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# **FINANCES**



## METHODS OF INCREASING THE ROLE OF THE CORPORATE TAX IN THE ECONOMIC AND SOCIAL DEVELOPMENT

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*In this paper we will discuss about the implications of the corporate tax in the field of economical and social development. In the beginning we will present the results of the introduction of the new quota (16%) as budgetary receipts and after that we will discuss about the evolution of the DFI in Romania in the period 1991 – 2008 along with some measures by which the authorities could improve the development of some geographical areas.*

*Keywords: corporate tax, DFI, budgetary receipts, underdeveloped areas*

*JEL code: G*

In the case of the profit tax, things are relatively good if we take into consideration the drawing quota, which is low, in order to determine the tax payers to avoid tax dodging. On the other hand, if we put this quota at a lower level, we may notice problems at the total amount of the budgetary incomes. By reducing it from 25% to 16%, a part of the subterranean economy will be brought to light, but this thing should not affect the process of collecting the budgetary incomes necessary for the well-being of the economy. In order to see how things are, from this perspective, we will analyze some statistical data which will be grouped in a table, illustrated later on by a graphic.

Tabel no. 1  
The evolution of the budgetary receipts from corporate tax, 2002 – 2008  
millions RON

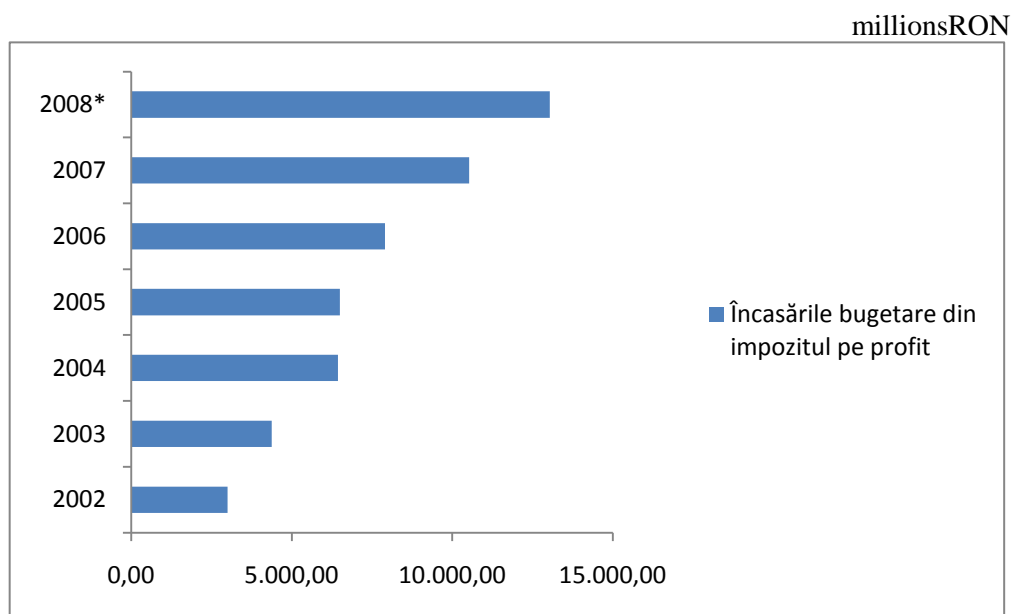
|                                       | 2002    | 2003    | 2004    | 2005    | 2006    | 2007     | 2008*    |
|---------------------------------------|---------|---------|---------|---------|---------|----------|----------|
| Budgetary receipts from corporate tax | 2.997,9 | 4.368,1 | 6.441,6 | 6.495,3 | 7.905,5 | 10.528,9 | 13.039,9 |
| Annual growth (%)                     | -       | 45,71   | 47,47   | 0,83    | 21,71   | 33,18    | 23,85    |

Source: personal calculus based on data from *Statistical Yearbooks 1991 – 2008 and Monthly Statistical Bulletin, Dec. 2008*

\*for 2008 data are provisional

We mention the fact that, concerning the line of the percentage growth, we considered each year as a base for the next one, and the figures above represent the result. Now we will position only the first line in the graphic, the one representing the cashing in the absolute sum, because the representation for the percentage growth is a little bit disordered in comparison with the other one.

## The evolution of the budgetary receipts from corporate tax, 2002 – 2008\*



Source: personal calculus based on data from *Statistical Yearbooks 1991 – 2008 and Monthly Statistical Bulletin, Dec. 2008*

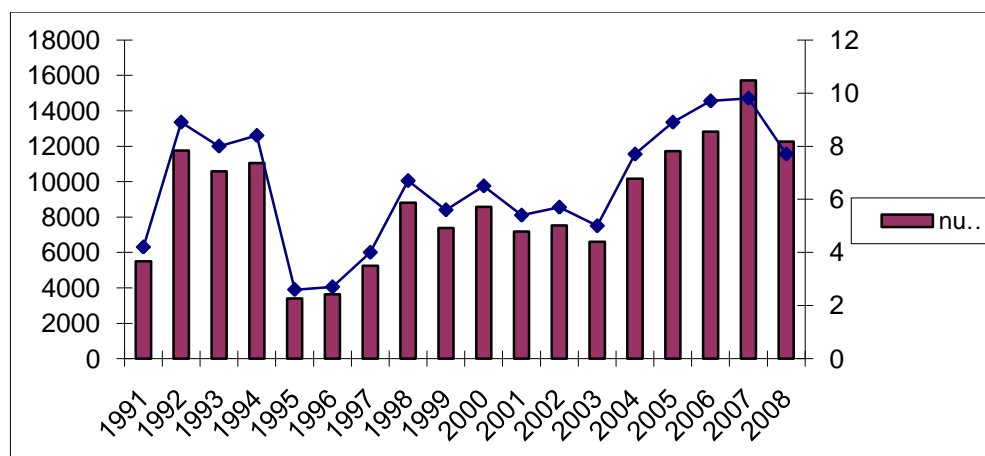
\*for 2008 data are provisional

From the two analyzing tools, we can observe the fact that the reduction of the drawing quota of the profit tax has not given extraordinary results from the perspective of the budgetary incomes, even though at the beginning of 2005 there were optimistic estimates. Moreover, we can say that in the first year when the quota was changed, the increasing of the budgetary incomes from the profit tax was insignificant, as we could clearly observe from the table, too. We have chosen the period 2002-2008, in order not to dilute the space with older data, on one hand, and on the other hand, we can clearly observe the tendency of the three years previous to the changing of the drawing quota. We can notice the fact that in 2003 and 2004 we acknowledged significantly growths in percentages in comparison with the ones after the changing of the drawing quota. We could say that, in 2005 and 2006, the slope of the percentage growth suffered a loss of the sharp character that existed before the changing. After that, things became relatively normal, the growth of the attracted amounts increasing year after year.

Another possible dimension of the influence of this drawing is the one of attracting foreign capital in an economy. Generally speaking, the growth of the capital is good for any kind of economy, no matter how developed it is. Thus, every country tries to persuade the ones having investment capital to use it in economic activities in their domain. The profit tax and the regulations that govern it can be mentioned as a tool in this respect. In order to have a clear image of the amounts' growing rhythm coming from other countries we will use public statistical data.

The idea created from the data will be shown in the following graphics. First of all, we will make a graphic that will show us how the number and the structure of the commercial societies have changed every year, and then another one showing us the same thing from the perspective of the amounts invested, in Euro.

DFI as number of companies, 1991 – 2008\*



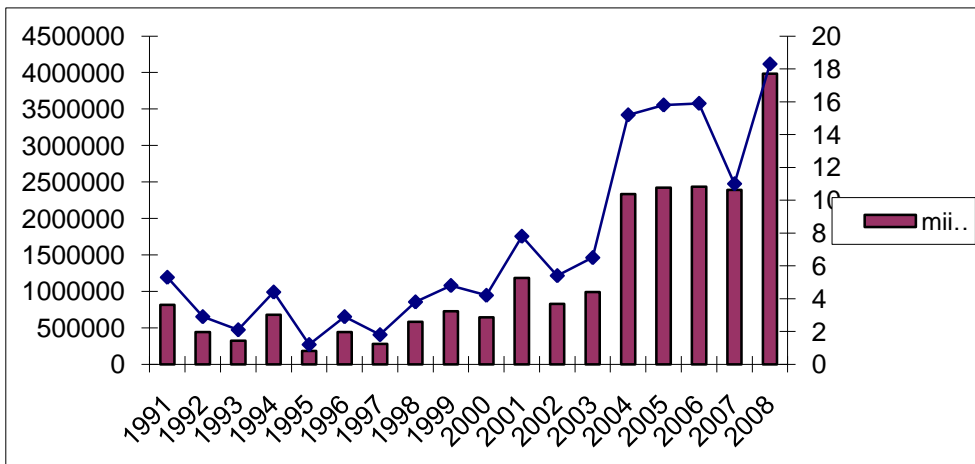
Source: personal calculus based on data from *Statistical Yearbooks 1991 – 2008 and Monthly Statistical Bulletin, Dec. 2008*

\*for 2008 data are provisional

From the Graphic no. 2 we draw the conclusion that the evolution of this indicator had a relatively inhomogeneous course until 2003, when its increasing tendency is absolutely clear. We cannot accept this evolution as a result of the changing of the drawing quota of the profit tax, but this measure had its role in this evolution. Another plausible explanation could be that, during this period, the efforts made by our country regarding the adherence to the European Union, have given a better image of the Romanian economy, fact that determined the foreign investors to come to our country. In the same manner, the calculations made by the investors, based on the forecasts, as well as the conclusions given by the rating agencies could determine such an evolution of the above analyzed indicators.

Going on, we will make another graphic in order to illustrate the evolution of the invested amounts in economic activities, in the same period in our country.

DFI as ammounts (Eur)



Source: personal calculus based on data from *Statistical Yearbooks 1991 – 2008 and Monthly Statistical Bulletin, Dec. 2008*

\*for 2008 data are provisional

The number of units in an indicator is significant, quantitatively speaking, it has an important role in its debate, but when we talk about its qualitative perception, things will change a lot. In the case of the studied indicator, the direct foreign investments in Romania, we can consider the number of the commercial societies having a foreign part in the social capital, as being a quantitative exponent, on one hand, and on the other hand the level of the invested amounts representing the qualitative part. A relatively big number of commercial societies have a foreign participation in the social capital, but without investing important amounts, they represent only some tests of the Romanian economy, but when the amounts start to be felt, then we can really talk about foreign investments in Romania.

We cannot say that the changes done in the profit tax had the most important role in the behavior of the investors but, this role cannot be neglected. This lever, in the hand of the authorities, has its own efficiency, and it is absolutely impossible not to be used properly.

One of the dimensions of its usage, as a method in influencing the behavior of the investors, is represented by the facilities which can be given to these. It is absolutely clear that the European Union does not agree with such fiscal methods, but taking into consideration the development of the Romanian economy, we think that it can bring only advantages, in the given context. For sure, these facilities need to have a well shaped temporal horizon, they cannot be applied endlessly, but during this short period the effects can be significant. We are talking here about Moldavia, especially its Northern part, which has the reputation of the worst developed part of the European Union. In this region, but in some other ones, too, the authorities could give some sparing in the profit tax payment, in order to attract companies, and permit them to capitalize being based on profit centers and not on subvention from the mother company.

In the following lines, we will try to analyze the areas in our country where the economic development is not so good. As an identification tool, we will use the foreign investments, too, because the investors do not put their money in the areas where the economic development is not good. Almost the same names of Romanian counties appear in the last positions of a *sui generis* classification: Giurgiu, Neamț, Teleorman, Vâlcea, Vaslui, Vrancea, Călărași, Ialomița, Sălaj. Not to mention but these.

The data concerning this classification are regarding December 2005 and December 2006 and refer to the last 15 places occupied, from the perspective of the two classification criterions (amounts and share).

We can observe that the same names of counties are repeated, fact that show an unwanted stability of the phenomenon in their respect. Even though the capacity of description of the data is reduced – we are talking about only two same months in two consecutive years, not only about a longer and more compact period – the repetitive character of the information can determine us to draw the conclusion that the “permanent” character is the one that describes best the situation in these counties. We won’t prolong the duration of the phenomenon analyze because there are no essential changes of the situation in the following years.

This is why we think that it is not useless that exactly in these counties the authorities should begin helping policies concerning the economic dimensions of these areas. The investors’ attraction, irrespective of nationality, has to be first priority for the authorities, even though the governing doctrine is based on liberalism or any other economic trend. It is true that the economic development of a region does not depend only upon the authorities’ will and it can be done without measures done in this respect, but the stake does not have to be seen as contemplative but proactive, and one tool which acts efficiently in this respect is the profit tax, on short term.

A way of gaining positive results is represented by making free of trade areas, especially because among the enumerated counties, ten are situated at the border of the state territory, being border counties. By regulating such business conditions in some regions, capital disposals could be created, determining the decrease of the unemployment along with the development of the respective areas. It is true that, in this situation, the role of the profit tax is a reduced one, but the implications of it cannot be neglected at all. The simple trade in the free areas and the possible customs changes represent just a few of the positive aspects of these modalities by which new jobs can be created and by which the potential of the economic growth of these areas can be increased. However, the institution of free areas does not represent a success for sure for the development of the area. An example, in this respect, can be Giurgiu County, where there is a free trade area for a relatively long time.

We consider that the changes of the market conditions, implicitly the ones regarding competitions, can bring positive changes in the economic development.

So far, we have referred only to the economic dimension of the profit tax influence, which can be exerted upon the society, in general, but we are not allowed to forget about the social dimension, too. We have already mentioned the fact that the economic and social areas are closely related, and normally they intermingle. Thus, when we act by the help of a fiscal lever, the results of our action are seen upon the followed objectives. We can say that, any growth of the economic activity determines the appearance of almost direct social effects. When the achieved effects have a strong durable character, the social dimension of the collectivity will feel them positively, on a long term.

Besides the economic measures, we have to mention the social ones which follow exact results in the social area. These are measures which can be brought in order to obtain less attractive effects in the economic activities, concerning the difference between the accountancy and economical costs, but because of the fact that some products and services are gained with higher costs, so as they would discourage the consumers if the profitability was the only result of the economic agents’ entrepreneurial abilities. We are talking about education, culture, sports and health, areas of activities in which the profit tax sparing can bring reduced costs of the respective products and services.

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3. INSSE - Statistical Yearbooks 1991 – 2008 and Monthly Statistical Bulletin, Dec. 2008
4. L 571/2003 (Fiscal Code), published in M.O. no. 112/06.02.2004

# THE ROLE OF THE CORPORATE TAX IN THE ECONOMIC AND SOCIAL DEVELOPMENT IN ROMANIA

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*This paper is about how the corporate tax could interfere with the economical and social development. We put in it some graphics which present the situation of three major economical indicators by which we illustrated our meanings. Gross Domestic Product, investments and the budgetary deficit are those who may provide strong connections among the possibilities of using the corporate tax to influence the economical and social development.*

*Keywords: corporate tax, GDP, investments, budgetary deficit, economical and social development*

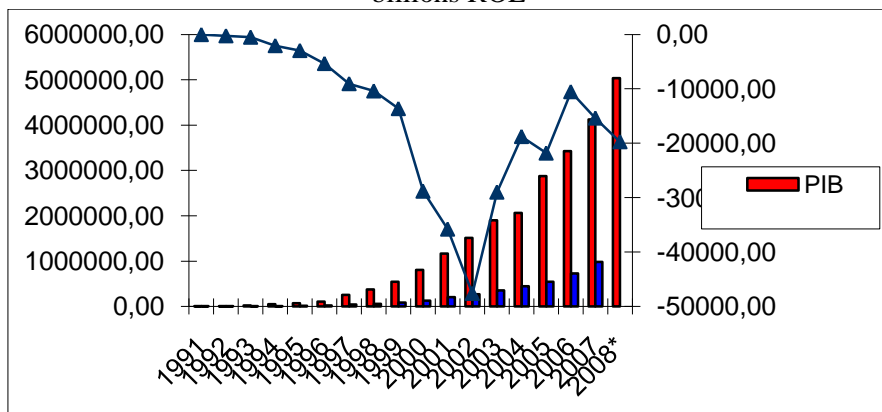
*JEL code: G*

The regulations with fiscal character have been numerous in Romania, after 1989. We have just mentioned a few of them, the ones which offer details about the way in which the corporate tax has been conceived and perceived, and as a result we are now in the position to identify the role of the corporate tax in the Romanian economy.

In order to do this, we will mention three major economical indicators, upon which the corporate tax and the drawing, in general, have an influence. They are: the Gross Domestic Product, the investments and the budgetary deficit.

First we will present a combined graphic of all the three indicators and after that one of the budgetary deficit as GDP percent.

Graphic no. 1  
The values of the GDP, investments and budgetary deficit (sums)  
1991 – 2008  
billions ROL



Source: personal calculus based on data from *Statistical Yearbooks 1991 – 2008 and Monthly Statistical Bulletin, Dec. 2008*

\*for 2008 data are provisional

If we take a look upon the graphic we can observe an approximately equal growth between two of the indicators, the Gross Domestic Product and the sum of the investments, but in the case of the third indicator, its evolution can be interpreted as interesting, at least. From a minimum level of the budgetary deficit, in absolute sum, which can be observed at the beginning of the studied

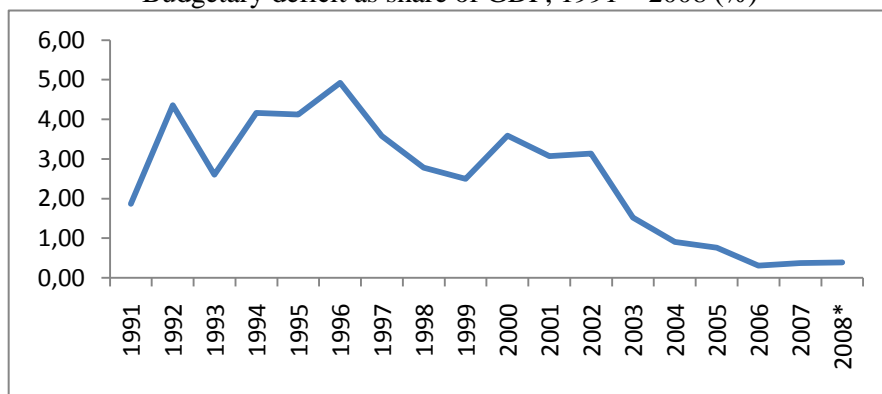
period, to a real abyss in 2002, and then, to a sudden change towards the present period. This last development has to be interpreted as a positive fact of the fiscal authorities, from 2002 on. Also, the same authorities are responsible for the continuous preoccupation in making the drawing system profitable.

At first, we have chosen the budgetary deficit as a reference indicator, because of the relative constancy in the dynamism of the expenses, that is to say, that we have been guided by the idea that these expenses have to be made, and the budgetary deficit is the one which best illustrates the budgetary effects of some fiscal regulations. The graphic above shows us that things are not like that; the absolute value of the budgetary deficit is the most proper to reflect the dimensions of the fiscal policy influence upon the economy. This is why we will take the budgetary deficit as share in the Gross Domestic Product and we will search if there is a link between this indicator and the effects of the fiscal policy upon the economic environment.

Before starting to analyze the budgetary deficit in the GDP, we have to realize that its seize depends upon the fiscal revenue on two dimensions: one which refers to the revenues dimensions and the second one which is determined by the quality of the revenue collecting, the fiscal system's profitableness. We will notice later that, the fiscal authorities' preoccupations are not only towards the improvement of the economic environment, but also towards the improvement of the drawing activity.

In order to analyze the above mentioned indicator, we will make a graphic that will help us understand it better. We have not inserted one table which is the base of the graphic, because we want the present paper to be a clear one, without having supplementary elements which overcomplicates it.

Graphic no. 2  
Budgetary deficit as share of GDP, 1991 – 2008 (%)



Source: personal calculus based on data from Statistical Yearbooks 1991 – 2008 and Monthly Statistical Bulletin, Dec. 2008

\*for 2008 data are provisional

From this graphic we can observe that there is a certain heterogeneousness of the indicator from one period to another, without having a tendency to increase or to decrease, until the year 2002. We could even imagine an average of 3,5%, which could describe the period we are talking about. This is valid if we consider things in general. If we talk about two periods 1992-1996 and 1996-2000, we notice that in both of them there is a decreasing tendency of the budgetary deficit as share in the GDP, until the last year of the two periods. We may notice an increase of the analyzed indicator between the last year and the year before. The explanation which is at hand is that all these years (1991, 1995) were pre-election years, and probably if analyzed the social costs, we could identify the source of this growth of the budgetary deficit. A notable exception is



the year 2004, when the deficit shows a decreasing trend. A possible explanation could be that the increased level of the adherence negotiations did not permit a digression with a non-economic character. From this point of view, we can observe that the analyzed indicator begins to show another tendency than the neutral one previously manifested, inscribing itself on a descending slope, at least until the present period.

We will continue with a kind of corollary of our analyses, in order to see if there is a correlation between the GDP and the budgetary deficit, as a weight in the GDP, on one side, and the adopted fiscal methods, on the other side. The two directions are part of a more complex scheme, the pentagon of the macro-stabilization<sup>1</sup>. We have mentioned only these two because the other three dimensions of the economy, components of the same scheme – the rate of inflation, the rate of the unemployment and the balance of the external payments – have a less direct relationship with fiscal system. We don't say that there is no connection between these, because the economic system contains relations of interdependence among its subsystems, but we say that the link between these is an indirect one. But in the case of the analyzed economical categories, the fiscal factors have a more direct action upon these. We have also to say that, the authorities do not use only one type of measures to a certain subsystem of the economy (the type of monetary or fiscal measures) but set of measures<sup>2</sup>, of policies that help in the achieving of the macro-objectives.

To the above mentioned indicators, we have added also the investments in the economy, because it seemed a proper indicator for underlining the fiscal impact upon its two dimensions, upon the economy in general. It is true that the fiscal facilities given with discernment leave the tax payers supplementary amounts which will be oriented, according to the markets characteristics, towards investments which will generate a development of the economy, in general. Moreover, we can also notice that in the titles of the legal regulations the idea of "investment stimulation" appears.

Coming back to an above mentioned idea concerning a digression from the trend in 1997, we will make a connection with the first graphic where the leap of the illustrated dimensions is significant, and also in the second graphic where there is only one small change in the development slope, both of the GDP and of the investments. The most valid explanation is that 1997 was a year of great importance for the Romanian economy. It was the moment when the currency market was liberalized, and a series of prices which previously were administrated, have lost this characteristics. Thus, we can say that, that year was a difficult one for the economy of our country. We think that it is enough to mention the fact that the inflation was 151, 4% in 1997, and in the context of a decreasing budgetary deficit situated in the trend of that period, we can say that the financing necessities of the budget, which are relatively constant in comparison with the previous year, represent the origin of the inflection points of the analyzed graphic. In order to be more accurate regarding that period, we have to mention also the year 1999, as a year with some inflections, mostly because that was the highest point of Romania's external debt. In this context, a supplementary budgetary compulsion is absolutely evident, but this year was not at the same level of turbulence as 1997.

Relying on the information above, we can say that the profit tax is one of the efficient tools by which some subsequent economic objectives can be achieved. In the specialized literature, this type of tools is known as lever<sup>3</sup>, because operating in one point of the economic field, we obtain effects in another point. Generally speaking, the fiscal measures have to have a neutral character, without favouring or inhibiting some other subdomains of the economic life. But taking into consideration all the attributives of the economy, we come to the conclusion that it is much more than an alignment of theoretical notions, having some social dimensions too, with a profoundly subjective nature. Thus, a lot of countries adopt different types of measures in order to

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1 Văcărel etal – *Finanțe publice*, 4th edition, Didactică și pedagogică Press, Buharest, 2003, pp 651.

2 Idem – pp 652.

3 Văcărel etal – op. cit. pp 110.

consolidate their economical position, to develop it and to create competition advantages of circumstance.

Leaving aside the financial policy, in general, we will mention its components which have as a specific tool the tax on profit. Looking back, we may classify the adopted measures, after the criteria of the objectives of the Romanian authorities in the analysed period. Thus, we have preoccupations oriented towards the stimulation of local companies' capitalization, towards gaining foreign capital, towards the stimulation of economical growth and investments. If we take only these three categories, we can observe that they intermingle and besides there are a lot of other objectives, such as: strict financial discipline, the fostering of small and medium size companies, etc. Some other measures are the ones mentioned in the Pre adherence Treaty, but these reflect more, indirect concern for the economic development.

The title of this paper refers to the role of the profit tax in the stimulation of the economic growth, and the fiscal policy uses a lot of sets of measures for achieving this objective. This is why we consider that it is necessary to mention the fact that the economic growth has at least two dimensions: a quantitative one (the economic growth) and a qualitative one (which refers more to the subtle parameters than to the strict percent in the GDP). Moreover, we have to take into consideration the inevitable process of improving the quality of the decision process.

If at the begining of the 90s everything seemed to be linked to the development of the private initiative, along with some other premises of the economic growth, and from the perspective of influence, this was oriented towards exemption of taxation for some periods (a fact that permitted a superior capitalization of the companies), in time these exemptions have been eliminated, and to appear other measures oriented towards the improvement of the business environment.

We can say that, in the present period, the role of the profit tax is one of economic growth stimulation (the reduction of the drawing share to 16% leaves supplementary resources at the commercial companies' disposal, fact that determines increasing investments in the same field or in another one); of job creation stimulation (by maintaining the provisions concerning the disadvantaged areas); of developing the small and medium size companies' sector (by maintaining a reduced drawing quota situated above the incomes made by this type of commercial companies – 5%).

All these directions reflect preoccupations towards the combining of short term rationality with the long term rationality<sup>4</sup>. It is obvious that all the above mentioned notions can be interpreted in different ways; if the economic growth is understood as an objective for the moment, it can generate serious lack of balance, because of the so-called 'over heating' of the economy, the newly created jobs will bring their contribution to Romania's future development, and the small and medium size companies represent the 'middle class' of the economy.

The tax profit begins to appear in other sectors, too not only in the above mentioned ones. Not only the drawing quotas and the exemption of taxation represent action methods of this efficient economic lever, but also the way of determining the taxable base. For example, in the case of the income tax of the microenterprises<sup>5</sup>, from the totality of the income, a series of incomes are subtracted, or some deductions are given, which are partly found in the general profit tax. We have to mention the possibility of entire deduction of the acquisition value of the cash machines in the trimester when they have been put into function, on one side, and the withdrawal from the taxable incomes of the corporal and non corporal immobilization. These measures want to strengthen the financial discipline and to stimulate the production.

Besides the actions oriented towards the economic area, some behaviours can be induced to companies by certain fiscal measures, intensifying their propensity towards financing of some charity, cultural or sports actions. The possibility of affecting a part of the taxable income for such actions is stipulated in some normative acts which underline the authorities' concern

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4 Văcărel I. – Politici fiscale și bugetare în România, 1990 – 2000, Expert Press, Bucharest, 2001, pp 346;  
5 L 571/2003 (Fiscal Code), published in M.O. no. 112/06.02.2004.

regarding this kind of activities. This concern is oriented not only towards the organization of such activities, but especially towards the impact of them upon the physical and mental health of the persons involved in such activities. Also, there are preoccupations related to the educational system, by exempting the private schools from payment of the profit tax invested in their activity object and preoccupations concerning the qualitative and quantitative growth of education reflected in the authorities' concern towards the future workers. This line of action reflects a preoccupation for the future but also for the quality of that future.

Coming back to quality, but this time from the imposing point of view, we have to say that, at least in Romania, the profit tax is suited to actions of the authorities, for improving the drawing advantageousness. A good example in this sense could be the reduction of the drawing quota from 25% to 16%. Assumed in the election campaign, the respective reduction had to bring to light a certain percent of the subterranean economy, by influencing the tax payers to abandon tax dodging, thus important incomes being collected from the state budget.

Besides all these measures, the fiscal decision makers have to act continuously in the sense of the quality improvement of the staff, of the fiscal mechanism's infrastructure, in order to increase the attracted resources.

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# THE ROLE OF ECONOMIC AND FINANCIAL ANALYSIS IN THE PROCESSES OF CONTROL, AUDIT AND DIAGNOSIS OF ENTITY' S ACTIVITIES

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*Abstract:*

*In the current material we have tried a positioning of economic and financial analysis in relation to the processes of control, audit and diagnosis of the activity of an entity based on the objectives and methodology specific to each process. We have also underlined and bold the major role the financial analysis plays in particular to meet the needs of decision-making of corporate governance through the processes of control, audit and diagnosis that are exercised by it. We believe that such an approach is very useful, knowing that very often in economic life these processes are not precisely defined and there are errors in the usage of these terms without a consistent and accurate correspondence with reality. We refer in particular to pairs of concepts such as analysis-diagnosis, control-audit and various combinations of these terms.*

*Keywords: analysis, diagnosis, control, audit, objectives, methodology, interactions.*

*JEL classification: M41, M42, G33*

## **I. Introduction.**

In an economic environment with so many unknowns, against the backdrop of major global crisis that raises many questions, economic and financial analysis comes to light through this economic thicket. It is intended to find answers to information needs of decision-making of investors, shareholders, banks, financial investment firms, business partners, employees, government and not least to information needs of corporate governance from the level of economic entities.

In the current material we have attempted to emphasize the role of economic and financial analysis from positioning it in relation to the processes of diagnosis, audit and control of a company's activity, starting from the theoretical and practical content of each such process.

## **II. Stage of knowledge on the basis of specific objectives of analysis / diagnosis / audit / control**

To argue the differences between the four processes and emphasize the central place of economic and financial analysis within them, we will emphasize the specific objectives of each process through their conceptual definition starting from the theoretical and practical stage of knowledge existing till present.

A. The term "analysis" comes from French and has a double meaning:

On one hand, the verb "analyze" means to investigate a phenomenon or a whole through it's each item;

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On the other hand, the noun "analysis" means a scientific research method that relies on the systematic study of each element of an issue and the careful survey of a problem.(DEX on line-[www.dexonline.ro](http://www.dexonline.ro))

Analysis, as a general method of research, involves decomposition or the conduct of an object or phenomenon in its component parts, in the simplest elements. Using specific methods, each component is examined, the causal relations are determined and also the factors that generated them, conclusions are formulated and the future framework is outlined.

In the opinion of renowned professors from Bucharest (M. Niculescu, 1997:22), economic and financial analysis is «a set of technical concepts and tools to ensure treatment of external and internal information in order to express relevant feedback on the situation of a company, on the level and quality of its performances, on the degree of risk in a highly competitive and dynamic environment».

Other famous authors from Bucharest universities, believe that «microeconomic analysis is conducted at the level of an entity and its elements regarded as a system. Microeconomic analysis studies individual behavior or the one of an entity in its economic activity and the obtained results reveal the factors determining the shift in capital investment, in utilization of resources and obtained results.» (C. Stănescu, etal, 1996: p15).

According to the opinion of teachers from Cluj (I. Bătrâncea etal, 2007:p23) «microeconomic analysis is investigating, using a system of related indicators, phenomena and specific mechanisms acting at the level of a company».

In conclusion we consider that the general objective of economic and financial analysis consists in studying the mechanism of formation and change of economic phenomena through the decomposition of them in component elements, factors and causes of the phenomenon studied through structural analysis, from the factors acting indirectly to those with direct action until the discovery of the final causes (primary causes). Analysis carries out the shift from appearance to essence, from general to particular, from simple to complex to explain a certain state of fact, a certain level or a specific evolution of a phenomenon. (M. Achim, 2009: p13).

*Elements* are part of the analysed phenomenon (result).

*Factors* are forces driving to the emergence of a phenomenon.

*Cases* are circumstances, that in certain conditions, explain the emergence of a phenomenon (a result).

The cause is a factor that can not be split, representing the final essence of the phenomenon.

The scheme of the development of economic and financial analysis process is presented in the figure below:

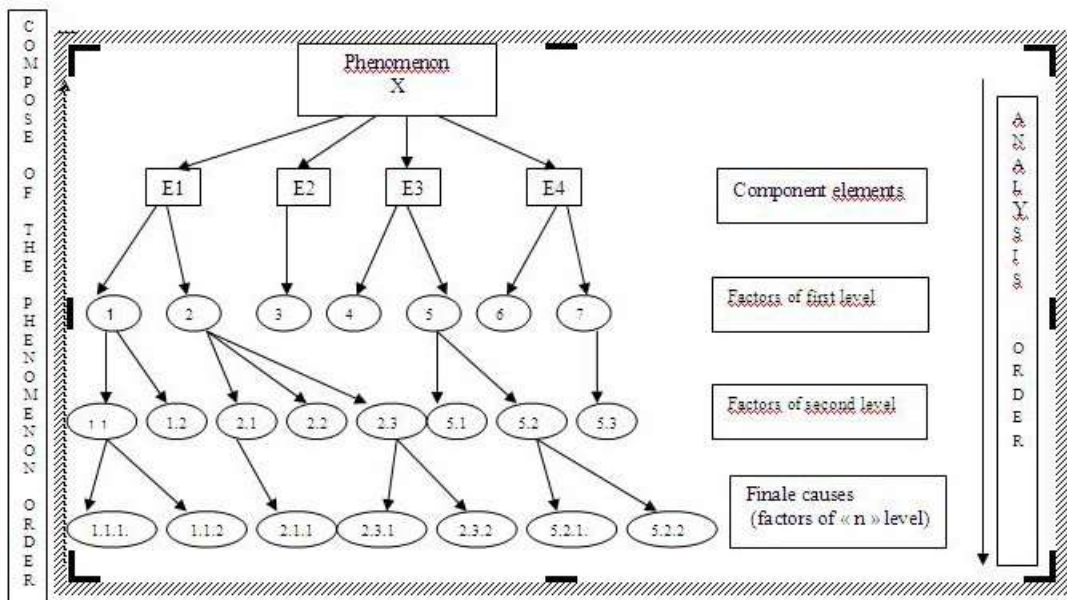


Figure. no. 1  
The scheme of the development of economic and financial analysis process

As such, the phenomenon X may be addressed as a result of the combination of factors and causes summarized above.

**B.** The term "diagnosis" is of Greek origin and means "apt to discern".

The diagnosis process, in the general sense, represent «a broad investigation of the main aspects of the organization activity, of economic, technical, sociological, legal and managerial nature, in order to identify strengths and disruption, causes that rise them and to design some recommendations for improvement and development.» (M. Miles, 2000: p.86).

In the view of other redoubtable authors, «analysis- diagnosis involves the decomposition of a mechanism or an economic phenomenon in its component parts, determining factors of influence, measuring there influence on the components both static and in dynamic, and ultimately determining the strengths and weaknesses of the mechanism or economic phenomenon investigated and proposing practical solutions for correction of the trajectory of less functional components». (I. Bătrâncea etal: 2003:p6)

In our view, the diagnosis can be defined as a complex research of competitional, economic and financial aspects that characterize the activity of an organization, through which are identified the strengths and weaknesses, the causes that generated them and are made recommendations to eliminate or diminish the negative aspects and / or exploit the positive ones.

It may be noted that unlike the analysis of a phenomenon through its decomposition, the diagnosis involves the framing of analyzed aspects in stereotypes, by reporting them to some references, in other words making some value judgments on the analyzed phenomenon. The ultimate aim of diagnosis is to prescribe "therapy" for recovery and to track the way they are carried out.

In the formulation of a diagnosis is dashing necessary to pertain to some references. In supporting the call to spatial comparisons of different economic and financial indicators, information provided by governmental bodies, banks, consulting firms, rating companies, etc. may be used.

It can be concluded that unlike the general objectives of analysis, the proces of analysis diagnosis has as a general objective the sighting of symptoms, disruptions, establishing the economic and

financial state of an entity, prescribing "therapy" to redress situations existing at a certain moment.

C. The term "audit" comes from the Latin word *audit-auditare*, which has the meaning "to listen."

About the audit process is talked from the period of Asiriens, Egyptians, from the reign of Charles the Great or of Eduard the First of England. Audit activities were conducted in Romania during all this time, but bearing other names.

Using the term audit in the currently used signification is relatively recent and is placed in the period of economic crisis from 1929 from United States, where businesses were affected by economic recession and had to pay significant sums for external auditors that exercised the certification of accounts for all businesses listed.

Major U.S. companies were already using the services provided by External Audit Cabinets, independent bodies that have the task of checking accounts and balance sheets and certifying the final financial statements.

According to regulations in force (Article 2 of Government Ordinance 75/1999 with subsequent amendments) financial audit is the examination, in order for the financial auditors to express of an opinion on the financial statements, in accordance with auditing standards harmonized with international audit standards and adopted by the Chamber of Financial Auditors from Romania.

Audits tend to generalize to numerous areas that have no direct relationships with the financial statements of a company (social audit, quality audit, environmental audit, etc.) and, in this case, it is design as the diagnosis of the organization and management and, in particular, the control of procedures and the manner in which the body (entity) acts in relation to its tasks and objectives.

Although this term was generalized in time to other areas, the overall objective of the audit is the control of compliance in report with a system of references imposed by rules, laws, regulations such as: financial audit, tax audit, social audit, legal audit, quality audit.

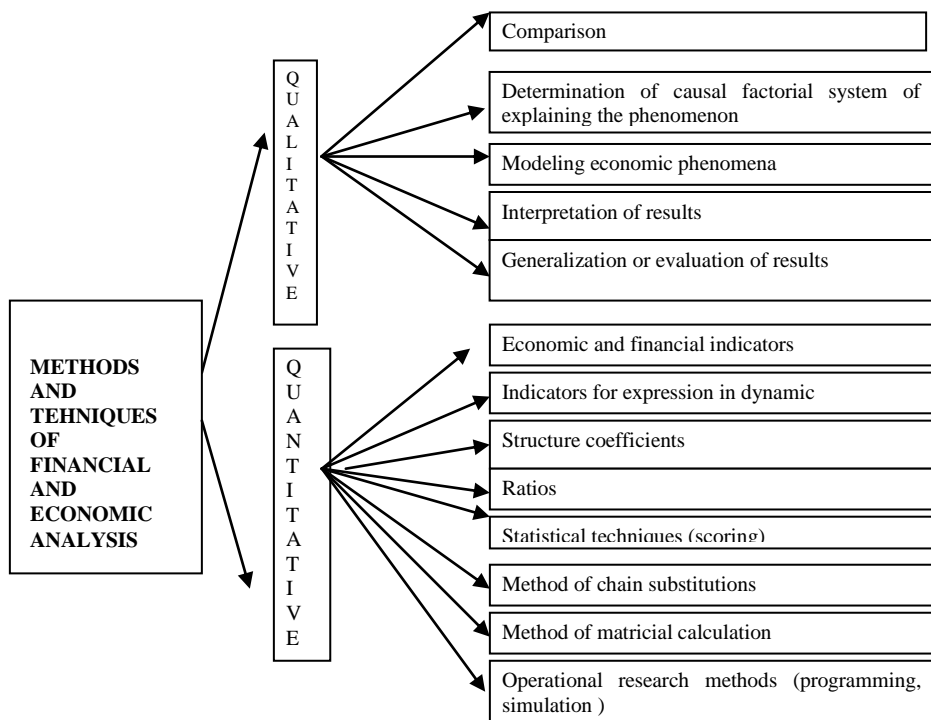
D. The term "control" comes from the French word " *contrôle* " which means under DEX «monitoring, analysis and permanent or periodic verification of an activity or a situation to watch its developing and to take measures to impound any risks and to improve its activity. »

Control provides detailed and thorough knowledge of economic and social realities, but is not limited only to that. It must make value or conformity judgments, interpreting states and realities established by a continuous reporting of them to the proposed objectives, standards previously established or rules of deployment fixed in advance. Control makes possible to determine deviations registered and to establish their significance and implications, the causes that generated them and the necessary measures to avoid their repetition in the future. (S. Borlea etal: 2009:p.23)

In other words, the general objective of the process of control consists of permanent monitoring of an activity to identify deviations from a base of comparison and to procede to a continuous regulation of the activity to continuously increase the economic efficiency.

III. Interactions of analysis with the processes of audit / control / diagnosis

In a synthetic speech the methodology of financial analysis includes the following methods and techniques:



*Figure no 2*  
*Methodology of economic and financial analysis*  
*Source: appreciations of the authors*

The methodology of economic and financial diagnosis incorporates part of specific methods and procedures of financial analysis but it has additional specific methods and procedures. Among the most commonly used specific methods of diagnosis analysis we include:

- SWOT Method (strenght, weakness, opportunities and threats);
- Method of assessment scales;
- Method based on benchmarking;
- Combined methods.

The result of interaction between analysis and diagnosis in economic and financial activity of an entity will have to be materialized in emphasising weaknesses, strengths, opportunities and risks facing entity's activity and also using comparisons with the plan or with the competition to trace the path of future action built on the base of the "therapy" for recovery of its activity.

General methodology of the audit includes all methods and techniques used in the external audit (financial). The role of financial analysis is very significant in order develop relevant opinions on the compliance of financial statements with the references' system considered (Auditing Standards).

For example, if through the analysis of the financial state of an entity conducted on the basis of information supplied by the financial statements the probability of bankruptcy exists, this should be reflected in the application of the principle of continuity of activity in accounting. If the evaluations of the assets did not take into consideration the uncertainties about the continuity of



activity or even about its definitive discreditation, the auditor's opinion will be significantly different in the sense that it will be expressed an opinion with reserves on the relevance of informations provided by the financial statements.

It is very clear that the audit will be based on very substantial extent on the methods and techniques of economic and financial analysis. In particular, audit also uses its own methods and techniques especially in the attempt to collect audit evidences needed to obtain a reasonable assurance of the lack of significant distortions in the financial statements. It's about using specific audit procedures as the so-called "audit tests" that can be of three categories (I Oprean et al: 2007:p.162):

- Tests of risk assessment;

- Tests of control;

- Background procedures (Tests of details).

The result of interaction between audit and analysis will have to capture whether or not the conformity of the financial statements exists in relation with a particular system of references choosen and than beeing able to determinate the auditor's opinion that can be: unqualified opinion, qualified opinion, adverse opinion or the impossibility of expressing an opinion ( disclaimer of opinion).

General methodology of control includes all methods and techniques used in the activity of economic, financial and managerial control. They are divided into two broad categories:

- Specific technical methods of economic, financial and managerial control which include: verification of documents, control inventory and the use itsof own means of record and confirmation of findings;

- Common methods and procedures used in economic, financial and managerial control which include: direct observation, laboratory tests and technical expertises, methods of economic and financial analysis (such as comparison, generalization, the correlative grouping of factors and the measurement of their influence). (Borlea S. et al, 2009:pp.147-153).

As it can be observed the control methodology includes its own specific methods and procedures but also some of thespecific methods of economic and financial analysis.

The result of interaction between control and analysis in economic and financial activity of an entity has to be materialized in emphasising the deviations, determining causes and tracing the path of action for settling the economic and financial activity.

Based on those presented so far, the positioning of analysis in relation to the processes of diagnosis / audit / control is stressed in the figure below:

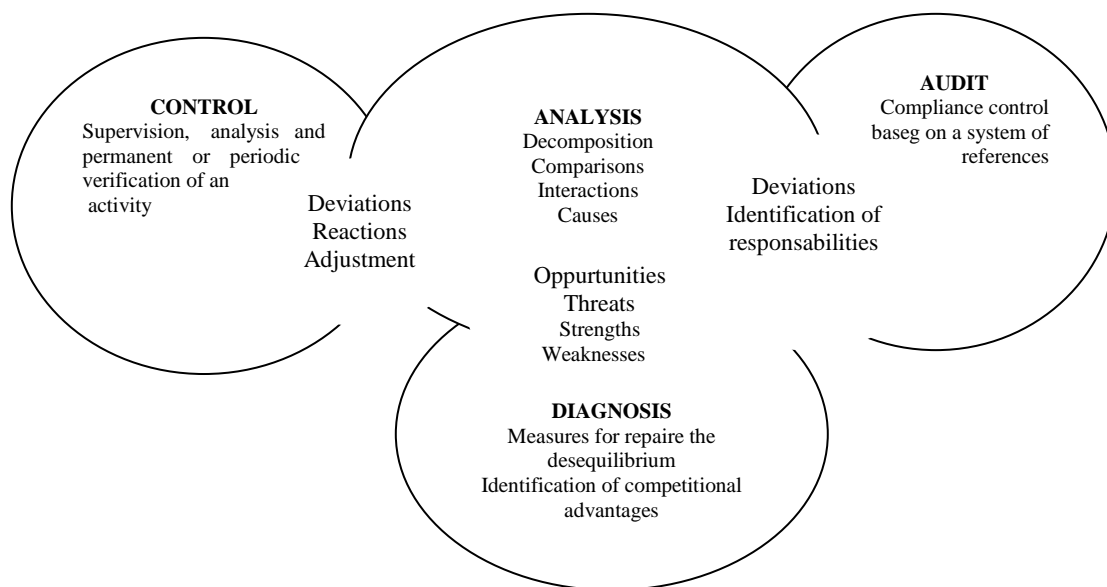


Figure. no 3

Positioning of analysis by reporting to the concepts: audit, diagnosis, control

Source: adjustment after M. Niculescu, 2003: p.30

#### IV. Conclusions

The increasing complexity of economic activity in the context of market mechanism has profound implications on the process of leadership that can not be done on a routine basis but on a deep research and understanding of reality. We appreciate that economic and financial analysis has a major role in the system of corporate governance of an entity. Its methods and processes have a wide applicability in the activity of control / audit and general diagnosis of the economic and financial status of an entity. Without exaggerating the role of economic and financial analysis, its absence reflects a bad management which can only result, in time, in loss of market share and ultimately in the disintegration of the business.

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## THE LUMP-SUM TAX – SOLUTION FOR DIMINISHING TAX DODGING AND RAISING OF THE BUDGETARY INCOMES –

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*The lump-sum tax was applied in our country for a few decades, but only in the case of certain natural persons that carried on certain economical activities. The applying of the lump-sum tax in the case of enterprises is a novelty in the Romanian fiscal system.*

*The lump-sum tax can be defined as a compulsory payment, established as fixed sum by the public administration organs respecting the legal foresights, for the natural and legal persons and paid from their income.*

*Levying this lump-sum tax on firms is a measure that aims to oblige the tax dodgers to pay a minimal contribution to the budget of the state.*

*Key words: lump-sum tax, tax rate, taxable profit, tax dodging, fiscal equity*

*Code JEL:H25.*

As it is well known, in the last period of time some discussions took place, all kind of ideas were issued by all means of information, having as subject the intention of the Public Ministry of Finances to introduce a lump-sum tax, concerning the commercial societies that record losses, and in this way don't pay at all to the state the profit tax. Initially, there were aimed the companies that carry on their activity in six domains of national economy: food industry, drinks industry, the en-gross and retail trade, hotels and restaurants, real-estate and constructing transactions.

Subsequent, the finances minister announced that the constructions societies will be submitted to the lump-sum tax, this, from my point of view, being a fair measure, as I will try to argue in the following.

From the report of "Gândul" newspaper it results that the minister of finances has argued his decision of introducing the lump-sum tax on the fact that, from the approximately 680.000 of commercial societies that carry on their activity in the national economy level, approximately 12.000 ensure over 85% from the public incomes, and the companies that operate in the mentioned six economic fields are responsible of 70% from the net loss of 2007 of all companies from Romania.

Towards the Public Finances Ministry's intention to introduce the lump-sum tax, there were emitted lots of points of view, but I believe that, the most relevant ones are the one expressed by the business society from Romania. In this way, according to the information accessed on the internet, Mr. Ovidiu Nicolescu president of the National Council of Small and Medium Sized Private Enterprises in Romania argues the introduction of a lump-sum tax as a possibility of avoiding the overstating of lump-sum tax, with the condition that this one to be established depending on the average profit upon activity categories. On the other hand, Mr. Florin Pogonaru, president of Romanian Businessmen Association argues that the introduction of a lump-sum tax would be a tardy measure, the European states in which this system is applied trying to eliminate this method of taxation, under the conditions of the financial crisis, because it might pull down activity areas, like constructions where most of the companies have losses. In

his opinion, the establishing of a fixed sum that the economic operator would have to pay, would mean to pay this money no matter if the company had or had not any profit at all.

*The lump-sum tax* was applied in our country till the end of 1999, but only in the case of certain natural persons that carried on certain economical activities. The applying of the lump-sum tax in the case of commercial societies would be a novelty in the Romanian fiscal system. Although the lump-sum tax in the case of natural persons has been applied since certain decades, no normative document that stipulated the applying of this kind of tax, gave any definition to the lump-sum tax. In this way, the Decree no. 153/1954 regarding the income tax of population, stipulated the applying of lump-sum tax for some categories of workmen, but without defining the conception of lump-sum tax.

Sometimes, for some categories of tax payers, special normative documents were issued. This way, by Government's Order no. 11/1992 concerning the way of the taxi activity deployment, it has been established that the natural persons that deploy taxi activity to be submitted to a trimester lump-sum tax of 30.000 lei.

Subsequently, by Government's Urgency Order no. 85/1997 concerning the taxation of the obtained incomes by the natural persons, that was in operation during 1<sup>st</sup> of January 1998 – 31 of December 1999, there were abrogated all normative documents that regulated the taxing of the incomes obtained from the carrying on of certain economical activities by natural persons, but the application area of the lump-sum tax has extended. So, the tax payers that deployed exclusively trade activity in many places, carriers with animal traction ways of transport and circulating craftsmen were obliged to the paying of a trimester lump-sum tax that was decided by means of the county councils decision or of the Bucharest Town General Council. The authorized natural persons, and also the collaborators of the commercial societies that deployed taxi activity with their on personal cars, were obliged to a trimester lump-sum tax of 400.000 lei that could be increased or diminished with up to 50%, depending on the concrete conditions of practicing of this activity from each locality.

In the Romanian explanatory dictionaries it is stipulated that the word '*minimum tax*' is used when the discussion is about tariffs, taxes, duties, payments; it is before established as a global and invariable fixed or unvaryingly sum.

As it is well known, the *tax rate* represents the *compulsory, general and definitive money draw* realized by the state from the incomes or fortune of natural and/or legal persons in the terms and quantum stipulated by law, towards covering the public outgoings and intervention of the state in the society and economy, without any obligation of this one to carry out any equivalent and immediate duty.

So, the lump-sum tax can be defined as a compulsory payment, established as fixed sum by the public administration organs respecting the legal foresights, for the individual and/or juridical individuals and paid from their incomes.

The introduction of the lump-sum tax is not a new idea in the Romanian fiscal politics. So, in the beginnings of 2001, Premier Adrian Năstase announced the introduction of a profit tax as fixed sum (minimum tax) for companies with less than 20 employees and with a business sum of 100.000 euros. Subsequently, the idea was dropped and, starting with 01.09.2001 it was introduced the income tax for small enterprises by applying of a percentage share on the established incomes.

At that time, the motivation was the high share of the profit tax rate (25%) that determined the growth of hauling times in the underground economy, ways by which the fiscal pressure is avoided. It was motivated then, the same way that it is nowadays too, that the introduction of lump-sum tax will diminish the motivation for tax evasion.

The introduction of lump-sum tax was abandoned until the summer of 2007, when Premier Călin Popescu Tăriceanu announced the introduction of this type of tax rate for panification factories, arguing that in this field the tax evasion reaches alarming dimensions of 60 – 70%.

The idea of introducing of the lump-sum tax was resumed by the actual govern, when Mr. Ghe. Pogea announced that a lump-sum tax will be introduced for six types of businesses, the scope being the growing of the incomes of the state budget, the motivation being that the majority of the companies don't pay the profit tax. To sustain his affirmations Mr. Minister was showing that from approximately 680.000 of companies that have laid down the financial statements corresponding to 2007, about 12.000 assure approximately 85% from public incomes, which means that the immense majority of companies don't contribute at all. From the information supplied by mass-media, in conformity with the analysis made by the Finances Minister for 2007, approximately 242.000 companies (almost 39%) from the registered societies have had losses. If we report the number of companies with losses to the ones that have laid down the annual financial statements, the percentage is of approximately 35.6%, but neither this percentage reflects the degree of profit of the Romanian companies, affirmation that I will sustain in what will follow. The 35.6% percentage resulted from an empirical calculus is very close to the 35 – 37% percentage sustained by Mr. Florin Pogănar, the president of the Romanian Businessmen Association, in conformity with the Newsletter publication.

Because the press information and the ones posted on the internet regarding the introduction of the lump-sum tax can represent an interpretation and analyzing problem for many persons with economical studies, and not only for them, I have realized an analysis of the financial statements corresponding to semester I of 2008, that are lied down by the commercial societies from Dolj county.

So, from the total of 17.481 of companies that have laid down the financial statements on semester I of 2008, 2.389 of them have paid the *small enterprises profit tax*, by paying a medium monthly tax of 224 lei, and 4.192 of companies have paid the profit tax a monthly average of 1.813 lei. On the other hand, from the total of companies that have paid tax profit, approximately 1.600 of them do not have any employee at all, which denatures and makes more difficult any analysis of the profit of Romanian companies. At first sight, this would mean that approximately 11.000 companies have had great losses in the activity from the first semester of 2008. It is a false impression, because approximately 5.500 companies have lied down financial statements that were "zero" meaning that they did not have any incomes, nor outgoings, so they did not have any activity at all. So it results that the firms that had fiscal losses were about 5.500, which represents approximately 46% from the total 11.970 of active companies.

The question that is imposed is if these companies can work with losses on long period of times without needing a credit. It is very well known that for companies with losses the access to bank credits is denied, and then, to finance the activity, the employers credit their societies with personal money. As long as the companies have accomplished losses many subsequent years, the money can not come from anything else than tax dodging.

If we make an analysis of the tax rate paid by the societies from Dolj in the first semester of 2008, we can draw pertinent conclusions that will sustain the measure of introducing the lump-sum tax.

In this way, in the case of small companies, it results that on a tax rate of 224 lei, the monthly average income is about 8.970 lei. Most societies (approximately 51% in Dolj) are commerce-based activities, and assuming, for easy analysis, a 10% gross margin, the income obtained from the trade markup is 900 lei per month. A very simple and pertinent question is imposed, that I believe that not even the greatest "expert in financial engineering" can respond to, with real credible arguments: if the firm has had at least one employee to whom the minimum economy salary was paid to, if the firm paid the social taxes owed by the employer and also the utilities (energy, water, sewer, gases, etc), from where does the employer - as single associate earn his living, and most of the cases his family's too? The answer can only be one: *tax dodging*.

From the above shown, and the affirmations of government officials from the last years, results that the tax dodging is a wide-spread phenomenon in Romania, that is difficult to be kept under

control by the organ fiscal. The only solution to oblige the hundred of thousands of tax dodgers to pay the tax rate was to introduce a minimum tax rate, established based on certain criterions.

The reaction of businessmen towards the introduction of tax lump-sum tax was different, the majority harshly criticizing these measures, explaining that in the crisis period in which we are all in it is not opportune the taking of this measure that would lead to bankruptcies of 10 thousands of companies and, as a consequence, the growth with some hundred of thousands of unemployed persons. If we make an analysis of the lump-sum tax, as it was negotiated by the govern and the representatives of businessmen and adopted by the urgency order<sup>6</sup>, we will see that their affirmations are exaggerated.

Before making an analysis of the lump-sum tax, as it was adopted by the govern, I consider that some observations are necessary concerning what it was negotiated, what was published in mass-media and what was adopted by the governs' urgent order. So, if the opinions of negotiators (govern, employers, syndicates) let to understand that the new system of taxing for the commercial society is lump-sum tax, after the analysis of stipulations from the normative document, we reach the conclusion that the so announced "lump-sum tax" is a minimum tax rate, already used in the case of societies that deploy their activity in the following domains: night bars, night clubs, discos, casinos and sporting bets, that any commercial society registered in Romania has to pay, no matter if it operate or not, if it has incomes or not, in the case when the income tax from the current year is smaller than the minimum one established depending on the business sum of money obtained in the preceding year.

Another observation is that the way that the legal normative documents state, without any "decisional transparency" the Govern took the measure of taxing the firms without any activity, was considered by the majority of persons that have economical and fiscal tangencies in harsh terms. Referring to this measure, I consider that a small comment must be made. So, I have previously shown that over 30% from the companies that have laid down the financial statements do not have any activity at all. According to the legal stipulations, these firms are in activity: they have laid down the financial statements, and the fiscal statements, but all of them are "zero"; the reason? For not being punished in contravention, and the main reason for not to be crossed of from the Register of Commerce due to not laying down of the financial statements.

Taking into consideration the useless costs that are endured by the fiscal administration for directing these tax payers, as long as there are not any legal stipulations of "crossing of" such kind of companies that harm the Romanian society (can there be estimated the costs of directing these firms by the state institutions: the National Fiscal Administration Agency, the Register of Commerce?), measure that was initially issued by the Finances Ministry and approved by the govern, that even although it breaks the basis principles of taxation, I consider to be a coercive measure applied to these societies, to determine them to act properly: either they start to have activity, or they are crossed of from the Register of Commerce. In the actual situation, it is difficult to presume that there will be many companies that will begin to have activity, the only way to escape from the tax rate being the dissolving of those societies, which is a slightly difficult and long procedure, according to the legal in operation stipulations. If there will be established debits for the duty of these tax payers, it is difficult to assume that they will be sometimes taken back. This is why, I consider that it is imposed the elaboration of a normative document by which to dispose of the immediate dissolving of these societies, excepting the ones that are in the evidence of the fiscal organs with debts, and also the ones that did not have any activity at all from their setting up (they did not have laid down the financial statements, according to the legal stipulations<sup>7</sup>).

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6 O.U.G. no. 34/11.04.2009 published in Of. M. no.249/14.04.2009, concerning the budgetary rectification on 2009 and regulating some fiscal - financial measures

7 Art. 36 align (3) from Law no. 82/1991 the accounting law, republished in Of. M. no. 454/18.06.2008

The tax rate, the taxable profit and the rate of return for the maximum incomes, according to the lump-sum tax grid are shown below:

| Total annual incomes (lei) | minim annual tax (lei) | Tax rate                              | Taxable profit | Rate of return for the incomes        |
|----------------------------|------------------------|---------------------------------------|----------------|---------------------------------------|
| 1                          | 2                      | 3 = 2/maximum income from taxing grid | 4 = 2/16%      | 5 = 4/maximum income from taxing grid |
| 0 - 52.000                 | 2.200                  | 4,23%                                 | 13.750         | 26,4%                                 |
| 52.001 – 215.000           | 4.300                  | 2%                                    | 26.875         | 12,5%                                 |
| 215.001 – 430.000          | 6.500                  | 1,5%                                  | 40.625         | 9,4%                                  |
| 430.001 – 4.300.000        | 8.600                  | 0,2%                                  | 53.750         | 1,25%                                 |
| 4.300.001 – 21.500.000     | 11.000                 | 0,05%                                 | 68.750         | 0,32%                                 |
| 21.500.001 – 129.000.000   | 22.000                 | 0,017%                                | 137.500        | 0,11%                                 |
| Above 129.000.001          | 43.000                 | 0,033%                                | 268.750        |                                       |

If we analyze the minimum established tax rate, reported to the maximum business sum, in accordance with the taxing grid, we notice that there are huge discrepancies in this tax rate, for which there can not be brought any sustainable economical or financial arguments. So, it is easily noticed that the small companies, the term that it is used to describe them in the fiscal legislation<sup>8</sup>, have been divided in 3 taxing grids. Basing on the above presented argumentation, it results that companies that accomplish a positive but less than 52.000 lei incomes, and also the most majority of the ones that accomplish an income between 52.000 – 215.000 lei can not survive without making tax dodging. If we compare the current 3% turnover tax of small and medium sized enterprises (100.000 euro = 430.000 lei X 3% = 12.900 lei), to the lump-sum tax we notice that the lump-tax is about 50% (6500 lei), which can only represent a measure of fiscal relaxation, that is valid not only in the case of small enterprises.

For the first 3 categories from the taxing grid, the regression of the tax is acceptable. Starting with the 4<sup>th</sup> category, there are major differences between the incomes and the minimum due tax, and this is, in terms of economic and financial analysis, *unacceptable*. Analyzing the data from the table presented above it is clear that firms that had over 100000 euro incomes in the previous year are more advantaged in terms of “lump-sum” tax than the small or medium sized enterprises, so the fiscal relaxation is much more consistent. Of course, we exclude those firms that reported losses in the previous year.

If we analyze the companies with over 260 millions lei incomes that have under 0.10% profit rate we notice that fiscal relaxation is directly proportional with incomes. If we look to the data in the table we can see that is no correlation between income category and due tax. The incomes in the 4<sup>th</sup> category are 10 times bigger than the 3<sup>rd</sup> category ones, but the tax is only by 1.32. The incomes in the 5<sup>th</sup> category are 5 times bigger than the 4<sup>th</sup> category ones, but the tax is only by 1.28. The incomes in the 6<sup>th</sup> category are 6 times bigger compared to the 5<sup>th</sup> category ones and the tax is only twice as high.

### Conclusions

Taking into consideration the high level of tax dodging, stated not only by public institutions but also by businessmen and professionals in the field of economy and finance, introducing the lump-sum tax is a welcomed measure, in the absence of other legal provisions, to attract some incomes

<sup>8</sup> Art. 103 from Law no. 571/2003 concerning the Fiscal Code



to the state budget from the underground economy relating to the profit or income tax, because other kind of incomes can't be obtained by such measures (social contributions, value added tax etc.). The ways to establish the lump-sum tax can be improved so that the tax amount that the companies have to pay should reflect a basic principle – that of the *fiscal equity*.

As a final conclusion, diminishing tax dodging can't be done only by fiscal measures; it has to be correlated to other economic or social measures.

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## THE JUDICIAL CONDITION OF THE LOCAL PUBLIC FINANCES

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*An important condition to realize the reform of the Romanian public administration is to assure the necessary financial resources for a real decentralization.*

*The governmental traditions in a lot of developed countries have conformed the idea of the efficiency of the function of the local public administration depending on a financial autonomy. As a member state of the European Union, in our country the principle of local autonomy constitutes an indispensable element for the economical development of the state.*

*Keywords: local self-government, local finances, legislation,  
Code JEL: K 00 Law and Economics General*

In year 1985 was signed in Strasbourg the «European Charter of self-government»<sup>9</sup>, through which local self-government was treated and defined– as organizational and functional system of the local public administration. Through article 3 of Carta was defined the content of the notion local autonomy. According to this: «local self-government denotes the right and the ability of local authorities, within the limits of the law, to regulate and manage a substantial share of public affairs under their own responsibility and in the interests of the local population. This right shall be exercised by councils or assemblies composed of members freely elected by secret ballot on the basis of direct, equal, universal suffrage, and which may possess executive organs responsible to them. This provision shall in no way affect recourse to assemblies of citizens, referendums or any other form of direct citizen participation where it is permitted by statute».

We mention two essential characteristics of the local self-government, which are obvious from the definition given by Carta and these are: «the effective capacity of the local public authorities» and «the solving of problems and dealing with local business in proper name». In this sense the notion «effective capacity» means that the formal right to rule and to administrate certain public businesses must be accompanied by some measures (institutional, material and **financial**) necessary for its effective practice, and that the sintagma «in proper name» accentuates the fact that the local public authorities must not only delimit themselves to the role of simple agencies of the superior authorities, but they have to own various responsibilities, which could be practiced on a local level.

The legal definition of the local self-government in the internal law can be found in the content of article 3 of Law No. 215/2001 of the local public self-government<sup>10</sup>. However we can mention the fact that from the conceptual point of view, the problem of local self-government was treated by the Romanian legislators starting with 1991<sup>11</sup>.

The real local self-government cannot function without the system of financial resources necessary for the local authorities to exercise their competences and to fulfill their

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9 This document was accepted in Romania through Law No. 199/17.11.1997 published in the Off. M. No. 33/26.11.1997.

10 This way, according to art.3 of Law No. 215/23.04.2001, republished in the Off. M. No. 123/20.02.2007, «through local self-government we understand the right and effective capacity of the authorities of the local public administration to solve and treat, in the name of the local collectivity it represents, the public affairs, according to law».

11 Art. 119 of the Constitution foresaw that: «the public administration from the administrative-territorial units is based on the principle of local self-government and the principle of decentralization of the public services».

responsibilities, according to law. From the point of view of *management*, the self-government is connected to the competences of local authorities, which are managing the local patrimony. In this sense, the law must foresee the quality of judicial person of the administrative-territorial unit, the existence of a patrimony, of an own budget and that the local public authorities are fulfilling their duty according to the law in the established administrative-territorial units.

In the table of contents of the article 3 from European Carta regarding to the local self-government there are established some general dispositions about *the financial resources of the authorities of the local public administration*<sup>12</sup>, aspects taken into consideration by the Romanian legislators<sup>13</sup> too.

The actual judicial condition of the financial relations on the level of local collectivities is regulated by Law No. 273/2006 regarding to local public finances<sup>14</sup> with the ulterior modifications and supplements<sup>15</sup>. Through O.U.G. No. 28/2008<sup>16</sup> there are some modifications made to the earlier mentioned law, like the followings:

- modification for point 40 from the content of article 2, in the matter of the substitution of the notion of *loans* with that of *repayable finances* which represents: «obligations of the local public institutions from finances engaged through the instruments of the local public debt, on contractual basis or guaranteed by the administration of the local public authority, according to the dispositions of Law No. 273/2006 and according to O.U.G. No. 64/2007 regarding to the public duty, with the ulterior modifications and supplements».

- modification of paragraph 7 of the article 32 in the matter of enlargement of the obligation sphere of fiscal registration of the tax-payer, who had organized some stabile points of work with minimum 5 employees for every point of work. This way the new legal text establishes that «any person, subject of a judicial fiscal report, even the economical operator, the public institution, the local public institution, which organizes a unit, with or without judicial personality, on an other address as the social office of that certain subject, with minimum 5 persons who have incomes from salaries, are obliged to request the fiscal registration of that certain unit, as salary-payer, as payer of other salary-like incomes, by the fiscal organization under the subordination of the National Agency of Fiscal Administration, on the territory where the address of the activity of that certain unit is. The request must be done in 30 days from the date of the setting up, for the

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12 According to art. 9 of the Carta: «local authorities shall be entitled, within national economic policy, to adequate financial resources of their own, of which they may dispose freely within the framework of their powers.

Local authorities' financial resources shall be commensurate with the responsibilities provided for by the constitution and the law.

Part at least of the financial resources of local authorities shall derive from local taxes and charges of which, within the limits of statute, they have the power to determine the rate.

The financial systems on which resources available to local authorities are based shall be of a sufficiently diversified and buoyant nature to enable them to keep pace as far as practically possible with the real evolution of the cost of carrying out their tasks.

The protection of financially weaker local authorities calls for the institution of financial equalisation procedures or equivalent measures which are designed to correct the effects of the unequal distribution of potential sources of finance and of the financial burden they must support. Such procedures or measures shall not diminish the discretion local authorities may exercise within their own sphere of responsibility.

Local authorities shall be consulted, in an appropriate manner, on the way in which redistributed resources are to be allocated to them.

As far as possible, grants to local authorities shall not be earmarked for the financing of specific projects. The provision of grants shall not remove the basic freedom of local authorities to exercise policy discretion within their own jurisdiction. For the purpose of borrowing for capital investment, local authorities shall have access to the national capital market within the limits of the law».

13 Art. 9 from Law No. 215/2001, about the local public self-government.

14 Law No. 273/29.06.2006, about local public finances, reedited in the Off. M. No. 618/18.07.2006.

15 O.U.G. No. 46/2007, to complete art.63 of Law No. 273/2006, O.U.G. No. 64/2007, about public duty, O.U.G. No. 28/2008, to modify and complete Law No. 273/2006.

16 O.U.G. No. 28/19.03.2008 for the modification and completion of Law No. 273/2006 regarding to local public finances published in Off. M. No. 217/21.03.2008, accepted through Law No. 206/24.10.2008.

new units. The fiscal institution has the duty, that in 5 days from the fiscal registration, to send a copy of the fiscal registration certificate to the major of the administrative-territorial unit/ to that sector of Bucharest where the unit has its activity. The salary and income-payers have the obligation to reorganize and to make the accountability in a way that these must reflect the taxation for the incomes of every month, calculated, booked and transferred by every unit which is registered under this paragraph».

- the ordinance makes some modifications in the matter of contraventions and of the sanctions applied. This way, by article 78 paragraph 1, after letter c) it is introduced a new letter d), with the following content: «not respecting the dispositions of article 33 paragraph 7<sup>1</sup> and 7<sup>2</sup>» and by article 78, after paragraph 2 in is introduced a new paragraph, paragraph 2<sup>1</sup>, with the following content: «contraventions foreseen in paragraph 1 letter d) are sanctioned with an amendment from 10.000 lei to 50.000 lei».

Taking into consideration the legal foresights, we discover that the local financial resources are represented by the followings:

- own incomes, formed by: fees, taxes, contributions, other payments, other incomes deducted from the taxation of incomes;
- amounts deducted from some incomes of the budget of state;
- subventions accorded by the budget of state and by other budgets;
- donations and sponsorizations.

By the establishment of local fees and taxes by the General Council of Town Bucharest or by the regional or local councils, foreseen by the Fiscal Code and by the methodological norms of application of Law No. 571/2003 regarding to the Fiscal Code<sup>17</sup>, it is instituted the obligatorily respect of the following principles: *transparence* (according to which the authorities of the local public administration are obliged to do their activity in an open manner towards the public), *the unitary application of legislation* (according to which the authorities of the local public administration assures the organization of execution and the concrete execution, in a unitary way of the foresights of Title IX from the fiscal Code and of the methodological norms, being forbidden to institute other local taxes, just those foreseen in Title IX of the fiscal Code. The special taxes, instituted for the function of some local public services created for the interest of some physical and judicial persons which have incomes only from these, according to the regulation approved by the local councils, by the General Council of Capital Bucharest and by the district councils), that of *the local self-government*. In the content of the appendix No. 9 of Law No. 18/2009<sup>18</sup> there are named the income categories of the local budgets, from which we mention: the tax on the profit from the self-governing administrations and companies under the control of the regional councils, the tax upon transport, the tax upon fines and other sanctions according to the law, subventions accorded by the budget of the central state administration – subventions for the heat rehabilitation of some houses, amounts from the European Union in the account of payments – The European Fond for Regional Development, European programs financed in the period between 2007-2013, etc.

The Law No. 273/2006 regarding to the local public finances foresees some categories of incomes, which complete the system of incomes of the local budgets. This way, for example, from the taxation upon incomes, paid for the budget of state, on the level of every administrative-territorial unit it is allocated monthly, in 5 days after the end of the month of the payment of the tax, a part of 47% for the local budgets of the communities, towns and cities, where the tax-payers are developing their activities, a part of 13% for the local budget of the district and 22% for a distinct account, opened for the general directive of the public finances of the district by the

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17 Law No. 571/22.12.2003 about Fiscal Code published in the Off. M. No. 927/23.12.2003, with the ulterior supplements and modifications.

18 Law No. 18/26.02.2009 of the budget of state of year 2009, published in Off. M. No. 121/27.02.2009.

exchequer of the resident town of the district to equilibrate the local budgets of the communities, towns, cities and of the district.

In the matter of the institutional construction, Law No. 273/2006 foresees the setting up of a *Committee for local public finances*, with the aim to protect the interests of the administrative-territorial units on the financial plan, to harmonize the decentralization process of some attributions from the level of the central public administration to the level of the local public administration. The Committee analyzes the proposals regarding to the amount limits to deliberate, which can be annually offered by the local budget of state, as the substantiation and allocation method for districts and it makes recommendations for the development of the allocation system. In the same time, the Committee analyzes the proposals regarding to the modifications of criteria and of the allocation formula of the equilibrating amounts which will be allocated to districts, to administrative-territorial units, and makes recommendations for the development of the equilibrating system.

The Committee creates even proposals upon the projects of normative acts which contain regulations with financial and fiscal character regarding to administrative-territorial units, when they consider it necessary<sup>19</sup>. At the same time, The Committee has competences in analyzing the dysfunctions signed by the representatives of the administrative-territorial units determined by the legislative modifications , as by their impact upon the local public finances and creates recommendations to develop the legal frame. From the point of view of organization, the Committee is formed by one representative of the Parliament of Romania, of the Ministry of Administration and Internal Affairs, of the Ministry of Public Finances, of the Association of Communities from Romania, of the Association of Romanian Cities, of the Association of the Romanian Towns and of the National Union of the District Councils from Romania. As president of the Committee, is named the representative of the Ministry of Public Finances.

Finally we can have the conclusion, that local finances have a great importance which gives them the possibility to manifest a real influence upon the local life, especially from economical and social point of view. The effects of decentralization in the domain of public finances is concretizing itself through a better mobilization of the local fiscal resources, of an allocation and of the efficient use of the economic-financial resources, as by the local public service delivery towards the citizens in an equitable and more efficient way from the pint of view of costs.

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<sup>19</sup> For example, by the reunion of the Committee on 09.03.2009 there was discussed the opportunity and necessity of the establishment of the Code of local public finances, which will concentrate all the regulations about local public finances.

## CONSIDERATIONS ABOUT THE FORMS OF JUDICIAL RESPONSIBILITY IN THE MATTER OF BUDGETARY EXECUTION

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*The social life is developing in an organized way based on some social norms and regulations which are necessary for the good development of human activities in any domain, these norms establishing a certain way in which the subjects of social relations must respect them taking into consideration the ratio among them – the breaking of the rules by an improper behavior will involve the social responsibility of the guilty part, being obliged to support the different consequences of his actions.*

*According to the judicial norm which was broken, to the social danger level of the action, to the social values which were broken, there are different forms of judicial responsibility (penal, civil, contravention, disciplinary etc).*

*Keywords: budgetary execution, judicial responsibility, contravention, infraction  
Code JEL: K 00 Law and Economics General*

The breaking of the financial judicial norms which regulate the process of the budgetary execution (practically the encashment of budgetary incomes and the payment of costs approved by the budget) involves, usually, the responsibility form of administrative-contraventional, civil, and even the penal form.

According to law<sup>20</sup> «it is contravention an action done with guilt, established and sanctioned by law, ordinance, Governmental establishment, or in some cases, by the decision of the local council of the community, town, city, of the sector of Bucharest, of the district council or of the General Council of Bucharest».

The administrative-contraventional responsibility exists in case of not-respecting of the norms regarding to the establishment of budgetary incomes and those regarding to the payment of budgetary costs, by the sequencers of budgetary loans. Among the actions which are considered to be contraventions by Law No. 500/2002 regarding to public finances<sup>21</sup> we can mention:

- the registration, employment or making a payment, in case when a legal basis does not exists for that certain cost<sup>22</sup>;
- the engagement, ordinance or payment of a cost by public funds, in case when these operations were not approved according to law and are no beneficiary of a budgetary foresight;

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20 Law No. 180/11.04.2002 to approve Governmental Ordinance No. 2/2001 regarding to the judicial system of contraventions published in the Off. M. No. 268/22.04.2002.

21 Law No. 500/11.07.2002 regarding to public finances published in Off. M. no. 597/13.08.2002.

22 The budgets which are here foreseen are:

- the budget of state;
- the budget of the social insurance of the state;
- the budget of special funds;
- the budget of the treasury of the state;
- the budget of the self-governing public institutions;
- the budgets of public institutions financed integrally or partially by the budget of state, by the budget of social insurance of the state and by the budget of special funds;
- the budget of public institutions financed integrally by own incomes;
- the budget of funds from external loans contracted or guaranteed by the state and their reimbursement and other costs are assured by public funds;
- the budget of external funds with no reimbursement.

- not-respecting the obligation to approve the budget of the treasury of the state and the budgets of self-governing public institutions, in a period of 15 days from the publication date of the annual budgetary law or of the modifying law in the Official Monitor of Romania;
- the breaking of the legal dispositions about the conditions of elaboration of the technical-economical documentation in the domain of the investment objectives;
- not transmitting<sup>23</sup> by the main sequencers of loans to the Ministry of Public Finances of the situation of the transfers of budgetary loans;
- the engagement and ordinance of public costs without previous accord of prevention financial control;
- the breaking of the general principles which are the basis of budgetary execution;
- the breaking of the obligation to elaborate certain documents from the accountancy;
- not-respecting the norms which regulate certain aspects of the salary-process<sup>24</sup> in the budgetary sector;
- not-respecting the reimbursement period of the temporary loan, adjusted by a main sequencer of budgetary loans for some activities or public institutions created under the supervision of that main sequencer;
- the engagement and use of budgetary loans for other aims, than it was approved etc.

In the matter of establishing contraventions and applying amendments the following institutions have responsibility:

- Court of Auditors;
- Ministry of Public Finances;
- Other persons authorized, according to law.

Near the contraventional responsibility it can be engaged the disciplinary responsibility of the public agent, who is guilty of doing some things which are considered to be deviations from the work discipline. The disciplinary deviation is, according to law<sup>25</sup>, «an action connected to work and which consists in an action or inaction done with guilt by the employee, through whom he had broken some legal norm, the internal regulation, the individual working contract, the applicable collective working contract, the commands and legal dispositions of the hierarchical leaders». When the action of the employee or public agent consists in a disciplinary deviation, through which the employer has to suffer, it is involved the patrimonial responsibility<sup>26</sup> of this employee too.

We must mention the fact that in the situation when there are produced some prejudices, because of the breaking of the regulations by some persons with budgetary activity (public agents), these persons will have patrimonial<sup>27</sup> responsibility (covering the whole prejudice), according to the request of the person in case.

In the activity of budgetary execution, it can appear penal responsibility too, the most serious form of judicial responsibility, in case when the action has all the constitutive elements<sup>28</sup> of an infraction.

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23 According to art. 47 paragraph 10 from Law No. 500/2002 regarding to public finances, being the duty of the main sequencers of loans, it is established the obligation of monthly transfer to the Ministry of Public Finances, in 5 days after the end of the month, of the situation of transfers of budgetary loans.

24 According to the foresights of art. 53 paragraph 1 from Law No. 500/2002 regarding to public finances, the salaries in the budgetary system are paid monthly once, between 5 - 15 of the month for the previous month.

25 Art. 263 paragraph 2 from Law No. 53/24.01.2003 – Working Code published in the Off. M. no. 72/05.02.2003.

26 According to the foresights of art. 270 paragraph 1 from Law No. 53/2003 – Working Code «the employees have patrimonial responsibility, according to the norms and principles of the contractual civil responsibility for all the material damages caused by them and in relation with their work on the address of the employer».

27 Form of the patrimonial civil responsibility.

28 Elements which compose the structure of an infraction are: object – judicial, material/physical, subject, with objective view (the action or inaction is done against some social values protected by law; the sequel of this action is socially dangerous and the relational cause between infractional action or inaction and the sequel is socially dangerous), subjective view, content.

In Law No. 200/2002 regarding to the public finances there are two actions mentioned, which are the following:

- the exceed of the approved amounts for the costs through the component amounts of the budgetary system or the unitary budgetary system, through which payments are engaged, commanded and transferred;

- the engagement of some expenses from the unitary budgetary system, exceeding the maximal limit approved of the budgetary loans. The sanctioning system applied foresees the alternative sanction of prison from one to 3 months or of the amendment from 5.000 lei to 10.000 lei.

In the same time through Law No. 273/2006 regarding to local public finances are incriminated the followings:

- the engagement, commandment or transfer of payments above the maximal limit of the approved amounts for expenses, through the budgets of public institutions financed integrally or partially by local budgets, by the local budgets of communities, cities, towns, of the sectors of Bucharest, of districts and of Bucharest, through the budgets of public institutions financed integrally by their own incomes, through the budget of external and internal loans, to which the reimbursement, the rates, the commissions and other costs are assured by the local budget, by the budget of external funds with no reimbursement;

- the engagement of expenses from the earlier mentioned budgets above the limit of the approved credits;

- the exercising by the main sequencer of credits or by the deliberative administrative-territorial unit being under the process of insolvency<sup>29</sup> in any kind of financial matter which is under the responsibility of the administrator named by the union-judge.

The sanctioning system applicable for the first infraction foresees the alternative sanction of prison from one to 3 months or of the amendment from 5.000 to 10.000 lei, and in the case of the other infractions it is foreseen prison from one to 3 months or an amendment from 10.000 to 25.000 lei.

Another action which breaks the legal dispositions regarding to budgetary discipline, having as a result the disturbance of economical-financial activities or could cause even material damages, is incriminated in the content of the Penal Code, article 302<sup>1</sup>- the infraction of defalcation<sup>30</sup>.

The infraction of defalcation contains even a more severe variant<sup>31</sup>. We can notice that the judicial object of this infraction is represented by those social relations which are connected to the sphere of the financial discipline – material resources, financial funds must be used according to their legal destination. The material object of the infraction is represented by those funds or financial resources which were defalcated through the action of the active subject. The quality of subject of the infraction can have that person who has the *right*, according to the special attributions of duty, to arrange the destination of some financial funds. We remark that in case of this infraction it is possible the penal participation, by any form – instigation, complicity.

The objective part of this infraction takes into consideration:

- the material element of the infraction consists in the action of changing the destination of some material resources (this way the resources being used for other destinations as those initially foreseen in the budget);

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29 According to law, the administrative-territorial unit is considered to be under insolvency in the following situations:

- not-paying of obligatory payments, cash and demandable, older than 120 days and which are above 50% from the annual budget, without taking into consideration the contractual litigations;

- not-paying the salaries foreseen in the budget of incomes and expenses a longer period than 120 days.

30 According to article 302 Penal Code «the changing of destination of money funds or material resources, without respecting the legal foresights, when the action caused a disturbance of the economical-financial activities or it caused a damage by an organization or institution of the state or by other units..., it is punished with prison from 6 months to 5 years».

31 According to the foresights of article 302 paragraph 2 of the Penal Code: «if the action described in paragraph 1 had particularly severe consequences, the punishment is prison from 5 to 15 years and the prohibition of some rights».



- the action of changing the destination of some material resources is done without respecting the legal foresights;

- the consequence of the action consists in the disturbance of economical-financial activities or in causing a damage to an organization or institution of the state.

The infraction can be done with direct or indirect intention.

The sanction system is represented by the punishment of prison from 6 months to 5 years and for the more severe form of the infraction, which has as a result the production of some very serious consequences<sup>32</sup>, it is foreseen a punishment of prison from 5 to 15 years and the prohibition of some rights.

At the end we must accentuate the importance of respecting the legal dispositions in the matter of budgetary execution. The protection of the financial interest of the state, this way is a priority for the authority in charge.

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32 According to art 146 Penal Code «through very serious consequences we understand a material damage higher than 200.000 lei and a severe disturbance of the activity, in the function of a public authority...».

# THE ROOTS OF THE WORLD FINANCIAL CRISIS

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*Abstract. In this paper the authors show the possible causes of the world financial crisis. In this way is presented the start of the financial crisis, and the evolution of American economy, its huge defficit, the evolution of nemployment rate, the inflation rate, the people rate debt etc.*

*Key words: financial crisis, oil price, national debt, solvency*

*JEL: G01*

## 1. Introduction

Many analysts consider the financial crisis as a new phenomenon, without precedent in the world economy.

Real estate credit crisis led to global financial crisis, and since then central banks and governments of developed countries made great efforts to unlock credit economy, which gradually came into recession

A retrospective of the world economy reveals that there were crises in other countries such as Brazil and Mexico, but they were due to wrong government policies based on low taxation and a fixed rate of conversion of national currencies.

“The punishment of Allah”, “Economic Pearl Harbor” (American billionaire Warren Buffet, one of the most respected investors on Wall Street), “Explosion of the financial Bubble”, “The new financial collapse”, “Financial vortex” (Alan Greenspan) are just some of the phrases used to define the global financial crisis.

## 2. The origins of global financial crisis

American administration policies were based on the premise that every American should be homeowner, and the facility offered by the American taxation authorities is the one of the deduction of interest from taxable income. This implies that all homeowners assume a financial risk, as it happened to the more than 22 million Americans, which in the period 2005-2007 have bought new or older houses, and who, after “real estate balloon” burst, lost a significant part of this investment. Currently, American analysts estimate that more than 10 million families own houses and their mortgage value exceeds the market value of these homes, and therefore this no longer allows them to change frequently jobs.

An important cause of the current financial crisis can be identified on the one hand in the absence of regulation in the banking (financial) system of the United States, on the other hand, in the decrease in reference interest by FED after the terrorist attack from 09.11.2001, in order to create liquidity in the banking system and to protect numerous financial institutions entering the payment inability.

A major cause identified by most financial specialists refers to the financial derivatives (contracts) market.<sup>33</sup> Otherwise, the unprecedented development of this from 106.000 billion

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33 Klein A., Goldfarb Z., The Bubble, The Washington Post, 06.15.2008

dollars in 2002 to over 531.000 billion dollars in 2008 was intended to increase the risk instead of limiting it based on the doubts about how companies value them.<sup>34</sup>

Derivatives were created as a protection against losses from investments. These contracts allowed financial services firms and companies with adequate liquidity to take more complex risks that normally would be avoided.

Defender against the imposition of restrictions on financial market derivatives Alan Greenspan argued in 2003 in front of the U.S. Congress that “derivatives were and are an extraordinarily useful vehicle to transfer risk from those who should not take it to those who are willing and able to do so.”<sup>35</sup>

The collapse of real estate credit in the United States resulted in massive losses for all investors who bought financial assets based on mortgages. These losses have affected the credit institutions which in the attempt to cover the debts sought to increase their own capital by selling shares, which resulted in negative reaction of the capital market, by dramatically lowering the shares of these banks, and pronounced reduction of equity of credit institutions.

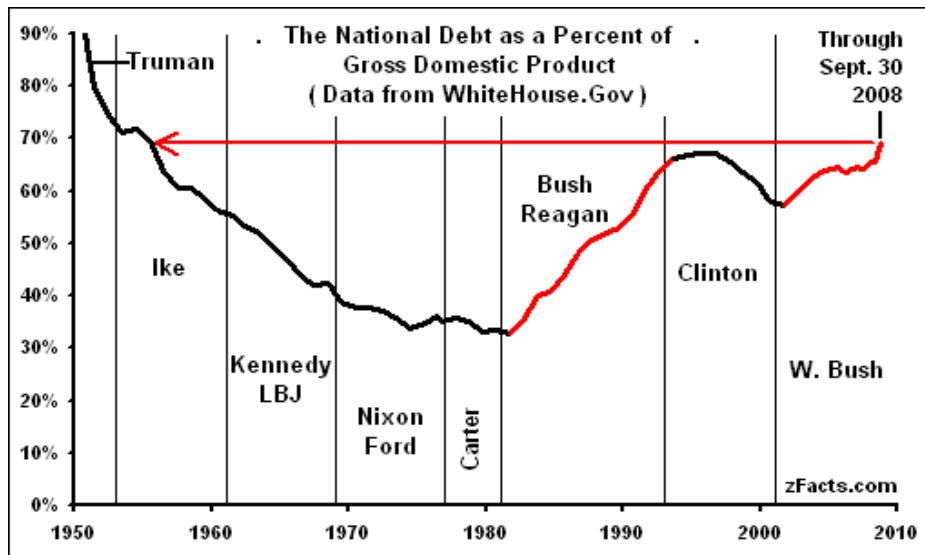


Fig.1. The evolution of public debt of the United States

Undoubtedly, a major cause that has been overlooked beginning with the Bush administration was the public debt of the United States which could reach a record level of over 70% in 2009.<sup>36</sup> Also in the analysis of the financial crisis one cannot exclude the evolution of the degree of indebtedness level of the population in the United States.

Thus, based on data obtained from the American statistics we have determined the evolution of this indicator over the period 2003-2008.<sup>37</sup>

34 www.zf.ro nr. din 13.10.2008

35 Idem

36 www.whitehouse.gov

37 The Statistic Federal Reserve Board. Statistical Supplement of Federal Reserve Bulletin 2004-2008; US Department of Labor. Bureau of Labor Statistics 2003-2008

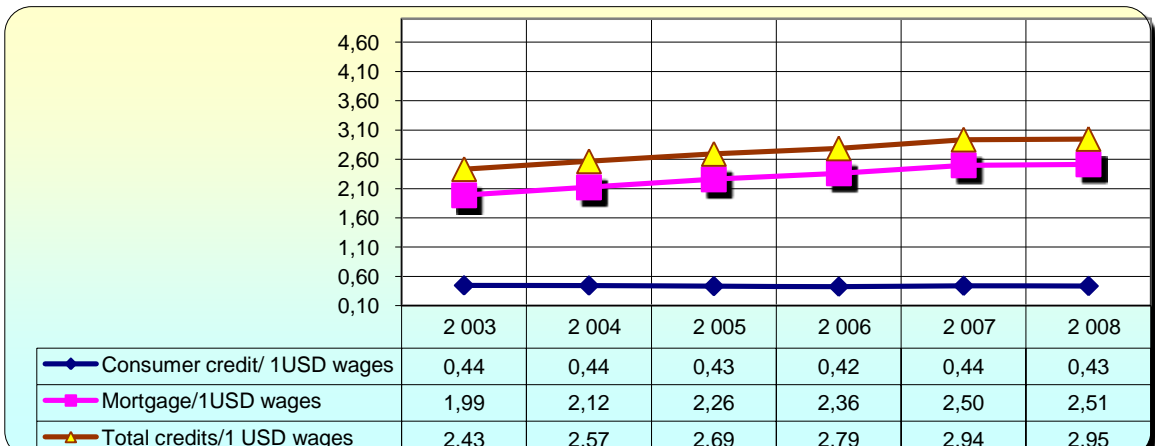


Fig.2.The evolution of degree of indebtedness level of the population in the United States

As shown in the picture above, the degree of indebtedness of the population has evolved between 2003-2008 from 2.43 USD to 2.95 USD for a US dollar income. Under American economy shrinkage conditions, as a result of the increase in the number of unemployed, those who were indebted could not pay the rates due on loans and thus triggering the foreclosure process of the respective properties.

Certainly, a major cause that triggered the financial crisis has its explanation in the evolution of industrial production in the United States.

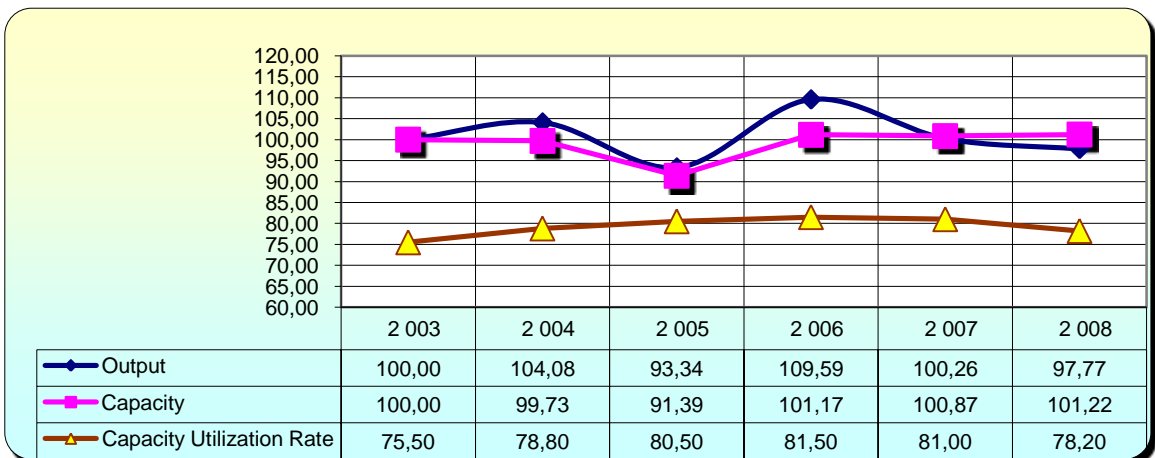


Fig.3.The evolution of output, capacity and the output capacity rate in the United States

Thus, it can be observed a decline in industrial production during 2004-2005 and 2006-2008, given that the rate of utilization of installed production capacity decreased between 2006-2008 from 81,50% to 78,20%.

Particularly important is the analysis of correlations between annual productivity and average annual gain as shown in the picture below.

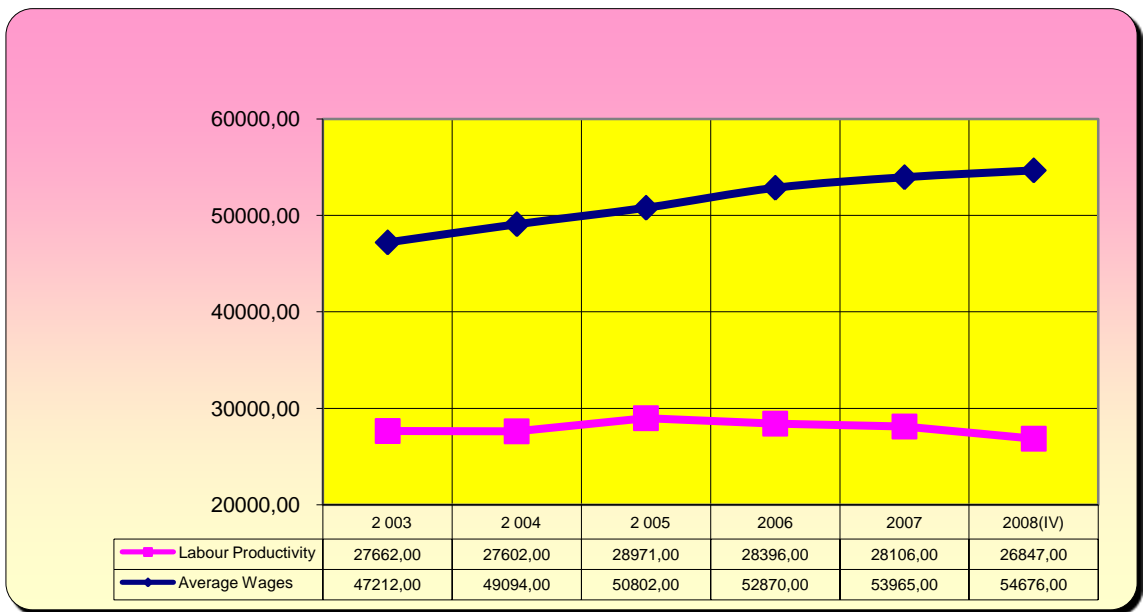


Fig.4. The evolution of productivity and the average wages in the United States

From the data presented above results on the one hand a level of productivity below the average annual earnings.

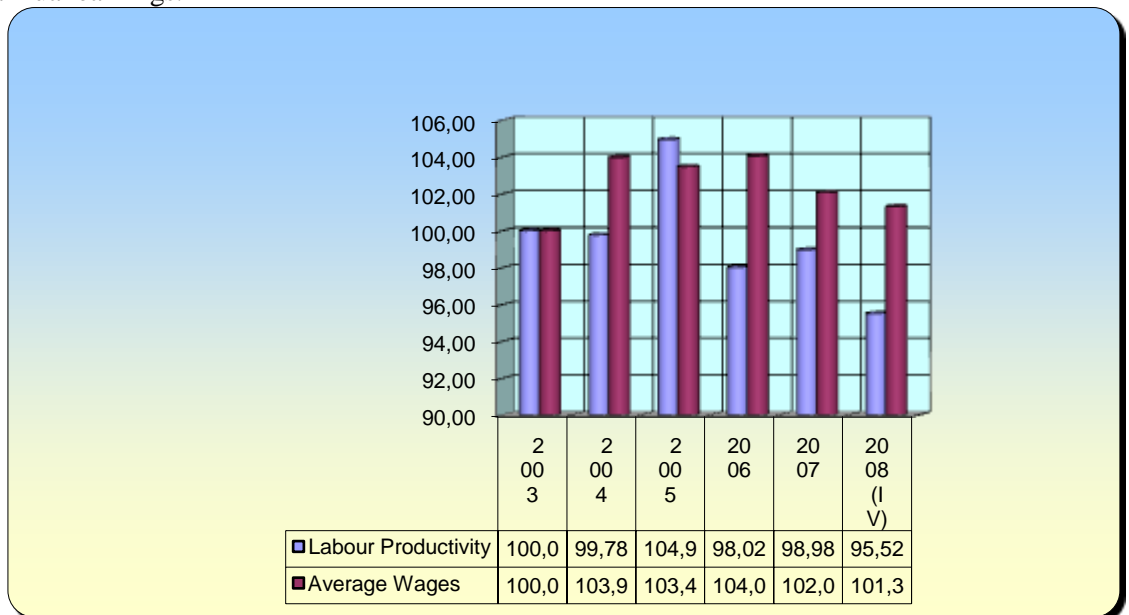


Fig.5. The dynamics of labour productivity and average wages

It is noted therefore that the average income outran the pace of labor productivity in 2004 and in the period 2006-2008.

Financial crisis triggered in the United States based on the real estate credit crisis has its explanation also in the fluctuation of the U.S. currency on financial markets on the one hand and in the evolution of oil stock.

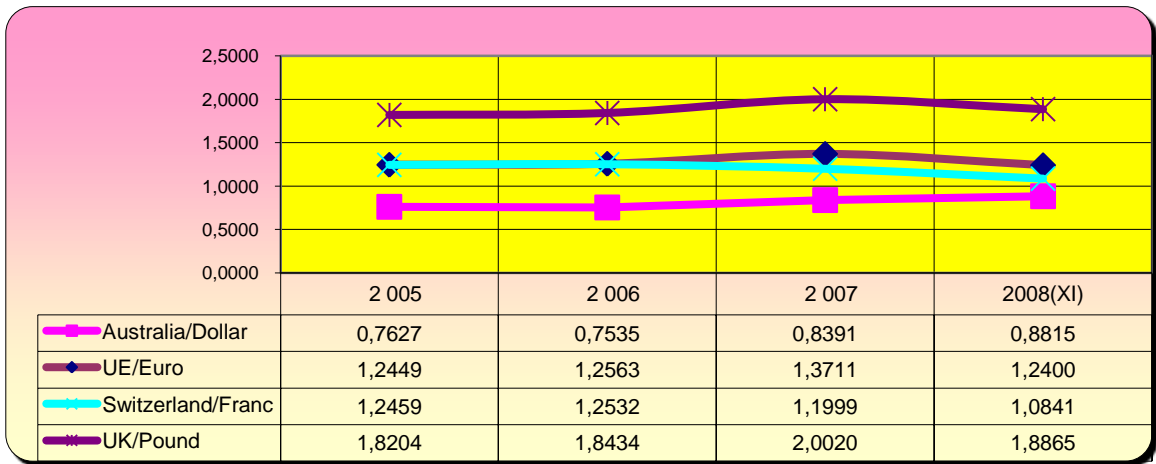


Fig.6. The evolution of exchange rate of USD

From the data presented above it results that one of the causes of financial crisis has its explanation in the strong depreciation of U.S. dollar against other currencies in Europe, Australia, Switzerland or Great Britain in the period 2005-2007.

On April 22, 2008, the dollar traded at \$1.60 for a euro and \$2 for a pound. After this strong depreciation, beginning with August the dollar has strengthened continuously, based on business liquidation made abroad by American investors and on the reference rate policy set by central banks: thus Fed established beginning with October 2008, 1.5% interest on overnight deposits, the European Central Bank setted interest at 3.75% and Bank of England at 4.5%. Currently the quotation is 1.36 dollars for a Euro.

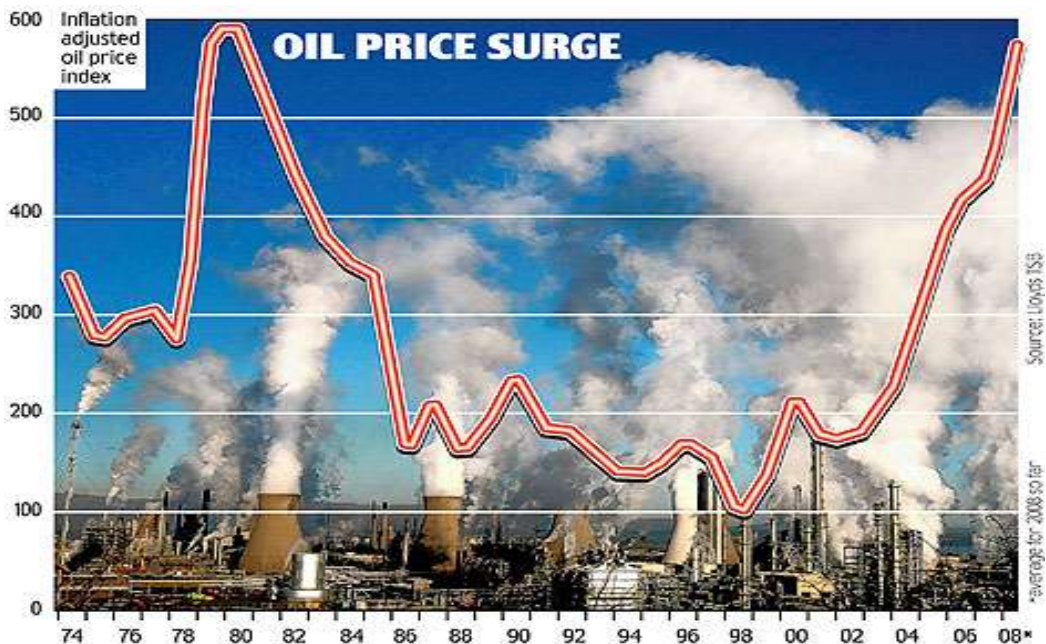


Fig.7. Evolution of oil stock in the period 1974 - July 2008

Global financial crisis has its explanation also in the development of the oil stock which reached a historical maximum of 145 USD per barrel in July 2008, after which, based on the evolution of the economic recession the stock has fallen steadily, reaching at present 51 USD per barrel.

### **3. Conclusions**

No doubt that the current global financial crisis is unprecedented, although some analysts compare it with the one from the years 1929-1033, whose duration is estimated by most analysts at least 5 years.

Paulson and Obama plans in the United States appears not to have had the expected effects, and European plan to stabilize the financial system didn't fall into place yet.<sup>38</sup>

Exiting the current global financial crisis undoubtedly involves state intervention in the economy with all the negative consequences arising from this.

One of the myths dispelled by the current global financial crisis is that the bank is the fundamental actor of the market economy, whose unwritten law is that those who fail to cover their expenses with their income are out of the game through bankruptcy.

The fact that banks which have recorded huge losses have not gone bankrupt, has shown that they are no longer subject to the laws of market economy but they are utility suppliers just like the suppliers of electricity, water etc.

Finally we observe that the crisis in U.S. is engendered mainly by the generalized decrease of consumption, which was the basis of American economic growth, and that has thus contributed to the lack of liquidities in the financial market.

Financial instruments through which American companies try to increase their capital are no longer efficient in these circumstances, as investors lost their confidence in the returns offered by the capital market.

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# CREATING VALUE FOR SHAREHOLDERS BY THE USE OF CASH-FLOWS

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*This paper addresses a topic of great contemporaneity and of particular importance, namely the extent to which the creation of value is achieved at micro level through the cash flow. Thus, after a brief introduction, there are given short feedbacks on two basic concepts that are used in the management oriented at creating value, namely: economic value added and market value added. Naturally, in close accordance with the present's work title, a large space is dedicated to value added in the form of cash flow. It enjoys both a broad theoretical description and a practical suggestive example.*

*Keywords: cash flow, value added, firm, investment*

*The Jel Classification: G31, G32*

## **1. Introduction**

The investment of capital in assets determines the size of the undertaking, the profits of its operational risk and the liquidity of its business. Getting the best combination of financing determines future cash flows, the financial risk, and has an impact on the value of the enterprise. Also, an optimal allocation of the net profit creates the prerequisites for further development and the structuring a stable shareholding. The basic idea is to acquire assets, to invest when cash flows are expected to exceed the investment, and finance with those instruments that are best, and therefore achieve an optimal distribution of net profit for self and for dividends.

For a long time, the company's management major objective was to maximize profits. It has been proved that such a goal presents a number of limitations, including: the orientation to the horizon near the expense of strategic objectives on medium and long-term; the possible deterioration of relations with customers, suppliers, employees, associates; the low connection with incomes and payments, etc. Gradually, because of these limits, such an objective has been replaced by another, more inclusive and that better meets the current requirements. Therefore, the major objective of the firm must be to create value for its shareholders, or, in other words, to maximize its value.

In order to create value, the businesses must have sufficient results to cover its operating costs and pay the invested capital properly. Performance and value represent an ideal duo for a modern and efficient company's management. "To measure performance one must assess the value and to know the value is to " translate" "performance"<sup>39</sup>.

Indicators reflecting the creation of value were created in the '80-'90 and they are of interest for both company shareholders and management. They were created to remove the deficiencies presented by indicators based on financial accounting data, such as the omission of the capital cost and the excessive use of rates in the economic and financial analysis. With these, there are made links between economic and financial performance achieved by the firm as measured by traditional indicators, and the company's value, as a means of measuring managerial performance.

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39 Albu C., Albu N., Tools for Management Performance, Economic Publishing House, Bucharest, 2004, pg. 96.



It is believed that, to create value, a company must earn enough to cover its operating costs and to ensure appropriate remuneration of the capital invested. To attract the interest of investors, equity pay must be at attractive rates, higher than an investment in assets with no risk. Management oriented at value creation includes three basic concepts: economic value added, market value added and value added under the form of cash flow.

## **2. Brief feedback on the economic value added and market value added**

**Economic Value Added (EVA)** was designed at end of the '80 by U.S. economist Bennett Stewart.

This indicator reflects the surplus of value obtained by shareholders from the profit of the related operating result, after covering the costs of invested capital and profit tax, and it is set as the difference between the result of the operation after deducting related tax and cost of capital invested.

Economic value added is based on the fact that, in order to create value, investments should be made that have an economic rate of return above the rate of cost of capital invested, alleged by the suppliers of funds. If positive, the economic value added creates value, and if negative, it expresses a loss of value for shareholders. If economic value added is equal to zero, this result is a satisfactory achievement because the shareholders have obtained a return that compensates for the risk they have assumed.

The goal of using economic value added is to reflect what happened to the wealth of shareholders. According to it, if the economic rentability is superior to the cost of the capital invested, the firm's value increases and vice versa.

To evaluate the wealth created for shareholders, in the case of companies listed on the market, Bennett Stewart set another indicator, **market value added**.

**Market value added (MVA)** expresses the richness of the company for its shareholders over the net book value of company assets. It is the difference between the market value of capital or exchange value of shares and book value of equity. The market value of equity is given by the stock exchange capitalization of the company, if it is listed on stock exchanges. If the company is not quoted on a regulated market, it is necessary to assess it by specific methods of evaluation.

Value-added market shows how much value was added or lost from the investment of shareholders<sup>40</sup>. Firms with a profitable activity create market value added and thus increase the amount of capital invested by shareholders, while unprofitable firms lose a part of the capital originally invested.

The market value added level depends on the profitability of invested capital. Thus, if the economic rate of return is greater than the cost of capital, the market value of company shares will rise above the initial investment, and this will have a positive value added. The same reasoning applies to the economic value added, so that a positive economic value added means a positive market value added.

The relationship between economic value added and market value added is that the size of the market value added is equal to the update value of all future economic value added.

It follows that by increasing the economic value added, a firm can increase its market value added or, in other words, increase the difference between the market value of the company and the amount of capital invested in it.

## **3. Theoretical aspects of the value added in the form of cash flow**

**Value added in the form of cash flow (VACF)** was created by Swedish economists Erik Ottosson and Fredrik Weissenrieder, at the mid-'90.

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40 Dincă M., The System of Indicators of Economic and Financial Results of the Company, Scrisul Românesc Publishing House, Craiova, 2001, pag. 158

Although the focus is on non-financial indicators, the two authors did not renounce to measure the company's activity from a financial perspective.

Value added in the form of cash flow is the net present value, which considers that the increase of the value of a firm can only come through the adoption of optimal investment decisions.

To determine this indicator, investments are classified into two categories: strategic investments and non-strategic investments.

*Strategic investments* are investments made from zero, made initially; while *non-strategic investments* are made subsequently, to maintain the value generated by strategic investments. Non-strategic investments will be treated as costs, as they are made in order to preserve the value of strategic investments.

The determination of the value added in the form of cash flow requires the calculation of the *operating cash flow* and *operating cash flow requirements*.

Requirements of operating cash flow is the level of cash flow, which, updated with an appropriate cost of capital, will lead to obtaining a net present value equal to zero.

Requirements of operating cash flow is a real annuity, adjusted according to the actual annual inflation, which should be covered by operating cash flow (CFE), which represents the cash flow before making strategic investments, but after the non-strategic investments, to ensure that strategic investment can create value.

A strategic investment creates value if operating cash flow exceeds the operating cash flow needs during the operation of investment:

$$\text{VACF} = \text{CFE} - \text{NCFE}.$$

The calculation of value added in the form of cash flow is as follows:

Income from the sale of products and goods

-Monetary operating expenses (expenses paid)

= Gross operating surplus (EBE)

- The variation of necessary working capital of exploitation

- Non-strategic investment

= Operating cash flow (CFE)

- Operating cash-flow needs (NCFE)

= Value added in the form of cash flow (VACF)

Operating costs do not include depreciation and other non-monetary costs, as these are not payable expenses.

Gross operating surplus reflects a potential result obtained by the business, as not all sales revenues are actually collected and not all the costs incurred are paid. For this reason, it is necessary to correct the EBE, in order to emphasize the **operating cash flow** from the acquired operations involved in the conduct of the made investment.

In this sense, from the revenue of the sale of products and goods it must be deducted the variation of inventory and accounts receivable ( $\Delta St + \Delta Cr$ ), and from costs it should be deducted variation of operating unpaid debts ( $\Delta Dets$ ), related to unpaid salaries of staff in the accounts, to on credit acquisitions of raw materials from suppliers, unpaid due taxes to state. The difference between the previous items is called the variation of necessary working capital ( $\Delta NFRE$ ):

$$\Delta NFRE = \Delta(St + Cr) - \Delta Dets,$$

In which:

St = inventory' value;

Cr = accounts receivable' value (with the sales receipt at a later date);

Dets = short term operating debt;

$$\Delta \text{NFRE} = (\text{St1} + \text{Cr1} - \text{St0} - \text{Cr0}) - (\text{Dets1} - \text{Dets0});$$

In which:

St1 = inventory' value at the end of the year;

St0 = inventory' value in the beginning of the year;

Cr1 = accounts receivable' value at the end of the year;

Cr0 = accounts receivable' value in the beginning of the year;

Dets1 = short term operating liabilities at the end of the year;

Dets0 = short-term operating liabilities in the beginning of the year.

A positive value of the  $\Delta \text{NFRE}$  signifies that the company has immobilized in inventory and accounts receivable greater cash amount than was able to draw from suppliers, staff, state, which negatively affect the size of CFE. A negative  $\Delta \text{NFRE}$  shows a lower value of fixed assets of company funds attracted from used sources, which is favorably evaluated, as having a positive influence on the size of CFE.

In order to obtain the total size of the operating cash flow, from of the value of EBE must be discounted the non-strategic investments made by the company (Ins), represented only in payments account.

*The value added in the form of cash flow is determined as the difference between the operating cash flow and operating cash flow requirements. It is, therefore, a surplus of value from shareholders' point of view.*

The operating cash flow needs represent the necessary cash flow in order to financially satisfy investors in the company's strategic investments.

Under this model, the investment's net present value ( $\text{VAN}_{\text{Inv}}$ ) is equal to the difference between the current value of the operating cash flow generated from investment for the entire period of operation ( $\text{VA}_{\text{CFE}}$ ) and the strategic investment made (I). Given that the latter is the updated value of the required operating cash flow during the operation of the investment ( $\text{VA}_{\text{NCFE}}$ ), we obtain:

$$\begin{aligned} \text{VAN}_{\text{Inv}} &= \text{VA}_{\text{CFE}} - I = \text{VA}_{\text{CFE}} - \text{VA}_{\text{NCFE}} = \sum_{k=1}^n \frac{\text{CFE}_k}{(1+r)^k} - \sum_{k=1}^n \frac{\text{NCFE}_k}{(1+r)^k} = \\ &= \frac{\text{CFE}_1 - \text{NCFE}_1}{1+r} + \frac{\text{CFE}_2 - \text{NCFE}_2}{(1+r)^2} + \dots + \frac{\text{CFE}_n - \text{NCFE}_n}{(1+r)^n} = \frac{\text{VACF}_1}{1+r} + \frac{\text{VACF}_2}{(1+r)^2} + \dots + \frac{\text{VACF}_n}{(1+r)^n} = \text{VA}_{\text{VACF}} \end{aligned}$$

Where:

r = discounted rate (usually the weighted average cost of capital),

n = number of years of operation of investment.

The calculus for operating cash flow needs the processing of the following *steps*:

1. The identification of required payments for each strategic investment.
2. The estimation of the economic life of each investment strategy.
3. Calculating the nominal cash flow you must produce for every strategic investment in each period (year / quarter / month), to achieve a net present value equal to zero, according to a calculation adjusted for inflation. The need for operating cash flow is assumed to be the same in real terms each year, which means that the size of the cash flow of the unadjusted calculation for inflation modifies only with the outcome of past inflation, if VACF analysis is done based on past data and based on estimated future inflation for the remaining NCFE.

Thus, under conditions of zero inflation, the forecast of operating cash flow is the same every year:

$$\text{NCFE}_1 = \text{NCFE}_2 = \dots = \text{NCFE}_n.$$

Considering an annual rate of inflation constant in time (i) the requirements of operating cash flow in year k is determined as follows:

$$\text{NCFE}_k = \text{NCFE}_{k-1} \cdot (1+i) = \text{NCFE}_1 \cdot (1+i)^{k-1}$$

If the rate of inflation recorded large fluctuations in time, previous formula can not be applied, requiring the use of the inflation rate each year for the analyzed period.

If analysis VACF is done only for the future (strategic investment will be made now or in future years), the NCFE of the first year for an investment with a lifetime of  $n$  years can be calculated as follows (assuming a future inflation and constant):

$$I = \frac{NCFE_1}{1+r} + \frac{NCFE_1(1+i)}{(1+r)^2} + \dots + \frac{NCFE_1(1+i)^{n-1}}{(1+r)^n} = \frac{NCFE_1}{1+r} \left[ 1 + \left(\frac{1+i}{1+r}\right) + \left(\frac{1+i}{1+r}\right)^2 + \dots + \left(\frac{1+i}{1+r}\right)^{n-1} \right]$$

In the right parenthesis we have a geometric progression term 1, ratio  $\frac{1+i}{1+r}$  and last term

$$\left(\frac{1+i}{1+r}\right)^{n-1}. \text{ Therefore: } I = \frac{NCFE_1}{1+r} \cdot \frac{1 - \left(\frac{1+i}{1+r}\right)^n}{1 - \frac{1+i}{1+r}} = \frac{NCFE_1}{r-i} \left[ 1 - \frac{(1+i)^n}{(1+r)^n} \right]$$

Where that needs operating cash flow of year 1 will cause such:

$$NCFE_1 = \frac{I}{\frac{1}{r-i} - \frac{(1+i)^n}{(1+r)^n}}$$

A special information presents **the index of value added in the form of cash flow**, calculated by the reporting date of CFE to the investment made and the strategic value of NCFE updated as follows:

$$\text{Index VACF} = \frac{VA_{CFE}}{I} = \frac{VA_{CFE}}{VA_{NCFE}}$$

An index value of VACF greater than 1 shows that strategic investments produce an operating cash flow sufficient to cover the demand for operating cash flow and to achieve a surplus that will lead to increasing real wealth held by shareholders as owners of the company.

#### 4. Practical way of determining the value added in the form of cash flow

To demonstrate how computing VACF, we consider that a company makes in year 0 an investment of 500 thousand lei, whose economic life expectancy is 7 years. The investment comes into operation from January 1 next year and year 1. The average rate of the cost of the capital invested ( $r$ ) is 15% each year, and inflation ( $i$ ) is assumed to be constant during operation of the investment, 5% per year. Operating cash flow needs have the same record in real terms each year; in nominal value, it is different, being affected by inflation. Sales, costs, the variation of necessary working capital ( $\Delta NFRE$ ) and non-strategic investments (INS) that the company estimates that it will achieve in each of the 7 years are presented in Table 1. Based on these data, it can be calculated the CFE, NCFE and VACF.

Table 1 – thousand lei-

| Year   | 0 | 1    | 2    | 3    | 4    | 5    | 6    | 7    | Total |
|--|---|------|------|------|------|------|------|------|-------|
| 1. Revenues from sales of products and goods |   | 1100 | 1250 | 1400 | 1600 | 1700 | 1850 | 2000 |       |
| 2. Payable expenses                          |   | 900  | 1000 | 1050 | 1200 | 1300 | 1400 | 1500 |       |
| 3. EBE [(1)- (2)]                            |   | 200  | 250  | 350  | 400  | 400  | 450  | 500  |       |
| 4. $\Delta NFRE$                             |   | 0    | 50   | 100  | 150  | 150  | 150  | 200  |       |
| 5. Ins                                       |   | 10   | 10   | 15   | 20   | 25   | 30   | 40   |       |

| Year                      | 0   | 1      | 2      | 3      | 4      | 5      | 6      | 7      | Total         |
|---------------------------|-----|--------|--------|--------|--------|--------|--------|--------|---------------|
| 6. CFE [(3)- (4)- (5)]    |     | 190    | 190    | 235    | 230    | 225    | 270    | 260    |               |
| 7. I                      | 500 |        |        |        |        |        |        |        |               |
| 8. r                      | 15% |        |        |        |        |        |        |        |               |
| 9. i                      | 5%  |        |        |        |        |        |        |        |               |
| 10. NCFE                  |     | 106,15 | 111,46 | 117,03 | 122,89 | 129,03 | 135,48 | 142,25 |               |
| 11. VACF [(6)- (10)]      |     | 83,85  | 78,54  | 117,97 | 107,11 | 95,97  | 134,52 | 117,75 |               |
| 12. VA <sub>CFE</sub>     |     | 165,22 | 143,67 | 154,52 | 131,50 | 111,86 | 116,73 | 97,74  | <b>921,24</b> |
| 13. VA <sub>NCFE</sub>    |     | 92,31  | 84,28  | 76,95  | 70,26  | 64,15  | 58,57  | 53,48  | <b>500,00</b> |
| 14. VA <sub>VACF</sub>    |     | 72,91  | 59,39  | 77,56  | 61,24  | 47,71  | 58,16  | 44,26  | <b>421,24</b> |
| 15. Index VACF [(13) / 7] |     |        |        |        |        |        |        |        | 184,25 %      |

Size VACF shows the period during which the strategic investment is able to create value and to produce more or less CFE towards the cost of investors' capital (NCFE).

NCFE level of first year (NCFE<sub>1</sub>) and subsequent years shall be determined as follows:

$$NCFE_1 = \frac{500}{\frac{1}{0,15 - 0,05} - \frac{(1 + 0,05)^7}{(0,15 - 0,05) \times (1 + 0,15)^7}} = 106,15 \text{ mii lei}$$

$$NCFE_2 = NCFE_1 \times (1 + 0,05) = 111,46 \text{ million } NCFE_1 \dots NCFE_7 = x (1 + 0,05)^6 = 142,25 \text{ million}$$

The net present value at the time of investment (December 31 year 0) of the necessary operating cash flow, of the operating cash flow of the and of the value added in the form of cash flow is calculated as follows:

$$VA_{NCFE1} = \frac{NCFE_1}{1 + 0,15} = 92,31 \text{ thousand} \quad \dots \quad VA_{NCFE7} = \frac{NCFE_7}{(1 + 0,15)^7} = 53,48 \text{ thousand}$$

$$VA_{CFE1} = \frac{CFE_1}{1 + 0,15} = 165,22 \text{ thousand} \dots \quad VA_{CFE7} = \frac{CFE_7}{(1 + 0,15)^7} = 97,74 \text{ thousand}$$

$$VA_{VACF1} = \frac{VACF_1}{1 + 0,15} = 72,91 \text{ thousand} \quad \dots \quad VA_{VACF7} = \frac{VACF_7}{(1 + 0,15)^7} = 44,26 \text{ thousand}$$

Based on these data, the index can be calculated VACF:

$$I_{VACF} = \frac{VA_{CFE}}{I} = \frac{921,24}{500} = 184,25\%$$

## 5. Conclusions

It is found in the previous table, that in all seven years of operation, the value created by the investment is made positive. In sizes up to date, there is a similar situation, a positive VA<sub>NVACF</sub> each year, and fluctuate from one year to another. Net present value VACF is 421.24 thousand lei, representing the growth of the investment value that it created for shareholders over the remuneration that they and the creditors require. In update terms, the rentability of the strategic investment is 84.25%, meaning the increase pf the firm's value in the seven years on the investment made.

In the chart below there are listed the developments related CFE, NCFE and VACF in nominal value for the example by up.

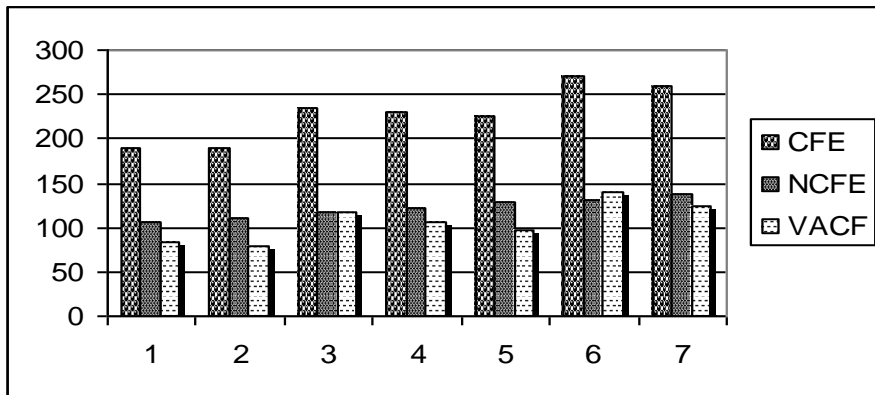


Fig. 1. The evolution of CFE, NCFE, VACF

It is noted in the chart above, the CFE fluctuating trend, but with an upward trend, with a maximum reached in 6 of 270 thousand lei. In order to maintain the productive capacity of the investment, the firm must carry out non-strategic investments each year, that are reflected positively in company's sales growth, covering the additional expenses incurred. The following graph reflects the evolution NCFE, CFE VACF, updated in year 0 and reflected in currency units of the time of the investment.

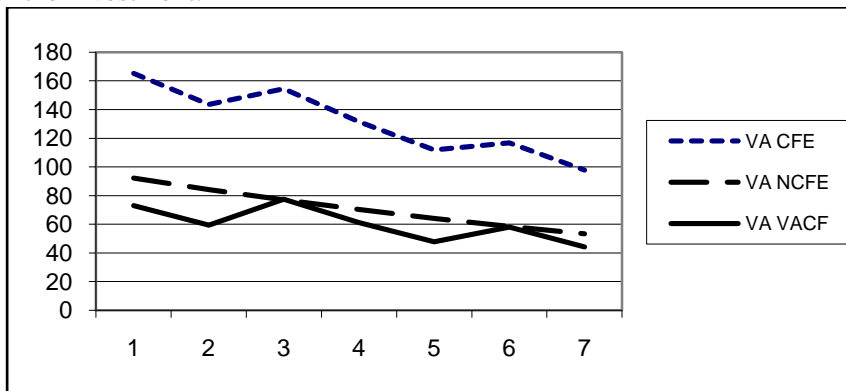


Fig. 2. The evolution of  $VA_{CFE}$ ,  $VA_{NCFE}$ ,  $VA_{VACF}$

The evolution of these indicators played a decreasing trend of the updated values CFE, NCFE and VACF during investment.

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# THE FORMATION OF ROMANIA'S BUDGET DEFICIT IN THE CONTEXT OF THE EUROPEAN INTEGRATION

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*In this paper we intend to analyze the evolution and factors generating the budget deficit of Romania in the period before the year 2008, putting into light the impact of European integration, both from the perspective of the size of the budget deficit promoted by public authorities in our country, in accordance with the nominal convergence criteria stipulated by the Treaty of Maastricht, as well as of the size and structure of budget revenues and expenditure.*

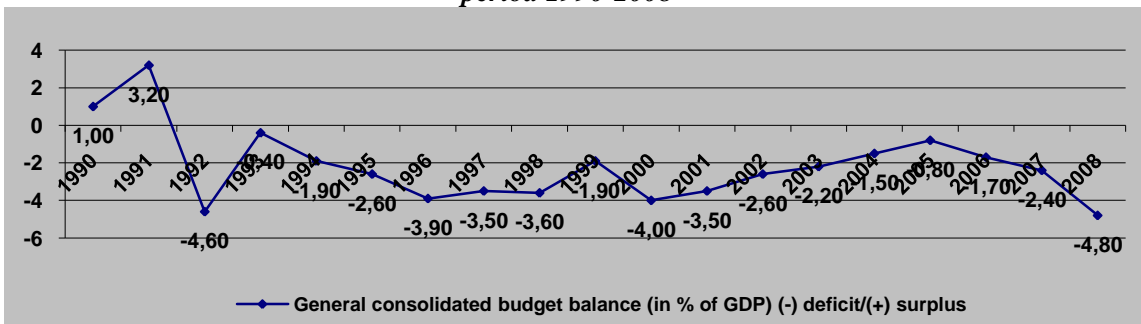
*Key words: budget deficit, budget revenues, budget expenses, European Union*

*JEL code: H20, H50, H62*

## 1. The evolution of the budget deficit of Romania in the context of the transition to the market economy and the European integration

The evolution of the budget balance in Romania, in the period after 1990, was marked by two major phenomena: the transition from the economic centralized system to the market economy and the acquisition of the status of member state of the European Union, phenomena requiring considerable efforts on the financial plan, for supporting the process of reform and establishing some solid bases than ensure the appropriate conditions for the development of a functional economy. Figure 1 presents the evolution of the general consolidated budget balance of Romania, during the period 1990-2008.

*Figure 1: The dynamics of the general consolidated budget balance of Romania during the period 1990-2008\**



\* operational data for 2008

Source: data provided by the Ministry of Public Finance, the National Bank of Romania and the National Institute of Statistics

We can ascertain the fact that, excepting the first two years of the post-December period, the general consolidated budget has permanently registered deficit after 1990. However, what has varied was the extent of the deficit achieved. In the period 1992-2000, the deficit generally registered high values as proportion in the GDP, being of 4.6% in 1992 and 4% in 2000. Afterwards, it was reduced, reaching the minimum level of 0.8 of the GDP in 2005, resuming its



easily ascendant trend after this year, up to 2.4 from the GDP in 2007. In 2008, in the conditions of the reduction of the economic growth rhythm on the background of the financial crisis, the deficit substantially increased, up to 4.8 of the GDP. According to the estimates of the European Commission, this evolution is expected to continue in the immediately following interval, the forecasted budget deficit being of 7.5% of the GDP for the year 2009 and 7.9% for 2010, therefore over the threshold of 3% of the GDP<sup>41</sup>.

The consolidated budget balance evolution was especially determined by the trajectory of the state budget deficit, since other components (mainly the local budgets and the social security budget) have most often presented surpluses or deficits reduced as dimensions<sup>42</sup>.

**Table 1: The budget deficit of European Union's Member States during the period 1992-2008 (in % of GDP) \***

| <b>Countries</b>      | <b>1992</b> | <b>1994</b> | <b>1996</b> | <b>1998</b> | <b>2000</b> | <b>2002</b> | <b>2003</b> | <b>2004</b> | <b>2005</b> | <b>2006</b> | <b>2007</b> | <b>2008</b> |
|-----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Belgium</b>        | -8.4        | -5.0        | -3.9        | -0.9        | 0.0         | 0.0         | -0.1        | -0.2        | -2.7        | 0.3         | -0.2        | -1.2        |
| <b>Czech Republic</b> | -           | -           | -3.3        | -5.0        | -3.7        | -6.8        | -6.6        | -3.0        | -3.6        | -2.6        | -0.6        | -1.5        |
| <b>Germany</b>        | -2.5        | -2.3        | -3.3        | -2.2        | 1.3         | -3.7        | -4.0        | -3.8        | -3.3        | -1.5        | -0.2        | -0.1        |
| <b>Greece</b>         | -           | -           | -           | -           | -3.7        | -4.7        | -5.7        | -7.4        | -5.1        | -2.8        | -3.6        | -5.0        |
| <b>Spain</b>          | -           | -           | -4.8        | -3.2        | -1.0        | -0.5        | -0.2        | -0.3        | 1.0         | 2.0         | 2.2         | -3.8        |
| <b>France</b>         | -4.6        | -5.5        | -4.0        | -2.6        | -1.5        | -3.1        | -4.1        | -3.6        | -2.9        | -2.3        | -2.7        | -3.4        |
| <b>Italy</b>          | -8.6        | -9.0        | -7.0        | -2.8        | -0.8        | -2.9        | -3.5        | -3.5        | -4.3        | -3.3        | -1.5        | -2.7        |
| <b>Lethonia</b>       | -0.5        | -1.3        | -0.4        | 0.0         | -2.8        | -2.3        | -1.6        | -1.0        | -0.4        | -0.5        | 0.4         | -4.0        |
| <b>Lithuania</b>      | -           | -           | -3.3        | -3.1        | -3.2        | -1.9        | -1.3        | -1.5        | -0.5        | -0.4        | -1.0        | -3.2        |
| <b>Austria</b>        | -2.0        | -4.8        | -4.0        | -2.4        | -1.7        | -0.7        | -1.4        | -4.4        | -1.6        | -1.6        | -0.5        | -0.4        |
| <b>Hungary</b>        | -           | -           | -4.7        | -8.2        | -2.9        | -8.9        | -7.2        | -6.4        | -7.8        | -9.2        | -4.9        | -3.4        |
| <b>Poland</b>         | -           | -           | -4.9        | -4.3        | -3.0        | -5.0        | -6.3        | -5.7        | -4.3        | -3.9        | -1.9        | -3.9        |
| <b>Romania</b>        | -           | -           | -3.7        | -3.2        | -4.4        | -2.0        | -1.5        | -1.2        | -1.2        | -2.2        | -2.5        | -5.4        |
| <b>Slovakia</b>       | -           | -6.1        | -9.9        | -5.3        | -12.3       | -8.2        | -2.7        | -2.3        | -2.8        | -3.5        | -1.9        | -2.2        |
| <b>Great Britain</b>  | -6.4        | -6.8        | -4.3        | -0.1        | 3.6         | -2.0        | -3.3        | -3.4        | -3.4        | -2.7        | -2.7        | -5.5        |
| <b>Eurozone **</b>    | -           | -           | -4.2        | -2.2        | 0.1         | -2.5        | -3.1        | -2.9        | -2.5        | -1.2        | -0.6        | -1.9        |
| <b>EU27</b>           | -           | -           | -           | -1.9        | 0.6         | -2.5        | -3.1        | -2.9        | -2.4        | -1.4        | -0.8        | -2.3        |

\* the data concern the general government budget deficit according to the Maastricht criteria. They sometimes substantially differ of those presented by the national authorities due to the differences in methodology;

\*\* 11 members since 2000, 12 members in 2006, 13 in 2007 and 15 in 2008

Source: Eurostat

Although the budget disequilibrium has known important dimensions, still it must be regarded in the context of specific transformations that the Romanian economy was subject to during the post-December period. Comparing the evolution of the consolidated budget deficit of Romania, in the period after 1990, with the one registered in other countries from the Central and Eastern Europe, going through the same transition process to the market economy and, afterwards, preparing for the European integration, we can assess the fact that it was kept under control by the public authorities, registering relatively lower dimensions, in accordance with the inflation diminishing objective. This also allowed maintaining the public debt at a lower level compared to other states of the Central and Eastern Europe.

41 European Commission, Interim Forecast January 2009, p. 38.

42 Other components of the budget system that registered deficit are: the budget of external credits given to the ministries, some budgets of the extra-budget funds, the Budget of the National Company of Highways and National Roads etc.

As we can notice from the data presented in table 1, during almost the entire period analyzed, the consolidated general budget deficit of Romania was much smaller than the deficits registered in the countries found in the same economic and political situation, such as Slovakia, Hungary or Poland. In some of them, the budget deficit approached or even exceeded 10% of the GDP (the case of Slovakia in 2000). Even after the accession of Hungary, Slovakia and Poland to the European Union, the deficits registered in these three states were much higher than the limit stipulated through the Maastricht Treaty, of 3% of the GDP. On the contrary, Romania complied with this nominal convergence criterion after 2002 although, under the conditions of the current financial crisis, this limit will be exceeded.

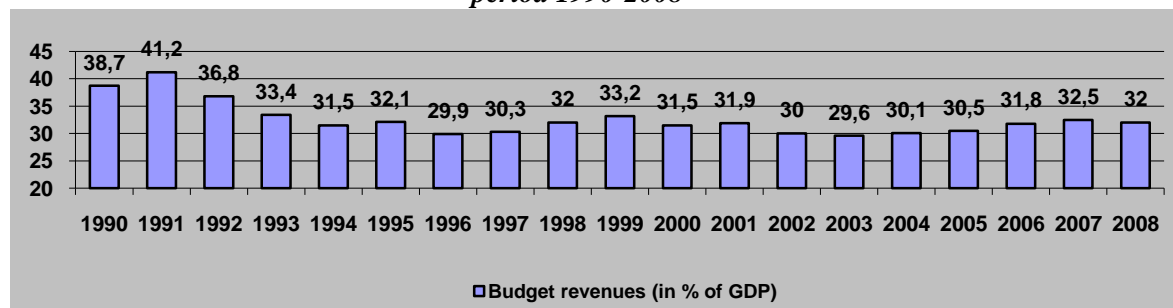
Analyzing the evolution of the budget deficit in other countries of the European Union as well during the period 1992- 2008, we can ascertain that there were many cases when the budget deficits were substantial. Negative budget balances of important dimensions were especially encountered in France, Greece, Germany, Italy and Great Britain, many times leading to the triggering of excessive budget deficits procedures, provided by the Stability and Growth Pact.

Taking into consideration all these aspects, the evolution of the budget deficit of Romania during the period 1990-2008 can be appreciated as being a normal evolution through the events that our country has experimented and through the similar previous cases seen at the international level. Nevertheless, the objective of adopting euro as a national currency imposes the intensification of the efforts to maintain the budget deficit at a low level, including from the perspective of maintaining under control the inflation, as a distinctive criterion of nominal convergence. In this manner, the public debt would be maintained at a sustainable level as well.

## 2. Forming the budget revenues - factor with impact on the size of the budget deficit

*The reduced level of the financial resources* attracted at the budget represents the main generating factor of the budget deficit promoted by the public authorities during the period after 1992. We can ascertain, from figure 2, that the budget revenues have generally represented, approximately 30-33% of the GDP, much under the average of developed states and even under the level registered in other states from the category of those in transition to the market economy and involved in the process of European integration, confronting with the same requirements in the financial plan. For example, in 2007 the budget revenues represented 40.4 % of the GDP in Poland, 43.2% in Slovenia, 44.6 in Hungary, 40.8 in Czech Republic, 41.2 % in Bulgaria and only 32.5% in Romania. Under the conditions of the current crisis that our country goes through, the volume of the incomes collected to the budget seems to decrease.

**Figure 2: The evolution of the general consolidated budget revenues in Romania, during the period 1990-2008\***



\* operational data for 2008

Source: data provided by the Ministry of Public Finance, the National Bank of Romania and the National Institute of Statistics

Among the factors that exerted their influence on the volume of resources attracted in the budget, we can mention: the annual repeated and ample decreases of the GDP from the first transition years<sup>43</sup>; the inadequate tax politics promoted by the competent authorities; the proliferation of tax evasion phenomenon, also because of the multiple exceptions and exemptions given by the state regarding the payment of some taxes and duties; the relative reduced rate of collecting the duties, taxes and contributions, especially at the level of the state enterprises.

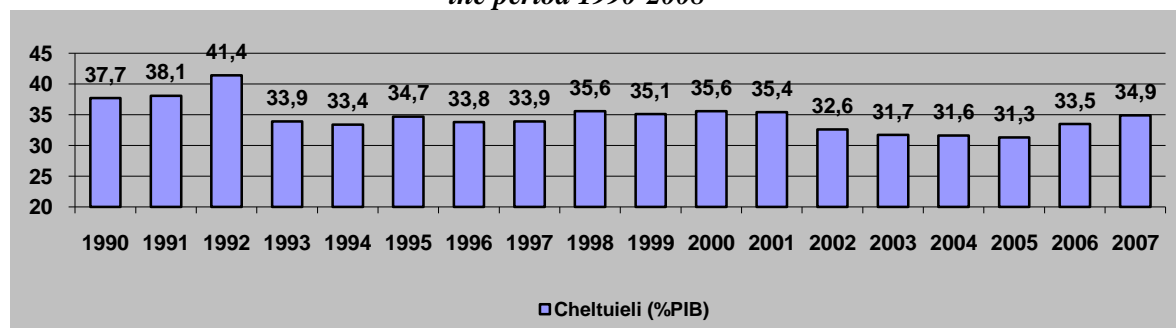
The taking over of the sums from the privatization of state capital companies by the budget, allowed, as other states in transition, to complete the tax incomes and, in such manner, to maintain the budget deficit at a lower level. The sums obtained in such way were substantial, reaching up to 2.3% of the GDP in 1998.

### 3. Making the budget expenditure – factor with impact on the size of the budget deficit

Although the *budget expenses* were continuously bigger than the ordinary revenues, forcing the public authorities to loan money, we can ascertain (Figure 3) that they were also maintained *at a low level compared with the one registered in other states knowing similar socio-economic conditions*. Excepting the first years of transition, when it approached 40% of the GDP, the level of public expenses was of 30-35%, with a maximum of 36.9% of the GDP in 2008. By comparison, in 2007 the public expenses were of 42.2% in Poland, 43.3% in Slovenia, 50.1% in Hungary, 42.2% in the Czech Republic and 37.8% in Bulgaria.

In the dynamics, we can ascertain that *the rhythm of increase or decrease of public expenses followed closely the one of the available financial resources*, effect of drastically reducing the expenses at the level of incomes, especially under the impact of the pressures exerted in this sense by the International Monetary Fund<sup>44</sup>. This is emphasized especially in 1999 when, under the conditions of reduced credibility on the external plan, the substantial reduction of the budget deficit was imposed, reaching in the end the level of 1.93 % of the GDP.

**Figure 3: The evolution of the general consolidated budget expenditure in Romania, during the period 1990-2008\***



\* operational data for 2008

Source: data provided by the Ministry of Public Finance, the National Bank of Romania and the National Institute of Statistics

43 For example, during the period 1996-1999 the fiscal policy promoted by the public authorities concerned to increase the level and the number of taxes, fees and contributions; as a result, although the budget incomes increased as a percentage in the GDP, on the background of the serious economic recession provoked, they knew a reduction in real size.

44 In order to benefit from the IMF resources, based on the principle of conditionality, the member states must elaborate and implement certain programs referring, among other things, to the budget deficit size. Such programs were implemented by Romania as well. The problem became again one of actuality in the context of the recent stand-by agreement that will be signed with the IMF.

Analyzing in structure the public expenses (Table 2) we can ascertain that the *current expenses* were and are *predominating* (wages, goods and services, interests, subventions and transfers) with percentage over 80% (variable from 79% in 1990 to 90.3% in 2001 and 91.4 % in 2005). The capital expenses, on the contrary, have had much more reduced dimensions (in the analyzed period their maximum value being of 21% of the total of expenses in 1990 and 16.4 in 1994) with a tendency of decreasing until 2000. This indicates the fact that the expenses were limited at the level of available incomes, most often, by adjusting the investment expenses.

**Table 2: The economic classification of the general consolidated budget expenses of Romania, during the period 1990-2008 (selected years)\***

-in % of total expenses –

| Year | Current expenses |                    |           |             |           | Capital expenses | Financial operations |
|------|------------------|--------------------|-----------|-------------|-----------|------------------|----------------------|
|      | Wages            | Goods and services | Interests | Subventions | Transfers |                  |                      |
| 1990 | 18.0             | 11.8               | -         | 18.6        | 30.7      | 21.0             | -                    |
| 1992 | 17.9             | 15.1               | 0.6       | 31.4        | 22.6      | 9.8              | 2.7                  |
| 1994 | 19.4             | 16.2               | 3.9       | 11.5        | 31.5      | 16.4             | 1.0                  |
| 1996 | 17.8             | 17.1               | 4.7       | 12.9        | 30.8      | 15.4             | 1.2                  |
| 1998 | 14.2             | 18.4               | 12.7      | 4.7         | 37.4      | 10.3             | 2.3                  |
| 2000 | 15.5             | 19.9               | 13.8      | 4.6         | 36.3      | 8.6              | 1.3                  |
| 2001 | 14.9             | 20.8               | 11.5      | 6.2         | 36.9      | 9.4              | 0.3                  |
| 2002 | 15.0             | 21.2               | 9.7       | 6.2         | 37.9      | 9.7              | 0.3                  |
| 2003 | 15.8             | 21.3               | 5.3       | 9.3         | 38.2      | 9.8              | 0.3                  |
| 2004 | 16.7             | 20.8               | 4.1       | 7.1         | 41.2      | 10.0             | 0.1                  |
| 2005 | 17.3             | 22.3               | 3.8       | 7.0         | 41.1      | 8.6              | 0.04                 |
| 2006 | 18.6             | 19.7               | 2.4       | 6.6         | 41.1      | 11.3             | 0.04                 |
| 2007 | 18.7             | 18.9               | 2.0       | 5.0         | 44.7      | 10.6             | 0.01                 |
| 2008 | 22.8             | 17.6               | 2.2       | 4.1         | 41.2      | 12.2             | 0.00                 |

\* operational data for 2008

Source: data provided by the Ministry of Public Finance

The expenses with the transfers constantly represented the most significant percentage in the total of public expenses, most often of over 30% and even over 40% beginning with 2004. The general tendency registered was of increasing the relative importance of this category of expenses, in this manner being able to appreciate that they had a major contribution to increasing the public expenses and, as a consequence, to producing the budget deficit.

The transfers serve very different political, economic, scientific and cultural purposes, for accomplishing some international obligations and especially, some social purposes. The growth of the latter, in the form of expenses with the pensions, insurance and welfare etc. (with a percentage of approximately 80% of the total of transfers) was determined by numerous factors, among which: the accelerated increase of the average number of retired people compared with that of the employees and total population, the high rate of unemployment, including on the background of applying some measures of privatizing and restructuring the companies that led to massive personnel layoff, the high rate of poverty that required the intervention of the state in the most different manners in view of supporting the population etc. According the autumn forecast of the European Commission<sup>45</sup>, the increase of public expenses with the pensions, together with reducing the social security contributions and the costs for introducing the second pillar of pension system will have an important contribution to increasing the budget deficit in 2009.

45 European Commission, Economic Forecast Autumn 2008, p. 107.

In the context of European integration, the recent growth of public expenses with the transfers can also be ascribed to ensuring the co-financing of non-reimbursable financial assistance from the European Community, and of the contribution of the community budget as well. Together with the integration in the European Union, our country has to contribute to the community budget, as a member state, in this way being paid in 2007 the sum of 3.9 billion lei (approximately 1% of the GDP). In 2008, Romania's contribution to the EU budget was of 4.2 billion lei, increasing compared to the sum due for 2007, in the period 2009-2011 being maintained around the value of 4 billion lei.

The expenses with subventions and premiums have known important dimensions and have had a significant contribution to the production of budget deficits especially in the first years of transition (31.4 % from the total of public expenses in 1992 and 12.9% in 1996), in the context of the state's direct involvement in maintaining at a reasonable level some prices and tariffs at the basic resources and products and services of strategic importance for the national economy and the standard of living of the population, covering the state companies' losses, supporting the agricultural producers etc. Because of the gradual renunciation to subventions in the context of preparing to access to the European Union, the subventions registered a decreasing percentage in the total of public expenses in the last period, being of only 5% in 2007 and 4.1 % in 2008.

The expenses with the interests and those assimilated to them (with the issuance and placement of government bonds, related to the risk of guarantees given by the state in the limits of the law, the expenses caused by establishing the country risk through specialized agencies) have registered during the transition period the most alert rhythm of increase and have had the most unfavourable impact, on the line of budget expenses, on the budget balance; practically inexistent in 1990, they grew up to 13.8% of the total of public expenses, in 2000. In order to establish a degree of comparison, it is sufficient to mention that, at the level of 2000, they substantially exceeded those destined to priority sectors of economy, such as education, health care, national defence. Among the factors that contributed to increasing this category of expenses, we can mention the increase of public debt and its inadequate structure, the high rates of interests, and the national currency instability. After 2000, on the background of reducing the public debt and improving its management, the expenses with interests were substantially reduced, representing, in 2008, 2.2% of the total of public expenses (0.8 of the GDP). In this manner, we created the manoeuvre space necessary for increasing other categories of expenses, including those regarding the investments in the transport infrastructure and for complying with the environment standards, so necessary from the perspective of alignment to the requirements of the integration into the European Union.

**In conclusion**, the specific transformations to which our country was subjected, in the context of the transition to the market economy and European integration, finally put fingerprints on the structure and, especially, the size of budget revenues and expenditure, generating budget deficits. However, compared with other countries under similar conditions, the Romanian authorities have shown concern for maintaining their level within acceptable limits, including from the perspective of the nominal convergence criteria laid down by the Treaty of Maastricht, in order to adopt the euro.

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# FACTORS INFLUENCING DECISIONS REGARDING THE FINANCIAL STRUCTURE OF THE ENTERPRISE

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*In the paper there are presented the importance of the financial structure of the enterprise, the micro and macroeconomic factors that influence decisions on the financing, their characteristics, how they interact between them. All this must be achieved to attain the optimal state of the enterprise. Keywords: financial structure, capital, microeconomic and macroeconomic factors*

*JEL Classification codes: G32*

## **Introduction**

Financial structure of the enterprise reflects the composition of capital and is defined in two ways, either by taking into account the duration or the feature of the capital, either having in view the origin of the capital.<sup>46</sup> The financial structure of the enterprise involves the achievement of the equilibrium between the level of the risk and the rate of profitability.

In order to determine the choice of financing the enterprise should be considered the factors that influence decisions on financial structure. These factors relate to: the structure of assets, the internal conditions of the enterprise, market conditions, profitability, profit margin, growth rate, operational leverage, the instability of sales, taxation, quality of management control of the company, creditors, financial flexibility.

Should be noted that in addition to the remembered microeconomic factors, we must take into account the existence of the macroeconomic factors, of which we mention: inflation, cyclical factors, international and cultural factors.

The paper is structured as follows: a first part dedicated to the microeconomic factors that influence the decisions regarding the financial structure of the enterprise and the second part with the macroeconomic factors that have an influence on it. Last section is dedicated to the conclusions.

## **The microeconomic factors that influence the decisions regarding the financial structure of the enterprise**

Structure of assets refers to assets share in all tangible assets of the enterprises, and those assets that can be used as collateral in order to grant the necessary credits. This means that the enterprise of property and utilities can use more borrowed capital, and those of high technology which have an accelerated rate of growth use less borrowed capital.

Also, assets with high liquidity and a multitude of uses are valid guarantees, while the assets that have special characteristics have low degree of liquidity and are not adequate safeguards.

Internal conditions of the enterprise affect the achievement of the financial structure. Thus, when the market price of shares is low, it will not issue shares to achieve the financing, even if large earnings are expected in the near future, as these earnings are not anticipated by investors, and therefore do not influence the price of market shares to increase it. In this case, it is desirable to achieve the financing of borrowed capital until it materializes the earnings and are reflected in price of the share. Only after that, may be issued and sold shares and capital can be repaid until the borrower considered optimal.

Market conditions, both the market shares and the bond markets and banking markets is amended in the short term and long term and thus influencing the capital structure. If the banking operators

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46 Cristea, Horia; Talpoș, Ioan; Cosma, Dorin, *Gestiunea financiară a întreprinderilor*, Editura Mirton, Timișoara, 1998, p. 188

during the crisis of money market impose certain restrictions on granting credit to long-term businesses that can not subscribe to restrictions (the example is in an inferior place in the standings of operating banks) will not get credit on long run as achievement of optimal capital structure, being financed on short-term loans or the capital market.<sup>47</sup> When the economic - financial situation of the market improves, those may grant loans in the long run. In crisis situations, the enterprise that occupies a lower place on the bonds market, to achieve the necessary funding must use the shares or bonds on short run.

In it turns, profitability influences decisions regarding the financial structure. It was observed that the enterprise which have a large rate of return on investments, recourse less to the borrowed capital. Explanation would be that enterprises which have high profitability do not need to use too much borrowed capital to finance the loan, being financed from their profits.

Another factor influencing decisions on financial structure is the margin of profit. Its stability is very important, being influenced by the easiness with which businesses can enter the economic branch and the competition capacity to expand production capacities. It is attractive in terms of a profit margin an economic branch in growth.

The entry into this economic branch is relatively easy (does not require large capital investment) and the number of new enterprises grows quite rapidly making profit margin to decrease significantly. If the access into the branch is more difficult, profit margins are not subject to erosion from the competition.

Growth rate is another factor to influence the financial structure. Such enterprise which has a faster rate of growth turns more to the financing of foreign capital, creating a tendency to use debt instruments to a greater extent than enterprises that have a slower growth rate. In addition, the costs necessary to issue and sell shares are higher than those for the issue and sale of bonds.<sup>48</sup>

The effect of operational leverage on the decisions of financial structure is that the enterprise which operational leverage is less is able to use financial leverage to a greater extent. The degree of operational leverage is represented by the way how the changes on sales affect the number of income, and the degree of financial leverage is represented by the way in which changes in operating income affect the operating profit per share.

Stability of sales is that if the sales are stable, the borrowed capital can be used in a greater measure and higher fixed costs may be incurred. Where we have unstable sales, plus a degree of indebtedness, we may think of the probability of bankruptcy with high bankruptcy costs, which leads to lower market value of that enterprise. When we have stable sales, there may be large bankruptcy costs, but the probability to lead to bankrupt is small. This makes enterprise with stable sales to use high debt. Future growth rate of sales is the result of the fact that earnings per share may be increased by the effect of financial leverage.

Taxation influences financial structure, because the higher the rate of enterprise tax is, the more advantageous is for it to use borrowed capital. It is demandable the fact that interest is a deductible tax expense and so there are ensured savings at taxes.<sup>49</sup> Those tax savings are not due to borrowed capital, but to some deductible expenses in calculating the tax. Among those include: accelerated depreciation, digressive depreciation, provisions expressly referred to as deductible, LIFO method of inventory evaluation, providing the meal ticket, benefits offered to the employees. The enterprises intensely capitalized and with a high growth rate can obtain savings on taxes: the interest fiscally deducted is of minor importance, and the enterprises establish a low rate of debt.

Quality management refers to the fact that owner managers of a small enterprise are more cautious than in the large one. Large enterprises with multiple shareholders can decide for selling shares because this affects in a negligible way the control over it. Instead small enterprises, rather

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47 Dănescu Tatiana, *Gestionarea financiară a afacerilor*, Editura Dacia, Cluj-Napoca, 2003, p.65

48 Harpen, P., Weston, J.F., Brigham, E.F., *Finanțe manageriale*, Editura Economică, București, 1998, p.656

49 Harpen, P., Weston, J.F., Brigham, E.F., *Finanțe manageriale*, Editura Economică, București, 1998, p.657



said their owners, avoid the issue of shares to ensure continuity of their control. If the owners have confidence that follows a period of significant earnings, results from some degree of indebtedness, will attract high proportions of debt. When there is only one owner manager, of precaution he may limit the loans and could cause the loss of a share of the fortune.

Control is an important factor in establishing the financial structure. When owner managers whom have control over the enterprise can not or have not the interest to buy new shares, will not resort to financing through issuing shares or selling it, but to finance with borrowed capital. If managers do not have the control of the enterprise and financing with borrowed capital will aggravate the already existing problems and bringing the enterprise into the impossibility to pay, then will turn to the issue and sale of new shares. This does not mean that ownership leads to setting the type of financing that the enterprise will use because the type of capital necessary for keeping control is different from case to case.

Usually, the enterprise managers discuss with creditors about the desired financial structure and they could take account of advice offered by them. Creditors may not accept increases in debt wished by the enterprise or they can accept them, but at a higher price. It is known that increasing the debt leads to the growth of the interest rate of the borrowed capital in the idea of compensation the additional the credit for the supplementary risk beard. However interest rates can increase up to a certain limit, crossing it meaning the bankruptcy of the enterprise. This is aimed to be avoided both by the enterprise and the creditors in the same way and because of this the creditors limited the level of the credit granted.

Financial flexibility reflects the capacity to raise capital in unfavourable circumstances. To ensure the stability of the enterprise is necessary to have a constant offer of capital, regardless of the economic and financial overview. When circumstances are favourable, the financing can be done through the issuing and selling of shares or bonds, but when they are unfavourable, the suppliers of capital prefer bonds. The solution would be to maintain an adequate reserve for the borrowing capacity. When they give up on a promising business, but because there are not available funds, is affected on long run the profitability of the enterprise and following that, is affected the market price of the shares. The settlement of this stock for the capacity of borrowing is a problem of the financial manager, but depends of the factors remembered earlier.

In order to determine how the companies choose their financing, must be taken into account the effects caused by factors that affect the financial structure decisions. These are: risk balance - profitability, economic risk (business), financial risk, inflation, cyclical factors, international and cultural factors and the financing effect through the debt or equity position on the control manager.

In terms of financial, profitability is a result of favourable economic activities resulted in increased revenue from financial expenditure incurred and as a result of which has created a surplus value called profits.<sup>50</sup>

Risk is a measure of differences between different outcomes, more or less favourable or unfavourable, to a future action.<sup>51</sup> Between profitability and risk is a direct proportionality as profitability increases, the risk is increased, binomial risk - return underlying arbitration between holding various financial assets and even individuals.<sup>52</sup> Any rational investor aims to maximize earnings and minimize future risk, combining the two elements - and earnings yield - the investor

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50 Ceaușu Iulian - Dicționar enciclopedic managerial, vol.1, Editura Academică de management, București, 2000, p. 671

51 Ceaușu Iulian - Dicționar enciclopedic managerial, vol.1, Editura Academică de management, București, 2000, p. 691

52 Moldovan Nicoleta-Claudia, Costul și structura capitalului societății comerciale- Teorie și practică, Editura Universității de Vest, Timișoara, 2004, p. 215

must decide for one of the following alternatives: high gain / high risk, high gain / moderate risk, low profit / risk low gain and less / lack of risk.<sup>53</sup>

When the economic rate of return is higher than the debt rate, is preferable to resort to loans, having a positive effect on leverage. When it is lower interest rates, the debt must be financed with equity, the leverage effect is negative and decreasing the rate of financial return.

The risk of economic / business is defined as: inherent uncertainty in estimates of future profits or gross financial result, before deducting interest and taxes<sup>54</sup>, or degree of uncertainty inherent in forecasting future earnings generated by assets or equity, if the firm does not use borrowed capital financing.<sup>55</sup>

Business risk is different from an economic to another and from one company to another and over time, due to changing competitive structure, technology, economy in general. It is believed that small and with only one type of product enterprises has a relatively high degree of business risk. Industry and food trade or retail industries are having a low risk business, while cyclical industries operations have a high risk business. If two enterprises have the same level of operating profit, which the business risk is highest recorded fluctuations of profit exploitation higher than what the other business risk are lower.

Business risk is determined by the nature of operations performed by the enterprise, the most important factors being:

- variability of demand and the demand for products the enterprise to be stable, the business risk will be lower, as the other variables are constant;

- variability of the price of products sold and services performed, which means that the enterprise that markets its products in markets with high volatility are exposed to a greater business risk than those whose prices are relatively stable;

- variability of prices of production factors manifested in that when prices of production factors are in continuous changing, the enterprise is exposed to a high risk business;

- ability to adjust prices of finished products and services to changes in prices of factors of production means that if this capacity is higher, the degree of business risk is lower. It is clear that some enterprises have no difficulty in terms of higher prices of finished goods and services when the prices of factors of production increase. The importance of this factor is even greater during inflation;

- the level of the operating leverage explained by the fact that when an enterprise in which a significant part of total costs are fixed and can not be reduced when demand decreases, there is an increase in business risk.

Each factor of the shown ones is determined by the characteristics of the branch in which the enterprise operates, while each factor can be controlled in some measure by the management of the enterprise. Of course, this involves the more expenditure on advertising or price discounts in order to convince customers to buy fixed quantities in the future at fixed prices.

The business risk is a direct function of allocating capital. Once made these decisions, they affect the company as business nature and composition of its assets.<sup>56</sup>

Financial risk is the risk to be further supported by the holders of ordinary shares as a result of the use of financial lever<sup>57</sup>, is the result of decisions of long-term financing, being represented by a variable increase revenue potential holders of common shares and increased the likelihood of

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53 Tudose Mihaela-Brândușa, Gestiunea capitalurilor întreprinderii – Optimizarea structurii financiare, Editura Economică, București, 2006, p. 211

54 Cocriș Vasile, Economia afacerilor, Editura Graphix, Iași, vol. 3, p.41

55 Hoanță Nicolae, Finanțele firmei, Editura Continent, Sibiu, 1996, p. 233

56 Hoanță Nicolae, Finanțele firmei, Editura Continent, Sibiu, 1996, p.234

57 Harpen, P., Weston, J.F., Brigham, E.F., Finanțe manageriale, Editura Economică, București, 1998, p.634

financial danger to the owners if it use financial leverage.<sup>58</sup> Financial leverage refers to the use of securities with a fixed income which have a payment priority over equity.<sup>59</sup>

Financial risk is characterizing the variability of net profit under the capital structure. Money borrowed by their size and pay of systematic financial expenses, involve a net profit variability, so an increase in financial risk.<sup>60</sup> To analyze variability of net profit are two methods: the method based on the threshold of profitability and the effect of financial leverage.

### **The macroeconomic factors that influence the decisions regarding the financial structure of the enterprise**

Financial structure is influenced by inflation, cyclical factors, and international culture. Inflation is a macroeconomic indicator of great importance, as influencing any economic variable. Opinions are divided as regards the relationship between inflation and capital structure. Some authors maintain that the relationship between the two is negative, because it turns investors borrowed capital in equity because the return on real capital becomes relatively more important than profitability indebtedness. However, most of them are of the opinion that between inflation and capital structure is a positive relationship. For example F. Modigliani argues that inflation should increase the benefit by increasing the indebtedness on which a record financial leverage<sup>61</sup>. B. Zwick is of the opinion that the existence of inflation, the preferred use of debt financing when the actual cost of debt is decreasing. When inflation and interest rate recorded an increase equal, will decrease the cost of indebtedness by deducting taxes. In contrast to this view are the JR Franks and J.E. Broyles, who believes that businesses do not tend to borrow in terms of high inflation, as they pay more expensive lend money when the inflation rate will increase over the foreseeable businesses that lease record earnings, while inflation will fall, they will lose<sup>62</sup>.

Also, periods of economic prosperity and recession are affecting the capital structure. Enterprises can, in periods of economic recovery, to finance from the accumulated profits and stocks, not of indebtedness, because in this case, the long run lending decreases.

Moreover, the capital structure of an enterprise is influenced by market conditions on the issuance of shares. When the current price of shares is low, and there is forecast a supplementary earning, is preferred issuance and sale of bonds and not shares. Issuance of shares is preferred after the periods of strong performance of market shares, and issuing bonds when interest rates are low or are expected to grow.

International factors that have an influence on the financial structure refers to: protectionist strategies, repatriation of capital, government incentives for the collection of funds from abroad. Among the cultural factors that have an important determinant of financial structure include: stage of development of capital markets, the social distribution of income, accounting system, tax system.

### **Conclusions**

In addition to its objectives of growth, profitability, risks, the enterprise, in the moment of determining the financial structure, should take account of shareholders, banks, financial state, market situation, macroeconomic stability of the country, local traditions relating to business, the development of credit, interest rate, inflation and economic - financial situation.

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58 Hoanță Nicolae, *Finanțele firmei*, Editura Continent, Sibiu, 1996, p.234

59 Harpen, P., Weston, J.F., Brigham, E.F., *Finanțe manageriale*, Editura Economică, București, 1998, p.634

60 Stancu Ion, *Finanțe*, Editura Economică, București, 2002, p.870

61 Modigliani F., Debt, Dividend Policy Taxes, Inflation and Market Valuation, *Journal of Finance*, vol. 37, 1982, pp.255-273

62 Moldovan Nicoleta-Claudia, *Costul și structura capitalului societății comerciale- Teorie și practică*, Editura Universității de Vest, Timișoara, 2004, p. 228-229

Another factor to note is the creditor, better said the risks to which is exposed (risk of losing the capital when the debtor is unable to repay the amount, interest rate risk, the inability of the payment of interest by the debtor term, risk restraint, which exists when the debt payment period, by blocking borrowed capital). In order to protect from these risks, the creditor requires insurers and guarantee participation by the debtor to finance capital.

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# A FEW CONSIDERATIONS REGARDING THE SPHERE OF FINANCIAL RELATIONS

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*The author discusses his financial affairs sphere, looking at this issue under a double aspect: analysis of the financial relations sphere and analyzing the financial activity sphere. Analysis of the financial relations sphere is made on the basis of four criteria, namely: the existence of the distribution relationship, the financial relationships as money relationships, a value basis; nature and conditions of transfer; the way needs are satisfied. In the sphere of business financial analysis, are used three areas: the programming and planning, the financial and business performance analysis and control.*

*Keywords: financial sphere, distribution operations, financial operations, transfer, needs.*

*JEL code: B00 – General.*

## **1.The sphere of financial relationships**

Financial relationships are relationships of individual human nature in time between the multitude of human relationships, being part of the economy overall. On the other hand both financial relations and economic relations are social relations.

Finance science devoted some specific criteria (conditions) which delimits financial relationships and other types of relationships.

These criteria are<sup>63</sup> :

- I. The existing distribution relationships
- II. The monetary values of distribution
- III. The nature and conditions of transfer
- IV. The way needs are satisfied

### **I. The first criteria - Finance as distribution operations**

Under this criteria, as well as economic class, social relationships are finance-economic distribution of a part of G.D.P. to meet social needs. But the relations of distribution are more comprehensive than financial relationships because:

a) relations of distribution are presented in the form of both monetary as well as natural, while financial relationships mandatory dress monetary form. But not all relationships are funds and financial relations.

b) distribution is formed as financial income (for the shares of public and private) and non-financial income (personal consumption purposes)

About financial relationships we can only speak with the general form of value transfer.

### **II. The second criteria - Finance as financial operations**

Type monetary transfer is a mandatory financial relation, which are financial relationships. But money is the sphere of relations wider scope than financial relationships. In other words, not all relationships are funds and financial relations.

### **III. The third criteria - the nature and conditions of transfer – practically limits Financial reports itself in financial relationships.**

Thus, for a monetary operation belong to finance, it must meet mandatory and cumulative three conditions<sup>64</sup>:

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63 I. D. Morar. – „Public Finance”, University of Oradea Publishing House, 2004, page 14

1. to have a instant transfer of resources and purchasing power  
2.the transfer must be done without binding or without immediate equivalent but may take as definitive and free or on a temporary basis, repayable and payment of interest.

3. the resources to finance actions aimed at public or private business.

Express indication of the nature and conditions of transfer has a double utility:

a) primarily features enable a definitive formulation of financial operations, without the transfer being equivalent or without immediate equivalent generates changes in partners assets, in terms of enhancing the customer and reduce it to the payer.

b) secondly, to specify the nature and conditions of transfer is a basic criterion for analyzing the structure of finance, can delimit them in: finance itself; credit, the financial market, insurance and social protection, insurance of goods, persons and responsibility civil, business finance, international finance, as the transfer is final and charge or on a temporary basis, repayable with interest, etc..

Therefore, transfer - in general - and the financial nature - in particular - is without equal and without immediate equivalent. Taxes, subsidies and other transfers without equivalent, usually from taxpayers to the state are final and non-transfer relation under the law and based on documents generating obligations (drawing tax role).

Permanent transfer, and without immediate benefits, grant represents financial relationship itself (in effect, restricted finances).

Transfer value can be done temporarily, value refund will be mandatory, and are accompanied by payment of interest (in case of credit) or voluntary repayment became compulsory only in the event of a random phenomenon (the case of relations of property insurance, people and civil liability).

Such financial operations occur<sup>65</sup>:

- Between banks and their customers with the opportunity of attracting funds temporarily available resources, and the provision and reimbursement of loans;
- Between owners and the beneficiaries of money through financial market;
- Between the insurance institutions and their customers, at the collection of insurance premiums and payment of damages and sums insured;
- Between participants from different forms of insurance and social protection and institutions that administer such funds, at the collection of contributions and payment allowances payable to the beneficiaries, etc..

#### **IV. A fourth criterion - the kind needs satisfied**

Nature and conditions of transfer depends mainly on whether needs to be covered<sup>66</sup>.

Needs are satisfied by the public - as social needs, general level and at the company private - needs to own businesses.

Social needs, materialized in the financing needs of different social structures and objectives are important public needs. General public services, and other elements of the public sector should be maintained on the public effort.

Usually needs financing of economic agents is due to meet private finance but sometimes finance can participate in public funding (eg subsidies)<sup>67</sup>.

Depending on how satisfied the needs, financial practice devoted two types of transfer:

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64 C. I. Tulai, "Public Finance and Fiscality", "Casa Cărții de Știință" Publishing House, Cluj-Napoca, 2003,page 19-22.

65 C. I. Tulai, op.cit., page 19-22.

66 I.D. Morar, op. cit. page 16.

67 C.I. Tulai, op. cit. page 21.

a) the transfer for free and finally, when resources are intended to meet ongoing needs and support consumption permanently. In this case the funds are committed, directed towards public institutions and private entrepreneurs in certain circumstances subsidized by the state.

b) transfer on a temporary basis, repayable with interest and, when needs are temporary. In this case involved resources are directed towards applicants of credit loan.

From another perspective, the transfer may be required (if the payment of taxes) and voluntary (if optional insurance).

Regardless of the nature and terms of transfer, in all these cases are financial reports, not because we are dealing with an equivalent or immediate benefits.

Therefore, financial relationships occur as a result of the transfer of value and power of buying up funds in the economy or from these funds to various beneficiaries, through the transfer of money made without benefits (equivalent) and direct and immediate as grant or under repayable - in some cases - in order to meet public needs and / or private.

Synthetic, in the financial relationships we include:

a) relations which express a compulsory transfer of money resources (and therefore the value of purchasing power) without equivalent (benefits) directly and immediately and for non-refundable. These are classic financial relationships or relationships in the financial sense or restricted public finances. They find their reflection in the state budget, budget social insurance state or local budgets in some extra funds are defined in taxes and fees, including fees paid to social insurance and health insurance, made by taxpayers, which is feeding public funds. *The purpose of public finances is generated from the needs of society.*

b) relations expressing the transfer of value and power of compulsory purchase in the form of money over a fixed period in the form of guarantees (material) or in the form of loan funds for which interest is due - if the credit relations - are under repayable law (including public credit).

c) relations expressing the transfer of value and power of voluntary or compulsory purchase if necessary, without direct and immediate benefits, but with possibility of a subsequent benefits, in the event of a random phenomenon.

Examples: insurance relationships of goods, persons and civil liability and compensation.

d) relationships that occur in the formation and distribution of funds to money available to enterprises, for economic activity and their development,

on account of his own income, the bank loans, the issuance of bonds, the sale of social parts (or shares). These relationships are called finance financial enterprises (or finances of company) and designed to achieve profits in the private entrepreneur.

In conclusion, financial relationships described in all four points, *public finance (pet. a) credit relationships (pet. b) insurance relationships (pet. c) and the finance of company (pet. d)* financial relationships together form in the broad sense.

In case the movement of resources between partners is done on a commercial basis, with equivalent or benefits, we are dealing with money relationships, which are not of financial nature. They do not belong to either distribution or serve as personal consumption. Appropriate operations for sale - purchase, payment of salaries, of works or services performed, etc..

Even if a series of operations have money financial nature, they have a close connection with finance, representing as appropriate, be prerequisites for future financial operations, or the final effects of prior financial transactions, or use by spending itself of resources allocated of financial funds. Here are several examples of this regard<sup>68</sup>:

• **financial operations, premises for future financial transactions:**

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68 C.I. Tulai, op.cit. page. 22.

-Surgery for sale - purchase, payment for finishing the goods, requires financial payments such as spilling taxes, payment of dividends, repayment of loans, interest payments, etc.. Or non-financial operations such as payment of goods purchased, pay, payments for services; etc..

-Operation of the payment of wages, non-financial in nature leads to the typical financial payments: taxes on wages, contributing to fund unemployment or supplementary pension insurance and contribution to Mandatory health.

-Succession and donations from individuals have no financial nature but are accompanied by the obligation for payment of taxes.

• **financial transactions that give finality to prior financial transactions.** In this situation are included, especially in operations caused by use or spending itself acquired resources of their beneficiaries, for example:

-Purchase of machinery, equipment, facilities investment, amounts due from associates captured;

-Pay for current production, due to borrowing from banks;

-Pay loans from the public budget allocated from the budget;

-Payment of pensions, unemployment aid, sickness allowances, maternity, etc..

It may be noted that there are situations in which operations have the same type or financial nature, in relation to the destination resource or quality of such beneficiary. Appropriate donations for the purpose of public utility and the benefit of individuals, the payment of insurance premiums, and collection of damages or sums insured loans granted to state and those of individuals, etc..

It is also mention the case of exceptional charges. Taxes are an exception to the principle of free and finally transfer (specific duties), the transfer of title and return time (if credit) and whose transfer to permanent or refund is conditioned on random factors (insurance). In the case of taxes, the money transfer means benefits. However, tax is included in financial operations, because the transfer is done by state or local organizations, in order to meet public needs.

Moreover the correlation of financial relationships with non-financial, financial bodies are concerned about progress in the best conditions of all money transactions. Therefore, the scope of financial activity is greater than the scope of financial operations, or in other words, the sphere of finance is more narrow than the scope of financial relationships, in the sense that not all relationships are funds and financial, but only those relationships which express money transfer value , assuming it is binding and transfer of purchasing power, producing in such a change in the size and not just a change in the forms.

Changing the forms (in the form of “merchandise” in the form of “money” or vice versa), takes place in the production and trade and is not part of the sphere of finance, since financial relationships that generate leads only to changing the shape and value not changing the size of a person who has a physical or juridical person.

*In conclusion, financial relationships are money transfer permanently and without direct and immediate needs in terms of general satisfaction, and sometimes collective own businesses. This is the sphere of financial relations and the subject of finance economic class.*

**Public finance** division relations as the monetary part of the gross domestic product to the state to cover public needs.

**Private finance** are relationships in the form of monetary allocation of a part of gross domestic product at businesses, in order to realize profits in their task.

## **2. Financial sphere activity**

Financial activity represents all operations performed by financial institutions and specialized agencies in connection with developing forecasts, plans, financial budgets and programs, financial execution and financial control.



Object of economic activity differ in relation to the level at which it unfolds<sup>69</sup>:

- at the macro level and mezzo-economic level, forecasts are developed in extensive programs, using models to optimize options, aims monetary financially mechanism functioning as a whole;
- micro-level (base level units) programs are developed, plans and budgets a little complexity, and the most intense activity is related to the financial execution.

Financial scope of activity has three components, namely<sup>70</sup>:

1. *The programming and planning*, which includes the operations of making plans, programs and financial performance forecasts of future financial flows. This activity is materialized in the programs, plans, budgets - such as budget revenues and expenditures, the state budget, special funds, social insurance budget, financing plans, programs, etc..

2. *Financial activity execution*, which includes the operations of receipts and payments necessary in financial activity. Revenue collection, preservation and making their payments operations are called treasury operations. An important part of execution is the execution of financial budget, which includes two parts:

- the *Execution of revenue*, which materialized in cashing operations, tracking revenue collection and

- the *Execution of expenditure*, which provides operations to pay expenses on the budget.

Treasury notion that has multiple meanings<sup>71</sup>:

a) it represents the storage and administration of treasury, consisting of: the income state reserves of precious metals and precious stones, foreign currencies, currency, debt of state;

b) the execution of the house of the state budget and the institution that creates this execution;

c) treasury operations of economic agents, operations that are related to the execution of budget revenue and expenditure, with an attempt of synchronization of money flows - financial and non-financial - in order to avoid situations and lack of availability and financial blockade, the bankruptcy and insolvency. How in practice can not be timing perfect, often appear pluses or goals of the house. Company Treasurer role is just to prevent gaps and to mobilize the cheapest resources to cover that, respectively, to find the most profitable investments available resources for short and long term, so that cash will increase the company.

3. Activities include analysis and control operations to synthesize the results of the execution of their financial and valuation in order to use the results of this activity, and financial control of operations performed at the level of the firm, and company level through specialized organs and conditions established by law .

*Scope along with the financial relations field financial activity are represented by the area of finance.*

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## NATIONAL AND INTERNATIONAL APPROACH TO FINANCIAL INSTRUMENTS

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*Due to the international character of the financial markets and to the general tendency of globalization, the accountancy treatment of the financial mechanisms and instruments acquire a special importance because the theory, the norms and especially the practice in this domain quickly pass the borders of a country or of an entity. At the level of the international accountancy reference system, the accountancy politics and options regarding financial investments and financial instruments represent the object of the international accountancy norms: IAS 32 „Financial instruments: presentation and description” and IAS 39 „Financial instruments: acknowledgement and assessment”, IFRS 7 “Financial instruments: information to be provided”. The affiliation of securities to the sphere of financial instruments and their presence on the capital market is treated by the identification of securities in the wider category of financial instruments and clarifying the differences between different securities.*

*Keywords: financial instruments, securities, IAS 32, IAS 39, IFRS 7.*

*M41*

### **Introduction**

The dynamic nature of the international financial markets had as a result the wide use of a variety of financial instruments, starting from the primary traditional instruments such as bonds, to various forms of derived instruments such as swaps of interest rate.

The objective of these Standards is to support the users of financial situations in understanding the significance of the financial instruments of balance and extra balance and their signification, connected to the financial situation, the results and fluxes of cash of a company.

The **IAS 32** standard recommends certain requirements for the presentation of the financial instruments which enter the balance and identify the information which have to be presented in relation with the financial instruments of balance (acknowledged), and with those extra balance (not acknowledged). The standards regarding the presentation deal with the classification of financial instruments in debts and own capitals, the classification of interest, dividends, as well as losses and earnings associated with these, and the circumstances under which the financial assets and financial debts can be compensated. The standards regarding the information which need to be provided refers to the factors which affect their value, moment and degree of certitude of the future cash fluxes of a company associated with financial instruments, and also the accountancy politics applied to those instruments. At the same time, the Standard encourages the presentation of information about the nature, amplitude of using the financial instruments by an entity, the purposes that they serve, the risks associated with them as well as the managerial strategies for controlling these risks. This Standard applies to all financial instruments included in the consolidated financial situations of the mother – companies, regardless of the fact that those instruments are owned or have been issued by the mother – company or by its subsidiary. Similarly, it applies to the financial instruments owned or issued by an association in participation and included in the financial situations of a partner of such a company either directly or by proportional consolidation.

The objective of the Standard **IAS 39** is to establish principles to acknowledge, assess and present the information regarding financial instruments in the financial situations of a company. According to the definition offered by IAS 32, the financial instrument is represented by any

contract from which it simultaneously results both the financial assets of the company and the financial debt or an instrument of the own capital of a company. The American accountancy Standards have a definition similar to that of the financial instruments, the international norms being strongly influenced by US GAAP, U.S.A being the first country in the world which approached the issue of financial instruments from the accountancy point of view. The American Standards stipulate that a financial instrument is based on cash, a right or a contractual obligation which is liquidated by providing cash or interests of property in an entity.

**The IFRS 7 Standard** is the product of a remake of the requirements of describing the financial instruments and the risk management stated in some already existent standards. The IASB objective, by publishing the IFRS 7 standard is the remake of the presentations referring to the financial instruments in the light of new concepts and approaches of the risk management which have evolved in the last years, and also in the light of the new techniques the companies resort to for the assessment and management of exposure to the risks which derive from the financial instruments used. The objective of the IFRS 7 Standard is to impose to the companies a series of presentations which could allow users of the financial situations to assess: the importance of the financial instruments within the context of the position and financial evolution of the company, the nature and dimension of the risks which derive from the financial instruments to which the company is exposed including the management of these risks.

## **SECURITIES VS. FINANCIAL INSTRUMENTS**

Securities can be defined as being papers/ documents under a materialized and non materialized form, which incorporate patrimonial assets and offer rights and obligations to their holders, namely the issuers, resulted from commercial or financial operations and which can be negotiated on the market. Securities issued by entities can be the object of transitions both on the basic capital market and on the secondary one. Entities resort to the services of the capital market in order to purchase or sell securities. On the secondary capital market securities are also named movable values/ assets or financial titles („securities” in the Anglican and Saxon countries), suggesting an investment which guarantees good earnings. In the French concept of accountancy, securities appear under the name of titles of portfolio and are made of movable values defined as: titles of participation, immobilized titles of the portfolio activity, other tangible titles and movable values of placement. In Romania, securities are met in theory, practice and regulations under the name of movable values. These are defined as: “negotiable financial instruments that can be transmitted by conveyance or registration in an account, offering equal rights on categories and giving to their holders the right to a fraction of the subscribed capital of the issuer or a general right of debt over the patrimony of the issuer, and / or susceptible of being transitioned on a regulated market”. The movable assets defined as such include: state titles, bonds issued by the central and local public administration and commercial companies, and other titles with the maturity bigger than one year; from the financial and accountancy analysis of the securities regarded as financial instruments, we can identify some overlaps and also some situations of not being covered by the securities, of the area of including financial instruments.

### **Delimitations regarding securities and financial instruments**

| <b>Securities</b>  | <b>Financial instruments</b>  |
|--|---|
| The concept is more limited  | The area of inclusion is wider and embraces the area of the securities.       |
| Frequently transitioned on the organized financial markets.                    | They have no nominal value nor full value and they not have their own market. |
| They are volatile and have a liquid market (daily variation of the full value) | They have no volatility nor liquidity   |
| They are almost substituted by cash  | They do not have an immediate capacity of turning into cash.                  |

| <b>Securities</b>   | <b>Financial instruments</b>  |
|---|---|
| They are contracts which generate simultaneously financial assets for a contracting company and financial debts or instruments of their own capital for another contracting entity. | They are contracts which generate simultaneously financial assets for a contracting company and financial debts or instruments of their own capital for another contracting entity. |
| For their issue or purchase the entity accesses the monetary or capital market.   | For the initiation of a financial instrument, other than a security, the entity enters classic commercial relations.  |

Table drawn by authors

The practical utility of these delimitations for the entity is that of finding operative and safe solutions of managing the portfolio of securities or simply taking good decisions of financing and investing.

### CRITERIA OF DIFFERENTIATION

The criteria of differentiating securities are:

a) **The juridical criterion** presents and considers securities as titles of credit which offer to their holders a right of debt equivalent to a counter service. They are synalagmatic contracts. They include: titles of commerce (the bill of exchange, the promissory note and the cheque), movable values/ assets (shares, bonds and other titles issued by the patrimonial entities), securities of the nature of social shares, representative titles of the merchandise (the bill of lading and the deposit receipt).

b) **The financial criterion** reveals the financial characteristics of the securities related to the negotiability and incomes that they generate. We use the name of financial titles for the movable assets (shares, bonds, futures contracts, options, etc). The legislative frame of the capital market from Romania, uses the notion of movable assets to designate the instruments issued and transitioned on the capital market. **Movable assets** in the literature of specialty are defined as **non banking financial assets** expressed on a material support or into an account and negotiable on the secondary market at the full value. Financial assets are defined as the monetary correspondent of the real assets and are structured into: **banking assets**, represented by availabilities and deposits which generate interests, and **non banking assets** in whose category we can include **monetary assets and capital assets**.

c) **The accountancy criterion** classifies the securities differently according to the approach and the normative conception of the accountancy. In the approach of the International Standards of Accountancy, securities are financial instruments which are represented by any contract which simultaneously generates financial assets for an entity and a financial debt or an instrument of own capital for another entity. It results that in the accountancy of the entity, securities can be found under the form of **financial assets, financial debts or instruments of the very own capital**. The differentiation is based on the definition of the financial instrument. The same financial instrument is differently classified in the accountancy of the issuer and of the holder (investor). At the issuer it generates instruments of own capitals or financial debts and at the investor – holder, financial assets. The accountancy approach of the financial assets proposed by the international norms contains certain differences compared to financial one. The Standards extend the area of this notion over all commercial debts on short term, or limits it by excluding some “classic” financial assets of the type of derivatives on merchandise

regularized by physical delivery, so that their discount should not involve the cash transfer or other financial assets.

From the presentation of the criteria **of differentiation it results that securities are a financial instrument but not every financial instrument represents securities as not all financial instruments can be transitioned.** The area of inclusion of financial instruments is wider than that of securities.

### **The accountancy normalization and harmonization of the financial instruments**

For the last two decades we have assisted to a considerable development of the international financial markets, so that more and more companies try to be quoted of markets abroad. The pressure in favor of the international accountancy harmonization grows constantly and the harmonization of the national accountancy systems has become a necessity. Starting from the idea that users want to know the financing structure of the entity in order to take decisions, and managers support expenses in order to present a certain image of it, the Regulator must have in view a system of classification which could respond to the needs of users and limit the possibilities of manipulation. All entities must publish information regarding the importance of the financial instruments that they issued or hold, the risks which derive from these as well as the way in which those risks are managed. The European accountancy normalization is represented by the Directives of the European Union. By derogation from Directive IV-th of CEE it is anticipated the possibility that member states of EU prescribe specific structures of the annual accounts of the investment companies and financial holding companies. According to Directive IV-th of CEE in the structure of balance, the financial instruments which fulfill the qualities of securities are presented in assets as financial investments on long term and as current financial investments and in the liabilities as financing on long term or current financing. The balance structure recommended by Directive IV-th of CEE underlines the role of financial titles in the investment activity and in that of financing the entities. The American Regulator FASB approach the issue of financial instruments before IASB, existing nowadays more American standards which offer detailed guidance regarding different types of instruments, transactions and activities. The American norms have been and still are an important source of inspiration for the international ones. Characterized by a strong financial market, the American economy has the greatest experience in using financial instruments. This can explain the American origin of the first norms regarding financial instruments as well as the great influence exercised by US GAAP over IAS/IFRS. The notion of financial instruments includes a variety of elements. As a result, the Regulator - International Accounting Standards Board – IASB decided the elaboration of different standards in order to accurately deal with different types of financial instruments. Nowadays there are three international norms or standards which strictly deal with financial instruments: IAS 32 „Financial instruments: presentation” and IAS 39 „Financial instruments: acknowledgement and assessment” and IFRS 7 “Financial instruments: information to be provided”. IFRS 7 refers to the necessity of describing the importance of financial instruments for the position and performance of a company, and also of qualitative and quantitative information about the risks which derive from financial instruments. IAS 39 comes to complete the provisions stipulated in IAS 32 in a series of problems related to the acknowledgement and assessment of financial instruments, as well as to the politics of administrating risks. Some of the provisions included in IAS 32 are resumed and debated in a more complex manner in IAS 39.

### ***Regulating securities in Romania***

In Romania, the capital market is not seen as a real alternative to the traditional sources of financing such as bank credits. The share issues are rarely practices, although during the last years there have been several initial public offers at the Stock Exchange from Bucharest. The advantages of listing on the stock exchange by launching initial public offers do not seem to be known or understood by many of the Romanian companies whose partners are not willing to share property with other share holders or to answer in front of the investors on the capital market

by writing transparent periodic financial reports. Referring to bonds we may say that they are financial instruments whose presence on the Romanian financial market is quite recent, the first issues being transacted at the Stock Exchange from Bucharest in the fall of the year 2001. The bonds offered by the Romanian firms or local authorities are not very sophisticated, not representing complex features or special clauses. The derived financial instruments started to be used in the year 1997 at the Monetary- Financial and Commodity Stock Exchange of Sibiu under the form of futures contracts on different currencies. The options on futures contracts appeared one year later when the transaction of the derivatives also started at the Romanian Commodity Exchange. The most transacted types of derivatives at BMFMS are, futures contracts. The options hold an extremely reduced part of the total of transacting volume, the main explanation being that these are financial instruments more sophisticated and expensive than futures contracts, so that only initiated investors dare to use them. The range of financial instruments offered in Romania on the regulated market and on OTC is very poor, shares, city bond and several types of derived contracts being all that local or foreigner investors have at their disposal. Another category of financial instruments little used in our country is that of state titles, these are sold/ bought, for the time being, only on the monetary market, the banks being the main agents authorized by the National Bank of Romania on the primary and secondary market. In Romania, the state titles of the type of treasury certificates, treasury bills or state bonds are not transacted at the Stock Exchange from Bucharest, the main agent remaining the banking system. As for the national treatment of financial instruments, these are regulated by *O.M.F.P. no. 1.752/2005*. As it is also mentioned in *O.M.F.P. no.1752/2005* regarding the accountancy regulations according to the European directives, a financial instrument represents any contract that simultaneously generates financial assets for an entity, an entity and a financial debt or an instrument of own capitals for another entity. According to this regulation, those elements from the financial situations which fulfill the conditions of financial instruments are evaluated according to the general base rules used at the acknowledgement and assessment of assets and financial debts. The same general rules are used to assess derived financial instruments. As for the evaluation rules of the financial instruments at the right value, these are used only in the consolidated financial situations. Thus, in the individual financial situations, the rules of assessing derived financial instruments are the general rules used at the evaluation of assets and financial debts. Although these are not expressly defined or named as such in the harmonized accountancy regulations, securities are financial instruments in the literature and in the spirit of the International Standards of Accountancy. Securities correspond to the definitions given by IAS 32 and IAS 39 to financial instruments. In forming the harmonized balance according to European norms and international standards, the financial instruments which generate securities appear under the form of: **financial assets** within the tangible/fixed assets, as **financial fixing** and within the *circulating assets* as **financial investments on short term**, *financial debts* within current debts, which have to be paid in a period shorter than one year; and within long term debts, which have to be paid in a period longer than one year, *instruments of own capital*. Romanian accountancy harmonized regulations do not make expressed references to the financial instruments derived neither in the general Plan of accounts nor in the structure of the balance.

## Conclusions

A first advantage of the norm IAS 32 is that its text apply to the assembly of financial instruments, regardless of the fact if they appear or not in the balance. The elements outside balance must obey the same obligation, on the line of informing, just like the elements which are kept in books (have a balance), this fact being important for the financial analysis. Moreover, the norm IAS 32 allows the final regulation of the problem of classifying hybrid instruments. An essential contribution of the norm is to make compulsory the provision of information related to different financial risks the entity faces. Consulting the annexes, the users can have a precise idea

regarding the exposure to the risk of credit, the risk of exchange rate, the risk of the interest rate or the market risk. IAS 32, in its annexes, indicates the fact that the financial instruments should be kept in books at the correct value, when entering the patrimony of the entity. IAS 39 can be applied to all entities, with no exception. Essentially the norm focuses on the notion of accurate value, especially for evaluating derived instruments, for registering the variation of the accurate value kept in books at the result or own capitals and, eventually, for the compulsory identification of the incorporated derivatives. Using the accurate value in Romania is quite limited because of certain conditions among which we mention: the priority of certain regulations which give advantage to juridical and fiscal aspects to the prejudice of the economic ones, the mentality of the specialist who do not accept the new concept with all its implications, the insufficient development of the capital market. IFRS 7 „Financial Instruments: information to be provided ” overtook many of the information requirements that existed in IAS 32 and IAS 30, some of those requirements supporting editorial modifications, moreover there have been anticipated new requirements. The entities must provide information that could allow the users to assess their exposure to the financial risks and the way in which those risks are managed. There are necessary information regarding: the importance of financial instruments for the position and financial performance of the entity; the nature and amplitude of the risks which derive from financial instruments (quantitative information); and the manner in which the entity manages those risks (qualitative information).

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## WHY TAX HEAVENS ARE A BLESSING?

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*There does not exist a single, unambiguous definition of a tax haven. Some regulatory criteria, such as secrecy and low or zero taxes, appear in one form or another in each definition. However, different tax havens are considered a blessing for corrupt and illegal economic activities. Offshore centers are used mostly by companies that conducted criminal activities for money laundering. In simple terms, they are some places a long way from honest taxpayers' paradise, but very closed to criminals' paradise, however we define it.*

*Keywords: tax havens, secrecy, dirty money*

*JEL Classification: H 25, H 32*

Who would not want to pay lower taxes, if not at all? Probably it's a dream for any person or company to take part from a jurisdiction which does not impose taxes or impose it low. Locations which have an advantageous tax regime are called "tax heavens" (fiscal paradise). Business field uses the term "offshore" for locations with such a tax system. Tax heavens give opportunities to taxpayers to avoid or evade tax in their home countries. When individuals and companies evade their tax obligations, they deprive governments of revenues needed for schools, hospitals and other public spending projects.

There is no precise technical definition of a “tax haven”. Typically, however, they are characterized by low or zero taxation, a lack of transparency and a refusal to provide information to foreign tax authorities. The main listings of tax havens have been developed by OECD, as part of the project against ‘harmful tax practices’ of its Committee on Fiscal Affairs (CFA). A 1998 publication entitled Harmful Tax Competition - An Emerging Global Issue, set out a series of criteria on which it based its subsequent work: “The absence of tax or a low effective tax rate on the relevant income is the starting point of any evaluation. No or only nominal taxation combined with the fact that a country offers itself as a place to be used by non-residents to escape tax in their country of residence may be sufficient to classify that jurisdiction as a tax haven.”

The OECD 1998 Report defined a tax heaven as a jurisdiction which has: (a) no or only nominal taxes (generally or in special circumstances) and offers itself, or is perceived to offer itself, as a place to be used by non-residents to escape tax in their country of residence; (b) laws or administrative practices which prevent the effective exchange of relevant information with other governments on taxpayers benefiting from the low or no tax jurisdiction; (c) lack of transparency, and (d) the absence of a requirement that the activity be substantial, since it would suggest that a jurisdiction may be attempting to attract investment or transactions that are purely tax driven. (Op. cit. OECD 1998, pp. 22-23) However, the fourth criterion of “no substantial activities” was rejected by the new US administration in July 2001, and it was formally withdrawn in the OECD’s 2002 Progress report (Op. cit. OECD 2001, p. 10). The OECD recognizes that every jurisdiction has a right to determine whether to impose direct taxes and, if so, to determine the appropriate tax rate. Transparency ensures that there is an open and consistent application of tax laws among similarly situated taxpayers and that information needed by tax authorities to determine a taxpayer’s correct tax liability is available (e.g. accounting records).

Tax havens are different because: they encourage people with no other contact with their territory to open bank accounts there, to set up companies there and to operate trusts there. They make sure that while they locate these activities in their haven none of the activities they actually undertake occur in the haven. So the bank account is used to receive income earned elsewhere

and settle bills incurred somewhere else, the companies incorporated in the haven must not undertake any real trade there, the trust manage assets located elsewhere. Companies don't do anything in the tax heaven (except, perhaps pay some official fees and charges) they are exempted from tax there.

With regard to exchange of information in tax matters, the OECD encourages countries to adopt information exchange on an "upon request" basis. Exchange of information upon request describes a situation where a competent authority of one country asks the competent authority of another country for specific information in connection with a specific tax inquiry, generally under the authority of a bilateral exchange arrangement between the two countries<sup>72</sup>. An essential element of exchange of information is the implementation of appropriate safeguards to ensure adequate protection of taxpayers' rights and the confidentiality of their tax affairs. No developing countries currently participate in automatic information exchanges on the activities of their citizens, or with regard to the funds of non-residents deposited there. In many cases tax heavens refuse to participate in such arrangements.

Lack of transparency means that banking secrecy is strictly enforced. No bank can say what they are doing for anyone without severe penalties applying. If a register of companies exists it does not require the names of the beneficial owners to be published, the names of the people who really control the company to be published, accounts to be put on public record. *In other words, it's almost impossible to find out who is doing what in a tax haven.*<sup>73</sup>

In some countries, high tax rates can lead to economic incentives for the taxpayers to relocate to areas with comparative lower tax rates and this phenomenon creates tax competition among different governments. There are many tax heavens specified for different types of taxes as well as for different groups of people and companies. Tax heaven has the potentiality to transform the tax structure of any nation. As a result, there are also some effective tax laws regulating the protections of the tax heaven such that there are no revolutionary changes within the economy.

There is even a moral case for tax heavens: they play a critical role in protecting people who are subject to religious, ethnic, sexual, political, or racial persecution. Most of the world's population lives in regimes that have inadequate human-rights protections, and people with assets often are targets of oppressive governments. The ability to put money in a tax heaven offers important protections for these potential victims.

Richard Murphy shows in *Fiscal Paradise or Tax on Development*<sup>74</sup> that there are at least 72 tax heavens in the world. The secrecy space that tax heavens provide encourages corruption, and it is widely accepted that this is more likely to happen in developing countries. Tax heavens are not a fiscal paradise. They are the home of anti social and illegal activity that hits the poor of the world hardest of all.

What are the reasons for using a tax haven? There are three reasons why anyone would ever use a tax haven<sup>75</sup>: 1. they want to avoid tax, 2. they don't want people to know what they are doing; 3. they want to avoid regulation. Usually economic corrupt activities take place in fiscal paradises. Two type illegal activities use tax heavens: corrupt ones and tax avoiding ones. Corrupt activities include the receipt of bribes and illegal commissions, money laundering of all sorts or drug and people trafficking enterprises. Tax evading activities include individuals not declaring their income in offshore accounts, people relying on secrecy to avoid a tax. Liability, businesses undertaking dubious practices such as artificial transfer pricing which moves profits from high tax to low tax areas.

Tax heavens are a blessing because they encourage crime and corruption by providing the secrecy space in which it can happen, they encourage tax evasion by providing a tax free environment in

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72 [http://www.oecd.org/document/23/0,3343,en\\_2649\\_33745\\_30575447\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/23/0,3343,en_2649_33745_30575447_1_1_1_1,00.html)

73 Murphy Richard, *Fiscal Paradise or Tax on Development*, Tax Research Paper, 2005

74 [www.richard.murphy.dial.pipex.com/Fiscalparadise.pdf](http://www.richard.murphy.dial.pipex.com/Fiscalparadise.pdf)

75 Murphy Richard, *Fiscal Paradise or Tax on Development*, Tax Research Paper, 2005

which it can be claimed profits are earned when the real transactions take place elsewhere, they provide a safe home for “capital flight” money that wants to be hidden from prying eyes, they provide a space in which the regulations of the developed economies put in place to protect their citizens from abuse can be avoided by unscrupulous businesses.

Currently, tax heavens are one of the best known and used procedures for international tax evasion and fraud. These are places where money are washing, "it washes whiter than white"<sup>76</sup>. Anonymity and friendly tax regime applied to these countries are attractive not only for professionals in international tax planning, more or less knowledgeable. Many corrupt politicians have diverted funds from their countries to these areas in order to enjoy them legally.<sup>77</sup>

Offshore centers are used mostly by companies that conduct criminal activities for money laundering.

Huge amounts of money move through tax heavens, namely, dirty money resulted from drug traffic, guns, smuggling, amounts arising from acts of corruption, tax evasion, human beings traffic, deception in financial banking.

Many specialists tried to quantify how much money is held in tax heavens. It is difficult to give any reliable figure since timely information is not widely available in respect of all jurisdictions and all asset classes. The amount of money offshore is rising. The reason is simple: the havens are innovating faster at this moment than those who are trying to nail them down.<sup>78</sup> This money is integrated in the financial circuits to be placed in legal business and to dissimulate their illegal origin. Money laundering has become a global business that is carried out at the line between licit and illicit.<sup>79</sup>

Although banking secrecy and tax paradise are two distinct notions, they have in common the fact that offers the possibility of transactions witch can prove to be recycling activities, laundering some funds from illegal activities.<sup>80</sup> Taking advantage of the absence of any exchange rate control, the stark anonymity, recyclers carry cash from the country in which it was produced and they deposit it in banks in tax heavens. Once you get it in offshore banks, money move smoothly through electronic transfers all over the globe.

Unfortunately internet banking allows activities for money laundering, it offers the possibility to access an account in any part of the world, making almost impossible the discovery of amounts' origin.

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## RELATIVE TAX MATTERS TO INSOLVENCY PROCEDURE

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*In terms of tax rules, we find rules in the Tax Code which link to specific stages of insolvency procedure the production of some tax effects.*

*In this paper, we present these legal provisions, among which we mention: the integral deductibility of the losses recorded when clearing from the list of the uncollected debts if the insolvency procedure of debtors was closed on a law court's decision, the adjustment of collected VAT if the debt can not be collected because of the bankruptcy of the beneficiary; application of the simplification measures for the deliveries / procurements / by a person against whom the insolvency procedure was opened, and so on.*

*Keywords: insolvency procedure, bankruptcy procedure, legal reorganization*

*JEL Classification: H3, H32*

### **I. Introductory Considerations**

Lately, in the global economic crisis, more and more economic agents face with financial difficulties, which, in some cases, led them to the termination of payments. This state of affairs has reacted also on their business partners, who, thus, were unable to achieve the debts.

The Romanian law givers had constant concerns in reforming, adjusting and improving the legal regimen of insolvency, the last major legislative reform being the Law No. 85/2006 on insolvency procedure.

In terms of tax rules, we find rules in the Tax Code which link to specific stages of insolvency procedure the production of some tax effects.

Thus, by way of example, we show that the Tax Code regulates the integral deductibility of the losses recorded when clearing from the list of the uncollected debts if the insolvency procedure of debtors was closed on a law court's decision, the adjustment of collected VAT if the debt can not be collected because of the bankruptcy of the beneficiary; application of the simplification measures for the deliveries / procurements / by a person against whom the insolvency procedure was opened, and so on.

In what follows we suggest, for the correct interpretation and application of tax regulations, to clarify the concepts of operation of tax law giver and which we find in the Law no. 85/2006 on insolvency procedure.

### **II. Short presentation of the insolvency procedure**

The Law No. 85/2006 regulates two forms of the insolvency procedure – the general procedure and the simplified procedure, each applying in certain circumstances expressly regulated, but which do not form the subject of our study.

The general procedure represents the procedure whereby the debtor enters, after the observation period, successively, the legal reorganization procedure and the bankruptcy procedure or, separately, only the legal reorganization procedure or only the bankruptcy procedure<sup>81</sup>.

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81 Art. 3 item 24 of the Law no. 85/2006.

The simplified procedure is the procedure whereby the debtor enters directly the bankruptcy procedure, either once with the opening of the insolvency procedure or after a period of observation of maximum 60 days<sup>82</sup>.

The legal reorganization is defined, by the item 20 of the article 3, as the procedure to be applied to the debtor, legal person, in order to pay its debts, according to the payment program of debts. The reorganization procedure involves the drafting, approval, implementation and compliance with a plan, called reorganization plan, which may provide, together or separately:

- Operational restructuring and / or financial restructuring of the debtor;
- Corporate restructuring by altering the structure of stock share;
- Restriction of activity by the liquidation of some assets from the debtor's property.

The bankruptcy procedure is defined, in the text of the item 23 of the article 3, as the collective and egalitarian corporate insolvency procedure which applies to the debtor in order to liquidate its property to cover its liabilities, being followed by the deletion of the debtor from the registry where it is registered.

In a synthetic speech, given the definitions above:

- the general procedure, in the most extended form, involves going through the following chronological phases: the opening of the insolvency procedure; the entry into reorganization;
- assuming the success of the plan of reorganization, the insolvency procedure closes;
- assuming the failure of reorganization, the bankruptcy procedure is opened; the liquidation of the debtor's property, the closure of the procedure and the cancellation of the debtor;
- the simplified procedure involves: opening the insolvency procedure and concomitantly / subsequently the opening of the bankruptcy procedure, the liquidation of the debtor's property, the closure and cancellation procedure of the debtor.

### **III. Presentation of tax rules that are incident in the insolvency procedure**

We present hereinafter the tax regulations incident in the insolvency procedure, contained both in Title II relating to tax on profit, and Title VI, on the value added tax.

**A.** Article 21 paragraph (2) letter n) of the Tax Code, provides that the law giver regulates the integral deductibility of the losses recorded by removing from the list of the uncollected debts **if the bankruptcy procedure of the debtors was closed on a law court's decision**, considering that these losses are expenses incurred for the purpose of achieving revenues.

**B.** In addition, the integral deductibility is regulated, or, where appropriate, limited, as we show below, of the provisions established for the uncollected customers:

**- for the debts registered after 01.01.2007<sup>83</sup>**

The provision is fully deductible up to a percentage of 100% of the debts on customers.

In order to be deductible, the provision established under the Article 22 paragraph 1, letter j, it is necessary that these debts to meet cumulatively the following conditions:

- there are registered after the 1<sup>st</sup> of January 2007;
- the debt is owned by a legal person on whom the procedure of opening the bankruptcy is declared, on the grounds of a law court's decision which attests this situation;
- there are not guaranteed by another person;
- there are due by a person who is not affiliated with the taxpayer;
- there were included in the taxable incomes of the taxpayer.

**- for the debts registered before 01.01.2004<sup>84</sup>**

The provisions established for the debts on customers, registered by taxpayers before the 1<sup>st</sup> of January 2004, are deductible within the limits laid down in the art. Article 22 paragraph (1) letter

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82 art. 3 item 25 of the Law no. 85/2006.

83 art.22 paragraph 1 letter j of the Law no. 571/2003 with its subsequent amendments and additions

84 Art.22 paragraph 8 of the Law no. 571/2003 with its subsequent amendments and additions

c)<sup>85</sup>. . In order to be deductible, the provisions established under the Article 22 paragraph (8), it is necessary that these debts to meet cumulatively the following conditions:

- there are not guaranteed by another person;
- there are due by a person who is not affiliated with the taxpayer;
- there were included in the taxable incomes of the taxpayer;
- the debt is held on a legal person on whom the bankruptcy procedure was opened, on the grounds of a law court's decision which attests this situation; - there haven't been established tax deductible provisions for that debt

It can be noted that in the legal assumptions presented above, it is made reference to the decision of opening the bankruptcy procedure, respectively the decision on closing the bankruptcy procedure, without the law giver to clarify whether those decisions should be irrevocable.

Given that, according to the art. 12 paragraph 1 of the Law no. 85/2006, these decisions are final and enforceable, we consider that, in the absence of a relative express regulation regarding the irrevocable character of the decisions, the deductibility of loss, as well as of provisions, to which we referred above, appears at the time of ruling the decisions.

**C.** According to the art. 160 paragraph (2) letter d) of the Tax Code, the application of simplification measures is mandatory if the insolvency procedure was opened, at least against one of the contracting parties, either the provider / supplier or the beneficiary. As an exception, there are not applied the simplification measures in the case of goods supplied in the retail trade. It is known that the simplification measures consisted in the following:

- on the invoices issued for the respective operations, suppliers are obliged to register the word "reverse charge", without registering the afferent charge;
- on the invoices received from suppliers, beneficiaries will sign up the afferent charge, that they highlight both as the collected tax, as well as the deductible tax in the tax settlement. Accountant, the beneficiary shall register during the tax period 4426 = 4427 with the amount of the afferent charge;
- for the operations subject to simplification measures it is not made the payment of the tax between supplier and beneficiary. The accounting registration 4426 = 4427 to the buyer is called the self liquidation of the value added tax, the collection of value added tax to the level of deductible tax is assimilated to the payment to the supplier / provider.

The Tax Code regulates two conditions, whose cumulative meeting is necessary for the application of the simplification measures: both supplier and beneficiary must be registered for a VAT purpose, respectively the operation should be taxable.

Regarding the second condition, namely, that the operation to be taxable for the application of the simplification measures, we consider that it should be made some clarifications. Given the specific of the simplification measures, meaning that the provider / supplier does not collect the VAT for the respective operation, and makes no actual payment of the VAT between supplier and beneficiary, in practice, there have appeared some situations in which it has been mistaken the application of the simplification measures with an exempted operation.

As stated above, the operations for which the simplification measures are applied are taxable transactions, the simplification measures representing a form of payment of VAT. Thus, for the exempted operations without the right to deduct for which one may choose to charge, covered by the art. 141 paragraph 2 letter e)<sup>86</sup> and letter f)<sup>87</sup>, there shall not be applied "automatically" the simplification measures, but only assuming that it chooses to charge transactions, by filing the appropriate notifications.

Example:

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85 for the year 2008, the provision is deductible up to 30% of the uncollected debts.

86 hire, rent, leasing of real estate

87 Total/partial delivery of an old building and lands of any kind, except those available for building

A trading company which has entered into insolvency procedure sells an agricultural land and does not choose to charge - because there aren't economic and tax reasons to express this option<sup>88</sup>: the delivery shall be made within an exempted regimen, without the right to deduct. If choosing for charging, it is compulsory to apply the simplification measures.

According to the art. 138 paragraph 1 letter d of the Tax Code, the tax base is reduced if the equivalent value of the delivered goods or provided services can not be collected because of the bankruptcy of the beneficiary. The adjustment is allowed from the date of the ruling of the law court's decision to close the procedure laid down by the Law no. 85/2006 on insolvency procedure, decision remaining final and irrevocable.

An additional condition for the adjustment of VAT is included in the item 20 paragraph 3 of the Government Decision 44/2004, which states that the adjustment of the tax base of value added tax, referred to in the art. 138 letter d) of the Tax Code is permitted only if the date of declaration of bankruptcy of the beneficiaries has occurred after the 1<sup>st</sup> of January 2004, including for the invoices issued before that date, if the equivalent value of the delivered goods / provided services or the value added tax recorded in these invoices can not be collected because of the bankruptcy of the beneficiary.

The judgement for this regulation consists in abiding the principles of neutrality and transparency of VAT. Basically, it reaches a situation in which the supplier / provider pays VAT to the budget, which was not collected from the client, provided that the failure of the debts is not attributable to him.

Given the specifics of this situation, respectively the fact that after the date of closing the bankruptcy procedure, the debtor is cancelled, the adjustment made in the case covered by the art. 138 paragraph 1, letter d has the following features:

- the adjustment is made by issuing an invoice with the values entered with a minus, but which it shall also not be notified to the beneficiary;
- the beneficiary shall not adjust, correlatively, the right to deduct that he practised for the respective operation.

Example:

SC X LLC provides services to SC Y LLC, collecting the afferent VAT on this transaction. Subsequently, SC Y LLC, is cancelled as a result of closing the bankruptcy procedure, but without the SC X LLC to collect its debt. In this situation, in the settlement afferent to the tax period (month/quarter) when the decision to close the bankruptcy procedure remained final and irrevocable, SC X LLC shall be able to reduce the initially collected VAT.

It is necessary to point out that in drafting the text of the art. 138 paragraph 1 letter d, the tax law giver uses an inaccurate terminology when operating with the notions contained in the Law no. 85/2006, which creates difficulties of interpretation. Thus, it is noted that the non-collection of the debt is due to the bankruptcy of the debtor, but the tax adjustment is made on the law court's decision, final and irrevocable, of closing the insolvency procedure.

Or, as we showed above, the insolvency procedure regulated by the Law no. 85/2006 can be closed also as a consequence of achieving the reorganization plan, case in which, obviously, the debtor does not go also through the bankruptcy procedure. This inaccuracy should be corrected, just to ensure the accuracy of the legal text.

**D.** The reimbursement of VAT for the impossibility of recovering the tax paid by the supplier, if the tax was erroneously entered in the invoice and for which the beneficiary, of course, has no right to deduct.

According to the art. 150 paragraph 3 of the Tax Code, any person who entered a tax on an invoice or any other document serving as invoice is required to pay it.

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<sup>88</sup> For instance: it did not deduct the VAT on land acquisition as it purchased it from a natural person, and, consequently, has no obligation to adjust the deducted VAT, if it resells it under the exemption regimen without the right to deduct.



The person who wrongly enters the tax into an invoice or another document treated as an invoice, shall pay this tax to the state budget, and the beneficiary will not be entitled to deduct such tax. In this case, the beneficiary may request the supplier or provider the correction of the invoice prepared wrongly, by issuing an invoice with the minus sign and a new correct invoice.

Assuming that the supplier or provider is unable to correct the invoice issued in error due to the release of the liquidation, bankruptcy, cancellation procedure or other similar situations, the tax law giver regulated by the item 58 paragraph 2 of the Government Decision 44/2004, a refund procedure of this tax not due to the budget, the beneficiary-applicant must proving the fact that he paid this tax to the supplier, as well as the fact that the supplier has paid the respective tax to the state budget.

Frequently, such an erroneous invoicing of the value added tax appears for the exempted operations without the right to deduct, but for which there is an option to charge, covered by the art. 141 paragraph 2 letter e and letter f of the Tax Code.

For example, assuming that it is rented a building and the owner invoices as normal charge, without filing to the tax authorities the notification by which he expresses this option, the renter has no right to deduct this tax and will require the owner to correct the invoice.

There is a possibility that since the invoicing date, the owner trading company to be declared bankrupt and thus to be unable to correct the invoices. In this situation, the renter will request the reimbursement from the budget of the value added tax, but needing to prove that he paid that tax to the owner as well as the fact that the owner has paid such tax to the state budget.

#### **IV. Conclusions**

From the above exposed, it appears that the tax law giver was concerned to cut the financial losses of economic agents whose business partners have been declared bankrupt as a result of not collecting the debts held on them. In practice, however, given the fairly long period before declaring bankruptcy (several years), inflation tends to cancel the positive effects of these regulations.

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## THE BUDGET OF THE EUROPEAN UNION

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*The budget represents a complex system of acts and operations that together lead to a financial balance, very important for the state and citizens.*

*The European budget has known many changes by now due to the fact that Union is continuously changing.*

*Key words: budget, budgetary procedure, budgetary treaties*

At European level, the budgetary procedure had known multiple changes in time due to the very dynamic developments of the Union.

Treaties establishing the European Communities had rules relating to the budget. Only the rules that govern the budget were quite low in importance as new entities were at the top of the road. The main regulation of budget we find in Budgetary Treaties, Treaties that are applied today, alongside other acts in respect of the budget and finances.

In 1965 was settled in Brussels the Treaty that established a single Commission and a single Council for all three communities. This treaty entered into force on 1 July 1967. As the three treaties established initial budgets, one for each Community, there had been developed measures to take to a joint budget now. There was a fact of abnormality as there were three budgets but common organisms. So, after few steps they have been signed and entered into force the budgetary treaties.

The first Budget Treaty was signed in Luxembourg on 22 April 1970 and entered into force on 1 January 1971. It's called the Treaty amending certain budgetary provisions of the Treaties establishing the European Communities and the Treaty establishing a Single Council and a Single Commission of the European Communities.

The second budgetary treaty was signed on 22 July 1975 and entered into force on 1 June 1977. It's called the Treaty amending certain financial provisions of the Treaties establishing the European Communities and the Treaty establishing a Single Council and a Single Commission of the European Communities.

The two treaties completed and amended the Treaties establishing the Communities. Major additions and changes which they brought in were the foundation of new institutions and procedures to develop a budget.

Treaties established the Court of Auditors, which was to act within the limits and the structure covered by these treaties.

Another important provision is the exercise of a financial year between January 1 and December 31. It also established the budgetary procedure. It encompasses a large number of provisions that cover all situations that could create this effect.

Administrative expenses of the Community included those of the High Authority of the Assembly, Council and Court of Justice. Each of these institutions had to prepare before July 1, a provisional situation which covered their expenses. High Authority grouped these situations in a preliminary administrative budget draft, adding it with an opinion which may contain divergent preliminaries. The project included estimated preliminaries of revenue and expenditure. Council had notified the High Authority in connection with the preliminary administrative budget draft by September 1 of the year preceding the implementation of the budget. Council consults High

Authority and, where appropriate, other institutions concerned whenever it intends to depart from the preliminary draft. Council establishes the administrative budget and forward it to the Assembly. This was to be decided by the Council by qualified majority. Assembly must be notified of the administrative budget draft no later than October 5 of last year for which the budget is approved. The Assembly has the right to amend the draft budget and administration to propose to the Council, by an absolute majority of votes cast, modifications of the project in relation to expenditure incurred in binding treaties or other acts adopted pursuant thereto. If the Assembly approves the budget within 45 days, after that the budget is finally adopted. Also, the budget is finally adopted if in this term the Assembly has not changed and neither has proposed his amendment. When the Assembly adopted or proposed changes in this period, the draft amended or accompanied by proposals for amendment is sent to the Council. After debating the project with the High Authority and other concerned institutions, the project is changed depending on what the Council wants. If within 15 days of the budget draft the Council has not changed any of the amendments adopted by the Assembly and if the proposed changes were accepted, the budget is finally adopted. Council shall inform the Assembly on that there has not been changed any of the amendments and proposed changes were accepted. In contrast, if within that period the Council has modified one or more of the amendments adopted by the Assembly or if the proposed changes submitted by it have been rejected or amended the draft budget is submitted as the Assembly, the Council shall submit its debates. After this transmission, there is a new 15 days term, during which the Assembly can amend or reject the amendments made by the Council and, consequently, adopt the budget. If during this time the Assembly has not acted, the budget is considered as finally adopted. However, for very important reasons, the Assembly may reject the draft budget and ask another.

If at the beginning of a new financial year the budget is not adopted, the costs can be made the monthly, in limit on one twelfth of credits opened in the previous year. The High Authority is the one that has the authorization and obligation to collect revenues up to the amount of appropriations from previous financial year, but without being able to cover an amount greater than that which would result from adoption of the budget draft. All this is presented annually to the Council and Assembly. Establishing the Court of Auditors was a big step for the budget. Noteworthy is the Treaty provision according to that the Court of Auditors shall be chosen from "personalities who are part or have been part of the external institutions or have a special qualification for this position." The 9 members of the Court of Auditors were appointed by the Council decided unanimously after consulting the Assembly. The performance of the Court is to verify accounts of all expenditure and revenue of the Communities, to verify the legality and regularity of expenditure and revenue, ensure good financial management. Court of Auditors draws up an annual report after the end of each year, report to be sent to all institutions and published in the Official Journal of the European Communities. The Assembly is the one which task is to give discharge to the High Authority. It is this recommendation to the Council, after checking the accounts and financial position after the Court of Auditors.

From the financial point of view, we consider the adoption of such treaties as the primary step, and most importantly, to be conducted to establish a financial balance at the level of Communities. Lack of balance leads to many financial problems and attract the very instability of the Communities. Or, establishing a budget and complex budget procedures, there was only a solidification of position on the international position wanted by the founding countries. Today we can say that there is rich legislation regarding the budget and the budgetary procedure at the Union level. But not all regulations govern the budget itself. Many of these cover issues arising during the financial year. Acts governing the purely budget as an institution, are much less numerous.

The main act that contains budgetary provision is the Maastricht Treaty. It reiterates the budgetary procedure established by the Treaties, requiring the financial order in the Union. What

we notice is that it does not change anything from budgetary treaties, but it only brings improvements to be made because of the new European realities. The budgetary procedure shall be retained. The institutions change. Now the High Authority is the Commission, the Assembly is the Parliament.

The Maastricht Treaty establishes a financial discipline on the avoidance of excessive deficits to the Member States and the Commission must examine whether the budgetary discipline was observed. The Commission, together with the Council must ensure compliance with budgetary discipline, developing measures and imposing sanctions to some countries that do not comply with the decisions taken to reduce the budget deficit and maintain a financial balance. Also, the Maastricht Treaty reiterates the duties of the Court of Auditors, Parliament and the Council stating that "Court of Auditors supports the European Parliament and the Council in exercising their control of budget execution". Moreover, the Treaty strengthens the position of the Court of Auditors among the EU institutions, resuming many of the provisions of the Treaties concerning the its existence and attributions.

This Treaty exposes for the first time two important principles of budgetary activity. The principle of legality according to which all the income and expenditure should be subject to provision for each financial year and be included in the budget. The second principle of the Maastricht Treaty refers to is the budget balance, stating that "revenue and expenditure budget must be balanced."

The Maastricht Treaty reiterates that the budget is funded solely from its own resources, without prejudice to other revenue, which we find in the preamble to the Budgetary Treaties, this being a determinant thing for the establishment of order by creating a budget and a budget activities budget without which it could not exist.

For the first time it appears in the Maastricht Treaty the institution of financial regulations that are adopted by the Council unanimously, on the proposal from the Commission and after consulting and obtaining the opinion of the Court of Auditors. They determine ways of designing and implementing the budget, provision and checking accounts.

The Treaty of Lisbon is the last treaty signed by the European member states. This treaty has not yet entered into force but it is expected that this will happen in the current year. Regarding the financial matters, it did not make any changes or additions, the procedure and the budget will take place throughout the current rules: Budgetary Treaties and the Treaty of Maastricht. The budget represents a complex system of acts and operations that together lead to a financial balance, very important for the state and citizens.

All the operations are very complex and consists of both acts of nature (financial analysis and forecasting) and on legal documents (the draft budget law). This leads to the difference between the budget draft and the annual budget law. The draft budget is a financial plan which was based on economic forecasts. We can look the draft budget and the budget as part-whole. It should also be noted that the budget is spread across three years: first year when there is predicted the budget for the year and it is subject to monitoring and approval, the second year which is the very budgetary year, the year in which the implementation of the budget - the revenue and expenditure in making the budget year and the third year after completion of executing the budget year in which the control of the budget for the financial year ended. All these operations involve acts of great responsibility for the authorities. We should mention that the Romanian state budget is subject to the Community law in the matter.

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# THE SYNTHETICAL ANALYSIS OF REFLECTING THE LABOUR PRODUCTIVITY INTO THE MASS OF PROFIT

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*The labour productivity is one of the most important indicator for analyzing a company activity and it has always been the target of the attempts to permanently increase the profit and its results. The increase of labour productivity represents also the most important factor to increase the volume of production, to decrease the production costs and to increase the products' rentability and competitiveness both on internal and external markets. Reflecting the labour productivity into the mass of profit is connected to the grasping of its contents and significance, of the priority of influential factors and the way of capitalization. The key of labour efficiency as a production factor is given in essence by the relation between the dynamics of its output (labour productivity) and the dynamics of average wages whereas the condition of this efficiency is that the dynamics of labour productivity should outrun the average wages.*

*Key words: profit, labour productivity, average wages, wages expense.*

*JEL Classification: D24 – production, cost, capital and total factor productivity, capacity.*

Labour productivity is equalized to profit, which is in essence symmetrical to its volume. Consequently we may speak about a conversion of output at the level of product or of the entire production obtained or sold ( physical and value output). Also labour productivity represents the efficiency of consumed labour and at the same time the efficiency of human potential to generate profit both at the level of product as well as at the level of the entire production.<sup>89</sup> At the level of product, the quantifying methodology of reflecting the output of labour we reckon to be the following:

$$T_{s_1} \cdot (\overline{whs}_1 - \overline{whs}_0) \cdot \overline{pr}_0 \quad \text{sau} \quad (qv_1 \cdot ts_1) \cdot (\overline{whs}_1 - \overline{whs}_0) \cdot \overline{pr}_0$$
$$T_1 \cdot (\overline{wh}_1 - \overline{wh}_0) \cdot \overline{pr}_0 \quad \text{sau} \quad (qv_1 \cdot t_1) \cdot (\overline{wh}_1 - \overline{wh}_0) \cdot \overline{pr}_0$$

### where:

$T_s$  – standard time of work per product;

$ts$  - standard time of work per product;

$\overline{whs}$  – the value of production per standard unit of time;

$\overline{pr}$  – average profit per 1 leu production;

$qv$  – sold production;

$T$  – total working time;

$\overline{wh}$  – average productivity per hour;

$t$  – working time per unit of product.

Regarding the profit per unit of product, the labour output (physical productivity) can be emphasized through time economizer, respectively:

$$-(t_1 - t_0) \cdot \overline{wh}_0 \cdot \overline{pr}_0$$

<sup>89</sup>Alexandru Buglea, Analiză economico-financiară, Universitatea de Vest, Timișoara, 2008.

$$-(t_1 - t_0) \cdot \frac{P_0}{t_0}$$

where:

t – time of labour per unit of product;

$\frac{P}{t}$

t – profit per unit of time.

To exemplify the following data can be used:

**Table no.1**

| Product | Physical volume  |                | Standard time per unit of product (hours) |                | Total standard time |                | Value volume (lei) |                |
|---------|------------------|----------------|---|----------------|---------------------|----------------|--------------------|----------------|
|         | P <sub>n-1</sub> | P <sub>n</sub> | P <sub>n-1</sub>                          | P <sub>n</sub> | P <sub>n-1</sub>    | P <sub>n</sub> | P <sub>n-1</sub>   | P <sub>n</sub> |
| A       | 2.000            | 2.200          | 100                                       | 100            | 200.000             | 220.000        | 20.000.000         | 26.640.000     |

| Average production per standard unit of time (lei) |                | Profit per 1 leu production |                | Sum of profit per product (lei) |                | Deviation of the profit sum (lei) |
|--|----------------|-----------------------------|----------------|---------------------------------|----------------|-----------------------------------|
| P <sub>n-1</sub>                                   | P <sub>n</sub> | P <sub>n-1</sub>            | P <sub>n</sub> | P <sub>n-1</sub>                | P <sub>n</sub> |                                   |
| 100  | 120            | 0,10                        | 0,12           | 2.000.000                       | 3.196.800      | 1.196.800                         |

The influence of the output (labour productivity) based on the data in the above table is accomplished as it follows:

1. based on the value productivity per standard unit of time (at the level of product):

$$T_{s_1} \cdot (\bar{whs}_1 - \bar{whs}_0) \cdot \bar{pr}_0 = 220.000 \times (120 - 100) \times 0,10 = +440.000 \text{ lei}$$

2. based on physical productivity of labour per unit of product and per product where the following data may be used:

**Table no. 2**

| Physical volume of the product |                | Working time per unit of product |                | Working time per product |                | Average value production per unit of time |                | Profit per product (thousands of lei) |                | Profit per unit of product |                |
|--------------------------------|----------------|----------------------------------|----------------|--------------------------|----------------|---|----------------|---------------------------------------|----------------|----------------------------|----------------|
| P <sub>n-1</sub>               | P <sub>n</sub> | P <sub>n-1</sub>                 | P <sub>n</sub> | P <sub>n-1</sub>         | P <sub>n</sub> | P <sub>n-1</sub>                          | P <sub>n</sub> | P <sub>n-1</sub>                      | P <sub>n</sub> | P <sub>n-1</sub>           | P <sub>n</sub> |
| 2.000                          | 2.200          | 100                              | 85             | 200.000                  | 187.000        | 10.000                                    | 14.246         | 2.000.000                             | 3.196.800      | 1000                       | 1.453,1        |

Per unit of product, it means that the output is reflected into the profit (profit per unit of product) with:

$$-[(t_1 - t_0) \cdot \bar{wh}_0 \cdot \bar{pr}_0] = -[(85 - 100) \cdot 100 \cdot 0,10] = +150 \text{ lei}$$

or

$$-(t_1 - t_0) \cdot \frac{P_0}{t_0} = -(85 - 100) \cdot \frac{1.000}{100} = +150 \text{ lei}$$

At the scale of the entire volume of production obtained and sold (in order not to complicate things further with correction of production obtained with increasing and decreasing of stocks of finite products and of course their amounting in prices of selling) it means that altering the profit per unit of product, the physical volume of product is magnified with the physical volume of product in P<sub>n</sub>. The relations comprising the variables would be written as it follows:

$$-\left[ qv_1 \cdot (t_1 - t_0) \cdot \overline{wh}_0 \cdot \overline{pr}_0 \right] = -\left[ 2.200 \cdot (85 - 100) \cdot 100 \cdot 0,10 \right] = +330.000 \text{ lei}$$

or

$$\left( qv_1 \cdot (t_1 - t_0) \cdot \frac{P_0}{t_0} \right) = -\left( 2.200 \cdot (85 - 100) \cdot \frac{1.000}{100} \right) = +330.000 \text{ lei}$$

Thus out of deviating the profit per product A of 1.196.800 lei, 330.000 (that is approximately 28%) represents the effect of the output increase of the labour factor. Based on value productivity, the labour output is reflected in the profit per product with:

$$T_{S_1} \cdot (\overline{wh}_{S_1} - \overline{wh}_{S_0}) \cdot \overline{pr}_0 = 187.000 \cdot (142,46 - 100) \times 0,10 = 187.000 \cdot 42,46 \cdot 0,10 = +794.002 \text{ lei}$$

$$(qv_1 \cdot t_{S_1}) \cdot (\overline{wh}_{S_1} - \overline{wh}_{S_0}) \cdot \overline{pr}_0 = 2.200 \cdot 85 \cdot (142,46 - 100) \times 0,10 = 2.200 \cdot 85 \cdot 42,46 \times 0,10 = +794.002 \text{ lei}$$

Under these circumstances, in order to accomplish the connection between the real output and the profit, in the extent that the productivity in comparable prices has not been taken into account, it is necessary that the influence of inflation should be eliminated. This means that the effective productivity would be equal with:

$$\frac{qv_1 \cdot \overline{p}_0 \cdot Ip}{T_1}$$

**where:** Ip – indices of prices.

Accepting the hypothesis that Ip = 1,10, the value productivity of labour per unit of time in P<sub>n</sub> would be equal with:

$$\frac{qv_1 \cdot \overline{p}_0 \cdot Ip}{T_1} = \frac{[(2.200 \cdot 10.000) \cdot 1,10]}{187.000} = 129,41 \text{ lei}$$

Under these conditions, the real output of labour is reflected into the profit per product with:

$$(qv_1 \cdot t_1) \cdot (\overline{wh}_1 - \overline{wh}_0) \cdot \overline{pr}_0 = 2.200 \cdot 85 \cdot (129,41 - 100) \cdot 0,10 = 2.200 \cdot 85 \cdot 29,41 \cdot 0,10 = +549.967 \text{ lei}$$

As it has been observed before, the different results of the calculi are not subject of an estimation, the aim of the paper being that of demonstrating the mechanism and methodology, the conversion of volume into profit and utilizing the production factors – with circumscribing to labour and capital.

Exemplifying the conversion of the output through the agency of fixed expenses for 1 leu or 1 thousand lei production may be accomplished utilizing the following data:

**Table no.3**

| Nr. crt. | Indicator                                       | P <sub>n-1</sub> | P <sub>n</sub> |
|----------|---|------------------|----------------|
| 1.       | Turnover - CA                                   | 23.148.000       | 28.800.000     |
| 2.       | Fixed expenses - Cf                             | 2.500.000        | -              |
| 3.       | Average productivity per hour - $\overline{wh}$ | 11.603           | 15.008         |
| 4.       | Total working time – hours                      | 1.995.000        | 1.919.000      |
| 5.       | Indices of prices - Ip                          | 1,10             | -              |

For this the relation

$$-\left( \frac{Cf_0}{\frac{1}{1000} \cdot (T_1 \cdot \overline{wh}_1)} - \frac{Cf_0}{\frac{1}{1000} \cdot (T_1 \cdot \overline{wh}_0)} \right) \cdot CA_1 = -\left( \frac{2.500.000}{\frac{1}{1000} \cdot (1.919.000 \cdot 15.008)} - \frac{2.500.000}{\frac{1}{1000} \cdot (1.919.000 \cdot 11.603)} \right) \cdot 28.800.000 =$$

$$= -\left( \frac{2.500.000}{28.800.352} - \frac{2.500.000}{22.266.157} \right) \cdot 28.800.000 = -(0,0868 - 0,1123) \cdot 28.800.000 = +734.400 \text{ lei}$$

is used or eliminating the effect of inflation:



$$\begin{aligned}
& - \left( \frac{Cf_0}{\frac{1}{1000} \cdot (T_1 \cdot \bar{w}h_1)} - \alpha \frac{Cf_0}{\frac{1}{1000} \cdot (T_1 \cdot \bar{w}h_0)} \right) \cdot CA_1 = \\
& = - \left[ \left( \frac{2.500.000}{\frac{1}{1000} \cdot (1.919.000 \cdot 15.008)} - 1,739 \right) - \left( \frac{2.500.000}{\frac{1}{1000} \cdot (1.919.000 \cdot 11.603)} \right) \right] \cdot 28.800.000 = \\
& = - \left[ \left( \frac{2.500.000}{28.800.350,26} \right) - \left( \frac{2.500.000}{22.266.157} \right) \right] \cdot 28.800.000 = -(0,0868 - 0,1123) \cdot 28.800.000 = +734.400 \text{ lei}
\end{aligned}$$

where:

$$\begin{aligned}
\alpha & = \frac{\sum qv_1 \cdot \bar{p}_1}{T_1} - \frac{\sum qv_1 \cdot \bar{p}_0 \cdot Ip}{T_1} = \\
& = \frac{28.800.000}{1.919.000} - \frac{23.148.000 \cdot 1,10}{1.919.000} = 15,008 - 13,269 = +1,739 \text{ lei}
\end{aligned}$$

The labour efficiency as a production factor is based in essence on the connection between the dynamics of its output (labour productivity) and the dynamics of the average wages. As it is known, the requirement is that the dynamics of the output should outrun the dynamics of the average wages. This is the case of the dynamics of the real output in the sense of elimination the effect of inflation and the structure of production. Similarly the problem of comparing the average wages intervenes.<sup>90</sup> With the correlation in the above agreement is operated at the level of exercise production, of the turnover or the added value, depending on the way the output of the labour factor is established.

It is a frequent practice that in the specialised literature the labour productivity be used, established on the turnover per employee or unit of time. It is certain that as any other value indices the labour output is not beyond the incidence of inflation and of production structure. The correlation between the dynamics of output (the labour productivity) and the dynamics of average salary is reflected through the agency of the correlation indices established through 2 modalities<sup>91</sup>:

$$I_c = \frac{I_s}{I_w} \quad \text{și} \quad I_c = \frac{I_{s-1}}{I_{w-1}}$$

where:

Ic – the indices of the correlation;

Is – the indices of average wages;

Iw – the indices of labour productivity.

The requirement due to which the dynamics of the labour productivity outruns the dynamics of the average wages, is emphasized by the inequity:  $I_c < 1$  (the conditions taken into consideration before are reminded). As it is known nobody has established the optimum opening of the correlation, the contractual indices of correlation which cannot be a standard, but a conditioned aptitude (the social variable included).

To exemplify we admit the following situation:

90 Lucian Bușe, *Analiză economico-financiară*, Economică, București, 2005.

91 Căruntu Constantin, Lăpăduși Mihaela, Căruntu Genu, *Analiză economico-financiară la nivel microeconomic*, Universitaria, Craiova.

Table no. 4

| Indicatori  | $P_{n-1}$  | $P_n$      | $\frac{P_n}{P_{n-1}}$ | $I_c$                 |
|---|------------|------------|-----------------------|-----------------------|
| 1.The labour output for an employee (labour productivity) - lei     |            |            |                       |                       |
| a) based on the production exercise                                 | 20.571.500 | 2.633.152  | 1,28                  | x                     |
| b) on the turnover  | 18.600.000 | 23.436.000 | 1,26                  | x                     |
| c) on the added value   | 9.257.175  | 12.112.500 | 1,31                  | x                     |
| 2. The average annual wages - lei                                   | 7.200.000  | 8.640.000  | 1,20                  | x                     |
| 3. The indices of the correlation judging after the two modalities: |            |            |                       |                       |
| a)based on average production of the exercise per employee          | x          | x          | x                     | $\frac{0,938}{0,714}$ |
| b) on the average turnover per employee                             |            | x          | x                     | $\frac{0,952}{0,769}$ |
| c)on the average value added per employee                           | x          | x          | x                     | $\frac{0,916}{0,645}$ |
| 4. Expenses on wages for 1000 lei                                   |            |            |                       |                       |
| a) the production exercise  | 350        | 328        | 93,71                 | x                     |
| b) turnover   | 387        | 369        | 95,35                 | x                     |
| c) added value  | 778        | 713        | 91,68                 | x                     |

First the following situation appear, where  $I_c < 1$ , irrespective on what grounds labour productivity is established and on which modalities the indices of the correlation is established. In other words, it means the dynamics of the labour productivity deviated the dynamics of average wages, and the effect within the decreasing of wages expenses at 1000 lei production of exercise, turnover or added value and consequently in increasing of profit and evidently of rentability rates.

If we exemplified the situation taking into consideration the expenses at 1000 lei turnover, it would result that the labour output (labour productivity) through the effect of the correlation is reflected in altering the wages expenses with – 18 lei thus:

1.The influence of the labour output (labour productivity):

$$\left( \frac{\bar{S}m_0}{W_1} - \frac{\bar{S}m_0}{W_0} \right) \cdot 1.000 = \left( \frac{7.200.000}{23.436.000} - \frac{7.200.000}{18.600.000} \right) \cdot 2000 = -79,50 \text{ lei}$$

or

$$\frac{C_{S_0}^{(1000)}}{I_w^-} - C_{S_0}^{(1000)} = \frac{387}{1,26} - 387 = -79,50 \text{ lei}$$

where:

$C_{S_0}^{(1000)}$  – wages expenses at 1000 lei turnover;

$I_w^-$  - the indices of labour productivity in this case established on the basis of the turnover.

or

$$C_{S_1}^{(1000)} - \frac{C_{S_1}^{(1000)}}{I_w^-} = 369 - \frac{387}{1,26} = +61,50 \text{ lei}$$

Consequently, it follows that the effect of the labour output (labour productivity) compensates the influence

of average wages increase and furthermore it contributes to the reduction of wages expenses at 1000 lei turnover with 18 lei, and implicitly to the increase of profit at 1000 lei turnover. Taken into consideration separately, it denotes that the dynamics of the output (labour productivity) competed at reduction of wages expenses at 1000 lei turnover with 79,50 and corresponding to the increase of profit at 1000 lei turnover having the same value. Transformed into calculus relations, it means that the labour output through its effect on the correlation, led to the increase of the mass profit afferent to the turnover with:

$$\begin{aligned} -\left[\left(\frac{\bar{S}m_0}{W_1} - \frac{\bar{S}m_0}{W_0}\right) \cdot 1000\right] \cdot \frac{CA_1}{1000} &= -\left[\left(\frac{7.200}{23.436} - \frac{7.200}{18.600}\right)\right] \cdot 1000 \cdot \frac{18.748,8}{1.000} = \\ &= -[(0,307 - 0,387) \cdot 1000] \cdot 18,7488 = +1.499,904 \text{ lei} \end{aligned}$$

respectively

$$\begin{aligned} -\left(\frac{C_{S_0}^{(1000)}}{I_w} - C_{S_0}^{(1000)}\right) \cdot \frac{CA_1}{1.000} &= -\left(\frac{387}{1,26} - 387\right) \cdot \frac{18.748,8}{1.000} = \\ &= -(307,143 - 387) \cdot 18,7488 = -[-79,857] \cdot 18,7488 = +1.499,904 \text{ lei} \end{aligned}$$

Note: CA1- respectively the turnover in Pn = 18.748,8 lei

In case the influence of average wages were introduced for the integrating image of the correlation effect, then it would result from the following:

$$\begin{aligned} -\left(\frac{\bar{S}m_1 - \bar{S}m_0}{W_1} \cdot 1.000\right) \cdot \frac{CA_1}{1.000} &= -\left(\frac{9.000 - 7.200}{23.436} \cdot 1.000\right) \cdot \frac{19.748,8}{1.000} = \\ &= -\left(\frac{1.800}{23.436} \cdot 1.000\right) \cdot 19,7488 = -(0,0768 \cdot 1.000) \cdot 19,7488 = 76,8 \cdot 19,7488 = -1.516,7078 \text{ lei} \end{aligned}$$

or

$$\begin{aligned} -\left(C_{S_1}^{(1000)} - \frac{C_{S_0}^{(1000)}}{I_w}\right) \cdot \frac{CA_1}{1.000} &= -\left(369 - \frac{387}{1,26}\right) \cdot \frac{18.748,8}{1.000} = -(369 - 307,143) \cdot 18,7488 = \\ &= -61,857 \cdot 18,7488 = -1.153.051.000 \text{ lei} \end{aligned}$$

Therefore in its unity, the correlation between the dynamics of labour (labour productivity) and the average wages lead to the increase of the profit afferent to the turnover with:

$$+1.499,904 - (-1.516,7078) = +3.016,6118 \text{ lei}$$

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# INVESTIGATION OF THE COSTS AND BENEFITS OF ROMANIAN INTEGRATION IN EUROPEAN UNION

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*The aim of this study is to investigate the costs and benefits of Romanian integration in European Union. Starting from this idea, the paper presents the political and economic factors that conduct to the integration even that the economic growth is under the average of European Union member states.*

*Keywords: European Union, integration costs, integration benefits*

*JEL classification: E6, F5, O1*

## **1. Introduction**

Accession to the European Union (EU) involves certain impediments in the expression of freedom to act in foreign policy. The business environment will become more competitive, and the Romanian companies will have to lead a fierce battle with leading companies on the European states. European integration is, first of all, execution of joint projects with the EU, the Romanian entrepreneurs to develop partnerships with businesses across the EU. These projects could help to eliminate the technological gap that we feel towards the real convergence. There is, however, a danger that the Romanian economy will not face the European technology standards. Therefore, will be necessary important domestic investments both public and private.

The aim of the paper is to investigate the political and economic factors that conduct to Romania accession to EU highlighting the costs and benefits of this process. Section 2 presents the costs and benefits of EU integration focusing on the reasons of Romania in the EU's acceptance and effects, and the objectives pursued by the Romanian governments on long run. The main concluding remarks are included in section 3.

## **2. Cost and benefits of Romanian integration in EU**

After the fall of communism in 1989, many new countries became independent states and were classified by IMF as a transition economies. They were led by a single party, with a commercial autocratically a planned economy and common property in terms of production and land. Romania is unfortunately one of the countries that have suffered from the communist regime. But after 1989, Romanian governments tried hard to acquire a sustainable economic growth, political stability and maintain good international affairs. An important step in the deployment of the past was joining NATO in late March 2004. Position and air and naval base of the Black Sea are that Romania is attractive from this angle for the alliance, but also for the European Union.

Until 1990, the EU has been restricted to the western part of Europe. If the EU would not be opened to the east, would have created a large discrepancy between the two regions and probably would have been two different systems. But there is a big problem on the extension to be addressed: who should join and who should remain on the outside? One of the reasons for enlargement to the east is a moral, said Robert Schuman. A united Europe should be able to accept people from Eastern Europe and to help achieve the desired transformation.

In addition, a stable and secure political environment in the east was absolutely necessary for the future of the European Union. Political stability is a vital condition for economic development. Since the new developing countries could become areas of conflict would be affected and consequently also the rest of Europe, the EU should provide necessary help to build a democratic political system supported by law.<sup>92</sup>

Europe has a unique chance to avoid future conflicts, but the enlargement strategy should be subordinated to long-term objectives. Being based on common values and interests, the current expansion could be the path to stability and durable peace in Europe. But the diversity of economic, social, cultural and institutional, and economic differences and the transition may create some risks.<sup>93</sup> Developing countries in Eastern Europe modify the political balance and increase the asymmetry between member states. Differences in quality of life and economic problems have led to divergent in terms of interests.

The European Union is primarily a pawn in the international market of energy being the largest importer and second largest consumer in the world. Energy is an important factor in economic and geopolitical. However, the European Union is dependent on imports for half of this addiction and demand could reach 70% by 2030 if it does not take other measures. Depending on natural gas could reach 70%, oil at 90% for coal and even 100%. In this respect, the EU should also ensure access to these resources because they are vital for economic welfare. Most likely, the EU enlargement will strengthen this trend, despite the fact that the possibility of inviting countries with natural sources of energy (eg coal to Poland and Romania for oil and natural gas) or the possibility of including transitions countries.<sup>94</sup>

Among the reasons for increasing political community is worth mention access to energy resources, and Romania was able to take advantage of the favorable geographical position. Opening the Black Sea offers another advantage for the EU as strategic links between the European Union and NATO and other important regions: Middle East, Caspian Sea and even Central Asia. Black Sea is very important for energy security is situated at the intersection interests both political and commercial. Of course it is restricting the issue of oil and gas transportation from Caspian region to Europe and will certainly start a competition for control of transport and infrastructure.

The importance of Romania, situated in this region is very high considering the existing market potential and the fact that the country is a supplier of energy resources. Janusz Bugajski, director of Eastern Europe Project belonging Center Strategic and International Studies, said that Romania could play an important role in the distribution network between Central Asia and Europe, but European Union, although it tries to diversify energy sources, there are still a well-formulated strategy.

In the years that follow will be a tough challenge for the EU and U.S. to solve the security problem that may affect this area. European Union and the United States should cooperate closely with the region, especially with NATO forces and / or the EU Member States.

Black Sea is the point where some major powers, spheres of influence and security areas intersecting with political, military and ideological factors as well: EU, NATO, Russia and USA. To accelerate economic development, countries in the region should cooperate with one of the actors mentioned above.

In Romania, the general opinion was to support integration in the Union. According to Eurobarometer 64, autumn of 2005, 64% of Romanians had confidence in the European Union, compared with 62% in Greece and Portugal.

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92 Canbazoglu, R.G.; Kaiser, M. (2006). Where does Europe end: a political-economic approach to an enlarging United States of Europe? – International conference, The process of EU enlargement: today, p 6-8.

93 Pascariu G.C. (2001). A study on Romania's situation in the process of accession to the European Union, Centre for European Studies

94 Canbazoglu, R.G.; Kaiser, M. (2006), p.18

After 1993, the status of obtaining EU has become a priority for any Government. Unaffected by politics, all the leaders followed the same common goal: joining the EU. This can only materialize through the implementation of reforms and fulfilling the criteria of Copenhagen and Madrid as soon as possible. The integration in 2007 has highlighted certain advantages but also costs the country had to bear. I will summarize the costs and benefits of the next part.

As we mentioned above, the Romania has certain benefits and costs. There are at least three clear benefits of EU integration: security (economic, strategic resources), welfare (to participate in this framework is a select) and obtaining a higher standard of civilization. No Member State has lost those benefits after integration, the maximum benefit less than others. Among the main benefits obtained by European integration are:

- politico-economic climate is more stable contributing to sustainable growth and development;
- economic and business environment will become more stable and slightly predictable;
- increase productivity by stimulating local businesses - they will increase efficiency by developing new products and services, the introduction of modern technology and reducing cost of entry so we have the ability to compete on the European market;
- commercial trade will increase, both in the Member States of the Union and the rest of the world also;
- facilitate access to capital markets and investments in Europe to diversify financial products, Romanians will benefit from access to modern hi-tech know-how and organizational techniques that have already been successfully implemented in other countries;
- opportunities of the European Monetary Union;
- increase of national security;
- ability to participate in making decisions about the future of the European Union, also, Romania will follow his own best interests, both at European and global;
- country's public image has improved globally;
- Romanians enjoy the European rights;
- Romanians can access the labor market Europe, as part of accession;
- reforms designed to bring economic growth have intensified;
- Counseling at European level from different institutions, as result, the Competition Council and the Ministry for European Integration have been formed and adopted new standards on the environment.

Costs resulting from an attempt to bring Romania to the European standards are in fact the Romans price that they have paid for economic reform and to obtain a certain degree of development. According to economic theory, European integration has 4 types of costs:

- legislative and institutional costs generated by the need to implement the *acquis*, by the participation to the European institutions and the contribution to the EU budget. Implement the *acquis* means substantial investment in environment, agriculture, transport and in general, investments in those sectors where Romania is less developed in comparison with other countries;
- costs for production modernization. They are designed to increase productivity so that domestic companies to face competition imposed by the single market. If not, there is the possibility that these companies can not compete and fail;
- costs generated by implementation of European standards by Romanian agencies (standards of environment, infrastructure, consumer protection, animal protection, customs control);
- costs generated by the labor market (the reorientation and retraining). Single European market may have negative influence on companies, resulting in bankruptcy that are not competitive enough and thus resulting in increasing unemployment. Local farmers may also be affected.

Another objective of Romania in the agenda is to be accepted into the Schengen area scheduled in 2011. Regrettably, although both Romania and Bulgaria are members of the community with full rights, are not allowed in Schengen (22 states of the EU, Iceland, Norway). Among the

advantages of the Schengen areas are: lack of control at the border, less lost time and, therefore, less bureaucracy. The two countries have to wait a little and prepare thoroughly before becoming part of this group. Romania signed the Treaty of Accession to the Schengen area in January 2007, and membership costs can amount to approximately half a billion Euros. Part of this amount will be assigned new system to send photos faster and fingerprints to the Community. Therefore Schengen border will soon become the line divides the space into two parts, respectively Europeans and non-Europeans. It is obvious that Bulgaria and Romania will be part of this area like Greece and Hungary. However, the process will be on long run.

### **3. Conclusions**

In conclusion, we can say that cooperation between domestic policies and the EU had results. There remained the problem of capacity and interests of some political parties were affected. People with different political views were able to cooperate so that could lead to achieving common objectives. Even if it comes to costs, both short-term objectives and the long term are considerable.

Regarding the decision making process, the most important challenge is to connect with the national vision European, resulting in more transparency in the political credibility and to strengthen institutions that take these decisions.

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# THE ABC METHOD FOR CALCULATION OF COSTS IN CONSTRUCTIONS

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*The traditional methods for cost calculation are based on splitting the enterprise in centers of responsibilities and usage of systems for distribution of indirect expenses which can lead to under or overvaluation phenomenon of the unitary costs which serve as a base for price fixing. The ABC method does not represent a simple system of cost calculation, being considered as a system of consumption of resources ensuring the premises for transition from the principle of “products consumes resources” to the principle “products consume activities” which as well consume resources. The particularities of the activity for the construction enterprises, linked by the unitary character of the calculation’ object, the differentiated structure of the calculation for articles, the large volume of resources allocated in time it creates the premises of applying the ABC method for the cost calculation in combination with the traditional methods and especially with the standard method.*

*Key words: cost calculation, activity, ABC method, cost inductor, construction enterprises*

*The article’s JEL codes: G30, G31, L74*

## **The limits of the “classical” management accounting**

The management accounting, an instrument for modeling the value creation process within the company, it constitutes the main source of information used by the management of the enterprise. It has the role for modeling the relationships between the finalities of an organization (products, services, activities, orders etc.) and the value of its needs and resource consumptions which these finalities are generating.

The conceptual and methodological basis of the “classical” analytical accounting, register the expenses and try to riddle the costs for product or on each centre of costs, following the “Taylor” splitting of the enterprise. The indirect expenses are allocated to different products for calculation of the complete cost of production, using distribution keys more or less arbitrary, most frequently being used as basis of distribution an element of direct expenses (direct manual labor, direct materials or even direct costs).

The traditional model of management accounting, based on the “Taylor” concept regarding the enterprise, which acts in an stable economic environment and in competition conditions, are not representing the reality, because the environmental conditions in which operates the enterprise suffered significant mutations.

Thus, the performance of the enterprise becomes multidimensional, because it is resulted from a combination of processes: minimum price, maximum quality and strict fulfillment of the delivery terms.

The performance of the enterprise must be measured by the profile obtained on long term, profit which depends by the capacity of the enterprise to renew the characteristics of its products or to obtain them at lowest costs.

Beside the evolutions of the market, we assist to changes of the internal production conditions, so at changes within the internal environment of the company. Automatization of the production leads to attenuation or even disappearance of the difference between the direct and indirect manual labor, which puts into the discussion the complete cost concept.

Increase of the technical level grows the tendency of reduction of the share of direct expenses and increase in the share of indirect expenses in the total costs. Allocation of indirect materials with the help of a basis of allocation (direct manual labor, direct materials or even the total direct costs) takes to the delivery of information regarding a non-relevant cost, which doesn’t reflect the reality.



The classical model of enterprise organization, characterized by a pyramidal type structure and by separation of the execution and direction functions, which suffers important mutations because the organizations have become “flat” structures, with low hierarchical levels and with an trans-functional approach. The structure of the enterprise is “deformed” under the pressure of the increased role which has the activities of “support”, both from upstream and downstream regarding the production function. Therefore, costs evaluation on centers of analysis, which care correspond with the functional structures of the enterprise, no longer are able to ensure a representation of the support costs, which are mainly indirect costs and which can not longer be explained through the direct volume costs, but through other dimensions which are complexity, variety and flexibility. On the other side, the cost of a “support” activity corresponds, most frequently, to a resource consumption which is realized in several functional structures.

These changes in the external environment (conditions for formation of the market value) and internal (changes in the production conditions) have as a consequence and fast expansion of the indirect expenses. In these conditions, the method of complete costs, centered on the indirect costs counter, is diminishing in weight within the total cost and becomes lack of relevance. An relevant information regarding the costs, represents an accurate image of the company’s performance. It is considered that an information regarding cost is relevant if it modulates in the best way the reality, so it reflects the consumption of resources and it is useful in the decision making process.

### **The methodology of cost calculation based on activities**

The costs based on activities or the ABC (Activity Based Costing: ABC) method it represents an analytical system of accounting built around the concept of activity, defined as an ensemble of elementary operations, which allow the delivery of utilities starting from certain resources, homogenous from the point of view of their cost and performance evolutions. Composed from elementary operations, the activities are regrouped in processes. A process is defined as an ensemble of activities organized for realization of a common goal and has three essential characteristics (Lorino, 1996): it is organized in a transversal value regarding the hierarchical organization and towards main functional structures of the enterprise (production, marketing, sales, financial, planning, acquisition); each process has an output (ending) unique global; has an internal or external client.

These activities can be regrouped in processes, depending on their common objective. The production process will regroup all activities which concur to its realization. In this way it is passed from a hierarchical and functional approach of the enterprise to one which is trans-functional, the enterprise being considered as a “flat organization”, respectively a network of activities, with decentralized responsibilities.

The ABC method is not just a simple system of cost calculation on products, but it can be considered mainly a system of resource consumption (Kaplan, 1991). The system of costs based on activities crosses from the traditional logic in costs formation, according to which “the products consume resources”, to a more analytic approach in which “the products consume activities, which at their own consume resources”.

The separation of the enterprise on activities and not in centers of responsibilities (workshops, branches, work positions etc.) offers a better representation of the processes which consume resources, the ABC method is concerned mainly, with the resource consumption by the activities which compose the enterprise.

Searching of a relevant cost model, which can reflect the process of value formation, makes obvious the primary causes of consumption of the resources which are liable to direct control, performed exactly in the moment of the consumption of these resources, in order to realize an efficient administration.

Establishing of the cost on activities supposes association of each activity with an explicatory factor of variation called cost inductor.

The cost inductor is a base of allocation (input) of indirect expenses over the activities and also over the objects of calculation (products, works, services, orders etc.) which have to express an causality relation with the indirect expenses.

The cost inductor must be always the cause of an resource consumption. Based on performance the influence can be of cost, quality and term of delivery. The ABC method introduces a multi-criteria administration, based on an information system regarding costs, quality, and delivery term. The real (effective) expenses and those planned are followed on activities.

The specialized literature makes a distinction between operational inductors, specific to operational activities, such as supply, montage, distribution etc. and structural inductors, which are characterizing structural activities, such as: the administration activity, management etc.

The possible cost inductors can be the basis of distribution used traditionally for distribution of the indirect expenses (number of hours of manual labor, machine-hours, quantity produces and sold etc.), but can also be introduced new cost inductors: number of de inspections, handlings, settings of the devices.

In case of the ABC method, the activities constitute themselves as points of intermediary accumulation of costs, because, finally, the resource consumptions are deducted to a calculation object (product, work, service, order etc.). The cost of a calculation object is determined by totalizing all the direct costs and the costs of the activities which concur to the acquiring of a certain product or service.

The calculation of cost has several stages:

Each work centre from the enterprise (organizational structure) is associated with a certain process and later decomposed in elementary activities. The cost of each work centre is distributed on activities.

For each individualized activity, is searched an explanatory factor of the consumption variation, respectively the cost inductor.

All the activities which have the same cost inductor are regrouped in a “regrouping centre”. It is calculated a unitary cost of the inductor, equal with the ratio between the amounts of the reunited expenses into the regrouping center and the total volume of the cost inductor. In the case of the “activity based costing” it disappears the distinction between the main and auxiliary locations of expenses, and deduction of an expense over a certain activity is realized only if between them exists a causality relation.

It is determined the cost of the calculation object (product, work, service, order etc.), by totalizing all the direct costs and of consumption of cost indicators which are coming from the regrouping centers, due to obtaining the specific utility. In the cost model based on activities the notion of product cost is not disappearing, being specific the deduction approach and the administration of the indirect expenses which contribute to the production and sale of a certain product.

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# INCREASE OF PERFORMANCE THROUGH INTEGRATION OF THE CONTROLLING IN THE MANAGEMENT SYSTEM OF THE ENTERPRISE

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*Key words: controlling, management system, enterprise*

*The article's JEL codes: G31, G30*

*The complexity and dynamic of the organizations, which are in a permanent competition for resources and for the life quota in a turbulent economic environment, imposes the controlling as a functional concept of management having the role of coordinating the planning, control and information in the direction of obtaining the planned results. The controlling is not referring to the qualitative characteristics of the products, but to the correlation between the planned results and the progress of their implementation, having as support the financial-accounting organization of the enterprise. The practical approach of this modern and efficient managerial product imposes a deep analysis of the existing accounting system, of the report and planning system, a redefinition of the role and content of managerial accounting within the existing accounting system.*

The controlling developed itself in the practical life of the enterprises becoming a management function, “functional concept with the role of coordinating the planning, control and dissemination towards the direction of obtaining the required results<sup>95</sup>”.

It is realized a distinction between controlling as a function, the central task of the management and controller as responsible which has the role to coordinate the partial plans and to organize the entire planning process, contributing to the implementation of the strategic policy. At the small and medium enterprises, the controlling function is taken over by the management of the enterprise or by the accounting department, the controller transforming itself from a service supplier to a consultant of the management and involving its responsibility for achieving the objectives from different points of view:

- responsible for correctness of the collected and transmitted information;
- through organization and supervision of the management process in order to achieve the objectives it contributes to the object oriented decision making of the management.

Transformation of the controlling in self-controlling is realized currently by training employees, at all levels, towards knowing and realizing the objective.

Each enterprise is following a certain strategy, for which its realization is guaranteed by a adequate structure adapted to the exploitation processes and realization of a an adequate organizational structure. The necessity of realization of its own controlling system supposes to answer to a collection of questions, like the following ones:

- Do you know exactly from which products profit it's obtained and where are generated losses?
- Do you know how various measures act over the result?
- Do you know how it looks your result analyzed over the business values of the company, without fiscal or balance sheet splitting?
- In your planning are included success oriented objectives and have proper allocated resources?
- How fast can you find out if you are still in the graph or you lost control?
- The need for decisions is established in time and all required measures are taken?
- Can you transpose the strategy of the enterprise in tangible plans oriented towards results and measures?
- Do you know factors which make you indirect costs to grow?

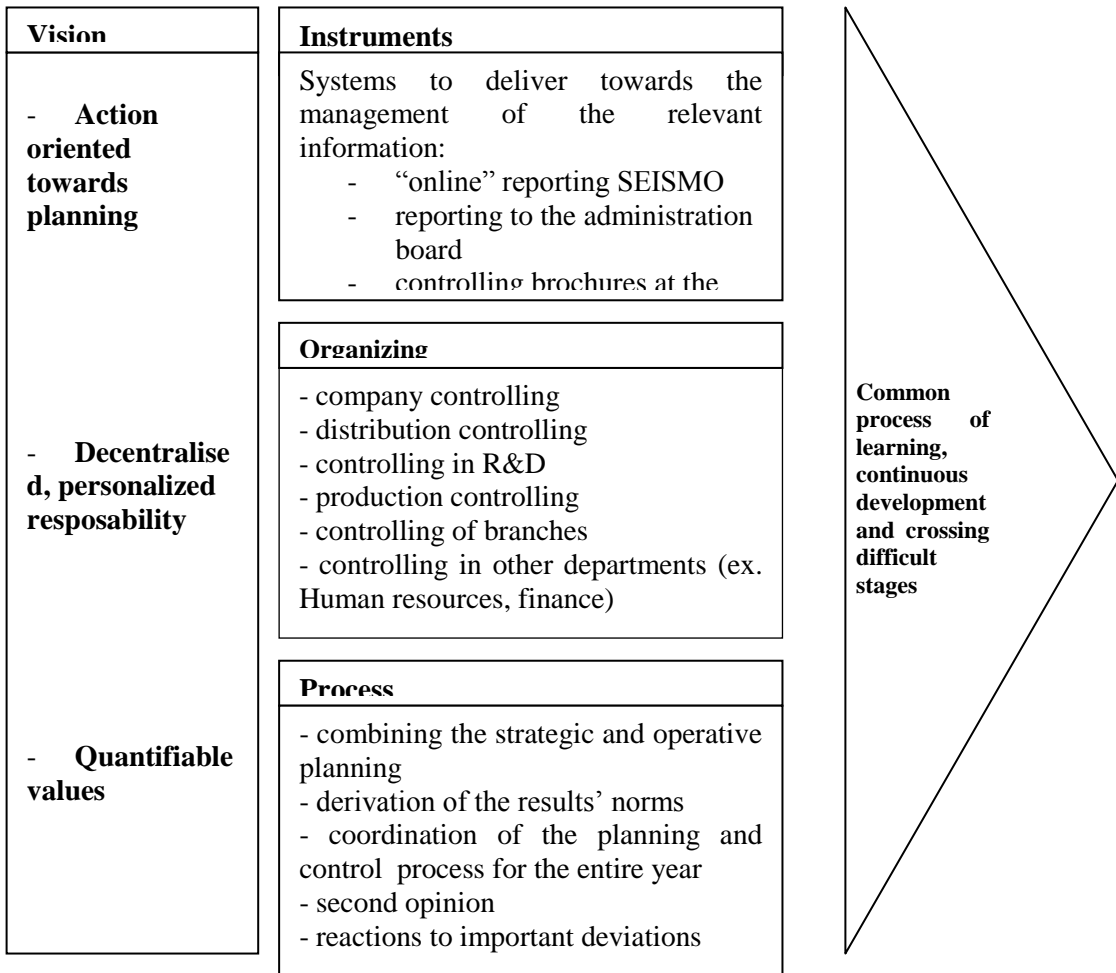
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95 Horvarth & Patners “Controlling. Sisteme eficiente de crestere a performantei firmei” , Editura C.H. Beck , Bucuresti , 2007, pag. 4

The systemic organization of the management activity supposes orientation of the controllers' activities in two directions:

- Towards the planning and control system, having as main component the **budgeting**;
- Towards the information system, having as main component the **accounting**.

*Structuring of the information system determines its need of information, obtaining and processing through accounting, and information submission through reports and it concerns, mainly, the costs calculation system, the efficiency calculation of the investments, the content of the plans and execution of the planning stages.*



The permanent coordination must be understood as a reaction to the inside and outside information which impose permanently the value comparison between the effective and estimate. The most important aspect in the regulatory circuit of controlling its represented by the way are treated the deviations which should not be used as penalizing evidences for the negligence of the employees, but to be used as a basis to establish new measures.

Organization of an controlling system at the level of an enterprise must have as objective assuring transparenance as a premise for realization of an efficient management, which is guided on the following principles:

- Actions are oriented towards plan;
- Individual, decentralized responsibility;
- Quantifiable management indices.

Realization of the controlling system supposes the integration of principles, instruments, organization and the controlling process in the structure of organization, in order to coordinate the information and planning system.

Coordinated execution of the controlling activity is determined by the operative, yearly detailed planning. The controller, in its quality of permanent backer of the decisional process is subordinated directly to the management of the company, but its activity is carried on at all hierarchical levels, assuring the efficient functioning of the entire managerial system from the enterprise. Its position, hierarchical relations, duties and competencies result from the job description.

There are remarked the attempts to reproduce the functions from the value generating chain - logistic controlling or even inclusion in the network of the strategic partners.

Planning and reporting system, based on the accounting data, represents one of the most important fields of activity of the controlling. For a diagnostic it is imposed to answer to several questions regarding:

## **THE ACCOUNTING**

- The system of the expense account
  - Ensures the differentiation between the fixed and variable costs?
  - Are differentiated the relevant types of costs over their nature and destination?
- The centre of costs account
  - The centers of cost are structured over clear defined fields of responsibilities?
  - Unitary and adequate calculation procedures are used?
  - Are realized systematically, planned, preliminary and effective calculations?
  - It exists a profit and loss account, on the short term, which is linked to the cost centers?
  - Can be determined the marginal revenues which are related to the adopted decisions?
- Allocation of costs in term
  - Relations between the cost centers are adequately illustrated?
  - In the generating chain of evaluation are used internal processes of discounting?
  - It exists a causal discounting of the costs between the cost centers?
- Result accounts
  - It is realized and analyzed the result account in function of the evolution in time (for the entire financial exercise, at the finalization of activity for products with a long cycle of manufacture)?
  - The result account reflects the evaluation generating chain at the level of enterprise?
  - How differentiated (developed) is the result account?
- The investment calculation
  - Are used the adequate, unitary procedures for the calculation of the investment?
  - The procedures are in conformity with the accounting directives and standards?
- There is a consistency between the profit and loss account and the financial accounting.
- The synthetic analysis of the liquidities is used.
- There is a link between the profit and loss account and planning

## **REPORTING**

- Reporting is based on the data delivered by accounting?
- The reporting system differentiates the data from the internal and external accounting?
- The reporting system is based on the automatic or manual data processing?
- The reporting system assures the information according to the users' needs?

- The information delivered by reports is presented in a clear and understandable form?
- The information system delivers relevant information regarding deviations and causes?
- On the basis of the reporting system are created measures of deviation removal?

## **PLANNING**

- It exists a strategic planning in accordance with the operative planning?
- Planning is based on external information regarding forecasting of business revenue, competition analysis and technological trends?
- The operative planning systems are integrated in the financial planning (result account, balance sheet, capital flow)?
- The detail degree is adequate to the planning?
- The information delivered by planning are updated and used by the management?
- It is used the system of updating within a financial exercise?
- The implementation of the planning process has an internal regulation (budget manual)

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# THE ROMANIAN INSURANCE MARKET AND THE POTENTIAL EFFECTS OF THE CRISIS UPON IT

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*The global financial and economic crisis is felt in almost all the companies that operate on the European financial and insurance markets. The European insurance and re-insurance industry would register a significant decrease of the investments and a reduction of certain insurance lines' weight within the portfolio. For the 2009 year, the previous years' increase of the insurance market would be drastically slowed down, the profile industry needing to be characterized by simplicity of the insurance products and a greater transparency. The purpose of this paper is to analyze the strategic facts and the future hypothesis for the crisis' effects upon the Romanian insurance market.*

*Key-words: life insurance market, non-life insurances, financial-economic crisis*

*JEL Code: G01, G22*

It is a well-acknowledged fact that the economic sector which is mostly affected by the present financial and economic crisis, and facing serious problems, besides the banking sector, is the insurance market sector. In Romania the contributions to the insurance companies are not guaranteed in case of financial problems as it happens with deposits (through the fund of guaranteed deposits of the banking system). The Romanian insurance companies are mainly owned by the major heavily involved insurers of the worldwide global financial markets that presently find themselves in acute crisis period. Even if their Romanian subsidiaries still work well, in case of occurring problems at the parent company, its subsidiaries will be affected automatically. Unlike for the banking system, in the field of insurance, the liquidation of an insurance policy is a more complex and ponderous process than the liquidation of a bank account. Considering these circumstances, many people waive their insurance contracts and further withdraw money with the rigor losses and place them into a bank deposit, which, at least theoretically, is a safer option than pitching them within an insurance contract.

## **The Life Insurance Market and the Crisis' Impact**

The 2007 growth pace of gross subscribed premiums for life insurances is greater than the growth trend of non-life insurances which is due to the entry of new foreign capital on the life insurance market, the diversification of insurance products related to the demand of the sector, the authorization for companies to engage in the voluntary pension funds (which positively affected the life insurance activity), and the use of modern distribution channels.

Table 1. The evolution of gross subscribed premiums for life insurances

| <b>Year</b>        | <b>Gross subscribed premiums for life insurances (million lei)</b> | <b>Increase compared to the previous year (%)</b> |
|--------------------|--|---|
| 2003               | 619,93   | -   |
| 2004               | 746,02   | 20,34   |
| 2005               | 1.037,99   | 39,14   |
| 2006               | 1.138,28   | 9,66  |
| 2007               | 1.449,03   | 27,30   |
| 2008 <sup>96</sup> | 1.750,94   | 20,83   |

Source: Authors' processing

During the last six-year period, according to table 1, we may notice that that gross subscribed premiums for life and non-life insurances had an increasing tendency, of about 25% on average from one year to another, except for 2008 where it may already be noticed a decreasing tendency due to the effect of the financial-economic crisis. This effect started to be felt within the last quarter of the year, and it'll be validated by the upcoming annual report of the Insurance Supervising Commission (ISC).

Table 2. Dynamics of gross subscribed premiums for non-life insurance

| <b>Year</b> | <b>Gross subscribed premiums for life insurances (million lei)</b> | <b>Increase compared to the previous year (%)</b> |
|-------------|--|---|
| 2003        | 2.053,88   | -   |
| 2004        | 2.730,51   | 32,94   |
| 2005        | 3.379,17   | 23,76   |
| 2006        | 4.591,00   | 35,86   |
| 2007        | 5.726,75   | 24,73   |
| 2008        | 7.099,14   | 23,96   |

Source: Authors' processing

A slightly decreasing trend of the non-life insurance market may be observed from table 2, and it's confirmed by the evolution of the total subscribed premiums from table 3. The market will probably continue to grow in 2009 as well, but at a slower pace than the previous years.

Table 3. Dynamics of gross subscribed premiums for life and non-life insurances

| <b>Year</b> | <b>Gross subscribed premiums for life insurances (million lei)</b> | <b>Increase compared to the previous year (%)</b> |
|-------------|--|---|
| 2003        | 2.673,81   | -   |
| 2004        | 3.476,54   | 30,02   |
| 2005        | 4.417,16   | 27,07   |
| 2006        | 5.729,28   | 29,70   |
| 2007        | 7.175,78   | 25,25   |
| 2008        | 8.850,08   | 23,33   |

<sup>96</sup> Preliminary results for the 2008 year, published by Insurance Profile, March 2009, year VII – issue 1/2009 (22).



Source: Authors' processing

Still, the life insurance market in Romania is underdeveloped, so this area needs a solid law package, but also a series of tax incentives. The Romanian insurance market is not up to the real needs of the economy, because there are no incentives to encourage the development of this area. However, it is strongly recommended for operators on the insurance market to implement effective support strategies, especially under crisis conditions.

The biggest potential danger occurs in the case of the life insurance segment, since many contracts have already reached maturity. Pensions' market is safe from, because the second pillar of mandatory retirement is ensured by the state and the voluntary pension values are too small. The psychological impact of the crisis was felt starting with October and November 2008, as a total of 14.577 life policies were surrendered, that represents 0.2% of the total issued valid life policies up to September 2008. The surrender values paid by the insurance companies last October sum up to the amount of 26.6 million lei, that is with 80% more than the average for the first nine months of 2008 and with 56% more compared to the similar period in 2007. On the long term, this emotional decision of insured individuals that have decided to surrender their unit-linked policies while in crisis and low yields, might prove to be more expensive than by the contracted maturity time.

The crisis is affecting the profit margins of insurers and hits the life insurance sector, which could only be supported by the state by introducing the *deductibility of premiums*. In Romania, the premiums paid for life insurances are not deductible from taxes, compared with other countries that have benefited from such deductibilities for several years. Although life insurances have existed on the Romanian market for over ten years, so far insurance companies have not managed to obtain tax deductibility of premiums. In contrast, contributions to voluntary private pensions, launched a year and a half ago, have since the very start been deductible from the employee's income tax, and from the employer's profit tax. Starting next year, the deductible sum would double, to reach 400 euros for the employee and the same amount for the employer. Although life insurance is a similarly strong saving instrument to voluntary private pensions, it is still not deductible. The Ministry of Finance, the institution that could change this situation, says the Romanian fiscal system does not allow the introduction of such incentives.

The life insurance market depends upon a large extent of the *credit policies*, as long as the mortgage loans come with the requirement for clients to subscribe life insurances, but insurers also must find new strategies to support business in these circumstances. The Romanian bank credit market has been blocked since last October, and it continues to be blocked for individuals for the first semester of 2009. Still, the un-blocking of credits for legal entities, to be realized in the near future, would confer assurances for the rectifying of the economy.

For the current crisis, whose effects will be felt upon the entire level of the insurance market, the concerns for people's financial safety and the saving and investment tendencies might shadow the life insurances without the full understanding of the benefits of these products. During a financial crisis, the risks related to the individual's life conditions do not decrease, but on the contrary, it is compulsory required to get an increased financial effort for the same degree of incidence. The main purpose of an insurance policy is to cover a risk, therefore the life insurances preserve their usefulness, and more, it's even increased. The life insurance policy is signed on the long term (between 10 and 30 years, maybe more), therefore, its benefits are quantifiable on the long term as well. It is even more important under crisis period for people to sign life insurance policies in order to shelter them and their loved ones.

### **The Crisis' Impact upon Non-life Insurances**

By analysing the losses' frequency evolution for the last period, a constantly increasing trend of it may be noticed. A 50-60% losses' frequency in the *automobile insurance portfolio* of the Romanian insurance market is mainly caused by the insufficient infrastructure, the great number

of cars and the road indiscipline. Despite this, for the current year it's possible to have a reduction in the weight of automobile insurances' subscription, mainly due to the substantial reduction of sales for new automobiles. Moreover, the decrease of automobile insurances may also be caused by the decrease of the number of cars bought through leasing or credit. So the insurers should probably focus upon renewals and fidelities for the existing customers, in order not to register great losses upon this segment.

We studied the evolution of the Romanian insurance market for the cars' segment, and we observe a continuous growth pace of it – the cumulated percentages it represented are as follows: 67.4% of the non-life insurances in 2006, 71.6% in 2007 and 76.3% for the first nine months of 2008. Still, the predictions for 2009 consider only a 70% weight within the non-life insurances.

Altogether, the cars' insurance market registered a 14% increase within the first nine months of 2008, and it's expected to increase with 10% in 2009, taking into account the actual conditions of the economy. *The depreciation of the national currency* also affects the business of the insurance companies because the prices of spare parts and the costs of damages are calculated in euros. Actually all the costs that contribute to damages are more or less related to the euro currency. Despite this, the Romanian insurance market has been dominated by automobile insurances and it'll most likely continue the same trend. It'll still be the most prevalent insurance form mainly because of the cars' vulnerability.

The law on *compulsory house insurance* was recently postponed from entering towards the half of this year. Officials of the ISC have declared that the norms for the compulsory house insurances are being worked upon. The next step would be to consult the insurers for making up The Insurance Pole against Disasters. The compulsory insurance will help people in case of calamities, but this must be supplemented by optional insurances. So, besides the effects of the worldwide financial crisis, the numerous Romanian laws' modifications for the non-life insurance domain (The Compulsory House Insurance Law, the friendly agreements, the electronic issuance of Motor Third Part Liability Insurance policies, etc.) will adjust the evolution of the market.

### **Conclusions/ critical points**

Regarding the evolution of future sales of the insurance market and particularly for the life insurance segment, in the context of current economic turmoil, there are some different opinions: -there are supporters of an extreme assumption that anticipates a spectacular evolution if not a boom of sales in this industry, from the population's increasing need for safety. It's considered that this period is adequate for investments of this type, and people will continue to buy such products. Despite the potential regress of the profile industry, *four new profile companies* applied for authorization from ISC (BRD Asigurări de Viață, Credit Europe Life Asigurări, Ergo Asigurări de Viață și Uniqa Asigurări de Viață), and currently are waiting to start operating in the life insurance domain.

-at the other extreme there are the supporters of the idea that the evolution of sales within the industry will drop drastically, because of the customers' lack of trust in insurance products, mistrust manifested by the recent major surrenders of policies.

Our opinion is that the insurance policies' sales will maintain a growing trend in 2009, but a lower one compared to the previous growth paces. The insurers' orientation towards the corporate potential clients will no longer be an advantage for the following period because their budgets are under strong restraints. For a sustainable growth, the actors of the insurance market will have to generate new business through creating products that are adapted to the actual needs, still focusing upon the existing portfolio, mainly on traditional life-insurance products, and not unit-linked ones. The insurance companies should focus to maintaining their existing customers and would only be able to attract new ones by adopting a more flexible policy in fixing the

premiums, the relationship with customers and by creating products that adapt to the real needs of their clients.

Another management strategy for minimising the crisis' impact upon the insurance domain could be to maintain a transparent relationship with the client in order for him to have the clear financial picture of the effort made and of the safety benefit gained during the insurance covered period. For the financial crisis' management of insurers, the profit and staff management are crucial, as well as the transition from extensive growth to optimal management.

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## METHODS DESIGNED TO DETERMINE THE VALUE OF THE FIRM AND THEIR DEFICIENCIES

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*Determining the value of a company is a process very important and controversial at the same time process. Knowing the value of a firm is indispensable in case of sale, merger, but not only; it is also useful to identify sources of value creation. The value of a firm is influenced by several factors, such as quantitative factors: future performance, assets, capital structure, cash flows, rate of return; and qualitative factors that largely determine firm's performance and its' value. Among these factors can be remembered: the reputation, the loyalty of customers, training and experience of employees, a strong management team, holding any secret manufacturing, trend working in the field of business, geographical location.*

*Key words: value, intangible assets, cash-flow, benchmarking*

*JEL classification: G3*

### **The value of the firm - between present aspects and future prospects**

Determining the value of a company is a process very important and controversial at the same time process. Knowing the value of a firm is indispensable in case of sale, merger, but not only; it is also useful to identify sources of value creation. There is no standard method used for determining the value of the company, but it differs depending on the purpose, being a process that involves a high degree of subjectivism. Subjectivity of determining the value of the company was illustrated by the specialists from Blackbaud from a simple question: in what situations it is necessary to know the company's value? It is a simple question with a complex answer. The answer follows the logic of the problem, namely: in case of sale, in case you wish to attract capital from investors, in case of business division, in case of a merger, if one owner wishes to retire from the firm. Changing the problem, it will change the established value of the company. Thus, if there is such a withdrawal of one of the owners, the other owner will still try to award the company a value as low. Instead in case of sale, merger or raising capital from investors will pursue the establishment of a value as high<sup>97</sup>.

Value should not be confused with price; the relationship is explained by Pablo Fernandez in his work *“Company valuation methods. The most common errors in valuations”*. The price represents the value accepted by the seller and buyer in the sale of a company. The value of both companies differs from seller to buyer, as well as between different customers. For example a foreign company wants to buy a local known company in order to expand its market, benefiting by the local brand. Buyer will determine the value of the company that intends to acquire according of its brand, not to the infrastructure available to it. In the same time, the seller will try to give value to the company through the assets the firm owns, setting a minimum value that is willing to accept.

Knowing the company's value is very important and useful in many situations faced by the company and certain actors of the external environment, during its existence, namely<sup>98</sup>:

- The company's value represents the maximum price that the buyer would be willing to pay, and the minimum that the seller would be willing to accept.
- The company's value influences the price of shares.

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97 Lamb David – Private Company Valuation and the Prospect Researcher, available at [www.blackbaud.com](http://www.blackbaud.com).

98 Pablo Fernandez – Company valuation methods. The most common errors in valuations, IESE Working Paper No 449.

-For companies listed on the stock market, the company's value is compared to the price of shares and in this way the shareholder bases his decision to sell, buy or maintain the shares.

-Comparative analysis of the values of several listed companies affect the structure of securities portfolio, preferring securities that are being underscored at the market, ie when the firm's value is lower than the its market value, given by the price per share multiplied by the number of shares issued.

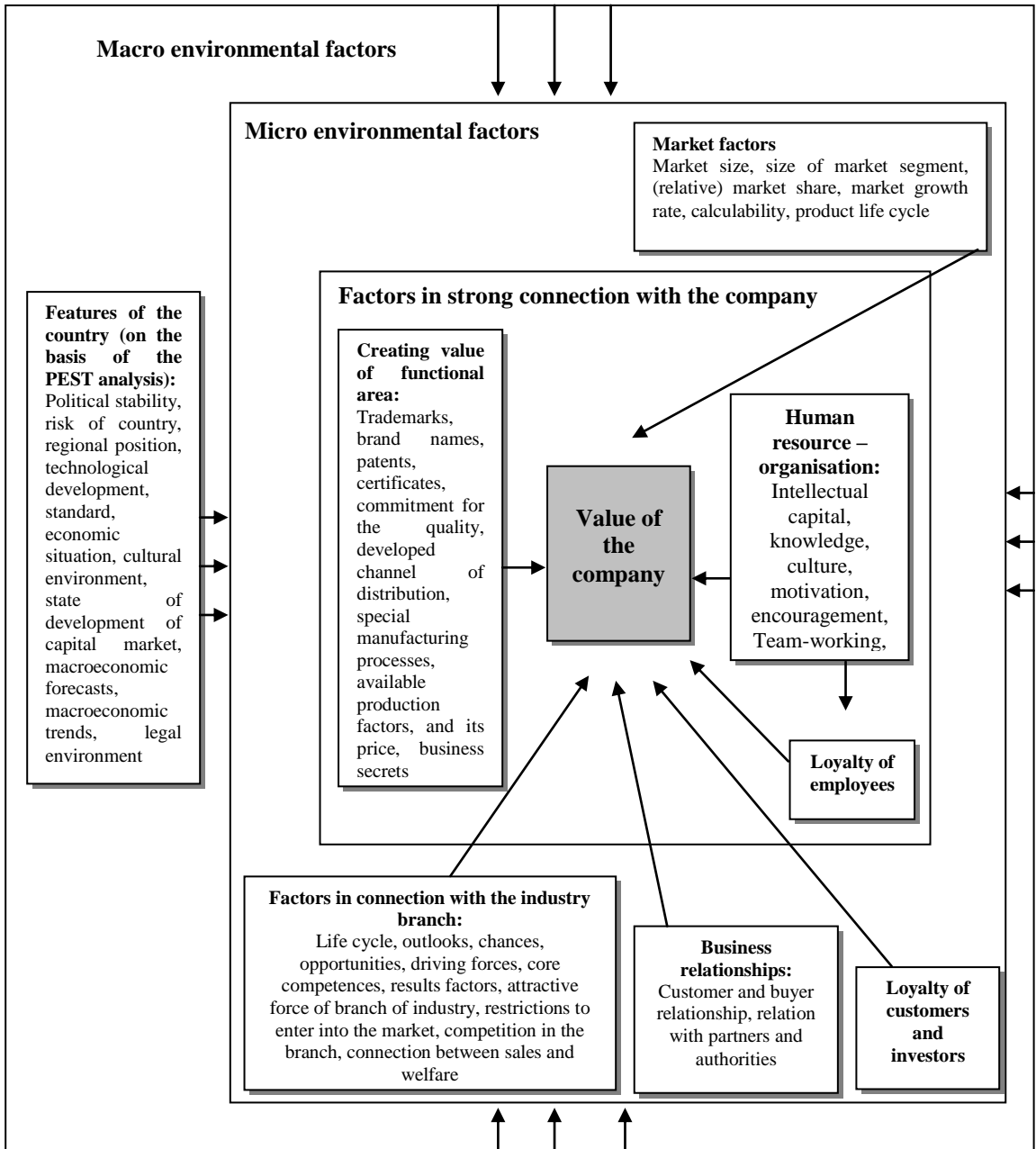
-The process of setting the company's value helps to identify sources of value creation.

-The level of firm's value affects the owner's decision to continue the business, to sell it, to merge with other companies, to expand it, to buy other companies.

The value of a firm is influenced by several factors, such as quantitative and qualitative or intangible factors. *Future performance* foreseeable by a potential buyer exercises a direct influence on the company, linked to the level of expected income. *Capital structure* of the firm is another factor that influences the value of the firm, meaning that a company obliged worth more than one who has not resorted to loans because of lower cost of borrowed capital compared with the cost of own capital, even more, the interest expense is a deductible expense, generating in this way a fiscal advantage. *Assets* of a company have a major influence, but contradictory, in determining the amount of company's value. One company benefiting from modern technologies clearly worth more than one with similar equipment outdated, but a business which has a high level of assets will be worth less than one that does not involve a significant assets base, because in the first case a large part of the profit should be reinvested in the replacement of these assets, when they reach a complete depreciation. *Rate of return* expected by a potential buyer indirectly affects the firm's value; if the buyer expects a high future returns, the company assigns a lower value. The value of *cash - flow* is directly related to the company's value; the discounted cash flow method is a current method which is very used in determining the value of a company. Experts from Business Development Solutions, following a study, have found that small businesses tend to sell for the amount of 2 to 4 times the annual cash - flow value, and medium businesses with 3 to 6 times the latter. But there are also exceptions<sup>99</sup>.

The value of a company is not only dependent on financial factors or tangible assets. A major influence has also the qualitative factors and *intangible assets*. Current models for determining the value of the company take into account only quantitative factors, directly quantifiable, without making reference to those factors perhaps more difficult to quantify directly in money, but which often make the difference between performance of firms, and between their default values. For example, two offices of financial advice can value the same due to the methods based on tangible assets, but in reality a significant influence on the value of these companies has the prestige, experience and skills of the consultant, a factor which has no direct quantification, but can be found ways of measuring, for example through tariffs which are putting pressure directly on the level of income and cash flows.

Generally, it can be said that intangible, **qualitative factors**, largely determine firm's performance and its' value. Among these factors can be remembered: the reputation, the loyalty of customers, training and experience of employees, a strong management team, holding any secret manufacturing, trend working in the field of business, geographical location, etc



**Source:** Agnes Horvath – Non-quantitative measures in company evaluation, European Integration Studies, Miskolc, Volume 4, Number 1(2005), page 66.

Current methods used in determining the value of the firm are quite numerous, but are not standardized; they vary from country to country depending on the accounting system practiced. Another important statement to make at the outset is that these methods can be applied in general only for large businesses, and not for SMEs.

Pablo Fernandez, in his work “*Company valuation methods. The most common errors in valuation*” achieves a comparative presentation of these methods, pointing through practical examples the value of a company obtained by applying different methods of valuation.

**Balance sheet – based methods**<sup>100</sup>, these methods determine the value of the company based on its assets value. In this category belong the following methods: book value, adjusted book value, liquidation value (which represents the minimum value of a company), substantial value. These methods which rely solely on accounting data, which are static data, skipped several major influences, they do not take into account the future development of the company, quality of human resources, etc.

Asset-based methods, as are also called, are more suitable for manufacturing enterprises, because they have tangible assets of significant value, such as technologies, equipment, buildings, land that can be evaluated quite easily, starting from the market value of them. In the case of companies whose business does not involve possession of tangible assets with higher values, these methods are unfavorable, minimizing their value of some assets such as goodwill, the exposure on the market, seen as intangible assets which are not quantified in money in financial reportings and which are not taken into consideration by accounting data.

Starting from these deficiencies have been implemented a number of methods called **revenues based methods** of determining the value of the firm. They take into account to determine the value of company profits or annual income reported by the firm. It is a fairly common practice to establish a rapid and nearly value of the company by multiplying the annual revenue with a multiplier that varies depending on the industrial branch of the company, and on the market situation. For example, accounting firms have a value of about 100-125% of annual revenues; bookstores have a value equal to approximately 15% of annual sales plus inventory, offices of law firms have a value of between 40-100% of annual income; supermarket's worth 8-10% of annual revenue plus inventory, travel agencies worth about 40-45% of annual fees collected.<sup>101</sup>

**Cash Flow Discounting based method**<sup>102</sup> is the most used method for determining the value of the firm. According to this method the value of a company is the total cash earnings of the firm realizes that during its existence. The value of a company is the discounted value of its expected cash flows in the future. However this method presents some weaknesses related to:

- Can be applied with success only in a stable environment, the company exceeded its launch phase and is not in decline.
- The cash flow forecast is not very precise, may occur considerable deviations from the real one.
- Failure in taking into account the inflation rate.
- Update rate may be set wrong, and it should be related with foreseeable risk.
- Error in determining the residual value.
- Depending on the purpose for which the company's value is set, the person who calculates it may intend to show optimism in the forecast cash flow, working hard to combat.

**Valuation with multiplication indicators**<sup>103</sup> is based on comparison of company indicators. The most used indicators are Price (P)/Earnings, P/Sales, P/EBIT, P/EBITDA. In the case of listed companies these indicators are easy to find out. For companies that are not listed, average

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100 Pablo Fernandez – Company valuation methods. The most common errors in valuations, IESE Working Paper No 449, page 4-6.

101 These data are from The Business Reference Guide published by Business Brokerage Press, available at <http://www.bizstats.com/reports/valuation-rule-thumb.asp>.

102 Agnes Horvath – Non-quantitative measures in company evaluation, European Integration Studies, Miskolc, Volume 4, Number 1(2005), page 62-63.

103 Idem 1

indicators of listed companies and the ones operating in the same sectors are taken into account, as their indicators are easy to compute. Disadvantages of this method are related to the fact that if a firm starts work in an area completely new method that may not apply. Such a method was presented by INC. Magazine, and it establishes a indicative value of a company, but however useful to know.

**Evaluation based on economic value added (EVA)**<sup>104</sup> is a measure of the value a company has created during a certain period, and provides similar results to discounted cash flow method.

**Market value**, it is a method that can be used only for the listed companies. In this case the value of the firm it is very simple to find out by multiplying the number of the stocks issued by the firm with the price, established on the Stock Exchange.

**Mixed methods**, which combine the balance-sheet methods with the level of goodwill. Generally, goodwill represents the value of the company's intangible assets, which often do not appear on the balance sheet. The problem arises when trying to evaluating the goodwill, which consist of elements difficult to measure directly, such as: brand, market position, portfolio of customers, strategic alliances.

Among these methods there are<sup>105</sup>:

-*The classic valuation method*. This method states that a company's value is equal to the value of its net assets plus the value of its goodwill; ad the goodwill is valued as "n" times the company's net income.

$V = A + (n * B)$  V- value of the firm; A-net assets; n-coefficient between 1.5 and 3 B- net income.

-*Union of European Accounting Experts method*

$V = [A + (an * B)] / (1 + i)^n$  A- corrected net assets; an- present value, of n annuities, with n between 5 and 8 years ; B- net income; i- interest rate obtained by an alternative placement.

There is a simplified variant of this method:

$$V = A + an(B - iA) \quad an(B - iA) - \text{goodwill}$$

In this case the goodwill represents the capitalization of a super profit (B - iA).

-*Anglo-Saxon method*:  $V = A + (B - iA) / tm$

In this case the value of the goodwill is obtained by restating for an indefinite duration the value of the super profit obtained by the company. The rate tm is the interest rate earned on fixed income securities multiplied by a coefficient between 1.25 and 1.5 to adjust the risk.

**Benchmarking** is an empirical method to find out the value of a company by comparing the target company to a similar one. This method can be used when you don't have access to detailed financial information from inside the company. In this case a possible option is to find comparable companies whose values are known.

As it can be noticed, the balance sheet methods are past oriented, book values of the firms are usually lower than the market value, and as a consequences, in the past decades market evaluations of companies have become much more independent from accounting data. It can be express a stronger relation between earnings and company's value, but the real value of a company does not take into account only her capacity to generate earnings. Nowadays, the cash flow discounting method is generally used, because it is considered by some specialists to be the only conceptually correct valuation method. In this method, the company is viewed as a cash flow generator and the value of the company is obtained by calculating these cash flows' present value using a certain rate of discount, but also this method has its own shortcomings.

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104 Idem 1

105 Pablo Fernandez – Company valuation methods. The most common errors in valuations, IESE Working Paper No 449, page 10-12.



A company is valuable not only it possesses assets, generates cash flows, and it obtains earnings, but a large contribution to the value of a company have the loyalty of the employees, fidelity and satisfaction of the customers, business relationship with the investors, with the suppliers, the professional quality and the experience of the work force, products' quality, the company's brand, good management, the market position. There is a great need for methods on the basis of which not only financial indicators, but also qualitative once, based on intangible assets can be analyzed<sup>106</sup>.

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## THE EFFICIENCY OF PUBLIC SPENDING

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*The correlation between the level of public spending and its efficiency can be made by means of a range of indicators expressing the positive impact on the economy and the society. The resources – outcomes - income - impact mechanism is the strength of the budget. Therefore, the budgetary activities should result in a definite impact through the added value, due to the fact that the quantifiable objectives may be achieved. In order to prove the degree of the efficiency of public spending, we believe that there should be a correlation between the quality approach of the budgetary expenditure and the performance indicators.*

*Keywords: public spending, efficiency spending, performance indicators*

*JEL classification:H3, H5, H6*

From the analysis of the budgetary expenditure corresponding to the year 2008, it follows that Romania has an economy within which the mechanisms of the market are still trying to define themselves and therefore need significant support from the state. Consequently, we believe that the following are necessary:

- The public services of general interest must be harmonized with the economic and social policies, with special attention paid to solidarity and correctness;
- The excessively liberalized public services should be controlled in a more severe manner, according to the European requirements.

The resources – outcomes - income - impact mechanism is the strength of the budget. Therefore, the budgetary activities should result in a definite impact through the added value, due to the fact that the quantifiable objectives may be achieved.

So, in order to carry out a credible estimation, a trustworthy quantification, the following steps are required:

- To define the quantified objective in an accurate manner
- To quantify the object
- In case of deviations, to estimate the consequences.

These steps in the public sector are difficult to perform, and the rules should be adjusted, in order to include behavioural changes.

In order to prove the degree of the efficiency of public spending, we believe that there should be a correlation between the quality approach of the budgetary expenditure and the performance indicators. These indicators are the following:

- For the administrative sector: corruption, bureaucracy, the quality of the legal system, the black economy
- In the sector of education: the quality of mathematics and science
- In the healthcare sector: the child mortality, the life expectancy.

The correlation between the level of public spending and its efficiency can be made by means of a range of indicators expressing the positive impact on the economy and the society.

Although in the Government Budget for 2008, the expenses concerning the general services account for 1.5%, which is a significant value, the actual situation is different because the population is distrustful due to bureaucracy and corruption. The population's view is that the

bureaucratic apparatus is highly overloaded (3 out of 10 employees work in administration), and the value of the Corruption Perceptions Index (CPI) is 3<sup>107</sup>, as compared to the Scandinavian countries, the values of which are over 9.

The education and healthcare fields are public spending on human capital, able to lead to the increase in the productivity and welfare. Due to the fact that the local authorities have better knowledge concerning the situation in the areas where they fulfil their attributions and as a result of financial decentralization, the spending on healthcare and education have been taken over by them. But due to the absence of reliable programmes, the amounts allocated to education and healthcare do not have positive outcomes, do not lead to an improvement in conditions and to an increase in the standard of life.

This inefficient finalization of the financial resources may originate in intentions such as: renouncing the profession, emigration, abandoning school, reduced productivity and low income, excluding young people over 15 years old.

The healthcare system also presents such obvious inconsistencies concerning the allocation of resources for expenses and their finalization: lower life expectancy than the national average – 71.9 years, high child mortality of 16.5 per 1,000 live births, 6.6 hospital beds per 1,000 inhabitants, acute lack of medical personnel, (20 doctors at 10,000 inhabitants), high mortality rate - 11.9%, few compensated and free prescription drugs.

From the budget figures it follows that a significant percentage of spending is allocated to social insurance and welfare, in statistical conditions of economic growth. In our opinion, the amounts allocated to this field represent the corollary of the inefficiency of the rest of the budgetary expenditure. The significant poverty rate of good part of the population, the fact that half of the population of the country benefits by some form of social support raises the problem of the finalization in the expenses in the other financed areas. In our opinion, the manner in which the amounts are allocated to this area cannot help but stimulate the beneficiaries' reticence in getting involvement in a remunerated activity that generated added value, thus increasing, in fact, poverty. The usage of the values in the field of social insurance and welfare should be oriented towards programmes of economic and social inclusion with long-term support and effects.

From the point of view of the economic consequences of public spending, after a quite significant period of time during which the inflation rate was kept under control, and the target set by the National Bank of Romania was observed, at the end of 2007, and from the perspective of 2008, sudden rises in the inflation are noticed again under the pressure of factors including that of inefficient public spending, the corridor decided for the inflation rate being jeopardized, with all its potential the negative consequences.

Statistically, the unemployment rate is low in the western areas of the country and in Bucharest, nearing zero. But this seemingly positive situation is not due to the absorption of the labour force through economic programmes, but rather to emigration, which affects the development prospects.

In what the efficiency of public spending is concerned, a survey<sup>108</sup> reports the latest update of the worldwide governance indicators (Worldwide Governance Indicators – a research project) that covers 212 countries and measures six government indicators between 1996 and 2007: Voice and Accountability, Political Stability and Absence of Violence/terrorism, Government Effectiveness, Regulatory Quality, Rule of Law and Control of Corruption. The most recent aggregated

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107 The values of CPI can be estimated at values ranging from 0 to 10, where 0 is attributed to the highest level of corruption, while 10 is viewed as the lowest level of corruption.

108 Daniel Kaufmann, Aart Kraay, Massimo Mastruzzi – Governance Matters VII: Aggregate and Individual Governance Indicators 1996-2007, The World Bank, Development Research Group Macroeconomics and Growth Team & World Bank Institute Global Governance Program, Policy Research Working Paper 4654, June 2008, [http://www.wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2008/06/24/000158349\\_20080624113458/Rend ered/PDF/wps4654.pdf](http://www.wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2008/06/24/000158349_20080624113458/Rend ered/PDF/wps4654.pdf).

indicators are based on hundreds of specific individual and disaggregated measurement variables, and on various dimensions of governance, taken from 35 data sources supplied by 32 different organizations. The data reflect opinions concerning the governance in the public sector, in the private sector, NGO and experts, and thousands of responding citizens and companies worldwide. The authors also explicitly calculate the margins of error afferent to each estimated country. The governance indicators are defined bellow:

*Voice and Accountability (VA)* – measures the perceptions concerning the extent to which the citizens of a country are able to participate in selecting their government, as well as freedom of speech and mass-media free.

*Political Stability and Absence of Violence (PV)* - measures the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including political violence and terrorism.

*Government Effectiveness (GE) (the quality of public services)* – measures the perception concerning quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, the management of the budgetary policy, and the credibility of the government's commitment to such policies.

*Regulatory Quality (RQ)* - measures the perception related to the ability of the government to formulate and implement sound policies and regulations that allow for and promote private sector development.

*Rule of Law (RL)* – measures the perception related to the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, the observance of the ownership, the police, and the courts, as well as the likelihood of crime (violence).

*Control of Corruption (CC)* – presents the perception concerning extent to which certain rights are obtained by paying a gain, including both petty and grand forms of corruption, as well as the cases already “captured” by the state.

At the level of our country, these indicators are presented in Annex no. 8. After analysing the charts generated by the model referred to by the authors as “the comparison machine”, our observations are as follows:

- The *Voice and Accountability* indicator is situated around the average value of 60 (on a scale of 0 to 100), with small increase or decrease variations; the conclusion is that in Romania there is freedom of speech, free mass-media and the citizens' freedom of choosing their representatives in administrative functions.

- The *Political Stability and Absence of Violence* indicator presents an average of 55 (on a scale of 0 to 10) and has a downward trend until 2000, and then rises until the middle of the mandate of the next government (2002), and then it decreases towards the end of the mandate of the same government (2004), and then it remains under the calculated average without significant variations.

- The value of the *Government Effectiveness* indicator reflects an average level of 48 (on a scale of 0 to 100) and increases by the middle of each mandate of the period 1996-2007;

- The *Regulatory Quality* indicator is situated around the average value of 55 (on a scale of 0 to 100), and is characterised by a significant increase in the period 1996-1998 (de la 34 la 58), as well as in the period 2003-2004;

- The *Rule of Law* indicator has an average value of 48 (on a scale of 0 to 100), during the analysed period, the last trend being an upward trend;

- The *Control of Corruption* indicator has an upward trend, its average value being around 47 (on a scale of 0 to 100).

The conclusion drawn from the interpretation of the results is that the objectives of the Romanian Government should be the following:

- improving the decision-making process at the political and administrative level, by increasing the capacity of those present on the interface between the administrative level and the political one, i.e. those in charge with the substantiation of decisions, by improving their training in areas such as the collection of data, methods of analysis and research, elaborating public policies and being capable of transposing public policies into normative acts. This objective can be materialized by the implementation of initiatives concerning the improvement of regulations, supporting the implementation of reforms related to the creation of public policies by training the various categories of employees involved in this process or by reviewing the current working procedures, as well as by organising consultations concerning the reform process.

- increasing the degree of accountability of the administration, in two main sub-sectors, the first being the improvement of the performance reporting systems, and the second being the development of a culture of evaluation at the central and local level, by treating an expanded range of identified problems, such as the problem of corruption, or that of the capacity to implement normative acts. This objective can be materialized through the increase in the capacity to implement new normative acts by the development of the method of elaboration of systems, practices and procedures necessary for the implementation of the primary and secondary laws; the improvement of the performance reporting, for example by training the personnel in areas such as the performance indicators or the creation of a system of internal reporting, as well as granting support for the implementation of a method of evaluation programmes/projects at the central and local levels of the public administration.

- *improving the organizational effectiveness* by endorsing a package of public management reforms at the central and local level. This package aims at continuing the activities already started concerning the strategic planning in key areas such as financial management, human resources management, usage of the information technology and other general management techniques (management programs specific to various sectors, as well as granting support in necessary areas of the public administration, such as the legal area, the human resources area, the audit and accounting area, as well as supporting the training supply management). This objective can be materialized through supporting the modernization of structures both at the central as well as the local level; developing a methodology of evaluating administrative costs; preparing training modules in areas such as public acquisitions, ECDL (**the** European Computer Driving License – it is the most widely spread programme of certification of the computer operation skills, internationally recognized in over 148 countries), foreign languages and support granted to the training management function, including the capacity to certify the supplied training.

*These three objectives should result in the improvement of management in public administration.*

- *supporting the decentralization process*, within which three programmes of utmost priority are identified - health, (secondary) education and social welfare, but other sectors can be supported as well. This objective implies supporting the mechanisms of coordinating sectorial decentralization; supporting management in the new structures and/or reviewing it in current institutions, as well as developing projects of disseminating good service provision practices.

- *The improvement in the quality of services and the efficiency of the service provision* by financing preparatory studies and activities for the implementation of service provision quality standards and quality management systems (the development and implementation of service quality standards; the implementation of a more efficient service provision process through the usage of the information technology and the improvement of the service performance evaluation competence).

- *the improvement of the fund absorption capacity* especially in the case of the local public authorities by increasing in the level of knowledge within public institutions, but also by granting the necessary support to potential beneficiaries in order that they should be able to use these funds. This objective can be materialized by supporting the local public administration services in charge with the promotion of development funds, as well as those aiming at increasing the

absorption of funds and supplying training the employees who assist the possible eligible beneficiaries.

*These objectives should result in the improvement of the quality and efficiency of public services at least by decentralization.*

A credible Government is a government based on the efficiency of spending public money, which implies corporate governance, transparency, budgets based on performance. A government that aims to obtain performance takes into account the manner in which resources are allocated, the cooperation and coordination, creates a culture of results, emplaces *system of sanctions and rewards*.

In order to obtain performance, it is necessary to take into account:

- The manner in which resources are allocated
- Cooperation and coordination
- *Systems of sanctions and rewards*.

Consequently, for a good governance in the public sector, (a strategic approach, not a segmented one) cooperation is necessary among all the ministries, trade unions, taxpayers, beneficiaries of public funds, such cooperation ultimately resulting in an increase in welfare.

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# CONSIDERATIONS REGARDING THE EFFICIENCY OF PUBLIC EXPENDITURES FOR EDUCATION

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*The impact that education, particularly higher education, has on individuals - with direct influence on their standard of living, but also on society as a whole - on the community's economic development, requires concern towards the necessary resources for funding educational activities, the benefits released and towards the efficiency of resources usage. The aim of this paper is to identify the methods to estimate the efficiency of using public funds in financing education as well as the evaluating methodology of costs and benefits associated with educational activities.*

*Keywords: efficiency, government expenditures for education, benefits of education.*

*JEL Classification: H 21, H 52, I 21, I 22*

## **1. Introduction**

Current economic context associates investment in human capital to a catalyst for economic development of any community which invests in education, at all levels, both in order to achieve future higher income, in terms of individuals, and to improve the living standards of citizens – of society as a whole.

As a worldwide trend, over 75% of educational services, at least for compulsory education, are provided by public education institutions. This reflects the state's intervention on educational services market in order to correct the existing failures (such as "public goods" and "externalities") (Moșteanu and Iacob, 2007a, 2007b).

However, Governments' intervention in providing access to education, respectively in funding education from public funds may be the consequence of public benefits of education or of the fact that the main beneficiary of human capital investment is the state, which, as a result of increased productivity and of increased individuals' revenue, collects a higher level of income tax.

Considering public expenditures for education as investment, the analysis of their efficiency requires the accounting of education's efficiency – *internal efficiency*, simultaneously with the efficiency of the financial resources allocated to education, determined by comparing the economic and social effects with the required efforts - *external efficiency*.

This way, the economic literature launches two dimensions in addressing efficiency. On one hand, it deals with *technical efficiency* seeking the optimum combination of production factors and comparing the effect/effort ratio with a standard rate considered optimal, and, on the other hand, it deals with *allocative efficiency* which refers to allocating resources properly to *Pareto-optimal*<sup>109</sup>.

Generally speaking, efficiency pursues proper present use of the resources, in order to promote growth in the future.

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109 According to Pareto, beyond the optimal resource allocation, there is no other allocation to positively influence a person without issuing negative influences on a third person.

## 2. A short tour of the recent history regarding public spending efficiency evaluation for education

The most used methods for estimating efficiency frontiers are the non-parametric methods: Free Disposal Hull (FDH) and Data Envelopment Analysis (DEA). The aim of these methods is to construct an efficiency frontier in such a way that all observations lie on or within the frontier.

Concerned with measuring the efficiency of public spending on education and health, Gupta and Verhoeven (2001) apply the inputs oriented approach of FDH<sup>110</sup> method for a sample of 37 African countries, considering public expenditure on education as *inputs*, and the literacy rate and number of students as *outputs*. The study's conclusions emphasize Government educational policies inefficiency. However, over the analyzed period, there is a tendency of increasing the efficient use of public funds for education.

Two years later, Afonso, Schuknecht and Tanzi (2003) used, in order to determine public spending efficiency, the same non-parametric method. Thus, using a series of performance indicators of the public sector as the *effect* and the entire public expenditure as the *effort*, they determine the efficiency of public spending and conclude that countries with limited public sector have the highest level of efficiency and effectiveness in achieving social goals. Beside St. Aubyn, Afonso (2005) applies, in assessing the effectiveness of public spending on education and health, another non-parametric method - DEA<sup>111</sup>.

Another study conducted by Pang and Herrera (2005), much wider than the previous, estimated public spending efficiency as the distance between the point corresponding to the adequate mix of effects and efforts and the *efficiency frontier*. Thus, it appears that those countries which have a high level of public expenditure have lower efficiency indicators. The same trend also appears in states where the share of personnel expenditures in total public spending is high enough.

Moreover, Eid (2008) proposes applying CAPM<sup>112</sup> in order to determine the efficiency of public spending for education, using Sharpe index as a measure of performance, and concludes that even if, over a decade, the system of financing higher education is slightly effective, beyond this period the index recorded a negative value suggesting the inefficiency of public spending for education system.

Regardless of the method used, the efficiency of public spending on education requires, first of all, the correct definition and estimation of resources / efforts / costs, and also of results / effects / benefits associated with educational activities.

## 3. The costs/efforts/resources associated with higher education

In order to correctly estimate the efficiency of public spending for education is necessary to consider all costs - both direct resources allocated to education from the state budget, as well as indirect costs, which may include transportation, accommodation, food or health insurance subsidy for students or other type of aid granted by local authorities or higher education institutions.

While determining the company's financial effort with education, it should be taken into account the lack of earnings, which represents the income that students who are enrolled in different forms of education would get, if, instead of learning, they would engage in an activity which brings a benefit.<sup>113</sup>

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110 Free Disposal Hull – method used for the first time by Deprins(1984).

111 Data Envelopment Analysis. A non-parametric method used for the first time by Farrell (1957) in order to assess public spending efficiency. The method requires a convex production frontier.

112 Capital Asset Pricing Model.

113 Văcărel, I., et al., 2007, "Finanțe Publice", Editura Didactică și Pedagogică, București.



However, the value of all public costs related to education may be underestimated, mainly for two reasons:<sup>114</sup>

- firstly, due to the fact that Governments do not include the *opportunity costs* for the use of a property owned by the state, such as educational spaces, within the estimation of the costs associated to education;
- secondly, because the budget for education, which is related to the benefits associated to public spending, does not cover all fix costs related to the Government operation.

#### 4. The effects/benefits/outcomes associated with higher education

According to human capital theory, education is a prerequisite for increasing labour productivity, which has as a direct effect the increased revenue. Moreover, income growth may be based on a number of factors which are not necessarily related to an individual's level of education. However, the educational activity also issues social benefits, other than increasing productivity and income.

Sometimes, the benefits associated with educational activities may occur, both as private non-market effects, as well as social benefits associated to pure public goods or, also, as externalities.

As a result of investment in higher education appear the positive externalities which represent the basis for social strengthening and economic development in the transition to knowledge-based economy (Cretan and Lacrois, 2008). The source of the externality may consist in the interaction, both at work as well as in the society, with better trained people. A large proportion of worldwide studies indicate public outputs of higher education (Lacrois and Cretan, 2008, p. 65).

A first example of a positive externality associated to educational activity is productivity. If an individual additional education influences productivity – meaning increasing the labour marginal productivity of that person's work colleague –, it can be observed the positive externality of the individual's education on his colleagues. Additionally, if the increase in the labour productivity of a person with a higher level of education is reflected on his increased revenue, the Government receives a benefit in the form of additional income tax. Evaluating this type of effects with respect to educational investment is hard to achieve. However, it is absolutely necessary to continue research in this direction due to the importance of this quantification in policy making in education. Thus, various studies have focused on determining and valuing the non-market benefits of education (Haveman and Wolfe, 1984, Wolfe and Zuvekas, 1997, McMahon 1999, Mora et al., 2007).

Evaluating benefits associated with educational activity requires classifying them by their nature, in private benefits and social benefits, as seen in table 1 (Wolfe and Zuvekas, 1997, McMahon, 1999, Villa, 2000, Mora et al., 2007). Furthermore, measuring educational social effects needs to settle a clear delimitation of the benefits encountered by an individual from the ones encountered by the society as a whole.

**Table 1. Classification of education's benefits**

| Nature of the benefit | Private   | Social  |
|-----------------------|---|---|
| Market                | <ul style="list-style-type: none"> <li>- increasing employment rate;</li> <li>- obtaining higher earnings;</li> <li>- less unemployment;</li> <li>- labour market flexibility;</li> <li>- greater labour mobility;</li> </ul> | <ul style="list-style-type: none"> <li>- higher productivity;</li> <li>- higher tax revenue;</li> <li>-dissemination of technological innovations;</li> </ul> |

114 Afonso, A., Schuknecht, L., Tanzi, V., 2006, "Public Sector efficiency: Evidence for New EU Member States and Emerging Markets", European Central Bank Working Paper No.581.

| Nature of the benefit | Private  | Social   |
|-----------------------|--|--|
|                       | - higher saving rate;  |  |
| Non-market            | <ul style="list-style-type: none"> <li>-higher family productivity;</li> <li>- higher consumer efficiency;</li> <li>- better own and family health;</li> <li>- more charitable acts;</li> <li>- more hobbies;</li> <li>- better spending leisure time;</li> <li>- achieving optimal family structure;</li> <li>- increased efficiency in determining marital status;</li> <li>- increased efficiency in obtaining jobs;</li> <li>- better working conditions;</li> <li>- higher work satisfaction ;</li> <li>- increasing the educational level of those children coming from a family of educated people;</li> <li>- increasing happiness.</li> </ul> | <ul style="list-style-type: none"> <li>- social cohesion;</li> <li>-better vote participation;</li> <li>- reduce violence during protests;</li> <li>- reduced crime ;</li> <li>- lower fertility ;</li> <li>- reduced bureaucracy ;</li> <li>- less spread of infectious diseases ;</li> <li>-environmental protection;</li> <li>- reduced corruption</li> </ul> |

*Source: amended and adapted after Wolfe and Zuvekas, 1997, McMahon, 1999, Villa, 2000, Mora et al., 2007*

## 5. Conclusions

Educational policies aim at improving the efficiency of the education system, both of the learning activities as well as of funding it, in the whole range of systems funded from the public budget. The efficiency of public resources in financing education can be regarded as a static efficiency necessary to bring, in the future, a dynamic efficiency measured through economic growth. Known the fact that the educational dimensions are determined by consumers and producers of educational services, Governments have the responsibility of sizing and setting public spending needed to achieve the optimum level of benefits. For an optimal sizing it is necessary to measure all costs and benefits of education, including the social ones. Assessing higher education social benefits becomes absolutely necessary in the actual economy.

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# CARACTERISTIQUES DES SYSTEMES DE FINANCEMENT DE L'ENSEIGNEMENT SUPERIEUR

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*The continuous transformation the economy faces, requires the existence of an educated population, able to create and disseminate knowledge. Moreover, the governments dealing with a rapidly increasing number of students, in the conditions of limited resources, has resulted in changes, both into the management and funding systems of higher education. In this context, the paper aims at identifying the main sources of financing higher education according to the beneficiaries of the educational system, and also at identifying the characteristics of the funding systems, mainly from public funds.*

*Keywords: education financing, higher education, public funds*

*Cod JEL : H 52,I 22*

## **1. Introduction. L'enseignement supérieur au chemin de la connaissance**

La transformation de l'UE dans la plus importante économie de la connaissance dans le monde, est le plus grand défi pour les gouvernements des États membres, mais aussi pour le Conseil Européen. La clé de la réalisation de cet objectif ambitieux est l'éducation de tous les grades.

Par conséquent, l'investissement dans les ressources humaines, notamment la taille et la qualité de celles-ci sont à la base de la création et la diffusion des connaissances. Dans cette équation, l'enseignement supérieur joue le rôle principal en raison de son importance dans la réalisation d'un très qualification des ressources humaines, mais aussi dans la création de programmes d'approfondir les domaines à forte intensité de connaissances.

Dans ce contexte, l'éducation devient une priorité du gouvernement, en termes de garantie de l'accès à l'enseignement supérieur public, en particulier en termes de sécurisation des ressources nécessaires.

## **2. La dualité du financement de l'enseignement supérieur**

Recherchant du point de vue des bénéficiaires de l'enseignement supérieur, le financement de l'activité d'enseignement supérieur dans le segment tertiaire devrait revenir aux universités. Il est connu que l'enseignement supérieur a des effets tant sur les personnes bénéficiant directement en leur donnant la possibilité de réaliser des recettes futures plus importantes que celles réalisées par les individus, sans études supérieures, mais aussi sur l'environnement des entreprises privées qui utilisent, à des fins commerciales, des ressources humaines qualifiées, l'environnement privé devrait être une source importante de financement de l'enseignement supérieur. Toutefois, il ne doit pas être négligé aucun des avantages sociaux de l'enseignement supérieur publié par type: la cohésion sociale, l'amélioration de la santé, la réduction de la criminalité, qui souligne la nécessité de poursuivre le financement de ses fonds publics.

Ainsi, le financement mondial de l'enseignement supérieur est réalisé à partir de deux sources principales, classées en fonction de leur origine, en sources publiques et privées. En ce qui concerne ce dernier, les états qui détiennent la plus grande part du total de leurs sources de financement de l'enseignement supérieur sont les États-Unis, le Japon, l'Australie et le Canada. Ceux-ci financent l'enseignement supérieur, principalement à partir des sources suivantes: les

frais de scolarité, les dons, les contrats de recherche ou de consultation en partenariat avec le secteur privé.

Dans les autres États, en particulier en Europe, le financement est le plus souvent concentré sur les ressources publiques, soit directement en offrant des places financées par le budget de l'État, par le biais de bourses d'études offertes dans le pays et à l'étranger, par l'accès à des conditions préférentielles pour le réseau national de transport, ou indirectement par l'intermédiaire d'une série de programmes qui fournissent un soutien financier tels que l'assurance-maladie pour les étudiants ou leurs parents, l'arrêt de la perception de l'impôt des personnes dont les enfants fréquentent des cours des établissements d'enseignement supérieur, etc.

### **3. Caractéristiques du financement de l'enseignement supérieur en Europe**

Les États d'Europe, mais surtout ceux membres de l'Union Européenne, se confrontent à un faible niveau d'investissement dans le capital humain. Ainsi, la part des dépenses publiques d'éducation dans le produit intérieur brut (PIB), a une moyenne un peu plus de 5%. Le poids des dépenses publiques d'éducation, en particulier celui supérieur en PIB ainsi que leur volume varie de pays à pays selon le système de financement adopté par chaque gouvernement séparément.

#### **3.1. Financement de l'enseignement supérieur en Grèce**

En termes de financement de l'enseignement supérieur la Grèce est le pays qui détient la plus grande part du financement public de l'enseignement supérieur, approximativement 98% contre 80% à la moyenne européenne. Les principales sources de financement sont le budget de l'État et le programme d'investissement public qui est basé sur des fonds nationaux et de l'UE. En outre, la Grèce entre dans la catégorie des pays qui n'ont pas de frais d'inscription pour la formation dans l'enseignement supérieur.

Alors que les dépenses publiques d'éducation dans le budget de l'État sont dirigées, principalement, pour les dépenses de fonctionnement comme les salaires du personnel enseignant, technique et administratif des manuels gratuits ou des bourses d'études, les fonds du Programme d'investissements publics sont destinés à des infrastructures et des équipements.

En ce qui concerne la répartition des fonds du budget, le système est basé sur une formule de calcul des montants qui fait la corrélation des frais de fonctionnement des universités et ne conditionne pas le montant du financement de tout indicateur de performance. À ces montants alloués par le budget s'ajoute le financement des dépenses spéciales que les universités ne peuvent pas planifier.

#### **3.2. Financement de l'enseignement supérieur en France**

En France, comme dans la plupart des pays de l'OCDE, l'État est le principal financeur de l'enseignement supérieur. Ainsi, le financement par des fonds publics du budget de l'État, des administrations locales, les départements, est en moyenne de 73,1% par rapport au privé, qui a une part de 26,9%. Cependant, la France est située dans une zone médiane de la structure de financement, avec un pourcentage de 83,6% du financement public, et seulement 16,4% des fonds privés.

Tableau 1- *Les financeurs du système éducatif français en 2006*

| Les financeurs du système éducatif français   | Participation à la dépense globale d'éducation de 2006 (en millions d'euros) | Pourcentage de participation à la dépense globale d'éducation de 2006 |
|---|--|---|
| Le ministère de l'éducation nationale, de l'enseignement supérieur et de la recherche | 65 911   | 54,4 %  |
| Les autres ministères   | 6 055  | 5,0   |
| Les autres administrations  | 889  | 0,7   |

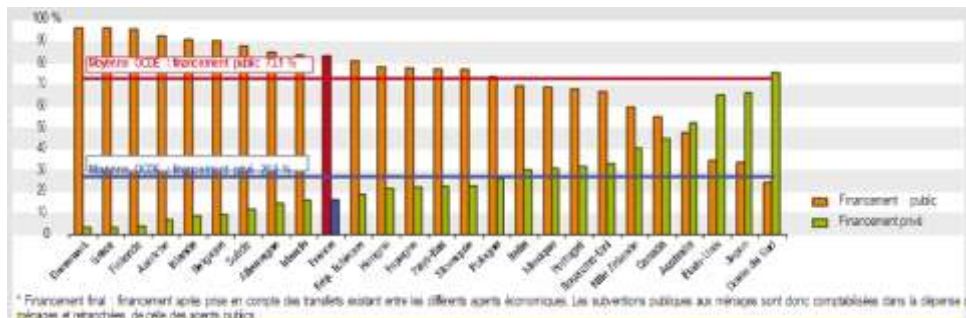
| Les financeurs du système éducatif français | Participation à la dépense globale d'éducation de 2006 (en millions d'euros) | Pourcentage de participation à la dépense globale d'éducation de 2006 |
|---|--|---|
| Les collectivités territoriales             | 27 208   | 22,4  |
| Les entreprises                             | 7 695  | 6,4   |
| Les familles                                | 13 494   | 11,1  |

Source : Ministère de l'éducation nationale, "Repères et références statistiques", 2008.

En ce que l'on peut dire que l'enseignement supérieur en France est libre, même s'il s'applique le principe de la contribution privée par le paiement des frais de scolarité modérés.

En ce qui concerne les aides accordées aux étudiants, ils sont essentiellement sociaux et ils sont donnés en fonction des moyens financiers des parents.

Figure 1 –Part relative des financements publics et privés alloués aux établissements d'enseignement supérieur (2005)

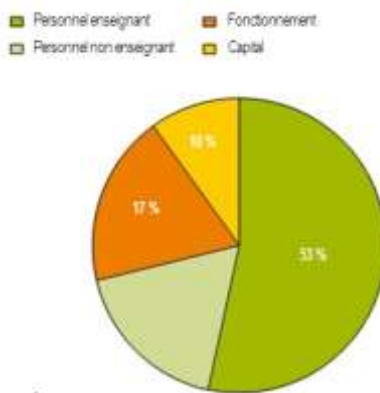


Source : OCDE, *Regards sur l'éducation*, 2008

Après leur nature, les aides d'État peuvent être classés en deux catégories principales: des aides budgétaires et des avantages fiscaux. La répartition des fonds budgétaires est fondée sur l'aide financière directe ou indirecte accordées aux étudiants. L'aide financière directe se réfère à des bourses, des prêts pour des études et des indemnités diverses. Les bourses sont attribuées soit sur des critères sociaux(selon le revenu familial), soit sur critères universitaires (par exemple des bourses pour master), ou fondé sur le mérite (acquise à la suite des concours de dossiers par des étudiants méritants qui souhaitent suivre des cours universitaires). Les allocations versées par le budget de l'Etat concernent les aides pour le logement social fournis par l'Office national du logement et les aides personnalisés accordés aux étudiants pour le logement. L'aide indirecte aux étudiants porte sur les réductions d'impôts accordées aux familles.

En tant que tendance générale, la majeure partie du financement est destinée aux dépenses opérationnelles, comme le montre la figure no. 2.

Figure 2 – Nature des dépenses pour l'enseignement supérieur (2007)



Source : OCDE, *Regards sur l'éducation*, 2008

### 3.3. Financement de l'enseignement supérieur en Espagne

A la suite de la reconnaissance de l'enseignement supérieur comme un bien public, le financement public représente plus de 70% du total des fonds alloués à l'enseignement supérieur. Ainsi, l'enseignement supérieur est presque gratuit, les frais de scolarité couvrant 20-30% des coûts des universités.

En outre, même si, en 1985, le financement des universités a été la responsabilité du gouvernement, une décentralisation partielle de l'enseignement supérieur a lui-même attiré le financement des universités par les autorités régionales, pour la plupart. Toutefois, le système de financement pour aider les étudiants et la recherche universitaire est resté dans la tache du gouvernement.

Dans la première phase, le financement des universités est fondé sur des négociations entre les autorités régionales et universités selon le nombre d'étudiants. Quelques années plus tard, le financement de l'enseignement supérieur a été déplacé vers un budget pluriannuel qui prend en compte aussi la qualité de l'activité de l'enseignement.

Les composants de la subvention reçue d'abord par les universités de la part des autorités régionales étaient : le financement de base, le financement orienté vers les objectifs et le financement axés sur qualité. Ensuite, avec la mise en œuvre du financement de l'éducation basée sur la multi-subvention des budgets, les composants de la subvention ont changé. Ainsi, les universités ont bénéficié d'un financement fixe, le financement de base, financement compensatoire des coûts<sup>115</sup> et le financement par objectifs<sup>116</sup>.

### 3.4. Financement de l'enseignement supérieur en Suède

La Suède est le pays où l'accès à l'enseignement supérieur est gratuit pour tous les étudiants. Cependant, ils doivent payer une redevance pour les services rendus par le syndicat des étudiants. Ainsi, plus de 85% des fonds alloués à l'enseignement supérieur proviennent de ressources publiques, dont plus de 65% sous forme de financement direct de sources budgétaires, le reste provenant d'autres fonds publics mis en place par divers organismes gouvernementaux. Du secteur privé, il est d'environ 15%.

De plus, les étudiants issus de familles ayant une situation financière précaire, mais qui souhaitent poursuivre des cours des établissements d'enseignement supérieur sont financés par le gouvernement par le biais de l'octroi d'une bourse et un prêt d'études. Le remboursement du prêt

115 engl.compensatory funding costs.

116 Mora, J. G. et al., 2007, "Rates of return and funding models in Europe", Final report to the Directorate-General for Education and Culture of the European Commission, Center for the Study of Higher Education Management

pour l'éducation n'oblige pas les étudiants de payer pendant leurs études. Ainsi, le remboursement est effectué après 6 mois de l'achèvement des études, la période maximale du prêt étant de 25 ans. Tenant compte qu'au niveau de l'année 2007, les dépenses publiques d'enseignement supérieur avait un poids de 1,53% du PIB, la Suède a la chance réelle d'atteindre, d'ici 2010, l'objectif de 2% du PIB à l'éducation de l'Union Européenne<sup>117</sup>.

#### **4. Conclusions**

En termes de financement de l'enseignement supérieur il y a deux modèles distincts: l'un a porté principalement sur les fonds collectés du secteur privé, appliquée avec succès aux États-Unis et celui de l'Europe axe sur des fonds dans le budget de l'Etat. Bien que le rendement universitaire est inscrit dans les deux systèmes, cependant, le modèle appliqué par les Américains laisse plus de légèreté, mettant les universités dans une position d'indépendance d'une seule source de financement. Le principal problème de la majorité du financement budgétaire est insuffisance des fonds et non-implication du milieu privé directement dans la vie universitaire, ce qui dans le temps peut conduire à un écartement entre l'université et les demandes des entreprises privées.

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117 Högskoleverket (Swedish National Agency for Higher Education), 2008, *Swedish Universities & University Colleges Short Version of Annual Report 2008*, Stockholm.



# ANALYSIS AND MODIFICATION OF THE STRUCTURE OF THE INTERMEDIATE MANAGEMENT BALANCES THROUGH THE FLOWS OF THE LEASING OPERATIONS AND OF VENTURE OPERATIONS

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*Abstract. In the present the author shows the relationships between the different major indicators from the income statement, especially on the value added.*

*Key words: turnover, trading margin, value added.*

*Jel: G30*

## **1. Major indicators used in income statement analysis**

Turnover (CA) represents the volume of the achieved portfolio of business conducted by the entity in relation to third parties with the occasion of the current activity and it reflects the production side and the commercial side of the enterprise.

Turnover expresses the value volume of the following income: income from the sale of finished products; income from the sale of semi-fabricated products; income from the sale of residual products; income from the work performed and services rendered; income from studies and researches; income from the fees, location management and rentals; income from various activities; income from sale of goods; income from the recorded interest by the entities whose main activity is leasing and income from operating grants for afferent turnover.

Changes made in the balance sheet and implicitly in the profit and loss account through O.M.F.P. no. 1752/2005 on highlighting distinctly interest income recorded by entities whose main activity is leasing, lead to the emergence of **a new element of turnover**, namely **INCOME INTEREST REGISTERED FOR LEASING ACTIVITY**.

The model of turnover is:

Turnover (CA) = Output sold (PV) + Sales of Goods (VMF) + Interest income recorded for the leasing activity (VDI) + Operating grants afferent to the turnover (SE)

$$CA = PV + VMF + VDI + SE$$

Sold production represents the productive activity and performing of services. Sales of goods represent the commercial activity. Interest income recorded for the leasing activity represents the recorded amounts as interest of the entities, whose main activity is leasing. Operating grants represent the cover of the differences in price, respectively the cover of losses, and also other grants that the entity benefits of.

Another important indicator is the trading margin (MC) is the supplement of value brought by the entity through the marketing activity = purchased products and goods = being an item of the added value and is determined with the help of the relationship:

$$MC = \text{Sales of Goods (VMF)} - \text{Cost of goods (CMF)}$$

$$MC = VMF - CMF$$

Finally, exercise's production (PEX) represents the size of the productive activity of the entity through goods and services produced and sold and stored production variation, respectively production of fixed assets for their own purposes and capitalized (immobilized) production

PEX = Sold production (PV) + Stored production (PS) + Production of fixed assets for their own purposes and capitalized production (PI)

$$PEX = PV + PS + PI$$

In terms of analysis, “the exercise’s production” is heterogeneously because sold production is evaluated in prices of production, and the variation of the stored production and the production of fixed assets are valued in production costs.

In conclusion also the factors that alter the status of these components are grouped into: physical volume - the structure of production and sales - selling price - cost of production.

## **2. Flows of leasing operations and venture operations**

Following undertaken studies and researches, respectively analyzes of the financial position and financial performance of the entity, **we found two significant and relevant elements of operational flows** that affect the intermediate management balances of the operation activity. These two elements are components of the added value and represent

a) Flows from operating leasing operations, respectively

b) Flows from operating venture operations

### **a) Flows from leasing operations – leasing operations margin**

Flows from operating leasing operations generate **a new indicator** in regard to analysis of the intermediate management balances which we called **the margin of leasing operations**.

Changes made in the balance sheet by O.M.F.P. no. 1752/2005 on **distinctly highlighting the recorded interest income** by the entity whose main activity is the leasing (part of turnover), respectively distinctly highlighting the costs of the refinancing interest registered by the entities whose main activity is leasing led to the emergence and introduction of this new indicator. **The margin of leasing operations** can be calculated by the leasing companies and reflect the profitability of the leasing activity and measure the effectiveness of activities of this kind. **The financial theory in the basic formula, respectively specialty literature doesn’t specify and doesn’t highlight this new indicator**. In my opinion it must be introduced in the analysis of intermediate management balances with the principle of calculation of margin trading, citing the existence of many leasing companies as legal personality in Romania.

**The margin of leasing operations** is the value supplement created by the leasing companies through their specific activity and business and is determined as difference between income from recorded interest and expenses on recorded interest in refinancing.

$$\text{MOL} = \text{VDI} - \text{CHDI}$$

where: **MOL** = the margin of leasing operations

**VDI** = income from recorded interest

**CHDI** = expenses on recorded interest in refinancing

### **b) Flows of venture operations - venture operations margin**

Economic agents, regardless of their legal form, may initiate based on the rules of commercial, civil and economic law the progress "in participation" of some activities with productive and / or commercial character on determined periods without being for this purpose patrimonial entities with legal personality.

Accounting of these venture operations can be organized and done either by different functional departments from the organizational structure of each patrimonial entity co-participating in venture operations or by the accounting compartments of one of it. In both cases between the organizer and implementer accounting compartment of venture operations and participant patrimonial entities with legal personality are born settlement of accounts relations aimed at three **main groups of problems**, namely:

1. Cashing and refunds of amounts covering the creation and liquidation of the necessary working capital for the development of venture operations;

2. Transfer of income and expenditure between associates to participation in venture operations and settlement of amounts representing gross financial result between associates.

3. Transfer of amortizations and of the equivalent value of its settlements for immobilization which belongs to associates, but whose amortization is adjusted by the organizer and implementer accounting compartment of venture operations.

O.M.F.P. no. 1752/2005, regarding the associated venture operations, regulates “costs and revenues determined by associated venture operations are accounted separately by one of the associates according to association contract compliance. At the end of the reporting period costs and revenues recorded on the nature of each one are transmitted based on the settlement of accounts to each associate in order to record it in its own accounting.”

Following studies and research practically made on associated venture operations, we found that the transfer of revenue and expenses by nature in order to record in the accounting of the associates presents contradictions and failures in terms of accounting management.

Given the conditions under which venture associations conduct several activities: manufacturing, services, trade, financial, etc., registration in associates accounting of the revenue and expenditure by nature is difficult and contradictory. In this context, I consider that venture operations are relevant and significant, respectively recording of expenditure and revenue settlement of accounts should be summed in total revenue and expenditure.

In my opinion, to not distort the structure of the profit and loss account, total revenues of venture operations may be recorded distinctly in "OTHER OPERATING INCOME", respectively the total expenditure from venture operations may be recorded distinctly in "OTHER OPERATING EXPENDITURE", citing the following reasons:

a) “Other operating income” is an element of the profit and loss account and is a component of total operating revenue;

b) Accounting regulations O.M.F.P. no. 1752/2005 in accordance with European directives, in Section 7, article 212 point 1 shows the structure of the operating revenues, respectively at point.

e) is highlighted "other operating income" current, including revenue from recovered debts and other operating income,

c) Accounting policies should be developed so that to ensure the provision - through annual financial statements – of information that should be:

- Relevant to the needs of users and decision-making, and

- Are credible in the sense to represent accurately the assets, debts, liabilities, financial position and profit or loss of the entity, are cautious and are complete in all significant respects.

Changing accounting policies is permitted only if required by law or has as a result information more relevant or more credible regarding the entity’s operations.

In conditions of ventures association, revenues are recorded globally in "OTHER OPERATING INCOME" analytically distinct, which represents “TOTAL INCOME FROM VENTURE OPERATIONS”, respectively expenditures are recorded globally in "other operating expenses" analytically distinct, which represents "**TOTAL EXPENSES FROM VENTURE OPERATIONS**".

Other total operating income = Income from venture operations + Other operating income

Other total operating expenses = Expenses from venture operations + Other operating income

Exercise’s production (PEX) in this case includes goods and services produced directly by the enterprise and the activity that generates operating income in venture operations.

PEX = Sold production (PV) + Stored production + Production made for the company and capitalized (Pi) + Other operative operating income (AVEO).

d) In practice there are economic activities and operations which employ costs, generate revenue and are significant, but these costs and revenues must be recorded in "**Other operating expenses**" respectively in "**Other operating income**" taking into account the fair, clear and complete image in all aspects of annual financial statements, respectively balance sheet correlations.

### 3. Case study

To support this theory I present an example of a joint venture implemented in practice and developed by myself.

SC "Transport Local" SA Târgu-Mureş and SC "Siletina Impex" SRL have entered into a contract of venture association. The main activity consists in organizing and carrying out, with own transport means or hired, the public transport of people activity, respectively selling fuel, repair services, car wash, I.T.P. station. In the venture association contract are provided:

A. Contributions of each side to the formation of the association

- a) SC "Transport Local" SA – Fixed and circulating assets 60 %
- b) SC "Siletina Impex" SRL – Fixed and circulating assets 40 %

B. Participation in profits and losses

a) Revenues and expenses of the venture association are divided in proportion of 60% by SC "Transport Local" SA Târgu-Mureş and 40 % by SC "Siletina Impex" SRL.

b) The amounts realized by way of "net income" will be passed to the associates by settlement of accounts and will be steered into their bank accounts.

c) Income and expenses of the association are divided 60% to SC "Transport Local" SA Târgu-Mureş and 40 % to SC "Siletina Impex" SRL.

#### **C. Venture operations accounting is organized distinctly from the accounting of the associates.**

Venture operations association contracts involve transfers and settlements operations per total economic activity. Revenues and expenses in connection with the association contract are aggregated in total, income and expenditure being distinct elements.

Costs and revenues are recorded and grouped in the separate accounting of the venture association by the way and nature of it, in compliance with accounting regulations in force.

The situation of "settlement" includes:

- Monthly income and expenditure;
- Yearly income and expenditure;
- Income and expenditure transferred to associates in ratio of 60 % - 40 %;
- The monthly and yearly net result and the quota to be transferred to associates of 60 % and 40 %.

Revenues and expenses are recorded in the accounts of the associates as follows:

INCOME 60 % = 10.518.117 lei;

INCOME 40 % = 7.052.078 lei;

EXPENSES 60 % = 9.321.599 lei;

EXPENSES 40 % = 6.214.399 lei;

A. Income transfer

1)  $\frac{458 \text{ Settlement from venture operation}}{10.518.117 \text{ lei}} \times \frac{758^* \text{ Other operating income}}{7.052.078 \text{ lei}}$

2)  $\frac{458 \text{ Settlement from venture operation}}{7.052.078 \text{ lei}} \times \frac{758^* \text{ Other operating income}}{10.518.117 \text{ lei}}$

758\* → ANALYTICAL DISTINCT

B. Costs transfer

1)  $\frac{658^* \text{ Other operating expenses}}{9.321.599 \text{ lei}} \times \frac{458 \text{ Settlement from venture operation}}{10.518.117 \text{ lei}}$

$$1) \frac{\text{658* Other operating expenses}}{\text{458 Settlement from venture operation}} \times \frac{\text{6.214.399 lei}}{\text{6.214.399 lei}}$$

658\* → ANALYTICAL DISTINCT

Economic operations related to the venture activity will be finalized through detailing the account "settlements from venture operations" 458 = "Settlements from venture operations - liabilities" 4581, and

"Settlements from venture operations - assets" 4582

Given that venture associations conduct several activities: products, services, trade, it is useful to introduce a "new" indicator and that is "**Margin of venture activity**" because of the following reasons:

- Income from sold production does not have a direct correlation with the products and services conducted in venture association, respectively income from sold production does not have a direct correspondence with clients, has a direct correlation with the settlements in the venture operations.

- Income from sale of goods has no direct correlation with stocks of goods, goods movement and differences in price of goods (trade margins).

- Income from stock variation has no direct correlation with stocks of goods and products that are still in the production stage.

- Cost of raw materials and materials do not have a direct correlation with stocks, respectively corresponding movement of stocks.

- Utility costs in terms of energy and water can double if one of the associates holds the contract as a beneficiary for electricity, gas, water, these utilities or part of them are consumed by the venture association; in this case the holder of the contract re-bills the consumption towards the venture association as to any other client. After the data from the settlement of accounts of the expenses of the venture association, recording once again the expenses for energy and water distort these external charges.

- The expenses with the personnel are not consistent with the average number of employed personnel of the entities. Associates may have more or less employees detached in the association. Personnel detachments in the association are not equivalent to the percentage distribution of income and expenditure and it is possible to distort the calculation of labor productivity.

- The transfer of depreciation afferent to common investments or differences of depreciation distort the amortization costs and by default **distort the correlations of the balance sheet** and these errors can not be justified in the explanatory notes.

- The transfer of goods and personnel insurance can double, which distorts the structure of expenditure.

- In the case of the production activity: stored production and running production is highlighted in the total income from venture operations, and simultaneously are highlighted in the total costs from venture operations of expenses incurred for the stored production and running production.

- In the case of trade revenues and expenses are included in the total revenue and expenditure of the venture activity.

- Expenditure on staff salaries are totalized in costs, and also other income and expenses such as financial ones, respectively extraordinary are totalized in revenue and expenditure.

We point out that joint ventures do not have legal personality.

Margin of the venture operations activity (MOP) can be determined by the difference between revenues transferred from the venture operations (VTOP) and expenses transferred from venture operations (CHTOP):

$$\text{MOP} = \text{VTOP} - \text{CHTOP}$$

**Margin of the venture operations activity** represents the new created value in the area of activity of the ventures association, industrial, commercial, service activities respectively other activities determined over a period of management. It's a "new" indicator and we believe it is useful and will be introduced in the financial theory.

**Value added (VA)** represents and expresses what the entity adds to the economic circuit by its activities within a determined period of time, usually during the financial exercise.

The indicator measures the economic and financial performance of the entity, the growth index of value added must show a tendency to exceed the one of the exercise's production and be in a continuous growth.

The importance of the analysis of value added is reflected in the following aspects:

- Value added represents the main source of self-financing of economic agents activity;
- Value added represents the source of remuneration of staff;
- Value added represents the source of financing of budget obligations;
- Value added represents the source of increasing the entity's reserves.

Value added can be determined by the synthetic method by which from the exercise's production is deducted intermediate consumption and are added margin trading, margin from venture operations and leasing operations margin or by the method of repartition (additive) by which are summed the staff expenses, excise taxes and taxes, depreciation and operating profit.

$$VA = PEX - CI + MC + MOP + MOL$$

**PEX** = Exercise's production

**CI** = Intermediate consumption = CM + LE, where

CM = Material costs

LE = Works and services performed by third parties

**MC** = Trade margin

**MOP** = Margin from venture operations

**MOL** = Margin of leasing operations

From the profit and loss account are determined the intermediate balances that characterize the performance of the operation.

Intermediate management balances of the activity. Case study

| Criterion Number | Indicator Name  | Financial Exercise |             | Deviations ± Δ | Indices (%) |
|------------------|---|--------------------|-------------|----------------|-------------|
|                  |   | Previous           | Current     |                |             |
| 1                | Sold Production (PV)  | 22.560.600         | 28.265.262  | + 5.704.662    | 125,28      |
| 2                | Revenues from sales of goods (VMF)                                  | 452.362            | 532.450     | + 80.088       | 117,70      |
| 3                | Income from recorded interest from the leasing activity (VDI)       | 12.563.500         | 14.260.350  | + 1.696.850    | 113,50      |
| 4                | Revenues from operating grants (VS)                                 | 1.265.             | 2.562.456   | + 1.297.056    | 202,50      |
| 5                | Net turnover (CA)   | 36.841.262         | 45.620.518  | + 8.779.256    | 123,82      |
| 6                | Income from venture operations (VTOP)                               | 8.747.972          | 10.578.117  | + 1.830.145    | 120,92      |
| 7                | Expenditure on goods (CHMF)   | 383.358            | 443.708     | + 60.350       | 115,74      |
| 8                | Expenditure on recorded interest for the leasing activity (CHDI)    | 10.500.800         | 11.265.677  | + 764.877      | 107,28      |
| 9                | Expenditure from venture operations (CHTOP)                         | 7.931.216          | 9.321.599   | + 1.390.383    | 117,53      |
| 10               | Trade Margin (MC) (2-7)   | 69.004             | 88.742      | + 19.738       | 128,60      |
| 11               | Leasing Operations Margin (MOL) (3-8)                               | 2.062.700          | 2.994.673   | + 931.973      | 145,18      |
| 12               | Venture Operations Margin (MOP) (6-9)                               | 816.756            | 1.256.518   | + 439.762      | 153,84      |
| 13               | Variation of stock of finished goods and of production running (PS) | + 3.268.418        | + 3.816.376 | + 547.958      | 116,76      |

|    |  |            |            |             |        |
|----|--|------------|------------|-------------|--------|
|    | - Balance C (+)                                  | 19.375.846 | 22.518.410 | + 3.142.564 | 116,21 |
|    | - Balance D (-)                                  | 16.107.428 | 18.702.034 | + 2.594.606 | 116,10 |
| 14 | Production made for own use and capitalized (Pi) | 309.518    | 217.350    | -92.168     | 70,22  |
| 15 | Exercise's Production (Pex) (1+13+14)            | 26.138.536 | 32.298.988 | + 6.160.452 | 123,56 |
| 16 | Intermediate Consumption (Ci)                    | 19.563.795 | 23.505.348 | + 3.941.553 | 120,14 |
|    | - Expenditure on materials (CHM)                 | 18.005.945 | 21.304.638 | + 3.298.693 | 118,32 |
|    | - Other external expenses (energy, water) (ACHE) | 307.200    | 340.440    | + 33.240    | 110,80 |
|    | - Expenditure on external services (CHPE)        | 1.250.650  | 1.860.270  | + 609.620   | 148,74 |
| 17 | Value added (10+11+12+15-16) (VA)                | 9.523.201  | 13.133.573 | + 3.610.372 | 137,91 |

Source: Own calculus

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# -sizing VALUE ADDED IN CORRELATION WITH TAXES, EXERCISE TAXES AND ASSIMILATED PAYMENTS

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*Abstract. In the present the author shows the relationships among different major taxes and the value added.*

*Key words: exercise production, trade margin, value added.*

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## 1. Introduction

The size of the value added depends on the elements that set the size of the workload of the enterprise's activity: production capacity, available resources, continuing change of the market demand. These elements can be both stimulating factors of the growth of the value added, and restrictions on its optimism. Regulating mechanisms of the adjustment proportion between value added and taxes of the economic units, aim at ensuring optimal correspondence between income and expenditure in order to ensure a maximum benefit.

Sizing value added in relation to tax and interest in the analysis presents interest not only in the conditions of maximizing the turnover, but also in the conditions it has values that allow for microeconomic balances: the minimum value added necessary to recover costs "**critical value added**" corresponding to "**threshold profitability**"; value added which can provide an estimated benefit, margin of safety, increase efficiency, respectively financial stability. These determinations should take into consideration the relations between: the value added, total income and total expenditure respectively taxes and excise taxes so that the activity is profitable.

$VA = PEX - CI + MC + MOP + MOL$  => value added by the synthetic method (subtractive)

$VA = CHP + (I+TX) + CHFIN + AMI + AVC + AVP + ACHE + CHEX + RN - AVEX - VEX - VSE - VFIN$

=> value added by the method of allocation (additive), where

VA = Value added

PEX = Exercise's production

CI = Intermediate consumption

MC = Trade margin

MOP = Venture operations margin

MOL = Leasing operations margin

CHP = Personnel expenditure

(I+TX) = Taxes and charges expenses including profit tax

CHFIN = Financial expenses

AMI = Value adjustments on intangible and tangible assets

AVC = Value adjustments on assets

AVP = Adjustments on provisions

ACHE = Other operating expenses

CHEX = Extraordinary charges

RN = Net result

AVEX = Other operating income

VEX = Extraordinary income

VSE = Income from operating grants

VFIN = Financial Income



$$(I+TX) = PV + PS + PI - CI + VMF - CHMF + VDI - CHDI + VTOP - CHTOP - CHP - CHF\text{IN} - AMI - AVC - AVP - ACHE - CHEX - RN + AVEX + VEX + VSE + VFIN$$

where

PV = Sold production

PS = Stored production

PI = Production for company's use and capitalized

VMF = Revenue from sale of goods

CHMF = Expenditure on goods

VDI = Interest income recorded for the leasing activity

CHDI = Expenditure on interest recorded for the leasing activity

VTOP = Income from venture operations

CHTOP = Expenses from venture operations

$$(I+TX) = (PV + PS + PI + VMF + VDI + VTOP + AVEX + VEX + VSE + VFIN) - (CI + CHMF + CHDI + CHTOP + CHP + CHF\text{IN} + AMI + AVC + AVP + ACHE + CHEX) - RN,$$

where

$PV + PS + PI + VMF + VDI + VTOP + AVEX + VEX + VSE + VFIN = \text{Total income (VT)}$

$CI + CHMF + CHDI + CHTOP + CHP + CHF\text{IN} + AMI + AVC + AVP + ACHE + CHEX = \text{Total intermediate expenditure (CHTI)}$

$CHTI = CHTB - (I + TX)$

$CHTB = \text{Total gross expenditure, where:}$

$$\boxed{I + TX = VT - CHTI - RN}$$

$CHTI = \text{Total intermediate expenditure}$

Total income: represents the amounts or cashed values or values that are about to be cashed in the company's name from any undertaken activities, and also the earnings of the entity from any other source, as part of its object of activity and their related activities.

Total expenditure: of the entity represents paid or payable values for: stock consumption, work performed and services provided that the entity benefits, expenditure on staff, enforcement of legal and contractual obligations.

Gross outcome (RB): represents the residual balance between total income and total expenditure and is determined by difference.

$RB = \text{Total revenue} - \text{Total expenses}$

The net result of the exercise (RN): is the final balance after applying the tax rate percentage (I) of the gross taxable outcome

$RN = RB - \text{Tax on profit}$

Total intermediate expenditure (CHTI): is determined by the difference between Total gross expenditure (CHTB) and Total expenditure of taxes and excise taxes, including tax on profit, and it is an analysis element, respectively factor of influence in terms of taxes and excise taxes, except V.A.T.

Total gross expenditure (or total expenditure) is the total sum of all expenditures registered by the entity in a concluded financial exercise that represents consumption and obligations.

$CHTB = CHT + CHIP,$

Where:

$CHTB = \text{Total gross expenditure}$

$CHT = \text{Total expenditure}$

$CHIP = \text{Tax profit expenditure.}$

## 2. Case study

The equation formula resulting from: the value added calculated by the subtractive method and value added calculated using the additive method  $(I+TX) = VT - CHTI - RN$  is useful for determining their influence on the financial stability of the entity and, consequently on the net result of the activity.

Taxes and excise taxes are primarily expenses for economic entities and secondly are legal obligations (debt) according to their nature and specification.

Analysis of taxes and excise taxes through the correlation  $(I+TX) = VT - CHTI - RN$ , on the basis of the data from the profit and loss account will be made according to the following calculation elements:

### Previous Exercise

a)  $(I+TX) = \text{Other taxes and excise taxes} + \text{Tax profit} = 2.875.680 + 850.476 = 3.726.156 \text{ lei}$

b)  $VT = \text{Total revenue} = 52.944.180 \text{ lei}$

c)  $CHTI = \text{Total gross expenditure} - \text{Other taxes and excise taxes} - \text{Tax profit} = 47.662.512 + 850.476 - 2.875.680 - 850.476 = 44.786.832 \text{ lei}$

d)  $RN = \text{Gross outcome} - \text{Tax profit} = 5.281.668 - 850.476 = 4.431.192 \text{ lei}$

### Current Exercise

a)  $(I+TX) = \text{Other taxes and excise taxes} + \text{Tax profit} = 3.350.480 + 1.561.812 = 4.912.292 \text{ lei}$

b)  $VT = \text{Total revenue} = 65.856.487 \text{ lei}$

c)  $CHTI = \text{Total gross expenditure} - \text{Other taxes and excise taxes} - \text{Tax profit} = 56.070.747 + 1.561.812 - 3.350.480 - 1.561.812 = 52.720.267 \text{ lei}$

d)  $RN = \text{Gross Outcome} - \text{Tax profit} = 9.785.740 - 1.561.812 = 8.223.928 \text{ lei}$

**Change of taxes and excise taxes** is the difference

$$\Delta = (I_1+TX_1) - (I_0+TX_0) = 4.912.292 - 3.726.156 = 1.186.136 \text{ lei}$$

$$\Delta r = I_{(I+TX)} - 100 = \frac{4.912.292}{3.726.156} \times 100 - 100 = 131,83 - 100 = + 31,83$$

**Influence factors** are determined in two stages:

#### Stage I.

$$\Delta = \Delta VT - \Delta CHTI - \Delta RN, \text{ în care}$$

$$\Delta VT = VT_1 - VT_0 = 65.856.487 - 52.944.180 = +12.912.307 \text{ lei}$$

$$\Delta rVT = \frac{12.912.307}{3.726.156} \times 100 = + 346,53 \%$$

$$\Delta CHTI = CHTI_0 - CHTI_1 = 44.786.832 - 52.720.267 = -7.933.435 \text{ lei}$$

$$\Delta rCHTI = \frac{-7.933.435}{3.726.156} \times 100 = - 212,91 \%$$

$$\Delta RN = RN_0 - RN_1 = 4.431.192 - 8.223.928 = -3.792.736 \text{ lei}$$

$$\Delta rRN = \frac{-3.792.736}{3.726.156} \times 100 = - 101,79 \%$$

By summation the equality is checked:

$$\Delta VT + \Delta CHTI + \Delta RN = 12.912.307 - 7.933.435 - 3.792.736 = 1.186.136 \text{ lei} = \Delta$$

$$\Delta rVT + \Delta rCHTI + \Delta rRN = 346,53 - 212,91 - 101,79 = +31,83\% = \Delta r$$

#### Stage II.

##### The influence of taxes and excise taxes

$$\Delta(I+TX) = 1.186.136 \text{ lei} = \Delta AITX + \Delta IP$$

$$AITX = \text{Other taxes and excise taxes}$$

$$IP = \text{Tax profit}$$

$$\Delta AITX = AITX_1 - AITX_0 = 3.350.480 - 2.875.680 = +474.800 \text{ lei}$$

$$\Delta rAITX = \frac{474.800}{3.726.156} \times 100 = +12,74 \%$$

$$\Delta IP = IP_1 - IP_0 = 8.223.928 - 4.431.192 = +3.792.736 \text{ lei}$$

$$\Delta rIP = \frac{3.792.736}{3.726.156} \times 100 = +101,79 \%$$

**Influence of total revenue: VT = VEXPL + VFIN + VEXTR**

**Previous Exercise**

a) VT = Total revenue = 52.944.180 lei

b) VEXPL = Total operating income = 51.445.380 lei

c) VFIN = Total financial income = 1.379.870 lei

d) VEXTR = Total extraordinary income = 118.930 lei

**Current Exercise**

a) VT = Total revenue = 65.856.487 lei

b) VEXPL = Total operating income = 63.824.367 lei

c) VFIN = Total financial income = 1.908.670 lei

d) VEXTR = Total extraordinary income = 123.450 lei

$\Delta VT = 12.912.307 \text{ lei} = \Delta VEXPL + \Delta VFIN + \Delta VEXTR$ , in which:

$\Delta VEXPL = VEXPL_1 - VEXPL_0 = 63.824.367 - 51.445.380 = +12.378.987 \text{ lei}$

$$\Delta rVEXPL = \frac{12.378.978}{3.726.156} \times 100 = +332,22 \%$$

$\Delta VFIN = VFIN_1 - VFIN_0 = 1908670 - 1379870 = +528.800 \text{ lei}$

$$\Delta rVFIN = \frac{522.800}{3.726.156} \times 100 = +14,19 \%$$

$\Delta VEXTR = VEXTR_1 - VEXTR_0 = 123450 - 118930 = +4520 \text{ lei}$

$$\Delta rVEXTR = \frac{4.520}{3.726.156} \times 100 = +0,12 \%$$

**Influence of total intermediate expenditure: CHTI = CHTB - (I+TX)**

**Previous Exercise**

a) CHTI = Total intermediate expenditure = 44.786.832 lei

b) CHTB = Total gross expenditure = 48.512.988 lei

c) (I+TX) = Total expenditure with taxes and excise taxes = 3.726.156 lei

**Current Exercise**

a) CHTI = Total intermediate expenditure = 52.720.267 lei

b) CHTB = Total gross expenditure = 57.632.559 lei

c) (I+TX) = Total expenditure with taxes and excise taxes = 4.912.292 lei

$\Delta CHTI = \Delta CHTB - \Delta (I+TX)$ , where:

$\Delta CHTI = CHTI_0 - CHTI_1 = 44.786.832 - 52.720.267 = -7.933.435 \text{ lei}$

$\Delta CHTB = CHTB_0 - CHTB_1 = 48.512.988 - 57.632.559 = -9.119.571 \text{ lei}$

$$\Delta rCHTB = \frac{9.119.571}{3.726.156} \times 100 = -244,74 \%$$

$\Delta (I+TX) = (I+TX)_1 - (I+TX)_0 = 4.912.292 - 3.726.156 = +1.186.136 \text{ lei}$

$$\Delta r(I+TX) = \frac{1.186.136}{3.726.156} \times 100 = +31,83 \%$$

**Influence of the net outcome: RN = RB- IP**

**Previous Exercise**

a) RN = Net outcome = 4.431.192 lei

b) RB = Gross Outcome = 5.281.668 lei

c) IP = Tax profit = 850.476 lei

**Current Exercise**

a) RN = Net outcome = 8.223.928lei  
b) RB = Gross Outcome = 9.785.740 lei  
c) IP = Tax profit = 1.561812 lei  
 $\Delta RN = \Delta RB - \Delta IP$ , where:  
 $\Delta RN = RN_0 - RN_1 = - 3.792.736$  lei  
 $\Delta RB = RB_0 - RB_1 = 5.281.668 - 9.785.740 = -4.504.072$  lei  
 $\Delta rRB = \frac{-4.504.072}{3.726.156} \times 100 = - 120,88 \%$   
 $\Delta IP = IP_1 - IP_0 = 1561812 - 850476 = +711.336$  lei  
 $\Delta rIP = \frac{-711.336}{3.726.156} \times 100 = + 19,09 \%$

### 3. Conclusions

In conclusion we can say that taxes and excise taxes have an influence on the financial position and financial performance of the entities.

The value size of the taxes and excise taxes is determined according to the value size of total revenue, the value size of expenditure and also of the value size of the net outcome.

Increase or decrease of taxes and excise taxes influence positively or negatively the major objectives of the enterprise:

- Maximizing enterprise value or maximizing the wealth of owners.
- Maximizing the utility function.
- Function with a minimum threshold to be achieved: the production, storage, sales, market share gained, profit.
- Minimizing the cost of transmission, recovery and verification of signals, respectively harmonizing interests of shareholders - managers.

Taxes and excise taxes recorded as trade-off expense with debts affect the patrimonial value.

$$\boxed{VP = AE - DAT}$$

**VP** = Patrimonial value

**AE** = Economic asset

**DAT** = Total debt

Increasing debt on account of taxes and excise taxes diminishes patrimonial value.

Decreasing debt on account of taxes and excise taxes increases the patrimonial value. Taxes and excise taxes affect the size of wealth and profit, respectively actual size of the monetary (cash-flow-in). The deductible character of expenses from taxable profit influences the size of profit tax, entity's taxation and its value.

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# THE FINANCING OF INVESTMENT PROJECTS BY ISSUING BONDS

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*The stock exchange is one of the most important institutions of the market economy, a segment of the financial market, an organized, transparent and supervised secondary market where agents conclude transactions with securities, their derivatives, and money.*

*The importance of the stock exchanges for the national economies has grown enormously in time. If, initially, the number of the stock exchange participants was limited to mainly individuals with a high income, today, millions of private investors place a large part of their savings directly on the market or through the mutual funds.*

*Keywords: Bonds, capital market, issuers, interest, risk.*

*Cod JEL: G*

### 1. General aspects on bonds

Throughout the evolution of the financial market, different institutions (trading companies, local public administrations, investment funds and banks), and elements of the equation MONEY – GOODS – MONEY have been looking for efficient solutions to draw in money in order to use it for financing different investment projects. The financing methods have evolved during the “money rush” so that we can speak today about two major categories of financial products:

- Financial products that participate in the financing process and generate ownership rights on the issuer – shares, and
- Financial products that participate in the financing process and generate debt rights on the issuer – bonds.

It is important to point out a third category – the bonds that can be converted into shares, thus transforming the debt rights to ownership rights on the issuer.

We are all familiar with the financing method by obtaining a bank credit, still, in time, this method has proven to generate high costs, the crediting conditions are rather rigid, the guarantees are quite big and the reimbursement terms are short. This is why the economic agents are always looking for ***an alternative to bank credits*** so that the issuer could finance himself having lower costs on longer terms, the investments could be guaranteed by the business itself, addressing several potential investors or all those who have bigger or smaller savings. Last but not least, another important aspect is to protect the issuer from the risk related to the growing interest rates during the periods of rising inflation, periods in which the cost of the credit was rising.

The investors have been always looking for financial products that bring a certain secure productivity, if possible, superior to the rates offered by the banks and lacking the risks specific to investments in shares on one side, allowing them to transform their investment into cash before the date of payment, on the other.

**The instruments or financial products that comply with the above mentioned requirements are the BONDS.**

From the point of view of the issuer, the main advantages of this financing method are the following:

- The low cost of the credit, the interest rates for the issued bonds are lower than the ones involved in bank credits and a little higher than the interest rates for the bank deposits.
- Due to the clause of redemption specific to the issuing process, the issuer has the right to redeem his bonds before the date of payment.

From the point of view of the investor, the main advantages of investing in bonds are the following:

- The low level of investment risk due to the right of being the first to be reimbursed in case the issuer bankrupts (before the shareholders).
- The obtaining of a certain profit equal to the interest rate for the issued bonds, the latter being higher than the interest paid for bank deposits or for the government bonds.
- By listing the bonds on a secondary market (the Stock Exchange or Rasdaq), the investors can transform their investment into cash at any time before its date of payment at a correctly and transparently established price.

On the international market, the bonds hold an important part of the primary and secondary capital markets. There are several types of bonds sorted according to their characteristics; the classification used most often is the one according to the type of the issuer. The bonds issued by the trading companies are called **corporate bonds**, while the one issued by the public authorities are called **municipal bonds**.

Bonds were issued for the first time in Romania in 1906 by the city of Craiova, the obtained funds following to be used to finance the works related to drinking water supply.

After the revival of the capital market in Romania, bonds started to be issued. In 1997 Siderca Călărași issued a number of 350.000 corporate bonds reaching their maturity in 2000. Starting from the year 2000, the number of bonds that are issued, both corporate (three issues), and municipal bonds (nine issues) is continuously growing. A constantly increasing number of local public administrations use this practical method of financing objects of interest for the community they are administrating, as an alternative to the modest funds they receive from different financial institutions (World Bank, Phare Funds, Sapard etc.), from the state or the local budget.

It is important to mention that all the municipal bonds issued so far in Romania were concluded successfully and were subscribed entirely.

Here are a few examples of objectives financed using the money obtained by issuing bonds:

**PREDEAL:**

a) The first issue of municipal bonds after 1989:

- The expanding of the skiing zones of the city.
- The new ski track from Creasta Cocosului.
- Obtained funds: 5 billion lei.

b) The second issue of bonds:

- Machinery for artificial snow-drifting of the tracks, modernizing and lighting the ski tracks.
- Obtained funds: 7.5 billion lei.

**MANGALIA:**

- The arrangement of the promenade near the sea-front in the south part of the city.
- Starting the construction of the sports center at Callatis Highschool.
- Obtained funds: 10 billion lei.

**ALBA IULIA:**

- The rehabilitation of the sewerage system of the city.
- Obtained funds: 16 billion lei.

**CLUJ NAPOCA:**

- The modernization of some streets.
- The modernization of the bridge over the Lombului stream.
- The modernization of “Mihai Viteazu“ public marketplace.
- Obtained funds: 25 billion lei.

**SEBEȘ:**

- The expanding and the rehabilitation of the water supply and sewerage systems of the town of Sebeş and the Petreşti village.

- Obtained funds: 10 billion lei.

#### **BACĂU:**

- The consolidation, modernization and arrangement of the “Bucovina” theatre.

- Obtained funds: 35 billion lei.

#### **TÂRGU MUREŞ:**

- The modernization of the street Gheorghe Doja.

- Obtained funds: 20 billion lei.

## **2. The risk factors**

Before subscribing to the Public Offer, it is recommended for the potential investors to take into account the following risk factors that have to be analyzed together with the information about the issuer. The main risks involved in the process of investing in securities in Romania are as follows:

### **1. The price risk**

This type of risk is relevant for the investors who do not intend to keep their bonds up to their maturity. The price variations are limited by the quarterly recalculation of the interest rate and its connection to the average of the BUBID and BUBOR rates.

### **2. The economic risk**

This kind of risk is generated by the possibility of being dependent upon an economic agent or any important changes in the demographic structure of the populations throughout the existence of the bonds, including the emigration and the immigration.

Romania is in a stage of transition towards the market economy and the macroeconomic environment is still unstable because of the low performance of the national economy, this being associated to such phenomena as hyperinflation, unemployment, budget deficit, balance of payments deficit capable to influence the performance of the budget exercise of the Issuer.

### **3. The risk related to legal instability**

The transition period of Romania is also described by instability and a certain legal incoherence that have effects on the economy. The legislation on the setting up and the activity of the trading companies and the one referring to the capital market is constantly changing.

### **4. The risk related to national currency convertibility**

The bonds are indicated in the Romanian currency. Consequently, the value of the investment will depend on the exchange rate of the Romanian leu as compared to any convertible currency. One should keep in mind that the Romanian currency has gone through a very big depreciation, but there are certain signals that due to the stabilization of the inflation at the present values, the coming period of time might bring a controlled depreciation with no significant jumps.

## **Conclusions**

According to their efficiency, the bonds are situated between the investments on the monetary market (government bonds, bank deposits) and the investments on the capital market (in stock shares); the efficiency of the municipal bonds in Romania is generally the highest efficiency that can be obtained from fixed income instruments available to common public.

| <b>Annual interest rate index in 2005</b>         |
|---|
| Municipal bonds 18,98 - 21,00%                    |
| Bills for population (issued for 6 months) 15,00% |



|  |
|--|
| Government bonds with an interest rate (for 3 years) 12,89%              |
| Government bonds with an interest rate (for 2 years) 13,95%              |
| BCR bank deposits interest rate (1 year, payment on the due date) 15,00% |
| BRD bank deposits interest rate (1 year, payment on the due date) 14,75% |

The financing of local budgets in our country poses great problems for the state budget because the budget income for this sector decreases every year. This aspect had important consequences for the **Baia Mare municipality** in the last few years.

In the case of the town of Baia Mare, the **municipal bonds** are profitable instruments both for the **investor**, and for the **issuer**. Consequently, using this type of financing method for own projects by the local municipal administrations means to obtain lower costs as compared to the bank credits, a better monitoring of the obtained funds (regular reports on the payment of the interests, the capital and the use of the obtained funds) which increases the trust of the investors in this type of instruments.

The issue of these bonds for the investment project “The modernization of the water supply network, stage II” for Baia Mare brings a series of benefits both for the investors, and the issuer. This project will provide all the inhabitants of Baia Mare with water supply according to pressure areas in all distribution networks. By its whole fiscal and tax power, the **municipality of Baia Mare** guarantees the payment of the interest and the capital on the due dates for the bonds.

Another big advantage – from the point of view of the **issuer** – is the very short period of time, taking into account that the works are planned to be finished in maximum one year with lower costs. The results of a previous analysis concerning applying for bank credits entailed higher costs and a period of 5 years.

The main advantages for the **investor** are as following:

- This is a secure investment method guaranteed by the state.
- The rate of interest for the bonds is higher than the one for the bank units.
- The profit obtained after these investments is not subject to state taxes.
- The commission imposed by the bank on subscribing cash bonds by the clients is paid by the Issuer.

In the near future one could expect a rise of the number of issuers of municipal bonds, still having a lower rate than the rise of issue, taking into account that some municipalities have reconsidered this financing method, going through two or even three bond issues.

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## AGRICULTURAL INSURANCE IN ROMANIA

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*Production risks, meaning weather and climate related risks, affecting agricultural activities could be managed through agricultural insurance. First, the paper presents the specific production risk in agriculture and the tools that are used to manage it in other countries. Next, the paper presents the agricultural insurance scheme for catastrophic risks in Romania and, also, the principal agricultural insurance policies offered by local insurers. The paper emphasizes the lack of some new products of insurance, like index insurance products, which are desired for production risk protection.*

*Keywords: risk, insurance, agriculture, catastrophe, climate*

*JEL codes: G22, G28, G19, Q54*

Agriculture is a risky activity sector, therefore it can have large negative impacts on agricultural income, on food security, and on the capacity of the sector to develop and invest in order to compete on the market.

#### **Agricultural enterprises face risks that can affect their profitability and viability:**

- *production or yield risk*, for which the weather is responsible most of the time, but also includes risks like plant and animal diseases. Yield risk is measured by yield variability. However, yield variability for a given crop differs from region to region, being determinate by the soil type, the climate and the production method. Weather risks are a major source of uncertainty for farms. Climatic risks are more important for crops and sanitary risks are more important for livestock, but none of them are exclusive;
- *market risk*, known also as *price risk*, which is referring to uncertainties about prices that producers will receive for commodities or prices that they must pay for inputs;
- *asset risk* is referring to the potential loss or damage to physical buildings, equipment, vehicles, and implements due to fire, theft, water damage, or accidents;
- *institutional risk* refers to policy changes which intervene with agricultural issues (referring to taxes, environmental protection, employment rules, workplace conditions, price or income supports, support payments, other subsidies, property confiscation) and that can have a negative impact on farm revenue;
- *operational risk*, referring to uncertainties in scheduling or using equipment at critical times, making or receiving shipments of critical inputs/outputs, and handling of labor disputes;
- *financial risk*, referring to rising costs of capital, exchange rate movements, insufficient liquidity to meet liabilities, loss of equity, and the prospect of loans being called by lenders;
- *personal risk* refers to uncertainties and risks connected to health and personal relations such as accidents, illness, death, and divorce.

One of the main risks is the production risk that arises because agriculture production closely relies to natural resources, which are not controlled by farmers. Moreover, climate has indirect impacts. Then, agriculture is a sector very dependent on climate.

There is also an important classification of risks which arises in agriculture:

- systemic risks, which affect an entire area or a group of people in entirety;
  - syncretic risks, which affect areas, sectors or individuals in a heterogeneous way, meaning that a person or a certain geographical area is affected in a different way than the others.
- So, risk management in agriculture is important, and likely to become more so in the future. There are two main risk management strategies that are used by agricultural enterprises:
- on-farm strategies, which are based on growing products with low risk exposure or short production cycles, diversification of the production programs, off-farm employment. These reflect the concern to reduce the period of time within the risk can affect the incomes of the farmer or to reduce dependence of farmers on agriculture as a source of income. These strategies could be used only for syncretic risks, not in systemic ones.
  - off farm strategies, which cover insurance, participation in mutual funds, future markets, contracts. Off farm strategies could address both syncretic risks, and systemic risks. These strategies are based on principle of risk sharing. As we can notice, insurance is just one tool for risk management in agriculture. It can be noticed that in most of the countries, the systemic risk is covered even partially by the state.

Agricultural insurance can be developed on a commercial basis or on a mutual basis.

The commercial insurance means that a specialized organization collects money as premiums and assumes the responsibility to compensate the loss suffered by the insured from a risk covered by insurance policy.

Mutual insurance schemes are a special case of insurance. The participants own mutual funds. In the case of a member incurring a loss, the loss will be fully or partially compensated through the collected money already available in the fund and an additional collection among participants.

When it comes to Romania's situation, the agricultural insurance market presently covers 0.91% from the total subscribed gross insurance policy. Also, the number of insurers involved in the field of agricultural insurances is relatively low, only 10 companies from 42 insurers. In TOP 5 of market share in 2008 are classified F.A.T.A Asigurari (31.03%), ASIROM (18.56%), ALLIANZ-TIRIAC (16.46%), OMNIASIG (11.02%) and ARDAF (9.63%)

As for the insurance of the crops, it covers an area of 4.3 million hectares for the 2007-2008 agricultural years, which represents approximately 45% of the plough land, or 30.5% of the agricultural area.

The causes which determined this situation are divers and take the form of the landed propriety's disintegration, the large number of non-performing autonomous producers, the abandonment of agricultural enterprises and of optimum agricultural food production facilities, the unfavorable environment factors, which have caused in the last years significant financial losses for the agricultural producers.

The agricultural insurance market needs fair products and a balance between the price of the policy paid by the insured and the risk taken by the insurer, which has been growing in the last years, especially for crops.

An important aspect is that at world-wide level, the insurance rate for crops represents approximately 4-5% from the sum insured, based on the area and on the risks undertaken in the insurance, according to the catalogues settled for the insurance conditions, which were written on the basis of technical and economical studies and of the statistics in the last 50 years.

But on the Romanian agricultural insurance market, because of the unfair and even unprofessional competition, 1-1.5% rate quotation are being practiced, which actually don't cover the acquisition and administration expenses paid by the insurer. This leads to a situation where for a damage rate of over 70% substantial losses are recorded for the insurance companies which offer agricultural insurance contracts.

Market share for Agricultural insurance in Romania<sup>118</sup>

| No.          | Company            | GROSS WRITTEN PREMIUM                  |              |              |              |              | Nominal change in EUR | Real change in RON | PAID CLAIMS  |              |              |              | Market share 2008 |
|--------------|--------------------|--|--------------|--------------|--------------|--------------|-----------------------|--------------------|--------------|--------------|--------------|--------------|-------------------|
|              |                    | Weight in the own insurance portofolio | 2008         |              | 2007         |              |                       |                    | 2008         |              | 2007         |              |                   |
|              |                    |  | EUR m.       | RON m.       | EUR m.       | RON m.       |                       |                    | EUR m.       | RON m.       | EUR m.       | RON m.       |                   |
| 1.           | F.A.T.A. Asigurări | 39,78                                  | 6,79         | 25,02        | 6,75         | 22,54        | 0,59                  | 2,93               | 4,34         | 15,97        | 4,41         | 14,7         | 31,03             |
| 2.           | ASIROM             | 2                                      | 4,06         | 14,97        | 5,09         | 17           | -20,23                | -18,38             |              |              |              |              | 18,56             |
| 3.           | ALLIANZ-ȚIRIAC     | 0,96                                   | 3,6          | 13,27        | 2,4          | 8            | 50,31                 | 53,8               | 2,28         | 8,39         | 4,8          | 16,01        | 16,46             |
| 4.           | OMNIASIG           | 0,75                                   | 2,41         | 8,89         | 1,32         | 4,41         | 82,78                 | 87,02              | 1,7          | 6,26         | 0,34         | 1,13         | 11,02             |
| 5.           | ARDAF              | 2,2                                    | 2,11         | 7,76         | 1,72         | 5,76         | 22,25                 | 25,08              | 1,83         | 6,73         | 0,36         | 1,21         | 9,63              |
| 6.           | GENERALI           | 1,15                                   | 1,31         | 4,81         | 1,31         | 4,39         | -0,65                 | 1,65               | 0,64         | 2,34         | 0,89         | 2,97         | 5,96              |
| 7.           | ASTRA              | 0,44                                   | 0,78         | 2,89         | 1            | 3,34         | -21,55                | -19,73             | 0,32         | 1,19         | 0,33         | 1,11         | 3,58              |
| 8.           | EUROINS            | 1,82                                   | 0,75         | 2,78         | 0,06         | 0,21         |                       |                    | 0,22         | 0,8          |              |              | 3,45              |
| 9.           | CARPATICA Asig.    | 0,17                                   | 0,04         | 0,15         | 0,04         | 0,12         | 14,22                 | 16,87              | 0,08         | 0,3          |              |              | 0,19              |
| 10.          | GARANTA            | 0,08                                   | 0,03         | 0,09         | 0,02         | 0,07         | 22,12                 | 24,95              |              |              |              |              | 0,12              |
| 11.          | AGRAS              | 100                                    | 0            | 0            | 0            | 0,01         | -96,25                | -96,16             |              |              |              | 0,01         |                   |
| 12.          | ASIBAN             |  |              |              | 0,33         | 1,11         |                       |                    |              |              | 0,01         | 0,04         |                   |
| 13.          | BCR Asigurări      |  |              |              | 0,24         | 0,82         |                       |                    |              |              | 0,06         | 0,22         |                   |
| <b>TOTAL</b> |                    | <b>0,91</b>                            | <b>21,88</b> | <b>80,63</b> | <b>20,28</b> | <b>67,83</b> | <b>7,83</b>           | <b>10,33</b>       | <b>11,40</b> | <b>41,98</b> | <b>11,21</b> | <b>37,40</b> | <b>100,00</b>     |

In Romania, the agricultural insurance products have known a pretty significant dynamic lately, so that, beside the classic insurance for crops and for animals have appeared products like: the optional forest insurance, the optional fowl insurance, the optional bees insurance, the optional fish insurance, the optional snails insurance, etc.

The main insurable risks for crops are usually: fire, hail, storm, rainfalls, landslides, landfalls, early autumn frost and late spring frost; while the main risks for animals are: diseases (some companies exclude infectious-contagious diseases) and accidents (including natural calamities like: storm, frost, earthquake, fire, lightning, landslide).

The money insured for crops is the value declared by the insured and accepted by the insurer, depending on the production direct technological expenses taken from the technological device on crops; or depending on the value of the estimated production, determined by multiplying the average production achievable in that area with the preliminary capitalization price, while the insured money for animals is usually the one declared by the insured, without exceeding the animal's real value.

**As we noticed, in many countries the government is involved in the agricultural insurance field, generally targeting the partial or total undertaking of the disaster risks. The same situation is in Romania. So, the insurers don't insure the disaster risks, whose regulation has been done only in 2002, once Law no. 381/2002 regarding the granting of compensations for natural calamities was issued.**

According to this law, natural calamities are the quantitative and qualitative crop losses, the death-rate and/or the necessary sticking of animals because of destructive natural phenomena and diseases on large areas.

The stimulant introduced by the law refers to the fact the compensations payment for agricultural producers, private individuals or corporate bodies, for natural disasters caused by natural phenomenon and diseases are done only for the crops, livestock, birds, bees and fish which were insured for Standard risks by the (re)insurance companies accepted by the Agriculture Ministry. Licensing the insurance companies which can make agricultural insurance is done annually by the Agriculture, Forests and Rural Development Ministry and by the Insurance Supervision Commission.

Another stipulation of the law says that in order to stimulate insurances and decrease the financial effort of the producers, the government gives subsidies for insurance rates for a value of 20%<sup>119</sup> from the one established by the (re)insurance company for cattle, as well as for the following crops: Autumn wheat for consumption and for seed; Sun-flower for consumption and for seed; Soya; Sugar beet; Noble grape-vines; Intensive meadows.

In the case of government subsidies for insurance rates, the final term for closing the insurance contracts is December 15 for crops sowed in autumn, and May 31 for crops sowed in spring and for plantations.

The same law established that compensations are granted to producers as follows:

- for crops and plantations affected by natural disasters, only for damages that go beyond 30% of the production, the maximum level of compensations is 70% of the expenses registered till the date of the disaster;
- for livestock, birds, bees and fish, the compensation represents 80% of the insurance value, diminished by the value of the resulted sub-products, which can be capitalized according to the legal regulations.

The level of the granted compensations on area units for crops and plantations affected by natural disasters, which registered damages of over 30%, is settled by applying the damage percent to the value of the expenses made until the day of the disaster, but no more than 70% of their value. The

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119 this value was increased to 50% in year 2006-2007 and starting with august 2007 was eliminated.

compensated expenses are: seed, chemical fertilizers, pesticides, mechanical and manual jobs, irrigations.

Establishing the damage percent for the affected crops is done by proportioning the production expressed in physical units, destroyed by natural disasters, with the production expressed in physical units, written on the insurance policy signed with the (re)insurance companies.

In order to set the expenses level for the affected crops and plantations, the producer must prove these jobs have been done.

Another legislative norm is the Government Emergency Decree no. 157/2002, which changes the law regarding leasing, according to which the insurance of leased agricultural goods becomes mandatory. According to this regulation, the sides of the leasing contract have the obligation to include in this contract the insurance clause for leased goods in order to recover the damages caused by natural disasters. Although the regulation doesn't stipulate a sanction for not obeying it, the risk of not complying is undertaken by the tenant farmer, together with the obligation to cover the possible damages caused by a natural calamity.

The coherent functioning of these legislations in our country hasn't been possible because of the following reasons: the tendency to underestimate the risk by the potential insurance policies buyers, or the development by the potential insured of a behavior specific to "charitable hazard", defined by the tendency of the person who is facing a risk to not turn to insurances or other ways to finance the risk, as a result of the belief he/she will receive help through emergency government programs. It's important to underline that if a big part of the people involved in agricultural activities run subsistence agriculture, the development of such behavior has been stimulated by the public authorities themselves, who, under the pressure of the population or because of political reasons, have supported both the insured citizens and the uninsured citizens after a natural calamity occurred.

The insurance method for crops that is massively subsidized by governments is expensive and arguable. Romania must avoid the introduction of traditional insurance charts for crops, which need large financial resources and (in a world with limited fiscal resources) obtain resources from risk management instruments which will be more efficient and better adjusted to the structural features of agriculture and its population.

The insurance products based on climate indexes have attractive characteristics:

- The insurance mechanisms based on indexes allow the risk's stratifying and facilitates the risks' transfers, including the CAT risks (losses with less probable important consequences) through market instruments.

- These policies eliminate many of the problems existent in traditional crops insurance (high correlated risks, asymmetric information and big transaction costs), making them more viable and less dependent on the public subsidies.

- Compensations are paid on the basis of a variable's recording at the weather stations. The basic variable mustn't be the production itself, but one of its basic indicators, like: precipitations – the most important climate indicator for agriculture, temperature; winds – especially in areas with an arid climate/semi-arid and light soils; vegetation indexes (satellite recordings); minimum requirements of solarization; powerful storms (hurricanes).

For example, the parametric insurance product based on climate indicators, through which the maize crops can be insured, will protect the three growing phases, and the index reflects the dependency that the maize production has for precipitations, from sowing to maturity.

The market of the insurances based on climate factors can support and complete the governmental measures to stimulate agricultural insurances.

In some markets the insurance industry has developed new innovative forms of risk transfer thus allowing an increase in the financial capacity of the market. Alternatives to transferring the risk to reinsurers or to the state, as insurer of last resort, include 'catastrophe bonds' (cat bonds). Cat bonds are securities that (re)insurance companies use to transfer natural catastrophe insurance risk

to institutional investors in the form of bonds. As such, they help the (re)insurer to spread the peak exposures caused by extreme natural catastrophes by transferring the risk to the capital market.

## **Conclusions**

Climate change is a global challenge. Addressing it will require an inclusive and coordinated approach across a wide range of policy areas. All members of society need to take responsibility as complacency is limiting the necessary risk reduction measures.

Insurers have expertise in the identification and analysis of risk, developing sustainable financial solutions and encouraging risk-reducing behavior by both individuals and businesses. The reinsurance industry wishes to play a full and proactive part in the climate change debate since it shares a common purpose with politicians and other stakeholders to limit the economic consequences of climate change.

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# STRATEGIC PLANNING AND PROGRAM BUDGETING IN ROMANIA RECENT DEVELOPMENTS

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*The paper emphasizes the efforts of Romanian authorities to implement program budgeting. Based on the first results, authorities decided to establish a link between strategic planning and budgeting, as a condition for implementing multi-annual budgeting. There are presented the steps toward this goal and there are made some remarks on future measures.*

*Keywords: budgeting, program, plan, outcome*

*JEL code: H61*

Program budgeting divides public expenditures by activity. Sometimes, program budgeting is officially related to a planning process where the national objectives are set and the allotment of resources is done in accordance with the necessary effort to achieve these objectives.

The program budgeting's characteristics can be synthesized as follows:

- identifying and operationally stating the objectives that must be reached on medium term (“planning”);
- stating the services' outputs which must be produced in the annual budget in order to achieve the objectives (“programming”);
- calculating the services' production costs in the annual budget, possibly followed by an adjustment of the outputs and objectives in order to comply to the deficit or budget constrains.

The program – an objective of the public policy, to which are associated the necessary means to reach it<sup>120</sup>, represents the essence of this type of budget. The budgeting based on programs has placed the emphasis explicitly on the budgetary choices between the competitor policies. While performance budgeting aimed to discover the most efficient method to achieve a certain objective, program budgeting has regarded the objectives as variables. Therefore, program budgeting strived for a connection between the program's costs and the results of the public programs. This budgeting method wanted to be an alternative to the traditional manner of making budgetary compromises, its supporters claiming that this way the decisions to allot the budget expenses will be taken in accordance to the marginal value, which can be obtained through a different use of the budget's resources.

From a political point of view, the program budgets have a great potential to allow the Parliament to analyze the political implications of the decisions regarding public expenses, because these are concentrated on generating information about the services' efficiency in connection to the formal objectives that were set for them; while from the economic point of view, because of the reasons stated above, the program budgeting represents a lead in relation to the performance budgeting.

Based on the economic theory of bureaucracy, it can be noticed the information supplied by this type of budget helps the Parliament to fairly assess the individual benefits resulted from the budgetary allotments; this generates tension in the executive branch, because this branch can't influence the information about individual benefits. Therefore, the information on effects is welcomed because, although it won't impact the productive efficiency, at least not directly, the allotments' efficiency will grow when the members of the political authorities will improve their estimations regarding the benefits.

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120 \*\*\*, Manuel de gestion des dependences publiques, Banque Mondiale, Washington D.C., 2000, pag. 22.



At the level of the central public administration, Romania has experimentally introduced in the year 2000 the program budgeting in 8 Ministries, and in 2002 this type of budgeting was extended to all the Ministries. The 2002 Law on Public Finance requires that all primary credit holders provide a report on programs as an annex to the budget. The law required that the Government, through the Ministry of Public Finance, elaborate the projects of annual budgeting laws and of the budgets. Among others, these projects were based on the programs drawn up by the primary credit holders in order to finance actions or a set of actions that are associated with accurate objectives and results indicators and efficiency indicators. The programs are accompanied by the annual assessment of each program's performances, which must set out: the actions, the associated costs, the aimed objectives, the estimated and obtained results for the coming years, measured by precise indicators, whose choosing is justified.

Thus, each program must define:

- the final purpose of the activity carried by a Ministry or a different central public entity;
- the aimed objectives, meaning the expected results that occur after running the program and which must mark a certain progress in reaching the desired goal;
- defining the program, specifying the priorities and indicating the time horizon it refers to; assessing the increasing possibilities of the efficiency/effectiveness after running the program; the financial effort needed to carry the program;
- results indicators, qualitative and quantitative indicators;
- financing the program – total financing and sources of descent.

Government approved the programs drawn up by the primary credit holders.

A few problems were encountered regarding the programs' settlement<sup>121</sup>:

- in some cases, the programs were established depending rather on the activities, than on the policies;
- in other cases, the programs were established depending rather on the finality, than on the policies.

The main indicators relating to the technical efficiency of the project were taken into account (for example, the unit cost) when evaluating the financed programs.

In 2004, each ministry had several programs. But program budgeting does not seem to be a serious requirement as there are little incentives or penalties to make credit holders take it seriously and parliament and civil society have not used the data to hold the executive to account. The 2003 Country Financial Accountability Assessment noted that line ministries needed to improve the realism and relevance of the quantitative performance indicators presented with the programs. As an answer, the Ministry of Finance has issued Order No. 1159/2004 approving the Instructions on the Content, Format and Structure of Programs. The Instructions provided guidance for line ministries in developing their budgets and they require that the line ministries evaluate the efficiency of allocations. The annexes to the budget provide the related performance indicators for the programs.

Another weakness of the system was that the programs' elaboration was supposed to consider the objectives included in a series of strategic documents (the governing programs, the national development plan, the pre- accession economic program, the documents and results of the pre-accession negotiation process), as well as the sectoral policies and strategies. The problem is that, across these various products, it is difficult to find comprehensive consistency of thought and strategic direction. The various strategic documents all derive from different processes involving different players and with different purposes—some political, some focused on EU accession and some focused on EU fund access. In reality, none is a proper strategic government-wide

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121 . C. Crăciun, P. E. Collins, Public policy management: transformations and perspectives, Polirom Publishing House, Iași, 2008, pag. 210.

framework that gives unequivocal direction to the Romanian people and public sector about what the government intends to achieve.

Government didn't have or had too few mechanisms to ensure the following:

- the revision of the political commitments that are planned or already exist in the mentioned strategic documents through the new information tied to the macro-fiscal framework;
- the revision of the planned or already existent public policies in light of decisions to follow other goals of policies rather than the ones in the documents mentioned above;
- identifying the degree in which different aspects of the existent set of policies can be put into practice on medium term, therefore the degree in which the time running and the implementation details of some policies must be changed;
- the actual testing of the viability for the current public policies options through a process of strategic planning which will give information about the impact and probability of their successful implementation.

The lack of clear policy direction in these documents is in large part a result of the fragmented processes by which policy is developed. Until 2005, Romania had more than 130 inter-ministerial committees or task forces working on different policy issues and generating their own policy products. There was no strong central policy "channeling" mechanism in the Cabinet responsible for issuing clear high-level directives and then ensuring that policy proposals all related to these, and that they were reflected in the budget. The fragmented process also results in Cabinet officials (like ministers) becoming involved in detailed aspects of policy delivery (typically the purview of delegated agencies like line ministries). This also led to the introduction of a significant number of policy products (including passing of new laws) that were not disciplined by a policy framework, or costed. In a number of cases, these resulted in unfunded mandates, sometimes introduced for implementation within a specific budget period (requiring significant funds movements, which undermined the value of the formulated budget).

Aware of its policy-making weaknesses, Romania's government has pursued various reforms in the past few years. These include organizational changes across and within ministries, with the most central involving the dismantling the over 130 Cabinet Committees and Task Forces and establishing eleven permanent Inter-Ministerial Councils (IMCs), which mirror structures at the European level (European Council of Ministers).

An important role in the public policies process is played by the Strategic Planning Council, which has the following main tasks:

- sets and coordinates the priorities derived from strategic documents in order to achieve the objectives of the Government in partnership with the resort ministries;
- correlates the governmental policies with the commitments and conditions undertaken by the Cabinet in relation with international organizations;
- makes the multi-annual programming of the fundamental strategic priorities and corroborates them with the medium-term programs budgeting;
- correlates the policies which are about to be implemented with the budget funds allotted on short and medium term.

A sequel of this measure was the drawing up in 2006 of the Strategy of improvement the elaboration, coordination and planning system of the public policies at the level of central public administration. The strategic planning within the central public administration is seen as an action that reunites in a single management framework such aspects as: public policies planning, budget drafting, establishing the priorities and the organizational planning.

According to the strategy, the strategic planning in Romania is introduced in two stages.

In the first stage, the management component of the strategic plans was prepared. Its content targets the following aspects: the institutions' mandate, its vision, joint values, the analysis of the internal and external environment, the medium-term priorities and the activity directions. The Minister who is in charge of referred to Ministry will approve the final draft of the management

component of the Institution's Strategic Plan. Before signing the final draft of the Strategic Plan, this must be assented at the level of all the ministries and must be presented within the Government's preliminary work meeting. This will insure that the way in which these norms are imposed by the methodology is kept trace of, as well as an exchange of good practice between the ministries.

For the trans-sectoral policies, the management components from the strategic plans of the ministries must be conformed through the inter-ministry permanent councils. The councils have an advisory role, and their involvement will insure the coordination of the activities that take place in different ministries that have distinct tasks within a political segment. This will lead to the avoidance of their overlapping regarding functions and activities.

At the end, after all the conforming procedures are applied, the updated and improved draft of the Strategic Plan will be adopted by the government, as well as the public policies documents or other projects for normative documents.

The solicitation that the line ministries present within a matrix with 9 columns information regarding the ministries' policies, objectives, expected results, beneficiaries, current status (related to the public policies), activities of the reform programs and budgetary implications and risks was simultaneously introduced in 2006 for the budget of the year 2007.

The second stage took into account the program budgeting component, which will insure the necessary connection between the public policies planning processes and the processes regarding the preparation of the budget.

The methodology regarding the strategic planning system on medium term for the central public administration institutions mentions that the Finance Ministry will include in the annual methodology of the budget elaboration instructions about the necessity to establish a clear connection between the public policies and the priorities in the Strategic Plans of the credit holders, on one hand, and the budgetary allotments, on the other hand.

The strategic plan plays the role of an instrument that promotes coherent public policies, insures quality and the right justification of the budgetary programs and backs up the main public policies to be financed.

Introducing the strategic planning system also creates the premises for a clear, coherent and well-argued competition regarding the financing of the additional initiatives of the resort ministries (mechanism for the financing of the public policies which are initiated after the budget is approved).

In accordance with the strategic planning methodology – the program budgetary component, each program described by Strategic Plan must correspond to a program that is really included in the yearly law of the state budget. In case the ministry which creates a new budgetary program or sub-programme during the elaboration of the budgetary programming component, this will appear within the strategic plan, and afterwards is undertaken in the documents needed to draw up the budget. PSI will be updated after the passing of the budget by the Parliament.

For the drawing up of this component of the strategic plan, for each budgetary program will be presented the following: the analysis of the current state, the objective of the budgetary program, the performance results and indicators, the new financing initiatives, the implementation mechanisms and the main tasks, as well as the program's financing.

Based on the diagnosis of the current situation, the objective (objectives) that must be achieved on medium term is set by putting into practice the referred to budgetary program. The clarity in expressing the objective/objectives is essential for the success of a program's implementation, allowing the targeted allotment of the budgetary resources. In many situations, establishing the objective actually represents the solution to a major problem.

These objectives should be defined SMART: Specific, Measurable, Achievable, Relevant and Timed.

The performance results and indicators must be defined in close relation with the program's objective. The results of the program can be divided in two categories:

- the outcomes of the public policy – which describe in a measurable manner the changes that occurred in the economic, cultural and social environment. These represent the long-term impact generated by the results obtained in a different time period. Afterwards, the policy's results allow the decision factors and the society to evaluate the degree in which the objectives were achieved during the implementation step or after;
- the outcomes of the actions – which are services or products supplied by an institution depending on its goal and for which the institution is totally responsible.

The outcomes of the public policy and the outcomes of the actions must have a series of features in order to be useful in the budgetary planning process:

Therefore, the outcomes of the public policies are<sup>122</sup>:

- should adequately reflect the government's objectives and priorities;
- should be indicated by the impact on the community;
- should be differentiated from the agency's strategies to which they contribute;
- should clearly identify target groups, if so focused;
- should be achievable in the specified time frame;
- should be possible to monitor and assess the achievement of the outcome;
- should be possible to identify the causal link between agency's output and the outcome;
- should have clarity in definition and description to be easily reported externally.

The outcomes of the actions are:

- should be a good or service provided to individuals/organizations external to the agency;
- should be able to be clearly identified and described;
- should be for final use and not for an internal process or intermediate output;
- should contribute to achievement of planned outcomes;
- should be under the control (directly or indirectly) of the agency;
- should be able to generate information on attributes of performance – price, quantity and quality.
- should generate information that is a basis for performance comparisons over time or with other actual or potential providers.

The performance indicators are measurable factors that show the degree in which the results were reached. The indicators must be drawn up based on the existent statistics. The results' achievement level can be tested with the help of a limited number of indicators. It is not necessary to elaborate more indicators based on expensive sampling methods for data if there is a possibility to get the same results with less effort.

All the results of the policy and of the actions must be in close relation with the results established in the public policies documents. If there is no policy document for that respective area, then the policies' and actions' results and the performance indicators must be enunciated during the drawing up of the program budgeting.

The "new financing initiatives" section of the program budgeting description gives information about all the initiatives which need additional financing from the budget, suggested by a ministry and the subordinated institutions. This section gives an abstract of the ministry's recommendations (and of the subordinated institutions) that can be accomplished by allotting additional fund in order to improve the services supplied to the society or to increase the institutional capacity. The New Financing Initiatives (NFI) include the sums needed in addition to the ones stipulated in that budgetary program for the previous year and surfaced as a result of the Government's approval of the public policy documents or of the normative documents subsequent to the budget's approval.

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122 J. Diamond, Establishing a Performance Management Framework for Government, IMF Working Paper, pag. 11.

The “programme financing” section includes only numbers and presents the financial results allotted to implement that budgetary program, as well as reaching the established objectives and purposes and obtaining the results of the planned policy and action. This is the most practical part of the program budgeting, which shows the actual sums included in the annual law of the state budget. The progression of the budgetary execution for the previous year are also presented, as well as the approved budget for the current fiscal year and a two year projection based on the macroeconomic and fiscal policy framework written by the Economy and Finance Ministry.

The goal of this section of the description is to show all the financial resources allotted by the Government and Parliament (including external help and other types of incomes) for the implementation of the specific governmental policies that are the subject of the particular budgetary program, as well as the recouped presentation of the due expenses.

The worldwide economic-financial crises that affected Romania has lead to slowing down the putting into practice of these measures.

Based on the stipulated measure, the executive pursued to integrate the budget in the strategic planning system. Thus, depending on the information and data included in the program budgeting component, the Ministry of Public Finance strives to prepare the public expenses framework on medium term, but also the sectoral ceilings for the annual budget. Furthermore, in the ministries’ budget projects sent to the Ministry of Public Finance must be drawn up according to the budget programming component.

These actions represent essential elements for the introduction of the multi-annual budgeting, which is an important mechanism for the insurance of the economic stability.

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# L'AMÉLIORE DE STRUCTURE DES SITUATIONS FINANCIÈRES EN REGARD LA CROISSANCE L'UTILITÉ ET LA QUALITÉ DES INFORMATIONS FOURNIES PAR LES

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*Accounting represents a technique applied for the collection, integration and interpretation of the information given by economical fluctuations.*

*Provided it is in users' service, it must be neutral in order to give unbiased answers to all parties interested in the institution's functioning and results.*

*As a result of the correlation among necessity, complexity, comparability of the data presented through the set of financial situations, an updating was initiated.*

*This updating was carried out through the Order of the Ministry of Public Finance no. 629/2009 for the approval of the Methodological Norms regarding the inditement and depositing of public institutions' trimestrial financial situations, as well as the 2009 monthly financial report.*

*Key concepts*

*Comparability, correlation, information, set of financial situations, necessity, reorganization*

Comptabilité est une technique visant la collecte, prelucration et l'interprétation d'information des fluxes économique.

En étant au service des utilisateurs, elle doit être neutre, pour répondre objectif à toutes ces partes intéressés, de la bonne fonction et des résultats d'organisation.

Aujourd'hui, les institutions publiques préparé et présente des situation financiers qui illustrent l'activité tenu et leur situation à un moment précise, pour les différents utilisateurs internes et externes tout les deux.

Les situations financière en regardant la station sont préparés a un moment spécifie en temps, et la situation regardant le flux couvrir une période de temps.

*D'entre les situations financières établie des institutions publique, le bilan est une situation d'état. Ca offre des informations lie au ressources qui se trouve dans un instution à un moment précis dans le temps, des situations telles que "Compte de profit et dette" au la situation les « Fluxes de trésorerie » caractérisée situation de flux. Cette rapporte l'activité des les institutions publique qui ont placer au long d'une période de temps. (trimestre, semestre, un année). Au cours de l'année 2006 a été passé à la comptabilité d' engagements, par défaut aété fait adaptant la situation financière.*

**Après la restructuration de la relation entre le besoin, la complexité, la comparabilité des informations par la groupe de situation financière, a été procédée au actualisation des cette.**

Cette actualisation avait mise par adoption d'arrêté du ministre des Finances publique nr.629/2009, pour la normes méthodologiques sur la préparation et la présentation des situation financières trimestrielles des institutions publiques, comme et d'autres rapports financières mensuelles en 2009.

Dans ce qui suivantes se présentera principaux modalités de réalisée.

*Directions de changement*

A)Par detailie des comptes sur les comptes de synthèse grade II dans regardant d'actualisation la qualité et à accroître l'exactitude des informations présentées dans certains postes du bilan.

*Groupe active non courantes*

L'informations qui regardent la division sur les périodes, d'actifs financiers a été améliorée par la suivant réorganisation:

Le contenu de file 07 « Les actifs financiers non courant (investissement à long terme) plus d'un année » des actuelle formulaire de Bilan l'Annexe 1 varie envers le contenu de l'entête du fichier. 05 Actifs financiers non courant (investissement à long terme) plus d'une année parmi des précédent formulaire de Bilan l'Annexe 1 par détaille du compte 267 « Les créances immobilisées » nécessaires en scope d'une fidèle refléter par périodes connexes, au cettas ( dans quelle se trouve seulement la valeur uniquement pour les périodes suivantes.)

Valeur des créances immobilisées connexes au : année en cours / maintenant en cours, se retrouver détaille dans nouveaux file introduit no. 27 « Emprunts à court terme étant donné » du la formulaire actuelle du Bilan l'Annexe 1

La détaille de valeur nette des 'Fonds de participation' est reflétée dans file no 08 du la formulaire actuelle du Bilan l'Annexe 1, qui est une parte de la précédent file .

File no. 05 des 'Les actifs financiers non courant (investissements à long terme)' du la formulaire actuelle du Bilan l'Annexe 1 = *File 07 « Les actifs financiers non courant (investissements à long terme) » du la formulaire actuelle du Bilan l'Annexe 1 que dans le strict respect de la bonne détaille du compte 267 »Créances Immobilisé »* .

Reflétant créances non courantes a été adaptée à la réalité en modifiant le contenu de file 09 – « Créances non courant » - des sommes qui doit être encaissé, après une période de plus d'un an, du la formulaire actuelle du Bilan l'Annexe 1, varie d'ancien poste de bilan des antérieure formulaire du Bilan Annexe 1 par l'introduction de compte 4118 « Les clients en litige ou incertaine ». L' Informations en regard exclusive les créances commerciale non courantes sont présente dans file 10- 'Créances commerciales non courant' - les montants encaissés à l'issue d'une période de plus d'un année actuelle formulaire bilan l'annexe 1, mais pas le compte 4282 – 'Les autres créances en relatives au personnel'. Cette créance est à l' en contre du personnel et n'est pas considéré comme une activité commerciale.

### ***Groupe courante active***

S' enregistrez un changement de mode dans qui se regarde intérêt de recette comme suit.

Le contenu de file no. 21 – « Créances sur les opérations commerciales, avances et les autres' établissements » des actuelle formulaire de Bilan l'Annexe 1 diffèrent de contenu de file no.10 - de « Créances commerciales et avances », des la forme actuelle du formulaire Bilan l'annexe 1, modifie par ajoutant compte 5128 – 'Comptes de clearing, barter et de la coopération économique' et le déplacement du compte 5187- 'Intérêts à recevoir', au file de disponible.

*Les files avec caractère de subdivision du poste bilanciel en regardant les créances, les avances et autres établissements*

Actuellement, dans cadre des créances commerciale se trouve/comprennent aussi les avances, donc dans le contenu de file no 22 'Les créances commerciale et les avances', des actuelle formulaire de Bilan l'Annexe 1 par ajoutant (compte 232 'Avances accordées pour immobilisations corporelles' et compte 234 'Avances accordée pour immobilisations incorporelles' et compte 409' Fournisseurs de soins')

***En mettant en évidence des créances budgétaire le contenu de file no 23 « Créances budgétaire » des actuel formulaire de Bilan l'annexe 1 diffère de contenu du file no.11 « Créances budgétaire » des précédent formulaire de Bilan l'Annexe 1 après plusieurs opérations :***

-par ajout suivantes comptes 4669 « Créances du budget de trésorerie d' état » et compte 481 'Règlement entre les établissements supérieurs de l'institution et les institutions subordonnées », et compte 482"Règlement entre les institutions subordonnées"

-et le déplacement suivantes comptes : 4681 » Les prêts accordés en vertu de la loi du budget de l'Etat » Et compte 4682 » Les prêts accordés en vertu de la loi du budget local « et compte 4684

« Les prêts accordés en vertu de la loi de la trésorerie » et compte 4687 « Les montants accordés du fonds de roulement adéquat loi » et compte 469 « Les intérêts relatifs aux prêts accordés à court terme », dans file no 27 prêts à court terme accordés des actuelle formulaire de Bilan l'Annexe 1, nouveau poste du bilan

Le contenu de file no. 24 « Les dettes du budget général » des actuelle formulaire de Bilan l'Annexe 1, diffère du contenu de file no. 11 bis « Les dettes du budget général » des précédent formulaire de Bilan l'Annexe 1 en ajoutant du compte 4669 « Les créances de l'Etat du budget de trésorerie » et l'élimination de compte 461 « Les débiteurs ».

Le contenu de file no25 « Créances sur les opérations avec des fonds l'étranger des subventions et des fonds provenant du budget » des actuelle formulaire de Bilan l'Annexe 1 diffère le contenu de file no. 11 « Créances d'exploitation », en ajoutant les comptes suivants 450+4507 +.4571 être approuvé par un arrêté du ministre des finances publiques.

*Les files avec caractère de subdivision du poste bilanciel, en regardant les dettes non courantes*

Dans ce moment au cadre des dettes non courantes se contenant les avances, comme suit : file no.52 « Montants non courant - montants qui se payer d'après une période plus d'un année », des actuelle formulaire de Bilan l'Annexe 1 a en plus de file no.24 « Montants non courant de payer », des précédent formulaire de Bilan l'Annexe 1 compte.401 « Fournisseurs ».

*Compte. 401 « Fournisseurs » a été introduit pour tenir compte de la possibilité d'observer, l'exécution des contrats avec la date de règlement dans l'exercice suivant et pour les autres catégories de biens et de services que les investissements.*

Ces comptes ont été introduit pour respecte la possibilité des contrats de performance et avec l'autre modes de règlement. reflète plus dans la file no.53 « La dette commerciale » des actuelle formulaire de Bilan l'Annexe 1 suivantes comptes :401 « Fournisseurs », 403 « Effets de payer », 405 « Effets de payer pour immobilisations ».

File no.54 « Prêts à long terme » des actuelle formulaire de Bilan l'Annexe 1, reflète compte.166 en manière détaille sur le suivantes comptes : 1661, t.1662, par rapport avec le file no.25 « Prêts à long terme » des précédent formulaire de Bilan l'Annexe 1 avec lequel est l'équivalent.

*La groupe des dettes non courantes, montants qui ont payer d'après une période plus d'un anne.*

Le contenu du file no. 60 « Dette commerciale, les avances et les autres établissements » des actuelle formulaire de Bilan l'Annexe 1, diffère de le contenu de file no. 29 « Dette commerciale et avances » des précédent formulaire de Bilan l'Annexe 1 en ajoutant de comptes 509 « Paiements à effectuer pour les placements à court terme », 5128 « Comptes de clearing, barter et coopération économique ».

### **Les files avec caractère de subdivision du poste bilanciel en regardant les dettes courantes**

Le contenu de file no.61 « Créances commerciales, et avances » des actuelle formulaire de Bilan l'Annexe 1, diffèrent de le contenu de file no. 29 bis « Dette commerciale » des précédent formulaire de Bilan l'Annexe 1 en ajoutant du compte 419 « Clients créditeurs ».

Couverture de la dettes d'opérations avec des fonds extérieures subventions et des fonds du budget, autres dettes envers d'autres organismes internationaux reflété dans le contenu file no. 65 des actuelle formulaire de Bilan l'Annexe 1 est enrichie par rapport de l' image similaires offert par le file no.31 « Dette à la Communauté européenne » des précédent formulaire de Bilan l'Annexe 1 en ajoutant comptes 4546+ 4585+ 459+ 462 +475 qui doit être approuvé par un arrêté du ministre et compte 462 « Les créanciers de ce type d'activité ».

*La groupe Prêts à long terme / court - montants qui ont payer dans une période jusque un anne.*

Le contenu de file. No. 70 « Prêts à court terme -les montants payables au cours d'une période plus d'un année » à partir des actuelle formulaire de Bilan l'Annexe 1, diffère de contenu de file no. 32 « Prêts à court terme - les montants à payer dans une période jusque un année » des précédent formulaire de Bilan l'Annexe 1 ajute par compte 5193 « Dépôts ».



Le contenu de file no. 71 « Prêts à long terme » - des montants à payer au cours de l'année à partir de l'actuelle formule de Bilan l'annexe 1 diffère de file précédente avec le même rôle, en ajoutant du compte 1661 « Les montants reçus pour couvrir le déficit budgétaire de l'État d'assurance sociale des comptes de trésorerie générale de l'Etat », et compte 1662 « Les montants reçus pour couvrir le déficit du budget de l'État ».

*Traitement des questions porter sur l'aspectes spéciales, nouveaux groupes, comparer d'autres valeurs de principe*

a) groupes nouveaux

*Afin de refléter exact de prêts à court et à long terme échéance à court terme. a été fondé un nouveau groupe, dans le file no. 27-« Prêts à court terme » des l'actuelle formule de Bilan l'Annexe 1. En ligne no.27 » Prêts « - par détail du comptes 267 » Les créances immobilisées », 468 « Prêts à court terme le droit », 469 « Les intérêts liés aux prêts à court terme » qui ont été détaillé au file no.05, 11, 11 bis des précédent formulaire de Bilan l'Annexe 1. Une autre Nouveau groupe créé est qui résulte par détail au cadre du file no. 41 » Comptes des disponibilités de Trésorerie centrale » des l'actuelle formule de Bilan l'Annexe 1 par détail le compte de disponibilité connexes au activités du Trésorerie Centrale, qui est utilisé exclusivement par cette institution.*

b) Autre principe retenu dans la comparaison des données

Le contenu de file no.33 « Comptes du Trésor, la maison, l'autre valeurs, des avances de trésorerie », des l'actuelle formule de Bilan l'Annexe 1, diffèrent de contenu du file no.15 « Comptes de trésorerie, la maison, l'autre valeurs, des avances de trésorerie », des précédent formulaire de Bilan l'Annexe 1, par suivants changement : compte 5187 « Intérêts à recevoir » (que la valeur comparative est tel accrual ne se comparant pas le cash) et remplacement du compte 524, qui est remplacé avec le compte 5294, qui a lequel a été rebaptisée.

*Les institutions publiques (le departamentes du municipalité de Bucarest) qui ont utilisé le compte 524 "Disponible des recette ment pour le budget de capitale, pour évidence des montantes recette ment conforme la loi, représentant les revenus du budget local de la capitale , renversement l'opérations respectives immatriculés entre le 1er Janvier 31 Mars 2009 à partir de ce compte, et enregistré en compte 5294 avec le même nom.*

Similar dans bilan position se reflétant des dépôts connexes au comptes ouverts au Trésor ainsi, contenu du file no.33 « Dépôts » des l'actuelle formule de Bilan l'Annexe 1, diffère de contenu de file 15 « Dépôts » des précédent formulaire de Bilan l'Annexe 1, par ajoutant de suivent compte 5187 « Intérêts à recevoir » ainsi, la valeur vise étant la cible accrual, non cette cash.

A la suite de la nouvelle tendance et la reflètent des comptes au l'institution de crédit (non) résident par le biais du file no. 35 « Comptes au établissements de crédit, la maison, des avances de trésorerie » des formulaire actuel diffère du contenu de file no. 17 « Comptes au banques commerciales » des précédent formulaire de Bilan l'Annexe 1 en ajoutant des suivants comptes 5187« Intérêts à recevoir », 5171 « Disponible en ron des prêts garantis par les autorités locales », 542 « Avances de Trésorerie », et détaille suivants comptes 560 « Disponible d établissements publics financés par des recettes propres » 5601 « Disponible courant» -5602 « Dépôts des établissements publics financés par des recettes propres » .

De même mode, pour la file no. 36 « Des Dépôts » des l'actuelle formule de Bilan l'Annexe 1 contenu de ce diffère de contenu de file no. 18 «Des Dépôts » des précédent formulaire de Bilan l'Annexe 1, en ajoutant les comptes suivants 5187 Intérêts à recevoir (telle, la comparaison entre la valeur d'engagements et valeur cash), 5602 » Dépôt des établissements publics financés par des recettes propres » reflète au file de dépôts.

Le contenu de file no. 62 « Les dettes à des budgets » des l'actuelle formule de Bilan l'Annexe 1 le bilan diffèrent de contenu de file no.30 « Dettes au budgets » des précédent formulaire de Bilan l'Annexe 1 en ajoutant le comptes suivants 431« Assurance sociale » 437 « Assurance pour

chômage », 473 « Règlement des effectuées dans le cadre de la clarification compte », 481 « Institution de règlement entre les établissements supérieurs et subordonnés », 482 « Établissements entre les institutions subordonnées », 4679 « Les créanciers de l'état du budget de trésorerie », 4555 qui doit être approuvé par arrêté du ministre des Finances.

La valeur d'un tel résultat comprend de la valeur des cotisations des employés pour le budget de l'état et l'assurance sociale lequel s'évidencie dans précédente formulaire de bilan, au cadre du file no.34 représentant les salaires et les cotisations des employés.

*Aussi dans ce lieu s'évidencie le :*

*-des montant en course de clarification, conexas , en spécial les paiements effectués au compte unique.*

*-les montants représente de règlement entre les unités ainsi au hauteur ainsi et sur horizontal après le transfert de transmission des montants entre ces.*

Les informations présentées dans au contenu de file no. 62 « Passif » au budgets des actuel formulaire de bilan annexe 1 ont été détail au file 63 « Dettes d'institution publique au budgets » ad file no.64 « Les montants dus au budgets des Autres fonds de la subvention » sous la même formulaire.

Le contenu de file no. 72 « Salaires des employés » des actuelle formulaire de Bilan l'Annexe 1, diffère de file no. 34 « Salaires des employés et de contributions , connexes», des précédent formulaire de Bilan l'Annexe 1, par détail du comptes suivants: 426 « Droit de personnels reportés », 427 « Perte de salaire et autres prestations due à des tiers » qui sont énoncés seulement dans la file no. 34 « Salaires d'employés et les contributions connexes » des précédent formulaire de Bilan l'Annexe 1, et maintenant se retrouvé ainsi dans file no. 72 « Salaires des employés » des actuelle formulaire de Bilan l'Annexe 1, autant au file no. 73 « Autre droits dues à d'autres catégories de personnes » (pensions, allocations de chômage, les bourses d'études) des actuelle formulaire de Bilan l'Annexe 1.,

Supressand l' évidence de cotisations des employés et. autres dette sociale, ainisi les comptes 431 « Assurance sociale », 437 « Assurance pour chômage » sont est actuellement se reflète ainsi seulement dans le contenu de file no. 62 « Dettes au budgets » des actuelle formulaire de Bilan l'Annexe 1

- Compte 438 « Autres passifs sociale » qui se reflète dans file no.34 « Salaires des employés et contributions connexes » des précédent formulaire de Bilan l'Annexe 1, se retrouvé maintenant dans le file no.73 « Autre droits dues à d'autres catégories de personnes » (pensions, allocations de chômage, les bourses d'études) des actuelle formulaire de Bilan l'Annexe 1.

Il convient la nécessité d'une spécifications, ainsi que les informations présentées mentionner « dont » , au moment de quantification de cette il doivent de résultat un montant moins au plus égal, avec laquelle des file de qui sont extraits

*Modification et completion dans le cadre d'autres formulaires des situations financières comme :*

*a) Dans cadre des fluxes de trésorerie*

En sol d'annexe connexes au comptes ouverts au Trésorie, s' indiqué encore, la detailie sur les colonnes pour les comptes de financement en fonction de mode la réalisation de ses, colonne 3 compte 7701 « Financement de la budget de l'Etat », colonne 4 compte 7702 « Le financement par les budgets locaux », colonne 6 compte 7704 " Le financement de la le budget de l'assurance-chômage », colonne 7 compte 7705 "Le financement du Fonds national unique d'assurance de sante ». Au compte 770 solde est calculé comme la différence entre les paiements effectués et les recettes et reflète le total de paiements nets par caisse, contrairement au mode de calcul au disponible propre, la detailie du colonne no.8 et suivante " compte de disponibilité: (5xx) des Situation des fluxes de trésorerie annexe no. 3

Dans le cas où les flux de la trésorerie annexe no. 4, connexe au compte ouvert aux institutions bancaires se distinguent de la détail des différences de change, comme suit: Les différences de cours de change favorable, dans le file no 15, Les différences de cours de change défavorable dans le file no 16, et leur inclusion dans le file no 17 « Monnaie et l'équivalent en espèces à la fin de la période » (file 13+14 +15-16).

Se remarque la nécessité d'une indication en regardant le mode de comptabilisation des files en regardant la différence de cours valulaire, ici franchissant exclusive la valeur de la réévaluation de disponibilités valulaire/ en valute au fin de période.

#### *b)Accounts d'exécution*

Pour les comptes d'exécution, respectivement -dépenses on a introduit une colonne avec le sens des crédits de l'engagement. Aussi dans les comptes de l'exécution-dépenses ont introduit de nouveaux titres, la où ont enregistré les changements de classificateurs budgétaire.

#### *Restructuration (modifie et completaire)*

Annexes 40 « SITUATION d' actifs financiers et les dettes des établissements publics de

L'ADMINISTRATION xxxx ou date de ... ..», , enregistre des changements majeurs, ainsi ont introduit la colonne de solde initial, ca encore avec le colonne de solde final, *cette collaboration avec le solde en corrélation avec le bilan.Elles ensemble se corréle avec le bilan.* Alors maintenant, l'annexe 40 se corrélaire pour le disponibilités en basée accrual avec bilan, non pas en basée cash comme dans la versions précédentes, cette corrélation est faite maintenant avec l'état des flux de trésorerie, distincts annexes 3 et 4 selon le type d'unité de la banque qui effectue le tiquer des montants, existant dans disponibles.

Cette annexe(40) avec les variantes en fonction de secteur au qui s' applique, se corréle avec Annexe 30 « RESTE A PAYER » sur les files, qui refelecte arriérés.

Que est que convient de mentionner est la simplification de ce dernier, s'en renonçant au collone symbolisent solde initial..

#### ***Recommandation***

Il convient de mentionner la nécessité d'une claire détermination de la soldes initiales, par prendre le solde final de l'équilibre, pour obtenir des formulaires exactement complète.

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# ANALYSIS AND CLASSIFICATION OF EUROPEAN SMES USING THE FINANCIAL CRITERIA ESTABLISHED BY THE “NEW SME DEFINITION”

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*Key words: SME, financing, micro, small and medium enterprises, European Union, SME classification, autonomous, partner, linked enterprises*

*The article's JEL codes: G38, F00, F02*

*In order to enhance the general economic development and to improve the competitiveness of the SME's was established a common definition of the SME's. The new definition of SME's is an important tool for implementing efficient measures and European and national financing programmes to support the development and success of SMEs. The category of micro, small and medium-sized enterprises (SMEs) is made up of enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding 50 million euro, and/or an annual balance sheet total not exceeding 43 million euro. To check if an entity is an SME the first step is to verify if it is an enterprise and if it fits to the following three criteria (ceilings): staff headcount, annual turnover and annual balance sheet. Other classification of SMEs is based on their relationships with other enterprises. Based on this they can be autonomous, partner or linked enterprises.*

## **1. Introduction**

As Gunther Verheugen, Member of the European Commission, Responsible for Enterprise and Industry, declared at the establishment of the new SME definition: “Micro, small and medium-sized enterprises (SMEs) are the engine of the European economy. They are an essential source of jobs, create entrepreneurial spirit and innovation in the EU and are thus crucial for fostering competitiveness and employment”<sup>123</sup>. The European Union board of statistics counts around 25 millions SMEs in all the 25 member states, which is representing around 99% of all EU companies, providing 75 million jobs. In order to enhance the general economic development and to improve the competitiveness of the SME's was established a common definition of the SME's and were created special financing programs both at the level of the European Union and at the level of the national governments.

The definition of SME was established by the “Commission Recommendation 2003/361/EC of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises” and was published in the in the *Official Journal of the European Union* L 124, p. 36 of 20 May 2003 and is the sole authentic basis for determining the conditions regarding qualification as an SME. As presented in the Recommendation 2003/361/EC, the category of micro, small and medium-sized enterprises (SMEs) is made up of enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding 50 million euro, and/or an annual balance sheet total not exceeding 43 million euro.

Micro, small and medium-sized enterprises (SMEs) play a central role in the European economy. They are a major source of entrepreneurial skills, innovation and employment. However, they are often confronted with market imperfections. SMEs frequently have difficulties in obtaining capital or credit, particularly in the early start-up phase. Their restricted resources may also reduce access to new technologies or innovation. Therefore, support for SMEs is one of the European Commission's priorities for economic growth, job creation and economic and social cohesion.

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<sup>123</sup> Extract from the declaration of Gunther Verheugen, Member of the European Commission Responsible for Enterprise and Industry, at the establishment of the New SME Definition.

## **2. The new SME definition**

In a single market with no internal frontiers, it is essential that measures in favour of SMEs are based on a common definition to improve their consistency and effectiveness, and to limit distortions of competition. This is all the more necessary given the extensive interaction between national and EU measures to help SMEs in areas such as regional development and research funding. In 1996, a recommendation establishing a first common SME definition was adopted by the Commission<sup>124</sup>.

This definition has been widely applied throughout the European Union. On 6 May 2003, the Commission adopted a new recommendation<sup>125</sup> in order to take account of economic developments since 1996. It entered into force on 1 January 2005 and will apply to all the policies, programmes and measures that the Commission operates for SMEs. As mentioned in the *“The New SME Definition – User Guide and Model Declaration”*, for Member States use of the definition is voluntary, but the Commission is inviting them, together with the European Investment Bank and the European Investment Fund to apply it as widely as possible.

According to the European Office of Statistics the average European enterprise employs no more than six people, so most of the enterprises can be considered as SMEs. However, the new definition takes into account possible relationships with other enterprises. In certain cases, those relationships, particularly if they create significant financial links with other enterprises, may imply that an enterprise is not an SME. This is the only way to ensure that only enterprises which genuinely require support are targeted by public schemes.

For this reason, it introduces methods to calculate the staff and financial thresholds to gain a more realistic picture of the economic situation of an enterprise. A distinction has been introduced between different types of enterprises: autonomous, partner and linked.

As mentioned above the Article 2 of the Annex of Recommendation 2003/361/EC considers that “The category of micro, small and medium-sized enterprises (SMEs) is made up of enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding 50 million euro, and/or an annual balance sheet total not exceeding 43 million euro.” The first step to qualify as an SME is to be considered as an enterprise. According to the new definition, an enterprise is “any entity engaged in an economic activity, irrespective of its legal form”. By being formally included in the recommendation, the scope of the new SME definition is now clearly marked out. Thus, the self-employed, family firms, partnerships and associations regularly engaged in an economic activity may be considered as enterprises.<sup>126</sup>

## **3. SMEs categories based on their headcount and annual financial data**

In order to check if an entity is an SME the first step is to verify if it is an enterprise. Further it must be established the data of the analyzed enterprise according to the following three criteria: staff headcount, annual turnover and annual balance sheet.

Comparing the data of the analyzed company with the thresholds for the three criteria will allow determining whether the company is a micro, small or medium-sized enterprise. It is necessary to note that while it is compulsory to respect the staff headcount thresholds, an SME may choose to meet either the turnover or balance sheet ceiling. The new definition offers this choice since, by their nature, enterprises in the trade and distribution sectors, have higher turnover figures than those in manufacturing. Providing an option between this criterion and the balance sheet total, which reflects the overall wealth of an enterprise, ensures that SMEs engaged in different types

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124 Commission Recommendation 96/280/EC of 3 April 1996 concerning the definition of small and medium-sized enterprises (Text with EEA relevance), Official Journal L 107, p. 4-9, of 30 April 1996

125 Commission Recommendation 2003/361/EC of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises (Text with EEA relevance), Official Journal L 124, p. 36-41, of 20 May 2003.

126 “The New SME Definition – User Guide and Model Declaration”, p12

of economic activity are treated fairly. The distribution of the companies in the micro, small or medium-sized enterprises categories is presented in the figure no. 1 below:

| Enterprise category | Headcount: Annual Work Unit (AWU) | Annual turnover                          | or | Annual balance sheet total               |
|---------------------|-----------------------------------|--|----|--|
| Medium-sized        | < 250                             | ≤ €50 million<br>(in 1996 € 40 million)  | or | ≤ €43 million<br>(in 1996 € 27 million)  |
| Small               | < 50                              | ≤ €10 million<br>(in 1996 € 7 million)   | or | ≤ €10 million<br>(in 1996 €5 million)    |
| Micro               | < 10                              | ≤ €2 million<br>(previously not defined) | or | ≤ €2 million<br>(previously not defined) |

Figure 1. Categories of SMEs according to the new thresholds

(Extract from “*The New SME Definition – User Guide and Model Declaration*”, p. 14)

The **staff headcount** is a crucial initial criterion for determining in which category an SME falls. It covers full-time, part-time and seasonal staff and includes the following:

- Employees, persons working for the enterprise being subordinated to it and considered to be employees under national law,
- Owner-managers, partners engaged in a regular activity in the enterprise and benefiting from financial advantages from the enterprise.

The staff headcount is expressed in annual work units (AWU). Anyone who worked full-time within an enterprise, or on its behalf, during the entire reference year counts as one unit. The part-time staff, seasonal workers and those who did not work the full year are treated as fractions of one unit. As mentioned in the User Guide **the annual turnover** is determined by calculating the income that the enterprise received during the year in question from its sales and services after any rebates have been paid out. Turnover should not include value added tax (VAT) or other indirect taxes<sup>127</sup>. The **annual balance sheet** total refers to the value of the company’s main assets<sup>128</sup>.

#### 4. Categories of SME’s based on their relations with other enterprises

The main categories of SMEs, based on their relations with other enterprises are **autonomous** – by far the most common category – a **partner** or **linked enterprises**. Depending on the category in which the analyzed enterprise fits in, it might be needed to add some, or all, of the data from those enterprises to the analyzed enterprise. The calculations for each of the three types of enterprise are different and will ultimately determine whether the enterprise meets the various ceilings established in the SME definition. Enterprises which draw up consolidated accounts or

127 Article 28 of Council Directive 78/660/EEC of 25 July 1978 based on Article 54 (3) (g) of the Treaty on the annual accounts of certain types of companies, Official Journal L 222, p. 11-31, of 14 August 1978.

128 Article 12.3 of Council Directive 78/660/EEC of 25 July 1978 based on Article 54 (3) (g) of the Treaty on the annual accounts of certain types of companies, Official Journal L 222, p. 11-31, of 14 August 1978.

which are included in the accounts of an enterprise which does so are usually considered as linked.

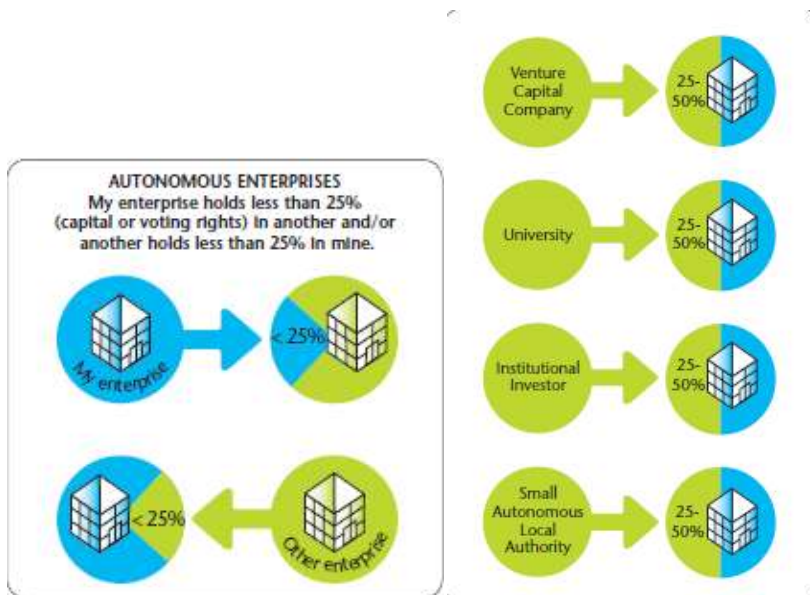
#### 4.1 Autonomous enterprises

An autonomous enterprise is that enterprise that is not partner or linked with other enterprises. The main conditions for an enterprise to be autonomous are:

The enterprise is totally independent, doesn't have any participation in other enterprises and no enterprise has a participation in it.

The enterprise holds less than 25% of the capital or voting rights (whichever is the higher) in one or more other enterprises and/or outsiders do not have a stake of 25% or more of the capital or voting rights (whichever is the higher) in the above mentioned enterprise.

For an autonomous enterprise, are used only the number of employees and the financial data contained in its annual accounts to check if it respects the above mentioned thresholds and to determine whether is a an micro, small or medium enterprise.



**Figure 2. Autonomous enterprises**

*(Extract from “The New SME Definition – User Guide and Model Declaration”, p. 17, 19)*

As exceptions to this rule, an enterprise may still be ranked as autonomous, and thus as not having any partner enterprises, even if this 25% threshold is reached or exceeded by any of the following investors:

- Public investment corporations, venture capital companies and business angels.
- Universities and non-profit research centers.
- Institutional investors, including regional development funds.
- Autonomous local authorities with an annual budget of less than 10 million euro and fewer than 5,000 inhabitants.

It is possible to remain autonomous while having one or more of the investors listed above. Each of these may have a stake of no more than 50% in your enterprise, provided they are not linked to one another. Of course, each investor has its rights as shareholder, but may not go beyond these and influence the management of the enterprise.

#### 4.2 Partner enterprises

According to the “*The New SME Definition – User Guide and Model Declaration*” This type of relationship represents the situation of enterprises which establish major financial partnerships with other enterprises, without one exercising effective direct or indirect control over the other. Partners are enterprises which are neither autonomous nor linked to one another. A company is a partner enterprise if:

It has a holding equal to or greater than 25%, of the capital or voting rights in another enterprise and/or another enterprise has a holding equal to or greater than 25% in the analyzed company.

It is not linked to another enterprise. This means, among other things, that the companies’ voting rights in the other enterprise (or vice versa) do not exceed 50%.

If a company is a partner enterprise, must add a proportion of the other enterprise’s staff headcount and financial details to its own data when determining its eligibility for SME status. This proportion will reflect the percentage of shares or voting rights – whichever is the higher – that are held. Thus, if a company has 30% stake in another enterprise, must add 30% of its headcount, turnover and balance sheet to its own figures. If there are several partner enterprises, the same type of calculation must be done for each partner enterprise situated immediately upstream or downstream from the analyzed enterprise.

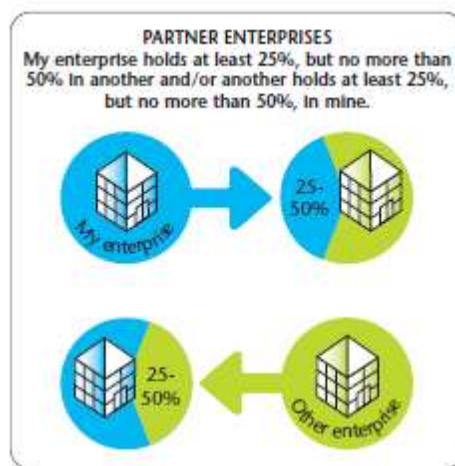


Figure 3. Partner enterprises

(Extract from “*The New SME Definition – User Guide and Model Declaration*”, p. 20)

#### 4.3 Linked enterprises

This type of relationship corresponds to the economic situation of enterprises which form a group through the direct or indirect control of the majority of voting rights of an enterprise by another or through the ability to exercise a dominant influence on an enterprise. Such cases are, thus, less frequent than the two preceding types. Two or more enterprises are linked when they have any of the following relationships:

One enterprise holds a majority of the shareholders’ or members’ voting rights in another.

One enterprise is entitled to appoint or remove a majority of the administrative, management or supervisory body of another.

A contract between the enterprises, or a provision in the memorandum or articles of association of one of the enterprises, enables one to exercise a dominant influence over the other.

One enterprise is able, by agreement, to exercise sole control over a majority of shareholders’ or members’ voting rights in another.



A typical example of a linked enterprise is the wholly-owned subsidiary. All 100% of the linked enterprise's data must be added to those of your enterprise to determine if it complies with the staff headcount and financial thresholds of the definition. An enterprise generally knows immediately that it is linked, since in most Member States it is required by law to draw up consolidated accounts or is included by consolidation in the accounts of another enterprise.

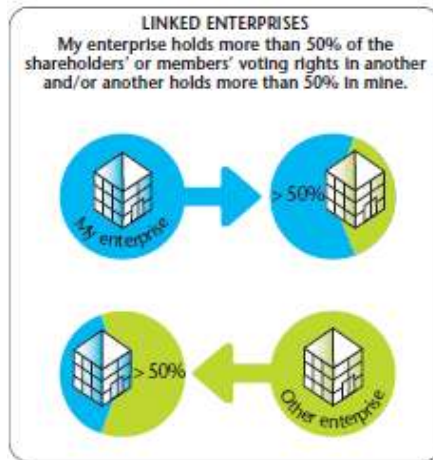


Figure 4. Linked enterprises

(Extract from “*The New SME Definition – User Guide and Model Declaration*”, p. 24)

## 5. Conclusions

In order to enhance the general economic development and to improve the competitiveness of the SME's was established a common definition of the SME's. The new definition of SME's is an important tool for implementing efficient measures and European and national financing programmes to support the development and success of SMEs As presented in the Recommendation 2003/361/EC, the category of micro, small and medium-sized enterprises (SMEs) is made up of enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding 50 million euro, and/or an annual balance sheet total not exceeding 43 million euro. To check if an entity is an SME the first step is to verify if it is an enterprise and if it fits to the following three criteria: staff headcount, annual turnover and annual balance sheet. The main categories of SMEs, based on their relations with other enterprises are autonomous – by far the most common category – a partner or linked enterprises. The calculations for each of the three types of enterprise are different and will ultimately determine whether the enterprise meets the various ceilings established in the SME definition and later if of benefits of special financing programs, created both by the European Union and by national governments.

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# INCREASING THE MANAGEMENT AND PRODUCTIVE CAPACITY OF ROMANIAN SMES AND LARGE ENTERPRISES BY ACCESSION OF STRUCTURAL FUNDS – SOP IEC

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*The European Integration came with new challenges for the Romanian enterprises especially for the SMEs, the opportunities arising from operating on the European Single Market and the possibility for accession of European Regional Development Funds. The main programme designed to offer access for small, medium and large Romanian enterprises to European funding is the Sectorial Operational Programme “Increase of Economic Competitiveness”- SOP IEC. The area of intervention “D1.1. Productive and environment friendly investments and preparation for market competition, especially of SMEs”a) with a financial allocation of 430 million lei in the period 2007-2013, supports strengthening and upgrading of the productive sector by tangible and intangible investments for small and medium enterprises (excluding micro enterprises) and also for large enterprises.*

*Key words: European financing, large enterprises, small and medium enterprises, POS CCE, SOP IEC, structural funds*

*The article’s JEL codes: G38, O19*

## **1. Introduction**

The European Integration came with new challenges for the Romanian enterprises especially for the SMEs, the opportunities arising from operating on the European Single Market and the areas eligible for the European Regional Development Funds. The Sectorial Operational Programme “Increase of Economic Competitiveness” (further referred to as SOP IEC) is one of the seven instruments (Operational Programs), which offer the financial support for the consolidation and modernization of productive sector through investments. 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.

The **general objective** of SOP is the increase of Romanian companies’ productivity, in compliance with the principle of sustainable development, and to reduce the disparities compared to the average productivity of the European Union. The target is an average annual growth of GDP per employed person by about 5.5%. This will allow Romania to reach an approximate of 55% of the EU average productivity by 2015.

**The specific objectives of the SOP “Increase of Economic Competitiveness” are:**

- Consolidation and environment-friendly development of the Romanian productive sector,
- Establishment of a favorable environment for sustainable enterprises’ development,
- Increase of the R&D capacity, stimulation of the cooperation between RDI institutions and enterprises, and increase of enterprises’ access to RDI
- Valorization of the IC&T potential and its application in the public (administration) and private sector (enterprises, citizens)
- Increased energy efficiency and sustainable development of the energy sector

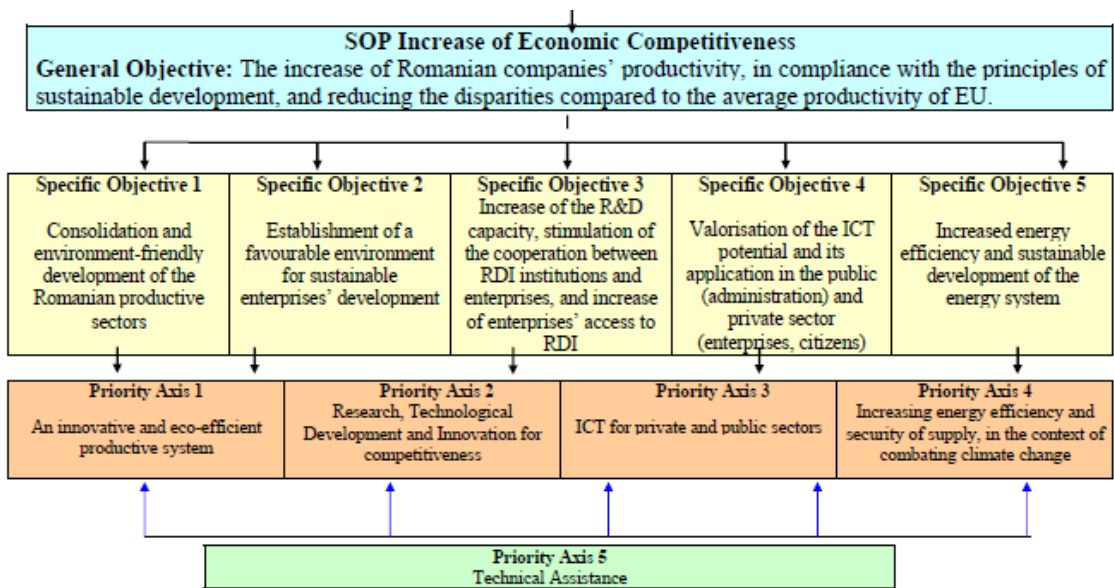


Figure 1. SOP Increase of Economic Competitiveness

(Extracted and adapted from the *Framework Document - Sectorial Operational Programme "Increase of Economic Competitiveness"*)

Taking into account both the identified possibilities for improvement of the competitive position of Romanian companies and the areas eligible for the European Regional Development Funds support, the following Priority axes have been identified in the SOP IEC:

- Priority Axis 1: An innovative and eco-efficient productive system
- Priority Axis 2: Research, Technological Development and Innovation for competitiveness
- Priority Axis 3: ICT for private and public sectors
- Priority Axis 4: Increasing energy efficiency and security of supply, in the context of combating climate change
- Priority Axis 5: Technical Assistance

## 2. Presentation of the Area of Intervention SOP IEC "D1.1. Productive and environment friendly investments and preparation for market competition, especially of SMEs."

The Priority Axis 1: An innovative and eco-efficient productive system of the Sectorial Operational Programme "Increase of Economic Competitiveness" refers to the efforts of supporting enterprises, especially SMEs, and will concentrate both on improving the market conditions linked to the development of the industrial base, in order to revive the business environment and generate new innovative enterprises, as well as on developing of the business sector, improving the access to capital and fostering technological development. The objectives which are set to be fulfilled by this priority axis are:

- Consolidation and sustainable growth of the Romanian productive sector
- Establishment of a favorable environment for enterprises' development.

The main key areas of intervention, divided in subprograms, are:

- D1.1. Productive and environment friendly investments and preparation for market competition, especially of SMEs
- D 1.2. Access to finance for SMEs
- D 1.3. Sustainable entrepreneurship development

From the above mentioned areas of intervention the main instrument of the SOP IEC in order to support and finance quality improvement of the production processes of the Romanian companies

is the area of intervention “D1.1. Productive and environment friendly investments and preparation for market competition, especially of SMEs.”

The specific objective of this key area is represented by the consolidation and sustainable growth of the Romanian productive sector can be accomplished through:

- The revival of the productive sector based on extension and modernization, by investments in new technology, equipment, machineries and by acquisition of patents, trademarks, licenses and know-how,
- Innovation of production both concerning the production processes and the products,
- Adaptation to European and International Standards and certification of management systems,
- Access of the Romanian companies to new markets
- Promotion of sustainable development, decreasing of the negative impact on the environment and growing the international competitiveness.

The following **indicative operations** are established:

- a)Support for strengthening and upgrading the productive sector by tangible and intangible investments
- b)Support for the implementation of international standards
- c)Support to access to new markets and internationalization

**3. Criteria of eligibility for applicants**

For the first indicative operation mentioned above: “D1.1. Productive and environment friendly investments and preparation for market competition, especially of SMEs.” a), two state aid schemes are designed, for large enterprises (over 250 employees) and for SMEs with more than 9 employees: small and medium enterprises (micro enterprises will be supported under a similar operational programme in the Regional Operational Programme).

In order to check if an entity is an SME the first step is to verify if it is an enterprise. Further it must be established the data of the analyzed enterprise according to the following three criteria: staff headcount, annual turnover and annual balance sheet.

Comparing the data of the analyzed company with the thresholds for the three criteria will allow determining whether the company is a micro, small or medium-sized enterprise. It is necessary to note that while it is compulsory to respect the staff headcount thresholds, an SME may choose to meet either the turnover or balance sheet ceiling. It does not need to satisfy both and may exceed one of them without losing its status.

| Enterprise category | Headcount: Annual Work Unit (AWU) | Annual turnover   | Annual balance sheet total                              |
|---------------------|-----------------------------------|---|---|
| Medium-sized        | < 250                             | ≤ €50 million<br><small>(in 1996 € 40 million)</small>  | ≤ €43 million<br><small>(in 1996 € 27 million)</small>  |
| Small               | < 50                              | ≤ €10 million<br><small>(in 1996 € 7 million)</small>   | ≤ €10 million<br><small>(in 1996 € 5 million)</small>   |
| Micro               | < 10                              | ≤ €2 million<br><small>(previously not defined)</small> | ≤ €2 million<br><small>(previously not defined)</small> |

Figure 2. Categories of SMEs according to the new thresholds  
(Extract from “The New SME Definition – User Guide and Model Declaration”, p. 14)

The new definition offers this choice since, by their nature, enterprises in the trade and distribution sectors have higher turnover figures than those in manufacturing. Providing an option between this criterion and the balance sheet total, which reflects the overall wealth of an enterprise, ensures that SMEs engaged in different types of economic activity are treated fairly. The distribution of the companies in the micro, small or medium-sized enterprises categories is presented in the figure no. 2 above.

For this operation, the financial support will be paid, through economic and financial appraisal of the applications for funding and in accordance with the provision of art. 57 of Council Regulation No. 1083/2006129, in order to avoid any financial support for:

- Public funding which would lead to deadweight;
- Investment deriving from delocalization from other member States in order not to involve the Structural funds in such public funding;
- Enterprises in financial difficulties.

Also are not eligible for financial support companies in the fields of activities (CAEN codes): B - extractive industry, codes 051,052, 061, 062, 0721, 0892, 091, 099, C- processing industry codes 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 120, 191, 192, 2051, 206, 242, 243, 2452, 254, 2591, 301, 304, 331, 332, E- water alimentation, waste treatment codes 360, 370, 381, 382, 390 and F – Building construction codes 411, 4399.

The operation D1.1.a), presented above, supports strengthening and upgrading of the productive sector by tangible and intangible investments for small and medium enterprises (excluding micro enterprises) and also for large enterprises. The operation has a financial allocation of 430 billions lei, in the period 2007-2013, divided between regions as following:

| Nr. | Regions   | Financial allocation |
|-----|---|----------------------|
| 1   | Bucharest- Ilfov  | 43 billions lei      |
| 2   | Regions: Center, North-West, West, South East             | 172 billions lei     |
| 3   | Regions: North – East, South Muntenia, South West Oltenia | 215 billions lei     |

Figure 3. Financial allocation within the SOP IEC D1.1 a) operation

(Extract from “*Ghidul Solicitantului POS CCE Axa 1 Domeniul 1.1 – Sprijin Financiar în valoare de până la 1.075.000 lei acordat pentru investiții în IMM*”, 2009)

The financial support for this operation is 60% grant for small enterprises in the Region of Bucharest Ilfov, 70% grant for the small enterprises in other regions of Romania. In case of the middle enterprises they benefit of 50% grant for those located in the region Bucharest-Ilfov and 60% grant for the middle enterprises located in other regions of Romania.

#### 4. Eligibility of activities proposed for financing

Considering the specificity of the SOP IEC programme and especially of the area of intervention “D1.1. Productive and environment friendly investments and preparation for market competition, especially of SMEs” the projects proposed for financing within this operation, are aiming to increase the economic development of the enterprises and the competitiveness of Romanian companies on the European Single Market. In order to fulfill this aims, the following activities are supported within the programme and are considered eligible:

- Creation of new production units,
- Extension of an existent production unit in order to increase capacity of production,
- Diversification of production on an existent site, as a result of initiation new products and services,

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129 COUNCIL REGULATION (EC) No 1083/2006 of 11 July 2006 laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund and repealing Regulation (EC) No 1260/1999, published in the Official Journal L210, p. 25-78,

- Modernization of the company, including changes of the production technology,
- Acquisition of intangible goods like patents, trademarks, licenses and know-how,
- Consultancies and training services linked with the activities above.

As seen above these activities are mostly encouraging new investments especially in the field of high-tech industry and highly productive industry support services.

The main criteria of selection for financing a project under this field of activity are:

- Relevance of the project for the realization of the objectives of the SOP IEC and especially the contribution brought by the project to the fulfillment of the SOP IEC objectives and especially of the D1.1a) field of intervention.
- Quality and coherence of the project and especially by justification for the need of public financing, by the quality of the technical-financial proposal and by presenting of the correlation between the objectives of the project and the obtained results.
- Maturity of the project and especially the level of preparation of the activities within the project, availability of the land, existence of the technical studies and permits, etc.
- Sustainability of the project which is concerning mainly the capacity of the applicant to ensure the financial and technical maintenance and operation of the investment for at least three years after the end of the project.
- Capacity of the beneficiary for implementing the project: management capacity, ISO certification, qualification of the management and of the personnel of the applicant.

If these criteria will be met the project will be selected for financing under the framework of SOP IEC programme and especially of the area of intervention “D1.1. Productive and environment friendly investments and preparation for market competition, especially of SMEs”. The implementation period for a project developed within this area of intervention is at most 24 months.

## **5. Conclusions**

The European Integration came with new challenges for the Romanian enterprises especially for the SMEs, the opportunities arising from operating on the European Single Market and the possibility of accessing European Regional Development Funds. The main programme designed to offer access for small, medium and large Romanian enterprises to European funding is the Sectorial Operational Programme “Increase of Economic Competitiveness”- SOP IEC. The area of intervention “D1.1 a). Productive and environment friendly investments and preparation for market competition, especially of SMEs” is financing projects which aim to increase the economic development of the production enterprises and to increase the technical and management competitiveness of Romanian companies on the European Single Market. The operation D1.1.a), mentioned above, supports strengthening and upgrading of the productive sector by tangible and intangible investments for small and medium enterprises (excluding micro enterprises) and also for large enterprises. The operation has a financial allocation of 430 billions lei, in the period 2007-2013, divided between regions. The main criteria of selection for financing a project under this field of activity are: relevance of the project for the realization of the objectives of the SOP IEC, quality and coherence of the project, maturity and sustainability of the project and capacity of the beneficiary for implementing the project. The implementation period for a project developed within this area of intervention is at most 24 months.

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7. Guvernul României – Ministerul Întreprinderilor Mici și Mijlocii, “Ghidul Solicitantului POS CCE Axa 1 Domeniul 1.1 – Sprijin Financiar în valoare de până la 1.075.000 lei acordat pentru investiții în IMM”, București, 2009



## EUROPEAN ECONOMIC INTEGRATION – CHALLENGES AND CONSEQUENCES ON ROMANIAN FINANCIAL SYSTEM SOUNDNESS

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*The international financial events of the second half of the 90<sup>s</sup> has provoked reflections and analysis within the international community on ways to strengthen the international financial system in order to achieve financial soundness. International organizations, national authorities, and the private sector, in collaboration with IMF has been working on a series of initiatives intended to contribute to a more stable and efficient financial system, and toward better preparedness to address future systemic problems. This paper want to emphasize actual stage of macro and micro-prudential indicators, needed so much in actual circumstance, when economies (banking-financial system, markets, public finance) are integrated and globalised. The role of NBR and actual stage of Romanian financial system soundness are also taken into discussion*

*Keywords: financial system, financial stability, system soundness, macro-prudential indicators, NBR'role.*

*JEL Code: G10, G20*

### **European Economic Integration – Benefits and Challenges**

The single market, the euro and the accompanying measures of financial integration can be viewed as a series of steps in the transition from completely segmented national markets toward a single European financial market. It is considered that European Integration has a wide area of effects, who implies important changes in political, social and economic environment. The result of Euro integration on member states can be summarized as follows: effects on members states (regarding general policy of member nations and their self-governing, consequences on market, economic policy, state of regions and currency stability), effects on citizens (outcomes on human resources, labor, consumption, prices), effects on enterprises, tourism and so on<sup>130</sup>.

A survey of economic literature suggests that financial impact of integration – that implies a single euro currency – affects financial systems of integrated countries (*banking systems, public finances, financial markets, financial institutions and financial services industry*) and also EU financial system, as a whole. European

Integration, in a financial approach, means, first of all, the introduction of a single European currency – euro. In fact, the world is different after 28 February 2002, since all national currencies in the euro area have definitely lost their legal tender status, which is now exclusively held by the euro. The introduction of the single currency marked the end of monetary differences and nowadays, the Single European Market is free of obstacles to the movement of goods, services, people and capital. For the countries participating, EMU has eliminated nominal exchange rate volatility and associated costs of exchanging different currencies within the euro area. This avoids a misallocation of resources, and hence fosters growth. The single currency makes prices across the euro area directly comparable, which increases competitive pressures and hence efficiency and growth. As a conclusion, Liebscher, K, Governor of Oesterreichische Nationalbank suggested “*Further benefits result from the reduction of risk premia built into real interest rates and from the elimination of premia resulting from less liquid markets. Thus, the*

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130 Brezeanu, P., Poantă, D. – Organisme financiare internaționale, Editura Lumina Lex, București, 2003, p.p. 232-244 and Brezeanu, .P. – Finanțe europene, Editura C.H. Beck, București, 2007, p. p. 13-27

*successful introduction of the euro and the price-stability oriented single monetary policy of the Eurosystem carry a number of benefits*<sup>131</sup>.

### ***Euro and a single currency market – stabilizing factors and catalysts of financial integration***

The stabilizing effects of the euro is related to its role of providing an anchor in the exchange rate regimes of not only EU accession countries but, all in all, about 50 countries within the gravity zone of the euro area. The euro contributes towards more stability in the international financial system by providing price stability, fiscal stability and financial stability.

As to price stability, it is a fact that since the beginning of EMU, the euro-area has achieved low inflation and expectations thereof and thus interest rates have been low.

Given the size and the economic influence of the single currency area in Europe, the stability-oriented institutional framework of EMU and the growing integration of the financial markets of the participant countries, the euro stands every chance of becoming a currency of global importance. In fact, the euro rapidly established itself as one of the leading investment, trading and issuing currencies. So, the euro has become a catalyst for change in the integration of the up to then largely fragmented European financial markets. Capital can be allocated more efficiently, euro area financial markets have gained significantly in size and depth.

The implementation of monetary policy in the euro area has proved highly efficient in fostering financial (market) stability. The Eurosystem has successfully introduced a market-oriented, modern and flexible operational framework. The **money market** has clearly benefited from this in its refinancing operations. *Short-term interest rates* have totally converged and the money market within the euro area has become fully integrated. In the **bond market** the euro play a crucial role in fostering a deeper and more liquid market. The introduction of the euro paved the way for issuers to access a broader base of investors. Investors too have gained access to a wider spectrum of investment opportunities.

*The euro has become the second most widely used currency as a result of the overall weight of the euro area economy in the world*<sup>132</sup>.

In the perspective of challenges, the most important one to achieve economic and monetary integration of the candidate countries in a successful way. There, the Union and the Eurosystem will have to proceed in three steps. In a first step, the candidates will accede to the European Union, then they will participate in the ERM II, the exchange rate mechanism of the Union, and finally, they will introduce the euro as their national currency. In another perspective, challenges of extending and solidifying the benefits of the euro are to be resolved. Also, regarding segments of the financial market, there is the problem of short-term securities markets or repo markets denominated in euro, who are still insufficiently integrated. Similar to other areas of the EU, several obstacles have to be removed to end those fragmentations, such as: heterogeneous national infrastructures of the market, different regulatory and legal regimes or varying market practices still impede full financial integration

*From an institutional point of view*, the current state of European financial integration is still not completed. The advent of the single currency and the accompanying measures of integration do constitute a lowering of the effective barriers to free investing across the euro area. However, significant barriers to a truly unified financial market continue to exist and progress often appears to be painfully slow. From a theoretical angle, EMU has often been deemed a minor event for equity markets, as currency risk was not found to be a major component of equity returns.

*In a public debt markets and risk free rates perspective*, in which a single risk free rate is the characteristic of a truly integrated financial area, suggests that major progress has been made.

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131 Liebscher, K. - EMU and the integration of financial markets in the EU – New Challenges Ahead, speech on 12th European Pensions Conference, [http://www.oenb.at/en/presse\\_pub/reden/re\\_20020415\\_emu\\_and\\_the\\_integration\\_of\\_financial\\_markets.jsp](http://www.oenb.at/en/presse_pub/reden/re_20020415_emu_and_the_integration_of_financial_markets.jsp).

132 *ibid.*

The disappearance of currency risk has eliminated the major discrepancy between bonds issued by governments with identical credit rating in the euro-area. And with identical inflation rates resulting from a single monetary policy, the fundamentals of the participating countries government bonds have fully converged. The same approximate risk-free asset is thus available to all euro-area residents. The low inflation level targeted and delivered by the ECB moreover implies that the approximation is fairly close. Finally, the Maastricht Treaty and attending restrictions on fiscal policies signal the intention to push the convergence even further, at the level of credit risk. Thus in terms of the fundamentals of government securities and the availability of an unambiguously defined risk-free asset, the euro is indeed a break point<sup>133</sup>.

*Regarding the equity markets*, the fundamentals underlying that equities have been affected in a more settle way. With a single monetary policy, closely aligned interest rates, and fiscal policies subject to a common discipline. the macroeconomic influences on company profits are clearly converging.

## **Financial system soundness – economic literature survey and indicators**

### ***Financial system soundness – narrow economic literature survey***

Over the years, scholars have developed a variety of economic theories to explain soundness in financial system and markets. Earlier researchers focused on movements in economic fundamentals as the origin of financial distress and crisis, while recent studies have highlighted the role of the information available to, and the expectations of, investors in explaining the behavior of financial markets. The classic explanation for financial fragility is given by I. Fisher in 1933<sup>134</sup>. He argues that weakness of financial system is closely related with macroeconomic cycles, and debt liquidation. According to the author, financial fragility is largely based on deterioration in economic factors.

Other theories highlight factors affecting depositor confidence. discuss the potential existence of multiple equilibriums in financial markets<sup>135</sup>. Banks offer a mechanism of maturity transformation whereby deposits are often lent with longer maturities. It is possible that the “good” equilibrium prevailing in normal times is not the only equilibrium, and that the banking sector finds itself in a “bank run” equilibrium<sup>136</sup>.

Some studies focus on information issues<sup>137</sup>, that stresses that information asymmetries between creditors and borrowers result in an adverse selection problem. Other authors extend the argument on asymmetric information to the possible practice of credit rationing. In the presence of uncertainty about the true return on investment, there may be a discrepancy between return expectations on the part of creditor and borrower. When the creditor’s expected return on a project is less than the return on his alternative use of funds, the borrower may be rationed.

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133 Adjaoute, K., Danthine, J.P. - European Financial Integration and Equity Returns: A Theory-Based Assessment, FAME Research Paper No. 84, January 2003, p. p. 2-5.

134 see Fischer, I. – The Debt deflation theory of Great Depression, *Econometrica*, 1933 p.p. 337-342, <http://fraser.stlouisfed.org/docs/meltzer/fisdeb33.pdf>

135 see Green, J., Lin, P. - Diamond and Dybvig’s Classic Theory of Financial Intermediation:What’s Missing, *Federal Reserve Bank of Minneapolis Quarterly Review*, Vol. 24, No. 1, Winter 2000, pp. 3–13, <https://www.minneapolisfed.org/research/QR/QR2411.pdf>

136 Evans, O., Leone, A., Gill, M., Hilbers, P. (coordinators) - Macprudential Indicators of Financial System Soundness, *IMF Occasional Papers*, Washington DC, 2000, p. p. 13-14

137 see also Mishkin, F. S. - Understanding Financial Crises: A Developing Country Perspective, *NBER Working Paper No. 5600*, 1996, (Cambridge, Massachusetts: National Bureau of Economic Research), <http://ideas.repec.org/p/nbr/nberwo/5600.html>.

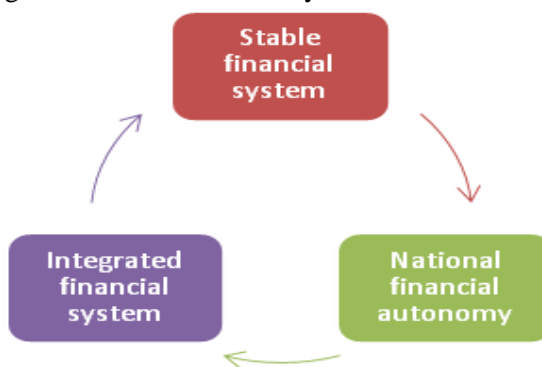
Their argument suggests that credit rationing increases with the level of uncertainty, and thus of financial vulnerability<sup>138</sup>.

There is also large literature studies related to the efficiency and financial system soundness when approaching financing system types. Financial systems are often described either as bank-based, universal, and relational or as market-based, specialized, and arms-length; and for many years academics and policymakers have debated the relative merits of these different types of systems<sup>139</sup>.

### **Financial stability**

Financial stability is approached related to financial stability trilemma<sup>140</sup>, that states (1) a stable financial system, (2) an integrated financial system and (3) national financial autonomy are incompatible. Any two of the three objectives can be combined but not all three; one has to give. Figure 1 illustrates the financial stability trilemma. While this trilemma could be analyzed at the global level, it also operate associated with the financial system in the European Union. An overview of the general working of the trilemma in an international environment. As international economic integration progresses, the policy domain of nation states has to be exercised over a much narrower domain and global federalism will increase (e.g. in the area of trade policy). The alternative is to keep the nation state fully alive at the expense of further integration.(see Figure 1)

Figure 1 – Financial stability trillema



Source: Schoenmaker, D. - *The Trilemma of Financial Stability*, VU University Amsterdam, 2009, p. 1

The figure explain the classical trilemma in economics relates to monetary policy, that states (1) a fixed exchange rate, (2) capital mobility and (3) and national independence in monetary policy cannot be achieved at the same time. Central banks combine the tasks of monetary stability and financial stability. It is fair to say that central bank practices, as well as the academic literature, on monetary stability is far more advanced than those on financial stability. The central bank practice of inflation targeting is supported by well-developed forecasting models. In the literature, the monetary policy trilemma is built on the Mundell-Fleming model<sup>141</sup> of an open economy under capital mobility. In Europe, the monetary trilemma is resolved with the establishment of a supranational institution, the European Central Bank (ECB), in 1998. Even a

138 Guttentag, J., Herring, R. - Credit Rationing and Financial Disorder, *Journal of Finance*, Vol. 39 (December), p.p. 59–82, <http://ideas.repec.org/a/bla/jfinan/v39y1984i5p1359-82.html>.

139 see Allen, F., D. Gale – *Comparing Financial Systems*, MIT Press, Massachusetts, 2000.

140 Schoenmaker, D. - *The Trilemma of Financial Stability*, VU University Amsterdam, 2009, p. p. 1-4, [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1340395](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1340395)

141 for Mundell-Fleming model, based on IS-LM framework see [http://www.swan.ac.uk/economics/cware/ec312/The%20Mundell-Fleming%20Model%20\(Topic%201\).pdf](http://www.swan.ac.uk/economics/cware/ec312/The%20Mundell-Fleming%20Model%20(Topic%201).pdf)

strong form of coordination of national policies within the Exchange Rate Mechanism (ERM) appeared to be insufficient to keep exchange rates fixed<sup>142</sup>.

### **Indicators for determining financial system soundness**

The international financial disorder of the second half of the 1990s has provoked much reflection and analysis within the international community on ways to strengthen the international financial system. Together with other international organizations, national authorities, and the private sector, the IMF has been working on a series of initiatives intended to contribute to a more stable and efficient financial system, and toward better preparedness to address future systemic problems<sup>143</sup>. Among these initiatives are the ongoing efforts to develop and use macroprudential indicators-defined broadly as indicators of the health and stability of financial systems<sup>144</sup> (Table 1).

| Aggregated microprudential indicators         | Macroeconomic indicators                     |
|---|--|
| <b>I. Capital adequacy</b>                    | <b>Economic growth</b>                       |
| Aggregate capital ratios                      | Aggregate growth rates                       |
| Frequency distribution of capital ratios      | Sectoral slumps                              |
| <b>II Asset quality</b>                       | <b>Balance of payments</b>                   |
| <b>II.1. Lending institution</b>              | Current account deficit                      |
| Sectoral credit concentration                 | Foreign exchange reserve adequacy            |
| Foreign-currency-denominated lending          | External debt (including maturity structure) |
| Nonperforming loans and provisions            | Terms of trade                               |
| Loans to public sector entities               | Composition and maturity of capital flows    |
| Risk profile of assets                        | <b>Inflation</b>                             |
| Connected lending                             | Volatility in inflation                      |
| Leverage ratios                               | <b>Interest and exchange rates</b>           |
| <b>Borrowing entity</b>                       | Volatility in interest and exchange rates    |
| Debt-equity ratios                            | Level of domestic real interest rates        |
| Corporate profitability                       | Exchange rate sustainability                 |
| Other indicators of corporate conditions      | Exchange rate guarantees                     |
| Household indebtedness                        | <b>Lending and asset price booms</b>         |
| <b>Management soundness</b>                   | Lending booms                                |
| Expense ratios                                | Asset price booms                            |
| Earnings per employee                         | <b>Contagion effects</b>                     |
| Growth in number of financial institutions    | Financial market correlation                 |
| <b>Earnings and profitability</b>             | Trade spillovers                             |
| Return on assets                              | <b>Other factors</b>                         |
| Return on equity                              | Directed lending and investment              |
| Income and expense ratios                     | Government recourse to banking system        |
| Structural profitability Indicators           | Arrears in the economy                       |
| <b>Liquidity</b>                              |  |
| Central bank credit to financial institutions |  |
| Deposits in relation to monetary aggregates   |  |
| Segmentation of interbank rates               |  |
| Loan-to-deposit ratios                        |  |
| Maturity structure of assets and liabilities  |  |
| Measures of secondary market liquidity        |  |
| <b>Sensitivity to market risk</b>             |  |
| Foreign exchange risk                         |  |
| Interest rate risk                            |  |
| Equity price risk                             |  |
| Commodity price risk                          |  |
| <b>Market-based indicators</b>                |  |
| Market prices of financial instruments        |  |
| Indicators of excess yields                   |  |
| Credit ratings                                |  |
| Sovereign yield spreads                       |  |

Source: Evans, O., Leone, A., Gill, M., Hilbers, P. (coordinators) - *Macroprudential Indicators of Financial System Soundness*, IMF Occasional Papers, Washington DC, 2000, p. 9

142 *ibid*.

143 see also Fischer S. – Central banking – The Challenges Ahead, <http://www.worldbank.org/fandd/english/0397/articles/010397.htm>

144 see also Hilbers, P. Krueger, R., Moretti, M. - New Tools for Assessing Financial System Soundness,

Related to *financial system stability*, it is considered that the concept has neither a clear definition nor a model or a standardized assessment framework. Financial stability is perceivable where no systemic crisis occurs. However, a *financial system is considered stable while being capable to efficiently allot resources (spatially and temporally), to adequately manage risks and to self-correcting when affected by external shocks, or being able to perform the intermediation function that give support to economic performances and absorb shocks to adjust imbalances generated by adverse market developments*<sup>145</sup>.

### **Romanian financial system stability in European Integration framework**

The Romanian financial system' developments through past years requested the co-operation among the authorities in charge of licensing, regulating, supervising and controlling the component markets of the financial system in order to ensure the transparency, stability and integrity of the whole system, the compliance with the applicable legal framework, as well as the expansion of the national financial stability framework. The EU requirements on financial crisis management ask for an agreement of co-operation between all national financial supervisors, central bank and finance ministry.

The National Bank of Romania has an important role in maintaining financial stability, attributable to its capacity to act as a monetary and supervisory authority. These objectives are served while performing its regulatory and supervisory functions, the conduct and efficient transmission of the monetary policy, as well as, while overseeing the smooth functioning of the systemically important payment and settlement systems. Risks and vulnerabilities identifying and assessing is an ongoing process for the financial system as a whole and its component parts, because the financial stability monitoring has a preventive scope<sup>146</sup>. The major goal of the domestic standing group would be to ensure the exchange of information between the authorities, as well as to prevent, appraise and manage possible difficulties having a systemic impact. In order to achieve these requirements, *the Ministry of Finance, the National Bank of Romania, the National Securities Commission, the Insurance Supervisory Commission and the Private Pension Scheme Supervisory Commission* established the National Committee for Financial Stability.

The Committee consists of the following members: the Minister of Public Finance, the Governor of the National Bank of Romania, the President of the National Securities Commission, the President of the Insurance Supervisory Commission and the Chairman of the Private Pension Scheme Supervisory Commission.

Some challenges are still to be confronted. These future actions are related to adoption of Euro currency, Basel II execution, accession to EMU II, or implementation of macro-prudential indicators.

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*This article proposes a reflection with regards to the links between accounting and finance. The both disciplines are today complementary and in the same time separated, with different origins. The accounting is organised and evoluates based on the requirements of the action. The finance discipline taked part from a micro-economical theoretical corpus supplying more and more often instruments, concepts, methods, explanations in order to administer better the resources in an economy where the financial markets play a very important role.*

*Mots clés: évaluation comptable, flux financier prévisionnel, gestion des risques, pratiques financières*

*G00:Financial Economics;General*

Pour éviter toute confusion sur les apports de la comptabilité et de la finance, il convient de situer leurs champs d'investigation respectifs. En mettant en évidence comment elle se sont enrichies mutuellement dans leur développement, il est alors possible de mieux évaluer les aspects complémentaires des concepts, des outils et des méthodes proposés par l'une et par l'autre.

Dans une première section je traitere de la rivalité entretenue par certains entre les deux disciplines. La finance serait qu'un prolongement de la comptabilité. La comptabilité est qu'une source d'informations pour la finance. Dans une seconde section, je montrere combien cette opposition mérite d'être dépassé au profit d'une lecture plus attentive de la complémentarité que ces deux disciplines doivent partager.

### **La rivalité entre les deux disciplines: finance et comptabilité**

Les relations entre la finance et la comptabilité sont typiques des relations qu'on observe souvent entre membres d'une même famille. À la fois, elles sont disciplines voisines et partagent nombre de matériaux mais elles se vivent souvent comme fortement rivales. D'un coté, la comptabilité s'affirme comme le point de départ incontournable. C'est elle qui produit l'information de base et la qualité de tout ce qui va suivre en dépend. L'essentiel serait donc de faire les bons choix parmi tous les principes et méthodes comptables. D'un autre coté, la finance revendique une place de choix dans la préparation de nombre de décisions qui engagent le futur de l'entreprise, en particulier en matière d'investissements et de financements.

L'information primaire nécessaire à l'analyse financière reste fournie par la comptabilité. D'un côté, el est indispensable de disposer d'une synthèse périodique du patrimoine de l'entreprise composé, d'une part, d'une évaluation rigoureuse de ses différents actifs (immobilisations, stocks, créance, etc.) et d'autre part, d'une description de ses sources de financement. D'un autre côté, il est souhaitable de disposer d'un suivi temporel de l'évolution de la valeur de ce patrimoine, en dégagant les origines de l'enrichissement ou éventuellement de l'appauvrissement. Il ne fait nul doute que les deux sources comptables les plus utilisées sont le bilan et le compte de résultats. Ces deux documents sont largement usités par tous les décideurs financiers, à savoir l'entreprise elle-même, les prêteurs, les actionnaires et leurs mandants. Avec le temps, d'autres acteurs se sont révélés être de gros consommateurs de ces informations.

La qualité des analyses financières continuaient à dépendre de la qualité des données comptables de base, quel que soit l'outil jugé le plus pertinent. Par exemple, un ratio d'endettement permet d'apprécier le risque financier couru par l'entreprise. Un tel ratio met en relation un montant d'endettement et un total passif ou un total des fonds propres. Le problème délicat qui se pose assurément reste de déterminer le mode d'évaluation de ces éléments de passif. Si on se fie aux seules informations comptables, alors la valeur des dettes est égale à leur montant nominal. Si,



par contre, on se réfère à la logique de marché, cette valeur comptable apparaît totalement inadaptée car elle ne tient compte ni de l'évolution des taux d'intérêt ni du risque de défaillance du débiteur.

Alors que la comptabilité fait un constat et vise à rendre compte dans un cadre réglementaire précis, la finance poursuit des objectifs de préparation à la décision ambitieux mais avec une information le plus souvent beaucoup plus hasardeuse. La préparation à la décision oblige le financier à se tourner systématiquement vers le futur. Dès lors, la problématique majeure en finance est de déterminer la valeur présente d'un élément d'actif ou de passif à partir d'une actualisation à un taux judicieusement déterminé de flux financiers prévisionnels.

Les objectifs de la finance sont aussi nombreux que ceux de la comptabilité, même s'ils divergent dans leur nature.

Au centre du débat s'inscrit le problème fondamental du choix et du financement des investissements. Dans un contexte bien évidemment hasardeux dans lequel le décideur ne dispose avec certitude que d'une partie de l'information pertinente, il s'agit de se procurer dans les meilleurs termes les fonds nécessaires et de veiller à ce que leur utilisation contribue à l'objectif de maximisation de la valeur de l'entreprise. Pour un projet d'investissement spécifique, le décideur connaît avec certitude le coût des différentes sources de financement qui s'offrent à lui, alors qu'il ne peut qu'estimer les flux qui seront générés durant la vie du projet. La présence d'un environnement incertain l'oblige à focaliser son attention sur les risques encourus, ces derniers affectant à la fois le rendement attendu du projet et la rémunération que les actionnaires et les créanciers sont en droit d'attendre de leur participation à son financement. À ce niveau, l'apport majeur de la théorie financière a été d'appréhender ce concept de risque, d'en fournir des mesures et de les intégrer dans des modèles d'évaluation. D'un point de vue méthodologique, les problèmes d'évaluations financières d'entreprise peuvent se résumer à une somme d'évaluations de projets d'investissement, où le caractère prévisionnel des flux limite le caractère prédictif des modèles.

De manière caricaturale, on pourrait dire que, pour un financier, tout est une question de traitement du temps via le concept d'actualisation et de traitement des aléas du futur à travers la notion de risque. Dans tout les cas, il est indispensable d'estimer les flux futurs. A ce stade, se pose déjà le problème de déterminer le type de flux qu'il convient

de prendre en considération. Pour la valorisation d'une entreprise non cotée, on peut s'intéresser à différentes mesures de cash-flows. Mais, il apparaît que dans toutes ces situations, la comptabilité fournit le cadre naturel de référence. On peut la considérer comme la langue du financier, même si les concepts sont déplacés du passé vers le futur avec tous les problèmes que cela peut entraîner. Toutefois, l'apport de la comptabilité ne se limite pas à ce seul aspect instrumental.

Partant d'une situation initiale où toutes les parties prenantes à l'entreprise sont confrontées aux mêmes aléas concernant le futur, le simple déroulement du temps va lever les incertitudes à des rythmes différents selon les acteurs. Le dirigeant d'une entreprise visualise bien plus rapidement qu'un petit actionnaire les premiers résultats effectifs de la mise en œuvre d'un nouveau projet d'investissement. De cette situation naît un problème d'asymétrie d'information qui n'est pas préjudiciable seulement à l'une, mais le plus souvent à l'ensemble des parties. Par exemple, un petit actionnaire peut souffrir d'être médiocrement informé car il peut être conduit à acheter des titres sur-évalués ou à vendre des titres sous-évalués. Il ne faut pas croire que cette situation soit sans conséquence pour l'entreprise. En effet, même si dans un premier temps, l'entreprise peut apparaître non concernée, elle risque d'avoir à faire face à un coût de ses fonds propres accrus lors de sa prochaine augmentation de capital en raison de la prime de risque réclamée par l'ensemble des actionnaires exposés à ce que tous les acteurs, et surtout les responsables d'entreprise, prennent des mesures visant à réduire cette asymétrie d'information. Parce qu'elle

fournit une information préalablement vérifiée et vérifiable, la comptabilité peut dans ce cadre nouveau d'analyse théorique jouer un rôle original et important.

Dans ces développements théoriques, la finance distingue deux types de problème d'asymétrie d'information: les cas dits de sélection adverse et les situations de hasard moral. Pour les premiers, le problème se pose lorsque, dans le cadre d'un contrat, l'une des parties dispose dès le départ d'un avantage informationnel nuisible à l'autre. En reprenant l'exemple précédent, le petit actionnaire sollicité lors d'une augmentation de capital par les dirigeants d'une entreprise mieux informés que lui sur les perspectives de cette dernière pourrait être amené à souscrire à un prix d'émission trop élevé. Pour les situations de hasard moral, l'asymétrie d'information naît durant l'exécution du contrat. L'une des parties peut être incitée à ne pas respecter ses engagements initiaux au détriment de l'autre. En reprenant toujours le même exemple, le dirigeant de l'entreprise sollicitant une nouvelle mise de fonds de la part des actionnaires ne respecte pas la politique d'investissement annoncée au départ et s'engage dans des projets moins rentables qu'escomptés par les actionnaires.

### **...À la complémentarité**

L'opposition entre deux positionnements de deux disciplines qui peuvent se vivre comme rivales conduit à ce que l'une se considère comme principale vis-à-vis de l'autre et réciproquement. Une telle opposition apparaît à l'analyse comme trop partielle et insuffisante pour comprendre les évolutions actuelles de chacune d'elles. Plutôt que d'exacerber une supposée rivalité, mieux vaut mettre en évidence une complémentarité de plus en plus étendue. D'un côté, la marchandisation de plus en plus grande des financements des entreprises a fait apparaître de nouveaux instruments et de nouveaux problèmes de comptabilité. Les contraintes de plus en plus fortes en matière d'informations financières imposées aux sociétés cotées en bourse sont sources de nouvelles normes, de nouvelles pratiques comptables. D'un autre côté, les modèles financiers fondés sur la notion de valeur présente montrent leur limite. La gestion d'une entreprise ne peut se contenter de cette seule notion. Au fond, l'apport essentiel de la comptabilité ne tient-il pas dans le concept d'exercice et donc d'évaluation périodique? La mesure de la performance a besoin d'un horizon périodique fixe. Il est intéressant de constater à travers les outils les plus récents et les plus populaires parmi les praticiens que la finance, sans renier ses principes fondateurs, retrouve des avantages dans le cadre de la comptabilité.

Si la finance a largement marqué des développements récents de la comptabilité, certains outils de la finance marquent un certain retour vers des principes fondamentaux de la comptabilité. Afin d'illustrer notre propos, je vais présenter quatre problèmes classiques de finance, à savoir l'évaluation d'une action, la mesure du coût du capital, le choix d'un investissement et la création de valeur et montrer dans chacun de ces cas qu'il n'est guère possible de se passer de la logique comptable.

En premier lieu, l'évaluation boursière d'une action se présente pour un financier comme une simple actualisation à l'infini de dividendes attendus. Comme on ne dispose pas d'une information complète permettant d'obtenir de façon réaliste la série de dividendes futurs nécessaire à l'utilisation empirique du modèle originel d'actualisation, le modèle de base dans le domaine est sans conteste celui de Gordon et Shapiro.

En deuxième lieu, l'estimation du coût du capital repose sur une approche bien connue des financiers s'appuyant sur deux composantes majeures, à savoir le taux d'intérêt sans risque et une prime de risque.

En troisième lieu, l'un des critères les plus recommandés en matière de choix d'investissement est celui de la valeur actuelle nette. Utilisée de manière statique, son estimation repose d'un côté sur l'actualisation de flux d'exploitation escomptés, d'un autre côté sur la prise en compte d'une valeur résiduelle. Cette dernière est le plus souvent une valeur comptable.

Enfin, plus encore dans le domaine a la mode de la création de valeur, la comptabilité apporte une aide considérable a l'analyste financier. Ce dernier tente de mesurer la valeur créée pour l'ationnaire( Market Value Added) depuis une date déterminée et ses principaux constituants. En conclusion, les deux disciplines sont aujourd'hui a la fois largement complémentaires et autonomes l'une par rapport a l'autre. On ne peut nier qu'elles ont des origines différentes meme si les usages les rendent proches. La comptabilité, plus fille du droit, conserve cette fonction incomparable de structuration, de normalisation d'une information qui rend compte de faits. La finance se résume de moins en moins a la seule analyse financiere des états comptables.

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# THE EFFECTS OF THE ENERGY TO ECOSYSTEM AND RISK MANAGEMENT SOLUTION FOR COVERING THE POTENTIAL LOSSES

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*Abstract: " In this paper we analyse the influence on climate change by one of the most important factors: the energy production and consumption, who caused in the last decades important damages to the ecosystems. The available resources of energy production are quite limited, the main important ones are fossil and hydro. These two resources are limited or will be limited in the future, so the ecological production must be focused on wind and solar resources. Another aspect debated in this paper refers to the risk management process for the most used energy producers – hydro power plants. The risk management process is a must and include risk controlling ant the financing process for the risks that can not be eliminated."*

*Keywords: energy, climate change, risk management, catastrophe, insurance*

*Cod JEL lucrare: O 14, G 12*

## **1. Introduction**

Nowadays, the global climate registers multiple changes caused by high concentrations of greenhouse gas emission from atmosphere.

To fight against the climate change, 150 countries who participate to the United Nations Conference on Environment and Development in June 1992 in Rio, settle the basis for the United Nations Framework Convention on Climate Change (UNFCCC).

In Romania, this was ratified with law 24/1994. It was considered that developed countries are more responsible for the greenhouse gases emission but on the other hand they are able to protect against the eventually climate change damage. Romania was included in the group of countries with transition economies, countries with limited gases emission but with probability of increase. According with 4.2 articles Romania, in collaboration with other states can developed common projects. Through the years, Romania established international cooperation with Switzerland in 1999, Netherlands 2000, Norway 2001, Austria 2002, Denmark 2003, Sweden 2003, France 2004.

On 11 December 1997, was negotiated an agreement by the Kyoto Protocol. The Protocol entered into force on 16 February 2005 and until today, 183 countries adhere to them. According to this Protocol, Romania adopts Law 3/2001 and needs to reduce greenhouse gas emission with 8% since 2008-2012 compared with 1989.

## **2. General research**

One of the most important factors who generate these global climate changes is the energy production and consumption, who caused in the last decades important damages to the ecosystems. In this case is very important for every country to establish national strategies in order to reduce the consumption and increase the renewable electric capacities.

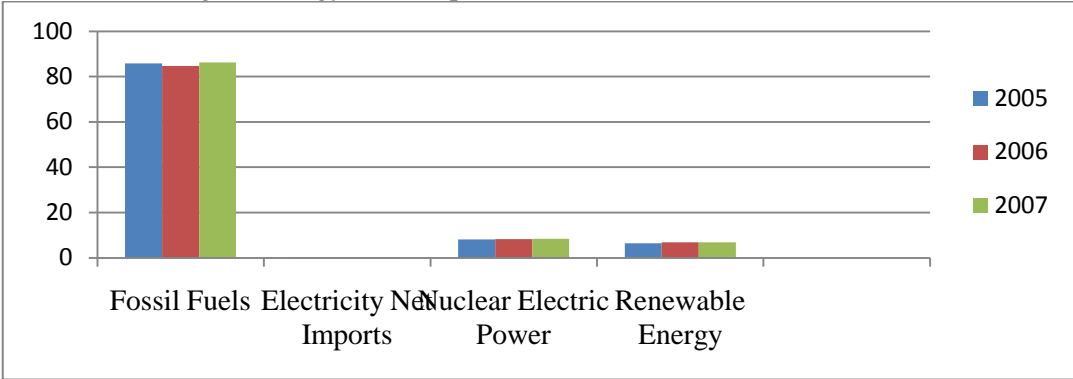
Renewable energy is considerate the energy generated from natural resources as biomass, wind, solar/PV energy, geothermal, water (hydropower).

As we can see in the practical field to reduce, the consumption is an utopia. The global population is continuously growing, so the energy demand cannot even be kept at a constant level and the consumption is increasing constantly. In this case is necessary at the global level to be

created a competitive energy market in order to have a high quality service at a low price, to reduce the quantity of energy produced from nonrenewable sources in favor of renewable sources.

First, we will analyze the US consumption in order to realize the high volume needed for the most important consumer:

Fig.1 - Energy Consumption US 2005-2007 (Quadrillion Btu)

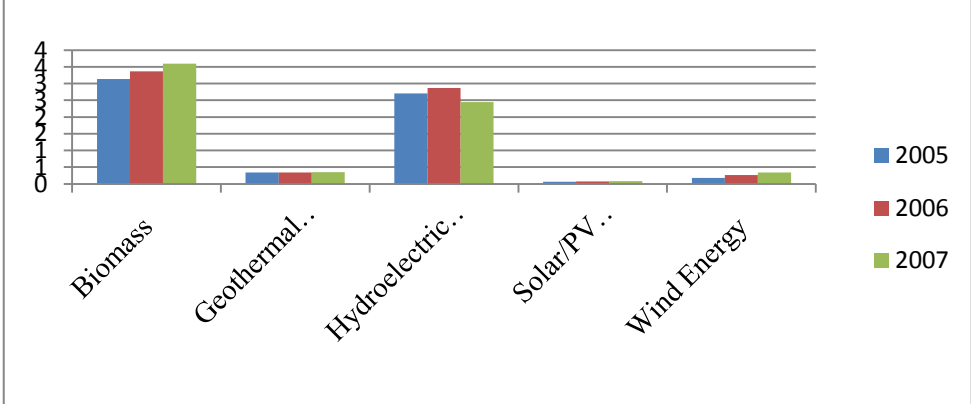


Source: Energy Information Administration<sup>147</sup>

From this graphic, it can be observed that the consumption of fossil fuels is at a very high level, and the ecological resources are at a very low level.

According with this reports offered by Energy Information Administration 7 percent from energy consumption was generated by renewable sources of energy in 2007.

Fig.2. Energy consumption US from Renewable energy by sources (Quadrillion Btu)

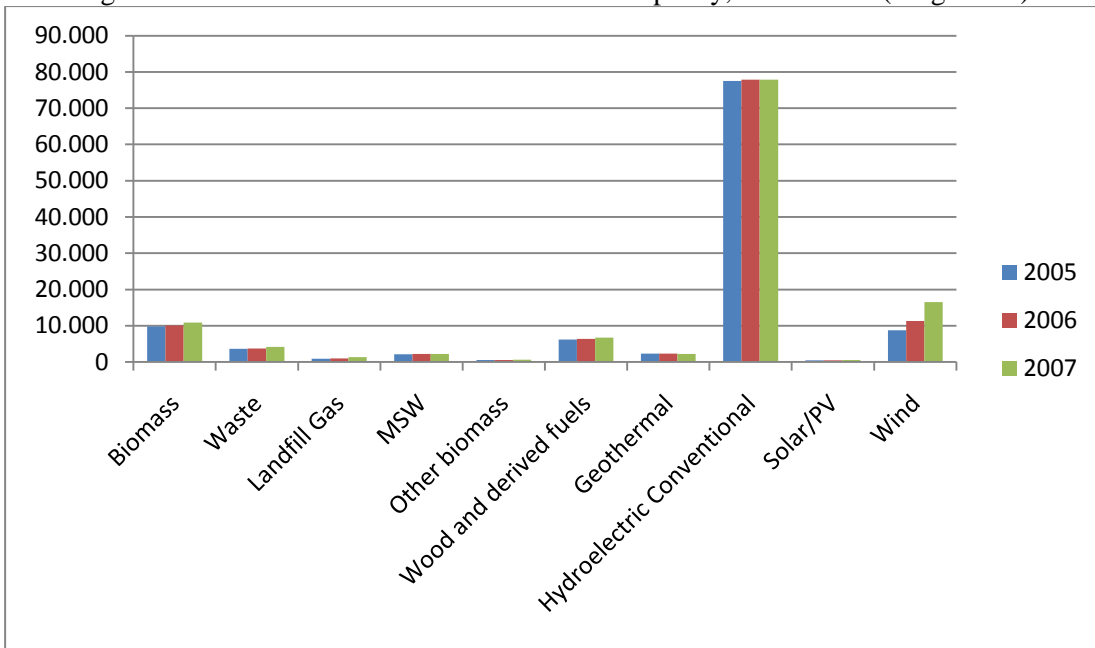


Source: Energy Information Administration

From this second graphic we mat conclude that biomasses and hydroelectrically sources are of huge importance and the producers must focused on them and also to increase the consumption of energy made by wind or solar resources.

147 www.eia.doe.gov

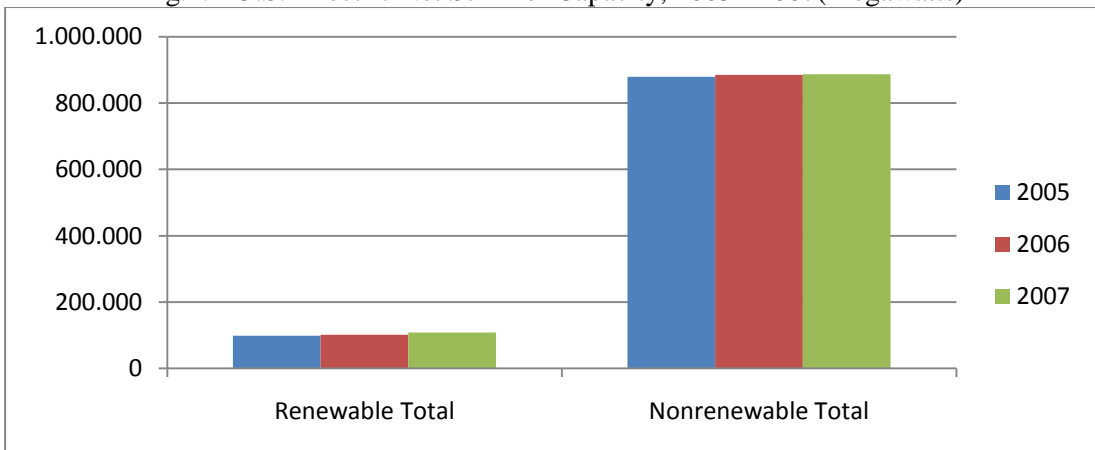
Fig.3 - U.S. Renewable Electric Net Summer Capacity, 2003 - 2007(Megawatts)



Source: Energy Information Administration

Continuing from the previous sections, we continue the analysis by studying the net summer capacity. Once again, hydroelectrically solutions are most used, but the distance to the others sources are of a high level. This fact may generate unpleasant situations, especially in the very warm summer when the water resources may decrease.

Fig.4. - U.S. Electric Net Summer Capacity, 2003 - 2007(Megawatts)



Source: Energy Information Administration

Unfortunately, as we observe from this graphic the majority of the electric summer capacities are nonrenewable, this fact is generate by the resources used in the production field. Almost 20% from global energy is generated by hydropower<sup>148</sup>. The largest producer of hydropower electricity is Canada, followed by US and Brazil.

148 National Hydropower Association - Facts You Should Know About Hydropower, 1996

Canada has an installed capacity of over 70 858 megawatts (MW ) in over 475 hydropower plants which generates an annual average of hydropower energy of 350 terawatt-hour (TWh)<sup>149</sup> with this production capacity, Canada can produce almost 13 percent from global hydropower energy.

In Romania, the energy sector is governed Hidroelectrica detain 307 hydropower plants with an installed capacity of 6361,92 MW and generates an annual production of 17300 Gwh.(normal year of precipitation)<sup>150</sup>.

The hydropower energy in Romania is very important, so we present the advantages and disadvantages of them. Advantages of hydropower energy are:

- Water used to produce energy is free
- Energy is generated with minimal pollution; there are no emissions in the atmosphere in the time of operation
- Relatively low cost of producing regarding nonrenewable energy capacities
- A flexible source an energy (a hydropower plant can operate as long as market energy is demanding energy regarding oil plant that is not so flexible in operation)
- In a hydropower plant electricity can be generated constantly

Disadvantages of hydropower energy are:

- Cost of investments is very high (hydropower plant and dam construction)
- The ecosystem around the area where the dam is supposed to be build is very affected (natural environment is destroyed in surrounded dams areas)
- The quantity of hydroelectricity is directly induced by the quantity of precipitation
- There is the peril of dam failure

In 2007, hydropower production was approximately 20% from the total of global electricity production with an installed capacity of 650,000 MW.

A very important aspect regarding hydro power plants refers to risk management process. This process is very delicate because of the huge impact of a potential loss. When a loss occurs to a hydro power plant, the effects may be at a catastrophic level.

Therefore, the risk management process may be start at the very beginning phase with the risk analysis.

In this stage, there are identified the risk that may appear in this industry:

- Accidental losses to the producing mechanism that may generate lack of energy providing
- Catastrophes – natural or technical, that may generate disastrous effects to the people in the river flow down area, and to the homeowners or commercial properties in the same are
- Losses to the natural ecosystem

It is obviously that all the risk exposures at a very huge level and in majority of the cases there are no similar losses caused in the past, in order to know exactly the expected frequency. The lack of data makes very important the stage of assuming the potential losses. There must take into account the value of the all exposed property in the valley and the “value” of the people. This last “value” is very hard to predict because the people may be injury, may record loss of the revenues during hospitalization or may die.

Once the risks are identify, the risk managers of the hydro power plants will start to the next phase - risk controlling.

The risk control has the main objectives<sup>151</sup>:

- to eliminate the potential losses and
- the decreasing of the losses once they occurs

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149 [www.ic.gc.ca](http://www.ic.gc.ca)

150 [www.hidroelectrica.ro](http://www.hidroelectrica.ro)

151 Rejda G. – Principles of Risk Management and Insurance, Pearson Education, USA 2002

The elimination of such losses (as mentioned before) is quite impossible, so the second objective seems to be more realistic. In this case, the effective measures are referring to;

- an adequate own workers protection
- periodical analysis of the structure of the dam/or the hydro power plant
- periodical revising of the mega engines, and all the technical motors
- building of the different small dams down in the river flow
- continuously supervising of the water volume, and in cases there are an excess there must be different ways to fill out this excess
- existence of a specialized people to do training for evacuation and survival in extreme or catastrophic conditions, for all the exposed people

The practice and the theory of risk management demonstrate that with all the taken control measures, there is no guarantee that the risk will not occur. Therefore, risk managers must find solution for financing the risks; the most common technique is transferring the risks to a third party.

The simplest solution is to find an insurance company to accept these risks. In addition, this insurance company may be very hard to find, because the exposure of the hydro power plant company is very high. The insurance premium must be calculated using very accurate actuarial data. This is more possible to an insurance company that has an international frame. Sometime is very necessary to ask for further information of the insurance company:

- experience in the field
- the quality of the reinsurance process

If the insurance company has experience in this kind of insurance, there is sure that the insurance premium is correctly calculated and the exposures are well covered.

The second aspect is important especially in case of the loss. If the insurance company has no adequate reinsurance program, in case of a catastrophic loss the financial strength of the insurer is affected, and in this case, the loss adjustment process is suffering. The hydro power plant company has no financial resources to cover all the claims and the bankruptcy is inevitable. Otherwise, if the reinsurance program is very strong all the mentioned problems are avoided.

The last stage of the risk management process is to observe the ongoing control and transferring process, in order to make adjustments and improvements when is needed.

All the hydro power plants that take this active measure of risk management will be successful ones, because even if different types of losses occur, all the quantifiable effects are financed. This mention must be read as a technical solution, because no one desire to generate catastrophic losses, and further more in many cases lack of people are not quantifiable even if there is an amount as compensation.

### **3. Conclusions**

Because the energy consumption is very high, and the ecosystem protection is very important, we conclude that in the future there must be used the new ways of energy production: wind and solar resources. This is a desiderate for the most energy producers because natural resources are infinite, despite the fossil ones that it will end in the future and water source that may generate very important losses.

All the hydro power plants that take this active measure of risk management will be successful ones, because even if different types of losses occur, all the quantifiable effects are financed. This mention must be read as a technical solution, because no one desire to generate catastrophic losses, and further more in many cases lack of people are not quantifiable even if there is an amount as compensation.

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*This article proposes to present some general issues related to budgetary transparency (principles promoted especially in UE and OECD countries). Further, these we analyze how these principles are and could be implemented by Romanian local level. After presenting the role of budgetary transparency, the local budgets are described taking into account the most important elements that could represent transparency subject. In next chapters are presented the budgetary reports and ways of control in order to assure the highest transparency for local budgeting in Romania.*

*Keywords: budget, transparency, budgetary principles*

*JEL Code: H61*

All public institutions in Romania (both central and local) have to set up budgets that reflect all the public revenues and their destinations. To assure the best public resource management, all the amounts are included in budgets. Budgets are instruments that reflect the public policy, being approved by legally designated bodies. One principle that has to be used in budgetary process is transparency. Respecting transparency, all the tax payers have the possibility to know what destination brought their taxes and fees paid to state.

In order to reach a high level of transparency, there are some actions that should be done. These actions take into account all the steps and stages in budgetary process, especially transparency should refer to budgetary elaboration, execution and report.

At local level, transparency principles are presented in the Local Public Finance Act (Law 273/2006). This normative act confirms the necessity of implementing transparent budgets. This is why all local budget projects and account executions should be presented in local newspapers, on the authority's web page or on poster boards. Supplementary, budget approvals and account executions should be made after public debates.

To analyze the relevant aspects related to transparency, OECD edited a Best Practice Guide on budgetary transparency. This document offer general guiding lines for budgetary transparency. In this respect, we can analyze it in comparison with Romanian local public sector.

## **1. Budgetary Transparency**

Budgetary rules were introduced in practice to permit a better management of public money. This principle is more useful in nowadays when public flows become higher and more complex. The EU budget's principles are considered one of the most representatives for this period. Council Regulation no 1605/2002 establish: "The budget shall be established and implemented and the accounts presented in compliance with the principle of transparency. The President of the European Parliament shall have the budget and amending budgets, as finally adopted, published in the Official Journal of the European Communities. The budget shall be published within two months following the date on which the budget is declared finally adopted. The consolidated financial statements shall be published in the Official Journal of the European Communities. The financial management reports drawn up by each institution shall also be published in the Official Journal of the European Communities".

The role transparency in budgetary sector is to limit structural economic weakness that limits medium- and long-term growth potential.

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## **2. The local budgets**

The local budget represents the financial image of the local policy because it transposes the Local Council's decisions. OECD recommends budgets to be comprehensive, encompassing all revenue and expenditure.

To include all kinds of revenues and expenditures in local budgets, every year, the State Budget Act has a special appendix with authorized revenue and expenditure categories for each financial year. For example, the State Budget Act for year 2009 authorizes 21 main categories of revenues and 18 domains of expenditures for local authorities.

The exact level of revenues depends on two main factors:

- amounts approved to be transferred from state budget to local budgets. From transparency point of view, there are deficiencies because State Budget Act establishes only the repartition on county level, effective amounts that will be transferred to each local budget being established after general ambiguous criteria;
- the exact level of taxes established by each Local Council guiding themselves after the minimum and maximum limits imposed by law (laws are approved by parliament and have effects at every level).

The final version of the budget should reflect the opinion of all implied parties. For this reason, the transparency is vital. It permits to analyze all the intermediary versions by all interested, and to come with proposals. The period of time allocated for embitter the initial version should be sufficient. OECD recommendations are for a minimum period of three month. The local budgetary legislation establishes minimum two weeks. What is more problematic is that if a 45 day period is overrun, local authorities will support the effects of a serious financial sanction resulting from resource sticking until budget is approved. A second problem derives from the interdependency between state budget approval process and local budget approval process because the later can begin after the former has finished. There are cases when state budget is approved to close to the financial year beginning, or even after that. In practice, there is almost impossible to approve local budgets before financial year begins.

The structure of the budget should not consist only from a number of abstract tables with codes and amounts, but it also should have detailed commentaries on each revenue and expenditure. At local level, the budget has no such appendixes.

A transparent budget should cover a longer period than the current financial year. A medium term prevision is necessary. The current Romanian practice refers to a three years perspective. Unfortunately, the initial forecasts are frequently revised. In most cases, the initial and final versions of budgetary indicators for the same period are radically different. The deviation explanations often are missing.

In budgeting process, all the principles have a vital role and have a certain degree of interconnection. Transparency and universality are interconnected because using gross terms permit a better control, and implicitly a higher transparency. Transparency and specialization: a budget build on a predefined structure permit an easy comparison with other budgets and permit a more transparent control. Transparency and unity: all resources and destinations being gathered in the same document, permits an exhaustive and transparent analyze without missing any component. Transparency and account unit: all the amounts being expressed in the same currency, the budget becomes more transparent.

## **3. Budgetary reports**

The budgetary activity need to be supported by some reports. The most important, from OECD point of view, are: pre-budget reports, monthly reports, mid-year reports, year-end reports, pre-election reports, long-term reports.

*Pre-budget reports* have to precede the budget proposal. It should be a more descriptive document which explains the economic and social context in which the budget will be approved. In this way are encouraged the debates on the budget. The main points in these documents should be grouped in three categories:

- latest years experience and relevant macroeconomic indicators;
- forthcoming budgetary year's indicators;
- estimations on medium term previsions (for the years that follows the base budgetary year).

Pre-budget reports should be based on the public authority's long term policy, integrating it in the general economic environment.

*Monthly reports* help to monitor the budgetary execution time-by-time, covering the period from the 1<sup>st</sup> of the month to last day of the same month. In order to have a correct image of the figures contained by these reports, it is necessary to compare the data with previous report, but also with data from the similar periods of the previous years.

The data from monthly reports should be followed by short explanations containing general issues and particular events that affected the budgetary execution.

*Mid-year reports* should reflect the budgetary situation after half of year passed. In Romania, it should be presented in August and should contain an updated situation of the budgetary indicators. The current procedures do not establish such obligation for local authorities, except the quarterly accounting reports (on revenues, expenditure, assets, and liabilities) that have no explanation or comments on how budgetary indicators were fulfilled.

*Year-end reports* are the most significant document on how budgetary indicators are effectively accomplished. These reports' data are based on banal budgetary execution and show the real situation of revenues and expenditures. It should be audited by a public audit body in order to confirm the exactness of data. Final annual accounts are approved in a similar manner with budgets. Year-end reports compare three parameters at every indicator level:

- initial provisions (at revenues and expenditures);
- final provisions that take into account all the in-year rectifications (at revenues and expenditures);
- effective values (at revenues and expenditures).

*Pre-election reports* are set up only in electoral years and have the role to illuminate the real situation of budgetary indicators from the beginning of the financial year in which elections are organized and a short period before elections are taken place. These reports' main utility is to confirm that former administration do not used abusively public resources to uphold electoral activities that help it to obtain easier a new mandate. A second utility of reports: helps citizens to decide what candidate to vote in elections. These extraordinary reports could be imposed by election legislation (not by ordinary financial legislation). OECD suggests that the moment of publishing these reports to be at least two weeks before elections.

*Long-term reports* should cover multi-annual periods (over 5 years) and represent documents that prove long-term sustainability of current government policies. These documents should evaluate the impact of social, economic, and demographic factors on budgetary indicators. For such long periods, it is recommended to use scenarios in order to try anticipating the future evolutions.

In Romanian local administration, these reports are not used in practice than in isolate cases and contains only general information, without representing real instruments for budgetary transparency. In future, it should be indicated to introduce gradually such reports and give some templates with information that should be presented.

#### **4. Budgetary control**

In public sector, the control is more vital than in private one. The specific conditions of public authorities impose a rigorous examination of all activities in order to reduce revenue un-cashing and unjustified expenditures. The accountability is organically linked to transparency.

Control, especially financial control, should be organized both internal and external. In Romanian local level, the control has two different components:

- preventive financial control is accomplished, in most cases, by an employee who has the responsibility to verify every financial operation and to confirm the legality of it ex-ante the institution's leader approve it;
- audit made by the Court of Accounts ex-post in order to confirm that institutions' budgetary indicators reflect the real situation.

## **5. Conclusions**

Transparency is a key principle in the budgetary process. It assures the premises for a good budgetary process (consisting of elaboration, execution, and reports). The international rules (such those promoted by OECD and EU) encourage transparency in budgeting.

Romania try to become closer to other European countries also in budgetary issues and to adopt common rules and regulation by assimilating the best practices from the region. An other trend is represented by using some budgetary provisions used for EU budget.

Romanian local sector is ruled by an act approved in 2006 and is updated with most recent tendencies. It is important to emphasize the specific provisions that statue the usage of modern means of transparency: using internet.

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# ON THE PERFORMANCE OF ROMANIAN COMPANIES AND PARTNERSHIPS

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*Abstract*

*This article is structured as follows: definitions of performance, profit - the main performance indicator and a case study on how the main performance indicators in the case of the company "X" were calculated.*

*Keywords: performance, profit, gross profit, net profit, operating profit, turnover, added value, gross operating surplus*

## **Definitions of Business Performance**

The etymology of the word goes back to the Latin 'performare' which means "to give a complete shape to a thing."<sup>153</sup> In English, the verb 'to perform' means 'to do a thing regularly, methodically and application, to execute, to lead to a convenient achievement.'<sup>154</sup>

In a general acceptance, 'performance'<sup>155</sup> means a special achievement in a line of activity. This definition leads to the conclusion that 'performance is not a statement; it is developed'.

*Economic and financial performance* is defined by Gheorghe O. Bistriceanu in *Lexicon de finanțe-bănci, asigurări, vol.III*, Editura Economică, Bucharest, 2001, p. 31 as 'a higher quality level of the economic and financial activity of private businesses that can be assessed with the help of several indicators, such as: turnover, return on equity, work productivity, capital yield, gross and net profits, annual fixed capital renewal rate, the efficiency of using fixed means etc.'

In the following page, we would like to discuss the concept of 'performance' as used after 1990.

Thus:

Amick Bourguignon (1995) defines management performance as 'the achievement of the objectives of an organization.'

A. Bulrland, M. Friédérich, G. Langlois show that 'performance is not bad or good per se. The same performance can be considered to be a good performance if the objective is modest or as a bad performance if the objective is ambitious'.

M. Niculescu (2003) links performance with enterprise productivity and efficiency 'an enterprise has theoretically a good performance if it is at the same time productive and efficient'.

P. Lorino (1995) states that 'for an enterprise, performance is that element which contributes to improve the value-cost pair. It is not only that which contributes to a decrease of cost or to an increase of value alone'.

T. J. Peter, R.W. Waterman (1995) 'assimilate performance to the concept of excellence which is based on four determinants: organization efficiency, social identity, objective achieving, and the organisation's reputation'.

C. Marmuse (2000) shows that 'performance allows for a long-term advantage to the competitors, through a strong motivation (based on reward systems) of all the members of the organisation'.

Recently, Iulia Jianu has showed that 'performance is a state of competitiveness that ensures the enterprise's long-lasting market presence. Performance indicates potential future results of the

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153 Iulia Jianu, 'Evaluarea, prezentarea și analiza performanțelor întreprinderii', CECCAR Publishing House, Bucharest, 2007, p.12, 19, 20, 21, 23, 24.

154 Idem.

155 Romanian Language Dictionary, Univers Enciclopedic Publishing House, Bucharest, 1996

satisfaction of strategic objectives. Therefore, performance does not describe a present state but it refers to the future’.

These two elements of performance, effectiveness and efficiency yield two types of cost, namely<sup>156</sup> ‘the resulted cost’, (cost of effectiveness), as an effect of actions that allow the enterprise to yield a result expected by its environment. By reporting the two types of cost categories, we obtain information necessary to pilot performance.

The diversity of definitions of performance proves that it is used differently by the users of financial information, depending on their interests.

Thus, managers are focused on the global performance of their company, the present and potential future investors understand performance as the profitability of their investments, employees are interested in company stability and profitability, creditors are interested in its creditworthiness, while clients are focused on company stability. Performance and value are the ideal pair for an efficient and modern management of companies and partnerships. ‘To measure performance means to appreciate value and to know value means to ‘translate’ performance.’<sup>157</sup>

The most complete definition of performance is given by IAS 1, which refers to global performance. In this view, ‘the limits’ of the accounting result are exceeded to include ‘differences of re-evaluation, differences of conversion, latent gains or losses on financial instruments, actuarial earnings and losses referring to pensions, the effect of change of accounting methods and fundamental corrections.’<sup>158</sup>

Thus, in order to measure a company’s performance, we have to make use of not only financial results, as ‘it is as if a team were to enter the championship based on its past results,’<sup>159</sup> but also of ‘a global view of interdependences between internal and external, quantitative and qualitative, technical and human, physical and financial partners of management. As a result, the users must resort to a company’s global performance. It is the mirror of the future ‘where results lie’ and of the past ‘where problems lie’.

It is our opinion that company performance is a complex concept which can be measured with a series of indicators that show the company’s place as compared to the competitors.

### **Profit, an indicator of enterprise performance**

From an etymological perspective, the origins of the word ‘profit’ lie in the Latin verb *proficere*, meaning to progress. It gradually became to mean ‘to yield profit.’<sup>160</sup>

Adam Smith<sup>161</sup> presents profit as the ‘total economic income of an enterprise less wages and land rent’.

Josep Scumpeter<sup>162</sup> describes profit as ‘an income surplus above the cost’.

P. Heyne (1991) defines profit as ‘the difference between the enterprise’s incomes after wages and financial rent’.

The Dictionary of Economics, 2<sup>nd</sup> ed., Economics Publishing House, 2001, Bucharest, at p.354 states:

- ‘profit is a generic name given to the positive difference between the income obtained through the sale of goods of a company and their cost, considered as an expression of economic efficiency’;

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156 Ristea M. Lungu C., Jianu I. – ‘Ghid pentru înțelegerea și aplicarea Standardelor Internaționale de Contabilitate, prezentarea situațiilor financiare,’ CECCAR Publishing House, Bucharest, 2004, p. 266-267.

157 Albu C., Albu N., ‘Instrumente de management ale performanței’, Editura Economică, Bucharest, 2004, p. 96

158 Ristea M. Lungu C., Jianu I. – ‘Ghid pentru înțelegerea și aplicarea Standardelor Internaționale de Contabilitate, prezentarea situațiilor financiare’ CECCAR Publishing House, Bucharest, 2004, p. 266-267.

159 Expansion Management Review, December 1997

160 Gheorghe I. Ana, ‘Profitul’, Editura Economică, 1998, Bucharest, p. 48.

161 A. Bolean, ‘Le profit’, Presses Universitaires de France, Paris, 1985.

162 J. Scumpeter, ‘Le profit’, Presses Universitaires de France, Paris, 1985

- allowed profit ‘designation (type) of profit as measure at the disposal of the author, after taxes and which they can use as they consider best; also called net profit’;
- legal profit ‘designation (type) of profit gained by abiding by the legal provisions’;
- illegal profit ‘designation (type) of profit gained by violating the legal provisions, deliberate or not’;
- regular profit, ‘designation given to profit considered to be enough for the owner to continue its activity’.

In Romania, profit is determined as a difference between total incomes and total expenses.

Therefore:

$$P_b = V_t - C_t$$

where:

$P_b$  = gross profit

$V_t$  – total incomes

$C_t$  – total expenses

The operating profit is also determined ( $P_e$ ) as a difference between operating incomes ( $V_e$ ) and operating expenses ( $C_e$ ) according to the formula:

$$P_e = V_e - C_e$$

Financial profit ( $P_f$ ) is calculated as the difference between financial incomes ( $V_f$ ) and financial expenses ( $C_f$ ) according to the relation:

$$P_f = V_f - C_f$$

Extraordinary profit ( $P_{ex}$ ) is the difference between extraordinary incomes ( $V_{ex}$ ) and extraordinary expenses ( $C_{ex}$ ).

The current profit ( $P_c$ ) expresses the positive difference between operating incomes plus financial incomes less operating and financial expenses.

Net profit ( $P_n$ ) is determined according to the formula:

$$P_n = P_b - I_p$$

where:

$I_p$  = profit tax

In Romania, the *Profit and loss account* form used until 2005 the term ‘earnings’, which has been replaced by ‘profit’ since 2006.

### Performance indicators for the company x

We will calculate the profit rates for enterprise X for the period 2004-2007.

The following table will be used:

|    | Indicator               | Measure unit | 2004     | 2005     | 2006     | 2007     |
|----|-------------------------|--------------|----------|----------|----------|----------|
| 1. | Total assets            | lei          | 33263340 | 34833135 | 35378984 | 36073079 |
| 2. | Net turnover            | lei          | 39651077 | 48617376 | 57671285 | 61136536 |
| 3. | Added value             | lei          | 14412885 | 18658471 | 20022065 | 21335446 |
| 4. | Gross operating surplus | lei          | 2272062  | 3917578  | 3710288  | 3797381  |
| 5. | Equities                | lei          | 14953621 | 15371466 | 15754922 | 15855815 |
| 6. | NFR                     | lei          | 9892772  | 10622547 | 10659099 | 11257595 |
| 7. | Operating expenses      | lei          | 55995332 | 61727868 | 38616787 | 49068066 |
| 8. | Sales of goods          | lei          | 848977   | 226625   | 198932   | 228816   |
| 9. | Value of merchandise    | lei          | 38636386 | 48200269 | 57412995 | 60278021 |



|     |  |     |          |          |          |          |
|-----|--|-----|----------|----------|----------|----------|
|     | production for<br>production<br>prices |     |          |          |          |          |
| 10. | Amortisation                           | lei | 791819   | 959658   | 753172   | 686575   |
| 11. | Registered<br>capital                  | lei | 4945203  | 4945203  | 4945203  | 4945203  |
| 12. | Permanent<br>capital                   | lei | 15534625 | 15647893 | 15948590 | 16425071 |
| 13. | Sales of goods                         | lei | 848977   | 226625   | 1198932  | 228816   |
| 14. | Net profit                             | lei | 27473    | 62737    | 384982   | 101149   |
| 15. | Current profit                         | lei | 185228   | 393530   | 736334   | 495805   |
| 16. | Gross profit                           | lei | 185228   | 382219   | 736334   | 495805   |
| 17. | Operating profit                       | lei | 798725   | 941051   | 1652500  | 663922   |

**Profit rates**  
**Based on the data in the table above we will calculate some profit rates**

*Table no.1. Relationship between earnings and means*

| Cr. No | Rate   | Measure unit | 2004  | 2005  | 2006  | 2007  |
|--------|--|--------------|---|---|---|---|
|        | $\frac{\text{Gross profit}}{\text{Total assets}} \times 100$   | %            | $\frac{185228}{33263340} \times 100 = 0,56$ | $\frac{382219}{34833135} \times 100 = 1,10$ | $\frac{736334}{35378984} = 2,08$            | $\frac{495805}{36073079} \times 100 = 1,37$ |
|        | $\frac{\text{Net profit}}{\text{Total assets}} \times 100$   | %            | $\frac{27473}{33263340} \times 100 = 0,08$  | $\frac{62737}{34833135} \times 100 = 0,18$  | $\frac{384982}{35378984} \times 100 = 1,09$ | $\frac{101149}{36073079} \times 100 = 0,28$ |
|        | $\frac{\text{Gross profit}}{\text{Net immobilised assets}}$  | %            | $\frac{185228}{7808565} \times 100 = 2,37$  | $\frac{382219}{7221735} \times 100 = 5,29$  | $\frac{736334}{6700173} \times 100 = 10,99$ | $\frac{495805}{7774952} \times 100 = 6,38$  |
|        | $\frac{\text{Net profit}}{\text{Net immobilised assets}}$  | %            | $\frac{27473}{7808565} \times 100 = 0,35$   | $\frac{62737}{7221735} \times 100 = 0,87$   | $\frac{384982}{6700173} \times 100 = 5,75$  | $\frac{101149}{77749952} \times 100 = 1,31$ |
|        | $R_{rfp} = \frac{\text{Gross profit}}{\text{Equities}} \times 100$   | %            | $\frac{185228}{14953621} \times 100 = 1,24$ | $\frac{382219}{15371466} \times 100 = 2,49$ | $\frac{736334}{15754922} \times 100 = 4,67$ | $\frac{495805}{15855815} \times 100 = 3,13$ |
|        | Return on registered capital:<br>Rrcs = $\frac{\text{Gross profit}}{\text{registered capital}} \times 100$ | %            | $\frac{185228}{4945203} \times 100 = 3,75$  | $\frac{382219}{4945203} \times 100 = 7,73$  | $\frac{736334}{4945203} \times 100 = 14,89$ | $\frac{495805}{4945203} \times 100 = 10,03$ |
|        |  |              |   |   |   |   |

|  |  |   |   |   |   |   |
|--|--|---|---|---|---|---|
|  | Permanent capital<br>Rrcp =<br>$\frac{\text{Gross profit}}{\text{Permanent capital}} \times 100$ | % | $\frac{185228}{15534625} \times 100 = 1,19$ | $\frac{382219}{15647893} \times 100 = 2,44$ | $\frac{736334}{15948590} \times 100 = 4,62$ | $\frac{495805}{16425071} \times 100 = 3,02$ |
|--|--|---|---|---|---|---|

Table no.2. Relationship between earnings and activity

| Cr. No | Rate   | Measure unit | 2004  | 2005  | 2006  | 2007  |
|--------|--|--------------|---|---|---|---|
|        | $\frac{\text{Gross profit}}{\text{Turnover}} \times 100$   | %            | $\frac{185228}{39651077} \times 100 = 0,47$ | $\frac{382219}{48617376} \times 100 = 0,79$ | $\frac{736334}{57671285} \times 100 = 1,28$ | $\frac{495805}{61136536} \times 100 = 0,81$ |
|        | $\frac{\text{Net profit}}{\text{Turnover}} \times 100$   | %            | $\frac{27473}{39651077} \times 100 = 0,07$  | $\frac{62737}{48617376} \times 100 = 0,13$  | $\frac{384982}{57671285} \times 100 = 0,67$ | $\frac{101149}{61136536} \times 100 = 0,17$ |
|        | $\frac{\text{Gross profit}}{\text{Value added}}$   | %            | $\frac{185228}{14412885} \times 100 = 1,29$ | $\frac{382219}{18658471} \times 100 = 2,05$ | $\frac{736334}{20022065} \times 100 = 3,68$ | $\frac{495805}{21335446} \times 100 = 2,32$ |
|        | $\frac{\text{Net profit}}{\text{Value added}}$   | %            | $\frac{27473}{14412885} \times 100 = 0,19$  | $\frac{62737}{18658471} \times 100 = 0,34$  | $\frac{384982}{20022065} \times 100 = 1,92$ | $\frac{101149}{21335446} \times 100 = 0,47$ |
|        | Return on used funds:<br>Rrfc = $\frac{\text{Gross profit}}{\text{Goods production}} \times 100$ | %            | $\frac{185228}{38636386} \times 100 = 0,48$ | $\frac{382219}{48200269} \times 100 = 0,79$ | $\frac{736334}{57412995} \times 100 = 1,28$ | $\frac{495805}{60278021} \times 100 = 0,82$ |
|        | $\frac{\text{Net profit}}{\text{Goods production}}$  | %            | $\frac{27473}{38636386} \times 100 = 0,07$  | $\frac{62737}{48200269} \times 100 = 0,13$  | $\frac{384982}{57412995} \times 100 = 0,67$ | $\frac{101149}{60278021} \times 100 = 0,17$ |

Table no.3. Return on assets (ROA)

|   |   |                            |   |                            |
|---|---|----------------------------|---|----------------------------|
| Net return on assets<br>ROA =<br>$\frac{\text{Net operating profit}}{\text{Total assets}} \times 100$ | $\frac{6906}{33263340} \times 100 = 0,02$ | -                          | $\frac{899388}{35378984} \times 100 = 2,54$ | -                          |
| Net operating profit =<br>(CA - CE) - A   | $798725 - 791819 = 6906$                  | $941051 - 959658 = -18607$ | $1652560 - 753172 = 899388$                 | $663922 - 686575 = -22653$ |

Table no.4. Return on equity (ROE)

| ROE   | Measure unit | 2004  | 2005  | 2006  | 2007  |
|---|--------------|---|---|---|---|
| $R_f = \frac{P_{net}}{Cp} \times 100$         |              | $\frac{27473}{14953621} \times 100 = 0,18$  | $\frac{62737}{15371466} \times 100 = 0,41$  | $\frac{384982}{15754922} \times 100 = 2,44$ | $\frac{101149}{15855815} \times 100 = 0,63$ |
| ROE before tax<br>ROE <sub>before tax</sub> = |              | $\frac{185228}{14953629} \times 100 = 1,24$ | $\frac{393530}{15371466} \times 100 = 2,56$ | $\frac{738334}{15754922} \times 100 = 4,69$ | $\frac{495805}{15855815} \times 100 = 3,13$ |
| Yield of equity $\frac{Dividends}{Equities}$  |              | -   | -   | -   | -   |

Table no.5. Return on sales (ROS)

|   | Measure unit | 2004   | 2005   | 2006   | 2007   |
|---|--------------|--|--|--|--|
| $R_{mc} = \frac{\text{Sales margin}}{\text{Goods sale}} \times 100$                     |              | $\frac{10238}{848977} \times 100 = 1,21$     | $\frac{21343}{226625} \times 100 = 0,42$     | $\frac{193}{1198932} \times 100 = 0,1$       | $\frac{1468}{228816} \times 100 = 0,64$      |
| Rate of the gross operating margin<br>$R_{mb} = \frac{EBE}{\text{Turnover}} \times 100$ |              | $\frac{2272062}{39651077} \times 100 = 5,73$ | $\frac{3917578}{48617376} \times 100 = 8,06$ | $\frac{3710288}{57671285} \times 100 = 6,43$ | $\frac{3797381}{61136536} \times 100 = 6,21$ |
| Rate of the net operating margin<br>$R_{mne} = \frac{PE}{CA} \times 100$                |              | $\frac{798725}{39651077} \times 100 = 2,01$  | $\frac{1233620}{48617376} \times 100 = 2,53$ | $\frac{1652560}{57671285} \times 100 = 2,87$ | $\frac{663922}{61136536} \times 100 = 1,09$  |

The evolution in time of the profit rates analyzed in the table above enable us to draw the following conclusions related to the Company X.

Thus, the turnover increased in 2007 by 54.19% as compared to 2004. The increase was especially due to the increase of labour productivity as the company/partnership did not make new investments in production capacities.

The goods production increased each year. In 2007, more goods were produced – 56.02% more than in 2004. The goods produced in this period were also sold and reality shows that the level of finite products stocks decreased from 1,854,330 lei in 2004 to 960,714 lei in 2007.

A major problem that the company/partnership has to face is connected to cashing in from foreign partners, which has negative consequences on the treasury flows. The trade receivables balance reached at the end of 2007 the value of 15,386,589 lei that is the value of the goods delivered in 2007 for 3.02 months.

Long term receivables were low. The company engaged long term receivables only in 2007, the number at the end of the year was 569,256 lei.

We noticed that the total immobilised assets at the end of 2007 was 7,774,952 lei as compared to 7,808,565 lei in 2004, so without any important fixed asset entries in this period.

Gross profit, as a main performance indicator registered modest values, below 800,000 lei, with a minimum of 185,228 lei in 2004 and a peak of 736,334 lei in 2006. Gross profit was decreased by tax rises paid at the state budget according to the deadlines calendar as follows: in 2004 - 681,895 lei; 2,015,405 lei in 2005; 757,931 lei in 2006 and 208,546 lei in 2007.

After this noteworthy effort that the company took at the end of the first trimester 2008, the enterprise paid all its budgetary dues, which it continued to do the rest of the year 2008. At the end of 2008, the net profit reached the sum of 1 mil. USD, with positive consequences for the future development of the company.

Measuring the performance of a company is a complex endeavour. It must measure, through a system of indicators, the activity of the enterprise.

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## LE CAPITAL FINANCIER – COMPOSANTE ORIGINAIRE ET CONDITION ESSENTIELLE DANS LE FONDEMENT DE LA VALEUR DE L'ENTREPRISE

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*The company's alternative between the partial or total reinvestment of the net profit of the shareholders and the partial or total breakdown of the profit as dividends has or should have as main goal the maximizing of the company's value. The companies are creating values as long as they pay for the capital, no matter how high this is, to an increase rate of a higher value than its cost. There will always be companies that will have a higher increase rate than the average of the economy (industry).*

*The present paper analyzes some of the indicators that are able to reflect best the value of the company starting from the added value as the most elementary of all indicators up to the Total Shareholder Return (TSR) as the most complex among the indicators.*

*Mots clé: capital financier, valeur de l'entreprise, valeur de marché ajoutée, rentabilité totale des actionnaires*

*Code Jel: G0, G3, M0*

La modalité où l'entreprise assure ses capitaux financiers, dans le volume et la structure nécessaires, dans un temps et un coût réduits, amène cette question, par la force des choses, dans le centre de l'activité de management, en imposant une autre place et un autre rôle au management financier.

Fama et Miller définissent le capital financier comme étant la capacité des ressources financières de générer, acquérir et maintenir le capital réel, celui qui offre à l'entreprise un rôle productif dans l'économie<sup>163</sup>.

En ce qui concerne la valeur de l'entreprise, ce n'est pas autant le volume, que c'est la structure des capitaux financiers qui a une influence très grande. Conformément au modèle hyper bien connu énoncé par Modigliani et Miller, la valeur de l'entreprise est donnée par l'addition entre le profit net de l'entreprise et la dépense avec le taux d'intérêt divisés par le coût moyen pondéré du capital.

L'alternative de l'entreprise entre re-investissement partiel ou total du profit net des actionnaires et la division intégrale ou partielle de celui-ci sous la forme des dividendes aura comme but, ou devrait avoir comme but, la maximisation de la valeur de l'entreprise.

D'une part, les actionnaires seront contents et l'entreprise sera privée d'une partie de son financement interne, et, de l'autre côté, les capacités d'autofinancement de l'entreprise augmenteront au détriment des propriétaires. Même si les deux situations sont désirables, dans la plupart des cas elles sont en contradiction.

La théorie financière explique le choix de la structure financière par le biais des coûts d'agent, de l'asymétrie des informations, des distorsions fiscales, des stratégies de croissance externe. La

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163 Culp Christopher L., 2002, The ART of risk management: alternative risk transfer, capital structure, & the convergence of insurance & capital markets.



théorie d'agent analyse d'un côté les conflits d'intérêts entre les managers non-proprétaires et actionnaires, et de l'autre côté ceux entre actionnaires et créiteurs, générateurs de coûts d'agent, qui auront des implications sur la valeur de l'entreprise, ainsi que sur le coût moyen pondéré du capital<sup>164</sup>.

Dans ce contexte, dans la littérature de spécialité il y a des débats importants concernant l'importance des actionnaires de l'entreprise par rapport aux autres partenaires – créiteurs ou salariés. On peut ainsi identifier deux approches<sup>165</sup>: la première approche considère que les actionnaires sont les propriétaires de l'affaire, et le management est choisi par ceux-ci pour représenter leurs intérêts en vue de la maximisation de la valeur des actionnaires, alors que la deuxième approche fait référence au fait que le management est mandaté par les actionnaires à assurer la continuité à long terme de l'affaire.

Au fil du temps, les indicateurs utilisés pour la quantification de la valeur que les entreprises créent ont pris de multiples formes, en exprimant toute une série de variables, plus complètes pour chaque catégorie, à mesure qu'on avait enregistré une évolution de ceux-ci.

Un premier indicateur, peut être considéré comme étant la *valeur ajoutée* de l'entreprise.

La valeur ajoutée est l'un des indicateurs les plus significatifs de l'activité de l'entreprise et dimensionne son apport dans le processus de production et distribution des biens, et, par addition, contribue à la formation du produit intérieur brut – avec quelques ajustements au niveau de l'économie nationale.

Dans la littérature de spécialité, la valeur ajoutée peut être calculée par deux méthodes<sup>166</sup>:

- la méthode soustractive
- la méthode additive

Conformément à la *méthode soustractive*, la valeur ajoutée se détermine comme la différence entre la production de l'exercice (Qe) et les consommations intermédiaires (C):

$$Va = Q_e - C$$

La **méthode additive de détermination de la valeur ajoutée** comporte l'addition de tous ses éléments composants: des salaires et charges sociaux, des impôts et taxes, des intérêts, des amortissements, des dividendes, le résultat net. Dans ce contexte, la valeur ajoutée comporte la rémunération: du travail (par les dépenses salariales), du capital propre (par dividendes), du capital technique (par amortissements), du capital emprunté (par intérêts), de l'Etat (par impôts et taxes).

*La valeur économique ajoutée (Economic Value Added – EVA)* mesure le succès des managers dans la direction de la maximisation du bien-être des actionnaires<sup>167</sup>.

EVA = Profit net opérationnel (net operating profit after taxes) – (capital x coût du capital)

*Valeur de marché ajoutée (Market Value Added - MVA)*<sup>168</sup>

MVA = VB – CT

VB – valeur de marché (boursière) de l'entreprise

CT – capital investi formé de la valeur présente du capital initial investi par les actionnaires et la valeur présente des profits re-investis

*La valeur créée = VP – (Ki + Prr)*<sup>169</sup>

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164 Dragotă, V., Ciobanu, A., Obreja, L., Dragotă, M., Management financiar, Vol. II, Ed. Economică, Bucurest, 2003.

165 A voir Ross, S., Westerfiel, R., Jaffe, J., Jordon, B., Modern Financial Management, McGraw-Hill Irwin, 2008.

166 Niculescu, M., Diagnostic global stratégique, Ed. Economică, Bucurest, 1997, pp. 270-271.

167 Moyer, Ch., McGuigan, J., Rao, R., Fundamentals of Contemporary Financial Management, Ed. Thomson, Canada, 2007, pp. 7.

168 [Desiraju Venkata Ramana](#), Market Value Added and Economic Value Added: Some Empirical Evidences in [8th Capital Markets Conference, Indian Institute of Capital Markets Paper](#), 2008, <http://ssrn.com/abstract=871404>.

où,

VP – la valeur de marché de la compagnie au moment de l'analyse

Ki – la valeur actuelle des capitaux investis par les actionnaires

Prr – la valeur actuelle des profits re-investis

### ***La rentabilité totale des actionnaires (Total Shareholder Return – TSR)***

L'indicateur TSR se détermine comme le rapport entre la modification de la valeur boursière de l'action ( $\Delta VB = VB1 - VB0$ ) plus les dividendes reçus (DIV), d'un côté, et la valeur boursière de l'action au début de la période (VBI), de l'autre.

$$RTA = [(\Delta VB) + DIV] / VBI \times 100$$

La plus complète (et en même temps la plus agréée) mesure de la création de valeur est la RTA. La RTA mesure la modification du prix de l'action plus le bénéfice apporté par le dividende sur une certaine période de temps. Il est très important de mentionner trois aspects<sup>170</sup>:

- **Les changements dans la valeur fondamentale.** La valeur fondamentale représente la valeur escomptée des flux d'encaisse prochains, basés sur les profits, la productivité des actifs, la croissance et le coût du capital. Les améliorations dans la valeur fondamentale sont la base de la création de valeur. C'est l'aspect sur lequel s'appuie la plupart des équipes managériales. Les études d'il y a plus de deux décennies concernant les finances des corporations ont montré que la valeur fondamentale apporte les plus grands résultats à long terme, en représentant 60% de la RTA. Et de tous les facteurs qui contribuent à la valeur fondamentale, le plus important est de loin la croissance des revenus.

- **Les changements dans l'évaluation à court terme suite aux attentes des investisseurs.** La modalité où le marché boursier évalue les performances fondamentales d'une compagnie peut faire augmenter – ou décroître – la RTA d'une compagnie à court terme. Les attentes des investisseurs peuvent être mesurées par la différence entre le prix actuel de l'action et le prix résulté suite à l'analyse des éléments fondamentaux. Ce résultat peut être analysé et par la comparaison du résultat avec celui des concurrents de la même industrie. Les améliorations en valeur fondamentale sont la principale source de croissance de la RTA à long terme. Mais à court terme, les changements dans la manière où le marché évalue une compagnie à un moment donné peuvent augmenter ou baisser la RTA. Ces modifications sont d'habitude exprimées par le multiplicateur d'évaluation de la compagnie, par un indicateur – le taux prix par gain ou par l'Excédent Brut d'Exploitation (EBE). Les études montrent que pour les compagnies de top les améliorations dans le multiplicateur d'évaluation ont la plus grande importance pour la RTA à court terme. Boston Consulting Group a développé de nouveaux indicateurs pour mesurer l'impact des attentes des investisseurs sur le prix de marché des actions d'une compagnie. En 2001, l'entreprise de consultance a introduit le prix de l'attente (expectation premium), une technique qui mesure la différence entre le prix de marché et le prix résulté de l'analyse de cash-flow des éléments fondamentaux. En même temps, ces derniers temps il a issu et la technique nommée l'analyse multiple comparée pour identifier les éléments fondamentaux qui sont spécifiques à une industrie.

- **Les changements dans la distribution des flux d'encaisse vers les investisseurs.** Une compagnie peut améliorer sa RTA et par la distribution d'argent/numéraire vers les investisseurs. Par exemple, les dividendes contribuent directement à la RTA. Mais les dividendes, tout comme le rachat d'actions et le paiement des dettes, peuvent contribuer indirectement à la croissance de la valeur de la compagnie. L'amélioration de la valeur fondamentale de la compagnie génère du

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169 Vâlceanu, G., Robu, V., Georgescu, N., Analyse economice-financiere, Ed. Economica, Bucarest, 2005.

170 The Boston Consulting Group, Balancing Act, Implementing an Integrated Strategy for Value Creation, 2005 Value Creators Report.

numéraire. Les compagnies se trouvent devant la décision de re-investir (par des investissements internes ou acquisitions) ou de distribuer l'argent (par le paiement des dettes, le rachat des actions ou par des dividendes). Telles distributions contribuent directement ou indirectement à la RTA. Ces trois aspects – la valeur fondamentale, les attentes des investisseurs et les flux de numéraire – sont des parties intégrantes du *système dynamique de création de la valeur*. Le défi le plus important de la création de valeur est la compréhension des liaisons entre ces trois composantes et la gestion des échanges entre celles-ci pour assurer que les actions du management sont synergiques et non pas contradictoires.

Le marché comprend les attentes des investisseurs concernant la performance prochaine dans le prix des actions, tout en poussant les compagnies à trouver des méthodes nouvelles pour dépasser les attentes des investisseurs. Malgré la simplicité et l'attractivité de se concentrer sur un seul indicateur, que ce soit le gain par action (CPA) ou le profit, il n'y a pas de panacée qui pourrait garantir les performances tous les ans.

Par contre, la création de valeur est un défi complexe et multidimensionnel. Tout d'abord, les managers de top doivent développer un plan détaillé pour améliorer la valeur fondamentale dans une manière qui assure l'avantage compétitif à long terme. En deuxième lieu, ils doivent comprendre la modalité où les investisseurs vont évaluer les performances de la compagnie à court terme. Troisièmement, ils doivent définir des priorités claires pour ce qui est la manière où l'argent généré par la compagnie sera utilisé – quelle partie soit tenue en liquidités, combien soit re-investi et quel pourcentage soit retourné aux investisseurs et aux crédateurs. Le plus important est le fait qu'il faut faire toutes ces choses dans une manière coordonnée, en anticipant la modalité où des changements dans une direction peuvent affecter d'autres directions et gérer des échanges complexes, souvent controversés entre les trois dimensions clés du système intégré de création de la valeur.

La plupart des compagnies surveillent les performances de création de la valeur dans le temps. Très peu créent une base assez complète pour aider à la valorisation entière des facteurs dynamiques qui déterminent la création de valeur dans leur compagnie ou industrie. La création de cette base n'est pas seulement un exercice de collection de données.

Que détaillée et orientée soit vers le management, une *stratégie intégrée de création de la valeur* n'est pas complète jusqu'au moment où elle est transposée dans les processus managériaux de la compagnie, dans des modèles et indicateurs. Et pourtant, beaucoup de compagnies ne mettent pas en place cette étape finale. Le remaniement de tous les processus, y compris la planification stratégique, la réalisation des budgets, l'allocation du capital et le niveau des stimulants pour les performances managériales qui se sont développés durant les années, peut même tomber à l'eau, peut être décourageante. Mais si une compagnie ne s'adresse pas à ce défi, elle se soumet au risque de ne pas être capable à aligner la culture organisationnelle à la *stratégie de création de la valeur*.

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# RISK AND PROFITABILITY AS CAPITAL STRUCTURE DETERMINANTS

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*Determining the optimal capital structure of a firm faces a difficult decision that involves the strategic trade-off between risk and profitability. Although many empirical studies have been done since the Miller and Modigliani theorem forms the bases for modern thinking on capital structure, no consensus has been reached with regard to the relationship between profitability and leverage. In contrast to theoretical deductions, many empirical studies show that leverage is negatively related to profitability. The main objective of this study is to explain the role played by profitability in establishing the firm's capital structure by examining the relationship between profitability, risk and leverage, and attempts to find the answer to the question: why do more profitable firms have lower leverage ratios?*

*Keywords: Capital Structure, Profitability, Leverage, Risk and Return Trade-off*

*JEL Classification: G32*

## **1 Theories of capital structure**

The pioneering paper published in 1958 by Merton Miller and Franco Modigliani is considered the cornerstone of modern corporate finance and capital structure analysis. The main idea of the theorem is an irrelevance proposition: The provocative M&M Theorem provides the conditions under which a firm's financing decisions do not affect its value. It states that, in a perfect capital market, in the absence of taxes, transaction costs, bankruptcy costs, and asymmetric information, the value of a firm is unaffected by how that firm is financed. It does not matter if the firm's capital is raised by issuing stock or selling debt (the firm's debt-equity ratio does not affect its market value). It does not matter what the firm's dividend policy is. Therefore, the Modigliani-Miller theorem is also often called the capital structure irrelevance principle.

In a subsequent paper (1963), they eased the initial assumptions and stated that under capital market imperfections (if the financial markets are competitive and corporations are taxed) the value of the levered firm equals that of the unlevered firm plus the value of the debt tax shield, due to the preferential treatment of debt relative to equity. So the firm's optimal capital structure is determined by the trade-off between the tax advantage associated with debt and the increased bankruptcy risk associated with the higher leverage. This statement predicts that financial leverage and economic performance are in a proportional relationship.

Although many empirical studies have been done since the Miller and Modigliani theorem forms the bases for modern thinking on capital structure, no consensus has been reached with regard to the relationship between profitability and leverage. The three most significant theories that aim to explain the correlation between capital structure and the market value of the firm are the trade-off, pecking order, and market timing models.

The essence of the **static trade-off theory** (referred to as the tax based theory), is that a value maximizing firm will consider the trade-off between the tax shelter provided by debt and the cost of financial distress [Brealey and Myers, 2003]. According to the static trade-off theory firms select optimal capital structure by examining the net tax advantage of debt financing by comparing debt advantages (tax shield benefits, the disciplinary role of debt on managers [Jensen & Meckling, 1976], lower information costs relative to equity finance costs) with drawbacks (the costs of bankruptcy due to higher debt and the costs of financial distress due to information asymmetry between shareholders and creditors) [Dobrica, F. I, 2007]. Firms adopting this theory

could be regarded as setting a target debt-to-value ratio, and would continuously and gradually adjust their capital structures toward this target in order to maximize the firm's value.

Hence, if firms seek external financing, they should issue equity when their leverage is above the desired target leverage, issue debt when their leverage is below the target, or issue debt and equity proportionately to stay close to the target. Myers (1984), however, suggests that when the firm's equity is under priced in the market, managers are reluctant to issue equity. The consequence is that potential investors tend to react negatively to an equity issue, because they perceive equity issues to only occur if equity is either fairly priced or over priced, which conjuncture is not a benefic one to buy the firm's securities. As a result, managers are reluctant to issue equity.

According to the trade-off theory, highly profitable corporations with stable, tangible assets tend to have higher target gearing ratios as their assets are relatively safe. In contrast, companies with mostly intangible and risky assets tend to have lower debt-equity ratio and rely more heavily on equity financing. The trade-off theory fails to explain the simple empirical evidence that more profitable firms have lower leverage, and the use of debt decreases with profitability.

An intriguing approach to studying the optimal capital structure is the so called **pecking order theory** [Donaldson, 1961; Myers & Majluf, 1984; Myers, 1984] constructed on the information asymmetry hypothesis, which suggests that there is no optimal capital structure. It states that because of asymmetries of information between insiders (managers) and outsider lenders and investors, the companies prioritize their sources of financing, and establish a hierarchical order according to the law of least effort, or of least resistance. Hence, due to adverse selection, managers prefer to use internal funds (retained earnings) first, and when that is depleted, debt is preferred over equity-issue if external financing is required. External equity is preferred only when the firm reaches its "debt capacity". In this case there isn't a determinate relationship between profitability and leverage. If there is a rich pool of good business opportunities and debt is available at reasonable cost, then increased leverage may be associated with higher performance. However, there is a risk of over investment into inferior ventures in which case we might see the inverse relationship [Andersen T. J., 2005].

A number of studies reveal that pecking order theories are not sufficient to explain all capital structure choices [Fama and French, 2004; Leary and Roberts, 2007].

The third theory, the **market timing theory** [Baker and Wurgler, 2002], based on the corporate mispricing, provides a new explanation to the financing decisions of the firm, and challenges both the trade-off and the pecking order theories. The model suggests that managers recourse to equity issuance in time periods during which the company's stocks have high market values relative to their book and past market values. This lowers the firm's cost of equity and benefits current shareholders at the expense of new shareholders. According to this theory, the equity issuing decision is guided by the managers' capability to time the market accordingly to the relative cost of debt and equity. While Baker and Wurgler (2002) states that "the capital structure is the cumulative outcome of attempts to time the equity markets", Dittmar and Thakor (2005) show that firms may issue equity when the stock prices are high even when managers do not attempt to exploit marker mispricing [Schultz, 2003].

## **2 The effect of leverage on risk and return**

Leverage and capital structure are closely related concepts linked to cost of capital and therefore capital budgeting decisions. Operating leverage is concerned with the relationship between the firm's sales revenue and its earnings before interest and taxes. Operating leverage can be defined as the ability to use fixed operating costs to magnify the effects of changes in sales on earnings before interest and taxes. When a firm has fixed operating costs, operating leverage is present. An increase in sales results in a more than proportional increase in EBIT (earnings before interest and taxes); a decrease in sales results in a more than proportional decrease in EBIT.

Financial leverage is concerned with the relationship between the firm's earnings before interest and taxes and the earnings available for common stockholders. Financial leverage measures a firm's exposure to financial risk and results from the presence of fixed *financial charges* in the firm's income stream. These fixed charges do not vary with the firm's earnings before interest and taxes; they must be paid regardless of the amount of EBIT available to pay them.

Total leverage is concerned with the relationship between the firm's sales revenue and the earnings available for common stockholders. This combined effect, or total leverage, can be defined as the firm's ability to use fixed costs, both operating and financial, to magnify the effect of changes in sales on the firm's earnings per share.

Risk comes into play in two ways: (1) the capital structure must be consistent with the business risk, and (2) the capital structure results in a certain level of financial risk. In other words, the prevailing business risk tends to act as an input into the capital structure decision process, the output of which is a certain level of financial risk.

Business risk can be defined as the relationship between the firm's sales and its earnings before interest and taxes (EBIT). In general, the greater the firm's operating leverage – the use of fixed operating cost – the higher its business risk. Although operating leverage is an important factor affecting business risk, two other factors also affect it – revenue stability and cost stability. Revenue stability refers to the relative variability of the firm's sales revenues. Cost stability is concerned with the relative predictability of input prices such as labor and materials.

The firm's capital structure directly affects its financial risk, which can be described as the risk resulting from the use of financial leverage. Since the level of this risk and the associated level of return (*eps*) are key inputs to the valuation process, the financial manager must estimate the potential impact of alternative capital structures on these factors and ultimately on value in order to select the best capital structure.

Since capital structure policy involves a strategic trade-off between risk and expected return, the target capital structure policy must seek a prudent and informed balance between risk and return [Akintoye, 2008]. The firm must consider its business risk, tax positions, financial flexibility and managerial conservatism or aggressiveness.

In general, firms with low operating leverage, stable revenues, and stable costs have low business risk, while firms with high operating leverage, volatile revenues, and volatile costs have high business risk. Firms with stable revenues and costs can accept greater operating leverage (fixed operating costs) than those with volatile patterns of revenues and costs. Business risk is not affected by capital structure decisions. The higher the business risk, the more cautions the firm must be in establishing its capital structure. Hence, if a firm operates in an environment characterized by a high degree of business risk should reduce the financial risk by choosing to finance their activities with lower leverage.

To run a firm in a dynamic competition market it is essential to continue innovative ventures and conduct more risky actions to achieve higher performance. Firms can realize sustainable competitive benefits by deploying valuable, extraordinary, unreplaceable, firm specific assets. At the same time it imposes a higher level of business risk on firms' organizational activities which argues for lower financial leverage. These firms often struggle with high level of environmental uncertainty.

### **3 Profitability and capital structure choices**

Corporations have three types of financing sources at their disposal: debt, external equity and internally generated equity. Debt financing can have beneficial but also harmful effects on firms risk and profitability. Since interest is a deductible expense, debt financing leads to tax benefits, which lower the cost of financing for profitable firms, but at the same time can cause financial distress. If a firm can service high debt without risk, it will create added value to the shareholders. Financing an investment opportunity through debt can generate for a profitable firm

a higher Net Present Value, due to these tax savings, and accordingly can create wealth for the owners. The reverse aspect is that when a firm experiences liquidity problems, a low debt ratio can be burdensome. Hence, firms should employ debt interdependently to the stability of its cash-flows. The stability of cash-flows allows firms to service a larger amount of debt capital, by lowering the risk of insolvency.

Liquidity problems and cash-flows irregularity can affect the financing decision, as they tend to raise the cost of the debt. Empirical evidence show that larger firms are perceived to have lower risk levels, hence they are more diversified and have lower variance of earnings, making them able to tolerate higher debt ratios. Graham (2000) concludes that large and profitable companies present usually a low debt rate. He also pointed out that large companies, which have means to offer good collaterals, usually find relatively lower financial costs, which does not mean that they display higher leverage.

Large companies, which have means to offer good collaterals, usually find relatively lower financial costs, which don't mean that they have a high debt level. Besides these factors, a lot of firms can opt to maintain flexibility reserves, using debt well below their potential, devising a possible future need. In case of smaller firms solving the information asymmetries with creditors requisites higher costs.

We can conclude that there is a negative relationship between profitability and leverage, because leverage degree generates agency problems among financial creditors and stockholders. The profitability of a firm is the main determinant of internally generated funds, and higher profits increase the level of internal financing. More profitable firms have more internally generated funds, and tend to avoid gearing. Hence the firm financial performance is a main determinant of its capital structure, because it affects one of these three main financing sources – internally generated funds. If these funds are sufficient to finance the firm's activity, than the need for debt financing is lower even if more profitable firms have an easier access to loans. This fact seems to confirm the predictions of the pecking order theory.

According to the static trade-off theory, profitable firms should have higher optimal leverage ratios. Contrary to the static trade-off theory's predictions, empirical evidence shows, that more profitable firms use lower leverage ratios. This evidence is the ground on which the pecking order theory is constructed [Fama and French, 2002]. This theory predicts that, due to adverse selection costs, firms follow the pecking order from internal funds, to debt, and to equity to finance new investments. More profitable firms raise less debt because they have more internal funds to rely on. The negative relation between profitability and leverage ratios thus suggests that tax benefits are of secondary concern [Chen and Zhao, 2004].

A possible explanation which partly reconciles the trade-off and the pecking order theory is that firms allow their leverage ratios to fluctuate within a certain range around the target rate, and do not adjust constantly their leverage ratio because the transaction costs that occur.

#### **4 Conclusions**

The choice among the ideal proportion of debt and equity can affect the value of the company, as much as the return rates can. The evidence shows that more profitable firms fund a larger proportion of their activity with debt capital, so they have lower leverage ratios. We can conclude that there is a negative relationship between profitability and leverage, because leverage degree generates agency problems among financial creditors and stockholders. In establishing their capital structure firms must consider their business risk, tax positions, financial flexibility and managerial conservatism or aggressiveness.

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# AN ASSESSMENT OF THE MILLER'S MODEL ON ROMANIAN FISCAL FRAMEWORK

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*Miller's contribution to financial theory is beyond any shadow of doubt. Starting from the well-known model elaborated with its partner Franco Modigliani, he consolidated a theoretical framework, which bears its name that partially offsets the original. Taking into consideration personal taxation of shareholders and debt holders, he extended the Modigliani-Miller's model into what is today simply called, the Miller's model. The present paper evaluates the basic element of the Miller model, the Miller's condition, under Romanian fiscal framework and tries to formulate some conclusions regarding the flat tax adoption.*

*Keywords: Miller's model, personal taxation, Romania flat tax*

*JEL classification: G38, H24*

The model of Modigliani and Miller did not take into consideration personal taxes of individual investors, either shareholders or debt holders. Accordingly, the model says that the value of a leveraged firm is greater than the value of an unleveraged firm due to the tax savings determined by the deductibility of interest:

$$V^L = \frac{EBIT(1-t)}{K_{ec}^U(U)} + D * t_c = V^U + t_c * D$$

EBIT = earnings before interests and taxes;

$t_c$  = corporate income tax rate;

D = debt;

$V^L$  = value of the leveraged firm;

$V^U$  = value of the unleveraged firm;

Based on some restrictive assumptions, the model shed a new light not only on the market value of the firm, but also on the incidence of taxation on business. Economists have begun to take into consideration taxes paid by businesses and investors in order to design the optimal corporate financial policy. Farrar and Selwyn, than Miller approach the incidence of personal taxation on investors streams of revenues in order to evaluate the impact at corporate at personal level. Miller argued that the marginal costs of equity and debt after corporate and personal taxes should be equal in equilibrium, so corporate tax savings related to debt could be offset by the personal tax disadvantage of holding debt instead of equity. This will cause investors to ask higher pretax returns on debt relative to equity, and that, from the company's point of view, will offset the tax advantage of using debt financing.

In these circumstances, the Miller model reconsidered the Modigliani-Miller one, by taking into consideration the personal taxes on shareholders and debt holders.

If the streams of revenues for shareholders were  $(EBIT-Interest)(1-t_c)(1-t_s)$  the streams of revenues for debt holders were  $Interest(1-t_d)$ , the value of the leveraged firm is determined by capitalization of these streams of revenues at specific rates, so:

$$V^L = \frac{EBIT(1-t_c)(1-t_s)}{K_p} - \frac{Interest(1-t_c)(1-t_s)}{K_d} + \frac{Interest(1-t_d)}{K_d}$$

$$V^L = V^U - \frac{\text{Interest}(1-t_c)(1-t_s)}{K_d} + \frac{\text{Interest}(1-t_d)}{K_d}$$

$$V^L = V^U + \left[1 - \frac{(1-t_c)(1-t_s)}{(1-t_d)}\right] \times \frac{\text{Interest}(1-t_d)}{K_d}$$

$$V^L = V^U + \left[1 - \frac{(1-t_c)(1-t_s)}{(1-t_d)}\right] \times D$$

$t_s$  = tax rate on shareholders income;

$t_d$  = tax rate on debt holders income;

The expression  $\left[1 - \frac{(1-t_c)(1-t_s)}{(1-t_d)}\right] \times \text{DAT}$  represents the advantage for the shareholders as a result of debt financing, or, in other words, the leverage in the presence of personal taxes (the gain from the leverage<sup>171</sup>). It is a real advantage as long as  $\frac{(1-t_c)(1-t_s)}{(1-t_d)} < 1$ , otherwise it

will be a loss for the shareholders. This fundamental condition is known as the Miller condition.

The Miller model represents an extension of the Modigliani-Miller model, in some particular circumstances, both being equivalent ( $t_s = t_d = 0$ ). In conclusion, the increase of the leverage will determine the augmentation of the firm's value if and only if  $(1-t_d) > (1-t_c)(1-t_s)$ . Otherwise, the tax savings at the firm's level resulted from the deductibility of interest will be offset by the fiscal disadvantage of the shareholders resulted from personal taxation. In fact, as Miller noted "for a wide range of values for  $t_c$ ,  $t_s$ ,  $t_d$ , the gain from leverage vanishes entirely or even turns negative!"<sup>172</sup>. When  $(1-t_d) = (1-t_c)(1-t_s)$  the offset is one-to-one and "the owners of the corporation reap no gain whatever from their use of tax-deductible debt rather than equity capital"<sup>173</sup>. But, Miller went further and makes some assertions valid in a progressive taxation framework: "any situation in which the owners of corporations could increase their wealth by substituting debt for equity (or vice versa) will be incompatible with market equilibrium. Their attempts to these opportunities would lead, *in a world with progressive income taxes*, to changes in the yields on stocks and bonds and in their ownership patterns. These changes, in turn, restore the equilibrium and remove the incentives to issue more debt, even without invoking the bankruptcy costs or lending costs as a *deus ex machina*"<sup>174</sup>.

In these circumstances, we tried to assess the Miller model on Romania's fiscal framework, by taking into consideration the tax rates for individual gains from interest and dividends, all along the period that started in 1990, and to reflect the impact of flat tax implementation at the beginning of 2005.

Our task was facilitated by the similar tax systems used both in Romania and in USA, regarding the taxation of dividends (the so-called classical systems in which the company is subject to corporate income tax, dividends distributed to shareholders being taxed again under personal income tax) and was based on the total deductibility of interest in computing taxable corporate income (an assumption which not was always true, because of the partial deductibility of interest depending on the leveraged ratio of the firm).

In these conditions, a brief history of taxation of dividends and interest in Romania is more than useful.

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171 Merton Miller – "Debt and Taxes", Journal of Finance, No. 2, May 1977, p. 267.

172 *ibid.*

173 *ibid.*, p. 268.

174 *ibid.*

The taxation of dividends was introduced in Romania at the beginning of 1992. The tax rate varied considerably along the period as table no. 1 shows:

Table no.1. The tax rate for individual dividend gains

| <b>Period</b>           | <b>Individual tax rate (%)</b> |
|-------------------------|--------------------------------|
| 01.01.1992 – 31.12.1999 | 10                             |
| 01.01.2000 – 31.12.2003 | 5                              |
| 01.01.2004 – 31.12.2005 | 10                             |
| 01.01.2006 – present    | 16                             |

Source: Fiscal legislation

One can notice the relative stability of the tax rate, which was at 10% for a period of ten years (1992 – 1999, and 2004 – 2005), interrupted by a period of four years (2000 – 2003), when it dropped to 5%.

As for interest taxation, it came into practice at the beginning of 1998, with a symbolic tax rate of 1%, which gradually reached the actual level of 16%, as table no.2 shows:

Table no. 2. The tax rate for individual interest gains

| <b>Period</b>           | <b>Individual tax rate (%)</b> |
|-------------------------|--------------------------------|
| 01.01.1998 – 30.04.2005 | 1                              |
| 01.05.2005 – 31.12.2005 | 10                             |
| 01.01.2006 – present    | 16                             |

Source: Fiscal legislation

One can notice the very low level of tax rate for individual interest gains, which determine the individual preference for debt buying rather than equity buying, a fact that in the Romania's condition at that time, was not quite desirable.

In order to assess the Miller's model in the fiscal framework of Romania, it is useful to aggregate the data by taking into consideration the corporate income tax rate for different periods, as in table no. 3.

Table no. 3. The tax rates for individual dividend gains, individual interest gains, corporate income and the Miller's condition in Romania

| <b>Period</b>           | <b>Tax rate for individual interest gains (%)</b> | <b>Tax rate for individual dividend gains (%)</b> | <b>Corporate income tax rate (%)</b> | <b>Miller's condition <math>\frac{(1-t_c)(1-t_s)}{(1-t_d)} &lt; 1</math></b> |
|-------------------------|---|---|--------------------------------------|--|
| 01.01.1998 – 31.12.1999 | 1%  | 10%   | 38%                                  | 0,563 < 1  |
| 01.01.2000 – 31.12.2003 | 1%  | 5%  | 25%                                  | 0,7196 < 1   |
| 01.01.2004 – 31.12.2004 | 1%  | 10%   | 25%                                  | 0,681 < 1  |
| 01.01.2005 – 30.04.2005 | 1%  | 5%  | 16%                                  | 0,806 < 1  |
| 01.05.2005 – 31.12.2005 | 10%   | 10%   | 16%                                  | 0,84 < 1   |
| 01.01.2006 - prezent    | 16%   | 16%   | 16%                                  | 0,84 < 1   |

Source: Fiscal legislation

As the table no. 3 shows, the Miller condition is fulfilled through the entire period taken into consideration. For the maximization of the leveraged firm's value from individual's perspective, it is necessary to minimize the Miller's condition. This was accomplished in the first two years of the period, respectively 1998 and 1999, when the tax rate for individual gains was almost insignificant (1%), especially by comparison with corporate income tax rate (38%). In the next four years (2000 – 2003), Miller's condition increased from 0,563 to 0,7196 (27,81%), due to conjugated effects of both decreasing individual dividend gains and corporate income tax rates. In the following year (2004) the increasing of the tax rate applied for dividend led to the decrease of Miller's condition to 0,681. As for the last years of the period, the value for Miller's condition have continuously increased, mainly due to the equalization of the tax rates applied ( $t_d = t_s$  in 2005;  $t_d = t_s = t_c$  from 2006).

One can notice that the fiscal reform implied by the implementation of the flat tax at the beginning of 2005 had led to the increase of the Miller's condition, respectively to the reduction of the leveraged firm compared to the unleveraged firm. The flat tax has reduced the appetite of the shareholders for debt financing, as long as  $t_d = t_s$ . In these conditions, the Miller's model became identical with the Modigliani-Miller model:

$$V^L = V^U + \left[1 - \frac{(1-t_c)(1-t_s)}{(1-t_d)}\right] \times D = V^U + [1 - (1-t_c)] \times D = V_U + t_c \times D$$

Thus, the flat tax not only increases the Miller's condition, diminishing its appeal, but also makes the model equivalent with the Modigliani-Miller's model, rendering the model obsolete. This is a supplementary evidence for the neutrality of the flat tax, which does not offset the fiscal advantage of the debt financing at the corporate level and the fiscal disadvantage at the personal level.

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# KEY STRATEGIES TO BE CONSIDERED IN VIEW OF THE FUNCTIONING OF ROMANIAN FIRMS IN THE SINGLE MARKET

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*Market offers unique new enterprises, many important opportunities and challenges on the functioning and development. Adequate capitalization of the opportunities and overcome challenges is closely related to strategies that identify, adopt and implement managers.*

*Keywords: economic environment, business, strategies, the European market*

*JEL Classification: F02, F00*

## **1. Introduction**

Businesses in Romania with the country's entry into the European Union are confronted with an environment specific market, characterized by free movement of goods and services, people and capital, and performance in joint applied research projects.

Organization and functioning of the common market have created a new environment, characterized by a potential powers of innovation and modernization considerably, by a great wealth and diversity of cultures and the components can achieve the beneficial effects of synergy. This new economic environment, political and social, stressing the priority of competition is conducive to achieving significant increases in productivity and competitiveness of the companies that manage to fall in the generalized liberalization and remove national barriers.

Valorization of the most powerful economic potential of available common market requires the adoption of successful strategies appropriate situation in which firms are located. Entry into the Common Market, which offers exceptional opportunities for growth, requires management to businesses in Romania to be managers dynamics, very good knowledge of methods and techniques of performance management and to apply these methods, which assume risks in planning business promotion, pursuing modernization products and services market, who understand very well that must cope with rigors of competition very tough and who can use and exploit the intelligence people for lifting economic performance of the enterprise. In the context of increasing complexity of the economic environment, competitive emphases, especially international, accelerate technical progress; an ongoing business concern in developed countries is to increase competitiveness, achievement of results over the longer period. In this respect, particular importances submit highlighting common features of enterprise competitive factors explaining their success.

## **2. Results and Discussion**

The performance of a Romanian EU market or on a wider international market requires the acquisition by a strategic or improving skill, if they exist.

Strategic competence must provide the ability to develop and put into operation a strategy that best fits at a time, valorificând powers at its disposal, such as financial powers of the negotiation and more.

An enterprise may implement a strategy, in which an account is taken of new products, new distribution channels. When the environment is progressively amended, or may adopt a different strategy when they need to cope with mutations of the environment that can change the professional vocation.

Adopt a strategy of internationalization, broad geographic or product strategies of growth, stabilization, or combined defensive etc. reflects the position, offensive or timid in relation to the environment in which they operate.

Strategies that may be adopted by a group may be internal and external strategies, each having certain characteristics and requiring specific skills.

Adopting a foreign strategy must aim at employment as a large part of the European market or, where appropriate, global diversification and specialization of its business by acquiring new skills strategic entry into economic relations with other enterprises in the environment. An external strategy is adopted to provide countries and market segments that will carry out the work with partners who will collaborate, using, where appropriate, the acquisition of businesses, providing synergy and risks facing the markets International etc. A strategy of external growth requires the undertaking to have the necessary financial and legal affairs strategy implementation, to have human and financial resources necessary for its implementation.

An internal strategy should aim, in the new European context, the vocation of professional excellence and focus existing resources to achieve the priority of the key points of the enterprise. Such a strategy requires the participation of personnel for its binding activity to meet the requirements of the consumer to ensure the manufacture of new products, continued to modernize the production and clearance contributes to organizational culture. To obtain the best strategy is internal means achieving a quality level requirements, productivity superior service at a good level and good motivation of staff to achieve objectives.

The successful implementation of an internal strategy puts the spotlight on the existence of powers of observation of competition and the environment, and skills on financial management of own funds, while adopting a strategy requires external human resources capable to fly activities strategic and financial resources necessary to finance external involved.

In relation to the economic situation of the enterprise, in terms of revitalizing the business and boosting Romanian and optimal functioning within the European Union market, a role he has all the factors that can help to achieve these vital objectives adopted to them a proper economic strategy in relation to existing economic status, application and bring the necessary corrections. This requires even more, as businesses are incapable of paying the debt in cash as a result of pursuing an inappropriate, with a large amount of arrears and loss in the activities.

In current conditions, with emphasis on restructuring, with a favorable economic environment and incentive reforms and made management firms should pursue the adoption of economic strategies that enable them to revive the business and achieving the desired economic performance. The starting point in adopting an appropriate economic strategy is required to perform the economic analysis of complex, through the establishment of diagnostic strengths and weaknesses of the enterprise, a set of possible strategies and choosing among them the economic strategy considered as the best.

Tests indicate the level that seen in whole, part of the businesses are viable under economic report, while others are viable, with a closer or more distant from bankrupt. Classification into one category or another of the company must be rigorously by the management company, which has overall responsibility for the existing situation and future business strategy and to adopt the most suitable company for the recovery, consolidation and development.

Regardless of the category to which the enterprise, based on analysis performed diagnosis, must be considered possible types of strategies that could be adopted and that, through a process of strategic management properly, can ensure future performance. In economic, possible strategies to be adopted is presented as a great diversity. Thus, business managers and Romanian can implement strategies to create and market dominance, strategies of differentiation strategies ranging market, principal types of segmentation, geographic expansion and globalization, diversification strategies in related sectors or establishment of financial holding companies. Choosing the most suitable strategy for the enterprise is a complex, requiring the study of

environmental factors internal and external short-term and long term, aiming at maximum recovery of resources in line with internal developments and possible changes in the internal market and the external.

An important category of enterprises in our country who contribute to the production is going well, being strong, and giving evidence of continuity in the achievement of good performance under the economic adjustment and operational requirements and the growing environment. Management firms in this category, with an appropriate strategy must always follow the undertaking to be well adapted to the requirements imposed by the European market and to react promptly in against the new requirements imposed by the changes taking place in markets, technology products, etc.

It should be noted that implementation of such strategies of continuity and adaptation increasing the factors of the environment requires consideration of the changes taking place in certain periods in the economic field, as a result of mutations that occur at European or world of technological transformations and the emergence of innovative technologies and products that can change the social and economic context in which they operate the business.

This category of viable enterprises may in certain circumstances any of the types of strategies mentioned above, ensuring that basic economic performance of present and future of the company. Another category of existing businesses in our country, defined on the basis of economic financial diagnosis, is characterized by a temporary maladjustment in the economic environment, showing trends of disruption in achieving economic performance.

While these enterprises are present bad situation, they have the necessary conditions for exit from the impasse and to become viable and efficient In this situation requires a more precise diagnosis as to whether the existing weak or unprofitable, due to factors acting permanent, which requires the classification in another category, which involves adopting a strategy of radical change.

It should be noted that the category of companies with lower performance can be part and those companies that develop and launch new products, market insufficiently known, but after a certain period, and failing to require market products or services, when such excess becoming heavy and profitable, as the many firms in the EU or world market.

In the current and future businesses operating in an environment in continuous change.

Following this, management must evaluate the business changes that may occur in the future as consumers, on different markets, imposing the taking of timely measures of economic transformation or reorientation. It is possible for those enterprises which, although currently have an acceptable performance in the economic, will need that in the near future to operate in an economic context in a good position different from the existing one, which requires the management of these companies implement a strategy or retraining.

In Romania, a good part of the business is directly influenced by a number of changes that occur in the environment in the manufacturing technology, the rules of a legislative nature, being under the impact of intensifying competition internal or external, etc. To be able to respond to such changes taking place in the environment, businesses should provide a transformation in the mission and strategy to better meet future requirements for conducting business. Great processes in economic liberalization, privatization, change the law, to increase competition and opening markets require driving businesses to adopt strategies for transforming the structures and activities in order to adapt better the environment changing environment.

In relation to the existing management firms may adopt strategies to shift the work, which involves changing the scope of work, and shift to making other kinds of activities considered most effective for the enterprise and use of more productive under these conditions the potential of existing.

Adoption of strategies or retraining must be preceded by appropriate training of staff necessary for the acquisition of the specific new areas, otherwise there is danger that they economically can not be applied.



Policy relenting Romanian bring the spotlight on the application of business strategy for recovery or revitalization of the business.. A test at macro and micro level reveals the existence of firms that operate with high losses, which, due to weak activity in the economy, contributing to increased arrears and financial blockage or are in imminent danger of a bankrupt.

### ***2.1 Strategies that pursue economic recovery activity for Romanian firms***

Inappropriate diagnosis of a situation of economic classification requires the businesses in the category of those who must pass the emergency until it is too late, the adoption of strategies for recovery and revitalization.

Recovery strategy is required to be adopted in particular those businesses that are on the verge filamentary and which to exit the crisis and to recover, should adopt special measures, under the radical economic report. Leaders of these businesses must have the strength, courage, willingness and ability to adopt a radical improvement. Worldwide there are many examples of companies that have managed to escape from such situations by adopting and implementing recovery strategies, as examples of large enterprises with tradition which, because of lack of adequate recovery strategies gave bankruptcy.

Revitalization strategy used successfully in the world of big companies, it must be adopted by those companies that get results generally mediocre or unsatisfactory and who wish to overcome this condition. Although not under the threat of a bankrupt, the leadership of the revitalization strategy, adopt vigorous measures appropriate to lead to increased economic performance, covering all areas of activity in the growth of both the responsibility of the management and the workers to the results of their work.

A great importance in the overall process of restructuring in Romania becomes an adoption by those companies that are bad and is under imminent danger of bankrupt, a radical strategy of recovery. Practice positive adoption and implementation of such radical recovery strategy highlights successful through stages that lead ultimately to the desired result. According to these practices with positive results, the elaboration of a strategy requires radical improvement through four stages, such as understanding the need to adopt a strategy for radical change and adopting a new mentality suitable change in the enterprise, the definition of strategic alternatives to radical change in relation with culture and business structures desired, adopt a radical change from the existing strategic alternatives, implementing the strategy of radical change.

Each of these steps requires, analysis and actions to ensure an appropriate degree of efficiency strategy adopted radical change.

The first stage of development strategy for radical change is very important, since the adoption of this strategy implies essential changes in mentalities and managers on new methods and management techniques to be applied on new structures to be adopted, as well as new requirements to be met by staff in relation to the process of change, etc.

As was shown in a number of cases that changed the mental framework of the management is not possible, existing experience worldwide shows that in these situations it was necessary to change the driver himself and frameworks governing refractory to these changes mentality, is made by developing collective strategies for change, including specialists brought in from outside the enterprise of people and responsive to change. Based on the new blast of the newly created mental, responsive to change and a belief that the other staff about the survival of the company there is only one that is based on the adoption and implementation of a strategy for radical change, can move to the second stage of defining the strategic objectives for change and some alternative strategies for change. This step is necessary to ensure selection of the many possible strategies, shown above, that strategy or those strategies that would best meet the requirements of future change to ensure that the desired performance. In principle, businesses, structures and the potential they have, may choose to adopt strategies to create and market dominance or differentiation of the products or services, a strategy of market segmentation, geographic

expansion, and domination of market through a policy of low prices, to concentrate on products or markets, specialization.

Each alternative strategy should be based on objective and judicious as possible to achieve, well evaluated, sufficient resources for implementation and action steps and well defined under the calendar.

A strategy for change based on the creation and domination of markets, for example, may provide the structural and functional elements essential decentralized organization of productive units and the center of their profit, the direct responsibility of the driver unit for decentralized activities and results obtained, the choice of customers and the market in terms of profitability assured, quick reaction to market changes, staff remuneration in relation to the performance achieved, emphasis on fast and reliable service to customers, applying a rigorous system of tracking costs, implement a system leadership skills, etc.

The third phase, adopting a strategy of radical change, is to specify measures to be taken to implement it. This step is necessary to define the new elements of structural and cultural which should underpin the new strategy, the existing structural and values that can be maintained, steps to achieve the strategy, the use of processes and systems management arrangements pay for planning, specifying the symbols to be endorsed by the staff.

The fourth stage, which consists in carrying out the strategy adopted, lead to practical, if well implemented, the desired radical change, which materialized new image of the company, ensuring the achievement of superior performance provided based on the new cultural values, structures and management systems.

Success strategy radical change, which materialized in this stage depends largely on the consistency of the measures provided by management, training and ability to convince the staff on the new strategy, the intuition, experience and skills managers, for their innovative spirit and creative, all designed to achieve superior economic performance.

## ***2.2. Strategies suitable for passing from the difficulty in the enterprise performance***

The finding, based on tests conducted, the state of difficulty that are undertaking or are announced in the near future it is necessary to constitute an alarm signal for driving the company and at the same time, the starting point for the adoption and implementation of measures decided and effective for the rapid revival of business.

Experience enterprises have managed to shift from the difficulty the state enterprise performance highlights the fact that all the measures taken to follow the basic requirements, ensuring a good competitive position, the activities of the financial balance and the adoption and implementation implementing a strategy to allow adequate recovery to a higher level of company resources.

Ensure a good competitive position in the domestic market and foreign markets is a basic requirement of a performance, which is necessary especially in the course of the free market within the European Union. Achieving this requirement implies that, based on analysis of strengths and weaknesses in the results of an analysis-diagnosis to be made and to monitor their implementation, to improve work in all basic areas of business, such order to ensure realization of the competitive advantages.

Another basic requirement to ensure dynamism and achievement of performance by an undertaking to ensure economic and financial balance overall. This implies that the enterprise to pursue through its portfolio of activities necessary balance between the strategic activities that are in growth phase, which requires massive investment and is thus consuming liquidity and strategic areas of activity, in stages of maturity or decline, which are generating cash, investments required are minimal.

To ensure this balance and proper positioning of strategic areas of activity in different fields of competition can use a series of matrices designed and used for strategic consultancy offices, such matrices are known as the Boston Consulting Group, AD Little, Mac Kinsey.

The transition from state enterprise in difficulty in the business viable and desirable performance requires developing and implementing a strategy appropriate to the objectives and policies adopted to permit the achievement of change. Such a strategy should enhance the strengths characteristic enterprise, transforming them into competitive advantages, which capitalize on the opportunities offered by economic environment and to remove existing weaknesses, thus avoiding in their threats.

Experience performing firms show that no performance can be achieved in a market in stagnation or decline, and it requires a strategy of rupture, which is based on a new market created as a result of a fundamental innovation or increase the market occupied by building a decisive cost advantage, either through diversification of activities, adding to existing stagnant activities in new sectors of growth phase.

When adopting a new strategy is necessary to consider the time horizon, whereas, when the company is in competition with other businesses, while playing a key role, competition is a race which means that to win, must run faster than competitors.

A successful strategy should be characterized by a high-density technology, the major economic ascent is made by those companies that enjoys technological independence. Given that time is a factor, it is possible that for a certain period to buy and to adapt those technologies needed for their research results could be obtained too late.

#### **4. Conclusions**

Integration into the European Union, is and will continue to be an important challenge for the Romanian companies, the challenge succeeds the post, when he moved from plan economy to market economy and would lead to a maturation process for many them as regards the operation of the new European context.

Success in implementing our strategies, such as, for example, the progressive increase of conversion or diversion, recovery and revitalization depends to a large extent by the company, prepared under the theory and practice with new methods techniques and management systems can print in-spirit innovative, creative, mentalities to remove old, outdated and lead to the formation of a culture of top business, generating economic performance.

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## THE IMPACT OF ECONOMIC CRISIS ON THE FISCAL REVENUES

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### *Abstract*

*This paper tries to evaluate the situation of the fiscal revenues in Romania in the context of economic and financial crisis, because the fiscal revenues are the major source of financing the public expenditure. The evolution of the level of fiscal revenue is very important because maintain the budget equilibrium. The article reveals the major trends of the fiscal revenues after EU enlargement and in the actual context of economic crisis and the impact on the budget deficit and the public debt. The state intervention in revive of the economy has to be financed through the budget, and this means a higher budget deficit. The proper solution in this condition for assuring the financial stability of the economy it was an external borrow from IMF.*

*Key words: fiscal revenues, budget deficit, public debt*

*The article's JEL code: H2, H62, H63*

### **Introduction**

The fiscal revenues are the most important source of financing the public expenditure in any economy through the public budget. The level of the fiscal revenues is determined by the fiscal policy adopted by the government, but also the evolution of the economy.

Despite a sharp drop in the last quarter of the year, GDP growth accelerated to 7.1% in 2008, from 6.2% in 2007. In the first three quarters, domestic demand for both consumption and investment boomed at double digit rates, fuelled by strong wage increases and a rapid expansion of credit. Net exports continued to record a negative contribution to GDP growth.<sup>175</sup>

In Romania, at the end of 2008 the effects of economic crisis are revealed by the evolution of the fiscal revenues: starting October, budget revenues decrease by 10% each month, according with HotNews.

The Romanian budget deficit for 2008 registered the higher value from the last years as a result of a lax fiscal policy and lower than expected revenues. The lax fiscal policy it was caused by the tax competition in which Romania it was engaged starting with 2005 with the introduction of the flat tax. But the lower fiscal revenues are a direct consequence of the economic crisis, because many companies which in 2008 obtained profits and paid taxes, in 2009 are closed. In these conditions the budget revenues are not enough for financing the public expenditure. For reducing the budget deficit the government planned to reduce some expenditure and in the same time to increase some taxes and even introduce a new one: the minimum income tax for companies.

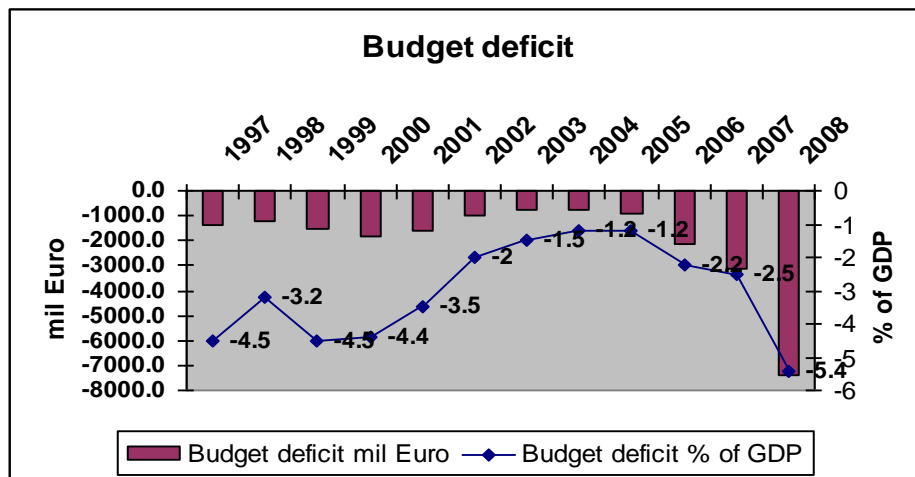
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175 Economic Forecast, Spring 2009, European Commission, Directorate-General for Economic and Financial Affairs, 3/2009

Austere fiscal measures planned as a result for 2009 will impact on wages and social security, affecting consumer spending and economic growth.

### The long term budget revenue analysis

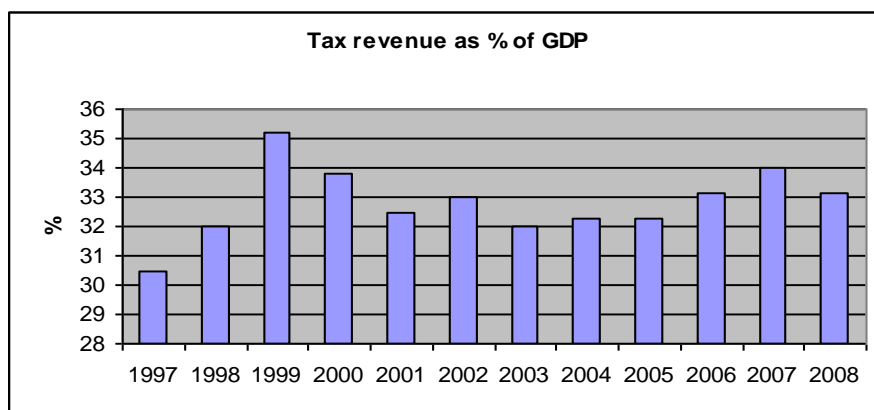
The study starts with a short analysis of the evolution of the budget revenues and budget deficit in the recent years. The budget deficit beginning with 2000 year is continuously decreasing until 2005, when start to increase, but it was below Stability and Growth Pact requirement of 3% of GDP, as can be see from the next figure.



Source: Eurostat

In 2008 the level of budget deficit is more than double comparative with the level of 2007, and this means 5.4% of GDP.

This was mainly due to substantially higher-than-planned current spending, notably in public wages and social transfers. In addition, overly optimistic revenue projections did not materialize and a sudden drop in revenue collection in the last two months of the year owing to the economic slowdown added to the worse than expected outcome.



Source: Eurostat

The evolution of the total tax revenue in the last ten years reveals that starting with 2005 we have an increasing of the tax receipt until in 2008. Because in this period the fiscal policy was unchanged the only cause for this decreasing remains the economic crisis, which affect not only companies but also individuals, who loss their jobs, and in this condition the income tax and consumption tax are decreasing.

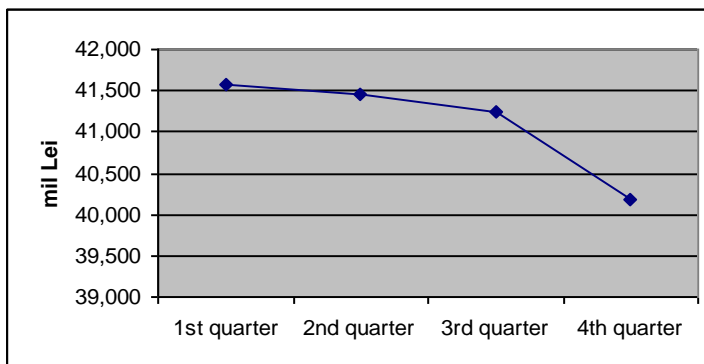
### The effects of the economic crisis on the tax revenue

The effects of the financial and economic crisis became obviously in our country starting with the last quarter of 2008, when the economic growth it was only by 2.9% comparative with the entire year, when the economic growth it was 7.1%. In the last quarter of 2008 comparative with the same quarter of 2007, can be observed the follow trends (in the real terms)<sup>176</sup>:

- the growth of the gross value added with only 3.5%;
- decreasing of the total consumption with 2.8%;
- increasing of the gross fixed capital formation with only 2.8%;
- increasing of the exports with 1.6 %;
- decreasing the imports with 10.2%.

In 2008 the general budget revenues decreasing from one quarter to another, though these reductions were not so significant. Budget revenues decrease in the last quarter with 2.6% comparative with the 3<sup>rd</sup> quarter of the same year.<sup>177</sup>.

**The evolution of budget revenues in 2008 quarterly**



Source: Raport privind situația macroeconomică a României pentru anul 2009 și proiecția acesteia pe anii 2010-2012

In 2008, comparative with 2007, the public budget revenues have registered an increasing in nominal terms, with almost 29%. The most important increasing have been for: corporate tax with 23.6%, income tax with 27.8%, VAT with 30.8%, excises with 8.7% and social contribution with 24.7%. These evolutions of tax receipts have been take place in the conditions in which GDP increased with 7.1% in the real terms and consumption with 8%<sup>178</sup>.

In 2009 when the economic crisis conditions becoming worse, as a consequence of decreasing the activity in many sectors of the economy, the state revenues were affected. The decreasing trend of tax revenue is obviously in the first quarter of 2009.

176 National Institute of Statistics, Press statement no. 41/4 march 2009

177 Raport privind situația macroeconomică a României pentru anul 2009 și proiecția acesteia pe anii 2010-2012

178 National Institute of Statistics, Press statement no. 41/4 March 2009

### The major tax receipts realized in 2007 and 2008



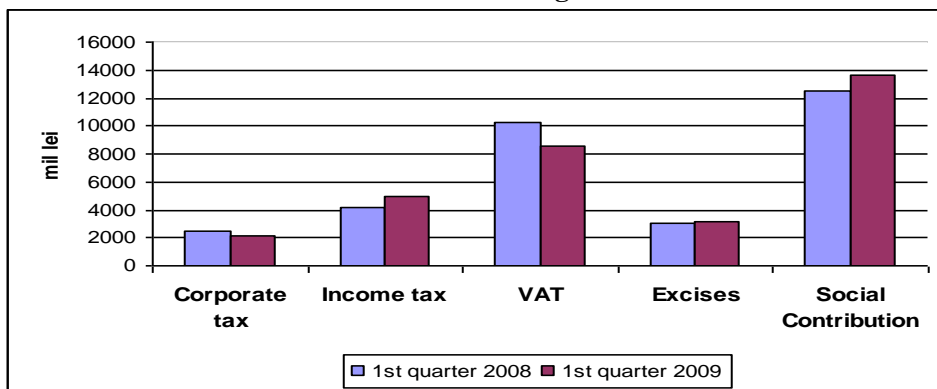
Source: Public Finance Minister

Budget revenues declined with 7.06% in the first quarter of 2009, (from 32.65 lei) compared to Q1 2008 (35.13 billion lei), according to Romania's National Fiscal Administration Agency (ANAF)<sup>179</sup>.

Concerning the major categories of taxes realized by ANAF in the 1st quarter of 2009 comparative with the same period of 2008 it can be observed the follow trends (in the nominal terms):

- decreasing of the corporate tax receipts with 13.7% (because for many companies the profits are lower);
- increasing the income tax receipts with 21.2%;
- decreasing of VAT receipts with 16.8% (this is a consequence of decreasing consumption);
- increasing excises receipts with 6.2% (because the excise rates were increased starting with 2009);
- social contribution receipts are higher with 8.8%.

### The evolution of main categories of taxes



Source: ANAF

### Conclusions

For the next period tax revenue has to be higher due to introduction of lump-sum tax and increasing the social contribution rate. These measures are not enough for assuring the budget

<sup>179</sup> Romania's National Fiscal Administration Agency, Press statement no. 109 0266/08.04.2009

equilibrium and the capacity of the budget to sustain all the public expenditures in the context that the effects of economic crisis are more pregnant. Much more the state intervention in revive of the economy has to be financed through the budget, and this means a higher budget deficit. The proper solution in this condition for assuring the financial stability of the economy it was an external borrow from IMF.

The deficit is projected to decline to 5.1% of GDP in 2009. The 2009 budget adopted in February 2009, contains several measures to lower the deficit, including a recruitment freeze and the reduction of various bonuses in the public sector, cuts in expenditure for goods and services and subsidies, limiting pension increases to inflation and a bringing forward of the schedule to increase excise taxes. On the revenue side, are taken some measures like eliminating certain tax deductions and allowances (in particular on company cars and depreciation of revalued assets). On the other hand, the government plans a substantial increase in public investment in 2009 compared with 2008. These measures are reflected in a budget rectification approved by the government in April 2009.

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#### Annex 1. Budget Revenue in 2008, quarterly (mil. lei)

|                                  | Total 2008 | Q1     | Q2     | Q3     | Q4     |
|----------------------------------|------------|--------|--------|--------|--------|
| Revenue                          | 164.466    | 41.584 | 41.454 | 41.252 | 40.176 |
| Change of the previously quarter |            |        | -0,3%  | -0,5%  | -2,6%  |

Source: Raport privind situația macroeconomică a României pentru anul 2009 și proiecția acesteia pe anii 2010-2012.

#### Annex 2. The major tax receipts realized in 2007 and 2008 (mil. lei)

|                     | 2007    | 2008    |
|---------------------|---------|---------|
| Corporate tax       | 10558,3 | 13045,9 |
| Income tax          | 14374,9 | 18365,7 |
| VAT                 | 31243,2 | 40875,1 |
| Excises             | 12511,8 | 13599,4 |
| Social Contribution | 38843,0 | 48419,8 |

Source: Public Finance Minister

#### Annex 3 The evolution of main categories of taxes (mil. lei)

|                     | Q1 2008   | Q1 2009   |
|---------------------|-----------|-----------|
| Corporate tax       | 2.461,99  | 2.125,63  |
| Income tax          | 4.119,11  | 4.993,91  |
| VAT                 | 10.264,16 | 8.535,52  |
| Excises             | 3.018,21  | 3.206,29  |
| Social Contribution | 12.503,50 | 13.600,02 |

Source: Romania's National Fiscal Administration Agency,



Press statement no. 109 0266/08.04.2009;  
Press statement no. 943 133/09.04.2008

## TAX ADMINISTRATION RISKS

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*Risk administration/management is a formal process, where environmental risk factors are identified, analysed, evaluated, classified, and systematically treated. Risk assessment means to appreciate the degree of tax compliance for different categories of taxpayers, in other words making sure that tax owed by legal taxpayers are collected respecting legal deadlines.*

*An efficient tax administration develops risk management strategies through increasing professional training, efficient support for taxpayers, correct audits, fighting tax evasion, and cooperation with other tax administrations in order to avoid double taxation. Tax administration performances can be appreciated according to the measures used in solving tax administration challenges.*

*Keywords: risk, identification, management*

*Cod JEL : G20*

### **Identification, evaluation, administration and risk management**

#### **1. Risk identification**

Risk administration/management is a formal process, where environmental risk factors are identified, analysed, evaluated, classified, and systematically treated.

Risk can be addressed in several ways:

- taxpayers are treated as a undifferentiated group (non-group), in which case tax administration is organized according to functional criteria, and tax categories;
- taxpayers are treated differently, as separate entities, with their own motivation. This situation requires better support services for taxpayers, encouraging voluntary tax compliance and discouraging tax evasion.

Quantitative and qualitative assessment of current and potential risks leads to one of the following alternatives for risk management:

- avoiding risk, altering the structure of the system so that the risk doesn't occur;
- reducing risk by limiting the event and the consequences;
- risk transfer, through insuring measures;
- taking risks when the costs of managing risk is too high compared to expected results.

Risk assessment means determining the degree of tax compliance of different categories of taxpayers, in other words making sure that tax owed by legal taxpayers are collected respecting legal deadlines.

An efficient tax administration develops risk management strategies through increasing professional training, efficient support for taxpayers, correct audits, fighting tax evasion, and cooperation with other tax administrations in order to avoid double taxation. Tax administration performances can be appreciated according to the measures used in treating tax administration problems. The quality of the results depends in good measure by structural factors, the quality of the services offered, the manner in which the taxpayers are treated and by the risk management procedures.

A large part of the risk of the risk that tax administration faces is caused by the informal economy.

This includes illegal activities and unreported income. Furthermore, politicization of the enforcement system, tax incentives and tax evasion leads to substantial gaps between legal tax rates and effective/ actual tax rates in tax collection.

Risk assessment is aimed to emphasize the risks to be studied in detail by tax administration, minimizing the possibility of omissions and facilitating a future detailed analysis. "The source"

and “the impact” of these risks represent two distinct dimensions of the risk identification phase. In order to understand risk causes, one must, first, discover its source.

Risks can be identified through top-to-bottom techniques, such as macro economical analysis, or through bottom-to-top such as case basis risk evaluation system. Accurate segmentation is essential for correct risk identification.

Multi-level approach of the risk identification and assessment process is needed for a comprehensive understanding of the risk. Risk identification processes that offer insight about understanding tax compliance behaviour are the most informative.

Analysis of current taxation laws is often the best way of starting a strategic risk assessment. Marginal revenue experts can easily identify the parts of tax law at the higher potential risk. Strategic risks identified at this level – often classified as “marginal” concepts about the environment – can be analysed using other strategies like market segmentation or organizational capabilities.

Most tax laws in the world are generally prescriptive in its nature. The law, itself tries to cover all the consequences of its application or lack of application. Unfortunately the nature of prescriptive legislation creates some problems given the inability of legislative bodies to address all situations that arise as a result of applying the current laws in force. Therefore, it is almost impossible to create a set of clear and concise set of laws. This ambiguity of the legal system favours taxpayers’ non-compliance which exploits the grey areas of the law. There always were and there will always be taxpayers determined to identified and exploit for their own purpose, the cracks in the legislative shield. Moreover, prescriptive legislation, usually, lacks flexibility to adapt to the dynamic business world.

When addressing the strategic risks, a common language framework is very helpful in assuring that the whole spectrum of risk is taken into consideration and all participants in risk identification conversation can knowingly take part. At a basic level, this language framework is represented by the matrix of non-compliance risks correlated to major obligation of compliance of the major segments of taxpayers, namely non-filing the tax return, non-reporting and non-paying the tax debts.

Identifying risks will often allow detection of problems which, if ignored, can become a risk to long-term sustainability of revenue collection. Community confidence in administration ability to properly and honestly manage the tax system, may affect future tax collections. Similarly if tax administration costs are onerous, this system will erode public confidence.

In some European countries there are two specific ways of aggregate case information needed for further risk identification:

- first way is collection and storage of standardized data from audit activities, in order to generate statistical information and relations frequency in standard conditions;
- second way refers to taxpayers behaviour in different successive events.

Non-compliance risks must be identified at a stage where they can be resolved. Even if informal economy is globally acknowledged as a problem for tax authorities, only when the concept is divided into act of specific conduct that can be attributed to sub-groups in the community, the appropriate counterbalance strategies can be found.

Non-compliance risks can be analysed from several perspectives. Most often, the individual taxpayer’s perspective is used when analysing risks. However, risks can be analysed from an industrial group perspective or from socio-economical or psychological perspective.

In order to obtain an accurate risk identification and assessment, there must be sufficient information for evaluation of non-compliance level. Gathering correct data for risk evaluation requires considerable effort.

To identify risks, the following types of information are fundamental:

- tax return (income statement) including information regarding taxpayer’s financial state;
- another information for tax purposes – industrial classification code, payroll data, VAT;

- details of bank interest , pension data, firm registration information;
- public information, especially Internet information (company publications, news);
- information needed in analytical and interpretative analysis – norms for net and gross profit for certain trade sectors, costs-to- profits ratio, the average profit per family depending on the neighbourhood;
- data from audit and other programs.

## **2. Risk assessment**

Tax authorities need a mechanism for objective evaluation of the relative proportion of non-compliance risk in the context of organizational priorities. Not every type of risk can be resolved; we just need a balanced approach for treating this wide variety of risks.

A balanced approach to risk makes possible focusing on certain risks, risks that do not represent major budgetary threats.

Essential for risk evaluation and prioritizing is the existence of a sound environment in which repeated comparative assessment of every type of risk evaluation and prioritization is possible. Decisions regarding treatment and acceptability of non-compliance risk must be based on a set of quantitative and qualitative criteria agreed upon. The purpose of risk evaluation and prioritization is to distinguish between major and minor risks and to anticipate risk management stage. In order to do that, one needs to take in account the source of risk, possible consequences for corporate objective and the probability for their occurrence.

Measurements are qualitative or quantitative or both, but they must be relevant for the considered objective. Every consequences model purpose is to provide authorities with mechanisms that allow repeated comparative evaluation of separate risks.

Probability is measured taking into account the probability of risk to become real. Measurement can be qualitative or quantitative. Probability is measured in terms of the likelihood that risks to be materialized. Measurement may be quantitative or qualitative.

Decisions regarding risks to be monitored and solved can be influenced by several factors like:

- internal capabilities;
- existence of efficient solving measures;
- existing implementation capability of the solving measures;
- rating/ risk level;
- contamination / infection level of the risk or risk deterioration level;
- current result of the measures (per year);
- the result of measures through time (income recovered each year in the future);
- public perception of tax administration versus risks;
- costs / benefits of the proposed measures (next phase feed-back);
- broader context of risk as a group.

The efficiency of the solving strategies is evaluated taking in account these issues.

Definitive risk ratings, usually, offers information about who in the organization is responsible for managing those risks. For example, the higher risk on the probability and consequences (effects) scale will be managed by the higher organizational level, and the other way around.

Non-compliance risk evaluation and prioritization will be taken whenever necessary.

Efficient non-compliance risk management requires a considerable research, factual evidence, analysis and logical reasoning. So, tax authority needs time to organize analysis and prioritize risk.

## **3.Risk administration**

Risk management activity takes place cyclical, and this phenomenon is present in developed and developing countries. In developed countries, this phenomenon has a reduced magnitude, given that their tax systems are more stable, tax arrears are less frequent and tax administering abilities

are superior compared with the developing countries, in transition. As regards developing countries, it was noticed that those who are in an advanced stage of development presents fiscal processes similar to those of the European Union, and a direct relation between efficient tax administration and progress in transition.

In less advanced countries, efficient tax collection depends rather on state administrative control. Field researchers have faced, in their attempt to determine the differential between the two levels of the rate, lack of conclusive information that could assure accuracy of calculations, and that is why one has chosen an aggregated approach of the problem.

As a result, the effective (actual) tax rate is calculated according to the following formula:

$$C_r = \frac{I_c}{B_i} \quad (1)$$

Where:

$C_r$  – effective tax rate/ actual tax rate

$I_c$  – volume of collected tax income/ amount of taxes collected

$B_i$  – tax base/ taxable income

The ratio between effective tax rate and legal tax rate is generated by the following formula:

$$\frac{C_r}{C_l} = \frac{I_c}{C_l B_i} \quad (2)$$

Where:

$C_l$  –: legal tax rate, and the remaining symbols retain their meaning

In order to avoid necessary data collection difficulties, a relevant even for international comparisons indicator was calculated. This one was named „normalised tax” and can be determined with this formula:

$$RNI = \frac{I_c}{PIB} \frac{r}{C_l} \quad (3)$$

Where:

RNI - „normalised tax efficiency (productivity)

$r$  – benchmark tax rate from a country considered to be representative ( where legal tax rates are close to effective tax rate)

This kind of indicator allows determining the analysed country’s tax efficiency when legal tax rate is the same for all countries.

#### **4. Risk management**

Risk management is a structured procedure for identifying, evaluating, ranking and systematic treatment of risk related to tax non-compliance (for example inadequate filling and reporting of taxable objective). Administration of tax non-compliance risk is a recurrent process consisting of a sequence of well-defined steps that facilitate mechanism for decision making. But there are questions that need to be raised: Which are the main risks? Which categories of taxpayers are targeted? How should these risks be treated to obtain the best result? Finding the answers to these questions is hampered by the complexity of taxpayers’ behavioural types (and the factors that favour a certain kind of behaviour), by the plurality of sources of taxable income and by many other influences.

The benefits of adopting a risk management policy are well outlined: - a structured basis for strategic planning;

- focus on factors (no symptoms) behind tax and promote diversity in the treatment of major risks related to tax non-compliance unlike general approach solution designed to fit in most cases;

- better results in terms of efficiency and effectiveness of the program (e.g. a high rate of tax compliance, tax laws that favour a better collection of taxes and high quality public service);

- an approach able to resist external scrupulous research;
- a solid foundation for the direct evaluation, based on evidence.

Tax non-compliance risk management can be both at the strategic level (top down) and at operational level (bottom up). Risks identified at the strategic level usually require extensive and carefully planned interventions, but those identified at the operational level can be treated as arising in the daily activities.

A fundamental aspect of the process of non-compliance risk management is that strategic risk identification should take place and be resolved before the identification of operational risk. If scanning the environment sets the context in which strategic risks can be effectively identified, in turn, to identify strategic risks is where operational risks are identified. But the process of identifying strategic risks is documented by continuous accumulation of data which are progressively transformed into information and knowledge. This accumulation of data often occurs in part as a result of measures related to operational risks in the past.

## **Conclusions**

The main purpose of the tax authorities is to collect taxes payable under the law and make it so as to maintain confidence in the tax system and its leadership. Taxpayers' actions – due to ignorance, indifference, or deliberate avoidance - and the weaknesses of the tax authorities, lead to the conclusion that the examples of failure in law enforcement are inevitable. Therefore the tax administration should possess designed strategies and structures needed to minimize the deviations.

At operational level, the objective is to identify individual cases or persons representing specific examples of customers who collectively represent strategic level risk that the authorities intend to deal with. In operational systems (or cases based), the selected taxpayers characteristics and financial transactions are examined to generate an objective measure that reflects the level of risk a taxpayer is placed compared to another.

In terms of history, many tax authorities have faced the risks of non-compliance only in terms of enforcement. Traditional reactive intervention strategies such as comprehensive audit represent a costly but necessary approach to solve certain aspects of tax non-compliance. However, the factors underlying the conduct of persons subject to any area of risk are often very complex and, therefore, it is unlikely that a one-dimensional strategy to be successful - especially one based only on verification and enforcement. Starting from these considerations, the tax authorities should be encouraged to pay more attention to understanding the factors that shape taxpayer behaviour in order to implement a more efficient set of reactions - reactions that can address the factors underlying taxpayers' compliance behaviour and not focus only on symptoms.

An effective approach to managing risk and tax compliance should be developed as a structured process of risk management that includes:

- continuous monitoring of the operational context of the tax authority and the taxpayer activity;
- identifying, assessing and prioritizing risks to the budget (revenue), the tax system overall, and reputation in the community;
- understanding taxpayer behaviour underlying factors leading to non-compliance;
- measures in case of non-compliance behaviour;
- evaluating the success of any intervention.

No strategy should be implemented without a process of assessment and reporting of results.

Measurement considerations should, therefore, be an integral part of building a tax compliance strategy.

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# EVOLUTION OF FISCAL PRESSURE IN ROMANIA AND EU MEMBER STATES

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*The article refers to the concept of taxation and fiscal pressure, on its forms of manifestation in relation with the level of organization to which we stand, the sphere of tax levies, their provided or effective character. A comparative study of the fiscal pressure between the EU Member States and Romania has also been prepared, highlighting the features taken into account in an analysis of the level of taxation in our country. At the end of the article, there are drawn some conclusions and suggestions that could lead to improving our system of taxation.*

*Keywords: . fiscal pressure, taxes, fiscality.*

*Cod JEL: G00, H20, H21, H30*

## **1. Considerations on the concepts of taxation and fiscal pressure**

The notions of “taxation”, “tax system” and “taxes” appeared on a certain stage of development of the society, to meet the needs of economic, financial and social objectives of the state.

Was for the economic, taxation is not only all the regulations on the establishment and levying of taxes, but also a feature of state policy in terms of taxes and an expression of the tax burden of various categories of taxpayers. In fact, in the usual language, but also in specialist publishing, especially when talking about fiscal tightening, it is identified with the fiscal pressure which means the level of taxation.

In more recent works the concept of taxation is even superimposed of that of taxes. Taxation is represented, by definition, said M. Lauré, by the levies imposed to the inhabitants of a country by a public authority which provides protection and services. Obviously there is a definition of taxes. Other authors do the same, by comparing taxation with parafiscality or with other mandatory or optional levies, they compare, in fact, the taxes and the parafiscal fees with social contributions or loans.

Some authors, starting from defining the taxes as a form of tax bite from the income or wealth of individuals and legal entities at state, to cover public spending, they see taxation as a “link between the state and individuals or legal entities”.

Trying a systemic-relational approach to taxation, some authors define the tax system as being “all the taxes established by the state which give it an overwhelming part of budgetary revenue, each tax having a specific contribution and a regulator in economy”, or as a “set of concepts, principles, methods, processes on a variety of elements (quotations, tax subscription, tax matters) which manifest relations arising from the design, law-making, settlement and collection of taxes and which are managed under tax legislation, in order to achieve the system’s objectives”.

Society can not exist without taxes, which must be established by the Constitution and, on the other hand, demonstrated by the historical reality. The normal following of tax establishment is the fiscal pressure experienced by all taxpayers.

Fiscal pressure is generally given by the levies which are calculated by reporting the total amount of mandatory levies (taxes, duties, fees, social insurance contributions) in a given period, usually one year, to the size of gross domestic product achieved during the same period by a national



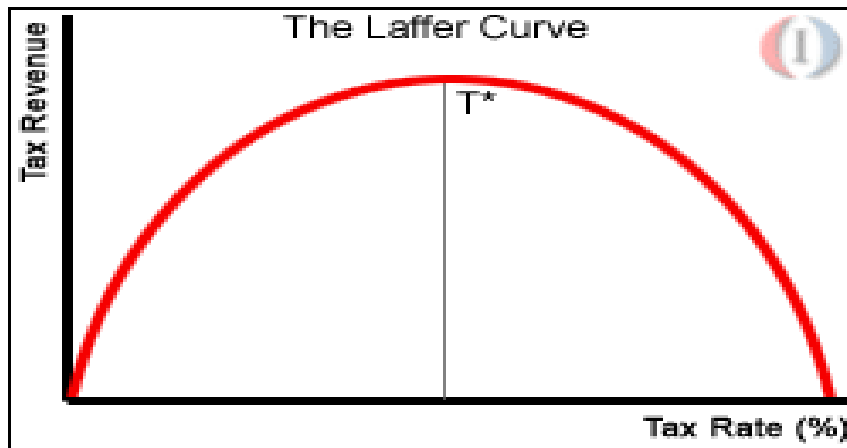
economy. Distinguishing between receivable mandatory levies, reflected by the right amount of state taxpayers and compulsory levies actually collected, we can distinguish two types of fiscal pressure, namely:

an “imposed” fiscal pressure given by the receivable taxes, fees, contributions and GDP;

an “accepted” fiscal pressure given the received taxes, fees, contributions and GDP.

Besides this objective fiscal pressure technically determined, at a macroeconomic level, there is also a psychological fiscal pressure that measures the tax threshold of tolerance of each taxpayer and that, most often, takes the form of individual fiscal pressure determined as a ratio between the total extent of mandatory levies paid by a taxpayer and his total income before tax.

**Chart 1.**



The threshold tax borne by taxpayers has been permanently raised by academics and the practice seems to overcome every time. The idea that “a very high tax kills the tax” has been pregnant for many economists. Thus, in 1952, Laferriere and Waline said that “high taxes cause, where it is not possible, a reduction of tax matter, either by restricting consumptions that are not essential, either by concealment or evasion”.

The specific issue of fiscal pressure generated a series of tests of American academics, and not only to rethink the problem of optimum tax. Thus, in 1974, Arthur Laffer transposed graphically an idea expressed in 1776 by Adam Smith, according to which too high tax rates destroy the basis on which taxation acts. Laffer believes that there is a threshold of maximum fiscal pressure to which any increase generates a reduction in the tax capacity, because a too high fiscal pressure will discourage the taxpayer to invest, save, produce and work. Arthur Laffer presented a relationship between tax rate and income level of taxes in the form of a chart bearing the name of “Laffer Curve” and it is illustrated in Chart 1. According to Laffer’s curve, the amount of compulsory levies is an increasing function of fiscal pressure rate, but only up to a certain maximum threshold, noted with  $T^*$ , which corresponds to the maximum level of the curve then it becomes a decreasing function of this rate, going until cancellation if the rate would reach theoretically the level of 100%.

The relationship was the theoretical argument to demonstrate the opportunity of diminishing the marginal rates of taxation which had achieved very high levels during the implementation of Keynesist economic policies and the development of state’s welfare. A significant reduction of direct taxes and an attenuation of their progressiveness are desirable and because the people with high-income are those who invest and save more. The reduction of taxation must be accompanied by reducing public spending in order to generate the needed resources to relaunch production.

## **2. Fiscal pressures in the EU Member States and Romania**

In order to make a rigorous analysis of fiscal pressure in the EU Member States we must move from a series of observations on inflation disparities between European countries, on the consistency of their budgetary policies, being able to make considerations on the connection between reducing taxes, economic development and pact stability, with all its constraints.

A fiscal policy plays an important role in economic cycles and therefore the countries with a modest growth rate of the GDP in a given period should seek to reduce the fiscal pressure. A classification of the countries that most need a reduction of taxation may be deducted from OECD's estimates for the European countries for the period 2004-2008, only comparing the discrepancies of the individual income with the average of the considered countries.

In the last two years the trend in the European Union was to reduce taxes, especially on companies' revenues. The reason is the competition between states to attract foreign investments which bring with them new jobs and prosperity. All the states attempt to create a competitive business environment, as demonstrates the reduction of total taxes on companies' revenue, whose average dropped from 50.6% in 2004 to 49.3% in 2008.

In EU countries the average fiscal pressure restarted its upward trend in 2005, reaching record level in 2000, after it registered a short-term decrease between 2001 and 2004. Fiscal pressure, calculated by reporting the amounts of taxes collected from GDP taxes reached 36.2% in 2005 versus 35.5% in 2004. Between 2005 and 2006, the fiscal pressure increased in 14 of 26 countries and decreased in 11 of them. In France, tax pressure increased from 43.5% in 2004 to 44.5% in 2006, while Switzerland has made in 2006 the highest rate of taxation, namely over 50.1%. In 2007, Romania had the lowest share of taxation in GDP, only 27.6%, followed by Lithuania – 28.9%, Latvia – 29.4%, Ireland – 30.8% and Estonia – 30.9%. The highest rate of tax pressure has been recorded in Sweden – 51.3%, Denmark – 50.3%, Belgium – 45% and France – 44%.

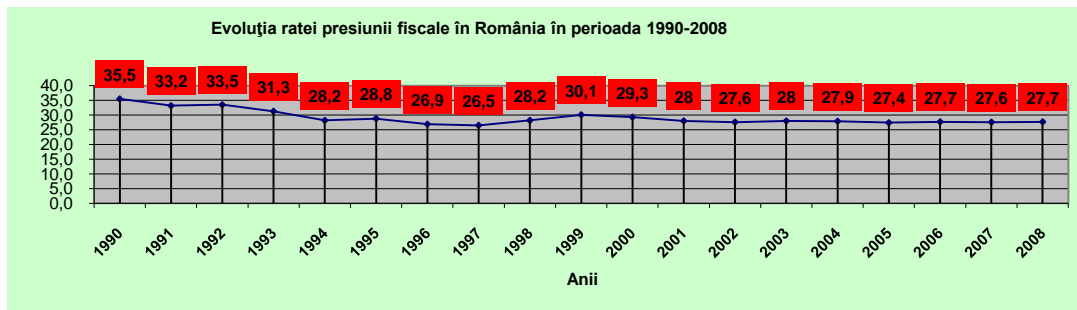
Very few members of the European Union meet the two essential requirements, namely: reducing fiscal pressure and holding the appropriate funds. Essentially in the Stability Pact, which requires a reduction of structural budget deficits, only the Netherlands, Belgium and Finland are in a position to guarantee their economic stimulus needed. It should also be noted that only four states afford significant tax reductions. The limits imposed by the Stability Pact are extremely punitive for the economies of two countries, namely Italy and Germany.

In Romania the fiscal pressure is neither statistical nor fiscally watched by the Ministry of Finance. Some specialists in the calculation of tax pressure take into account tax levies on the consolidated budget of the state. In Romania the tax pressure issue became topical after 1989 with the first signs that the Romanian economy will become a market economy, as the modernization of the tax system was thoroughly required, modernization that continues after 18 years of transition. An analysis of the fiscal pressure in our country short after joining the EU should take into account certain features, such as:

- Insufficient development of the economy so it can hardly cope with European competition.
- The gap between individual incomes in Romania and in the Community.
- Promotion of a fiscal policy whose sole objective is the collection of budget revenues.
- The existence of numerous revenues derived from the underground economy and whose tax would fill existing gaps in the budget and that are covered only by increasing tax pressure.

According to many experts, the main cause of increasing the tax pressure is the continuous growth of public spending, whose evolution is subject to certain economic, social, political "regularities".

**Chart 2**  
**Evolution of fiscal pressure in Romania between 199-2008**



Source: Data provided by the Ministry of Finance and the Statistical Yearbook of Romania

Using the formula for the reporting of budget revenue generally consolidated to GDP we find that the fiscal pressure rate is in a slight decrease from over 30% in the early 90's to about 27.6% in 2007, a level quite low compared with the rest of the Union's states, evolution reflected in Chart 2.

**At macroeconomic level**, fiscal consolidated revenues present during 1990-2007 an average share in GDP of about 30%, and non fiscal consolidated revenues shows an average of 3%.

Overall tax pressure is sustained by direct taxes, which together with the three major groups of mandatory contributions and local taxes have a share in total revenues of budget of 57.7% in 2007 and also by indirect taxes which are 42.3%. Within the direct taxes, social insurance contributions represented approximately 37.18% of direct levies, followed by revenue from income and wage taxes with 17.66%, and from indirect taxes the VAT provided 54.18% of total indirect levies, the rest being from customs duties and other indirect taxes. If one would not take into account the contributions required to calculate direct levies, but only the tax on income and wages, these, in the year 2007 would represent only 19% from the total revenue, well below the EU's average.

**And at microeconomic level** the tax pressure influences fiscal policy, strategy and decision. At a business level, taxation represents an important segment that influences managerial and strategic decisions of development.

A correct approach to fiscal pressure at microeconomic level involves its reporting to the accomplishment of development, financing and production functions of companies. The large number of taxes and the high level of tax rates discourage investors' interest in the performance of activities that generate profit and investments.

Given the economic situation of Romania, a low degree of taxation is beneficial because this way could result in capital from countries with high taxation. Through a reduced tax we try to stimulate the economic growth, the demand of goods and services and most important, investment activity. A high taxation in a poor economy as that of Romania, can have on medium and long term, only negative consequences, affecting the demand of goods, decreasing the interest in saving and investments which makes impossible the economic dynamism.

Even if the percentage level of fiscal pressure in Romania is close and even lower than in other European countries, in reality real tax pressure that push on each taxpayer is much higher due to low income and in such a situation, it is obvious that the temptation of detouring the legal framework with regard to declare all income determined correctly from the tax point of view is increasing.

In 2008, according to the Council's estimates for small and medium enterprises, the actual number of parafiscal taxes and fees amounted to 540, one third of them may be removed whereas they are not justified, while the number presented by the Ministry of Finance in August 2008 is 115. A coherent system of taxes and duties, with a positive finality both for the state and for the taxpayers, should be developed both qualitatively and quantitatively.

Besides the large number of taxes and duties owed by the individual and legal entities in Romania, they are forced to spend also a large amount of time to pay them, with a relatively high frequency (usually monthly) and in quite inadequate conditions (queues formed due to the small number of counters, rudimentary technique for the time being).

However, the same World Bank's study revealed how much time a Romanian taxpayer allocates, on average, to pay its obligations to the state, a level considered moderate compared with the European average and very small if we relate it to counterparts such as Bulgaria or Czech Republic.

In Romania we can identify numerous instances in which there is an obligation to pay twice for the same thing, which means double taxation. An example of this can be the road tax that drivers pay annually, which is nothing but a doubling of the road tax included in the price of fuel. Furthermore, the pump price is included and the excise duty on gasoline and diesel fuel.

Apart from double taxation, companies are required to subscribe to services from which they do not enjoy, such as the radio-TV fee which is mandatory for every company either it holds or not these TV or Radio receivers. In the same record of tax falls the tax for rain water, called the "fee for transporting and purifying meteoric water", which is supported both by legal and individual entities. Local authorities say that this is a paid service to collect and transport rainwater through the sewerage system of settlements and that in its absence the flooding of settlements would increase. Going by the logic of this fee we may ask why it is necessary to pay this fee during sunny days and drought.

The most important duties and taxes paid by individuals are value added tax (VAT), excise duties (tobacco, alcohol, fuels, coffee), the income tax, contributions to social budgets, on properties (real estate, auto), and various other payments for services. Although seemingly insignificant, being in the category of "other taxes", they are consuming the most time and money. For example, simply by purchasing a car we have to pay: the registration tax at the city hall, the first registration tax, the provisional registration number from the dealer, check tax, and if the vehicle is in intern production, one should pay a tax for the secrecy of the car's identity card at RAR.

### **Conclusions:**

In Romania, during 1990-2008, the fiscal burden pressed in particular on individuals, both by the high level of taxation on labor, as by the increasing revenue from indirect taxes, this way leading to a significant reduction of the degree of tax compliance of this category of taxpayers.

The analysis of international practices and trends manifested in fiscal policy, allows us to formulate some conclusions and points of view on complex issues of fiscal pressure:

- From the analysis of the evolution of level and structure of taxation we found that its level varies in relation with the functions assumed by the state especially on the social protection plan.
- After the tax reforms developed in the European states in the 90's of the last century, began a process of reduction of marginal tax rates in most countries, learning that their high values distorts economic activity and encourages tax evasion, even gaining ground the conception of using taxes as economic and social levers to their neutrality.
- Following the adhesion of new countries to the European Union, there will be an alignment of the level of taxation and redistribution to the values registered in the countries with lower taxation.

- The Romanian tax system has reached that level of maturity as the other tax systems in the European Union, but there are to be made a number of necessary changes to harmonize with the EU legislation as to remove some of its shortcomings.
- Fiscal pressure and the degree of taxation in Romania is only apparently a low one, actually, due to reduced gross domestic product, to an unequal distribution of taxation and to the large number of taxes and duties, for a large part of taxpayers, the taxation is very oppressive.
- We need a more equitable redistribution of taxation through a better tax collection and lowering their level, as to support the stimulation of investments and economic development in order to increase the income per capita and the general welfare.
- We should reassess the level and the forms of social protection in Romania, as well as the taxation of labor, since conducting a comprehensive social protection has a negative impact on the economic development.

The fiscal reform carried out in Romania must not stop at the achievement made so far, following a resettlement of the national tax system regarding a new qualitative and quantitative structure of it.

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## FISCAL COMPETITION IN EUROPE

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*In the context of the free movement of goods, capital, labor and services, the fiscal competition is a government tool in gaining competitive advantages. The main objective of the fiscal system is to collect revenues for the government to support the public services. Each European state has the liberty to establish its own fiscal policy. The main objective of the paper is to underline the impact of fiscal measures that European governments prepare as a response to the deepening economic crisis, on their competitive advantage in the line of fiscal competition.*

*Key words: fiscal competition, fiscal policy, income tax.*

*JEL Classification: H2, H3*

### **1. Introduction**

The fiscal competition in Europe, as a government tool in gaining competitive advantages, it promotes a better match between local policies and the preferences of residents, in an environment where mobility of economic factors is high and growing.

The fiscal policy can be treated like a competitive field, as infrastructure and education, with the objectives of income redistribution and macroeconomic stabilization. The fiscal competition is a positive one if determines the best quality/price proportion for public services.

Fiscal competition aims to select and attract firms and individuals, business investment and tax bases.

### **2. Fiscal competition or harmonization?**

In the emerging European Union, policy-makers decry the inhibiting effects on the public sector of fiscal competition among the member nations, emphasizing how fiscal policies affect the welfare (real incomes) of various groups and how these impacts depend on the mobility of resources.

Fiscal policymaking is affected by competitive pressures faced by governments, giving rise to all sorts of economic distortions. Harmonization of fiscal policies may also be used as a tool to reduce the negative effects of fiscal competition.

In the field of indirect taxation<sup>180</sup>, harmonization includes the necessary measures for the Union Market functioning (limits in VAT taxation), with the accent on preventing the distortions and the obstacles of free mobility of goods and services. So, at community level we talk about fiscal cooperation between member states. Harmonization is an extreme form of fiscal cooperation, but not the ideal solution in all situations. There are objective reasons for the existence of different rules in taxation, like local market characteristics, exchange rates between local currencies and euros (until Euro becomes the single currency in European Union).

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180 In the case of indirect taxation the chances of harmonization are bigger than in the case of direct taxation.

Tulai I. Constantin, Şerbu Simona, Fiscalitate comparată şi armonizări fiscale, Casa Cărţii de Ştiinţă, Cluj-Napoca, 2005, p.138

In direct taxation harmonization of fiscal policies among the European countries is a measure of integration, but is hard to achieve. The reasons are the fiscal sovereignty of member states and the condition of unanimity in adopting a decision.

Maintaining fiscal sovereignty of member states will endanger the European Union goal to minimize the fiscal distortions between union states. Despite all doubtful implications, the fiscal harmonization allows the optimal allocation of resources, becoming indispensable for eliminating the fiscal distortions.

There are two possibilities to obtain fiscal harmonization: through the market (liberal doctrine) and through negotiation (between European states- democratic doctrine; both having their downturns.

In the case of harmonization through the market, the fiscal competition leads to non-taxation of mobile factors and over taxation of immobile factors or cuts in public expenditures. Excessive power of national fiscal administrations can generate inequities and inefficiency in financing public expenditures.

On the other hand, the harmonization through negotiation it is the opposite of liberal doctrine. It is a confrontation between the community (fiscal unity) and the national authority (fiscal sovereignty), but also between the member states, as a result of economic diversity (public expenditures, public budgets, currency, market characteristics and national fiscal policy).

The fact that the few fiscal harmonization measures adopted at European level are the response of the market, denote that at the moment each member state tends to have its one fiscal policy. Direct taxation affects the investments, personal and business establishment, employment decisions. From 1 January 2007, in the European Union we can find 27 different taxation systems, generating problems such double taxations of revenues in the European Community, fiscal competition with negative effects, and restriction of free mobility of goods, capital, labor and services.

Adopted in 3 June 2003, the Code of Conduct for Business Taxation is not mandatory for the member states. The countries intend to eliminate the taxes and the fiscal competition with negative effects on factor mobility and the issue of time-varying policies, commitment, and dynamic consistency.

### **3. Romanian and European Fiscal Policies**

In the field of tax rates, there is wide variation throughout the European Union. The new member states in Central and Eastern Europe (CEE) which have joined since 2004 have lower rates, especially flat taxes<sup>181</sup>, which have had a major impact, often stimulating growth.

The reason for the low rates in these countries is the fiscal competition, the need for revenue in the context of European factor mobility, the positive effects like: economic growth, greater purchasing power, reduced costs for companies.

In the latest years, personal income tax rates had fallen all over the world, including Europe. Romania remains competitive with low flat tax of 16%<sup>182</sup> in the region, Bulgaria has a 10% flat tax, and the Czech Republic, introduced a 15% rate. The highest personal income tax rates are paid by the people of Denmark, 59%, Sweden 55%, Netherlands 52%.

But a low rate of personal income tax may be offset by other factors, like high indirect taxes<sup>183</sup>, tax on buildings that is several times greater than in the region countries, the lack of transparency, and the quality/price proportion for public services.

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181 is the case of Romania, Bulgaria, the Czech Republic, Estonia, Slovakia, Lithuania

182 but no longer the lowest in the EU

183 value added taxes, goods and services taxes, customs duties and fees for specific services.

The big disadvantage for Romania in the Central and Eastern Europe is the increase number of taxes that firms and individuals have to pay. The Finance State Department has identified 558 taxes, while The Czech Republic has 12, Hungary 14, Bulgaria 17, and Poland 40. The private sector<sup>184</sup> had demonstrated that over 80% taxes bring just 5% from the budget revenues, and meanwhile determine bigger cost than revenues. On that matter, the Ministry of Finance had announced a cost-benefit analysis for each tax to determine the opportunity of maintaining or eliminate the tax.

As 2009 and 2010 seems to be years with negative economic growth, governments are trying to use fiscal policies as tools against economic crisis. The purpose is to stimulate the economy, encouraging economic growth and protecting the economic interest of individuals, to maintain the competitive advantages in both personal and business sectors.

From 1 January 2009, in Romania, interest income derived from term deposits and/or other saving instruments are deemed nontaxable income when derived by individuals, dividends are exempt from the tax on dividends if distributed and reinvested in the distributing company's own activity, or in the share capital of another Romanian legal entity, for the purpose of securing and creating new jobs.

Also from 1 January 2009, the pension reference unit was lowered to RON 697,5 from the number originally agreed under Governmental Emergency Ordinance (GEO) 192/2008 (repealed) of RON 763,7. Families of pensioners can no longer be disbursed the cash equivalent of train tickets not used in 2008, as previously allowed under GEO 71/2004.

The minimum social pension in 2009 is of RON 300 effective from 1 April 2009, and of RON 350 as of 1 October 2009 respectively. 2. Effective from 2010, the social pension amount is determined under the State Budget, and it can be raised under the relevant correction laws, in accordance with the macroeconomic indicators.

The GEO no.34/14.04.2009 on Budget Correction and regulation of some financial and tax measures proposes a series of so-called anti-crisis measures aimed at increasing budgetary revenues in Romania.

A new minimum corporate tax is imposed, a turnover tax on companies whether they are profitable or accumulate losses, according to gradual brackets of turnover ranges between fixed numbers as determined under the Ordinance.

Deductibility is no longer allowed for income tax purposes, for the fuel consumption for cars used by individuals in management positions, for VAT related to the acquisition of those cars and also for the VAT of the fuel for respective vehicles.

According to a Deloitte<sup>185</sup> study, Bulgaria had adopted a five-year corporate income tax holiday for investments in distressed regions and individual tax relief granted for young families paying interest on home loans, as response to the economic crisis.

The Czech Republic reduced the corporate income tax from 21% to 20%, as from 1 January 2009, and the social insurance rates to 34% for employers, 11% for employees.

Hungary, as a response to the economic crisis, shifted taxation from income to consumption, reducing the individual income tax and the social insurance contributions (33.5% for employers and 27% for employees). The VAT rate would increase from 20% to 23% from 1 July.

Those measures will determine an increased inflation in 2009 (3.9%), compared to previous foreseeing (3,1-3,4%) and an accentuation of the budgetary deficit (2,7-2,9% from GDP<sup>186</sup>) determining the reducing of public expenses with 200 billions forint in 2009 (around 670 million Euro), with 500 billions forint in 2010, 650 in 2011 billions forint.

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184 At Business Standard initiative

185 „Tax Responses to The Global Economic Crisis”

186 recording Reuters, quoted by News In.



So the responses to the economic crisis do not stop in 2009 for Hungary. Beginning with 1 January 2010, they will abolish the 4% solidarity tax on businesses, resulting in a net reduction in the corporate tax rate of 1 percentage point. At the same time, they will increase the corporate income tax rate from 16% to 19%.

Hungary entered in a period of recession, the public revenues will suffer, but the budget has to stay in control to reach the commitments made to FMI and UE, from whom they obtained a „saving fund” of 25,1 billion dollars.

The situation in Hungary is similar with the other new member states, including Romania. The governments have to create a balance between the need of encouraging the economy and the consumption, and the excessive public budgetary deficit, using the fiscal policy.

Fiscal policy tool against the economic crisis is used not only by the new member states, but also by old ones. In the case of Italy, a decree issued in November provides that compensation paid in 2009 for overtime work and for work related to increases in productivity is subject to a 10% tax up to EUR 6,000 gross. The tax is applied by the employer to employees who did not earn more than EUR 35,000 in 2008.

Spain responded to the economic crisis earlier than other countries, by abolishing the wealth tax applicable to individuals (by way of a 100% tax remittance) as from 1 January 2008.

In France, at first, the companies and the investments were in the center of the intervention plan. After a recovery plan announced in December 2008, for companies, the president announced measures for individuals, exemption from paying 2/3 of the annual income tax for taxpayers who are subject to the first bracket (income taxable at 5.5%).

In Germany, the tax measures mainly affect individuals, by reducing the entry-level tax rate from 15% to 14% and an increase in the tax-free amount.

#### **4. Conclusions**

The competitive advantage for Romania in the Central and Eastern Europe is the income tax rate of 16%; in the personal income sector in 2009 the advantage remains, but in the corporate taxation, the introduction of the new taxation system will put a new barrier in front of investments. A lot of firms suffer from the economic crisis, but the new corporate tax will enlarge this category, by taxing including the firms that don't obtain any profits. In case of bankrupts, the individuals will have to suffer to, the unemployment rate will rise and put new pressures on the public expenditure.

The weak points in the Romanian fiscal system are: fiscal instability, high social contributions, fiscal legislation that generates distorted competition, lack of transparency, fiscal bureaucracy, and inefficient fiscal administration resulting in fiscal evasion.

As a response to the economic crisis, the fiscal policies are the key to maintain enough monetary resources to the companies and individuals, to continue their business and to encourage the consumption.

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## PUBLIC BUDGET AND TAXES

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*Modern methods of calculating the taxes suppose a permanent relation with tax-payers directly, at the pay-office, on the phone, electronically, relations which are developed by the fiscal organ that comes into contact with the payers giving up at its position of oppressor organ in the favour of an efficient relation.*

*Keywords: budget, the fiscality, modern methods the taxes.*

At the macroeconomic level the role of the budget and especially for the fiscal incomes ,part which is bond to the present study ,is praised by the connections between it and the other component elements of the general consolidated budget .Thus ,the public budget contains all the documents of the public sector ,which gives it the status of budgets formed of :the budget of state ,the budged of state social enssurances and the local budgets.

On the other side ,the state budget is the most important component of the integrated system of budgets ,through financial relationships it develops with each elements of the public system .The state budget contains the incomes and the expenses distributed by the annual budgetary law, which are of central importance .At the state budget come most of taxes and part of contributions,but also some other specific incomes.

By consolidated general budget of the state proceed to elaborations of some social and economic politics ,which aim at the accomplishment of macroeconomic poise in future periods.

The macroeconomic regulation through the state general budget ,and implicitly ,through the state budget , is accomplished by the size of the macroeconomic equilibriums and disequilibriums with modern methods that analise the appeareance of types of deficits or excesses of public sector , respectively the conventional ,primary ,operational ,structural deficit or excess ,as well as cvasi-fiscal deficit.

Fiscal problems have an important role in the market economy .So, the tax being a prelevation established by law with an obligatory , definitive character ,represents one of , the main sources of formation of the state financial resources .In this context , as object of discipline are the fiscal reports that appears in the formations process of public founds .These reports put face to face two parts ,law subjects :on the one side ,state as main subject ,represented by fiscal juridical structures ,which gives a privileged position ,and on the other side ,physical and juridical persons who have the obligation to contribute to the setting up of public financial resources.

The level of productions , of income ,of expenses and of prices in a market economy ,knew in time movements named "the cycle of affairs "or economic fluctuations. In some periods the productions , the incomes and the expenses were reduced and the unemployment grew ,while in other periods the growth of expenses and incomes had as result the inflation (a last growth of the prices level).

These growths and reductions of the economic activity were produced as a consequence of some changes in the initial expenses which determined a chain reaction ,by the multiplication of effects .Thus ,a change of expenses of a economical unity (firm ,consumers ,government) -upward or downward- affects the incomes of other unity .This one ,on its turn ,determines a change in expenses of another economic unity which ,on its turn ,affects the income of the next one and the process goes , including the entire economy .The final result of those changes outruns ,many times ,the dimensions of initial changes .On the other side , the fluctuations of economic activity (expressed by growth and diminutions) influence the life level of citizens ,in the sense of its growth or diminution .

The fiscal system in its structure reflected by the official fiscal politics supposes specific fiscal budgetary procedures ,techniques promoted by The fiscal procedure Code ,procedures which influence on their turn ,the tax-payer 'behaviour and not lastly the fiscal efficiency.

About this issue it is recognized the fact that the taxes 'administration is a well outlined theme, both form the conceptually and practically point of view.

Fiscal science and technique were outlined and delimited in time through the effort and experience of specialists in domain .In present , fiscal technique improves continuously under the influence of informatical applications and under the influence of literature of speciality at which we have access in the present.

However, fiscal efficiency is generally low , and we think that there are two causes at the base of this phenomenon : gaps in the general fiscal legislation and secondly, the management of administration of taxes. We want to study the last cause, considering that this issue still hides many conditions, and being analized and corrected, it may praise the real possibilities of fiscal system and of taxes of fiscal system.

The relations between taxes are of conceptual, technical and practical nature. All the taxes that function at a given moment in an economy and the relations between them make up the fiscal system.

Taxes established by the specific reglementations of fiscal domain generate, beside the relations between them, other influences on the environment which is the social one.

Taxes, the functioning of fiscal system, its relations with tax-payers and the influences upon the economy are established by juridical laws, specific subjective laws.

Modern methods of calculating the taxes suppose a permanent relation with tax-payers directly, at the pay-office, on the phone, electronically, relations which are developed by the fiscal organ that comes into contact with the payers giving up at its position of oppressor organ in the favour of an efficient relation.

If nowadays the decrease of fiscal pressure was realized both by deduction of level of taxes and by promotion of fiscal advantages , it seems that the last method is more performant regarding the effects on payers.

Grouping together the fiscal advantages in deduction from taxes sector and deductions from the calculated taxes, these seem to be the main methods of fiscal charge' deduction.

The main aim of scientific approach in this domain is to discover and to delimitate the generating connections of organizatorical potential and efficiency between the taxes that form the actual fiscal system and the connections between the components of fiscal organ and between this and the payers.

Choosing the most efficient relations and realizations of a functional table would justify its forming in order for the specialists to chose easier the alternatives that generate organizatorical potential and fiscal efficiency.

Such a model could be double capitalized , namely: from practical point of view for improvement of informational flux' organization inside the fiscal system and in its relation with payers and from theoretical point of view , by putting at the students and specialists' disposal the proposed models and structures.

Fiscal charge aims the effort of all citizens and releases unexpected reactions even of some so called non-payers of taxes, but who stands the effort under the effect of fiscal charge' impact.

It is known that taxes are a necessary evil , being indispensable a state form of social organization and that is why fiscal charge is accepted by payers till a certain level without too big oppositions.

From the moment when fiscal charge grows from different reasons, such as covering the budgetary deficit , this fact releases unexpected social interactions and still undiscovered totally.

If persons and collectivities have reasons of joy when it is contracted a public credit with destinations that bring social benefits , on the other hand when it is time to reimburse these credits , when big taxes are asked , their reaction is reverse to the initial one, such budgetary

measures suppose many modifications within financial politics and implicitly on some indicators such as: instalment of interest, of inflation, of consumption, etc.

The growth of budgetary incomes based on taxes or on the contrary, on the account of public credit, influenced by the way of using and functioning of public budget, the financial resources being partly directed to the unproductive sectors and are generally fructified with a smaller instalment than the medium interest instalment.

It results from these judgements that state will always spend worse its sources, in comparison with private sectors and that public sector should be divided such as to generate more rarely or at all such situations, such needs of financing by growing the taxes.

The benefic effects of incitations by taxes will have to be combined with suitable currency measures, which to generate an economic relaunching in conditions of maintaining the instalment of interest under control or till a certain level.

If we do not take in consideration some restrictions of fiscal politics such as: its correlation with financial potential of society, correlation with monetary politics, social politics in general, assuring the standing degree of fiscal pressure, subordination of the fiscal politics' aims to economical politics in general, assuring the working of fiscal system, integration of national fiscality into the international fiscal trends, assuring an efficient informational system and many others of the same kind, then the secondary consequences are multiple and most of them will be negative.

The unwanted effects will be: reduction of the productive effort, amplification of swindle and fiscal evasion, stressing of inflationist process, deterioration of international competition and generally, a deregulation of economical and social values of the system.

If the fiscal instalment exceeds a certain limit, this fact will dishearten the efficient work, will dishearten saving and investing. Possibilities of evasion and fiscal frauds will be looked, underground economy will take proportion, both regarding the mastership who want a reduction of subject of taxation for its incomes and fortune, and regarding the physical persons who will stand raised taxes in conditions of small net incomes in comparison with the level of gross incomes.

The increase of taxes implicitly generates the increase of prices with effects on inflationist process and on trade unions politics who immediately looks the increases of salaries and in this way the inflationist spiral goes on.

Such correlative conditions regarding the increase of taxes can be identified in time, on longer periods of time, context in which a morality problem can be put, namely supplementary fiscal charge generated by reimbursing of public credits repercuts in time on future generations which, we do not know if they are disposed to such an effort. On the other side, we do not know if we have the right to mortgage a part of our children's incomes for aims considered to be necessary but unaccepted by all in the collectivity.

Fiscal politics are controverted because sometimes they have unexpected results, results that are different from the initial intentions. For example, the budgetary deficit at which it gets to as a result of incomes' growth and / or as a result of reduction of taxes' level may get to a fast growth of public debt. In these conditions state has to borrow money in order to cover the expenses that should be done from the budget, because these outrun, in size, the incomes made from taxes. The credits for financing the budgetary deficit may determine the growth of interest instalment which determine the economical agents ( sellers and buyers ) to borrow less and, in the same time, to spend less than they have planned to.

There are two reasons for which fiscal politics could have unexpected and unwanted effects; allowing the government to have a deficit, it changes the constraints on expenses and the political responsibility of those who decide regarding the budget ( which gets to huge, successive deficits, as well as to the fast growth of public debt ), in order to cover the expenses that outrun the incomes made from taxes, state has to borrow money. This loan for financing the budgetary

deficit may determine the growth of interest instalment , fact which will be felt in the activity of economic agents. They will ask for less credits and they will spend less than they would have wanted.

The system of budgetary incomes and expenses is the base of a detailed analysis of the economic and social situation of a certain country , following to be established the necessary measures for macro-economic regulation.

We do not have to omit the fact that there are government actions of a special importance that have nothing to do with state budget , such as financial markets' politics, the reglementation of competition and others , but their realization has a huge impact on budgetary incomes and expenses.

The uncertainty of decisions regarding the state budget determine a series of budgetary changes for a single financial year , which may take to macro-economic disequilibriums generating of regrettable social phenomena.

The fiscal and budgetary operations in general and the procedures that are at their base reflect the economic and politic content of public budget .Taxes and budgetary incomes in their totality also represent the most important budgetary chapter and at least by the fact that they represent the state' main source of incomes , without which the functions of state cannot be accomplished.

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## TAXES IN FRONT OF THE ECONOMIC DECLINE

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*Fiscality and taxes, among their role as main source of public incomes, were sometimes invoked as cause in releasing the economic crisis, other times as effect in their quality as object of going out from crisis.*

*Keywords: fiscal science, fiscal equity, fiscal politics.*

Fiscal issue is large and complicated in the same time. Along the time it was searched and studied by the specialists and by economic schools which conceived the object of what we call today the fiscal science, as part of financial and economic sciences in their totality.

The evolution of fiscal science followed the evolution of society and of economic sciences, being marked in time by different political and economic trends. Influences from the political, economic and social environment in general, as well as military synopes, different pandemics that decimated the population and not lastly the economic crisis put their stamp on the economies of different countries, states and other social- economic entities.

Periods that follow after the economic crisis are periods of relaying the economic thinking, of adaptation at new social- economic and political conditions, because economic synopes are followed by changes in political spectrum.

Fiscality and taxes, among their role as main source of public incomes, were sometimes invoked as cause in releasing the economic crisis, other times as effect in their quality as object of going out from crisis. Either being considered cause or result of some bad measures for state or for payers, it is obvious that taxes always were reason of adaptation, of correction or even were invoked as representative ways of going out from crisis, anticyclic instruments of reclamation of public economy and others of the same kind.

After all, taxes represent a social raport that generate many connections between payers and between them and state. When public interest is not counterput to the private one, tax reflects a good part of its content and payers accept it without too much enthusiasm, but also without adverse reactions.

The relation between public authority and payer is administrated depending on fiscal politics and procedures, such as if these are accepted by the society and by payers as individs, members of the society, then public interest combines with the private one. Public interest is not the interest of an abstract entity, this interest is composed from the citizens' interest in their quality of individs, sometimes legally associated for some reasons, other times in their quality of payers.

Modern fiscal science studies the modalities of combination between individual interest and the general public one.

"The general interest includes, in an economy based on liberty of initiative, all the problems that cannot be assumed by industries and individs. These are free actors who defend their selfish interest and are totally incapable to defend the public ones." 1

Fiscal science is an economic science with deep social, national and psychological roots in the same time. Tax can be a perfecting instrument of the public interest if it respects the rules of democracy and economy in the context in which quantity and rapidity of informations amplify the role and the place of tax as economic and political decision of our contemporary society.

1, Constantin. I. Tulai - Public finances and fiscality, Science Book House, Cluj -Napoca, 2005  
In periods of crisis tax must be handled with more attention, the legislator and the members of fiscal system will have a rational attitude toward the payers.

Repeated relayings of taxes and changes of fiscal technique , sometimes for coercitive reasons release controverse reactions of the constraint ones.

The stability of taxes , fiscal equity, taxes' neutrality and the lack of arbitrary represent not only principles of imposing but also aims to be touched in contemporary fiscal politics.

Fiscal law has to be just the way of laying the tax and less an occasion of affirmation of the coercitive practices in domain.If tax can be correctly applied only with the help of an oppressing fiscal control, then it was badly conceived.

These variables of fiscal politics , together with social variables, in periods of economic crisis get a bigger importance.

When a tax is established, it must be well known all the changes that takes on economic equilibrium in general and on microeconomic and economic equilibrium of family and individ.

In conditions of economic crisis, when sales decline and cashing to public budgets are reduced and thus the executive has to find other sources of public incomes in order to maintain the public sector and eventually " to heat " the economy. This problem , as simple as it seems, in fact is a complicated one , because if they appeals to new taxes or increase the existent ones , real economy will suffer and individs will stand their quality of payers, suplimentary fiscal charge, fact which will deepen more the situation of crisis.

Another option for the executive is to appeal to extern public credit in order not to tax its own society and economy from potential intern resources.

It is known that manifestation of crisis are diverse and its causes are also multiple and some of them mayby unknown. My aim in this study is not to unravel the causes and effects of an economic crisis , but only the role of taxes in front of such a situation.

Tax being both the main way of attracting the incomes to public budget and a way of intervention of state in economy, influences on them can produce perturbations on fiscal mechanism' functionality and on payers' behaviour , beside the risk of reducing their efficiency.

If tax is defalcated from its natural content and it is used only as influencial instrument , then the economic and social distorsions will grow.

Taxes' stability and resilience are features , principles that cannot be given up at, especially in conditions of economic crisis.

To denaturate the objective content of tax, to give up at the imposing principles in the favour of some rapid aims means to give up at the objective scientific approach.

Objective truths must be searched by people and moreover in economy and fiscality. The philosopher D.D. Rosca in his book " Philosophical studies and essays" points out the role of the objective in this way - "the function that real intelligence has to accomplish in general economy of spiritual life of civilised man, is searching the objective truths , namely truths confirmed by practice and thruts that impose themselves through internal compulsion of all good-will spirits." 2 To disemble in fiscal politics means to violate the economic and social stability of a state, means to apply new ideologies , unverified by practice, with unhappy results in the society' welfare.

The scientific, objective, abstract approach in economy as well as in other domains of social life does not let place for disembles. To accept general ideas, sometimes imposed, other times from ignorance, worse from dishonesty represent the sign of degradation for individ and devastating for society.

2.D.D.Rosca - Philophysical studies and essays , Scientific Publishing House , Bucharest , 1970, pag.160

Not to respect the economic regularities, recognised and verified by life, means to create economic and social paradoxes, to create economic and social crisis.In economic reality these are recognised after the existence and proportion of financial blockings.

The economic science puts at the base of scientific approach the economic regularities , depending on which, in time , were elaborated different economic theories; optim equilibrium ,

right repartition of taxes and others. Economic practice was depossessed sometimes by theories verified by economic life, depending on ideologies practiced by political powers and depending on the measures sometimes uncontrolled, taken by the big finance - big banking institutions - of the world, with consequences on economic stability.

If economic science does not go away from the abstract approach and from objective economic regularities, then neither the economic practice, real economy does not detach itself from objectivity and reality, do not appear economic paradoxes and financial blockings, do not appear economic crisis.

The ideological behaviour does not detach from the exercise of economic approach not even in the periods of economic decline, thus being seen the psicho-behaviour component of individs and of decisional system in economy and society. Not respecting the economic regularities and morality in society maybe would exclude the psicho-component influences in periods of economic decline.

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# IMPACT OF FINANCIAL CRISIS OVER THE COMPANIES OF BET INDEX COMPOSITION

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*Mortgage crisis has affected indirectly three risk levels of the Romanian economy: the currency, external financing and the stock exchange. Foreign exchange market in Romania is of little depth, open to the speculation stormings. Romanian stock indices fell by over 50% in value in 2008, more harshly than those in mature European markets. This study investigates the impact of the financial crisis on the BET index, also on the companies that belongs to the index through a set of indicators.*

*Keywords: financial crisis, stock exchange, BET index*

*Code JEL G01 G10 G14*

## **Introduction**

Current financial crisis of unprecedented proportions, which has turned into a global economic crisis, became the dominant object and motivated concerns throughout the world.

The first sign of crisis was given by HSBC Holdings plc (the fourth bank in the world according to Forbes estimates in 2008 and most profitable bank in 2007) which announced very weak financial results in 2006.

Despite the massive interventions and lack of ambiguity, this time, of the European and the U.S. governments, the financial crisis is far from having a credible solution, which provides a clear perspective to economic actors. Moreover, panic appears to invade the market, although in global financial system were injected huge amounts, thousands of billions of dollars and euros, while EU Member States, the European Central Bank, EDF, U.S., Japan coordinates, closer and more transparent than ever, the policies and intervention way.

There are few people who believe that this crisis is not one of goods and services production, none of the research - development, none of the workforce, even one of crediting. There is not a crisis of the real economy. It is a crisis of virtual economy, of banks which have forgotten the basic mission and entered in the dangerous game of derivative products, decoupled from the daily realities of those who work in the real world.

## **Evolution of the BET index**

The Bucharest Stock Exchange has not given signs, during 2008, that it will change the downward trend, but there were still moments in which seemed that decreases would moderate, because of macroeconomic data that showed a growth of 8,8% in the first six months of 2008.

Lehman collapse, old financial institution of 158 years, has scarred the basement of international stock markets and the shock wave arrived quickly in Bucharest too, where stocks, many of them considered cheap, after depreciation of more than a year from the triggering global financial crisis, its deep decrease. In just two days, the stock exchange lost 3.2 billion euros ([www.zf.ro](http://www.zf.ro)). Moreover, financial turmoil turned the Bucharest Stock Exchange in the number one loser of emerging markets.

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BET index fell from 8449.36 points on the 3-rd of January 2007 (the maximum being recorded on the 24-th of August 2007 at 10,813.59 points) only to 2901.1 on the 23-rd of December 2008 (a significant decrease of over 60%). Depreciation of the BET index is more drastic compared to other indices for the same period, the indices have recorded depreciation of 31% (DJ Industrial index), 37% (Nasdaq), 30% (FTSE 100) and only 29% (DAX index) (author`s calculations).

### **Impact of financial crisis on companies**

Capital market is a barometer of the economy, here quantify not necessarily the actual results, but especially the future results anticipated by investors. This is why, although the financial results of several Romanian companies listed were very good, price evolution was a decline. At this time we talk about a downward trend over the medium term, and this trend will not change in one ascending the extent that prospects for a recovery of the global economy (are real and accepted by investors).

In 2008, the company Petrom S.A. appealed, for the first time since the privatization, at bank loans. Also, the management company decided that no longer paid dividends for the year 2008, and a significant reduction in investments in 2009. ([www.zf.ro](http://www.zf.ro))

In October 2008 S & P lowered the rating Transgaz for loans in foreign currency from BBB-, the negative perspective, to BB +, based on reduction of the country`s rating. ([www.wall-street.ro](http://www.wall-street.ro))

Biofarm Company recorded financial losses of 33.4 million lei, in the context of reducing the market value of portfolio investment stocks (at end 2008, Biofarm made a provision of 35.1 million lei for depreciation of portfolio shares to listed companies on the Bucharest Stock Exchange). Thus, in 2008 the company recorded losses of 21.3 million lei. (Financial Situations of the firm)

Azomures company decided in January 2009 temporarily halt production activities and sending in technical unemployment 2000 employees against the economic problems related to global financial crisis, which have resulted in the recovery of products, both because they decrease the price on market and due to drastic decrease in demand for chemical fertilizer market. (administrators`s report)

The vast majority of multipliers have decreased significantly as a result of decreasing the market price, the price of many shares were overvalued before the global financial crisis and following the events the price of securities listed on stock exchanges have come to their values true, then from 2008, the price of shares has depreciated significantly.

### ***The price of shares***

The price of shares should be given only by the requirements of investors. Based on the information that they have in their possession or they buy it in the form of consulting, of investment profile and the experience gained by trading, investors take decisions to sell or buy. That is why the existence of unknown information to the majority (confidential information) and those are used in the market seriously distorts the price of a share until its publication. Easy, cheap and undifferentiated access to information is one that ensures market integrity, which virtually all market exchange can not develop. The evolution of market prices of 10 companies is presented in table number 1 (we took into account the adjusted prices).

Table no.1

| Market price |         |          |          |
|--------------|---------|----------|----------|
| Ticker       | 2006    | 2007     | 2008     |
| TLV          | 1.0100  | 0.9000   | 2.6200   |
| SNP          | 0.5459  | 0.4779   | 0.1810   |
| BRD          | 17.9080 | 27.4000  | 8.2500   |
| TGN          | N/A     | 262.3400 | 122.0000 |
| RRC          | 0.0875  | 0.1090   | 0.0185   |
| TEL          | 33.4400 | 39.6400  | 11.0000  |
| BIO          | 0.6600  | 0.5900   | 0.0780   |
| IMP          | 0.5800  | 0.5000   | 0.0300   |
| BRK          | 0.7200  | 1.9300   | 0.0920   |
| AZO          | 0.1450  | 0.1970   | 0.1550   |

Source: Author's calculations based on the financial situations of the companies

Decrease the price of profitable shares from the stock exchange is a consequence of the international economic crisis, which are felt by the listed companies, from autumn 2007, high inflationary pressures affecting performance of all companies, possibilities of financing the much more difficult business due the increasing of financinf cost (in lei - as a result of increased interest in lei, euro - as a result of depreciation of Romanian currency and the increase of foreign exchange rates), a lower purchasing power of population, which will materialize in a lower consumer and, in small turnover of Romanian companies, the reducing of foreign investments in emerging markets (including Romania) etc. The price of many companies has come to be even below the nominal value

#### **Stock exchange capitalization**

Stock exchange capitalization is an indicator of the potential of a stock exchange.

Developments on the Romanian capital market are influenced by the rank of financial education of Romanian investors and namely that it is mostly a speculative side. Given that the current subcapitalization of the stock exchange is critical, with the consequence that many Romanian assets, from the stock exchange, are significantly subestimated on the Romanian stock market were changes in investment behavior. Foreigners buy at very low prices and Romanians sell of fear, which can be explained just by the degree of reduced financial education of Romanian investors. From this reason, the stock exchange capitalization of BET index dropped significantly in 2008. Evolution of equity market capitalization is illustrated in table number 2.

Table no.2

| Stock exchange capitalization |                |                |                |
|-------------------------------|----------------|----------------|----------------|
| Ticker                        | 2006           | 2007           | 2008           |
| TLV                           | 3,967,273,950  | 5,499,485,291  | 2,776,403,999  |
| SNP                           | 30,922,018,740 | 27,070,219,373 | 10,252,583,609 |
| BRD                           | 12,480,112,384 | 19,095,101,593 | 5,749,437,524  |
| TGN                           | N/A            | 2,725,421,140  | 1,267,444,336  |
| RRC                           | 1,846,186,650  | 2,299,821,084  | 390,336,606    |
| TEL                           | 2,451,080,639  | 2,905,736,549  | 806,334,573    |
| BIO                           | 309,872,602    | 576,757,396    | 85,399,197     |
| IMP                           | 580,000,000    | 1,000,000,000  | 60,000,000     |
| BRK                           | 78,639,175     | 365,888,798    | 26,631,395     |
| AZO                           | 76,274,732     | 103,628,429    | 81,535,058     |

Source: Author's calculations based on the financial situations of the companies

#### **EPS – earnings per share**

Information on profit per share evaluates the theoretical value that will receive the holder of shares if we assume that the issuing company would distribute the profit to shareholders without anything to stop for investment and reserves capital. Basically this is the added value that a company generates in a year for each of his shares.

A high indicator reflects the confidence of investors in the company management. Instead, a low level indicates a lack of confidence in current management of the company, also the company is facing financial problems.

Evolution of EPS is more useful in characterizing the progress of the company, rather than simply annual trend of profits. The multiple for the 10 companies is presented in table number 3.

Table no.3

| EPS    |           |           |           |
|--------|-----------|-----------|-----------|
| Ticker | 2006      | 2007      | 2008      |
| TLV    | 0.042946  | 0.077294  | 0.043092  |
| SNP    | 0.040515  | 0.031390  | 0.018049  |
| BRD    | 0.940709  | 1.315995  | 1.942146  |
| TGN    | 22.900673 | 21.562118 | 20.409244 |
| RRC    | -0.002178 | 0.000000  | 0.000000  |
| TEL    | 3.830413  | 0.710006  | 0.536709  |
| BIO    | 0.031712  | 0.025883  | 0.000000  |
| IMP    | 0.020771  | 0.007095  | 0.004114  |
| BRK    | 0.286704  | 0.312602  | 0.005541  |
| AZO    | -0.001971 | 0.105724  | 0.096147  |

Source: Author's calculations based on the financial situations of the companies

Financial crisis has affected the results of listed companies on stock exchanges. The companies entering the composition of BET index, Romanian Bank for Development is the only exception, the result of its action has doubled in 2008 (EPS = 1.94) compared with 2006 (EPS = 0.94). In 2008, the vast majority of companies have registered a subunitary result per share or even zero, because of reduced profits and losses recorded by the entity.

#### **PER - price earning ratio**

Coefficient of the stock exchange capitalization measures how often investors are willing to pay that profit what return for a share. Benefit per share indicates the potential of growth and the risk of a company. For businesses with better prospects for sale (in economic conditions and constant risk), the coefficient of capital stock exchange will be higher. Lower values will be recorded in the case of hazardous activities, which are expected to decrease in profits.

PER coefficient is very important in the economic and financial exchange analysis of multinational companies in the expeditions field of goods whereas it presents the number of years in which the investor recovers from result the amount of money that it has submitted to the acquisition of shares. If the coefficient is lower, the acquisition of these shares becomes more attractive for any investor. If the yield is the highest so PER is lower. Consequently, analysts recommend the buying of securities with lower PER (Alexandru Todea, 2005). PER multiple values are presented in Table 4.

Table no.4

| PER    |       |        |       |
|--------|-------|--------|-------|
| Ticker | 2006  | 2007   | 2008  |
| TLV    | 33.00 | 16.18  | 8.17  |
| SNP    | 13.53 | 15.22  | 10.03 |
| BRD    | 19.04 | 20.82  | 4.25  |
| TGN    | N/A   | 12.17  | 5.31  |
| RRC    | N/A   | N/A    | N/A   |
| TEL    | 8.73  | 55.83  | 20.50 |
| BIO    | 24.37 | 42.68  | N/A   |
| IMP    | 31.71 | 135.12 | 7.29  |
| BRK    | 4.21  | 9.54   | 19.57 |
| AZO    | N/A   | 1.86   | 1.61  |

Source: Author's calculations based on the financial situations of the companies

Under the influence of financial crisis, companies PER have decreased significantly (except SSIF Broker).

*PBR (price-to-book ratio)*

The multiple measures the value that the market adds to the management and organization way of the company, these two elements are factors that influences the business growth. The indicator is calculated as the ratio between the stock price and value of shares. A well managed company with a strong management and an organization that works efficiently, it will have a greater market value than the historical value of its assets.

Shares of companies with a low PBR is an investment with a low risk, through the fact that book value is a level which keeps the market. The book value is considered the level beyond which the market price will not fall, because the company will always remain the option to liquidate or sell its assets at their book value. A low PBR is considered to ensure a "safety margin", many analysts avoid shares with a high PBR in the process of portfolio formation. They get the idea that, as the other indicators remain the same for two shares, one with a low PBR is safer. In Table 5 we presented the PBR in the period 2006-2008.

Table no.5

| PBR    |        |        |        |
|--------|--------|--------|--------|
| Ticker | 2006   | 2007   | 2008   |
| TLV    | 5.6509 | 4.5454 | 1.6200 |
| SNP    | 2.5089 | 2.0532 | 0.7556 |
| BRD    | 5.3529 | 5.5248 | 1.3076 |
| TGN    | N/A    | 1.7393 | 0.5763 |
| RRC    | 0.7876 | 1.1142 | 0.2475 |
| TEL    | 1.1031 | 1.2361 | 0.3421 |
| BIO    | 4.3933 | 3.8190 | 0.6584 |
| IMP    | 3.5476 | 3.0609 | 0.1799 |
| BRK    | 0.9530 | 2.3210 | 0.1680 |
| AZO    | 0.2878 | 0.3042 | 0.2084 |

*Source: Author's calculations based on the financial situations of the companies*

In 2008, PBR multiplier of companies has declined, reaching even subunitary at the entities from BET index. Theoretically, a low level of PBR would indicate a safe investment, but the current crisis conditions we can say that the multiplier can "induce" in error. The reduced value is given by the undervalued prices of shares's companies in the current period.

***Return on equity (ROE)***

The financial rate shall be determined by reporting the net profit to shareholders' equity of the company. ROE focuses on the efficiency of invested capital by shareholders. A low rate may lead to dissatisfaction for shareholders that enables the distribution of dividends on expectations, but may also express any overcapitalization. Another interpretation of the low level of this indicator may be the policy of the profits reinvested in increasing assets and future revenue flows.

If you take into account that many of these investments are made in research and development activities, that will bring profits, but not in the short term, it is possible that in the future to increase ROE, giving satisfaction to shareholders. On the other hand, a rate too high indicates a subcapitalization and therefore a high degree of indebtedness.

The financial rate of return on equity put in evidence the efficiency equity and the investment made by shareholders of a company by purchasing company shares. The profit, important source of financing the development of an activity, is an undertaking part of the capital of a company, paying, first, the shareholders participation through dividends. An increase of this indicator shows an efficient activity in terms of equity fructification. The rate values of return on equity registered by financial companies from the composition of the BET index are presented in table number 6.

Tabl no. 6

| ROE    |         |         |         |
|--------|---------|---------|---------|
| Ticker | 2006    | 2007    | 2008    |
| TLV    | 17.123% | 28.099% | 23.156% |
| SNP    | 18.544% | 13.486% | 7.535%  |
| BRD    | 28.119% | 26.535% | 30.783% |
| TGN    | 19.854% | 14.296% | 10.849% |
| RRC    | N/A     | N/A     | N/A     |
| TEL    | 12.635% | 2.214%  | 1.669%  |
| BIO    | 18.027% | 8.948%  | N/A     |
| IMP    | 11.189% | 2.265%  | 2.466%  |
| BRK    | 22.634% | 24.333% | 0.859%  |
| AZO    | N/A     | 16.327% | 12.928% |

Source: Author's calculations based on the financial situations of the companies

The ROE indicator present oscillating values in 2008 compared to previous years. Companies such as Petrom, Transelectrica, SSIF Broker and Azomures present the lower values of ROE with negative impact on the level of dividends to be granted. Other two companies, Biofarm and Rompetrol Well Services, have negative values of profit, inducing a zero level of the indicator. Only BRD and Impact have higher values of ROE compared to previous years, which shows that companies produce an efficient activity of equity fructification.

#### **Dividend per share**

The indicator expresses the net remuneration that return to a share. A stable dividends policy is perceived as a safety and soundness sign. (Ioan Nistor, 2004)

A high level of this indicator attracts investors seeking safe returns in the short term. However low level of the indicator may mean a redirection of profits to the various investment projects, this is a good time to buy shares. The granted value dividends are presented in table number 7.

Always dividend policy of listed companies was one of the factors that an investor looks, one of the criteria that can even make the divide between companies on the list of purchases and ignored. Unlike other parameters that characterize the attractiveness of a company, more abstract, such as multipliers PER, PBR, indicators of profitability, liquidity or efficiency or hard quantifiable parameters, such as ownership structure, management, prospects for the sector, etc., dividend is something tangible, measurable and perfectly liquid.

Tabl no. 7

| Dividend per share |         |        |         |
|--------------------|---------|--------|---------|
| Ticker             | 2006    | 2007   | 2008    |
| TLV                | 0.0000  | 0.0000 | 0.0472  |
| SNP                | 0.0179  | 0.0191 | 0.0000  |
| BRD                | 0.3672  | 0.5921 | 0.7283  |
| TGN                | 11.6900 | 9.6600 | 10.4700 |
| TEL                | 1.4700  | 0.3600 | 0.3000  |

Source: Author's calculations based on the financial situations of the companies

In the past they were a rarity the companies offering an attractive dividend yield, because earnings from growth stocks eclipse everything. But it might as dividend to regain the importance in the investment decision, the daily realities are totally different from those of a year ago or more, two years. Everything is to keep companies their dividend policy, is very likely to witnessing at changes this year, because the need for liquidity and funding sources is now a priority for the company.

## **Conclusions**

The great problem of emerging capital markets, such as Romanian market, was the withdrawal of foreign investors, investors who went in search of better returns.

In the actual context investors are very careful in investing their capital, and the market market has no longer the attraction of taking into account the negative economic data that they present.

Given the conditions in which the current subcapitalization of stock exchange is critical, in consequence many Romanian assets are significantly underrated, also on the Romanian stock market there were seized some changes in investment behaviors.

In 2008, the vast majority of companies have registered a subunitary EPS or even zero, because of reduced profits and losses recorded by the entity. Consequently, the PER`s companies declined significantly, too.

Also, the profitability indicators have worsened, which shows a decrease in capacity management companies to made profit.

The crisis was beneficial in terms of political dividends, as more companies have started to pay dividends to attract investors.

The vast majority of multipliers have decreased significantly as a result of decreasing the market price, the price of many shares were overvalued before the global financial crisis and following the events the price of securities listed on stock exchanges have come to their values true, then from 2008, the price of shares has depreciated significantly.

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## THE FINANCIAL CRISIS AND THE IMPACT OVER THE SECTORS OF ECONOMY

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*The financial crisis is perceived as a tsunami wave started in July in the United States and which is presented on all countries in Europe and around the world. Mortgage crisis has affected indirectly the Romanian economy. The main factor which affected the business environment in Romania is the declining of demand. Banking and financial sector is probably the most affected by economic crisis, being negatively influenced by all the negative factors of crisis. This study investigates the impact of the financial crisis on the sectors of economy, because there is ample evidence that the economy is now slowing sharply.*

*Keywords: financial crisis, economy, interest rate*

*Code JEL G01 J01 E58*

### **Introduction**

The crisis is perceived as a tsunami wave started in the United States and which is presented on all countries in Europe and around the world. "When the crisis arrives in Romania" or "the crisis will be on top in month X" are phrases without value, but we hear every day on television. A closer look can see that economic disturbances started from subprime crisis in United State are only one side of a more complex reality that combine external economic factors with others, related exclusively to the Romanian environment.

Lending with identity card or in very easy conditions was aggressively promoted in the local financial environment, despite repeated warnings of the Nationale Bank. Unstable policy about the first registration fee which has affected the automotive industry in Romania is purely Romanian origin. Irresponsible spending of public money in 2008, leading now to increase taxes on labor (CAS), is again the result of political populism of our politicians. So what is myth and what is reality in the crisis from Romania?

Globally, losses recorded by commercial banks in the world rises, until now, at over 150 euro billion, of which 127.5 euro billion in U.S. only. It is expected that the financial industry to record total losses of more than 705 euro billion. "This crisis has become the new bird flu, that has infected absolutely everything". (Goldman Sach Investment Bank, 2008)

### **The impact of crisis on the sectors of economy**

The main factor which affected the business environment in Romania is the declining of demand. This however must be seen as part of a complex and interdependent set of factors, among which the most important are: the availability of credit, exchange rate volatility, the occurrence of arrears and liquidity problems, etc. All these are the effects of public policy little calculated at the time of their adoption, and a voluntary restriction of private consumption as a mean of protection against the effects of the crisis. The credit strengths for Romania include: increasing EU economic and financial integration that supports investment and microeconomic restructuring, low government debt and support from EU/IMF mitigate vulnerabilities posed by macro imbalances. The credit challenges for Romania include: controlling the budget deficit in the context of an economic recession and limited financing, risks to macro stability posed by

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deteriorating economy, high external debt and large current account deficit, stalled structural reform process. (Moody's Romania, 2009)

Problems of availability of lending are coming mainly from lack of cash existing on the global financial market. In Romania, the Central Bank increased the interest of reference and reserve requirements for banks to discourage the granting of too much easy credit. The result is a high cost for working capital and to fund investments for institutional clients. For individuals have been tightening credit conditions. 44% of managers in the metallurgical industry, metal constructions and metal products and 40% of chemical industry consider lending availability one of a key issues leading to declining demand in their sectors.

One unknown in the equation of economic crisis is the exchange rate level. In December 2007 the leu / euro was 3.53 to reach 3.92 in December 2008 and then jump to 4.23 in January. Some analysts forecast an average a rate of 4.4 leu / euro for the end of 2009, but the spreading of predictions is very high, which reflects the current state of volatility. In the situation analysis of the NBR in January 2009 show that the evolution of the exchange rate affects 36-45% of companies in the metallurgical industry, textile industry and calculation centres.

"Financial holds" a favorite phrase from the beginning of the past decade, reappears. In 1995, the economy was stuck in huge outstanding amounts to pay between and from the arrears and colosii from unstructured industrials, which spread throughout the economy. Fifteen years later, the forgotten problem of arrears becomes again topical. NBR mentioned in the report from January 2009 that have already appeared difficulties cashing the value of products sold to companies in the chemical industry, construction materials industry, the extractive industry, technical centres of computing industry, machinery industry, equipment and electronic devices ( in percent between 29 up to 100%) and 25% of companies in the construction sector. The government included in the anticrisis plan several measures that will help the traffic flow of money, such as TVA's compensation payment and recovered. These measures are beneficial, but might not be sufficient for the market at the moment.

Possible effects of the consumption decline of the Romanian economy were discussed more time. During the years of economic growth, have been told countless times that this growth is unhealthy, unsustainable, based on consumer credit on imported goods. That is why today we have a current account deficit of 13% of GDP. But the problem is a structural and old. There would be no problem if we temporary import more than export, with the conditions that we import also supply of investment that allows a qualitative improvement of goods that we produce (for internal consumption and export) and to attract foreign direct investment in productive activities. Unfortunately, we bought more consumer goods, which we funded from speculative capital (attracted here only by high interest rates and that leave as soon as they are needed in the mother countries) or from the money that have been sent home Romanian workers from EU. Increased consumption until this year did not occur in parallel with a similar increase of domestic supply. Our problem is that this year we don't have from what we fund the consumption: speculative capital leaves, Romanian workers from outside will not easily find work and to export will be something more difficult, because demand has fallen dramatically in countries where our products were selling before (EU). Domestic demand (not only the consumption, but also investment) will drop dramatically to the level which can be funded. In turn, the internal supply will be affected by the difficulty of financing of capital goods.

Investment in fixed capital has formed the second major component behind Romania's rapid rate of expansion after consumption, driven by a mixture of spending on construction activity and capital goods purchases in the industrial sector. It has been supported by the significant net inflows of foreign direct investment into Romania, access to relatively affordable credit prior to recent turmoil in global capital markets, and governmental capital expenditures to upgrade infrastructure. It has also been aided by the recent liberalization of the capital account and the upgrading of Romania's sovereign medium- and long-term foreign-currency securities to

investment-grade (which has now been reversed by several ratings agencies in light of global financial turmoil). Capital spending rose 28.0% in the fourth quarter of 2007 and 28.9% for the year, compared with 19.3% growth achieved in 2006. Higher domestic interest rates in 2008, motivated by the resurgence of inflation, will dampen capital investment growth however, especially coupled with very tight credit conditions on global financial markets. In the first three quarters of 2008, though, gross fixed capital formation was still growing at a very robust 27.7% year-on-year. The industrial sector has benefited from the influx of foreign investment capital, which has driven rapid growth in output and supported considerable investment in new machinery. While this has contributed to the deterioration of the current account in the short term, it should bring about longer-term export potential and is already driving significant improvement in productivity that will support rising real wages and help to keep Romanian exports competitive in what is certain to be a difficult global market. The flow of foreign capital for portfolio investment reached a net US\$1.694 billion in 2005, while direct investment reached a record US \$ 6.373 billion. This covered the current-account deficit almost entirely. In 2006, direct investment capital reached a new record high of 9.1 billion euro and covered around 91% of the current-account shortfall. Increases in the volume and volatility of inflows and outflows of portfolio capital reflect the development of the Romanian capital market. FDI, which does not typically flow in smoothly over the course of the year, was comparatively sluggish in 2007 at 9.06 billion euro, covering a lesser 41.9% of the burgeoning current-account deficit in that period. Foreign direct investment in the first 10 months of 2008 amounted to 8.157 billion euro and was equivalent to 56.5% of the deficit on the current account.

| Key Economic Figures                  | 2006  | 2007  | 2008  | 2009* | 2010* | 2011* | 2012* | 2013* |
|---------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Real GDP (% yoy)                      | 7.9   | 6     | 7.8   | 0.4   | 3     | 4.9   | 4.8   | 4.1   |
| Consumer Price Index (% yoy)          | 6.6   | 4.8   | 7.9   | 5.3   | 4.1   | 3.6   | 3.2   | 2.6   |
| Industrial Production Index (%)       | 7.1   | 5.3   | 3.2   | 3.2   | 4.3   | 4.2   | 3.8   | 3.4   |
| Foreign Direct Investment (% of GDP)  | 9.6   | 5.7   | 4.4   | 4.5   | 4     | 3.3   | 3.1   |       |
| Foreign Direct Investment (US\$ bil.) | 11.8  | 9.4   | 8.8   | 9.2   | 9.7   | 9.2   | 9.3   |       |
| Unemployment rate (% yoy)             | 5.2   | 5     | 4.9   | 4.7   | 4.6   | 4.5   | 4.3   | 4.2   |
| Trade balance (% yoy of GDP)          | -12   | -14.6 | -13.4 | -13.2 | -10.6 | -8.7  | -8.4  | -8.6  |
| Trade balance (US\$ bil.)             | -14.8 | -24.2 | -26.7 | -24.3 | -23.1 | -22.2 | -24   | -26.2 |
| Budget balance (% of GDP)             | -1.7  | -2.57 | -2.9  | -2.53 | -2.36 | -2.2  | -1.9  | -1.7  |
| Policy Interest Rate (%)              | 8.75  | 7.5   | 10    | 6.5   | 6.25  | 5     | 4.5   | 4.25  |

Source: [www.globalinsight.com](http://www.globalinsight.com)

Decrease demand has reached historic levels, according to the perception of managers. The bulletin of conjuncture of NBR from January 2009 states that 51% of surveyed managers consider the low demand as the main cause of limitation of production, almost two times more than at the beginning of the fourth quarter of 2008. The crisis is affecting the selective areas of activity. Most affected are firms in metallurgical industry, metal constructions and metal products (about 87% of companies surveyed) and transport industry, building materials, chemical industry. In a lesser extent is affected telecommunications market, where demand remains relatively constant, but it forecast a year with little growth. Voice services market has matured with penetration rate estimated between 90% and 130% and the market competition has become fierce, therefore we see rather optimization of costs, freezing employments and productivity growth. Hope comes from the area data services where there is still a high growth potential, but the development of broadband infrastructure will depend on the allocation of public funds and the capacity to spend for the development of metropolitan networks. Difficulties NetCity underground network in Bucharest are not auspicious, even in circumstances in which the project was granted to a private investor. In the IT area, expect a slow increase of the level of 25% estimated for 2008 to 5-6% in 2009, which will be reflected in postpone the development of new projects and in a slow wage increases in the area.

Companies large of retail / distribution estimates only a cap of demand, but a more important negative impact it would also have high costs of working capital due to interest rate. The retail of electronics products or IT is faced with a more pronounced decrease in demand, plus an unfavorable exchange rate. It is possible that these pressures will lead to disappearance from the market of some companies with smaller turnover. We will see the retail market postpone investments in new stores, although some large retails have announced that they will continue the plans. Greater attention will be given to various performance shops, so those who do not reach a level set will be closed or relocate.

In 2008 the automotive industry was bad, and the prospects for 2009 are still sombre. Association of Car Producers and Importers APIA (quoted by Intellinews) estimates that new car sales fell by 12% in 2008 compared to the previous year with large decreases in the last quarter and will continue to fall with another 50% in 2009. So at the end of 2008 and the beginning of 2009, Dacia (part of the group Renault) was forced to stay. The reduction of working time was necessary in the conditions in which in January 2009 sales fell by about 70% compared to the same period of the earlier year. Dacia announced that it will give up one third of staff if the rhythm is maintained. Auto market situation in Romania is not much different from other EU states. The answer of European governments ranged between subsidies, tax incentives and programs of auto park renewal using the program type "rabla". Romanian government using the first registration tax policy has managed to distort the market with frequent and unpredictable changes. In the crisis program, it included the allocation of additional funds for the Romanian program of renovation of car park. Voices from the area considered that the decrease of benchmark interest rate could have a greater impact as long as 70% of purchases of new cars are made by credit.

Textile industry is also affected by lower demand, especially on foreign markets, against the background of a still unfavorable climate in this sector, for which Romania has become before the crisis a business environment with larger costs. On domestic market, the consumption per capita was very low compared with Western Europe, even before the start of the crisis. Light industry, especially the lohn, was on the downward slope already in previous years, which marked a delocation of production to eastwards, where costs of labor were lower. Increasing taxes on the workforce will accelerate this delocation negating the potential positive effects of a favorable euro course for exports.

Metallurgical industry is also strongly affected by lower domestic and external demand. ArcelorMittal will reduce production in the next period by about 30% and the scheme of personnel will be diminished by one third. Alro has already closed one of the halls of electrolysis and about 30% of staff has leaving voluntarily with compensatory payments or have retiring in 2008. Cuprom has initiated insolvency proceedings and is expected important disposal of personal.

Economic crisis, lack of lending in particular, has severely affected affected the construction sector. For 2009 it is estimated a growth rate of 10-15%, less than 28%, the forecast for 2008. The expectations of entrepreneurs are going to work for infrastructure and industrial construction. The ability of state to use European funds for infrastructure will have a clear impact on the sector, but the speed with which it operates in complex procedures for these programs is not encouraging. Industrial buildings are under questionable sign as long as the main policy of firms in the period crisis is to postpone development and investments plans. In addition investors access to sources of financing will be difficult or very costly in terms of lack of liquidity in the financial system and for individuals the access to credits is more heavy than before, with interests and criteria less encouraging. In these conditions, the situation of the construction and building materials sector is not encouraging. Trends analyzed by INS in a survey of the situation in January 2009 based on the views of managers indicate a decrease in the volume of production and contracts stock for the first three months of 2009 (short-sold 33%, respective -26%) and

reducing number of employees (short-sold 28%). Also it forecast a stagnation of prices of construction works (short of the NBR report) or even an increase of prices of construction works (sold short 24% according to INS).

Banking and financial sector is probably the most affected by economic crisis, being negative influenced by all the negative factors of crisis. Reference interest rate increased from 7.5% in January 2008 to 10.25% in September 2008, being held up at present. In addition, there have increase the obligatory reserves both in lei and foreign currency. The loans had a spectacular fall since November 2008 when for the first time in recent years the volume of granted loans has decreased in terms of the grant of new loans has almost totally frozen. The forecast regarding lending for 2009 is not her best against the backdrop of lack of liquidity and the perception of managers is not positive for either the second part of the year. With regard to savings, develop an increase in deposit-type instruments in December, reflecting an increased attention to the economies of inflation protection, but voluntary restriction of consumption as a way to face the crisis. The level of remaining credit is low, but the upward trend from 1.12% (dec.2007) at 2.23% (dec.2008) of total loans in foreign currency. At the end of January the signals appeared as percentage debtors could dramatically increase in the near future.

In the energy sector, the situation is complicated by the large number of state-owned companies in the sector who play by other rules than the market. In the last quarter did not felt the crisis, but it expect a reduction of activity by about 10% in first half of 2009 (mainly due to low demand from the energy industry), and that in the second half of the year the situation is stabilize. Some of the existing contracts will be renegotiated because of arrears: some of large energy consumers would be unable to pay their debts on time. Available staff are partly caused by other factors, even to a greater extent than the crisis (eg, reducing the number of employees as a result of a restructuring plan for the post-privatization of Petrom, CEZ, ENEL or DistriGaz). Availability of credit market is a problem that will lead to postpone development plans. In the electricity sector up to the end of 2008 is discussed fairly serious about investment projects of up to 20 billion euros until 2016. As a result of uncertainties related to the crisis is now estimating that the total investment in production will not exceed 8 billion on the same time horizon. Exchange rate significantly affects the acquisition of capital goods and raw material (eg gas). Even the state companies make plans to reduce the operational costs by increasing production efficiency.

The transport sector is differentiated affected, depending on the mode. Road transport is most a private sector, it secures most transport services on the market and is full of striking crisis that affects clients. It is expected a large number of bankruptcies, especially among small firms and clients with specialized clients and consolidations to large firms. It is estimated that nearly 10% of the total number of carriers have already bankrupt until February and by the end of 2009 will stop work for 60% of those on the market in mid of 2008. Already the visible reduction of the intensity road traffic in January in Bucharest and other major cities, or around them, before the press and observers, is an important proof (though anecdotal) for what happens in the depth of the economy.

Railway operators, in contrast, faced with poor quality of infrastructure (where maintenance and investment, even the state risk to work worst than before because of efforts to reduce the budget deficit) and the arrears, very likely, from customers, the state-owned companies (mining companies, etc.). Rail freight carriers, unlike the road is not expected to drastically reduce their staff. The evolution of the exchange rate affects everyone and the impact on excise duties (in Euro). Reducing the possibilities of credit on the market strikes on investments in new means of transport - buses, trucks and train cars. Solution seen by operators, especially the road, consists in diversifying customers to reduce the risk of bankruptcy by arrears. Regarding the transport of persons, it is affected differently by road and air: while the coaches have lost customers and from the development of low-cost flights, both operators will be affected by the evolution of demand and fluctuations in fuel prices.

Market value of an investment is by definition oriented to future. It represents the price that someone would be willing to pay for the right over the future economic benefits associated with that investment. And now there is a consensus over the fact that accelerated decline will affect the real economy.

### **Conclusions**

There is ample evidence that the economy is now slowing sharply. Export-oriented sectors are reducing production and the construction industry is faltering. Domestic liquidity has eased somewhat since February but the central bank is still maintaining high rates to support the currency. Analysts expect that Romania to experience a difficult recession in 2009, but the economy should avoid a major collapse due to relatively low private sector debt and less reliance on foreign trade.

The government signed an agreement for almost EUR 20 billion in extraordinary support from the IMF and EU in March following concerns about a rapidly worsening budget balance and reduced external liquidity. The programme should stabilise the government's financial position for the next two years. IMF funds are being used to reduce foreign currency reserve requirements to boost FX liquidity. As inflation subsides, the additional funds should also allow the central bank to gradually reduce interest rates to support an economic recovery.

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# TAX ASSIGNMENT INFLUENCE ON BUDGETARY SYSTEMS

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*The public budget seen as a balance for revenues and expenditures but also as the main financial instrument of governmental policies, does not reflect simply data, numbers or amounts of income or expenditure. The budget also reflects judgments on criteria, benchmarks and how they come to be included in a budget or another or the way revenues or financing costs from a budget that involves other budget components are targeted. From this perspective, our paper aims to identify the coordinates that relationships between system components are built on, regarding the budget revenues, including the effects of such endeavour.*

*Keywords: tax assignment, fiscal decentralization, budgetary systems, financial autonomy*

## **Introduction**

Intergovernmental fiscal relations are a component of primary importance for the public budgetary system, since it depends on the functionality of the essential links that are established between the public budgets. From this perspective, the revenue allocation of public budgets, along with the award of public expenditures, intergovernmental transfers system and regulation of local borrowing are the basic pillars of fiscal decentralization. Fiscal decentralization process is, for the transition countries in particular, an important component of administrative reform, conditioning through the design and promotion of the overall reform its results. For this reason, we intend to explore possible arrangements for the award of public revenues between public budgets in direct relation with their effects on the provision of public goods at different administrative levels.

## **Fiscal arrangements theoretical bases**

Reasons underlying public budgets revenue allocation joins the issue of fiscal-budgetary policy, because decisions on public financial resources mobilised to the public budgets are in essence a result of the fiscal-budgetary policy decisions. It is recognized as a general rule that to central budgets are mobilized those revenues that have as a source activities throughout the entire state, while the local budgets concentrate resources from economic and social activities carried out within the perimeter of the administrative-territorial unit<sup>189</sup>. Also, it should be noted that income concentrated at central (federal) level come from a consistent base, resulting in substantial revenues, but they also have a more sensitive basis for settlement to economic conjuncture while revenue mobilized at local budgets come from sources that are less consistent, sometimes excessively "shattered", but more stable. We believe that a possible explanation for this customary way of promoting the relationships between the components of the budgetary system when it comes to its income part is the need for a coherent fiscal policy and a wider general political, economic and social one, to be designed as general directions at the central level in a uniform manner and completed within certain limits with decisions left to local authorities. Such a view results from the way some specialists consider the functions of the public budget and, implicitly, the role of central and local authorities. Musgrave expressed the idea that the involvement of authorities throughout the public budget should be "divided" into three functions (branches): macroeconomic stabilization, (equitable) income distribution and efficient resources

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189 Filip, Gheorghe, *Finanțe publice*, Ed. Junimea, Iași, 2002, p. 43.

allocation<sup>190</sup>. With regard to macroeconomic stabilization, as a rule, this is a privilege of central authorities<sup>191</sup>. The reason for such an approach is represented on the one hand, by the need for coherent policies and, on the other hand, by the fact that local authorities, having limited territorial jurisdiction, cannot influence macroeconomic conditions.

In these circumstances, it can be considered that revenues source such as income tax revenue of enterprises or the progressive income tax for individuals are to be used as leverage to obtain the expected effects (macroeconomic stabilization), the first one because the profit fluctuates under the economic general conditions and the latter because of differential tax rates allow selective action. This would mean that these sources of income must be always assigned to the central authorities, not necessarily excluding the possibility that local authorities can raise some revenue through income taxes placed on individuals (of copyright, self-employed or seasonal, etc.). However, it is possible that these sources of income should be allocated to local authorities, but under a rigorous control of the central authorities. As a result, local authorities should be acknowledged the right to raise those revenues coming from less sensitive sources to economic conjuncture (taxes on buildings, land, means of transport etc.)

Similarly, the second aspect of the involvement of public authorities throughout public budgets as Musgrave suggests, meaning the (fair) redistribution income is usually associated with the intervention of central authorities, especially due the reason of a consistent approach to the whole society, eliminating the risk of creating distortions in the geographical allocation of resources by different actions of local authorities. In the progressive tax context, those who support higher tax rate may try to avoid charging a higher rate by moving to another administrative-territorial unit (fiscal jurisdiction). This movement reduces the original proportions (equitable redistribution) of the effects that are being watched. Under these circumstances, the author suggests the intervention correlated with the help of public expenditure (for social protection, for example), whose implementation is within the jurisdiction of local governments, but funding to implement them comes from the central level. We believe that the "danger" of mobility of high incomes and capital due to progressive tax rates set by local authorities remains only a potential one, because the decision to change domicile depends on other factors as well, in many cases more powerful than the tax rate (the family, culture, tradition, etc.). Therefore, allocation of income tax of individuals to local levels of government can bear equitable redistribution of income, being corrected, if necessary, with the intervention through forms of public spending (subsidies or aid to the socially challenged individuals).

The third aspect of the involvement of the public budget, resource allocation, aims at satisfying a part of the social needs by offering utilities (services) created with the help of public financial resources. Musgrave believes that the policies promoted at local levels (supported by local budgets) should allow for and reflect the various preferences of people living in a territorial administrative unit. Giving the right to mobilize resources locally is, from this perspective, more efficient than the central allocation (transfers), because local authorities have more specific information on residents' preferences than the central ones.

Following another milestone in the award revenues to public budgets, we believe that treating the issue of revenue mobilization without taking into account the issue of their use, it cannot be fully satisfactory. Thus, it is required that the services provided by public authorities be partially financed through taxes borne by recipients and not always offered for free. This way of promoting the supply of public utilities is likely to lead to an more responsible use of financial resources of the nation. The recipient who once forced to bear a share of service costs will give up the use of services which are not really necessary, services that he would be consuming if they

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190 Musgrave, R., Musgrave, P., *Public Finance in Theory and Practice*, 5th Edition, McGraw Hill Book Company, NY, 1989, pp. 6-21.

191 Oates, W., *Fiscal Federalism and European Union: Some Reflections*, Societa Italiana di Economia Pubblica, 2002, <http://www.unipv.it/websiep/wp/132.pdf>, p. 2.

were free of charge. Also we believe that establishing a link between income and funded service (only for services that allow it), such as taxes on vehicles or road taxes included in the price of fuel, is beneficial in the context of the measurement of a cost-benefits analysis results<sup>192</sup>.

From the perspective of the link between the mobilized financial resources and the effects of public spending financed by their account, the central authorities should mobilize revenues for those public utilities which have a wide national resonance (e.g.: defence, external affairs etc.) and that practically cannot be offered by local authorities. Similarly, the decision on the right of mobilization of revenue available to the public authorities should take into account that these offers limited services at the level of administrative-territorial unit.

The issue of delimitation of the right of mobilization of financial resources between the various levels of government or public authorities may not however be limited to a review of the alleged economic matters, because specific decisions must take account of other reasons, such as local autonomy and fiscal competition.

First, a rational division of the rights over sources of revenue between central and local authorities is to ensure the control of the latter over its own developments regarding tax and even, according to some authors, "fiscal sovereignty". But it also should be noted that from the perspective of the overall functionality of the public budgetary system, a very strict demarcation can create major vertical and horizontal imbalances and fiscal sovereignty should not be seen as a support of a possible financial independence of local communities just for this reason. Only the discretionary power of subnational authorities must be limited to those revenues which they may establish (independently) in relation to services provided and not extended to all incomes of local budgets. It is important that local authorities should receive benefit from their own resources to finance public services, whether they come from mandatory contributions even established at local level or left it here by central authorities, whether they enjoy these resources in addition to balancing grants (unconditional) from the central authority, granted by a formula that ensures medium or long term predictability. In addition to these two possibilities, balancing revenue can be transmitted (for certain actions to be financed) under certain conditions by the central authority, local autonomy being somewhat diminished.

Where local authorities are recognized the right to establish local taxes and to determine their level, there is the possibility of obtaining marginal income, excluded if practicing revenues sharing between levels of government. A real financial autonomy is exercised only when local authorities can control their "own" income levels.

Another landmark for consideration in establishing the relationships between public budgetary system components is the subsidiarity in taxation. As a requirement imposed by the Maastricht Treaty, subsidiarity means that the decision be taken at the level of government closest to citizens, provided that such an approach does not lead to major distortions. Applied to tax assignment, subsidiarity requires that a tax should be raised from the lowermost administrative level can implement it and is not going to be inadequate. Such an approach would minimize any vertical fiscal imbalances due to the fact that many subnational authorities have difficulties in the implementation of taxes, while the central (federal) can implement any kind of tax (even if it is traditionally regarded as "local taxes").

Another aspect that should be discussed in connection with the fiscal arrangements is local accountability and fiscal competition between municipalities. Accountability requires that assignment of revenue sources to local authorities to be made so as to get the authorities interested in obtaining new sources of income, to identify, to stimulate and to exploit them. Competition implies that capital holders will invest where the size of the tax determined by the size of local benefits exceeds their costs incurred in the local budgets (or is very close to it) and

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192 Moşteanu, T., Iacob, M., Fiscal Federalism, Theoretical and Applied Economics, 2007, vol. 11, p. 21, <http://econpapers.repec.org/>.



will channel resources to other local jurisdictions, where this relationship is more beneficial. Similar, but not only for the stated reason, workers may carry out work in other administrative-territorial units than those in which they live, but consuming public utilities (at least partially financed by the state) where they live (e.g.: children are receiving education in administrative-territorial unit where domiciled and not where they parents work and pay taxes). These issues are likely to have some shortcomings in the economic and social development of local communities, by the lack or the decreasing of investment, unemployment, etc. Also, similar to mentioned phenomena require a wider involvement of authorities (for example, to support disadvantaged categories), which will lead to an increase in public expenditure, entailing greater imbalances.

### **Alternatives of public budgets revenue allocation**

In relation to the landmarks treated above, we conclude that there cannot be an optimal method, an universally valid tax assignment between the public budget system components, but we can identify several possibilities, taking into account how the decision-makers (the central authorities) place more emphasis on some of the judgements shown above.

To construct alternatives of allocation of financial resources to the components of the public budgetary system, we take into consideration the following reasons:

- Which level of government decides from which charges the local authorities will obtain income?
- Which level of government establishes the settlement of tax?
- Which level of government sets the tax rate?
- Which level of government administers the tax in question?

Compared to the degree of local financial autonomy, the ability to set rates (quotas) of the tax is the most important aspect because it enables local authorities to autonomously establish the level (size) of public utilities offer. Be noted that local authorities cannot be left with the absolute choice to set the required contributions needed to be mobilized, since it would create failures for the entire budgetary system (for example, if local authorities would raise customs duties). Similarly, an excessive discretion in determining the tax base or revenue management can create an undue administrative complexity and disparities or distortions in resource allocation.

Therefore, as a first possibility of substantiation of the relationships between the central budget and local budgets concerning the revenue sector we may have achieve the highest degree of financial autonomy for local governments. Such an approach will allow local governments to choose the taxes they impose, to determine the tax base and the tax rate and to administer the revenues obtained. The most convincing example for such an approach is, in general, the federal state that specifically gives a broad autonomy to subnational authorities, especially in the U.S., where the federal states have almost unlimited possibilities for a decision on the four aspects previously discussed. However, we emphasize that such an approach taken to extremes can create failures, because some authorities may establish fees radically different from those established by other authorities (for example, in some jurisdictions to determine taxes on retail while in other VAT), define the tax base in radically different ways or administer the same charge in different ways. Within certain limits, the inequities and economic distortions created may be admitted if decentralization is to benefit, but in a situation where they record increased levels, central authorities must intervene by setting common rules (e.g.: for assessment of the tax base). This happened in the U.S. in 1957, when was proposed the adoption of the federal act that included rules for assessment of corporate income tax, which is presently applied (with some changes) so far in 25 states. Even so, it can still be found substantial differences in the taxation of profits between federal states; the act in question is not quite comprehensive. The situation is similar in the case of taxes on sales, where each of the 46 U.S. states (including DC) defines the tax base in full freedom.

A second choice for substantiation of the relationship between public budgetary system components related to revenues which can be promoted in parallel with the first option presented, in order to avoid its potential negative effects, is enabling local authorities to collect such called "extra-quota" taxes due to some central budgets (surcharges). In this case, the top authority sets the tax base and collecting both its own revenue, as well as those from additional allowances established by local authorities due to budgets managed by them. Basically, the situation may be diametrically opposed as well, in the sense that subnational authorities can mobilize and manage additional-quotas added to central taxes previously raised by local authorities. An example can be found in Germany, where resources from value added tax (income entitled to federal state) are administered by the Länder<sup>193</sup>. Practicing additional quotas due to the central budget from local authorities has the effect that the latter have the power considered most important from the perspective of financial autonomy (setting tax rates) and top authorities will define the tax base in a global/unitary manner and they will manage in a similar manner the mobilized resources, avoiding the shortcomings of the first option exposed. An essential element for additional quotas practice is that, in general, it should be established "jurisdiction" of the taxation of income. This is a relatively simple thing in the case of taxes such as tax on wages, but it is more complicated if the taxation of income represents profits. This occurs because corporate income is obtained from a wider area (market) of territory, which includes several jurisdictions, but without being able to monitor and impose in a distinct manner the corresponding "parts" of income. For such a situation, the literature has been advanced as a possible solution the creation and application of a formula that divides the tax base between jurisdictions, but without reaching a concrete result. However, we think that this solution is not entirely impossible, and it may be fully satisfactory, as it should be based on variables of orientation (e.g.: average income per capita, population etc.) without being able to exactly quantify the "part" of profit that should become tax base for a certain jurisdiction.

A third option for substantiating the relationship between public budgetary system components regarding the choice of sharing some taxes between various components of the budgetary system. This possibility is considered<sup>194</sup> less attractive to local authorities than the previous because they would have fixed proportions of income from central budget, without the possibility of any influence regarding the amount of these incomes. In most cases, the shares of revenues of the central authorities that would be allocated to the budgets of local authorities are established without any distinction for the latter. The advantage of such ways of delimiting the relationship between budgets is that of absence of extreme differences as exposed in the first option. Certain independence is registered in determining the sources of income by local authorities but also local financial autonomy is restricted. Although local authorities have the freedom to decide how these resources will be spent, they cannot influence the size (the amount of) mobilized resources, so that they cannot control the size of any future local expenditures. Moreover, especially in less developed countries or transition countries (Romanian case)<sup>195</sup>, the amount of such income is not predictable, even for shorter terms, preventing the application of consistent and continuous local policies. However, in developed countries, the experience shows that through the collaboration of all subnational authorities it can be achieved a certain stability both on tax sharing (and hence, predictability) and also on reconsideration of the amount of revenues shared between various levels of governance and budgetary components managed by them.

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193 Hoorens, D., *Local Finance in the Twenty Five Countries of the European Union*, Dexia Editions, 2004, p. 31-45.

194 McLure, Ch., Vazquez, J.M., *The Assignment of Revenues and Expenditures in Intergovernmental Fiscal Relations*, [www.worldbank.org/decentralization](http://www.worldbank.org/decentralization), p. 13.

195 Oprea F., , Lazăr, S., *Local Financial Autonomy In Romania: Challenges And Options For Reform*”, CD of the VI International Scientific Conference “Management, Economics and Business Development in the New European Conditions”, Brno, 2008, p. 9.

The last option for substantiating the relationships between central and local budgets reveals the choice for some revenue sharing, using a distribution formula based on variables such as the average income per capita, population, fiscal capacity, public establishments etc. Unlike the options discussed above, this time there is not connection between the origin (place of origin) of the tax base and the entity that is receiving the revenues from taxation, but it is done simply a redistribution of resources among different authorities subnational. Thus, there is a more direct way to report the level of incomes that will come from local authorities budgets and their general needs, not only to their economic situation. Such a way of substantiation of the relationship between the components of budgetary system implemented without adequate "corrections" may have some negative effects. One of this is the lack of participation or interest of local communities with a weak economic development in obtaining new sources of income. On the other hand, from the perspective of provided financial autonomy the only freedom of local authorities is to decide how they will use these resources. For this reason, we believe that the redistribution formula should include an index of weighting tax efforts' that will reflect the size of the marginal revenue derived from their own sources of income.

### **Conclusions**

In conclusion, one can appreciate that the foundation of the most balanced relationships between the components of public budgetary system is the additional fixed-rates established by local authorities for some taxes of central authorities, placing it at the intersection of local autonomy requirements with the need to avoid major imbalances or distortions.

Any way of background to these reports, however, leaves room for the emergence of horizontal or vertical fiscal imbalances (between levels of government or between components on the same level). Vertical imbalances are determined by the fact that some taxes have to be administered by central authorities (such as VAT) and horizontal imbalances have as source different economic realities that local communities are confronted. It is obvious that the size of tax base determines, in an objective manner the level of resources that can be mobilized, especially that the setting of higher tax rates for less economically developed communities, in order to obtain higher returns would be an action with adverse effects. Thus, the only relevant solution is to implement a system of equalization grants from the central budget to local ones, designed to also reflect the efforts of local communities for obtaining additional incomes.

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# ECONOMETRICAL INTERPRETATION OF THE INTERDEPENDENCE BETWEEN FISCALITY RATE- FISCAL INCOMES- GROSS DOMESTIC PRODUCT

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*Econometrics has come into being and grown as a result of the need to set up instruments of investigation and increase of the methods to organize, conduct and manage the economy, and on the other hand, due to the successful statistical and mathematical methods in other scientific fields, thus making economic sciences adopt econometrical models.*

*Joining the importance of domestic fiscal policy with the compliance of Romanian fiscal policy with the European Union’s norms, econometrical models provide a prognosis for a sufficient period of time so as to justify an economic or social policy decision, and they also allow macroeconomic effects in a sensible way; they allow the testing of several scenarios to allocate financial resources in a potential economic structure and give the chance to analyze the directions in which the economy is responsive in terms of national concern fields.*

*Keywords: econometric model, rate of tax liability, fiscal incomes, gross domestic product*

*JEL classification: C10, E62, H20*

## **1. Introduction**

Modelling represents an activity of searching and knowing reality by means of several representations called models: they represent artificial systems with the help of which one can study the behavior of a real system (on micro and macroeconomic level) represented by analogy, this simplification not presenting the danger of changing the essential characteristics of the process or phenomenon that has been studied.

Within macroeconomic studies, the use of data and analyzing methods of existent information cannot be avoided. The economic-mathematical simulation is a method of searching and knowing complex economic phenomena and process, analyzed in an abstract way with the help of logical and mathematical formalization.<sup>196</sup> It can be seen as an alternative to the “experiment” used within exact sciences.

One of the main characteristics of all operational research methods is the fact that some operational research problems can be seen, from a purely theoretical point of view, as mathematical problems. This will not be the perspective approached in the following lines, as we will analyze operational research problems in close relation to practical problems. More exactly, we have in view achieving an econometrical model for seeing fiscal incomes in Romania.

## **2. Econometrical interpretation of the interdependence between – fiscal incomes – gross domestic product**

The model I have intended to develop is one of multiple regression, under the form:

$$FR = a_0 + a_1 FI + a_2 GDP$$

Where:

FR- represents the fiscality rate, which is a dependent variable;

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196 Pârlog Cornelia – “Provisional analyses methods”, Print Oscar Publishing House, Bucharest, 1998, pag.53

FI-fiscal income; GDP- gross domestic product – independent variables

With the help of this model we want to study the impact that the two independent variables have on the dependent one.

**Fiscality rate (fiscal pressure)** represents the relation between the total level of fiscal incomes and the Gross Domestic Product (GDP) and it shows the percentage of the GDP that belongs to the state by means of taxes and contributions.<sup>197</sup>

$$R_f = \frac{V_f}{GDP} \times 100$$

where:

$R_f$  = fiscality rate;  $V_f$  = fiscal incomes;  $GDP$  = Gross domestic product.

In our country, macroeconomic indices that represent the object of this analysis register the following values:

**Table no. 1: Evolution of fiscal incomes and Gross Domestic Product between 2001- 2008**

| Year  | Fiscal incomes, in comparable prices, millions lei | GDP In comparable prices, millions lei | Real fiscal rate, RFR % |
|-------|--|--|-------------------------|
| 2001  | 13.727,7   | 116.768,7                              | 11,76                   |
| 2002  | 13.694,1   | 122.844,6                              | 11,15                   |
| 2003  | 16.710,5   | 129.252,0                              | 12,93                   |
| 2004  | 19.141,2   | 140.188,7                              | 13,65                   |
| 2005  | 20.044,2   | 146.043,7                              | 13,72                   |
| 2006  | 20.645,5   | 157.422,3                              | 13,11                   |
| 2007  | 22.970,3   | 164.050,6                              | 14,00                   |
| 2008* | 26.317,8   | 171.894,1                              | 15,34                   |

Source: data taken by the author according to information in the Statistical Book of Romania, 2007 and 2008. In the last editions of the book the value data for 2001-2008 are expressed in the new Romanian currency.

\*- statistical information for 2008 are taken from the preliminary execution

Econometrical analyses are usually made for at least 15 years< in applying this econometrical model the data were limited to 2001-2008, as a representative period in our opinion that allows obtaining consistent information.

For the inference based on the multiple linear regression results to be available, a series of six hypotheses should be met, the regression based on such hypotheses being known as the normal classical model of multiple regression. Here are the hypotheses:

1. The relation between the dependent variable and the independent ones is linear.
2. Independent variables are at random. Among independent variables included in a regression there is no such linear relation. If independent variables are correlated then there is no multi co-linearity.
3. The expected value of the error term  $\epsilon t$ , is zero  $E(\epsilon t) = 0$
4. the variability of the error term  $\epsilon t$  is the same for all observations. These errors are called homoskedastice.
5. The error term  $\epsilon$  is nor correlated among observations.
6. The error term is normally distributed.

After having introduced data in Eviews<sup>198</sup>, we obtain the following results of equation:

197 Tatiana Moşteanu (coordinator) – Public Finance, University publishing House, Bucharest, 2004, p. 169

198 We refer to tests presented in table no 1

Dependent Variable: RFR  
 Method: Least Squares  
 Date: 03/18/09 Time: 19:41  
 Sample: 2001 2008  
 Included observations: 8

| Variable           | Coefficient | Std. Error            | t-Statistic | Prob.    |
|--------------------|-------------|-----------------------|-------------|----------|
| C                  | 186972.4    | 84744.52              | 2.206306    | 0.0785   |
| VFR                | 16.25329    | 2.861734              | 5.679526    | 0.0024   |
| PIBR               | -22.28124   | 9.174846              | -2.428514   | 0.0595   |
| R-squared          | 0.996332    | Mean dependent var    |             | 281707.1 |
| Adjusted R-squared | 0.994865    | S.D. dependent var    |             | 131475.8 |
| S.E. of regression | 9421.595    | Akaike info criterion |             | 21.41939 |
| Sum squared resid  | 4.44E+08    | Schwarz criterion     |             | 21.44918 |
| Log likelihood     | -82.67757   | F-statistic           |             | 679.0704 |
| Durbin-Watson stat | 1.360311    | Prob(F-statistic)     |             | 0.000001 |

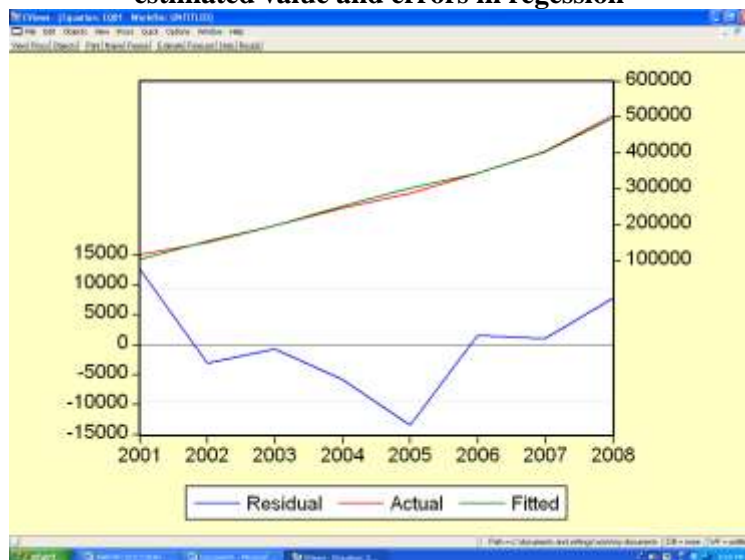
For each independent variable and constant EViews reports the standard error of the value, the *t-Statistic* and its associated probability.

We have been working on 5% level of relevance and the probability attached to this kind of test is inferior and the values are considered significant from statistical point of view.

*Durbin Watson statistic (DW)* is a statistic test that checks the serial correlation of errors. If errors are not correlated then DW value will be about 2. In the above mentioned example this indicator has the value of 1.36 and consequently there is serial correlation of errors. EViews also reports two informational criteria: *Akaike info criterion and Schwarz criterion*. These indicators are used when an equation must be chosen among more variants. According to the informational criterion we choose the specification for which informational criteria have the smallest values.

We also report *F-statistic* and its probability. As this possibility is smaller than the level of relevance, according to this test at least a value in regression is significant from statistical point of view. With *View/Actual, Fitted, Residual/Actual, Fitted, Residual Graph* option we can represent graphically the effective value of the dependent variable, its estimated value and errors in regression.

**Figure no. 1: Graphical representation of the effective value of the dependent variable, its estimated value and errors in regression**



With the option *View/Residual tests the regression equation errors are tested*.

Thus with the option *Residual tests/Correlogram – Q-statistics* we can test the auto-correlation of the equation errors in regression (similarly with testing the auto-correlation of time series).

CORRELOGRAM OF RESIDUALS

Date: 03/18/09 Time: 20:25  
 Sample: 2001 2008  
 Included observations: 8

| Autocorrelation | Partial Correlation | AC | PAC    | Q-Stat | Prob   |       |
|-----------------|---------------------|----|--------|--------|--------|-------|
| .  * .          | .  * .              | 1  | 0.075  | 0.075  | 0.0638 | 0.801 |
| .   .           | .   .               | 2  | 0.017  | 0.012  | 0.0678 | 0.967 |
| . ***  .        | . ***  .            | 3  | -0.320 | -0.324 | 1.7074 | 0.635 |
| . ****  .       | . ****  .           | 4  | -0.492 | -0.498 | 6.5472 | 0.162 |
| .   .           | .   .               | 5  | 0.025  | 0.065  | 6.5644 | 0.255 |
| .   .           | . *  .              | 6  | -0.025 | -0.115 | 6.5886 | 0.361 |

According to the results of this test for Lags 3 and 4 there is serial correlation of errors (the auto-correlation value exceeds the graphic interval). The auto-correlation is also confirmed by the test *Q-statistic* and associated probability.

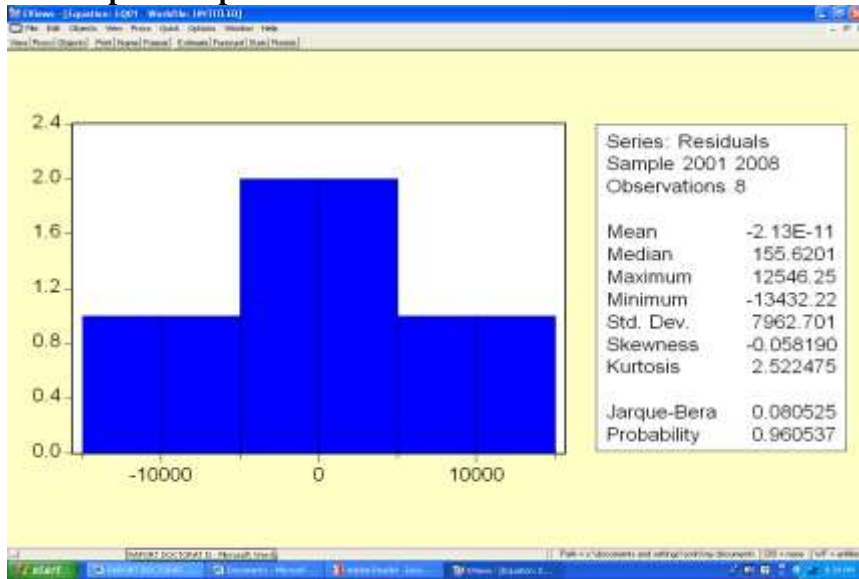
With the option *View/Residual tests/Correlogram Squared Residuals* we can test errors auto-correlation. If this auto-correlation of errors exists it is in fact an indication of heteroskedasticity (terms *ARCH*).

Date: 03/18/09 Time: 20:32  
 Sample: 2001 2008  
 Included observations: 8

| Autocorrelation | Partial Correlation | AC | PAC    | Q-Stat | Prob   |       |
|-----------------|---------------------|----|--------|--------|--------|-------|
| . **  .         | . **  .             | 1  | -0.207 | -0.207 | 0.4893 | 0.484 |
| . ****  .       | . ****  .           | 2  | -0.461 | -0.526 | 3.3195 | 0.190 |
| . *  .          | . ****  .           | 3  | -0.090 | -0.497 | 3.4483 | 0.328 |
| .  ****.        | .   .               | 4  | 0.482  | 0.025  | 8.1002 | 0.088 |
| . *  .          | . *  .              | 5  | -0.084 | -0.169 | 8.2873 | 0.141 |
| . *  .          | . *  .              | 6  | -0.154 | 0.076  | 9.2346 | 0.161 |

According to econometrical results, for the above mentioned equation, there is serial correlation of square errors, so there is a possibility to speak about *ARCH* terms. With the option *View/Residual tests/Histogram – Normality test* we can analyze (in the same way as the analyses of a series distribution) the distribution of errors resulted from regression.

**Figure no. 2: Graphical representation of distribution of errors resulted from regression**



According to the results of *Jarque-Bera test*, errors are normally distributed. The normal distribution of errors is very important especially when we want to make interpretation according to the estimated econometrical equation. The serial correlation, shown in errors diagram is confirmed with the help of *Serial Correlation LM test*, available with the help of the option *View/Residual tests/Serial Correlation LM Test*.

**Breusch-Godfrey Serial Correlation LM Test:**

|               |          |             |          |
|---------------|----------|-------------|----------|
| F-statistic   | 0.013019 | Probability | 0.987120 |
| Obs*R-squared | 0.068839 | Probability | 0.966166 |

**Test Equation:**

Dependent Variable: RESID

Method: Least Squares

Date: 03/18/09 Time: 20:36

Presample missing value lagged residuals set to zero.

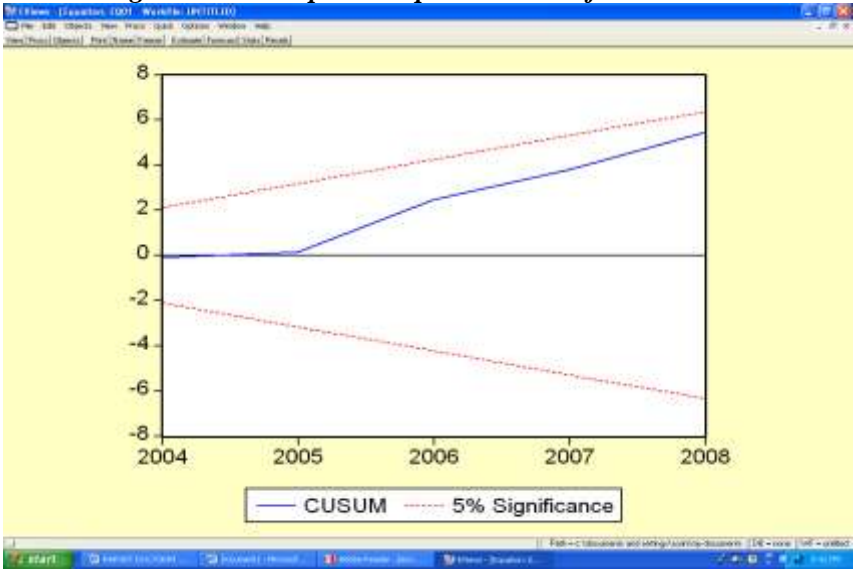
| Variable           | Coefficient | Std. Error            | t-Statistic | Prob.  |
|--------------------|-------------|-----------------------|-------------|--------|
| C                  | -5829.101   | 119100.5              | -0.048943   | 0.9640 |
| VFR                | -0.156066   | 4.014568              | -0.038875   | 0.9714 |
| PIBR               | 0.572674    | 12.88378              | 0.044449    | 0.9673 |
| RESID(-1)          | 0.109420    | 0.696034              | 0.157206    | 0.8851 |
| RESID(-2)          | 0.024741    | 0.697118              | 0.035491    | 0.9739 |
| R-squared          | 0.008605    | Mean dependent var    | -2.13E-11   |        |
| Adjusted R-squared | -1.313255   | S.D. dependent var    | 7962.701    |        |
| S.E. of regression | 12110.78    | Akaike info criterion | 21.91075    |        |
| Sum squared resid  | 4.40E+08    | Schwarz criterion     | 21.96040    |        |
| Log likelihood     | -82.64300   | F-statistic           | 0.006510    |        |
| Durbin-Watson stat | 1.502786    | Prob(F-statistic)     | 0.999862    |        |

The most important part of the test output is the first part that presents the two statistical tests *F-Statistic* and *R-squared* and the probabilities associated to these tests. The null hypothesis of these two tests is that there is no serial correlation of the equation errors up to *lag k* (mentioned above). If the probability associated to the two tests is below the level of relevance we are



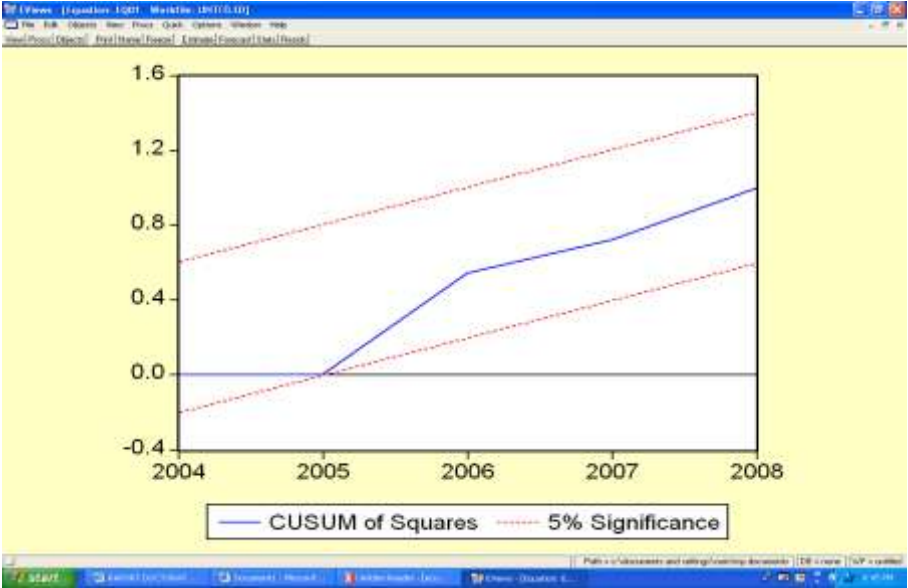
working at, then the null hypothesis is rejected, so we reject the non existence of serial correlation. On the contrary, the null hypothesis is accepted (there is no serial correlation). The tests of equation stability and of estimated values are available with the option *View/Stability Tets/Recursive Estimates (OLS only)*. The most used tests of stability are: *CUSUM Tests*;  *CUSUM of Squares Tests*; *Recursive Coefficients*.

**Figure no.3: Graphical representation of stabilit tests**



*CUSUM test* is based on the cumulative sum of the equation errors in regression. EViews represents graphically the cumulative sum of errors together with critical lines of 5%. The equation parameters are not considered stable if the whole sum of recursive errors gets outside the two critical lines. *CUSUM of Squares test* is similarly calculated and interpreted as *CUSUM test*, with the difference that instead recursive errors we use recursive doubled errors.

**Figure no. 4: Graphical representation of stabilit tests**

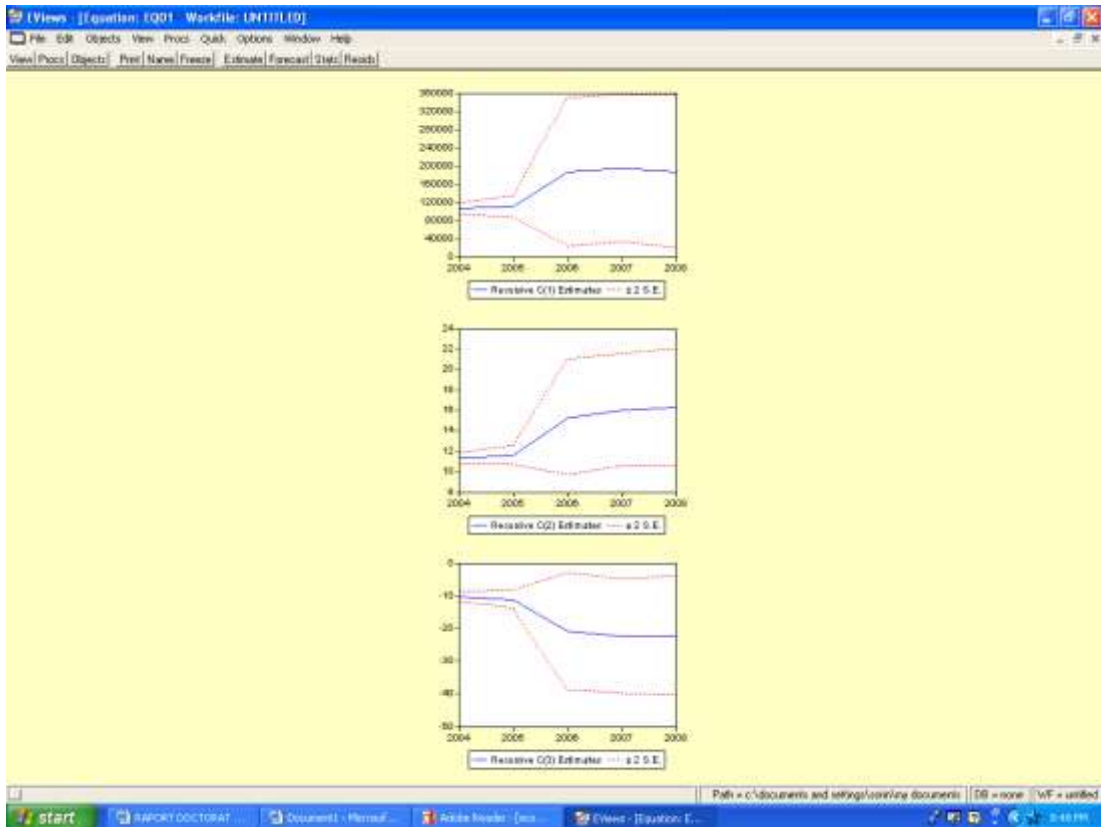


For the analyzed equation, according to this test, the values of the equation are stable.

*Recursive Coefficients* presents the equations values calculated regressively.

The values are stable if, together with the increase of the pattern, their value is not modified. For calculating recursive coefficients we start with the first observation  $k + 1$  where  $k$  represents the number of coefficient of the regression equation. We proceed similarly until we estimate coefficients for the whole pattern of available data. Then recursive coefficients are graphically represented. For the analyzed equation, recursive coefficients are represented in the following graphics:

**Figure no. 5: Graphical representation of stabilit tests**



After having analyzed the multiple linear regression model the general conclusion is that it is valid. Between the level of fiscal pression and economic activity there is a close relation, that is: a high fiscality determines decreased production activity and investments of economic operators, decreased demand of goods and services, economic growth brakeking process. On the contary, a moderate fiscality stimulates production activity, investments, demand of goods and services and stimulates economic growth.

The problem of fiscal pressure is more actual than anywhere else in our country, due to the fact that we are facing the improvement of the fiscal system, secondly because Romanian economy lacks available capitals to be invested which determined a special fiscal policy, and thirdly, due to our present economic situation, the incomes earned by most payees are not relevant for being marked by a too high fiscality without having unwanted effects.

For fulfilling its purpose within the fiscal policy, the fiscal pressure imposed by public organisms should put together two different tendencies totally opposed: on the one hand that of the state, which wants it to be higher and higher for covering the increasing public debts and on the other hand, that of the citizens who want a small fiscal pressure. No matter the terminology used in the

literature in the field, (fiscal coefficient, fiscal tension) , fiscal pressure expresses the same idea: that of obligation through impositions for the state.

### **3. Conclusions and proposals**

The practice for over the last years in our country shows that the high frequency of the fiscal system changes have not had as an essential purpose diminishing fiscal pressure on payees, among its main objectives being the following:

Repeated separated and incorrect attempt, sometimes done in campaigns, of adjusting the fiscal system to the budget requirements and less to the strategical and liable needs.

The every four year successive taking of power, which otherwise explicates the democracy of our political evolution, and the struggle of the majority party to maintain its power no matter how much the volume of public expenses has increased, have forced the fiscal system, which has turned fiscality into an important way of supporting such expenses.

The existence and maintaining of an inadequate social-professional structure, of a total disproportion between active and retired people, against weak economic financial performance, has strongly forced the financial system which made it almost impossible to direct the fiscal policy towards the payee.

At present, the effects of the international financial crisis have also affected the economy of our country. In a country affected by financial crisis, which will have to incur investments of billions of Euros in education, infrastructure and defense, alongside with high budget expenses and under the threat of strikes and social conflicts between the Government and all budgetary workers, the fiscal policy detains a very important role. Countries all over the world are taking measures against the international financial and economic crisis. From fiscal point of view, such approaches include simulative packages, ad-hoc measures, temporary stipulations, accelerating the process of implementing several measures that had been previously planned or, adopting all these measures at the same time.

In Romania, the fiscal policy has to be strongly strengthened, the recently approved budget for 2009 representing a step in this direction, especially due to the relatively high funds allocated to investments that could create spillover effects on the other economic fields. Thus, monetary policy is liable to recover gradually. It becomes obvious how a not very optimal combination in the last years (lax budget and salary policies, a very close monetary policy) can be replaced by an optimal combination where all policies (budget, salary and monetary) should have a similar level of restrictions and direct economic activity towards work and productivity.

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## EUROPEAN INTEGRATION EFFECTS: COSTS AND BENEFITS

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*„It will come a day when the European nations will join in a single organization and will set up European brotherhood, without losing their definite state characteristics or their glorious individuality. It will come a day when there will be no battlefields only markets opened to forwarded ideas. It will come a day when bullets and bombs will be replaced by votes.” These words were written by Victor Hugo in 1849, after several revolutions that had affected the European society. More than a century has passed for his predictions - seen as utopias at that time - to come true.*

*In a pragmatic approach of integration quality, this process is liable to an assessment in terms of cost and benefits, based on the analysis of the actual obtained results and not only on checking the level of achievement of some formal criteria. The post-adherence development can no longer be ruled by monitoring instead of conceiving and applying strategies and programs in a view that is the result of individual priorities together with the ones established on community level.*

*Key words: European integration, adherence costs, adherence benefits.*

*JEL classification: F36, H61, P43.*

### **1. Introduction**

As far as 1<sup>st</sup> August 1996, Romania has taken advantage of financial assistance by means of community programs. Thus, on this date it came into force the Additional Protocol to the Joining Agreement of our country, a document that mentions the means of our country's participation to community programs.

Joining an integration group determines a series of changes, of smaller or higher value, for the joining states. These changes' importance varies according to the level of integration reached by the regional group and they can take the form of institutional re-definitions and/or of regional policy making. Taking into account the high level of integration within the European Union (economic and monetary union), changes in adopting economic policies are obvious on the level of member states. Adopting some economic policies where the European factor becomes dominant means, mainly, reducing the freedom levels, justified by pursuing the common European interest in formulating and implementing economic policies. Thus, joining the European Union involves accepting external conditions in founding economic policies.

Romania's adherence, as well as that of other candidate states, is conditioned by meeting the conditional elements imposed by means of the four adherence criteria: political criterion – guaranteeing the state, economic criterion – a functional market economy that allows the candidate state to face the competition pressures and the market forces within the EU, juridical criterion – appropriating the community *acquis* in force at the adherence time, administrative criterion – assuring institutions stability and the capacity of taking up obligations involved by the quality of member of the European Union.

The European conditions determine institutional changes with a view to economic policies content of member states to the extent when there are certain incongruities among norms, the adopting framework and the policies content on national and European level. These adjustments

involves some costs for the candidate countries while the benefits resulted from EU joining can be underlined and maximized only if there is a high level of compatibility/convergence among policies and the institutional framework of adopting such policies on national level, on the one hand and the policies and the European institutional model of adopting such policies, on the other hand.

University professor PhD Florian Bonciu identified three classes of costs involved by Romania's adherence to the European Union, concerning the payees:

1. Public costs, covered by the state budget;
2. Private costs, covered by commercial societies
3. Individual costs, covered by citizens for pensions' system reform, professional reconversion reform, for another living standard.

For the first two types of costs some estimation of their value can be done, even a general one. For the third category such an appreciation is impossible to be done.

Precisely, the main categories of costs directly related to adherence can be grouped as follows:

1. costs of adopting European norms and policies (community acquis): costs generated by creating or changing the institutional framework of applying them, human resources costs, costs related to assuming economic policy community objectives, etc.

2. costs related to abidance and implementation of the standards defined by the norms and European policies – in this category they include costs in specific fields such as : infrastructure modernizing, labor and social protection standards, consumers' protection, quality standards, environment standards, as well as the costs determined by processes of goods, services, people and capital free movement. Most part of such costs can be emphasized on micro-economic level and they have the capacity of affecting the Romanian companies' competitiveness.

3. costs related to assuming the statute of European Union member. Such costs include contributions to the community budget, participation to community institutions, etc.

4. Costs related to Romanian economy modernization process. The costs included in this category are directly related to modernizing productive capacities, of increasing Romanian products and services competitiveness for facing the European Union completion pressures.

Special attention should be granted to every kind of expenses since most of these costs, known as the integration costs, are in fact costs involved by modernization, which must be done anyway even without community support, but for our integration. We can say we invest in highways for being accepted, or would it be better to say we want to have better roads that would contribute to economy development and, consequently to creating new vacant jobs? Could we say that investments done for reducing pollution or for improving the drinking water quality are done for the European Union? I think it would be proper to say that we are interested in having better water and a cleaner environment for each of us. Similarly, I believe each of us wants that all hygienic conditions to be respected by dairy laboratories and factories for guarantying food safety. Thus, most part of adherence costs are related to our life improvement. Things that should have been done anyway are now supported with community funds. Certainly the population could not have supported 100% Romanian costs.

In spite of the mentioned costs, the benefits of Romania joining the EU have already started to be seen in the national economy:

1. Romania has acceded economic stability and development on long-term. Although the EU is characterized by lower economic increases than those of China, USA and Japan, it still remains a region with undisputable potential and competitiveness resources;

2. The foreign capital is growing in Romania as a consequence of a better trust of foreign investitures in a country which applies the functional rules of the Single European Area, familiar and predictable rules.

3. Romanian producers have free access on the Single European Market with real changes of success if we have in view the competitive costs of many Romanian producers;

4. Romanian people free movement in Europe has been largely done after the adherence, despite the fact that full freedom is obtained in 7 years' time from adherence;

5. Access to education, information and economic opportunities has become obvious for most Romanian people;

6. Accelerating reforms and supporting transition by supplying the main elements for defining national economic policies. There hasn't been before registered such a passing to the market economy and in such situations, all transition period up to adherence has offered Romania a model of conceiving its economic policies. These benefits are difficult to be estimated and they can influence the transition period. The technical assistance provided by the EU in different fields represents an example of benefits in this category.

Some authors<sup>199</sup> state that Romania's and Bulgaria's European accession in 2007 as countries having a lower growth level than that of other member states has had many effects upon the community budget; additionally, one should also take account of the "great" Lisbon Agenda launched in 2000 which aims at creating "the most competitive economy" by 2010.

Approaching the capitalization of Romania's accession into the European Union in terms of costs and benefits as value terms, the contribution to the EU budget during three years (2007- 2009) is shown in the following table:

**Table 1: Romania's contribution to community budget (2007- 2009)**

|           | 2007*              | 2008**             | 2009               | 2008/<br>2007<br>variation<br>(%) | 2009/<br>2008<br>variation<br>(%) |
|-----------|--------------------|--------------------|--------------------|-----------------------------------|-----------------------------------|
|           | -Euros-            | -Euros-            | -Euros-            |                                   |                                   |
| EU budget | 113 845 815<br>415 | 120 662 885<br>029 | 114 972 328<br>243 | + 5.71                            | -4.72                             |
| Romania   | 1 060 225 579      | 1 350 381 019      | 1 387 921 912      | +27.36                            | +2.78                             |

Source: Made by the author according to the data taken from [www.eur-lex.europa.eu](http://www.eur-lex.europa.eu)

Notes: \*- the figures correspond to the budget in 2007 and rectifying budgets 1-7/ 2007;

\*\* - the figures correspond to the budget in 2008 and rectifying budgets 1-4/ 2008.

Romania's contribution in the European budget has four basic constituents : own traditional revenues (customs duties, agricultural customs duties, sugar supplies), VAT, the discount granted to the Great Britain (in order to make up for the difference between the amounts granted by the Great Britain to the budget and the expenditures the EU has had on the former's territory) and resources coming from Gross National Revenue. Romania's contribution in the EU budget during the years to come shall be about 1% of yearly GDP; more than half of the contribution shall ensue from Gross National Revenue yearly, whereas other significant amounts are to be ensured by customs duties and value added tax.

199 Ondřej [Schneider](#) - "The EU Budget Dispute – A Blessing in Disguise?", Czech journal of economics and finance, VOL. 57, year 2007, p. 304-323

## 2. Romania's contribution in the community budget in 2007

Since European rules stipulate the yearly adjustment of the budget (Article 268 in the European Community's Set-Up Treaty states: "Budget revenues and expenditures must be balanced"<sup>200</sup>), the surplus during 2007 has been given back to the member states, thus generating a decrease in their contribution the respective year. The following table shows the amounts that each country has been given back, their value being calculated according to their gross domestic product.

**Table 2: Distribution of the budget surplus in 2007 by member states**

| Member state   | Budget surplus in 2007 - Million Euros - |
|----------------|--|
| Austria        | 33                                       |
| Belgium        | 42                                       |
| Bulgaria       | 4  |
| Czech Republic | 15                                       |
| Cyprus         | 2  |
| Denmark        | 29                                       |
| Estonia        | 2  |
| Finland        | 22                                       |
| France         | 234                                      |
| Germany        | 300                                      |
| Greece         | 26                                       |
| Ireland        | 21                                       |
| Italy          | 191                                      |
| Latvia         | 3  |
| Lithuania      | 3  |
| Luxembourg     | 4  |
| Malta          | 1  |
| Great Britain  | 258                                      |
| Netherlands    | 70                                       |
| Poland         | 38                                       |
| Portugal       | 19                                       |
| Romania        | 16                                       |
| Slovakia       | 7  |
| Slovenia       | 4  |
| Spain          | 131                                      |
| Sweden         | 42                                       |
| Hungary        | 21                                       |

Source: [www.ec.europa.eu](http://www.ec.europa.eu)

EU returned to Romania 16 million Euros of the 1.1 billion-Euro contribution in the community budget meant for the year 2007, and the total amount that remained unspent by the EU and shared among the 27 member states was 1.53 billion Euros. The highest amounts were returned to Germany - 300 million Euros, Great Britain - 258 million Euros, France - 234 million Euros, Italy - 191 million Euros and Spain - 131 million Euros. The EU budget, mostly financed by the community governments, reached a total amount of 113.9 billion Euros in 2007 of which 1.53 billion Euros was not spent. The European Commission has announced the Union's more efficient management has allowed unspent funds to decrease over the last years: "The amount member states had to pay to the European Budget in 2007 was very close to the one that was

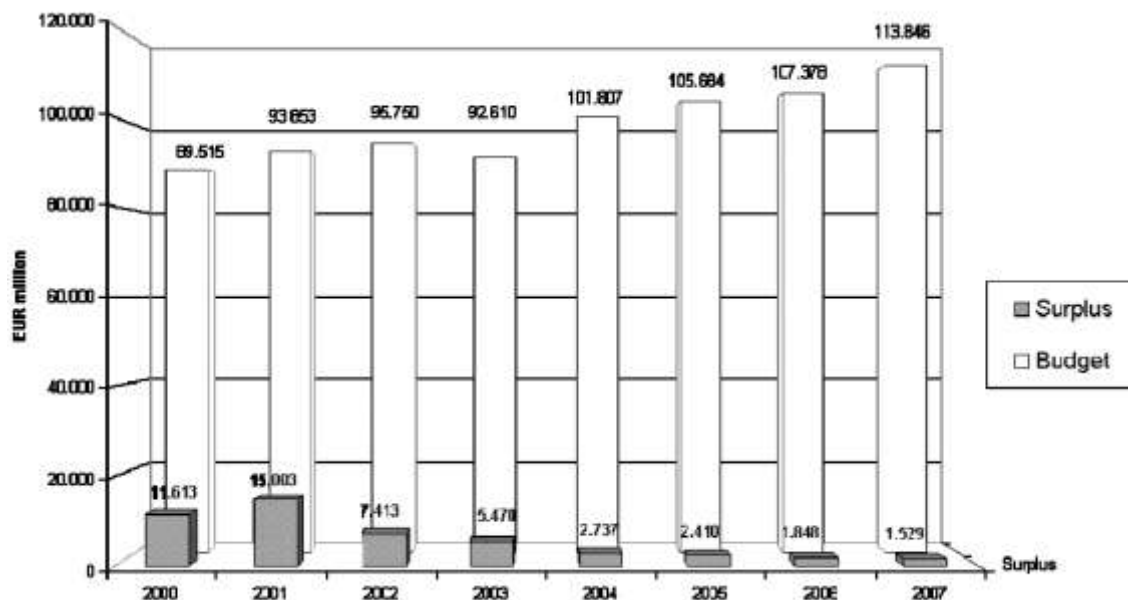
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200 Set-Up Treaty of European Community, Article 268, Indentation 3.

actually spent. This is good news”, stated Dalia Grybauskaitė, the European Commissioner for Financial Planning and Budget. Efficient Planning, the decrease in excessive bureaucracy and good budget management led to the fast development of some new programmes in 2007, thus helping member states to direct European money towards where it was needed”<sup>201</sup>, the Commissioner added.

The graph below showing the progress of the European Union’s budget surplus includes its decreasing trend which confirms the success of reforms in the financial management field over the last years.

**Graph 1: Progress of budget surplus in the European Union**



Source: [www.ec.europa.eu](http://www.ec.europa.eu)

### 3. Romania’s contribution in the community budget in 2008

An analysis comparing costs and prices in 2008 emphasizes surplus in Romania with over one billion Euros as to the European Union. Eugen Teodorovici, in charge of European funds at the Ministry of Finance explained in late 2008 that Romania subscribed 1.3 billion Euros to the European budget and the payments received from Brussels totalled 2.2 billion Euros by the 21st of November<sup>202</sup> the same year.

The spokesman of European commissioner for financial planning and budget, Dalia Grybauskaitė, assured Romania and Bulgaria that they should not worry they might be “*net contributors to the European Union’s budget*”, meaning they shall not pay the Union more than it gives them. Robert Soltyk explained there is a favourable ratio between what they pay and what they receive from the EU: “*None of the countries accessing in May 2004 has been a net*

201 [www.ec.europa.eu](http://www.ec.europa.eu)

202 Carla Dinu – “Romania has been given more money by the EU than it has given”, HotNews.ro, 23 December 2008

203 EU’s “net contributors” are frequently mentioned in public debates, often as dispute reasons. On one hand, the calculation of net contribution takes account of what every member state transfers and, on the other, what it receives from the EU by means of various European funds. Starting from this calculation, they often state that certain member states contribute in the European budget more than others do in terms of net and per capita value. Hence, the conclusion that the so-called “net contributors” take less advantage of the EU and its policies than others do. The states generally mentioned are Germany, France, Lowland Countries, Italy, Great Britain and Sweden.



contributor to the EU budget all these years. In conclusion, there is no reason why one could state that Romania and Bulgaria might be net contributors to the EU budget.”<sup>204</sup> In 2008, almost 20% of the Union’s revenues came from Germany, then 16.5% from France, 13.35% from Italy, 11.4% from Great Britain and 9.58 from Spain.

#### **4. Romania’s contribution in the community budget in 2009**

The European Union has allocated Romania as member state the amount of 19.668 billion Euros for the financial period between 2007 and 2013. 23.8% of structural and cohesion funds are allocated in operational programmes for transport infrastructure, 23.5% for environment infrastructure, 19.4% for regional growth, 18.1% for human resource development, 13.3% for economic competitiveness, 1.1% for administrative competence and 0.9% for technical assistance, according to the data of the Public Finance Ministry. This amount is supplemented by funds for the agricultural sector and rural economy reaching 11.1 billion Euros.<sup>205</sup>

The financial allocation granted to Romania by structural instruments this year ia almost 2.5 billion (2.458.387.439) shared among the following fields (Operational Programmes).<sup>206</sup>

|  |                   |
|--|-------------------|
| - Regional growth.....                       | 441.135.485 Euros |
| - Human resources.....                       | 452.584.803 Euros |
| - Economic competitiveness.....              | 364.964.902 Euros |
| - Environment.....                           | 578.507.217 Euros |
| - Administrative competence development..... | 6.862.966 Euros   |
| - Transport .....                            | 614.332.066 Euros |

#### **5. Conclusions**

European funds must be perceived as the inflow to Romania of which its contribution to the EU budget is deducted. Romania currently receives more than it gives. European funds’ absorption occurs when account settlements are made, namely European money reaches beneficiaries’ accounts by means of the Ministry of Finance.

In Romania, the hierarchical tradition typical of industrial society and augmented by order economy system has also manifested its natural effects during the transition to market economy and the period of preparations for the European accession ; thus, there has been limitation in the ability to promote new projects and to accomplish financed ones absorbing European allocated funds.

In this respect, there can be two principle explanations : on one hand, it seems typical to a hierarchical organization to tend to continue its existence, whereas a project is developed in a “countdown” order, with a clear deadline when it ceases to exist; on the other hand, project-based activities suppose ensuring resources whereas current activities in hierarchical organizations usually have limited access to centrally administered common resource portfolios.

The scanty absorption level of community funds is paradoxically compared to the considerable financing needs encountered by Romanian organizations in their efforts to prepare for the European accession; but, the explanation of this fact essentially lies in their little ability to promote valid projects within community programmes. There is even a continuous cycle of self-limiting the access to the European Commission’s multi-annual budgets, which increases domestic costs and unfavourably influences accession rhythm and quality.

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204 [www.EurActiv.ro](http://www.EurActiv.ro)

205 [www.europarl.europa.eu](http://www.europarl.europa.eu)

206 [www.fonduri-structurale.ro](http://www.fonduri-structurale.ro)

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# A REVIEW OF THE CAPITAL STRUCTURE THEORIES

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*In this paper the authors survey capital structure theories, from the start-up point, which is considered Modigliani and Miller's capital structure irrelevance theorem, to recent theories, such as the pecking order and the market timing theory. For each type of model, a brief overview of the papers surveyed and their relation to each other is provided.*

*Keywords: capital structure, market timing, trade-off theory, leverage, debt, equity, agency costs*

*JEL clasification: G32: Financing Policy; Capital and Ownership Structure*

## **1. Introduction**

Since the publication of the Modigliani and Miller's (1958) "irrelevance theory of capital structure", the theory of corporate capital structure has been a study of interest to finance economists.

Over the years three major theories of capital structure emerged which diverge from the assumption of perfect capital markets under which the "irrelevance model" is working. The first is the trade-off theory which assumes that firms trade off the benefits and costs of debt and equity financing and find an "optimal" capital structure after accounting for market imperfections such as taxes, bankruptcy costs and agency costs. The second is the pecking order theory (Myers, 1984, Myers and Majluf, 1984) that argues that firms follow a financing hierarchy to minimize the problem of information asymmetry between the firm's managers-insiders and the outsiders-shareholders.

Recently, Baker and Wurgler (2002) have suggested a new theory of capital structure: the "market timing theory of capital structure". This theory states that the current capital structure is the cumulative outcome of past attempts to time the equity market. Market timing implies that firms issue new shares when they perceive they are overvalued and that firms repurchase own shares when they consider these to be undervalued. Market timing issuing behaviour has been well established empirically by others already, but Baker and Wurgler show that the influence of market timing on capital structure is highly persistent.

## **2. The Modigliani-Miller Theorem**

The theory of business finance in a modern sense starts with the Modigliani and Miller (1958) capital structure irrelevance proposition. Before them, there was no generally accepted theory of capital structure. Modigliani and Miller start by assuming that the firm has a particular set of expected cash flows. When the firm chooses a certain proportion of debt and equity to finance its assets, all that it does is to divide up the cash flows among investors. Investors and firms are assumed to have equal access to financial markets, which allows for homemade leverage. The investor can create any leverage that was wanted but not offered, or the investor can get rid of any leverage that the firm took on but was not wanted. As a result, the leverage of the firm has no effect on the market value of the firm.

Their paper led subsequently to both clarity and controversy. As a matter of theory, capital structure irrelevance can be proved under a range of circumstances. There are two fundamentally

different types of capital structure irrelevance propositions. The classic arbitrage-based irrelevance propositions provide settings in which arbitrage by investors keeps the value of the firm independent of its leverage. In addition to the original Modigliani and Miller paper, important contributions include papers by Hirshleifer (1966) and Stiglitz (1969). The second irrelevance proposition concludes that “given a firm’s investment policy, the dividend payout it chooses to follow will affect neither the current price of its shares nor the total return to its shareholders” (Miller and Modigliani, 1961). In other words, in perfect markets, neither capital structure choices nor dividend policy decisions matter.

The 1958 paper stimulated serious research devoted to disproving irrelevance as a matter of theory or as an empirical matter. This research has shown that the Modigliani-Miller theorem fails under a variety of circumstances. The most commonly used elements include consideration of taxes, transaction costs, bankruptcy costs, agency conflicts, adverse selection, lack of separability between financing and operations, time-varying financial market opportunities, and investor clientele effects. Alternative models use differing elements from this list. Given that so many different ingredients are available, it is not surprising that many different theories have been proposed. Covering all of these would go well beyond the scope of this paper. Harris and Raviv (1991) provided a survey of the development of this theory as of 1991.

As an empirical proposition, the Modigliani-Miller irrelevance proposition is not easy to test. With debt and firm value both plausibly endogenous and driven by other factors such as profits, collateral, and growth opportunities, we cannot establish a structural test of the theory by regressing value on debt<sup>207</sup>. But the fact that fairly reliable empirical relations between a number of factors and corporate leverage exist, while not disproving the theory, does make it seem an unlikely characterization of how real businesses are financed.

A popular defense has been to argue as follows: “While the Modigliani-Miller theorem does not provide a realistic description of how firms finance their operations, it provides a means of finding reasons why financing may matter.” This description provides a reasonable interpretation of much of the theory of corporate finance. Accordingly, it influenced the early development of both the trade-off theory and the pecking order theory.

### **3. The Trade-Off Theory**

The term trade-off theory is used by different authors to describe a family of related theories. In all of these theories, a decision maker running a firm evaluates the various costs and benefits of alternative leverage plans. Often it is assumed that an interior solution is obtained so that marginal costs and marginal benefits are balanced.

The original version of the trade-off theory grew out of the debate over the Modigliani-Miller theorem. When corporate income tax was added to the original irrelevance, this created a benefit for debt in that it served to shield earnings from taxes. Since the firm's objective function is linear, and there is no offsetting cost of debt, this implied 100% debt financing.

Several aspects of Myers' definition of the trade-off merit discussion. First, the target is not directly observable. It may be imputed from evidence, but that depends on adding a structure. Different papers add that structure in different ways.

Second, the tax code is much more complex than that assumed by the theory. Depending on which features of the tax code are included, different conclusions regarding the target can be reached. Graham (2003) provides a useful review of the literature on the tax effects.

Third, bankruptcy costs must be deadweight costs rather than transfers from one claimant to another. The nature of these costs is important too. Haugen and Senbet (1978) provide a useful discussion of bankruptcy costs.

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207 Fama and French (1998) and Kemsley and Nissim (2002) provide related discussions.

Fourth, transaction costs must take a specific form for the analysis to work. For the adjustment to be gradual rather than abrupt, the marginal cost of adjusting must *increase* when the adjustment is larger. Leary and Roberts (2005) describe the implications of alternative adjustment cost assumptions.

### ***Static trade-off theory***

The *static trade-off theory* affirms that firms have optimal capital structures, which they determine by trading off the costs against the benefits of the use of debt and equity. One of the benefits of the use of debt is the advantage of a debt tax shield. One of the disadvantages of debt is the cost of potential financial distress, especially when the firm relies on too much debt. Already, this leads to a trade-off between the tax benefit and the disadvantage of higher risk of financial distress. But there are more costs and benefits involved with the use of debt and equity. One other major cost factor consists of agency costs. Agency costs stem from conflicts of interest between the different stakeholders of the firm and because of ex post asymmetric information (Jensen and Meckling (1976) and Jensen (1986)). Hence, incorporating agency costs into the static trade-off theory means that a firm determines its capital structure by trading off the tax advantage of debt against the costs of financial distress of too much debt and the agency costs of debt against the agency cost of equity. Many other cost factors have been suggested under the trade-off theory, and it would lead far to discuss them all. Therefore, this discussion ends with the assertion that an important prediction of the static trade-off theory is that firms target their capital structures, i.e. if the actual leverage ratio deviates from the optimal one, the firm will adapt its financing behaviour in a way that brings the leverage ratio back to the optimal level.

### **The Dynamic Trade-off Theory**

Constructing models that recognize the role of time requires specifying a number of aspects that are typically ignored in a single-period model. Of particular importance are the roles of expectations and adjustment costs. In a dynamic model, the correct financing decision typically depends on the financing margin that the firm anticipates in the next period. Some firms expect to pay out funds in the next period, while others expect to raise funds. If funds are to be raised, they may take the form of debt or equity. More generally, a firm undertakes a combination of these actions.

An important precursor to modern dynamic trade-off theories was Stiglitz (1973), who examines the effects of taxation from a public finance perspective. Stiglitz's model is not a trade-off theory since he took the drastic step of assuming away uncertainty.

The first dynamic models to consider the tax savings versus bankruptcy cost trade-off are Kane et al. (1984) and Brennan and Schwartz (1984). Both analyzed continuous time models with uncertainty, taxes, and bankruptcy costs, but no transaction costs. Since firms react to adverse shocks immediately by rebalancing costlessly, firms maintain high levels of debt to take advantage of the tax savings.

Dynamic trade-off models can also be used to consider the option values embedded in deferring leverage decisions to the next period. Goldstein et al. (2001) observe that a firm with low leverage today has the subsequent option to increase leverage. Under their assumptions, the option to increase leverage in the future serves to reduce the otherwise optimal level of leverage today. Strebulaev (2007) analyzed a model quite similar to that of Fischer et al. (1989) and Goldstein et al. (2001). Again, if firms optimally finance only periodically because of transaction costs, then the debt ratios of most firms will deviate from the optimum most of the time. In the model, the firm's leverage responds less to short-run equity fluctuations and more to long-run value changes.

Certain ideas are fairly general in dynamic models. The optimal financial choice today depends on what is expected to be optimal in the next period. In the next period, it may be optimal to raise

funds or to pay them out. If raising new funds, it might be optimal to raise them in the form of debt or in the form of equity. In each case, what is expected to be optimal in the next period will help to pin down the relevant comparison for the firm in the current period.

Much of the work on dynamic trade-off models is fairly recent and so any judgements on their results must be somewhat tentative. This work has already fundamentally altered our understanding of mean reversion, the role of profits, the role of retained earnings, and path dependence. As a result, the trade-off class of models now appears to be much more promising than it did even just a few years ago.

#### **4. The Pecking Order Theory**

The *pecking order theory* does not take an optimal capital structure as a starting point, but instead asserts the empirical fact<sup>208</sup> that firms show a distinct preference for using internal finance (as retained earnings or excess liquid assets) over external finance. If internal funds are not enough to finance investment opportunities, firms may or may not acquire external financing, and if they do, they will choose among the different external finance sources in such a way as to minimise additional costs of asymmetric information. The latter costs basically reflect the “lemon premium”(Akerlof, 1970) that outside investors ask for the risk of failure for the average firm in the market. The resulting pecking order of financing is as follows: internally generated funds first, followed by respectively low-risk debt financing and share financing.

In Myers and Majluf model (1984), outside investors rationally discount the firm's stock price when managers issue equity instead of riskless debt. To avoid this discount, managers avoid equity whenever possible. The Myers and Majluf model predicts that managers will follow a pecking order, using up internal funds first, then using up risky debt, and finally resorting to equity. In the absence of investment opportunities, firms retain profits and build up financial slack to avoid having to raise external finance in the future.

The pecking order theory regards the market-to-book ratio as a measure of investment opportunities. With this interpretation in mind, both Myers (1984) and Fama and French (2000) note that a contemporaneous relationship between the market-to-book ratio and capital structure is difficult to reconcile with the static pecking order model. Iteration of the static version also suggests that periods of high investment opportunities will tend to push leverage higher toward a debt capacity. To the extent that high past market-to-book actually coincides with high past investment, however, results suggest that such periods tend to push leverage lower<sup>209</sup>.

Empirical evidence supports both the pecking order and the trade-off theory. Empirical tests to see whether the pecking order or the trade-off theory is a better predictor of observed capital structures find support for both theories of capital structure (Shyam -Sunder and Myers, 1999; Fama and French, 2002).

#### **5. The Market timing theory**

The *market timing theory* of capital structure argues that firms time their equity issues in the sense that they issue new stock when the stock price is perceived to be overvalued, and buy back own shares when there is undervaluation. Consequently, fluctuations in stock prices affect firms capital structures. There are two versions of equity market timing that lead to similar capital structure dynamics.

The first assumes economic agents to be rational. Companies are assumed to issue equity directly after a positive information release which reduces the asymmetry problem between the firm's

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208 The pecking order theory was first introduced by Donaldson (1961), in a survey study among american firms.

209 Helwege and Liang (1996) find that the probability of raising external finance is unrelated to the internal funds deficit, and that firms that could have obtained bank loans often choose to issue equity instead. This also contrasts with the static pecking order model.

management and stockholders. The decrease in information asymmetry coincides with an increase in the stock price. In response, firms create their own timing opportunities.

The second theory assumes the economic agents to be irrational (Baker and Wurgler, 2002). Due to irrational behaviour there is a time-varying mispricing of the stock of the company. Managers issue equity when they believe its cost is irrationally low and repurchase equity when they believe its cost is irrationally high. It is important to know that the second version of market timing does not require that the market actually be inefficient. It does not ask managers to successfully predict stock returns. The assumption is simply that managers believe that they can time the market. In a study by Graham and Harvey (2001), managers admitted trying to time the equity market, and most of those that have considered issuing common stock report that "the amount by which our stock is undervalued or over-valued" was an important consideration.

This study supports the assumption in the market timing theory mentioned above which is that managers believe they can time the market, but does not immediately distinguish between the mispricing and the dynamic asymmetric information version of market timing.

Baker and Wurgler (2002) provide evidence that equity market timing has a persistent effect on the capital structure of the firm. They define a market timing measure, which is a weighted average of external capital needs over the past few years, where the weights used are market to book values of the firm. They find that leverage changes are strongly and positively related to their market timing measure, so they conclude that the capital structure of a firm is the cumulative outcome of past attempts to time the equity market.

#### **4. Conclusions**

When regarding to a firm's capital structure, the Modigliani-Miller theorem opened a literature on the fundamental nature of debt versus equity. The capital structure of a firm is the result of the transactions with various suppliers of finance. In the perfect capital markets world of Modigliani and Miller, the costs of different forms of financing do not vary independently and therefore there is no extra gain from opportunistically choosing among them. Nevertheless, financing clearly matters, and that as a consequence of taxes, differences in information and agency costs. The various theories of capital structure differ in their interpretation of these factors. Each emphasizes some cost and benefits of alternative financing strategies, so they are not designed to be general. According to the standard trade-off theory, taxes and bankruptcy account for the corporate use of debt. According to the standard pecking order theory, adverse selection accounts for the corporate use of debt. Both theories having weak parts, it is not surprising that there is active research on this matter. In the market timing theory, there is no optimal capital structure, so market timing decisions accumulate over time into the capital structure outcome. From this point of view, the market timing theory appears to have the most explanatory interest.

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# COMPARISON ON THE STRENGTHENING OF LOCAL PUBLIC FINANCES AUTONOMY IN THE EUROPEAN UNION COUNTRIES

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*This study is primarily intended to present a comparative analysis between EU Member States on the organisation and finance of local governments and to provide the stage of local financial autonomy in the context of European Union with the help of its relevant indicators and the establishments of legislation limits.*

*Key words: local public finances, financial autonomy, European Union, revenues, expenditures, investments*

*JEL classification: H7, H83*

## **1. Introduction**

In all EU countries an important part of economic activity is conducted under the responsibility of administrative, financial and legal local authorities as a result of the decentralization of decisions at the administrative-territorial units. Local public sector has undergone numerous reforms as a result of implementing the principle of local autonomy and decentralization process particularly in the municipalities or localities, corresponding to the first level of local government. These reforms in local public expenditure were adopted according to the needs of each country. Local government expenditure in the new EU Member States tends to increase as a result of the decentralization of local government. This increase powers of local and implicitly increases local public expenditure. Local tax reforms are initiated and implemented permanently in the European Union in order to identify the most effective form of local administration based on the principles stipulated by the European Charter of local autonomy. Administrative-territorial units of the Member States of the European Union have pursued continuously increase the performance of revenue that has held it in relation to five criteria: revenue adequacy, financial autonomy, fairness, transparency and simplicity, cost-effective<sup>210</sup>.

The framework of this paper is based on a set of research programs and papers made by different Romanian and foreign institutions as Council of Europe, Central and Local public administrations, Romanian Institute for Public Policies, DEXIA – France, Universities etc.

## **2. The legal framework of the autonomy of local public finance**

Each country has its own legislation on local public finances, but the diversity of national rules are in accord with the common legislation adopted at the European level and European Union level for its member states. So that, legislation, as a key factor in the process of implementation of local financial autonomy and decentralization process, establish the general rules for local public finances. Article 9 of the European Charter of Local Self-Government lists certain general principles concerning the financial resources of local authorities and Article 3 proposes that local authorities should have the right to regulate and manage a substantial share of public affairs. At the same time, fiscal policy has to be judged in the light of the Maastricht criteria<sup>211</sup>, which say that candidates for the monetary union must – among other things – not run an excessive deficit (a general government deficit of more than 3% of national gross domestic product and a general

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210 Comisia Europeană (1998), „Financing the European Union”, Commission Report on the Operation of Own Resources System, Brussels, p. 5.

211 Protocol No. 5 to the European Union Treaty, on the procedure concerning excessive deficits, Article 1

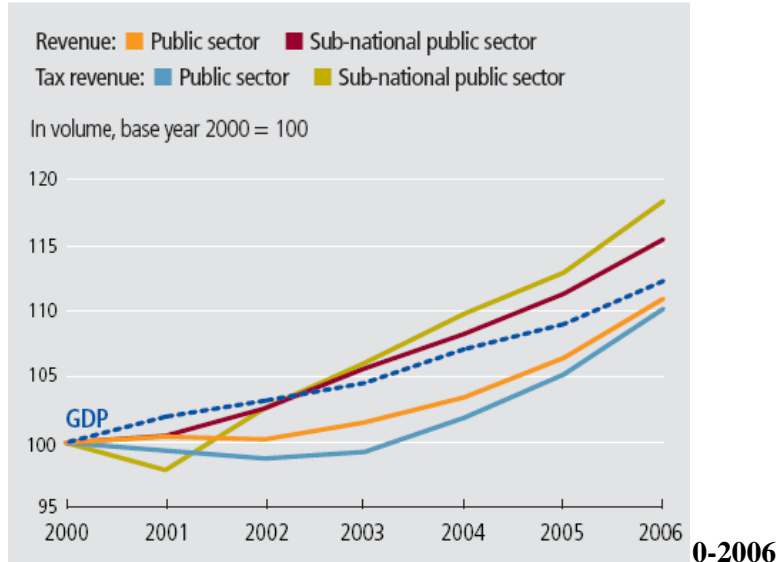
government debt of more than 60% of national gross domestic product). Where local authorities enjoy some degree of freedom in their fiscal policy and where their deficits or surpluses form a larger part of the deficit of the General State, the necessity of close coordination among the different levels of the state will arise. This might, at least in some cases, the reduction of financial autonomy of local governments.

### 3. The evolution of local public finances in EU

#### a. The evolution of local public revenues

Local revenues have increased annually between 2000 and 2006 on average of 2.4% (3.3% for the local sector only), outstripping GDP growth (2%) and that of total public revenue (1.7%). Within this revenue, tax revenues increased more faster, 3.1% on the local level.

**Figure 1: Evolution of revenue and tax revenue in EU-27 countries on the period 2000-2006**



Source: *Sub-national public finance in the European Union*, Dexia, December, 2007, p.15

Local revenue has expanded much faster in the EU-12 (7.8%) than in the EU-15 (3.5%) due the steady economic growth which positively impacted tax revenues, but also continuing reforms aimed at providing financial compensation for the transfer of competences.

#### b. The evolution of local public expenditures

Municipal responsibilities have been extended and the impact is very strong because it has significantly increased local government expenditure. Between 2000 and 2006, local expenditure rose 2.6% per year on average, surpassing annual GDP growth over the period (2%) and slightly outpacing total public expenditure (2.5%).

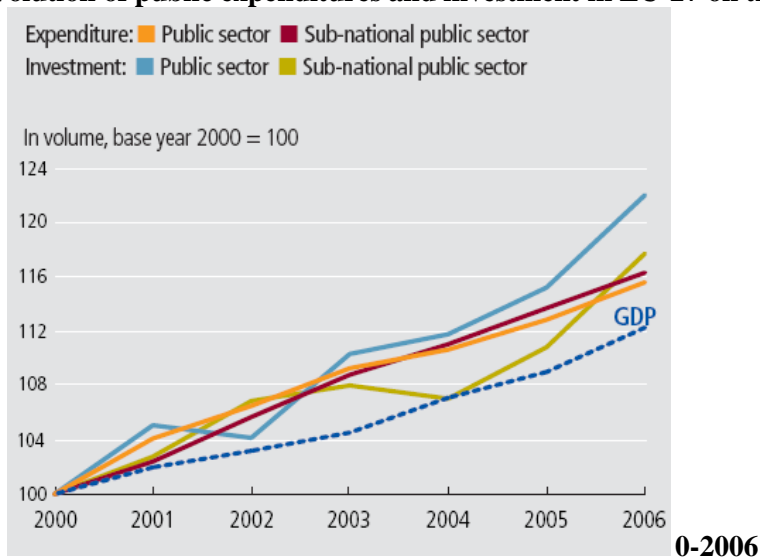
Local public expenditure growth is most dynamic in the new Member States of the European Union, the EU-12 showing a growth rate of 5.4% per year versus 2.5% for the EU-15. The largest increase (22.3%) occurred to Slovakia where financing for most infrastructure and public services was transferred to municipalities and the regions which were created in 2002.

A growing number of countries are involved in structural reforms which allow them to outsource spending (through financial dealings with satellite bodies which do not appears as public expenditure), to private local public companies or to transfer certain public utilities – like water

services, electricity or municipal waste – to the private sector (Austria, Belgium, Denmark, Germany, Portugal, Sweden, Spain).

Investment growth in the local public sector was 3.2% per year on average in the period 2000-2006. The growth was particularly strong in the EU-12 (9.1%) versus EU-15 (2.5) not only on account of increased expenditures linked to the decentralisation process but also because of the considerable infrastructure needs both in terms of renovation (catching up to EU standards) and construction in such key areas as transport and the environment (water, waste, management).

**Figure 2: Evolution of public expenditures and investment in EU-27 on the period 2000-2006**



Source: *Sub-national public finance in the European Union*, Dexia, December, 2007, p.12

Local investment was particularly dynamic in 2006, progressing by 6.6%, a pace more than double that of GDP growth (3%) and heftier than 2005 (3.6%). Investment growth was remarkable in most EU-12 counties, with an average growth of 28.9% for the zone. It was over 60% in Latvia and Lithuania and 84.6% in Romania versus EU-15 which registered 5.1%

In Romania, the capital expenditures in local public budget imposed by the necessity of development of local public investments must rise as a condition of local public autonomy, but the current expenditures are still too big.

**Table 1: The ratio of local expenditures in EU countries in 2006**

|                           | Romania<br>(million Lei) | EU-27<br>(million Euro) |
|---------------------------|--------------------------|-------------------------|
| Total expenditures        | <b>28761</b>             | <b>1322956</b>          |
| Intermediate consumption  | 7076                     | 331259                  |
| Compensation of employees | 11608                    | 453157                  |
| Interest                  | 330                      | 22186                   |
| Subsidies                 | 16                       | 44349                   |
| Social benefits           | 2998                     | 196180                  |
| Other current expenditure | 1061                     | 76483                   |
| Capital transfers payable | 0                        | 29912                   |
| Capital investments       | 5672                     | 168419                  |

Source: Eurostat

Resources from Cohesion and Structural Funds represent an opportunity for the new member states, because they offer the possibility to make big investment projects, also in local infrastructure, without using ordinary resources and without affecting the level of consolidated budgetary balance, being, at the same time, an element of local autonomy. The new EU member states and Romania in particular, don't have the capacity of absorption of these funds because of a lack of experience of management authorities and difficulty in designing projects that fulfill EU criteria and sometimes local authorities have trouble mobilising the necessary resources for co-financing of EU funds.

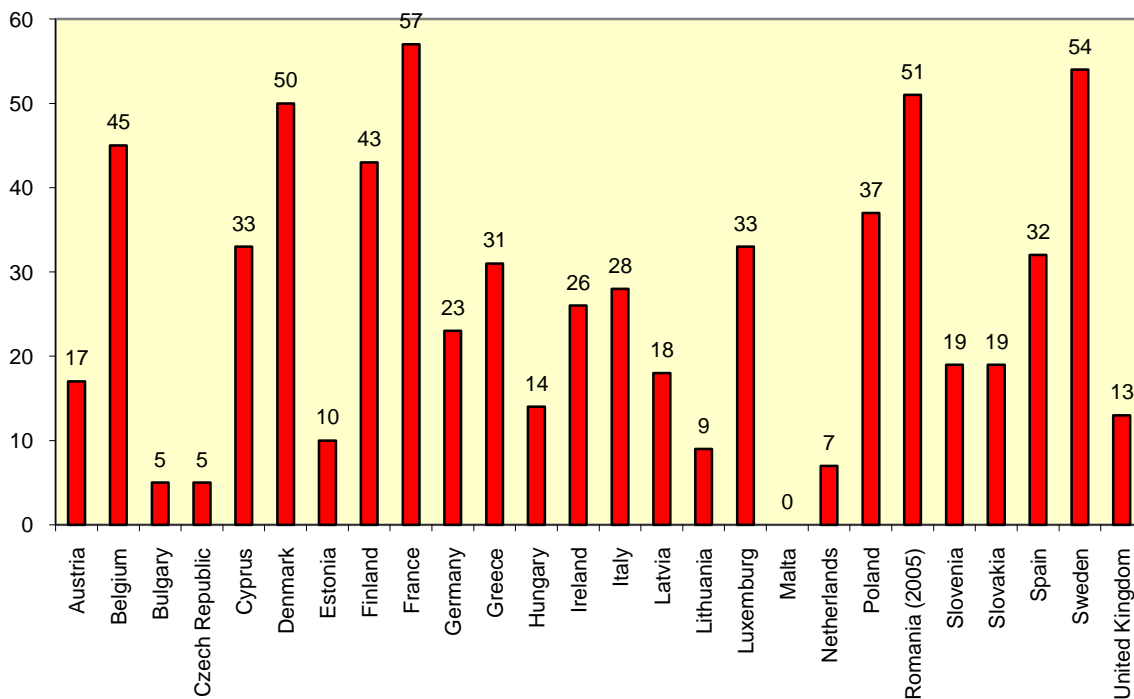
#### 4. Indicators of financial autonomy

##### a. Local financial autonomy rate

The level of own revenues in total local revenues represent the most significant indicator of local autonomy because makes the position of local authorities more independent on the state. As their incomes are higher, the increasing degree of autonomy because they can cover costs of local own revenue sources. Most of the revenue derived from taxes on wealth or property, revenue from the provision of services (parking cars, gyms). Almost all countries have left it to local authorities to collect very small taxes, such as dog license fees or entertainments tax. Very few counties have provision for genuine local taxes that yield an appreciable amount and for full autonomy to collect them. In Romania, United Kingdom and France, the main taxes levied are the various forms of property tax. In most cases, the rates can be determined either freely or within specified limits by the local authorities.

In a number of countries, e.g. France (taxe d'habitation) and the UK (council tax), citizens, who are responsible for a considerable proportion of the expenses incurred by the local authority, have had to pay a separate tax, owing to the limited possibilities of distinguishing between one payer and another, only yields a relatively small amount or else provokes a great deal of resistance.

**Figure 3: Local financial autonomy rate in EU countries in 2005 (%)**



Analyzing data from the table is a trend towards greater decentralization in the old EU countries, suggesting a greater local autonomy. In 2005, local financial autonomy rate is under 30% in majority of ex-communist countries (Bulgaria, Czech Republic, Estonia, Latvia, Lithuania, Slovenia, Hungary, Slovakia), and, also, in countries as Austria, Germany, Ireland, United Kingdom. The local financial autonomy rate between 30% and 50% is in Cyprus, Greece, Luxemburg, Poland, Portugal, Spain, and Finland.

The biggest rates of own revenues in total local revenues are in Finland (57%), followed by Sweden (54%), Romania (51%) and Finland (50%). Romania has a high local financial autonomy rate because in local financial law is mentioned as own revenue of local budget the income tax rate share.

***b. Local public revenues and local public expenditures as percentage of gross domestic product (GDP)***

Identifying local public revenues and local public expenditures as percentage of gross domestic product (GDP) and the surplus or the deficit is important for to see how local authorities can cover with their revenues the local public expenditures due of their exclusive, share or delegate competences.

**Table 2: Local public revenues and expenditures/GDP in 2007**

| Country<br>2005<br>I       | Total local<br>government revenue<br>% of GDP<br>II | Total local government<br>expenditures<br>% of GDP<br>III | II-III |
|----------------------------|---|---|--------|
| <b>EU27</b>                | 11.3  | 11.3  | 0      |
| <b>EU25</b>                | 11.3  | 11.3  | 0      |
| <b>EU15</b>                | 11.3  | 11.3  | 0      |
| <b>BE - Belgium</b>        | 6.6   | 6.7   | -0.1   |
| <b>BG - Bulgaria</b>       | 7.2   | 7.2   | 0      |
| <b>CZ - Czech Republic</b> | 11.7  | 11.2  | 0.5    |
| <b>DK - Denmark</b>        | 31.8  | 32.0  | -0.2   |
| <b>DE - Germany</b>        | 7.5   | 7.2   | 0.3    |
| <b>EE - Estonia</b>        | 9.3   | 9.8   | -0.5   |
| <b>IE - Ireland</b>        | 6.9   | 7.1   | -0.2   |
| <b>GR - Greece</b>         | 2.6   | 2.6   | 0      |
| <b>ES - Spain</b>          | 6.1   | 6.4   | -0.3   |
| <b>FR - France</b>         | 10.8  | 11.2  | -0.4   |
| <b>IT - Italy</b>          | 15.2  | 15.0  | 0.2    |
| <b>CY - Cyprus</b>         | 1.9   | 2.0   | -0.1   |
| <b>LV - Latvia</b>         | 10.0  | 10.6  | -0.6   |
| <b>LT - Lithuania</b>      | 8.0   | 8.4   | -0.4   |
| <b>LU - Luxemburg</b>      | 5.1   | 5.0   | 0.1    |
| <b>HU - Hungary</b>        | 11.7  | 11.7  | 0      |
| <b>MT - Malta</b>          | 0.6   | 0.6   | 0      |
| <b>NL - Netherlands</b>    | 15.3  | 15.3  | 0      |
| <b>AT - Austria</b>        | 7.6   | 7.4   | 0.2    |
| <b>PL - Poland</b>         | 13.4  | 13.3  | 0.1    |

|                            |      |      |      |
|----------------------------|------|------|------|
| <b>PT</b> - Portugal       | 6.0  | 6.1  | -0.1 |
| <b>RO</b> - Romania        | 9.6  | 9.8  | -0.2 |
| <b>SI</b> - Slovenia       | 8.3  | 8.4  | -0.1 |
| <b>SK</b> - Slovakia       | 6.0  | 6.1  | -0.1 |
| <b>FI</b> - Finland        | 19.1 | 19.3 | -0.2 |
| <b>SE</b> - Sweden         | 24.8 | 24.5 | 0.3  |
| <b>UK</b> - United Kingdom | 12.8 | 12.9 | -0.1 |
| <b>EA11</b> – Euro Area    | 10.1 | 10.1 | 0    |
| <b>EA12</b> – Euro Area    | 9.9  | 9.9  | 0    |
| <b>EA15</b> – Euro Area    | 9.8  | 9.9  | -0.1 |

Source: Eurostat

The examination of local public expenditures and local public revenues in relation to GDP highlights significant discrepancies between the countries, partly due to their varying level of decentralization and also to the varying financial weight of the responsibilities devolved to local public administrations tiers.

As data table shows, in the majority of European Union members budgets fluctuated moderately around balance point in 2007, the biggest being in Estonia (- 0.5%). The biggest surplus was registered in Czech Republic (0.5%). Only five countries succeeded to have a balance budget.

#### 4. Conclusion

The local financial autonomy represents an important issue in the global context of economic development and a result of implementation of local autonomy principle and decentralization process. The legislation of European Union and the evolution of European Union society are oriented to raise the local financial autonomy. Local tax reforms are initiated and implemented permanently in the European Union in order to identify the most effective form of local administration based on the principles stipulated by the European Charter of local autonomy. However, there are differences between countries even the convergence criteria are applied to the states and both to the state and to the local communities until the total economic integration, the last step in the European Union integration process.

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# POSSIBLE IMPLICATIONS OF ADOPTING THE SINGLE EUROPEAN CURRENCY FOR THE ROMANIAN ECONOMY

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*The actual preparation and adoption of the euro is, for Romania, the most important challenge of the first decade after its accession at the EU. It puts to the test the policy and administrative capacity to conceive and implement a coherent program of measures that will ensure real and nominal convergence and puts pressure on the economic system, which ultimately takes over the adjustment task.*

*Beyond these general guidelines raise numerous questions concerning the preparation process of the euro adoption, the implementation timetable and the impact of the changeover to the euro on the Romanian economy.*

*Key words: euro, exchange rate, Economic and Monetary Union, convergence criteria, ERM II, NBR, ECB, IMF, financial crisis.*

*Cod JEL lucrare: F15, F36*

## **1. Introduction**

Romania became a member of the Economic and Monetary Community on the 1<sup>st</sup> of January 2007, with derogation from adopting the euro as its currency. The exemption granted to Romania and to the other new members who joined after 2004 implies that these countries commit themselves irrevocably to replace their national currency with the euro, but they can choose when to demand approval for the integration in the euro area. European institutions, namely the European Commission and the European Central Bank, are called upon to evaluate and report to the Council of the European Union the progress of each country individually, aiming in particular at the way that economic and financial convergence is achieved, and following a set of distinct criteria established by the Maastricht Treaty (the founding document of the Economic and Monetary Union signed in 1992).

The entire process of adopting the single european currency, which implies the fulfillment of several strict formal criteria, was designed to reduce the risk of a weakening or even destabilization of the European monetary system when integrating economies with severe imbalances, protecting at the same time the economies of the countries joining the euro from the possible shocks resulting from direct confrontation with the euro area.

Waiver of its own currency and the related policy instruments transfers the task of adjusting the national economy to the asymmetric shocks coming from the Economic and Monetary Union area towards other directions – fiscal policy, wages and prices. This concerns mainly the economies with a structure and development level inferior to the European average which are thus more exposed to the risk of asymmetric shocks. Therefore the preparation process for the adopting of the euro focuses on the convergence or the adaptation of less developed economies to the European standard and structure; that explains the precautions in advancing towards the euro of most of the new entrants into the EU, whose GDP per capita is, in many cases, less than half of the European average.

So far we only have a very general idea of the trajectory that Romania plans to follow in adopting the euro. Both the Convergence Program and projections of the NBR want to achieve a gradual progression towards fulfilling the Maastricht criteria, so that in 2012 Romania would adhere to the ERM2 exchange rate mechanism for a minimum of two years, and that the actual shift to the euro would be possible in 2014.



The crisis affecting at this moment the international financial system introduces an additional factor of uncertainty and if prolonged, it may complicate the process of adopting the euro in Romania. On one hand, the management of the real and nominal convergence process becomes more difficult; on the other hand, the current crisis may prove to be the most serious test for the European financial system and its currency, the euro.

## ***2 Adoption of the euro - the last stage of a complete integration***

The benefit of a country's accession to a monetary union is the enhancement of foreign trade, which then leads to a faster economic growth. Equally noteworthy are the positive effects resulting from an increased financial discipline, the significantly improved access to the capital and the stability offered by the capital market forming at a union level.

The strategy that our country will have to adopt for the changeover to the euro must identify the conditions to be met so that the Romanian economy would fully benefit from adopting the euro, the sequence of measures to be taken in order to ensure these conditions, but also their implementation timetable. A detailed analysis of the experience of other countries which have undergone the process of adopting the euro or which are preparing to do so would be particularly useful since it may help avoid some mistakes and identify appropriate solutions – however without losing sight of the particular situation of each country.

The transition process towards adopting the single European currency by our country requires the fulfillment of the nominal convergence criteria set by the Maastricht Treaty in order to participate to a precursory stage within the ERM II mechanism. These criteria are detailed in the Protocol on the convergence criteria and operationalized by the European Central Bank during the evaluations that it makes regularly. In the Report concerning the convergence it is estimated that Romania will not be able to join the ERM II<sup>212</sup> before 2012, and the adoption of the euro is thus anticipated for the year 2014.

The current positioning of the Romanian economy concerning the fulfillment of the nominal convergence criteria is briefly presented in the table below:

Table no.1: The Maastricht criteria at the level of Romania  
(Nominal convergence indicators)

| <i>Nominal convergence indicators</i>   | <i>Maastricht criteria</i>   | <i>Romania 2007</i> |
|---|--|---------------------|
| Inflation rate<br>(percent, annual average)   | <1.5 pp above the average of<br>the<br>most performant 3 EU<br>members | 4,9                 |
| Consolidated budget deficit<br>(percent of GDP)   | below 3%   | 2,5                 |
| Debt<br>(percent of GDP)  | below 60%  | 13,0                |
| Exchange rate (RON/EUR)<br>(maximum procentual<br>appreciation/depreciation<br>compared to the<br>average over 2 years) | +/- 15%  | +10,8/-9,6          |
| Long-term interest rates  | <2 pp above the average of   | 7,1                 |

212 From the 1st of January 1999, when the single European currency was adopted, the multilateral exchange rate ERM (passed in '79) was replaced with bilateral one, ERM II, in which each participating currency has a defined central parity comparing to the euro, the fluctuation band maintaining the same ( $\pm 15\%$ ). ERM stands for Exchange Rate Mechanism (exchange mechanism).

|                    |  |  |
|--------------------|--|--|
| (percent per year) | the<br>most performant 3 EU<br>members |  |
|--------------------|--|--|

Source: ECB, Convergence Report, May 2008

The Treaty stipulates that adhering countries must "achieve a high level of price stability; this will be highlighted by an inflation rate which gets close to, at most, that of the three member states with the highest performance in terms of price stability".

The Protocol states that last year's average inflation is considered and that it should not exceed by more than 1.5 % the average of the three countries of the EMU which have the best performance. The member countries with the lowest inflation during the period prior to the publication of the last ECB report (April 2007-March 2008) were Malta, the Netherlands and Denmark, which had an average inflation of 1.7%, thus resulting a reference value of an average inflation of 3.2% against which candidates are evaluated.

Regarding the situation of public finances, the Treaty stipulates "the sustainability of the government's fiscal position; this will be highlighted by achieving a governmental budgetary position without an excessive deficit". The Protocol states that this means that at the time of the examination, the member country candidating for the EMU should not be the subject of a Council decision which draws attention on the existence of an excessive deficit. The procedure in case of an excessive deficit is initiated when:

- the ratio between planned and achieved government deficit exceeds the reference value of 3% of GDP (with some exceptions which take account of temporary or exceptional circumstances);
- the ratio between government debt and GDP exceeds a reference value of 60% (also with a tolerance for cases in which public debt is close to this level and falling).

Regarding the evolution of exchange rates, the Treaty stipulates "the enclosing within normal fluctuation limits set by the exchange rate mechanism of the European Monetary System for at least two years without depreciation against the currency of any Member State". Since January 1999 the ERM has been replaced with ERM2; as a consequence, the exchange rate stability condition for a two year minimum period is now being judged against the euro.

The Treaty also refers to the long-term evolution of interest rates which requires that "the soundness of the convergence achieved by the Member State and its participation in the exchange rate mechanism of the European Monetary System reflect in long term interest rates".

Protocol mentions that this stipulation means that, during the year prior to the examination, long-term interest rates (measured in interests on long-term government bonds or comparable instruments) should not exceed by more than 2 percentage points the average interest rate achieved by the three member states with the best performance in terms of price stability. For the period April 2007 - March 2008, the reference value resulting from the addition of 2 percentage points to the average interest rate in Malta, the Netherlands and Denmark is of 6.5%. Romania has declared an average rate of long-term interest of 7.1% above the reference value, for that same period.

The evaluation of the opportunity of joining the ERM II also takes into account the achievement of some real convergence criteria, which, although not expressly mentioned in the Maastricht Treaty, have a high predictive content concerning the success of this process. Fulfilling the real convergence criteria ensures a high degree of cohesion for the economies of the member countries of a monetary union. The main criteria considered are: the real level of GDP per capita, sectoral structure, the degree of openness of the economy and the trade share with the EU in the total foreign trade.

Figure no. 1: Evolution of GDP per capita in Romania between 2001-2007

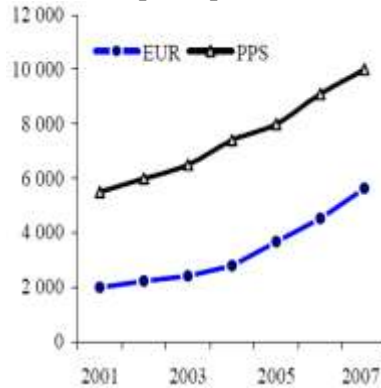
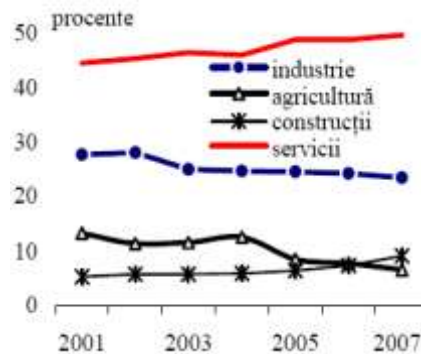


Figure no. 2: Evolution of the share of economic sectors in GDP between 201-2007



Source: EUROSTAT, NIS, NBR

Source: NIS, NBR

During the previous years, the changes in GDP per capita expressed according to the purchasing power standard registered a sustained growth. Regarding the structure of the economic sectors in Romania during the period under review, you can see an increase in the share of services and construction in GDP, amid a decline in share of industry and agriculture.

Romania will face a difficult recession in 2009, but the economy will avoid collapse, particularly as a result of a relatively low debt of the private sector and of reduced dependence to exports. For this year, we can predict a contraction of the Romanian economy by 4% and a budget deficit of 5.1% of gross domestic product (GDP), based on IMF estimates. Annual inflation would moderate to 4.9% at the end of 2009, compared to 6.3% in December 2008. We can expect the need for the expansion of state funding to increase the debt significantly, from 16.3% of GDP in 2008 to 22.5% this year. For the current account deficit a steep correction is estimated, up to 7.1% of GDP this year from more than 12% of GDP in 2008.

Romania's exports and imports will register an actual growth of 8.1% and 3.7% respectively this year, and 9.6% and 4.9% respectively in 2010. Regarding inflation, analysts foresee an annual rate of 4.9% for 2009 and of 3.7% for 2010, provided that the National Bank of Romania (BNR) maintains its cautious position until fiscal policy is more accurate and there is more stability on the currency market. Thus, analysts anticipate that the loosening of monetary policy will take place in the second half of this year and will lead to the reduction of interest rates to 8.5% from the current 10%.

However we must admit that a successful implementation of the IMF program along with a faster comeback of the national currency may cause the NBR to reduce interest more aggressively than currently anticipated. Analysts see a possible reduction of the rate to around 4.12 RON/euro at

the end of the year, compared with the current estimates of 4.2 RON/euro, in the context of the currency return as a result of the agreement with the IMF and the recent improvement of investor's confidence which was stronger than anticipated.

In 2010, the Romanian economy would return to the growth, with an estimated advance of 0.3% of GDP for the next year, an inflation of 3.7% at the end of the year, a budget deficit of 4% of GDP and a current account deficit of 6.8% of GDP.

Although average incomes are well below average in the euro area, GDP per capita climbed significantly over the past decade, and increasing trade integration, financial and institutional integration with Europe should support real convergence in the long term.

According to a report by the International Monetary Fund<sup>213</sup> (IMF), Member States of Central and Eastern Europe facing problems should quit the national currency in favour of the euro. IMF experts believe that the changeover to the euro should be made without states becoming members of the euro area and hold a place in the Governor Council of the European Central Bank. For the EU states, adoption of the euro offers advantages in terms of solving problems such as overlapping debt in foreign currency, removing uncertainty and restore confidence. Without the euro, solving the problem of foreign currency debts would require a massive reduction in spending in some states, under the conditions of a growing political resistance.

But there are also skeptics who claim that Romania will fail to adopt the euro in 2014, stating that the minimum real convergence will not be achieved, thus outrunning the changeover to the ERM II, and thereby the shift to the euro. However, failing to achieve nominal convergence criteria could be an impediment for which Romania will adopt the single currency in 2015, motivated by increased inflation and budget deficits. The current financial crisis in the United States, and not only, could also affect the adoption of the euro by Romania.

In my opinion, reducing inflation is crucial at the moment; locating it to sustainable levels, along with a more rigorous control on aggregate demand, will create favorable conditions for achieving nominal convergence. And as regards the crisis, it is still premature to assess the degree of impact that it will have on Romania, especially since the NBR measures on credit have been severe and Romanian banks kept their distance from "toxic" credit products. However, I believe that with sustained efforts from the Romanian authorities in maintaining a strict budgetary policy and the continuation of reform, taking into account the turmoil in international markets, Romania could adopt the euro on the 1<sup>st</sup> of January 2014.

### ***3. Financial crisis - a challenge for the Romanian economy***

From a historical point of view, financial crises have a common cause. They follow a period in which the low level of interest and inappropriate risk assessment generate a state of general euphoria. This period is then followed by a collapse one, when it becomes clear that the situation can not continue.

Most financial analysts estimated that the origin of the current financial crisis would be the dramatic lowering of the cost in the U.S. housing market or the collapse of the housing credit market. One can say that is an incomplete vision. The root causes of the financial crisis are deeper, both macroeconomic and microeconomic in nature, as several analysts recently recognized, the two types of causes interacting in the production of the crisis.

The effects of the international financial crisis were also felt in the Romanian economy. The banking system was slightly affected since it has not been exposed to toxic assets, but also due to administrative and prudential measures taken in time by the NBR. However, the international

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<sup>213</sup> IMF is an international organization which has 185 member countries, established to promote international monetary cooperation, currency stability and systematic currency agreements in order to stimulate economic growth and high levels of use of labor force, and to provide temporary financial assistance to member countries in appropriate circumstances, to adjust the balance of payments. Upon joining the IMF, each country contributes with a certain amount of money called "quota subscription".

financial crisis and its consequence in particular – the recession in developed countries - is expanding throughout the Romanian economy in several directions.

From the commercial point of view, it slows down export growth or even reduces it. On the financial direction, it limits the access to external financing and thus restricting the volume of credit, and creates difficulties in the private external debt.

The effect on the exchange rate, due to the reduction of external financing, was the depreciation of the national currency. The withdrawal of investors from esturopean countries resulted in moments of panic and speculative attacks on the monetary- foreign currency market, such as the one in October in Romania, which needed the NBR intervention.

The propagation of these effects results in an extremely high level of uncertainty regarding the progress of economic variables. Romanian economy has a high current account deficit, indicating its dependence on external financing. We have to choose between the orderly reduction of the deficit and its reduction by the market in the current conditions of tension and mistrust, with dramatic consequences for the exchange rate and economic growth.

After years of strong economic development with GDP growth rates of over 7%, massive direct foreign investment and relatively well developed exports, the Romanian economy is now threatened by a severe crash.

International financial crisis has massively reduced the demand on the major Romanian foreign markets: Germany, France and Italy, causing problems for the Romanian industry. Since the beginning of the year, many Romanians have lost their job, and unemployment rate could increase from 5.3% to 7% this year.

Romania is not the only country in the European Union facing problems. One can anticipate a decline of 3.6 percent for countries that use the single currency. Other states from the area of our country have also suffered: the Serbian economy will decrease by 2.1%, while Slovakia with 1.2 percent. Hungary faces a more serious situation, since its economic setback could reach 5.1%, while Croatia's 4.5 percent.

Romania is, after Hungary and Latvia, the third European Union member country forced to ask for help to the IMF and EU. From the crisis fund of the EU, from which Hungary and Latvia have already received 6.5 respectively 3.1 billion, remain another 15 billion. The fund was designed to help EU members outside the euro area, arriving in need of payment. The EU Commission also expected that EU countries whose economies have close connections with Romania to join in and help with loans. In the case of Latvia for example, loans have come from Sweden and Estonia.

Romania is now in the position of going to the bank and demanding for as many loans as possible, but without being sure that it can pay back the rates in the future. It counts on the fact that the crisis will pass, and the economy will start to thrive again. In addition, once entering the euro area in 2014 and adopting the euro, we will no longer have financial problems. Specialists in economics think that, unlike previous years, when foreign loans and money from privatizations were frantically spent in consumption, in compensatory payments and other purposes, this time things could be different. The difference is that now we will have more eyes riveted on Romania. If the IMF allowed enough during the 10 agreements so far, with the EU the situation is slightly difficult. The European Commission will be watching, controlling very carefully everything that happens. Brussels has every reason to save the East, especially since the economic interests of the area are very high.

Signing the agreement will give Romania the touch of credibility needed in the current international context. Money from the IMF, held at the National Bank, will help authorities maintain the currency if the RON will be submitted to further speculative attacks. We will have the surety that our currency is healthy, and will no longer suffer depreciation shocks from the estimations from 3 to 5 lei, which would lead to an economic failure and increased poverty. And last, but not least, the loan could allow the National Bank to provide the banks with more money

by reducing minimum reserve requirements, which will boost lending. Part of the money will pass through the branch of the Ministry of Finance and towards the Savings Bank and Eximbank, the two state banks, in order to support lending, especially to the SMEs and exporters.

So far, the International Monetary Fund has granted 47.9 million dollars to several countries affected by economic crisis, including Belarus, Hungary, Latvia, Pakistan, Serbia and Ukraine. The two member countries of the European Union were granted funds after the conclusion of joint agreements with the European Commission, World Bank and IMF. Thus, Hungary has received 29 billion in October, while Latvia received 7.5 billion in December. Following the agreement signed with international institutions, Budapest will have to reduce budgetary expenditure, reduce the budget deficit below 3% of GDP and implement a series of structural reforms, including a reform of the tax system. In this regard, a series of measures has already been announced, including the increase to 23% of the value added tax (VAT ) starting with July 20<sup>th</sup> from 20% as it is now, and the loosening of fiscal policy on the labor market. These measures also include significant changes in the social insurance and pensions system. In the case of Latvia, the IMF demanded the reduction of public sector salaries by 15%, maintaining a constant level of exchange rates, the increase of taxes and a drastic reduction of public spending. Romania should pay attention to the case of the countries mentioned and propose optimal strategies which would not affect the Romanian economy.

The danger of an agreement with the IMF is worth taking into consideration, namely that IMF grants money in rather harsh conditions, which do not encourage growth, but follow entirely different indicators. IMF does not adapt its solutions to the economic needs of the borrowing country and applies the same treatment to all, even if in some cases (see Korea, Argentina) it is an obvious failure. Decisions taken in the IMF board are taken by rich countries, whose economic interests do not always coincide with those of the Member to whom it borrows money.

#### **4. Conclusions**

Adopting the euro is the *ultimate test* for the Romanian economy, is the most important project of the first decade after joining the EU. The success of this project depends on the mobilization of political and social forces towards continuing the reforms necessary both to achieve nominal convergence criteria and increase the competitiveness of the Romanian economy so that it would face the pressures that may occur with the loss of the shield provided by the independence of the monetary policy and exchange rate fluctuation.

However, international financial crisis should not be neglected, since it makes the task of adopting the euro by Romania more difficult.

Although it does not have direct repercussions in Romania, the turmoil on international markets increase uncertainty and the difficulties in managing the monetary and economic policies. But the current financial crisis also highlights the advantages for smaller states in particular, which benefit from protection under one of the strongest currencies in the world-the euro.

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# THE ROLE OF STATE AIDS IN THE CURRENT FINANCIAL AND ECONOMIC CRISIS

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*This paper focuses on state aid's role in the current financial and economic crisis, in order to help all the economic sectors to get back on their feet. The negative effects of the sub-prime mortgage lending affected not only the US, but also the European financial markets, due to CDOs exposures, justifying the need for close European coordination of national aid measures. We have presented a review of the state aid measures adopted since October 2008 by the Member States within the temporary framework of common principles issued by the European Commission. In the last section we highlighted the state aid measures implemented by the Romanian Competition Council in tackling this important challenge, including the stand-by arrangement with the IMF, the European Commission, World Bank and with other international financial institutions.*

*Keywords: state aid, financial and economic crisis, European Commission*

*JEL classification: G01, G28, H53*

## **1. Introduction**

State aid is a form of state intervention to promote a private economic activity. State aids are granted in order to prevent those situations which lead to competition distortions contrary to the principles of the common market, lead to growth innovation, research, to better training and a high quality of jobs.

According to the EC Treaty, Section 2 - Aids granted by States, art. 87 (3) it is deemed to be considered compatible aid with the common market: aid to promote the economic development of areas where the standard of living is abnormally low or where there is serious underemployment; aid to promote the execution of an important project of common European interest or to remedy a serious disturbance in the economy of a Member State; aid to facilitate the development of certain economic activities or of certain economic areas; aid to promote culture and heritage conservation where such aid does not affect trading and competition conditions in the Community to an extent contrary to the common market.

State aid may be granted in the current context, starting from the existing regulations. In April 2008 have been adopted new rules on state aid for environmental protection, up to 70% of the additional investment costs for small enterprises and up to 100% where aid is granted under a real competitive basis, and this even for large companies. Similar benefits are granted to small enterprises, for R&D projects, of up to 100% of the eligible costs of the research project and development and up to 80% for industrial research, while for young enterprises aids amount up to € 1 million. Another regulation from June 2008 introduced the first discussions about specific safe-harbours for SMEs designed to ensure a more secure public guarantees for loans. Also, for the investment venture capital of SMEs, the EC has established a safety threshold of € 1.5 million for SMEs to an increase by 50% compared to the past. Since January 2007, the Member States may grant state aids to SMEs in order to create a new location or expansion of the existing one.

The crisis affects those companies with low indicators of solvency, but also small and medium enterprises, considered the “engine of Europe”, which face serious problems in accessing bank



credit. Therefore, granting of state aids can be a solution to these funding difficulties and can be a source of further investments, thus contributing to long term economic growth.

## **2. State aid measures taken at the European level**

Rules on state aids act as a catalyst in achieving the competitiveness objectives at the European level, even in this crisis period.

A first series of measures were adopted at the European level in response to the widening financial crisis on the European markets, such as: increasing the guarantee fund for bank deposits, from € 20,000 to € 50,000, in order to increase the confidence of depositors in the banking sector, liquidity injections in the banking system and decreasing the reference rates. Since some of these measures have had an individual character, but were measures concerning all financial market players, they did not come under the category of state aid and therefore, according to art. 87 (1) of the EC Treaty did not require a notification from the EC.

In October 2008 the EC issued a Communication<sup>214</sup> which sets the possibility for the financial institutions to receive from the Member State **guarantee schemes** for their liabilities, between 6 months and 2 years, with the possibility for the Member State of choosing for the liquidation of the financial institutions under his jurisdiction, including a range of assistance measures. Some of the conditions for these state aid measures are: non-discriminatory access, aimed at providing schemes to all financial institutions from the Member State concerned, including their subsidiaries, without discrimination based on nationality; state aid must be well defined and limited, excluding unjustified benefits for shareholders.

In another EC Communication<sup>215</sup> on **recapitalisation** of financial institutions in the current financial crisis are outlined the principles governing the different types of recapitalization: taking into account the market situation of each institution, including the risk profile and the level of solvency and not granting too high subsidies compared to the market existing alternatives. Recapitalisation helps banks to limit the risk of insolvency, to contribute to the financial stability, to ensure lending to the real economy and also the inter-bank lending. The EC adopted in October and by February 2009, 40 such decisions, many of them referring to major banks in the Member States.

In order **to relief the assets of the financial institutions**, EC adopted a new Communication<sup>216</sup> as a measure to safeguard financial stability and to support business lending, to reduce the risk of fragmentation of the internal market, to minimize the economic and budgetary cost of the state intervention, to avoid a subsidies race and to minimize competitive distortions between banks which receive support and the others. The first cases are being reviewed by the EC.

Until now, the EC approved guarantee schemes in 16 Member States whose value is approximately € 2,300 billion. Recapitalization schemes approved by the EC until the end of March 2009 were about 11 and their value is approximately € 275 billion. The highest recapitalization scheme amount was approved in Germany, for € 80 billion, and the lowest one was in Hungary, about € 1.04 billion. On 31 March 2009, the Commission approved a temporary facility for illiquid assets for a six months period, which Netherlands intends to grant in favor of ING. Also, Member States adopted, in accordance with art. 87 (3) (b) of the EC Treaty, a series of **ad-hoc measures** in favor of individual financial institutions, amounting € 400 billion. For

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214 Official Journal of the European Union, Communication from the Commission -The application of State aid rules to measures taken in relation to financial institutions in the context of the current global financial crisis, C 270/8, 25.10.2008.

215 Official Journal of the European Union, Communication from the Commission- The recapitalisation of financial institutions in the current financial crisis: limitation of aid to the minimum necessary and safeguards against undue distortions of competition, C 10/2, 15.1.2009.

216 Official Journal of the European Union, Communication from the Commission on the treatment of impaired assets in the Community banking sector, C 72/1, 26.3.2009.

example, Dexia, Fortis, KBC, Ethias, and Latvia Parex Banka, being in difficulty, took advantage of individual measures, while for the Anglo Irish Bank, ING, Aegon, SNS Reaal/New, Carnegie Investment Bank and Bank of Ireland were adopted recapitalization schemes.

EC adopted on 26 November 2008, “**A European Economic Recovery Plan**”, intended to support Europe in the current financial crisis, representing, otherwise, a suitable access for an acceleration of the reforms under the Lisbon Strategy. The plan aims a number of measures on short term, such as major infusion of the purchasing power in the economy in order to boost demand, saving jobs and restoring public confidence in financial institutions, but also a series of long-term objectives, which consist of “intelligent” investments contributing to growth, competitiveness and sustainability. In this plan, the EC states that the financial support in the context of crisis will be € 170 billion, which represents 1.2% of the European GDP, in order to make a quickly, positively and substantially impact on the European economy and on employment, besides the role of the automatic stabilizers. Also, in this plan it is stated that the national package of tax incentives should meet four conditions: to be opportune, coordinated, temporary and specific. In this period of crisis the focus is on short-term impact of public expenditures on aggregate demand, greater than the fiscal component of the budgetary policy. Public expenditures can be materialized in actions to increase or extend the allowances granted temporary to unemployed or households with low income.

The plan highlights the idea of improving the economic analysis for the evaluation of the positive and negative effects of granting individual state aids and also state aid schemes.

Also, in order to tackle this financial crisis, a new measure adopted at European level was the granting of temporary (until 31 December 2010) aids to enterprises which were not in financial difficulty at 1 July 2008, in the form of schemes, which have a limited value at € 500,000 per company, grant funding. For SMEs, the legislation on state aid has been much simplified, according to the General Block Exemption Regulation (adopted in July 2008); it enables Member States to give 26 types of state aids, up to € 7.5 million for investment projects or environmental support for business women up to € 1 million per company.

In the context of the current economic and financial crisis, we find as relevant enabling the clause provided in the Article 87 (3) (b) of the EC Treaty, in order to grant state aid for a limited period, to overcome difficulties caused by economic and financial crisis, the aim being to “remedy a serious disturbance in the economy of a Member State”.

The new measures taken in the current crisis for the category of **aids in the form of guarantees** provide a 25% reduction of the annual premium for new guarantees for SMEs and with 15% for large firms, which were not in difficulty from 1 July 2008, but have encountered problems later, as the crisis worsened. These measures contribute to an easier access to finance.

Until 31 December 2010, in order to help companies with difficulties in funding as a result of the current crisis were adopted measures on **aid in the form of subsidized interest rate**, which is at least equal to the central bank overnight rate plus a premium equal to the difference between the average one year inter-bank rate and the average of the central bank overnight rate over the period from 1 January 2007 to 30 June 2008 plus the credit risk premium corresponding to the risk profile of the recipient<sup>217</sup>.

**Aids for the production of green products** are considered by the EC as a priority even in this context of crisis, whereas are in the Community’s interest. Such aids are justified for new projects which contribute significantly to improving environmental protection and start from 31 December 2010 at the latest.

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217 Official Journal of the European Union, Communication from the Commission - Temporary Community framework for State aid measures to support access to finance in the current financial and economic crisis, C83/1, 7.4.2009, p.9.

On the basis of this communication was possible the approval of 24 measures of State aid by the EC: 8 aid schemes of € 500,000 per company to Germany, France, Latvia, Luxembourg, Hungary, Portugal, Britain and Austria; 4 subsidized interest schemes to Germany, Hungary and France; 3 schemes of risk capital in Germany, France and Austria; 3 schemes which provide reduced interest loans to companies that invest in the production of “green” products in France, Britain and Spain; 6 guarantee schemes to Belgium, France Germany, Luxembourg, Hungary and the UK.

The most affected by the crisis was the **automotive sector**, and in this respect, the EC reacted immediately, establishing measures to enable easier access to credit, to clarify the rules for aid in specific circumstances, to boost demand for new vehicles through coordinated actions at national level. According to Reuters, in March 2009, the EIB approved loans amounting € 3 million for the European automotive industry which is facing problems, in 4 countries: Germany, Italy, France and Sweden. The EC has approved a scheme for granting state guarantees, in early 2009, for countries like France, Germany and Great Britain for the car industry. As regards subsidized loans for green products aimed to produce “green” cars, the EC has approved a scheme for France, Britain and Spain.

Also, the current financial crisis affected the **air transport sector**. For this sector has been granted assistance to the Australian Airlines, which have taken the form of state loans guarantees, thus allowing the company to increase its funding opportunities on the market, despite the credit crisis and to continue their activity.

### **3. Romania state aid management in the context of the economic and financial crisis**

As the financial crisis entered in a phase marked by serious problems, the macroeconomic domestic prospects of our country worsened and the forecasts for 2009 made by the IMF show an economic decrease of 4%, the forecast budgetary deficit for this year is about 4.6% of the GDP corrected, whose value is 531 billion lei. In these conditions, the Romanian Government decided to contract a stand-by arrangement with the IMF, the European Commission, World Bank and with other international financial institutions, as a preventive measure in the context of the current crisis.

The effects of the economic crisis on the banking system, but also on the real economy had also affected Romania and worsened since October 2008. The lack of credit has affected in particular SMEs, which faced difficulties on funding, compared to large companies, and the effects may occur in short and medium term on the economic situation of the employees, but also in the long term, in the sense that delays or even waives certain development investments.

Romania’s negotiations with the international financial institutions have completed, on 25 March 2009, in a financing package of around € 20 billion, of which: € 12.95 billion are from the IMF, € 5 billion from the European Commission, € 1.2-1.5 billion from World Bank and € 1 billion from other international institutions (EIB, EBRD). On 26 March 2009, the IMF representative for Romania, Jeffrey Franks said that the arrangement will be granted for a period of 2 years, at an interest rate of approximately 3.5% per year, being consistent with the current market conditions, and the payment will be made in 3-5 years, no later than 2015. Also, the amounts held this year in May, should rise to € 11.8 billion, those from 2010 to € 7.1 billion and in 2011, the remaining of € 1.05 billion.

According to the declaration of the Minister of Economy and Finance, Gheorghe Pogea, on 25 March 2009, “this bold and proactive measure that the Government has taken (...) is likely to restore the investor’s confidence, to ensure a stable economy, but, above all, to ensure the financing of the investment projects (...) which remain at a high value of 7 % of GDP”. Under the new arrangement, the budgetary policy for the year 2009 will require adjustments to 0.85% of GDP of the primary expenditures, excluding the interest rates and also an increase of 0.25% of the additional revenue. There will be reductions by 37 million lei of the subsidies for public

entities and will be allocated funds to improve social protection, for the most vulnerable groups in this period of crisis. Meanwhile, the IMF demanded the reduction of the salary funds in absolute terms, proportional to a possible economic contraction of Romania, from 8 to 5% of GDP, in the following years, in the conditions of a constant GDP for the next period.

From 1 January 2007, the Competition Council is the contact authority in the relations with the European Commission and the actions taken in this period consisted in saving and restructuring measures for the enterprises from the Authority for State Assets Recovery (AVAS) and the Ministry of Economy portfolio, but also Eximbank's guarantee schemes, according to GEO no. 206/4 December 2008. The Romanian authorities intend to expand the scope of this state aid system to the economic agents from The Ministry of Economy.<sup>218</sup>

The amounts are allocated from the state budget through AVAS, representing revertible financial support in the form of loans with an interest rate at least comparable with the credits granted to healthier companies and, in particular, with a reference rate adopted by the European Commission. Besides the budgetary loans, there are also granted facilities to pay the tax, commercial and banking liabilities, consisting of staggered for a maximum period of 5 years. The granting period of State aid is up to 6 months from the takeover of the premium rate of the granted credit, following that, if loans taken from AVAS or guaranteed cannot be repaid, it is necessary to draw up a restructuring program or to initiate a liquidation procedure.

According to the Competition Council President's statement, Gheorghe Oprescu, on 3 April 2009, the Ministry of Economy and AVAS sent two state aid schemes for rescuing and restructuring the enterprises from their portfolios, in order to overcome the economic and financial crisis effects, and are discussions with the European Commission officials. In this context it was drawn up a draft Government Decision to establish a state aid mechanism which represents a legal basis for the preservation of jobs, further investments, access credit for enterprises which have a production for export etc.

State aid for rescue is granted as working capital for a period of six months, in order to rescue companies with difficulties, while in the case of restructuring aid the period may be extended if there are negotiations with the European officials. For the restructuring aid, after 6 months should be submitted a plan of reorganization or liquidation of the company. Also, the president stated that the maximum number of rescue state aids recipients is up to 15, for 2 years, and the total amount allocated will be around € 30 millions, while for restructuring state aids the annual potential number of companies will be about 50, throughout the years 2009-2010 and the budget is equivalent in lei to 180 millions. In order to support the rescue measures for the economic agents this draft decision states as necessary the allocation of 400,000 thousands lei from the state budget to AVAS budget for the years 2009 and 2010, which will monitor the implementation of State aid under this draft legislation, as a main *credit* release authority.

Another European measure is represented by the state aid schemes in the form of guarantees, with a granting period until the end of 2010, to the enterprises in difficulty. In this context, the Competition Council cooperates with Eximbank in order to grant state loan guarantees with 90% of the loan amount, which may be approved in the context of crisis. Now, it covers less than 80%. The scheme was already sent to the European Commission, following the pre-notification mechanism. The Eximbank budget is now about 15 millions lei.

Since 2007 has been developed a total of 68 state aid schemes and also de minimis aids (24 state aid schemes and 44 de minimis schemes). Of these, 22 schemes were designed based on the rules on state aid exempted from the notification to the EC, being approved by the Competition Council and transmitted for information to the EC, being accessed by the enterprises in order to receive funds. The Competition Council has had discussions with representatives of Management

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218 Oprescu, Gheorghe: Conference of the Romanian Competition Council, "Economic crisis and state aid perspective", Bucharest, 24 February 2009, p.9.

Authorities on the possibility of transforming certain de minimis schemes, where the aid is limited at € 200,000, in schemes under which the financial assistance can reach € 500,000.

In December 2008, the Romanian car industry took a severe hit and the government decided to grant state aids to Renault Dacia (€ 15.4 million) and auto parts suppliers: Delphi Diesel Systems Romania (€ 24.7 million), KS Atag Romania (€ 27.9 million), Calsonic Kansei Romania (€ 17.9 million) and Honsel (€ 37.4 million).

Herbert Ungerer, Deputy Director General of the General Competition Directorate from the European Commission, said during the Romanian Competition Council conference from February 2009 that have not yet received notification from Romania on the measures taken or planned to take in the context of the financial crisis.

#### **4. Conclusions**

State aid plays an increasing role in supporting the implementation of the Member States measures and enabling the clause stipulated in Art. 87 (3) (b) of the EC Treaty is justified in this period of financial crisis.

As the financial and economic crisis worsened since autumn of 2008, it became crucial the need for close European coordination of national aid measures, in order to avoid a subsidy race and damage the internal market. As Commissioner Kroes said: “Brussels can set the tone of response to the crisis and we can coordinate and enforce fairness, but we need all hands on deck”.

Because the financial crisis has a significant impact on the banking sector, it is of great importance the guidance provided by the European Commission in order to stabilize the financial markets, through rapid and coordinated actions. Since October 2008, the Commission issued several Communications as guidance on how Member States can take the right measures to support financial institutions, whilst avoiding competition distortions. In order to restore confidence in the financial institutions, boost demand, save jobs, was adopted “The Recovery Plan” which helps achieving the measures set by the Lisbon Strategy.

We find as very important the issue of the “Banking Communication” which mentions the general conditions for state aid, in order to be in compliance with the EU State aid rules, and focuses on granting guarantee schemes which cover the liabilities of financial institutions.

In this context of crisis, the Commission issued the guidance for another state aid instrument in order to restore and preserve the financial stability, as the recapitalisation schemes with their legal basis in the “Recapitalisation Communication”.

Also, for stimulate lending and avoid extending this crisis with banks that deal with impaired assets, which are likely to incur losses, like the US mortgage backed securities, a new guidance for the treatment of impaired assets in the EU banking sector was necessary. As the Internal market and services Commissioner Charlie McCreevy said: “If we don’t face up to this issue then we risk prolonging this crisis with zombie banks that are incapable of performing a useful role in our economies”.

Besides the state aid measures authorized by the Romanian Competition Council in order to support the enterprises from the AVAS and the Ministry of Economy portfolios and also the Eximbank’s guarantee schemes, the most important step is the stand-by arrangement with the IMF, the European Commission, World Bank and with other international financial institutions, as a preventive measure in the context of the current crisis.

We strongly believe that in this period of crisis, granting state aid is really justified in order to unblock lending to companies, to rebuild trust, but also to support continued investments.

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# THE FLAT TAX EFFECTS – THEORETICAL AND EMPIRICAL EVIDENCE IN WESTERN AND EASTERN EUROPEAN COUNTRIES

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*This paper takes a close look at the advantages and disadvantages of the flat tax and looks at its proven benefits and failings in some European countries which adopted it and its theoretical or possible effects on the economies of other European countries which refuse the idea of a single tax rate for all types of revenues. Although there is a basic format of the flat tax, there are multiple flat tax proposals that have been adopted in different central and Eastern European countries. The Western Europe feels differently. With heavy budget obligations, these countries reject flat taxes because they say their countries wouldn't be able to afford a cut in their tax revenues. But in the same time they are struggling to compete with the growing reliance on flat taxes of the East.*

*Keywords: flat tax, effects, benefits, failings.*

*JEL Classification Numbers: H21, H30, E62.*

## **1. Introduction**

Nowadays there is an extensive debate on what is called the major fiscal phenomenon of the last two decades: the flat tax. The flat tax is a tribute to fiscal simplification, a principled value held and espoused by the first great economist, Adam Smith. He advocated certainty, clarity and convenience as to an individual's own burden. These concepts typify a flat tax and demonstrate the general themes of classical liberalism.<sup>219</sup> The flat tax defined later by Hall and Rabushka is a cash-flow business tax plus wage tax at same rate. But the term 'flat tax' is now often used especially to designate a family of personal income taxes which are assemble but not identical.

Early experiences of flat tax reforms like the ones in Hong Kong and Channel Islands received little attention. Current interest sparked by the flat taxes of Eastern European transition countries from late 1990s, especially Russia in 2001 in which case the introduction of a low rate was quickly followed by 25 percent increase in real personal income tax revenues.<sup>220</sup>

Western Europe feels differently. To support large governments and sizable welfare payouts, many Western European countries impose a triple-tiered tax regime of Value-Added Taxes, akin to a sales tax, high taxes on corporate revenue, and personal tax rates that can exceed 50 percent. Eastern Europe's cheaper labor market and growing reliance on flat taxes leave Western European economies struggling to compete.<sup>221</sup>

## **2. Advantages and disadvantages of a flat tax**

Why is the flat tax seen as a magic formula for any fiscal system on the planet? Flat-tax advocates - and there are many- say that it encourages tax compliance and adds to the flow of foreign investors. In short the main benefits of a fiscal system based on a flat tax are the following:

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219 Evans, Anthony J., Flat tax: ideas and interest, Open Republic: July / August / September 2005, [http://www.openrepublic.org/open\\_republic/20050701\\_vol1\\_no1/articles/20050619\\_ft.htm](http://www.openrepublic.org/open_republic/20050701_vol1_no1/articles/20050619_ft.htm).

220 Keen Michael (International Monetary Fund, FAD), The Flat Tax Experience and Evidence, <http://www.cef-see.org/index.php?location=1094>.

221 Tzortzis, Andreas, Flat tax movement stirs Europe, <http://www.csmonitor.com/2005/0308/p01s03-woeu.html>.

- Reduced compliance costs: The complexity is a hidden tax, because the costs of determining a global progressive tax are sometimes extremely high. The flat tax instead is simple and clear for everyone and the spending with taxation is lower.
  - Reduced avoidance & evasion: A simpler tax system reduces the scope for legal tax avoidance, by removing many of the deductions, thresholds and anomalies on which most avoidance is based, and makes enforcement of taxes easier, reducing the possibility of illegal tax evasion. In addition replacing a system of higher rate taxes with a single, low, flat rate reduces the motivation for avoidance.
  - Instant Wealth Creation. According to Harvard economist Dale Jorgenson, tax reform would boost national wealth. It would do this in part because all income-producing assets would rise in value since the flat tax would increase the after-tax stream of income that they generate.
  - Reduced disincentives: Income tax is a great disincentive to investment (which has to be profitable enough to cover the tax as well as to give a return for the investor), to business start-ups or expansion (with few exceptions the tax system is usually more willing to tax profits than to give relief for losses), and for employment.
  - Fairness: some may say fairness is the greatest virtue of the flat tax. It is based on the idea of fairness learned in grade school - everyone should be treated the same. Rather than have politicians and their favored interests decide - for their own reasons - who should get favored treatment and who should be penalized, the flat tax sets a single objective standard. No matter how much money you make, what kind of business you are in, you will be taxed at the same percentage as everyone else.
  - Global competition brings economic growth: in the increasingly integrated global economy, nations are waging a battle between governments to attract investment and skilled workers by overhauling their tax codes to create a more attractive business environment. Tax competition facilitates economic growth by encouraging policymakers to adopt sensible tax policy. Today, thanks to competition, the average corporate tax rate in the European Union is less than 30 percent.<sup>222</sup>
- But whilst such a system looks beguilingly simple, beneath the surface the practical details are always more complex. Wherever flat taxes are used, they are always exercised in conjunction with more complex systems, merely adding another layer of regulations.
- There some hid disadvantages which cannot be seen only after a deeper analysis:
- Flat taxes are inherently regressive, meaning that the poor pay proportionately more than the rich, and so undermine the social democratic principle of richer helping poorer citizens for the public good. Such inequity is recognized and resented.
  - A main effect of the flat tax which can appear on the long term is the polarization of the nation's wealth in the hand of the few and the wealthy, giving the fact that a flat tax regime leaves more financial resources at the disposal of the rich.
  - The flat tax conducts to an unhealthy fiscal competition among different states. This phenomenon amplifies the migration of the capital and work force. This disadvantage can be eliminated by adopting some harmonization procedures which become absolutely necessary nowadays.
  - Flat taxes are too simple, losing necessary flexibility. Goods and services vary, so it would be wrong to tax luxury versions at the same rate as economy ones, or children's textbooks at the same rate as adult novels. Income taxes, by contrast, may encourage more labor to make up any shortfall, whilst tax credits given to low earners can ensure marginal rates stay below 100%.
  - Simply shifting administrative costs onto businesses will not help, as the Australian experience has shown that moving to flat or indirect taxes hit small business. An overly simple system does

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<sup>222</sup> Mitchell, Dan, Heritage Foundation, Tax Competition And Fiscal Reform: Rewarding Pro-Growth Tax Policy, <http://www.cato.org/events/russianconf2004/papers/mitchell.pdf>.



not allow in time for additional incentives to potential investors, causing a loss of international competitiveness.

- The transition to a new system can be complex and costly to begin with, leading to a period of confusion. The ability to discover new means of evasion will always be present, especially during the changeover. They are also inflexible, unlike income taxes where 'fiscal drag' and 'fiscal boost' act as automatic stabilizers in boom and bust periods respectively.<sup>223</sup>

### **3. The flat tax effects – empirical evidence in Eastern Europe**

Flat taxes used to be the norm in Western countries. But in the 19th century, Communism founder Karl Marx listed a "heavy progressive" tax as a top priority. Soon, higher income-earners were being taxed at higher rates around the world. The irony today is that every flat-tax country (except Hong Kong) is a former Communist nation.

Since 1994, the flat tax has become an important part of the fiscal landscape in Central and Eastern Europe, from Estonia in the North, to Russia in the East, Georgia in the South, and Slovakia in the West. They were joined by Latvia, Ukraine, Serbia, Romania, Macedonia, Albania and the Czech Republic.

Only three actual reforms have been examined in the literature: the 2001 Russian reform by, among others, Ivanova et al. (2005), the 2004 reform in the Slovak Republic by, among others, Brook and Leibfritz (2005) and partially the 2005 Romanian tax reform by the Group of Applied Economy. In the Russian case, the reform was followed by significant real growth in tax revenue, but there was no strong evidence that this was caused by the flat tax or by improved law enforcement, nor could any positive labor supply responses be identified. The Slovakian reform was expected to be revenue neutral, to increase the level and efficiency of capital formation and enhance the incentives of unemployed workers to seek work. While it is true that most real world reforms have been very recent, research on their effects is probably also limited due to the lack in those countries of high-quality (micro-) data for the pre-reform period.

#### ***Russia: the magic shift***

The Russian flat tax experiment is particularly interesting: after the introduction of flat taxes, and effective personal income tax rate cuts, tax revenues increased substantially and almost immediately. Furthermore, they increased much faster than labor supply and output.<sup>224</sup>

Russia introduced in 2001 a flat 13 percent personal income tax rate, replacing the three tiered, 12, 20 and 30 percent previous rates. The tax exempt income was also increased, further decreasing the tax burden. Considering social tax reforms enacted at the same time, tax rates were cut substantially for most taxpayers. However, personal income tax revenues have increased significantly: 46 percent in nominal and 26 percent real terms during the next year. Even more interesting personal income taxes revenues have increased from 2.4 percent to 2.9 percent of GDP—a more than 20 percent increase relative to GDP. Personal revenues continued to increase to 3.3 percent during the next year, representing a further 14% gain relative to GDP. Furthermore, even official estimates showed increased tax compliance.<sup>225</sup>

One study of the IMF shows that tax rate cuts in Russia increased tax compliance and that tax revenues increase in response. Tax rate cuts can affect tax revenues through two main channels: Affecting the tax base or affecting compliance with the tax rules.<sup>226</sup>

#### ***Slovakia: the Slavic tiger***

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223 Rose Jacqueline, Flat Tax, [http://www.idebate.org/debatabase/topic\\_details.php?topicID=169](http://www.idebate.org/debatabase/topic_details.php?topicID=169).

224 Tamás K. Papp, Előd Takáts, Tax Rate Cuts and Tax Compliance—The Laffer Curve Revisited, 2008 International Monetary Fund, [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1087186](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1087186).

225 Ivanova, Anna, Michael Keen and Alexander Klemm (2005) The Russian Flat Tax, Economic Policy, July: p. 397.

226 Tamás K. Papp, Előd Takáts, Tax Rate Cuts and Tax Compliance—The Laffer Curve Revisited, 2008 International Monetary Fund, available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1087186](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1087186).

In 2003 Slovakia has adopted flat tax of 19% both for corporation and individuals. Before deciding to implement the new system, the Slovak government has conducted five surveys in order to eliminate a negative effect of the flat tax on the economy. "More transparency, less tax dodging", this was the slogan used by Slovakia in implementing the flat tax system. In 2004 Slovakia received from the World Bank the title of "The most reformed economy of the globe". The flat taxing system has replaced a mechanism with 90 tax exceptions, 19 non taxed income sources, 66 exonerations and 27 products with different level of taxation. In the same time, Slovakia has eliminated the VAT reduced rates and established a new unique rate for the VAT of 19%. The consequences were: in 2003 in Bratislava there were 22 new projects and 7500 new jobs created and in 2004 there were 47 new projects and 12700 jobs were created.

The flat tax and other reforms have improved economic performance. Economic growth, after adjusting for inflation, has averaged 6.6 percent per year. The flat tax reform has generated a supply-side feedback effect. Because lower income tax rates stimulated additional productive behavior, personal income tax revenue collections in the first year were higher than forecasted by static revenue estimates. Likewise, value-added tax collections were lower than forecast in response to the generally higher tax rate. Slovakia's system is widely seen as a model for other nations, leading one economist to state, "The Slovak public finance reform will be studied in economic textbooks all over the world one day."

A study conducted by OECD Economic Department has shown the following results about the effects of the flat tax in Slovakia: First, the reforms were expected to improve both the level and efficiency of capital investment in Slovakia – although further improvements could have been made by eliminating the double taxation on projects financed by retained profits. Second, the combination of the tax and social benefit reforms has enhanced the incentives for unemployed workers to seek work, which should result in higher labour supply. Labour demand should also have increased, thanks to the more flexible labour market. However, as overall taxes on labour remain high, labour demand for very low skilled workers may not pick up without further reforms to reduce the cost of employing such workers. With respect to equity considerations the assessment is less clear cut. On the one hand the flat personal income tax has benefited both low income earners and very high earners, particularly those with families, while middle-income earners, particularly single earners appear to be somewhat worse off. The increase in VAT and the welfare reform also have distributive effects. The net result of these reforms has been a significant cut in the real incomes of social beneficiaries who are not working. On the other hand, by raising labor productivity and reducing structural unemployment the reforms have the potential to benefit the low-skilled population also – provided other public policies are in place to facilitate this outcome.<sup>227</sup>

#### ***Romania: unaccomplished flat tax reform***

Romania adopted 16% flat tax regime in 2005. The tax revenues of the public budget increased the following years substantially, but the increase was generated mainly by the revenues from VAT and not by the personal income tax revenues and corporate income tax revenues. This indicates the fact that the reform stimulated consumption and not investment and tax compliance. A study conducted by the Romanian research organization GEA (Group of Applied Economics) shows that the effects of the flat tax on income distribution were not the ones which were predicted initially. 40% of the benefits of the flat personal income tax were experienced by the very high earner, which represent 10% of the population. 84% of the high earners` flat tax benefits and 74% of low earners` flat tax benefits were consumed.

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227Brook, A. and W. Leibfritz (2005), "Slovakia's Introduction of a Flat Tax as Part of Wider Economic Reforms", OECD Economics Department Working Papers, No. 448, OECD Publishing, p. 3, <http://titania.sourceoecd.org/vl=833403/cl=13/nw=1/rpsv/cgi-bin/wppdf?file=51gl9fftr46k.pdf>.

The labor incentives were very weak taking in consideration the fact the marginal effective tax rate for the ones who gain less than the average wage is still high. The METR lowers significantly for high earners who already had important salaries.<sup>228</sup>

In the same time the 16 percent flat tax registered in one way a success in relaunching Romania's economic growth, not only because it provided citizens increased buying power, but also because it made it less expensive for companies to hire top managers.

#### 4. The flat tax effects – theoretical evidence in Western Europe

In the Western Europe, home to governments that generally profess the "social market economy" of high taxes and redistribution of income have appeared the first signs that the flat tax could become a reality. The increasing of unemployment and the decreasing rate of economic growth may change the view on the taxation policy. The flat tax is the central point of discussion regarding the taxation policy in Great Britain, Germany, Italy and Greece.

The question that follows is in what way the flat tax would affect the income distribution and the work incentives in these countries.

As a recent study shows that in terms of distributional measures two groups of countries were differentiated: inequality, polarization, (relative) poverty and richness are rather high in Southern European countries (Greece, Portugal and Spain) and the UK, whereas they are rather low in Continental Europe (Austria, Belgium, Germany, Luxembourg) and Finland. In terms of redistribution two different groups became visible: progression is rather low in Finland, the UK, Germany, Austria and the Netherlands, whereas it is rather high in Belgium, Greece, Portugal, Luxembourg and Spain. When looking at both dimensions a matrix with 4 groups emerges (see Table 1) resembling the modified typology of Esping-Andersen<sup>28</sup>: Mediterranean countries with high inequality and progression, Anglo-Saxon (or liberal) with high inequality and low progression, Continental European (or conservative) with low inequality and high progression and Nordic (or social-democratic) countries with low inequality and progression. This classification, however, is not completely consistent with Esping-Andersen (1990) as Germany and Austria are classified as social-democratic welfare states whereas Esping-Andersen sees them as prototypical conservative Continental European welfare states.<sup>229</sup>

**Table 1: Classification of countries based on the existing tax-benefit systems**

|             |      | Inequality, Poverty, Richness     |                               |
|-------------|------|-----------------------------------|-------------------------------|
|             |      | Low                               | High                          |
| Progression | Low  | AT, FI, GE<br>(social democratic) | UK<br>(liberal)               |
|             | High | BE, LU, NL<br>(conservative)      | GR, PT, SP<br>(Mediterranean) |

All in all the study results show that revenue neutral at flat tax reform cannot overcome the fundamental equity-efficiency trade-off. However, in some cases such as Greece, Portugal and Spain an increase in both equity and incentives is possible. These countries have the typical Mediterranean welfare state regime, characterized by high inequality, poverty, richness and polarization of the income distribution. These distributional characteristics imply a lack of a well established middle class. Therefore, the distributional effects of a flat tax regime are less adverse than in countries with a more equal income distribution. Switching to a tax regime in this setting

228Voinea, Liviu, Mihaescu, Flaviu, The Impact of the Flat Tax on the Inequity in Romania, The Group of Applied Economy, 2008, <http://www.gea.org.ro/index.htm>.

229Paulus, Alari, Peichl, Andreas, Effects of flat tax reforms in Western Europe on equity and efficiency, Institute for Social and Economic Research, 2008, [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1278921](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1278921).

can reduce inequality and increase efficiency in terms of labour supply incentives. However, the resulting .at rates are rather high.<sup>230</sup>

## 5. Conclusion

The flat tax systems in Eastern European countries proved their benefits and failings. The recent economic crisis tends to affect a lot these economies and may also affect their fiscal strategy. But on the short term the abortion of the flat tax regimes is unlikely to happen.

In most Western European countries with mature tax systems which are the result of the past political redistributive game over many generations, the most likely losers from a flat tax are likely to be the past beneficiaries—the middle classes—who will use the democratic process to resist it. The back tracking on the proposal in the US, Germany and probably in the UK suggests a full-blooded flat tax, may be infeasible in these mature tax systems. Thus, the future of the flat tax number might lie in countries which, like the East Europeans, are moving from the plan to the market.<sup>231</sup> But the economic crisis can also change the fiscal game and the introduction of flat tax regimes might be the winning card for the economies of some of these countries.

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<sup>230</sup>Ibidem.

<sup>231</sup> Lal, Deepak, The Flat Tax for Developing Countries, [http://www.cato.org/pub\\_display.php?pub\\_id=6009](http://www.cato.org/pub_display.php?pub_id=6009).

# EMPIRICAL STUDY REGARDING THE DEVELOPMENT OF AGRICULTURAL INSURANCES IN ROMANIA

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*Abstract: Maintaining a certainty degree for the agricultural producers in order to obtain stable and efficient results makes it both necessary and welcomes the protection through insurance and reinsurance in this field. In this paper we carry out an analysis regarding the penetration degree of agricultural crops insurance in Romania, as well as regarding the government implication as an insurer. The authors' conclusions is that from the 43 insurance companies that presently operate on the market, only 11 offer agrarian insurance contracts. To reach the level of the developed countries in the European Union, where the degree of insurance covering of agricultural fields is situated around an average of 65-70%, for Romania there is a 48-53% segment of the total insurable agricultural field that still needs to be covered.*

*Keywords: agricultural corps' insurance, gross premiums subscribed, damage rate, insurance coverage*

*JEL code: G22 Q18*

## **1. Introduction**

Natural calamities and other highly dangerous situations existing in agriculture are the factors that can overturn the results of the agricultural process. That is why maintaining a certain degree of certitude in what concerns the obtainment of stable and efficient results implies the protection through insurance and reinsurance in this field.

## **2. Material and Methods**

As a working material the authors have used information and statistics data published in different papers or specialty books and as a working method we have used observation, analysis, selection, and comparison and statistics interpretation.

## **3. Results and discussions**

### ***1. Recent evolutions of the agricultural insurance in Romania***

With a percentage of approximately 32% of the total work force, in agriculture, but with a contribution to the GDP formation of only 10%, Romania's agriculture is an important segment of the economy.

There are many risks that threaten the agricultural crops, causing farmers' important losses each year and, at larger scale generating big losses to the national economy as a whole. As risks we can mention some events that already have a chronic character, like: draught, floods, winter freezing that have an objective character, outside the men's possibility of intervention. Besides these objective risks, we can also identify some subjective factors with structural (lack of proper equipment and tools, of different sorts of selected seeds, as well as the lack of financial resources in order to get them) and conjectural character (price variations from year to year, theft, etc.)

An adequate measure of protection against agriculture specific risks and against their effects is the transfer of those risks through insurance. Agricultural insurances have a significant role in stimulating investments in agriculture and in stabilizing revenues of agricultural producers.

Agricultural insurances that are already used in Romania have as guarantee the function of compensation **of damages caused by natural calamities and different accidents and diseases**, as well as the function of **preventing damages**. Hence, the main categories of insurances practiced in this field are:

- insurance of agrarian crops, grape wine and orchard harvest;
- animals' insurance.

The risks against which the insurances are made are excessive and time persistent drought, that affects not irrigated soils; floods; excessive and durable rain; excessively low temperatures, under the resistance limit of plants; thick snow layer that produces damages in both the vegetal and animal sector; as well as other extended disasters and catastrophes. In a larger way we could say that it is insured, the quantitative and qualitative damages, as well as animal mortality, or the need of their scarification, produced through a destructive manifestation of some extended natural catastrophes and diseases. Insurance companies do not cover catastrophic risks like: drought, winter freeze, floods; long term rain; weir rupture; river floods etc. These last ones, like many other similar ones remain under government or local authority protection, hence being covered partially by public resources.

The scope of the optional agrarian insurances was and continues to be relatively reduced. In the agrarian year 2006-2007 there were only 1,8 million hectares insured, out of a total potential of around 10,5 million hectares, thus resulting only a 17% degree of insurance coverage of the agrarian fields. The insured areas have only grown with 20-25% according to the agrarian year 2005-2006. In order to reach the level of the developed countries in the European union, where the degree of insurance covering of agricultural fields is situated around an average of 65-70%, for Romania there is a 48-53% segment of the total insurable agricultural field that still needs to be insured.

In order to highlight the development degree of the agricultural insurances we have focused on the analysis of this domain in the period 2007-2008. Regarding the first half of the year 2008, in the market for agricultural insurances, the value of the gross premiums subscribed is 41,40 million lei i.e. EUR 11,3 million<sup>232</sup>. According to the latest data published by the specialized website [www.lasig.ro](http://www.lasig.ro), in the whole of year 2008, the agricultural insurances represented only 0,92% of the total national subscriptions. With an absolute value of around EUR 22 million (RON 81,3 million), this represents a nominal growth of 8,7% in euro, which is way beyond the medium growth of the Romanian specialized market in this domain, situated at 17%.

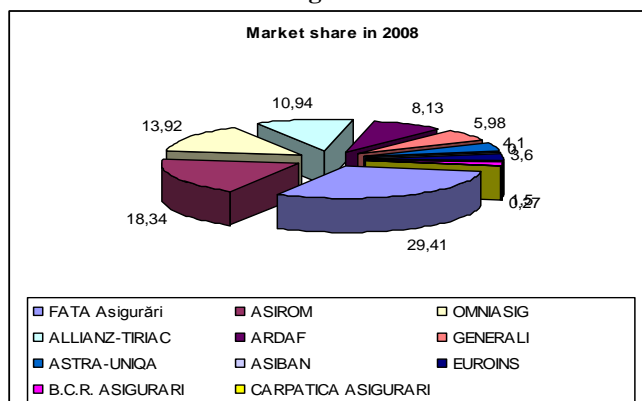
The EUR 11,28 million value of subscribed premiums in the first semester of 2008 also represents under 1% of the total subscriptions received by the Romanian insurance companies, which is the cost paid by farmers for the coverage of the 2008 spring crops. As a comparison, in 2007 the total premiums subscribed for the agricultural insurances has reached RON 54,76 million (i.e. EUR 16,41 million). At the same time, the volume of the compensations paid for the damages of the agricultural crops reached RON 5,31 million (EUR 1,45 million), out of which the highest payments have been made by ALLIANZ-TIRIAC (RON 1,88 million), ASIROM (RON 0,92 million) and FATA Asigurări (RON 0,66 million). Among the insurers that practice agricultural insurances we could find as a leader FATA Asigurări, which in the first semester of 2008 has gathered a volume of RON 12,18 million in gross premiums (it was on the third place in 2007 with a total gross value of the premiums subscribed of RON 8,77 million), hence with a

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232 According to the specialized website [www.lasig.ro](http://www.lasig.ro)

market share in total agricultural insurances of 29,41%. In the company's portfolio this share equals 47,6%.

**Figure 1**



Source: [www.lasig.ro](http://www.lasig.ro)

On the next places in the between the first five insurance companies we find ASIROM, with a market share of 18,34% (1<sup>st</sup> place in 2007 with) and OMNIASIG, with 13,92% of the market (6<sup>th</sup> place in 2007). They are followed y ALLIANZ-TIRIAC, with a 10,94% market share (2<sup>nd</sup> place in 2007) and ARDAF with 8,13% market share (4<sup>th</sup> place in 2007).

The compensation activity can be characterized on one hand, by the volume of compensations paid for the insured corps and, on the other hand by the damage rate calculated as a ratio of the total premiums paid for the agricultural insurances and the value of the compensation paid to insured farmers for the damages of the agricultural crops.

From an agro-meteorological point of view, the agrarian year 2006-2007 can be characterized as an atypical one. Late spring freezes have occurred at the beginning of May, that have damaged mainly the grapevines, fruit trees and vegetables, as well as very hot days that led to drought, followed shortly by heavy rains and storms, between May and September 2007, plus floods in some areas. The described happenings have caused losses because of the destruction of the harvest. The damages encountered have been rather big, so the insurance companies had to pay, a volume of compensations of approximately RON 48,3 million at a total value of premiums raised of 53,7 million<sup>233</sup>. In this case the damage rate calculated as mentioned above reached the level of 89,94%<sup>234</sup>.

**Table 1**  
**Compensations paid for agricultural insurances in the period 2007-2008**

|    | Insurance Company | COMPENSTATIONS PAID |               |               |               | Damage rate and the place in the top of the compensation payers in 2007 |
|----|-------------------|---------------------|---------------|---------------|---------------|---|
|    |                   | Q1 I 2008           |               | 2007          |               |   |
|    |                   | EUR -million-       | RON -million- | EUR -million- | RON -million- |   |
| 1. | FATA Asigurări    | 0,18                | 0,66          | 0,60          | 2,01          | 22,9% (4)   |
| 2. | ASIROM            | 0,25                | 0,92          | 1,51          | 5,02          | 29,5% (2)   |
| 3. | OMNIASIG          | 0,08                | 0,29          | 0,04          | 0,12          | 12,6% (8)   |

233 according to the specialized website [www.lasig.ro](http://www.lasig.ro).

234 There is no a priori established measure for the damage rate.

|     |                     |      |      |      |       |           |
|-----|---------------------|------|------|------|-------|-----------|
| 4.  | ALLIANZ-TIRIAC      | 0,51 | 1,88 | 6,04 | 20,16 | 133,6%(1) |
| 5.  | ARDAF               | 0,07 | 0,27 | 0,36 | 1,21  | 21,0%(5)  |
| 6.  | GENERALI            | 0,11 | 0,42 | 0,89 | 2,97  | 67,6%(3)  |
| 7.  | ASTRA-UNIQA         | 0,00 | 0,00 | 0,18 | 0,61  | 79,2%(6)  |
| 8.  | ASIBAN              | 0,11 | 0,40 | 0,01 | 0,04  | 3.6%(9)   |
| 9.  | EUROINS             | -    | -    | -    | -     | -         |
| 10. | B.C.R. ASIGURARI    | 0,10 | 0,38 | 0,06 | 0,22  | 26,8%(7)  |
| 11. | CARPATICA ASIGURARI | 0,02 | 0,08 | -    | -     | -         |
|     | TOTAL               | 1,45 | 5,31 | 9,70 | 32,36 |           |

**Source:** Specialized website [www.lasig.ro](http://www.lasig.ro)

## 2. Government involvement in agriculture insurance

The reduced degree of insurance coverage for the agricultural crops in our country, together with the fact that disaster risks have raised in the last years has determined a more active implication from the state as an agrarian insurer. In this way, in 2002, the Romanian government has issued Law 381 regarding the compensations paid in case of calamities in agriculture. As a matter of fact its implication in agricultural insurances regard the financial support for a part of the insurance premium for the risks to crops, animals, birds, bee families and fish, that mere mentioned in an ministry order. In 2007, the state subventions have reached 50% of the total premiums, with a purpose to increase the demand for agricultural insurances from the Romanian producers. For financial reasons, in 2008 there were no more such subventions.

This practice is not specific for Romania. It has developed in many countries, with a purpose for supporting the agriculture production and producers. As an example, we present the situation of the subventions for insurance premiums in states with tradition in this direction, were it can be easily noticed the support given to agriculture through the compensation of a part of the insurance premiums.

**Table 2.**  
**Subventions given by the state for the agricultural insurance premiums**

| Country                  | Risks covered by subsidized insurances | Subventions received as a percentage in the total premiums |
|--------------------------|--|--|
| France                   | Multiple risks                         | 60%  |
| Italy                    | Hail storm, freezing, drought          | 50% for freezing, 80% for the remaining risks              |
| Austria                  | Multiple risks                         | 50% for hail risk and freeze                               |
| Greece                   | Multiple risks                         | 50%  |
| Spain                    | Multiple risks                         | 55%  |
| Canada                   | Multiple risks                         | 50%  |
| United States of America | Multiple risks                         | Between 35% and 100%, according to the risks               |

**Source:** Transformation made for Martin Odening "Insurance of Climat risc In Agriculture", ICAR Forum, Bucharest, 2008.

Second, according to the specifications of the law 381/2002 regarding the compensation in case of natural disasters for agriculture, the state gives compensations for agricultural producers that were damaged by natural disasters, as well as diseases that generate natural disasters. In this way in the period 2003-2007, the Romanian government has reimbursed agricultural crops of a total surface of 2.142.782 hectares, as a result of natural disasters produced as follows:

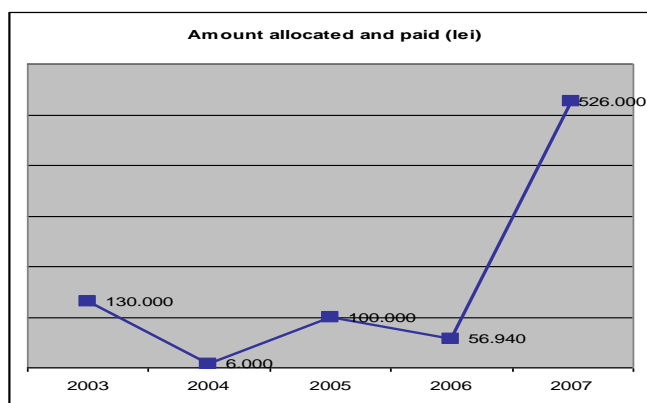


**Table 3**  
**Devastated agricultural areas in the period 2003-2007 and state disimbursements**

| <i>Year</i>                                      | <i>Devastated area (hectares)</i> | <i>Calamity</i> |
|--|-----------------------------------|-----------------|
| 2003   | 432.552                           | drought, freeze |
| 2004   | 11.375                            | drought         |
| 2005   | 240.178                           | floods          |
| 2006   | 111.760                           | floods          |
| 2007   | 1.346.917                         | drought         |
| <i>Total devastated area between 2003 - 2007</i> | 2.142.782                         |                 |

**Source:** MADR.

The total value of the amounts paid by the state in the same period to producers for the damaged crops has seen the following evolution:



**Figure 2**

Currently the compensation for the losses incurred by producers, individuals or firms, because of natural calamities and diseases is only made for crops, animals and birds that gave been insured by the insurance companies. Administration of the amounts meant to compensate the producers' losses is done by the resort minister. Compensations are given in the following cases:

- for crops and plantations affected by natural disasters, only for damages that exceed 30% of the production, with a maximum of compensation of 70% out of the expenses until the date of the insured event;

- for animals, birds, bee families and fish, the compensations are maximum 80% of the insured value, minus the value of the resulted sub products, that can be valued according to the enforced laws.

The expenses made with crops are being established through the frame estimates given by the Agrarian Economy Institute, considering only expenses with seeds, soil fertilizers, pesticides, and chemical fertilizers, mechanical or manual works. The insurance contract must end until 15 of December for the fall seeded crops and until 31<sup>st</sup> of May for the cultures established in spring for plantations.

#### **4. Conclusions**

*The first conclusion* that can be drawn form the above study is that the insurance coverage for the agrarian crops is still reduced as compared to the agricultural potential, but also compared with the developed countries in the European Union. As it has been proven according to the data, for Romania there is still a segment of 48% - 53% that needs to be covered by insurances, out of the

total insurable agricultural area. On one hand, this difference is difficult to catch up, but on the other hand, it represents an important potential for the agricultural insurance evolution in our country.

*The second conclusion* that can be drawn from this study is related to the role of the government as an insurer in agriculture. The protection offered by the state is limited to a reduced number of risks and, the compensations are conditioned by the existence of optional insurance contracts for crops in case of calamities. In our opinion this conditioning is meant to protect as much as possible the agricultural producer in the case of a disaster that threatens its assets. The state involvement, in the following years will increase, from our point of view. The state will remain the main insurer for disaster risk, while for the ordinary ones, that only affect few producers and have a random distribution; the protection will be effected through private insurances. For 2009 there is a project of law that stipulates the possibility for compensations for damaged cultures, even if there is no insurance contract for them, in which case the compensations given by the state would be around 50% from the values given for damaged cultures that have been insured.

*A third conclusion* is that agrarian insurances have a reduced incidence because of their high costs. The coverage of crops, as it has already been noticed, is risky for many insurers because of the increased frequency and intensity of risks, because of which, in some cases, the insurance premiums reach 6-8% of the insured value. The subventions given by the state for the agrarian insurance premiums could be the base for a durable development for this segment, on one hand and, on the other hand, for Romanian agriculture, thus being able to foster economic growth even in an unfavorable climate, with specific risks. This measure could stabilize farmers' income.

As a corollary of our conclusions we support the necessity for agricultural insurances. moreover, we propose a complex and integrated insurance system that includes, along with agricultural crops and animals' insurance, also a complex household insurance, that includes building and household inventory insurance.

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# COMPARATIVE STUDY REGARDING THE EVOLUTIN OF PRIVATE PENSION FUNDS IN ROMANIA (SECOND PILLOR)

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*Abstract: The goal of this paper is to present the basic characteristics of the Romanian private pension system as well as its evolution during a period of 43 weeks from 20<sup>th</sup> June 2008 to 10<sup>th</sup> March 2009. The paper begins by describing the legal work frame of the system and carries on by using basic descriptive statistics operations to emphasize the differences between the existing pension funds. The paper also tries to foresee, using Mathematica, the future values of the yields of four pension funds.*

*Keywords: Private pension, pension funds, yield, future value.*

*JEL Code: G23*

## **1. The premise of the introduction of private pensions in Romania**

At present the public pension system in Romania, a system that is operating on the principle of redistribution between generations, ensures pensioners a replacement income of approximately 40% of the average gross wage in the economy. In these circumstances it is indispensable to supplement the public pension with a private pension schemes where the contributions raised from the policyholders are accounted for in individual accounts and are fructified over the entire period of accumulation, so that in the decumulation phase the money obtained should increase. The pension obtained from the public system, supplemented with that obtained by the policyholders after participating in a private pension fund, is able to give pensioners a decent replacement income.

Besides the above motivation, in recent decades, two complementary phenomena has led to the need for an alternative to the public system and namely: an aging population and a declining birth rate. Both had the effect of modifying the normal report value of the active population / inactive population, creating strong pressures on the active population and on the entire public pension system. Forecasts for the coming decades indicate further deterioration of this report. According to a study conducted in 2006 by the Department for Economic and Social Affairs of the UN, in 2020 the population aged over 65 will represent 17.5% of the total population, and by 2050, the share of this population will be 30% of the population.

To cope with these pressures from the public system, many countries have decided to implement multi-pillar pension schemes. This way, through the reform undertaken in the field, in Romania were implemented two new components of the pension system: Pillar II (mandatory privately managed pensions) and Pillar III (voluntary privately managed pensions).

Shareholding members in pension funds (the insured) are persons aged up to 35 years, which are contributing to the public pension system. They are required to participate in a pension fund that is privately managed. There is a second class of participants, which are the taxpayers aged between 35 and 45 years that are now contributing to the public pension. For them, participation in privately managed funds covered by pillar II remains their option. For each of the participants to the private pension fund, an individual account is created in which monthly contributions and the investment resulting from the contributions to the fund will accumulate. In the first year collecting the contributions (2008), the amount was 2% of the base (the same basis of calculation used to determine the public contribution to public pensions). Within the following 8 years, the

rate of contribution shall be increased with 0.5 percent per year, starting from January 1st of each year, which will add up to 6%. After just one year, the Executive has decided ceasing growth contribution by 0.5 percent for 2009, arguing the decision through the excessive deficit of the social security budget, from which the contributions would be redirected.

Each participant adhering to a fund under the contract of membership, will benefit from an opened account in which the afferent individual account units are retained, and the participant complies with the restriction not to participate simultaneously to several pension funds. Note that the asset held by any participant may not be pledged or sold, and also it can not be subject to enforcement.

For a management in accordance with the law, currently in our country there are 14 pension funds managers, namely: AIG Pension Fund, ALLIANZ-TIRIAC Private Pensions, The Pension Fund Bancpost, BCR Pension Fund Administration, BRD Pension Fund, BT AEGON, AVIVA Management Society of a Private Pension Fund, GENERALI Pension Fund, ING Pension Fund, INTERAMERICAN Management Society of a Private Pension Fund, KD Pension Fund, Omnisig Pensions, OTP Pension Fund, PRIMA PENSIE Pension Fund. The fund administrator operates as a joint stock company formed solely for the purpose of managing pension funds and, optionally, providing private pensions.

Depending on the investments they made, each pension fund assumes a certain risk level and expects to obtain a satisfactory yield rate. Although the level of risk undertaken depends on the investment strategy and risk affinity for each fund, the law imposes certain limits to ensure safety, quality, liquidity and profitability of investment. Thus, in accordance with the law, a pension fund can invest in: money market instruments (with a maximum of 20% of fund assets value), government bonds (with a maximum of 70% of the total fund assets), bonds or other securities issued by local authorities (with a maximum 30% of the total fund assets), securities traded on regulated and supervised markets (up to 50% of the total fund assets), government bonds and other securities issued by third countries (to a maximum of 15% of the total fund assets), bonds and other securities issued by local authorities of third countries (to a maximum 10% of the total fund assets) or by foreign non-governmental organizations, if the instruments are listed on the stock market and they meet the criteria for rating (in proportion than 5% of the total fund assets), other instruments provided by the Supervisory Commission of Private Pension System.

The assets of each privately managed pension fund are kept by the Depositary institution. According to the law number 23 of 2007, the depositary is a credit institution in Romania, approved by the National Bank of Romania, in accordance with the banking laws or a branch in Romania of a credit institution authorized in one EU State or that is part of the European Economic Area, approved by the Supervisory Commission of Private Pensions System, for the activity of storing, according to the law, which they are assigned to storage safely, all assets of each privately managed pension fund. Currently in Romania the operating depositaries are : Romanian Commercial Bank SA, BRD - Groupe Societe Generale SA, Bancpost SA, and ING Bank NV Amsterdam Bucharest Branch.

The institution responsible for regulation and supervision of privately managed pensions is the Supervisory Commission of Private Pensions System, established by GEO 50/2005. Its main mission is to regulate, coordinate, monitor and control the activities of private pensions system and protect the interests of the participants and beneficiaries by ensuring the efficient functioning of the pension system and provide information on it.

## **2. Distinctive features of the pension funds administered by Pillar II managers**

To characterize the effectiveness of the activities conducted by the existing pension funds and to make a comparison between them we started from the annualized yield rates of pension funds, which are published weekly [3]. These yields are used because they allow comparison with other

investment yields made on other levels and financial markets. The first processing of these data relate to determining the variation in absolute terms between the initial and the final yields, the average, the variance, the standard deviation of each pension fund based on well known formulas. Thus, we obtain:

Table 1 Basic Statistics

Operators

| Pension Fund        | $\Delta_{38/1}$ | Average   | $\sigma^2$ | $\sigma$ |
|---------------------|-----------------|-----------|------------|----------|
| ING                 | -23.68          | 20.6863   | 42.1715    | 6.49396  |
| Vital               | 1.35            | 11.0837   | 0.4045     | 0.636003 |
| AIG                 | 11.68           | 5.00442   | 8.11513    | 2.84871  |
| OTP                 | -1.12           | 5.08047   | 26.6571    | 5.16306  |
| Prima Pensie        | -0.77           | -5.80349  | 7.7785     | 2.789    |
| Interamerican       | 14.1            | 4.52628   | 30.3161    | 5.50601  |
| Aripi               | 14.97           | 5.23326   | 27.8414    | 5.27649  |
| Omniforte           | 14.78           | 1.16233   | 40.7095    | 6.3804   |
| Pensia Viva         | 14.7            | 0.0362791 | 65.8041    | 8.11197  |
| Bancpost            | 13.34           | -4.42651  | 14.8325    | 3.8513   |
| AZT Viitorul<br>Tau | 24.13           | 4.84535   | 38.5666    | 6.2102   |
| BRD                 | 19.09           | -1.91651  | 20.8363    | 4.56468  |
| KD                  | 21.23           | 0.0567442 | 35.206     | 5.93346  |
| BCR                 | 29.89           | -0.372558 | 172.973    | 13.1519  |

#### Results and interpretations

Analysis of the submitted data shows that ING had the least favorable evolution in absolute terms, which registered a decrease in annualized yield of 24.57% from 41.07% in the first week to 17.39% in the last one. Also OTP and PRIMA PENSIE recorded a negative evolution. In absolute terms the best development was at BCR which increased from -19% declared yield after the first month to 10.89% declared yield at the end of the 41st week. If we relate the evolution of yields over the entire period, ING is the leader, getting an average yield of 20.6863% and the yield corresponding to the PRIMA PENSIE fund confirms the negative trends established earlier. Another issue arising from this table is the degree of homogeneity of the batch yields of each fund. This degree is obtained by comparing the mean with the variance and the standard deviation. So it can be concluded that the series of yields of funds such as PRIMA PENSIE, BRD and BCR are heterogeneous, and the AIG series is a series with a high degree of homogeneity. In a further deepening of the comparison, we chose the series of yields from ING pension fund, BCR and KD. For each of these series of yields we found a function that highlights the most faithful evolution and we forecasted 3 future values using that specific function. This way, we adjusted the 2 series using the graphics method, and once we determined each graph, we applied the analytical method to determine the coefficients of the function on which the adjustment and extrapolation will take place. All these methods have been put into practice through Mathematica using the least squares method. For all tree functions a statistical proof was carried on.

In the case of the ING pension fund the function that best approximates the evolution is given by

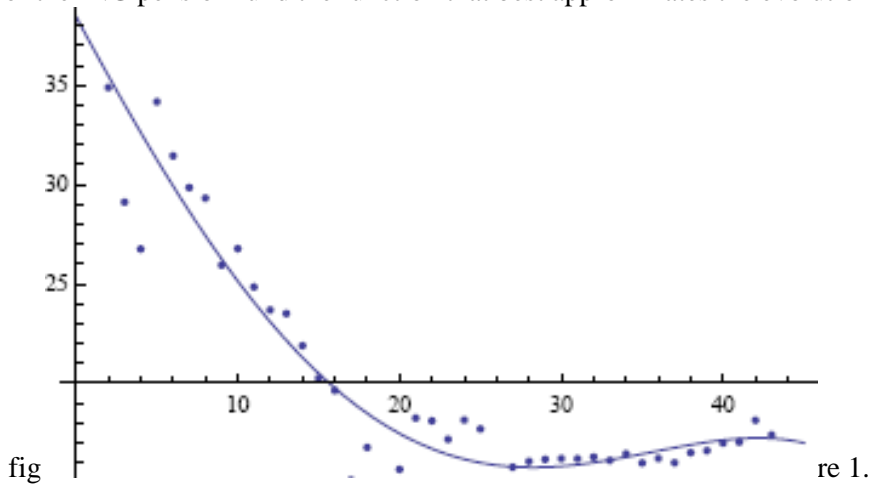


Figure1. ING yield rate

A first conclusion that can be disengaged from the graph is that during the 43-week yield the fund has recorded a significant decrease. As can be seen the graph of this function refers to a third degree polynomial. Thus the function we were seeking is  $Y: [1, \infty) \rightarrow \mathbb{R}$ .

$Y_t = 38,4483 - 1,51373 \cdot t + 0,0103426 \cdot t^2 + 0,000932249 \cdot t^3 - 0,0000144455 \cdot t^4$ . To prove the validity of the function we determine the correlation report, a value that should be as close to 1 as possible. In our case the correlation report is 0,938044654, which demonstrates that the function is valid. Further more, two statistical test were taken: the Fisher test and the Student test. The first test increases the function's significance due to the fact that the calculated value of 95,26816714 is higher than the critical one of 1,67097051. According to the Student test all 4 coefficients of the function have an influence on the yield value, the critical value of 2,018082 being lower than every of the calculated values. As for the future values we calculated  $Y_{44}=17,1368$ ,  $Y_{45}=16,9896$ ,  $Y_{46}=16,7637$ .

The next studied pension fund is BCR. In this case the graph is given by Figure 2:

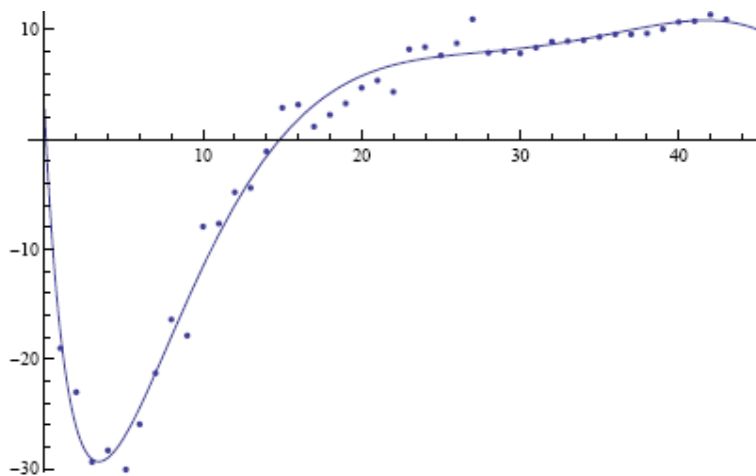


Figure2. BCR yield rate evolution

We can state that despite the decrease in the first few weeks, this fund had a good evolution maintaining an upward evolution. The function that best suits us is a linear combination of a four degree polynomial and a logarithm. After calculating the function's coefficients we obtain:

$$Y: [1, \infty) \rightarrow \mathbb{R},$$

$$Y_t = 82,8226 + 27,5405 \cdot t - 1,00397 \cdot t^2 + 0,0192257 \cdot t^3 - 0,000142942 \cdot t^4 - 115,568 \text{Log}[2 + t]$$

The validity of the model is certified by the correlation report value which is 0,993446 and by the two statistical tests, Fisher and Student. The calculated value of the Fisher's test is 559,0331 which is significantly higher than the critical value of 1,670971. Analysing the Student's test results we can conclude that every coefficient has an influence on the yield value, the most important influence being the one of the logarithm<sup>235</sup>. The future values calculated for this pension fund are:  $Y_{44}=10,425$ ,  $Y_{45}=9,95601$ ,  $Y_{46}=9,24863$ .

The last pension fund analyzed is KD. The graph that best represents its evolution can be seen in figure 3:

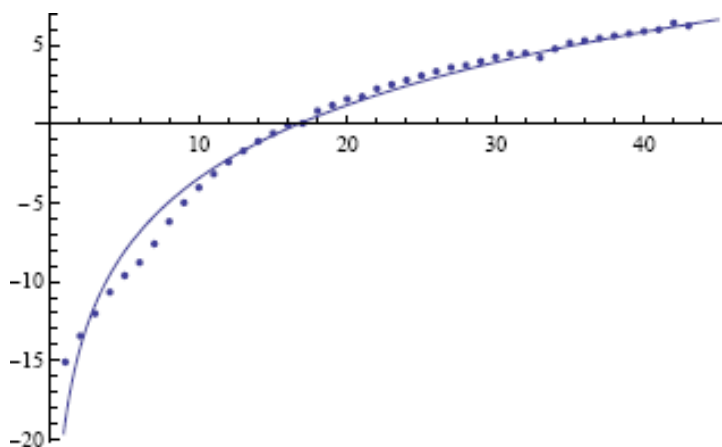


Figure3. KD yield rate evolution

A direct computation leads us to the function on which the graph is based upon:  $Y: [1, \infty) \rightarrow \mathbb{R}$ ,  $Y_t = -17,7364 + 0,0738881 \cdot t + 5,72032 \cdot \text{Log}[t]$ . The statistic validation shows us that the coefficients meet all the requirements. The correlation report value of 0,991824 states that the model itself is statistically valid. As for the Fisher's test, the critical value of 1,670971 is notably lower than the calculated value of 1208,088. A further proof of the validity of the model is given by the Student's test that shows that each coefficient is meaningful and influences the yield, due to the fact that all the calculated values are higher than the critical value of 2,018082. Based on this function the future values that can be foreseen are  $Y_{44}=7,1614$ ,  $Y_{45}=7,3638$ ,  $Y_{46}=7,5634$ .

It can be noted that these tree funds have a unique evolution that depends on the investment decisions taken by the managers, on the economical, political and social development and not the less on the way people perceive the efficiency of each pension fund. Despite all those factors, ING has managed to keep its leading place among privately managed pension funds. Even though BCR's start was not exactly perfect, its evolution has proven that inspired decisions and good management can lead to a spectacular growth. KD has had a constant evolution from the start, with minor setbacks and there is nothing to predict a turn in the near future.

<sup>235</sup> The calculated value in absolute terms of the logarithm is 9,93831, which compared to the critical value of 2,018082 demonstrates its influence.

It is important to note that in order to receive a satisfactory pension, a contribution composed of 10% -15% of the income is required, this means a contribution that is larger than the one currently practiced in our country, and also a long time horizon must be considered in order to make this contribution fruitful.

We conclude that although our country is at the beginning of the road regarding the system of privately managed pensions, the premises of an effective activity of this system exist. Clearly there are some gaps, of which we mention the too small values of contributions to these funds which doesn't allow the accumulation of a sufficient amount at the end of the period, or discrepancies between an existing contribution and the life expectancy between the sexes. But we must not forget that even now, on the basis of the world crisis, the private pension funds in Romania have registered over the past 9 months an annualized average yield of 11,9% when the private pension fund in other countries member of the EU, have registered a negative annualized average yield (Hungary -22,6%, Bulgaria -20,8%) .All things considered, we are confident that with time and experience all shortcomings will be overcome.

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## THE METHOD OF QUANTIFYING THE BENEFITS AND COSTS GENERAL PROJECTS WITH EUROPEAN FUNDING

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*Cost Benefit Analysis is typically used by governments to evaluate the desirability of a given intervention. The aim is to gauge the efficiency of the intervention relative to the status quo. The costs and benefits of the impacts of an intervention are evaluated in terms of the public's willingness to pay for them (benefits) or willingness to pay to avoid them (costs). Inputs are typically measured in terms of opportunity costs - the value in their best alternative use. The guiding principle is to list all of the parties affected by an intervention, and place a monetary value of the effect it has on their welfare as it would be valued by them. Cost-benefit analysis is mainly, but not exclusively, used to assess the value for money of very large private and public sector projects.*

*Keywords: cost-benefit analysis, financial analysis, economic analysis, benefit, cohesion, convergence, cooperation, project.*

*Cod JEL: G32*

The European Union is one of the most prosperous areas in the world economically and, potentially, one of the most competitive. Compared to Europe of 15, however, economic and social disparities between member states are twice as high in Europe of 25, now has 254 regions. Thus, while the Gross Domestic Product (GDP) of the 25 total increased only 5% compared to that of the 15, average GDP per capita of new Member States are below half of the current EU average. Regional disparities have increased significantly, with the integration of the 12 new Member States in May 2004 and January 2007. Thus, 10% of the population of the European Union living in the most dynamic, generating eight times more revenue in terms of Gross Domestic Product (GDP) than 10% of the population living in the least developed. Cohesion Policy of the European Union is intended to reduce these inequalities and economic difficulties that they generate in order to improve the functioning of the Single European Market. Cohesion Policy, in conjunction with policies of environmental protection and equal opportunities policy drive to promote sustainable development within the European Union. Reducing inequalities is important for all regions and social groups can contribute and benefit from the growth of the European Union. Any Member State or region whose GDP recorded a lower level than 75% of the average will receive allocations and will receive substantial funding under the Convergence objective of cohesion policy of the European Union for 2007-2013. This is regional policy which puts into practice the solidarity between the peoples of Europe mentioned in the preamble of the Treaty on European Union. One of the fundamental objectives of the European Union in this Treaty is to strengthen economic and social cohesion by reducing regional disparities. This objective has a great impact on regional competitiveness and standard of living of their inhabitants, and is done mainly through multi-financing of development programs. The role of regional policy is not confined only to the financial aspect. This policy not only aims at a simple redistribution of resources, but must create resources, investing in the potential of regions and their mass. In the current context in which Romania is a member of the European Union one of the most important issue is attracting European funds. Structural and cohesion funds are instruments through which finance policy of economic and social cohesion of the European Union. The corresponding policy is about 35% of the total European Union budget worth about 975 billion EUR for 2007-2013. To reduce the development gaps between regions of Romania

and the European Union, Romania in 2013 by receiving over 19 billion, amounts allocated by the specific structural policy instruments for economic and social.

***The overall objective of Romania for the period 2007-2013***

Reduce as soon as possible disparities of socio-economic development between Romania and the Member States of the European Union. Specific objectives: increasing competitiveness in the long run the Romanian economy, the development of European standards of basic infrastructure, improvement and better use of local human capital. National development priorities: increasing competitiveness and developing a knowledge-based economy, development and modernization of transport infrastructure, protect and improve the quality of the environment, human resource development, promoting employment and social inclusion and strengthening administrative capacity, development of rural economy and increase productivity agriculture, reducing development disparities between regions of the country.

**Pre-accession funds**

Year 2010 will be the terminal for the external grant funds for pre-accession, given that receiving funds PHARE, ISPA and SAPARD will cease after the full programs financed from these funds, depending on the hiring and payments agreed with the European Commission. For the period 2009-2012 are estimated funds with a decreasing rate due to the gradual completion of projects and payments within them. Funds for transitional facility as a temporary period from the accession to the end of 2007, given the role to continue the financial support offered by similar pre-accession instruments were forecasted in an upward trend for the years 2009 and 2010.

**Funds post-accession**

In order to implement the policy of Economic and Social Cohesion, European Commission created a series of financial instruments to reduce disparities between regions and promoting economic development and harmonious balance of the territory, increasing employment and protecting the environment. Thus, from 1 January 2007, Romania received non-reimbursable financial assistance from the EU objectives in the "Convergence" and "European territorial cooperation", and by the European Regional Development Fund (ERDF), European Social Fund (ESF) and Cohesion Fund (FC), known generically Structural Instruments. From the European Union are allocated to Romania for the period 2007-2013 amounts totalling 19,667.647 million euro of Structural Instruments.

Table 1.

**Allocation of amounts allocated to Romania under the EU cohesion policy, for the period 2009-2012 (million EUR, current prices)**

|  | 2009   | 2010   | 2011   | 2012   |
|--|--------|--------|--------|--------|
| Structural Funds (ERDF, ESF) Cohesion Fund (CF)  | 1717,8 | 2061,8 | 2221,0 | 2387,7 |
| TOTAL, of which                                  | 858,5  | 1030,2 | 1109,5 | 1192,6 |
|  | 2576,3 | 3092,0 | 3330,5 | 3580,3 |
| Convergence objective (ERDF, ESF, CF) - European | 2513,4 | 3027,2 | 3263,7 | 3511,8 |
| Territorial Cooperation Objective                | 63,0   | 64,8   | 66,7   | 68,5   |

**Cost Analysis - Benefits of Investment Projects (European Regional Development Fund, Cohesion Fund and ISPA)**

Cost-benefit analysis is a tool of great utility for the decision on allocation of resources for investment financed from public funds. In Romania, in the decades ahead will require very large investments in order to cover the difference between the existing infrastructures in the country and that meets in the European Union member states. Cost-Benefit Analysis can help identify public governor projects that will maximize net social benefits and thus to determine the order of priorities that will make the infrastructure work.

### ***Recommendations on developing cost-benefit analysis***

These recommendations are based on Working Paper No. 4 European Commission (Directorate General for Regional Policy), which is a guideline for developing cost benefit analysis for projects to be co-financed by the ERDF or Cohesion Fund during the period 2007-2013. ACB objectives will be:

- To determine the extent to which the project contributes to regional development policy (the POR) and in particular to the objectives of priority axis in which the requested funds;
- To determine the extent to which the project needs co-financing from ERDF to be financially viable.

To estimate the economic, social and environmental project is operating with assumptions, which introduces a number of uncertainties. Therefore a risk analysis should be included in the ACB. In the risk analysis will be outlined and measures to minimize the negative impact of certain risks. These measures may introduce additional items of expenditure, which means a return to design. Once identified needs and target groups need to project is the establishment of clear objectives. Different variants of solutions will be evaluated according to the extent that may contribute to the objectives. You proved that the solution selected and developed in the project is best suited to achieve the objectives. It is necessary that the objectives are more clearly defined and appropriate indicators such as better quantified, because they are elements of the analysis.

#### **Financial Analysis (Cost-benefit analysis accounts)**

Will be produced and included in the Feasibility Study, for all projects, regardless of the amount thereof. The main objective of financial analysis (cost-benefit analysis accounts) is to calculate financial performance indicators of the project (to profitability). This analysis is developed, usually in terms of the owner (administrator or legal) infrastructure. There are cases in which the owner and operator of infrastructure are not the same entity (delegated management). In these cases will be developed a consolidated financial analysis (as the same entity). The method used in developing financial ACB is the "net cash flow updated. In this method non-monetary flows such as depreciation and provisions are not taken into consideration. Unforeseen expenses in the general estimate of costs will not be taken into account only insofar as they are contained in the eligible project costs. They will not be taken into account in determining the necessary financing, as long as they do not constitute an actual expense, but only a measure to mitigate certain risks. Horizon of analysis recommended for projects funded through this area of intervention POR is 20 years. Rate recommended in the updated financial analysis is 5%.

In the analysis will use the incremental method. When it is difficult or even impossible to determine costs and revenues in the "without project", European Commission recommended that scenario without the project to be considered that "no infrastructure", if revenues and costs of operation and maintenance should be considered for all infrastructure, not only for the portion rehabilitated, modernized, by design. Financial Analysis will assess in particular:

- Profitability of financial investment and their contribution invested in the project determined indicators  $VNAF / C$  (updated net income calculated in total investment value) and  $RIRF / C$  (the internal rate of return calculated on the total investment value).
- Optimal amount of intervention from the Structural Funds.

#### **Economic analysis (cost-benefit analysis economic)**

*Will be produced and included in the Feasibility Study, only projects with a total value of more than 17,000,000 lei.* Economic analysis measured the impact of economic, social and environmental project and evaluate the project in terms of society. Not always a project is necessary and desirable. Therefore, where economic analysis will be accompanied by a study on the availability of target groups (people) to pay for services provided by infrastructure built / rehabilitated / upgraded by the project. Be considered, where appropriate, elements of nature supportability rate for people or environmental costs (applying the "polluter pays"). Basis for the development of economic analysis is the financial analysis tables. To determine economic

performance, social and environmental project should be made a series of corrections, both for costs and income.

### ***Analysis of risk and sensitivity***

*Will be produced and included in the Feasibility Study, for all projects, regardless of the amount thereof.* In accordance with Article 40 (e) of Regulation 1083/2006, cost-benefit analysis must include a risk assessment. This will be done in two steps:

- *Sensitive analysis:* variables identified will be critical, it will analyze the financial and economic performance of the project when their values vary more or less, 1%. What we are trying to determine those values that influence the stability of our project: under what conditions the net current reaches zero! (in other words: what is the sensible, which is calculated for VNAF and for VNAE).

- *Analysis of risk:* it will take into account the probability that the critical variable to evolve as we estimated in the sensitivity analysis. Will be used different statistical methods and will determine the probabilistic distribution of financial or economic indicators. Can not always determine the likelihood of change with a certain percentage of the value of critical variables. So we can not always develop a risk analysis based on sensitivity analysis. In these cases will be a qualitative risk analysis (qualitative assessment of risks presented narrative).

### **Other criteria**

Environmental analysis. National and Community require environmental impact assessments for most investments in the transport sector, particularly for developing new infrastructure. In these cases, reference should be made to the methods of assessment have been recommended. However, even if the law provides, it is advisable to consider the environmental impact from a general point of view, identifying the impact that it can project alternatives (if possible) and present a quantitative assessment based on impact and locating them in order to make a comparison between alternatives and to identify any mitigation measures and compensation.

*The impact on economic development.* This is one of the most controversial aspects of economic evaluation of transport projects in terms of theoretical and empirical. However, it is important to keep in mind that the impact on economic development can be both positive and negative. This means that in this market distortions, increased accessibility of a suburban area or region can be an advantage but also a loss of competitiveness if the industry is less efficient than central regions. In this case, the increased accessibility of the local industry can get on the market. It is therefore necessary to proceed carefully when the project is awarded such benefits, and in any case, it is advisable that they be excluded from the calculation of indicators of profitability.

### **Conclusions :**

Cost Analysis - Benefit is a great utility tool for deciding resource allocation for investment financed from public funds. In Romania, in the decades ahead will require very large investments in order to cover the difference between the existing infrastructures in the country and that meets the EU countries. Cost Analysis - Benefits governor can help the public to identify projects that will maximize net social benefits and thus determine the order of priorities that will make the infrastructure work. Purpose of the request a cost-benefit analysis for major projects has two aspects. First, it must be demonstrated that the project is desirable from an economic point of view and contribute to the goals of EU regional policy. Secondly, it must be evidence that the contribution of the Funds is required for the project to be viable financially. This is the basis for determining the appropriate level of assistance. ACB is an essential tool to estimate the economic benefits of projects. In principle, to assess the impact of projects from all points of view: financial, economic, social, environmental, etc.. ACB objective is to identify and quantify (to give a monetary value) all possible impacts to determine the costs and benefits of the project, then gather the results (net benefit) and concludes that the project is timely and deserves to be

implemented. Costs and benefits should be assessed on a differential basis, taking into account the difference between project and baseline scenario alternative to the project.

The impact is assessed according to certain predetermined goals. By evaluating a project according to the microeconomic indicators, ACB can assess the degree of compliance with specific macroeconomic targets. In the context of regional policy, ACB is used to estimate the importance of an investment project for the EU regional policy. The analysis used in the ACB must be defined in relation to the project company has a relevant impact. Costs and benefits may be gained and at different geographical levels, so as to impose a decision on the costs and benefits to be taken into account. Typically, this depends on the size and scope of the project. Can consider the impacts at local, regional, national and even EU level. In estimating the possible impacts of a project, analysts are always confronted with uncertainty. This should be considered and treated adequately ACB. The exercise of risk assessment is an essential part of a comprehensive review, because it enables the developer to better understand how the estimated impacts may change if certain key variables of the project prove to be different from those expected. A detailed analysis of the risk the basis for a proper risk management, which in turn is reflected in the project. From the analysis carried out is a series of risks which require the adoption of solutions.

### Major risks and solutions

| risks  | solutions  |
|--|--|
| Failure in accessing funds available (quality questionable applications for funding) | Contracting of professional consulting services<br>Human resources specialized in the administration of EU funds |
| Difficulties in financing projects   | Contracting of professional consulting services<br>Collaboration with banks that have funding programs for funds |

This approach will bring substantial benefits and therefore will contribute to accelerate decision-making procedures for complex projects. It will also result in capacity building in terms of the programming period 2007-2013.

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# THE EFFECTS OF TAX COMPETITION ON FOREIGN DIRECT INVESTMENTS IN THE ENLARGED EUROPEAN UNION

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*The issue of tax competition has fuelled a lot of interest and debates among theoreticians as well as practitioners during the last decades. The intense financial and labour flows due to globalisation has led to a "race to the bottom" tax competition among countries, some theoreticians considering it as beneficial others, on the contrary, blaming it as harmful competition, encouraging misallocation of resources. The paper endeavours to find out whether the tax competition has indeed a significant influence on the foreign direct investments flow, or other determinants are equally or more important in this process. This paper provides an empirical analysis of the impact of corporate tax rates on FDI. We use a panel of bilateral FDI flows for European Union member countries over the period 1995-2006.*

*Keywords: tax competition, foreign direct investment, statutory tax rates, effective tax rates*

*JEL classification: F21, H25, H87*

## **1. The empirical literature on the effects of taxes on FDI**

The tax competition literature has long been stating that increasing international integration might impose a growing pressure on tax policies, as raising taxes creates an incentive for mobile tax payers to relocate abroad. Because tax base relocation is proportionally more important in small countries than in large ones, this literature further shows that small countries have stronger incentives than large ones to cut taxes, which could eventually lead tax rates on mobile income converge toward zero. This theoretical conclusion has given rise to a number of papers dealing with tax competition, which emphasize, both on the theoretical and empirical level, that tax competition is unlikely to lead to zero taxation. On the theoretical level, the literature has highlighted the impact of various factors that impede the convergence of tax rates to zero: when taxation allows for the provision of public goods, tax rates can be higher (Tiebout, 1956); tax differentials are second-order determinants compared to the proximity to final markets or the characteristics of competition on the labor and goods markets for instance (Markusen, 1995); tax differentials can be an equilibrium outcome in an imperfect competition setting combining economies of scale with trade costs and/or agglomeration forces (Baldwin & Krugman, 2004).

As far as corporate taxation is concerned, most existing empirical studies focus on one particular aspect of tax competition, which is the sensitiveness of foreign direct investment or firms location decision to taxation. These show that MNEs do react to tax incentives, be they embedded in tax rules (which avoid double taxation problems through credit or exemption schemes) or tax rates (Gordon & Hines, 2002).

The empirical literature on the effects of taxes on FDI focuses almost exclusively on the US and the EU-15 data. There are only a few studies on FDI determinants in the NMS and only one of them applies effective taxation. Carstensen and Toubal (2004) apply difference between statutory rates of two countries as variable determining FDI flows for the sample of 1993-1999 and CEECs and conclude that estimated parameter value is small and not significant at the 5% level. The potential explanation was that they did not take into account special tax regimes designed to attract FDI. Application of effective tax rates would address these shortcomings. Tax rates were also examined as FDI determinant by Edmiston et al. (2003) who apply two variables: number of special tax rates and the highest statutory profit tax rate. The results indicate that imposition of an additional special tax rate reduces FDI as a percent of GDP and higher tax rates lead to lower inflows of FDI in FSU and CEECs. Again, the variable applied is statutory rate.

Most of the earlier studies, mainly using statutory tax rates, suggest an inelastic response of FDI to the corporate income tax burden. As statutory tax rates are an inferior measure of the corporate income tax burden, Bellak and Leibrecht (2005) provide the first empirical application of effective average tax rates (beatrs) on the bilateral level to explaining FDI flows to the CEEC-8. Their analysis is based on the OLI-paradigm, which explains the choice for FDI versus other routes of foreign market servicing, and a panel-gravity setting. They find that FDI is positively related to both source and host-market size as well as to progress in privatisation and that FDI is inversely related to the distance between home and host countries as well as to the effective corporate income tax burden and to unit labour costs. The derived tax-elasticity is very robust and higher than those derived in earlier studies on CEECs, pointing to a larger importance of tax policy for company location decisions. The coefficient on the bear is always statistically significant and negative in the range of  $-3.3$  and  $-4.6$ . Results also suggest that the relative importance of the bear as a determinant of FDI must not be over-emphasised as the results reveal that at least during the period 1995-2003 the bear had no exceptional influence on FDI flows in the CEEC-8 as compared to other determinants.

Lahreche-Revil (2006) adds data on some of the current new members to their EU15 sample, and tries to separate the effects of corporate taxation in the new members for the sample 1990-2002. The analysis is run on *bilateral* FDI data, which allows to identify the impact of tax incentives more accurately, since tax incentives can be computed for each pair of investing/recipient country. Tax measure determines the sample: statutory rate, implicit tax rates and effective average tax rates (EATR). The empirical investigation relies on a gravitational setting for FDI. FDI flowing from EU15 countries to the EU15 and the NMS is explained by the size of the investor, the market potential of the host, the distance between both country and additional gravity variables (contiguity, common language). Only implicit taxation can be shown to be a significant tax determinant of FDI flows, while statutory and *ex-ante* taxation fail to significantly explain location decisions. As to tax differentials, when significant, they also only affect investment decision when the investor targets an EU15 country, with a potential non-linear impact. Taking into account competition between potential host countries for attracting FDI confirms that tax incentives are significantly affecting FDI decisions only within the EU15 countries of the sample: on the whole sample, higher taxes in alternative potential locations tend to increase FDI in a given country, but this proves to be the result of the sensitivity of FDI flows going the EU15 only, since FDI flowing to the NMS is not affected by tax changes in other potential locations.

The issue of tax competition is examined with the use of the gravity model and of Jakubiak and Markiewicz (2007). The estimation of basic equation suggests that “traditional” gravity variables and differences in statutory tax rates have directed FDI flows to and from NMS. It suggests that investors – apart from the economic potential and distance – look at the nominal taxation when deciding about moving capital to and from the region. On the other hand, it is a bit surprising that differences in effective taxation do not seem to matter. Perhaps the backward looking measure is the reason for that. Ordinary differences in tax rates – be it positive or negative – do not seem to determine FDI flows. FDI remain determined by the economic potential of OMS, the economic potential of a destination country and the relative closeness that encourages FDI flows. However, the picture changes when distinguish for the economic potential of “big” vs. “small” country, which generates FDI. On the top of it, statutory and effective corporate tax rates matter, although in an asymmetric way. If investors can pay lower taxes at home than in a destination country, it hampers FDI flows to such destinations. For effective taxation, the result is especially strong if flows originate in a NMS.



## 2. Evidence concerning the effects of tax competition on foreign direct investments

The subject of tax competition can be examined using the gravitational model according to which the bilateral flows among origin and host countries are reduced on the basis of FDI flows, gravitational variables and taxes.

### 2.1 The gravity model

The regression equation is the following:

$$\log(FDI_{ijt}) = \alpha + \beta_1(CLI_{ijt}) + \beta_2(CEI_{ijt}) + \beta_3\log(GDP_{jt}) + \beta_4\log(GDP_{it}) + \beta_5\log(DIST_{ij}) + \beta_6FC_{ij} + \beta_7(CUFM_{ijt}) + \beta_8\log(CPI_{jt}) + \varepsilon_{ijt} \quad (1)$$

where  $FDI_{ijt}$  are the foreign direct investment flows among two countries ( $i$  country of origin,  $j$  host country) during a  $t$  interval. While estimating bilateral investment flows, we considered FDI outward flows financed with equity and other capital. As “other” flows consist mainly of loans and repayments from/to mother companies and subsidiaries, there is a possibility of obtaining negative flows (when repayments are large and larger than loans and equity inflows). This means that some observations have to be excluded, because they cannot be logarithmically transformed. In our sample, this approach resulted in the exclusion of 8% of observations on FDI flows. The study covers 27 EU member states during 1995- 2006 annual time series expressed in millions of Euro: 2575 observations are positive, 678 are negative and 5170 are zero or unavailable. Data on FDIs were taken from EUROSTAT.

#### *The tax variables, traditional gravity variables and traditional FDI determinants*

The tax variables of our interest that can potentially influence capital flows are the statutory tax rates ( $CLI_{ijt}$ ) and effective tax rates ( $CEI_{ijt}$ ).  $CLI_{ijt}$  are the ratios between the statutory tax rates between the source ( $i$ ) and the destination country ( $j$ ).  $CEI_{ijt}$  are the similarly computed differences in effective tax rates. The effective tax rates were calculated for the whole sample with macro-backward approach.

Traditional gravity variables measuring distance from capital cities between the sending and receiving countries ( $DIST_{ij}$ ) and the existence of common border ( $FC_{ij}$ ) were also included. The variable  $FC_{ij}$  is a dummy that takes the value of 1 if there exists a common border, and 0 otherwise.

Thus, we decided to include market size variable, as the one that motivates FDI ( $GDP_{jt}$ ), measures the size of the destination country. As these are bilateral flows that are considered, a variable measuring the size and the economic potential of the sending country was also included ( $GDP_{it}$ ). We also included – public capital expenditures in percent of GDP, in the host country ( $CPI_{jt}$ ). The resource-seeking motive and the empirical works on FDI determinants suggest that low cost labour should also influence aggregate investment flows. Hence, we included labour cost variable in our model, measuring also the relative abundance of labour in each of the host countries vis-à-vis the home countries.  $CUFM_{ijt}$  are the ratios of unit labour costs that are supposed to capture the resource-seeking FDI motive.

The results are shown in Table nr.1, showing that the considered variables have a significant effect on FDI flows for the EU27 member states. The GDP influence is a positive one even when cost variables are considered in the equation. Statutory tax rates have a positive impact in most cases, FDI flows being directed towards countries with lower statutory tax rates, while the impact of effective tax rates, though positively influencing the FDI, flows have a weaker influence. In addition, the labour costs positively influence FDI flows, countries with lower costs being attractive for FDIs. Likewise, countries with higher infrastructure public spending in the host country encourage FDI flows.

**Table nr. 1 The effects of gravitational variables, taxation, labour cost and infrastructure public spending on FDI flows**

Dependent Variable: LOG(FDI<sub>ijt</sub>?)  
Method: Pooled Least Squares

| Variable                   | Coefficient | Std. Error            | t-Statistic | Prob.    |
|----------------------------|-------------|-----------------------|-------------|----------|
| C                          | -7.736694   | 0.831371              | -9.305946   | 0.0000   |
| CLI <sub>ijt</sub> ?       | 0.458586    | 0.122447              | 3.745180    | 0.0002   |
| CEI <sub>ijt</sub> ?       | 0.024945    | 0.037292              | 0.668903    | 0.5036   |
| LOG(GDP <sub>it</sub> ?)   | 0.859465    | 0.032415              | 26.51446    | 0.0000   |
| LOG(GDP <sub>jt</sub> ?)   | 0.783547    | 0.033371              | 23.47967    | 0.0000   |
| CUF <sub>ijt</sub> ?       | 0.327655    | 0.394010              | 0.831592    | 0.4057   |
| LOG(CPI <sub>ijt</sub> ?)  | 0.501276    | 0.119269              | 4.202905    | 0.0000   |
| LOG(DIST <sub>ijt</sub> ?) | -1.405745   | 0.077435              | -18.15391   | 0.0000   |
| FC <sub>ijt</sub> ?        | -0.218306   | 0.136183              | -1.603031   | 0.1091   |
| R-squared                  | 0.463471    | Mean dependent var    |             | 4.274123 |
| Adjusted R-squared         | 0.461538    | S.D. dependent var    |             | 2.627942 |
| S.E. of regression         | 1.928384    | Akaike info criterion |             | 4.155271 |
| Sum squared resid          | 8255.433    | Schwarz criterion     |             | 4.178323 |
| Log likelihood             | -4622.049   | F-statistic           |             | 239.7134 |
| Durbin-Watson stat         | 1.305602    | Prob(F-statistic)     |             | 0.000000 |

## 2.2 Separating the effects among EU15 and NMS12 according to geographical location

Because the high heterogeneity among NMS12 and EU15 countries one can presume that determinants like tax rates and cost variables may differ significantly. In order to analyze this aspect the estimated coefficients are differentiated according to geographical location of host countries. The impact of taxation and labour costs on FDI flows is differentiated according to host country location (i.e. belong to the EU15 or NMS12 sample). Therefore, the taxation variables and labour cost ones interact with a *dummy variable*  $EU_i$  equaling 1 when the host country belongs to EU15 sample and zero ( $1-EU_i$ ) when belongs to NMS12 sample. The taxation coefficient and the labour costs interact with  $EU_j$  for EU15 group and ( $1-EU_j$ ) for NMS12 describing the geographical location of the host country. The regression equation is:

$$\log(FDI_{ijt}) = \alpha + \beta_1 EU_j * CLI_{ijt} + \beta_2 (1 - EU_j) * CLI_{ijt} + \beta_3 EU_j * CEI_{ijt} + \beta_4 (1 - EU_j) * CEI_{ijt} + \beta_5 \log(GDP_{jt}) + \beta_6 \log(GDP_{it}) + \beta_7 \log(DIST_{ij}) + \beta_8 FC_{ij} + \beta_9 (CUF_{ijt}) * EU_j + \beta_{10} (CUF_{ijt}) * (1 - EU_j) + \beta_{11} \log(CPI_{jt}) + \varepsilon_{ijt} \quad (2)$$

The estimated coefficients for the gravitation variables are resistant when  $EU_j$  dummy interactive variables are included. In case of separating the effects on taxation variables and labour costs an asymmetric behaviour can be noticed for NMS12 countries as compared to the EU15 ones. When they become significant, the statutory taxation differentials affect FDIs flowing towards the EU15 countries (positive value), but not towards the NMS12 countries (negative value).

The asymmetry among NMS12 and EU12 countries is also noticed in computations concerning the labour cost differentials. Obviously, the labour costs in NMS12 countries (presumably smaller) has a positive and significant impact on the FDI towards these countries while rather smaller in EU15 countries. The investment public spending in the host country also encourages the FDI flows.

### 2.3 Separating the positive and negative effects of tax rates differentials

The previous estimation relied on the hypothesis of a symmetric positive and negative effect of tax rates differentials. But, actually the impact can be highly asymmetric, the main reason being the coexistence of different double taxation schemes in investing countries. In order to identify the existence of such asymmetries influencing the effects of taxation and of labour costs, dummy variables are considered to reveal the sign of the taxation differentials:  $POZ_{ijt}$  equals 1 when the taxation differential is positive (the country of origin has higher tax rates than the host one) and  $NEG_{ijt}$  ( $NEG_{ijt} = 1 - POZ_{ijt}$ ) equals 1 when the tax differential is negative (the country of origin has lower tax rates than the host one). Next, the  $EU_j$  variable is added to determine whether there is another asymmetry induced by the geographical situation of the host country, i.e. the separation of positive and negative effects on EU15 and NMS12 host countries. In separating the positive and negative effects of statutory and effective tax rates, the following regression equation is used:

$$\log(FDI_{ijt}) = \alpha + \beta_1 POZ_{ijt} * CLI_{ijt} + \beta_2 NEG_{ijt} * CLI_{ijt} + \beta_3 POZ_{ijt} * CEI_{ijt} + \beta_4 NEG_{ijt} * CEI_{ijt} + \beta_5 \log(GDP_{jt}) + \beta_6 \log(GDP_{it}) + \beta_7 \log(DIST_{ij}) + \beta_8 FC_{ij} + \beta_9 (CUFM_{ijt}) + \beta_{10} \log(CPI_{jt}) + \varepsilon_{ijt} \quad (3)$$

The results shown in Table nr.2 reveal the fact that the investment flows are positively influenced towards countries with lower statutory rates compared to the countries of origin ( $POZCLI_{ijt}$  has a positive value), and not at all influenced ( $NEGCLI_{ijt}$  is negative) when the host country has high tax rates that the country of origine. When the variables are negative the investment flows are not influenced. Gravitation variables  $GDP_{it}$  and  $GDP_{jt}$  have positive signs and significant values, the labour costs themselves positively influencing the investments.

**Table nr. 2 Separating the positive and negative effects of taxation differentials**

Dependent Variable: LOG(ISDIJT?)

| Variable           | Coefficient | Std. Error            | t-Statistic | Prob.    |
|--------------------|-------------|-----------------------|-------------|----------|
| C                  | -7.201295   | 0.832396              | -8.651281   | 0.0000   |
| POZCLIJT?*CLIJT?   | 0.143486    | 0.113967              | 1.259006    | 0.2082   |
| NEGCLIJT?*CLIJT?   | -0.002831   | 0.194095              | -0.014586   | 0.9884   |
| POZCEIJT?*CEIJT?   | -0.037172   | 0.040356              | -0.921101   | 0.3571   |
| NEGCEIJT?*CEIJT?   | -0.559462   | 0.141353              | -3.957915   | 0.0001   |
| LOG(GDPIT?)        | 0.877948    | 0.032728              | 26.82572    | 0.0000   |
| LOG(GDPJT?)        | 0.770109    | 0.034056              | 22.61330    | 0.0000   |
| CUFMIJT?           | 0.338385    | 0.395619              | 0.855332    | 0.3925   |
| LOG(CPIJT?)        | 0.550850    | 0.119769              | 4.599270    | 0.0000   |
| LOG(DISTIJ?)       | -1.404580   | 0.077277              | -18.17586   | 0.0000   |
| FCIJ?              | -0.231846   | 0.135951              | -1.705365   | 0.0883   |
| R-squared          | 0.466516    | Mean dependent var    |             | 4.274123 |
| Adjusted R-squared | 0.464111    | S.D. dependent var    |             | 2.627942 |
| S.E. of regression | 1.923771    | Akaike info criterion |             | 4.151374 |

|                    |           |                   |          |
|--------------------|-----------|-------------------|----------|
| Sum squared resid  | 8208.582  | Schwarz criterion | 4.179549 |
| Log likelihood     | -4615.706 | F-statistic       | 193.9575 |
| Durbin-Watson stat | 1.329413  | Prob(F-statistic) | 0.000000 |

### 3. Conclusions

At the beginning of the transition process, the Central and Eastern European countries engaged in a full speed capital account opening leading to intense FDI inflows. This process was accompanied by important reforms in the taxation area generally following a decrease of tax rates and the tax base broadening. This behaviour raised suspicions that these countries engaged in a race to the bottom process forcing other countries to lower their corporate tax rates.

Recent studies suggest that the gravitation equation represents a critical tool to investigate the determinants of FDI flows. It also allows bilateral analyses encouraging considering the effects of the taxation stimulus packages on the investment location decisions. In our endeavour the bilateral flows among the 27 EU countries is explained by using the gravitational variables (the dimension of the investor, the market potential of the host country, and the distance between countries having a mutual border. These are structural determinants on the FDI flows in the sense that their unconditional impact on the host region. In these circumstances the taxation appears as a determinant but of non uniform importance for the FDI flows.

When the standard gravitational effect is used the estimations show that the statutory tax rates are important determinants in attracting FDI's while the effective tax rates are not relevant in location decision. The EU27 sample is heterogeneous concerning the attraction determinants on FDI flows. Indeed, the authors show that the effects of taxation and of labour cost depend on the destination of the FDI flows (EU15 or NMS12). It is also shown how the labour costs impact positively on the FDI, the lower the labour costs the more intense FDI flows (the results are significant for the NMS12 countries). The tax differentials become important when the investor envisages locating the plant in EU15 countries. For the whole EU27 countries only the statutory tax rates impact when they are lower in host countries, while when separating the effects of taxation for the two groups this determinant is significant in the EU15 countries while for the NMS12 it is insignificant.

To conclude: "who is afraid of taxation"? At first sight the EU old member states are worried because the lowering of tax rates in the NMS. But, as reassurance, the lowering of tax rates do not significantly impact on the FDI flows in the NMS but only in the EU15 countries. Therefore the competition coming from the NMS is not harmful.

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## FINANCIAL REPORTING

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*Financial reporting have a role and a special significance for the economic life of an entity. Models of financial reporting have evolved across time, is becoming more oriented to satisfy needs for information, constantly growing user. To avoid the difficulties that arise in the implementation of these models, management techniques must be made in relation to certain technologies that represent the force behind an organization and daily operations that are possible. An example of such technology is computerized communication has the potential to reduce the volume of information that managers need to take it into account, while broadening the horizon of an activity for which an individual monitors.*

*Keywords: financial reporting, transparency, balance, the profit and loss*

*JEL Classification codes: G32*

Communication today has a place mainly in economic life. Whatever the sector of activity (productive, commercial, extractive, agricultural, etc..) Competitive world, strategic position or function exercised, all companies have to communicate to be competitive and to make known. Information on their products and skills, the technology is justified ambition to attract new financial and industrial partners to increase market share or "meet the desires and needs of the financial markets."

In these circumstances it can be affirmed that the basic objective of accounting in the economic entity is the submission of periodic financial statements, called "annual" or summary documents (balance sheet, the profit and loss picture of cash flows, equity situation change, accounting policies and explanatory notes), which forms a whole indiscernible and should provide an accurate picture of assets, financial position and results of operation in order to provide useful information for all the users making economic decisions.

In continental concept (referring to the French General Accounting Plan) objective of accounting is defined as the presentation of situations that reflect an accurate picture of the business enterprise accounts must meet obligations under the rules of honesty and prudence.

### **The role and functions as financial**

Effective leadership of the business of any economic entity and knowledge of results, including aspects of the final results are possible in the current analysis of data provided by the economic evidence, in which the most important records of his rank, but the perspective, this goal can be achieved only by analyzing the information it provides the financial statements.

The financial accounting is a tool of great importance in the management of economic entities and requires substantiation for decisions on allocation of funding; use and recovery of funds organization achieve control over decisions, and to establish rights and obligations, of responsibilities and interests from the household and heritage development.

The financial statements have to be prepared with the emergence of accounting in the form of balance sheet structure subsequently developed because the needs are becoming more information.

The main financial statements of the enterprise with a growing and used especially during the last balance sheet is. The word balance comes after some views from the Latin "balance" which means "two talgere or bilancium", which means balance, word later also from the word "balance. Whatever the explanation given the word, the concept of balance has the same meaning, symbolizing a balance with two talgere ", which is constantly in balance.

Importance that the financial statements presented in synthesized, it can emphasize the following important aspects:

- The means of knowledge, control and analysis of economic activity by the Board, general meetings of shareholders or members of the tax statistics §. a.;
- Data they contain which refer to actual presentation of the indicators on current and previous years provide their analysis of trends from one year to another;
- The information it provides underlying fundamentals many decisions on the current and especially the prospect;
- Is a mobilizing factor for improving the content and organization of accounting, which must provide the necessary data, accurate and timely, to prepare its duly and in a timely manner. The financial statements must present the data as a unit, the same methodological standards, which is another prerequisite for fulfilling its role and also for fair and comparative assessment of activities and centralization for the general directions of public finance and financial control of and other interested bodies. The financial statements must be assessed, and also by its simple and clear goal necessary for the analysis of each economic activity by the parties concerned, the operation which can be easily and lead to appreciation in full accordance with reality.

Simplicity and clarity of financial statements is evaluated by the number of indicators on which presents to be significant and order by scientific criteria. Information or indicators of the financial statements must be presented simply and clearly to their analysis in order to ease the documentation necessary for the preparation for the coming years. Among the conditions or requirements imposed on the financial statements and the notes on its comprehensive in that it must contain all required forms, and they are filled with all the indicators that they contain.

### **Development of financial reporting in Romania**

The first signs that shows that the current pays Our "kept the books" of yore are linked to come binațională of the Romanian people. The first signs that we send to keeping the accounts in the territory of Dacia, historians discovered are related to the influence master novels.

Three major historical events leave their imprint on the evolution of financial reporting in the nineteenth century on the Romanian territory: Peace of Adrianople (1829), Union of Moldavia and Wallachia (1859) and national independence of Moldova and Romanian Country (1877 ). Specified for the preparation of balance sheet during the year, monthly balance sheet (balance with a single output equality) and also the gain and loss, to determine the level of profit or loss of the management question. Financial reporting have evolved across-nineteenth century in the Romanian Countries until the middle of the century is not a clear conceptual demarcation between balance and balance.

In the twentieth century, based on the development of the Romanian business environment, financial reporting need is felt in business concerns, and Romanian specialists in the field of accounting. Polemics on the international balance theories and have found echo in the concerns of researchers and accountants Romanian. This definition is both balance sheet presentation of relevant information offered it, and devising a form of situations covered by national summary: a balance-type and a periodicity of reporting.

### **Financial reporting in the context of globalization**

Globalization has become a fashionable phenomenon studied by economists and sociologists throughout the world, mainly dictum of specialists in management, catchphrase of journalists and politicians from around the world. The term globalization is reflected in the vocabulary required any person and constantly involved in any serious discussion.

Globalization appoint such an intensification of economic, political, social and cultural rights over national borders. In this sense it involves more than the geographical extension of a range of phenomena and issues. It signifies not only the intensification of the global connections and awareness but this step with concomitant reduction of the importance of territorial boundaries.

The preparation of financial reports is equal for both those who prepared and to users of financial information. Produces financial accounts which have an impact on society and change the behavior of individuals, resulting in mutations or social change.

Under conditions of virtual free market information, businesses must know how users of financial statements - information consumers accounts - choose a decision or another, and how these decisions affect the demand for information. Also, companies must know the market reaction to the products we offer - financial accounting information - the changing consumer behavior due to changing prices, incomes, and their preferences.

Accounting information is, without doubt, the global economic conditions that characterize the world economy, one of the main sources of information to any decision-making process. From reports on production and to preparing the annual accounts, the motivation is the same: support for different categories of users from different countries of the world, in that the best decisions.

In terms of economic development worldwide, multinational enterprises were confronted with the issue of reporting financial information in accordance with different accounting systems in the countries operating. This penalizes those companies that consolidate information on accounts at the central level, face major difficulties and the need to achieve the financial pretreatment under a particular set of accounting rules (usually practiced in the country of origin the parent company).

Wishing to eliminate these differences between different accounting systems to try first to know the factors that affect financial reporting worldwide and shaping them so as to obtain a set of accounting rules to ensure uniform reporting of information.

Identifying these factors influence has been great concern about research centers in the accounts.

Thus, Nobes and Parker in their paper "Comparative International Accounting" believes that the factors affecting financial reporting in various countries of the world are:

- The legal system,
- The tax system,
- How to ensure funding of enterprises,
- Culture,
- The accounting profession,
- Inflation and accidental events, random.

Other authors (Choi F., C. Frost, G. Meek, 2001) adds to these factors the level of economic development and education, or the import-export accounting between countries in certain areas of influence. As you can see, there is a relatively high consensus regarding the factors that determine how different the reporting of information globally.

One can appreciate that the factors influence the reporting of accounts can be grouped into three main categories:

- The institutions of the state, affecting the financial reporting system through political, legal and tax applied in various countries of the world;
- The financial system, through which companies conduct their business and ensure its development funds;
- The accounting profession, given that most finalizing legislation in the field based on professional accounting advice.

Although at first glance may seem paradoxical, the political system is an important factor of influence of financial reporting.

Regarding the tax system in all countries there is a tax on profits of enterprises, which constitute an important source of revenue for the state budget. As can be seen from the following table is the main partner firms, as long as collected in approximately one third of their profits.

The State's interest in collecting a good part of the business profits generated profound implications for financial reporting. More specifically allow state firms to choose themselves how to calculate taxable profit. Thus, to provide the necessary budgetary revenues and to equally distribute the tax burden between businesses, various states have established a set of rules in



relation to the determination of tax on profits of companies. These rules generally cover specific areas in which the calculation of the amount involved in the application of a specific logic of the professional accountant, such as assessment of impairment of assets or setting the deductible provisions. Some regulations Friday but in contradiction with the view of shareholders who do not believe that these tax rules give the best picture of the financial performance of the enterprise. This view has two explanations:

- The interest is mainly to formulate separate regulations to enable the collection regularly and certainty of taxes and duties, with minimum administrative costs and with the least possible evasion of the payer and not to assess the accuracy of the profits enterprise;
- Sometimes the state may adopt rules with a fiscal target, usually to promote a particular sector (exclusion from taxation of certain income), making the profits to be lower, which image is not very relevant to a shareholder or an investor who is interested primarily on the performance rather than taxation.

Another institutional factor to be considered a particularly important influence on financial reporting is accounting profession. Often there is a confusion between the profession of accounting and auditing. Accounting economist or accountant is to prepare the financial statements of the enterprise. Normally he is an employee of the company or be an external expert who provides the service for an enterprise.

He is a very important link in the production of reliable accounting information, which unlike the accounting is deemed to be an independent expert as saying that Kell, Zigler and Bozton in their work must truly be a "watchdog" (dog) and not a "blood-hound (beagle), meaning that he should rather prevent production errors or fraud than to detect. Auditing the financial statements of an enterprise is generally examine financial position and business operations.

In addition to these factors can be identified and other factors, which are mainly national and international environment in which country and its accounting system is located and does not constitute an integral part of the institutional structure of the country.

Regarding the accounting and financial reporting mode, the makers or distributors of public financing for businesses, there are other categories of people interested in the financial statements of different companies. In this category we include employees of firms, public accountants or theorists.

### **Coordinates of the current financial reporting**

Financial reporting should focus towards the needs of users because the traditional financial statements are not sufficiently oriented towards what users need. Starting from the premise that the diversity of users of financial reporting increased across time, and their involvement in influencing the content of financial reports will be more significant in the future, a class of users interested in information contained in these reports. Classification of users' financial reporting has been the subject of several approaches: Ogan and Ziebart (1991, Corporate Reporting and the Accounting Profession: An Interpreters Paradigm) have identified 6 groups of users: the owners, creditors, customers and governors.

### **The role of capital market development in financial reporting**

The last century brought new financial markets scene main actors, the stock exchanges, which came to play the central role in international finance. Stock Exchange is a true barometer of economic activity in a region or country, whereas it is only an instrument for measuring the performance of an economy but also a tool of efficiency. Efficiency of capital markets depends on the degree of transparency of information published: how comprehensive is the information, how widespread and how easily achieved by investors. The market is more efficient as any relevant information and found at a given time is reflected in price action. A weak market transparency information will impose constraints on the ability of companies to attract investor interest, as a poor transparency of a company will not fix it by investors.

In this sense, the capital market is responsible for ensuring a complete and timely information to all market participants, so that fixed prices for securities traded on the exchange to rapidly and effectively reflect the public information relating to the issuing companies. Basically, all these can be summarized in increased transparency of activities of the issuers securities traded on the stock exchange.

One of the principles governing the Bucharest Stock Exchange as the market held by the securities information is: scholarship is committed to providing permanent staff to companies and investors enough information about the companies traded and prices of securities issued by them. In this sense, strategies and actions aimed at both forward and issuers of capital market institutions. Issuers, to maintain the market, must meet high standards of transparency and penalized in the event of infringement.

Compliance with requirements of transparency and providing information on the capital market in Romania is ensured through the issuers BSE and RASDAQ, which transmit data on public investment activity and performance of economic and financial activities. Also, Romanian issuers are obliged to transmit information reports and NSC is the regulatory authority and control of the capital market and the BSE.

Electronic Reporting - inflexible point of financial reporting. The last decade of the century XX century brought a change of scenario in the communication business: companies are interested in playing and promoting the image and trained to disseminate information to interested parties through a medium that has revolutionized communication and information technology - the Internet. Overall development of business services and many innovative communications were made available to companies for providing new channels of financial reporting and disseminating information so that the traditional financial reporting requirements should be adapted to current business environment.

Effects of Internet on financial reporting are two-dimensional. First Internet development has economic consequences on financial reporting, meaning that the publication business is governed and stimulated by the cost - benefit, and secondly affecting supply and demand of financial information. The most important influences on the cost of driving is their cost of communication of information and the cost of processing transactions. These costs affect companies that use the Internet as a means of disseminating information and financial accounting in the sense that the benefits it will record a net will be higher costs involved in publishing financial reports on the website.

Development of Internet as a medium for providing information about the business generated a new structure of information flow from companies to investors, creditors and other stakeholders. However, the Internet is because of increased demand for new information before the application there appear new technology, but to meet its cost was too high to receive a reply, the Internet is what returns to satisfy information requirements under the best.

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# NEW CHALLENGES FOR THE FINANCIAL AUDIT IN THE CONTEXT OF MEASURES TO SURPASS ECONOMIC-FINANCIAL CRISIS

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*In order to find the antidote of the actual economic and financial crisis it is necessary to know the real causes that brought it about. Many companies and banks reached collapse or are closely there due to various ranges of reasons but among them there are those which are connected to a certain lacks of transparency regarding their financial going. One can say that financial audit and auditors as well should have been much more involved in the prevention process. We refer to both their professional and ethic standards and the principals of enforcing them. Some proposals were made by IFAC regarding to both these aspects. How they might be added to is the following: new principals in financial audit independence, new responsibilities for auditors in going concern analysis and, perhaps, in fraud and error competences.*

*Keywords: financial audit, independence, audit standards*

*Paper's JEL code: M42*

## **Introduction**

The actual economic and financial crisis has, undoubtedly, many causes. It started with banking and insurance system and has gone on with the companies from different fields. There are questions to get answers such as: how was it possible; are there anybody guilty; which the causes are and what is to be done so that the effect upon the people to be not too long in time and as much as possible less damaging as well.

All this period long the political leaders as well as the representatives of the economic and financial organizations widely discussed upon the subject of the means to stop the crisis course. Among the means they found money coming from the state as being a good one. There are different ways to do so but it ends-up in affecting the people's financial comfort. We can see, as a result, even changes in ideological thoughts of some public opinion-makers and also in the people confidence in the financial system.

There have been fewer debates and correspondently not enough ideas about the causes of the certain banks or big private companies' bankruptcy. Therefore, we consider that it is need for honest debates upon the real causes and the contribution should come rather from professional organizations than from the political world.

Could financial audit, in its organization and exercising, be one of the causes?

In our opinion categorically not or, at least, not the main cause. Although it might have be a better lever to prevent the wrong course of some companies' financial situation if its professional standards were more effective applied. In some respect the economic and financial world needed more transparency in revealing the basic of financial information and also a better organization of what is called "internal control system" and "risk management system". The standard of financial audit refers to such domains and there have been made proposals to improve the methods for enforcing them.

The International Federation of Accountants (IFAC) issued the International Standards of Audit (ISA) which financial auditors refer to in their activity. There have been also issued other rules and standards<sup>236</sup> as far as accounting activity and reporting system are concerned. Along the time there were issued recommendations to all economic and financial organizations, including the majority of countries, on how to improve their accounting activity and what to do in enhancing the transparency. It is to have been applied only.

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236 . <http://www.ifac.org/About/Publications.php>

To assist professional accountants in addressing issues related to the global financial crisis, IFAC and the International Auditing and Assurance Standards Board (IAASB) have focused on three activities:

- To increase awareness among preparers and auditors of existing and newly developed guidance that can assist them in reporting on financial instruments;
- To encourage further convergence in reporting standards on financial instruments, while at the same time strongly supporting (the continuation of) fair value accounting since reducing transparency is not in the interests of investors; and
- To participate in and promote discussions of best practice with respect to the audits of financial institutions and other organizations that are affected by the current crisis<sup>237</sup>.

Recently IFAC, as a professional organization, submitted recommendations for the reform of the global financial system to the G20 Working Groups that met during the 2009 London Summit. We are going to cover this subject in another chapter.

### **The Financial Audit-concept, goal, types and organizations**

According with International Standards of Audit (ISA 200) the financial audit consists in verification and certification independently carried out by a responsible professional as far as annual accounts and financial statements of any company are concerned aiming at expressing his opinion connected to the reality of information issued by these companies' synthetic documents.

The financial audit role, as an independent examination and expression of opinion on the financial statements of an entity, is to report on the truth and fairness of the financial statements on behalf of their users. That means the auditors give an opinion whether the financial statements are prepared in accordance with an acceptable financial reporting framework (e.g. international standards of financial reporting) and with any specific statutory requirements (e.g. rules and laws).

In order to accomplish such a goal the financial audit activity and the auditors have to comply with some basic principles of ethic that are required by the Ethic Code. Both the activity and auditors themselves must be **independent**. The fundamental principals stated by The Ethic Code are the following: integrity, objectivity, professional competence and due care, confidentiality, and professional behavior.<sup>238</sup>

It is not our purpose to detail the principals here but we want to stress the importance of an independent financial audit activity so as the opinion of the auditors to be believable and, as a consequence, really useful.

Using different criteria one can identify several types of financial audit activity. In our opinion two of them are extremely important in order to cover the independence task. Thus, taking in account the organizational position of the activity one can talk about internal audit and external audit. The former is organized inside of any entity that requires it to respond to the interests of that entity management. Being an employee those auditors are materially connected to the management interest and therefore, not always the objectivity can be real. It might be a relative independence. The external financial audit is an activity that comes from outside of any entity, the auditors are not any more employees and, as a result, they are seen as being more objective. The independence seems to be more real. But what about the material interest that interferes the contractual relation between an auditor that provides a service and a company that pay for that? Objectively, some threats of the independence might appear. An idea for a solution to improve the independence of the external audit exercised by direct contract relation, especially when it is about big companies with a certain public impact, is to be put forward further.

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237 <http://www.ifac.org/financial-crisis/>.

238 Federatia Internationala a Contabililor, Camera Auditorilor Financiari din Romania – “Audit Financiar 2006, Standarde, Codul Etic”, Editura Irecson, Bucuresti, 2007.

Another criterion to classify the forms of financial audit would be the organization the auditors belong to. By this point of view there is financial audit exercised by auditors belonging to followings: entities (internal auditors), professional organizations and supreme audit institutions. The last two forms appear as an external audit because they come from outside of any entity. The difference mainly consists in the fact that The SAI (supreme audit institution) usually belongs to The Parliament and exercises financial audit on the public funds. There is also a very useful difference between the professional organizations audit and that of the SAI. Namely there is no material connection between those two parts as long as the financial audit activity are compulsory exercised on public agencies and without any direct payment. That means a bigger objectivity and a real independence.

### **IFAC recommendations to G20 Group, April 2009, Summit**

As a professional organization compounded by 2.5 million accountants coming from 122 countries The International Federation of Accountants has acted responsibly to help political leaders to make the best decisions for surmounting the difficulties of financial and economic crisis. Therefore we consider that the financial audit activity might be an effective lever to increase the thrust and transparency as conditions either to prevent or to escape crisis.

As far as financial audit activity of The IFAC is concerned there have been identified at least two directions this institution has worked for:

- It issued some new guidance to help auditors improving their activity.

- It submitted recommendations to G20 Group, as an international political organization with the unique possibility to enforce them, in order to help the countries in a better organization of the financial and economic life. This opportunity was taken in April, 2009 when took place “The Group of Twenty (G-20) Finance Ministers and Central Bank Governors Summit “.

Those new guidance refer to also new problems the auditors have to cope with as a result of these challenges brought about the crisis. There have been issued: “Audit Practice Alert on Going Concern Assumptions” and “**Audit Practice Alert on Auditing Fair Values**”. Both of these guides offer to the auditors the best practice example on the probably some of the real causes of the certain banking and insuring companies’ bankruptcy such as: a worse deal with going concern assessment and a wrong estimation of provisions. The auditors should, probably, have worked better with the concepts like “going concern” and “fair values estimates”.

On the other hand IFAC sent to working groups of G20 recent Summit some recommendations that had been asked previously and were designed to support the leaders in developing the best solutions that lead to a more stable financial system. They refer to: “**Enhancing Sound Regulation and Strengthening Transparency**”, “**Reforming the IMF**”, “**The World Bank and Other Multilateral Development Banks (MDBs)**”. With a little more details the recommendations look like that:

- the G20 countries to adopt International Standards on Auditing (ISAs) where they have not already done so, and urge their adoption in nations and jurisdictions.

This will assist:

- (a) the G20’s goal of strengthening transparency and accountability in the context of the audit of financial information; and

- (b) national and jurisdictional regulatory systems in the interpretation and exchange of audited financial information.

- to adopt and implement (in letter and spirit) the Organization for Economic Cooperation and Development’s (OECD) Principles of Corporate Governance as the standard framework for corporate governance, and urge its adoption in other nations and jurisdictions.

- the G20 countries act to ensure that sufficient resources are applied to develop and disseminate implementation guidance for all global standards that they adopt/support, such as ISAs, the

OECD's Principles of Corporate Governance, the International Financial Reporting Standards (IFRS), and all others of the Financial Stability Forum's (FSF) Compendium of Standards.

- call for the establishment of an international, principles-based threshold of competencies for senior financial officers in public interest entities. This should emphasize, inter alia, training in corporate ethics, knowledge and application of financial reporting standards, continuing professional development, and familiarity with the national governance codes, and other regulatory rules and procedures.

- the countries should consider reforms of enterprise risk management systems and senior corporate remuneration schemes, as both may adversely affect sustainable business performance.

- the members of G20 to advocate the implementation of high quality models of governance for all international institutions with mandates to set financial regulation. Such models should be built upon principles of public oversight, accountability, independence and transparency – all of which are in the public interest.

- the countries to adopt International Public Sector Accounting Standards (IPSASs) where they have not already done so, and urge their adoption in other nations and jurisdictions.

- the G20 acknowledge the importance of the small business sector and ensure that any agreed policy actions are supportive of this sector.

- the G20 to require that the International Monetary Fund's (IMF) Code of Good Practices on Fiscal Transparency to be strengthened through the application of International Public Sector Accounting Standards (IPSASs).

-the G20 to support the IMF/World Bank Reports on Observance of Standards and Codes (ROSC) initiative

- the G20 to support the World Bank and other MDBs in their efforts to assist countries to improve their financial management capabilities and strengthen the financial reporting infrastructure. This would include facilitating the establishment and strengthening of well-governed national accountancy bodies where they do not exist.

-the G20 to support the World Bank/International Monetary Fund (IMF) Reports on Observance of Standards and Codes (ROSC) initiative.<sup>239</sup>

As we can see financial audit activity is actively involved in improving its methods of prevention the irregularities and in developing solution to make financial system healthier. We do not want to comment these proposals, we just say they exist, they have appeared and if they were applied the results would be certainly favorable. At the same time, further debates on the subject should take place because, we believe, the financial audit still has reserves for increasing the public control upon all the entities' financial statements.

### **The possible ways to increase the quality of financial audit**

As we have already assumed the problem of financial audit independence should be a subject that debates might still take place on. It is about both internal and external audit. The more independence of financial audit the better transparency as far as financial and economic activity of an entity is concerned.

While the independence of the internal audit is almost unanimously acknowledged as being a relative one and, as a result, it is to work with some objectively limited competences, the things are different in the external audit case. Therefore, we think of improving the independence of the external audit as a method to enhance the transparency and public control of the economic and financial processes both at the macro and micro economic level. Particularly we have to refer to those big financial organizations (banks, insurance companies) and also to the world wide developed economic companies from different fields. Why? It is so because, on the one hand, they are that type of entities that have a huge impact on the global economy and, on the other

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239 [www.ifac.org](http://www.ifac.org).

hand, the fate of a large number of the people throughout the world is strongly connected to their activity. It does not make sense whether they are privately or public organized. If the interest in such entities' economic activity is so huge it appears normally the public control should exist. This type of control could result from a bigger independence of the financial external audit. In such a context it is necessary to find the best form of the financial audit upon the financial statements of all such organisms so that to disappear any material interest between those audited and auditors. Actually we mean that as long as one can directly negotiate a price for the audit service the partners could easily become strongly subjective. Where money comes around the objectivity weakens. There have been, unfortunately, too many examples in this way. Therefore our proposal would be an audit which has not to be paid by those audited. Nor has it to be previously ordered by them or even planned. Who would be it exercised by? The answer could be: either a private audit company being paid by the world or European public organisms (G20 Group, European Commission) in case of The World Bank, rating agencies, big insurance groups, Stock Exchanges, and so on, or a supreme audit institution at the level of entities of a country interest.

It would be a big challenge for financial audit to help, in a way, economic system, especially in the crisis period. It is also a good opportunity to take advantages from. In his excellent words the Stanford economist, Paul Romer has so perceptively warned: "A crisis is a terrible thing to waste".

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# PRINCIPLES OF ROMANIAN WAGE PRACTICES– A CHALLENGE TO THE ANNUAL PUBLIC BUDGET

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*Romania's integration to the European Union has been creating new challenges to the financial and economic market against the background of the crisis that has extended to all globalised economies. Economy contraction, GDP drop, unemployment increase and the absence of financing from the market are challenges to which rulers must find appropriate solutions. The high percentage of expenses on wages that added to the public expenditure had an unnatural evolution during the period comprised between 2005 and 2008. Expenses on staff increased by 73%, while the GDP increased by 40%. Between December 2004 and December 2008, the Government authorised basic wage adjustments that amounted to 86% on cumulated bases, accounting for almost three times the inflation rate. The present paper aims at making an analysis of the Romanian wage practices versus the European wage practices. The analysis makes arguments in order to support a reform of the Romanian wage system in the public sector that clearly represents a challenge to today's rulers with respect to the decrease of the pressure laid on public budget.*

*Keywords: wage principles, European wage practices, wage structures.*

*Code JEL: G10, H11*

## **1.Introduction**

The analyses made by the World Bank during the periods comprised between 2000 and 2005 and 2005 and 2006 emphasised a series of principles and characteristics of a wage system specific to a transition economy, insufficiently consolidated and with uncompleted reforms. The analysis pointed out a series of weak spots that have medium and long-term impacts on the efficiency and effectiveness of public services. In order to eliminate them, the Government must take measures with a view to elaborating a wage reform strategy. This reform resides with:

- first of all, it may begin by determining the categories of benefits according to a gradual approach corresponding to each and every one of them. Some benefits will be included immediately in the basic wage, while others will be redimensioned and kept as benefits, some of them will be progressively eliminated, while others will be immediately and integrally eliminated;

- second, the Government may initiate a programme of merger of some positions into a single wage gradation. The decrease of the budget will determine the rhythm of implementation of structural reforms.

The support provided for the reform will be higher if resources allow for a higher number of persons to obtain such wage increase despite the structural changes. The performance of such strategy will be made difficult by the trade union structures. Instead of negotiating with the trade union, each year the wage policy will be guided by a multiannual framework that can reduce the pressure laid on the budget.

## **2.Principles of Romanian wage practices**

The long-term improvement of the public administration quality in Romania depends on many factors. The high level of budget resources may not solve the challenges that the public administration faces. The expenses on wages in the public sector have increased very much after 2004, but the system, the general remuneration principles and career promotion corresponding to



public offices have not changed very much. The annual wage increases are subject to ad hoc negotiations with the trade unions and are reflected by increases of the basic wage.

The facilities necessary with a view to attracting skilled staff and to motivate performance are still reduced.

The transparency and the perception of equity are eroded by the high dependency on benefits and bonuses that determine the total wage.

The wage dispersion for similar positions is higher than may be explained by the differences of work responsibilities.

It is necessary to redimension the benefits, while the fixed part of the wage (basic wage) must account for a higher percentage of the total income.

Time (seniority) requirements between gradations create rigidities within the wage structure, by maintaining the newcomers to decreased gradations and levels and by limiting a lot the wage promotion opportunities. In order to perform the release a greater flexibility is needed for career promotion.

Performance incentives are undermined by the percentage held by the seniority benefit and by the weak connection with the work responsibility. Therefore, the persons having a reduced responsibility may accumulate higher wages only due to the number of years worked in the public sector.

The wage differences must be determined first of all by the responsibility differences.

The seniority benefit must be redimensioned in time and finally eliminated because it has nothing to do with performance. Savings obtained this way may be used to redimension the fixed part of the wage (basic wage).

The public administration quality may be improved by performing a better alignment between work responsibilities and wage on the basis of the following aspects:

- by means of a review of the contents of work corresponding to certain positions that may confirm whether there are reasons justifying higher differences;
- the labour market conditions do not justify the continuation of current wages;
- the negotiation process of the collective labour agreement with the trade unions must be refined so that it may accommodate all adjustments of the system;

The responsibility agents (Government) must elaborate a long-term strategy in order to improve the information management and to report the wage practices in the public sector.

Various staff categories in the Romanian public sector are regulated pursuant to special laws. The description of wage components in connection with all staff categories render evident similar characteristics and special benefits.

The employees in the Romanian public sector do not receive "equal wage for equal work." There are no correlations between staff categories. The basic wages for similar career positions are very different. The Government has failed to carry out a comprehensive analysis of the wage system in the public sector of the last 10 years. Therefore wage discrepancies have increased and discontent has resulted, especially within the categories that receive lower wages.

The lack of equity within the system is due to the staff category division according to their basic wages: policemen, health and education employees constantly receive higher wages than public and contractual servants. Within these two groups, the fixed part of the wage (basic wage) is approximately the same, but the variable part thereof is significant.

The wages are not attractive to young graduates.

The wages of the public servants and of the contractual staff of the local administration are inferior to the wages received by those in the central administration.

### **3.Principles of European practices**

Within the European Union countries there are large variations regarding the application of wage practices in the European public sector. But they have a set of common objectives that are encountered in the majority of the European Union countries:

- ensurance of consistency, equity and transparency;
- creating wage differences that may offer facilities to the staff with a view to perform well and to seek higher responsibility levels;
- establishment of wages according to the wage levels of the market in order to attract and maintain the skilled staff.

On the basis of a series of reports drafted by certain consultancy companies, a summary of key elements relative to European wage practices may be drawn up:

- The basic wage makes up the main element of the total income, accounting for at least 90% of the total income. There are still many administrations that use benefits in order to reflect special work conditions, but by limiting the number and the size of the benefits the transparency of the compensation system and the perception of position fairness are increased.

- Bonuses are not a habitual element. Generally, the creation of a bonus system within the public sector is faulty. Normally bonuses are financed by using special budget allowances. The money saved from unfilled vacancies may not be used to pay the bonuses of the occupied staff. The budgets of the minister finance the levels of occupied positions and the resources of any kind that are not used return to the treasury.

- In kind benefits (accomodation, motor vehicles, mobile telephones) are infrequent. These benefit schemes are deemed to be costly.

- The wage levels in the public services are smaller in comparison with the wage levels in the private sector. They vary from one country to another but generally they represent approximately 70%-80% of the wage levels in the private sector. The low level of wages corresponding to public offices is compensated by a higher work security than in the private sector.

- The wage structures are usually based on a series of gradations that reflect the relative contents of the work. The gradation for a position is usually determined on the basis of a work assessment system that assigns the post of gradations according to the assessment of results, responsibilities, knowledge and necessary competence.

- For each gradation there usually is a wage scale that allows the staff corresponding to each level to receive an annual wage increase (without exceeding the maximum of the wage scale) that reflects the higher experience and the performance with respect to the level of the position concerned. The size of the wage scale differs but is usually does not exceed 50%.

- Seniority plays a subordinate role with respect to the job responsibilities. The benefits associated with the experiences are related to a certain post or gradation. After having reached the top of the wage scale, other wage increases require an increase of work responsibilites (namely a promotion).

- There is a significant difference between the levels of successive gradations amounting to approximately 12% (in some countries it usually reaches higher percentages) from the middle of one gradation to another. This way, the staff is financially motivated to accept higher responsibilities for the work performed. Performance is motivated within the gradation because this way promotion receives a high value.

- There is a single gradation and wage structure within each public sector or occupational family (for example, persons working in the health field, teachers,), which reflects the "human resources" principle – "equal payment for equal work." This way it is guaranteed that the employees in all public sectors have the same level of training, approximately the same work complexity, the same responsibility and work conditions and are equally paid.

- The wage structure is meant to achieve an equal remuneration competitiveness for the positions in the public sector. In other words, if the objective of the Government is to offer

payments at the average level of the private sector, it should do the same for all the positions within a category of the public sector.

#### **4. Conclusions**

The reforms of the wage systems in the public sector have clearly become a great challenge because they are bound to affect many interest agents. This has become pressingly necessary in order to decrease the pressure laid on budget expenses and in order to meet the budget deficit permitted by the European Union. The political problems that affect the initiation of wage policies seem to be more important and difficult to solve than the technical problems.

The present paper offers an analytical basis for understanding the problems of the current system and it also provides modalities of system alignment with the European wage practices.

Within the countries that faced similar challenges (Poland, Czech Republic, Hungary) the reforms were part of a comprehensive strategy and they were structured according to stages that comprised several years.

Long-term improvement of the Romanian public administration quality depends on many factors in the reform of the wage system. Higher levels of resources granted from the budget (for example, the period comprised between 2004 and 2008) will not necessarily solve the challenges that the public administration faces. The main challenges reflected by the wage practices are as follows:

- The transparency and the perception of equity are eroded by the high dependency on benefits and bonuses of the total wage.
- The wage dispersion for similar positions is much higher than may explained by work responsibility differences or gradation.
- The benefits must be redimensioned according to the basic wage and they must account for a smaller percentage of the total income.
- The facilities for attracting well trained staff seem to be extremeley reduced seen from the outside.
- The stimulation for achieving performance is undermined by the percentage of the benefits associated with seniority and the weak connection with the work responsibility.

All these wage principles may lead to a reasonable redimensioning of wage expenses that may account for 5% of the GDP and thus may reduce the pressure laid on annual budgets.

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# BUDGET RETRENCHMENT IN THE PUBLIC SECTOR – CHALLENGES AGAINST THE BACKGROUND OF THE FINANCIAL CRISIS

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*Romania’s entry to the “select” club of the E.U. generate new challenges that overlap against the background of a financial and economic crisis with dramatic repercussions that differ from one country to another. At the end of the year, Romania concluded by experiencing a budget deficit of 5.2% of the GDP, exceeding by far the standards of the E.U. (maximum of 3%). The present paper aims at performing an analysis of the evolution of the number of occupied posts versus wages granted, the percentage thereof of the GDP and the measures that must be taken in order to diminish this component of the public expenditure for the purpose of reducing the budget deficit to a maximum percentage of 3% of the GDP. The analysis was performed on various occupied staff categories of administration, tackling the analysis of the total structure (basic wage + in-kind components: bonuses, benefits, allowances and percentages thereof).*

*Keywords: staff expenditure, budget expenditure, challenges of the financial crisis, budget deficit.*

*Code JEL: G10, H11*

## **1. Introduction**

Romania’s entry to the “select” club of the European Union Countries has generated and continues to generate new economic and financial challenges. The economic and financial crisis has spread to the European countries as well and has had dramatic repercussions differentiated from one country to another. Romania has been “caught” quite unprepared by the wave of the crisis within an unfavourable political context (local elections and parliamentary elections of 2008, followed by the elections for the European Union Parliament and by the presidential elections of 2009) against the background of compressing the economy as of the fourth quarter of 2008.

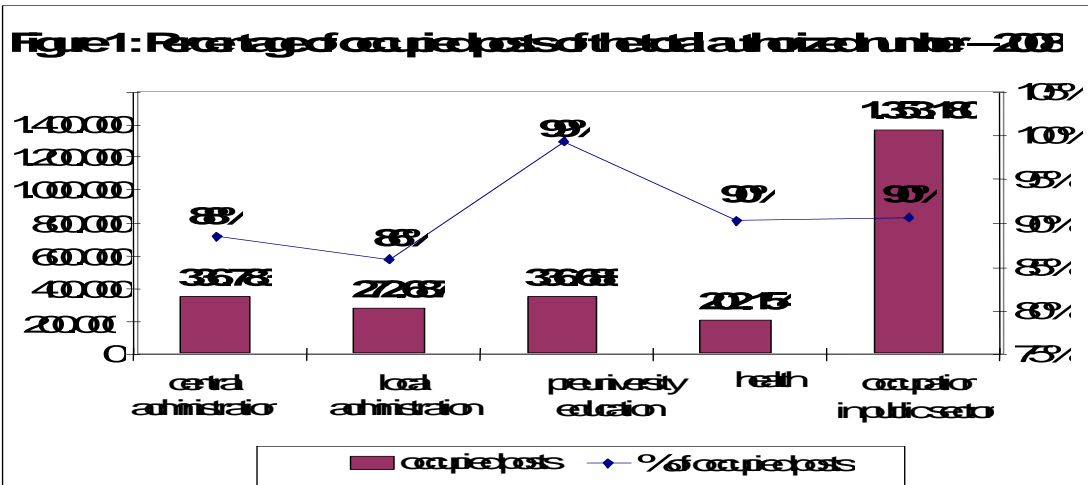
In addition to compressing the economy as of the fourth quarter of 2008, Romania has entered this whirlpool quite unprepared, having a budget deficit at the end of 2008 amounting to 5.2% of the GDP, exceeding by far the maximum level admitted by the standards of the European Union that reach a maximum of 3% of the GDP. One of the main causes that have led to this budget deficit is the increase of budget expenditure related to wages.

The present article aims at carrying out an analysis of the current wage practices in the public sector and suggests some recommendations that may be used for the future wage system.

## **2. General situation of the evolution of the wage system in the public sector**

In the Romanian public sector, including the central administration and the local administration, approximately 1,333,000 people were employed in 2007, accounting for approximately 30% of the number of employees at national level (of all the sectors). The staff expenditure account for 19.2% of the total public expenditure.

The degree of occupation of the number of budgeted posts in 2008 is indicated in Figure 1.



Source: Ministry of Economy and Finance.

The number of occupied posts is smaller, differentiated according to sectors, than the number of approved posts. The budgets earmarked for unoccupied posts have generally become sources of several purposes. The staff fluctuation over the course of the year is covered through the payment of overtime; various bonuses are granted (bonuses of 10% of the wage fund of public servants; 2% of the wage fund of the contractual staff and health staff; 5% of the wage fund for military men).

Part of the unoccupied posts may be used to cover the unforeseen staff demand at the level of the central administration (upon creating new structures, agencies, etc.).

The expenditure of the GDP account for 6.5%. The largest amounts are expended by the special sector (2.4% of the GDP). The military staff represent one quarter of the amount, while the remainder is divided between the Police Station, Fire Brigade and the legal system. Public servants and the contractual staff together account for 2.0% of the GDP. Preuniversity education staff account for 1.7% of the GDP. At the end of 2008, expenditure of the GDP accounted for 8.3%.

Table number 1 indicates the percentage of budget costs according to staff categories for 2007.

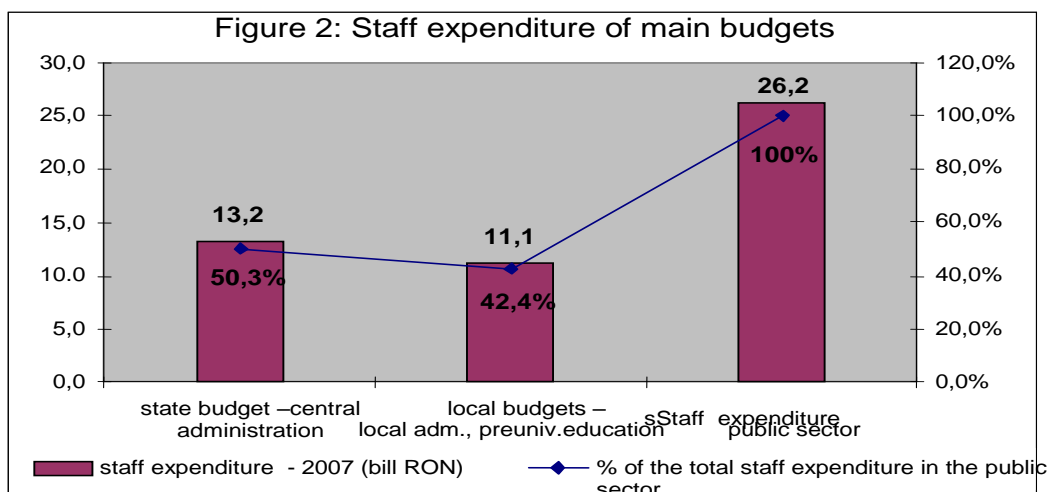
**Table 1: Percentage of budget costs according to staff categories – 2007**

| Staff category  | % of the total staff expenditure in the public sector | Staff expenditure according to authorised position | Total monthly expenditure according to individual | Total monthly expenditure for wages and in-kind benefits |
|---|---|--|---|--|
| Public servants & contracted staff – central administration | 13%   | 30,193   | 2,516   | 2,019  |
| Military men  | 9%  | 34,707   | 2,892   | 2,502  |
| Police Station, Fire Brigade, legal system                  | 28%   | 46,073   | 3,839   | 3,546  |
| Public servants & contracted staff – local administration   | 17%   | 14,052   | 1,171   | 921  |
| Preuniversity education                                     | 26%   | 19,699   | 1,642   | 1,277  |

Source: Ministry of Labour, Social Solidarity and Family.

Public servants and contractual staff encompass approximately 41% of the total number of approved posts, but account for only 30% of the costs. In contrast, the special sector accounts for 31% of the costs, having only 25% of the number of posts.

By analysing the costs of occupation in the public sector, one may notice a division that is almost equal between the state budget and the local budget, although the higher number of posts is in favour of the local budget (Figure number 2).



Source: Ministry of Economy and Finance.

State budget covers half of almost all staff expenditure, while the local budget pays 42% (including preuniversity education).

The structure of staff costs in the public sector includes three large budget components (Table number 2).

**Table 2: Structure of staff expenditure for all main staff categories**

| Expenditure item                           | Public servants and contracted staff – central administration | Public servants and contracted staff – local administration | Pre-university education staff | Police Station Fire Brigade, legal system | Army |
|--|---|---|--------------------------------|---|------|
| Staff expenditure                          | 100%  | 100%  | 100%                           | 100%                                      | 100% |
| Wage expenditure                           | 80%   | 78%   | 78%                            | 69%                                       | 67%  |
| Basic wages                                | 43%   | 47%   | 50%                            | 29%                                       | 26%  |
| Benefits (fixed part) <sup>240</sup>       | 9%  | 8%  | 12%                            | 4%  | 8%   |
| Other benefits and bonuses (variable part) | 13%   | 17%   | 11%                            | 32%                                       | 29%  |
| Other wage expenditure                     | 14%   | 7%  | 4%                             | 4%  | 5%   |
| In-kind benefits                           | 0.6%  | 0.1%  | 0.1%                           | 15%                                       | 24%  |
| Social contributions                       | 20%   | 21%   | 22%                            | 8%  | 9%   |

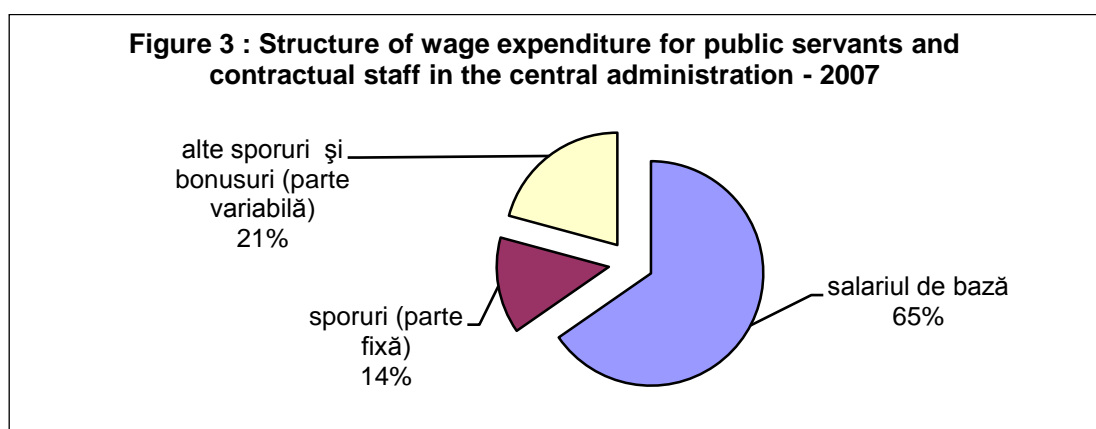
<sup>240</sup> Benefits, such as seniority benefits and management benefits, when they are added to the basic wage, are deemed to be part of the “fixed” wage.

Source: Ministry of Labour, Social Solidarity and Family.

The table indicates that the current wages represent by far the most important category of staff expenditure and that the real percentage varies between civil employees and special sector.

The wages of the first category amount to 80% of the total remuneration, while the remainder is earmarked for social contributions. As far as the special sector is concerned, the percentage of the wage drops to 67%, while the social contributions amount to 8%. In-kind benefits amount to more than 15% of the remuneration corresponding to the Police Station and more than 24% of the remuneration corresponding to military men. It is much more important to notice that within the wage expenditure, benefits play a variable, but substantial role. First of all, basic wages of civil employees account for approximately 2/3 of the total wage expenditure. For the special sector they account for 45%. Secondly, the percentage of special benefits that are part of the basic wage is variable: for public servants and contractual staff it ranges from 11% to 14% of the total wage expenditure for seniority benefits; in the case of professors, it amounts to 17%; approximately 22% of the wage expenditure of public servants relates to benefits.

Figure number 3 presents the structure of wage expenditure for public servants and contractual staff in the central administration.



Source: Ministry of Economy and Finance.

Table number 3 shows the occupation in the public sector according to staff categories for the period comprised between 2005 and 2008.

**Table 3: Occupation in the public sector for main staff categories 2005-2008**

| Category / Employer         | 2005 (authorised) | 2006 (authorised) | 2007 (authorised) | 2008 (authorised) | 2008 (occupied) | % occupied 2008 | Increase 2008-2005 |
|-----------------------------|-------------------|-------------------|-------------------|-------------------|-----------------|-----------------|--------------------|
| Total for the public sector | 1,317,916         | 1,405,609         | 1,453,617         | 1,495,597         | 1,353,180       | 90%             | 13%                |
| % of the total labour       | 28.9%             | 30.1%             | 30.1%             | -                 | -               | -               | -                  |

Source: Ministry of Economy and Finance.

### 3. Trends of occupation in the public field and staff expenditure (2005-2008)

Total posts have increased by 13% during the last four years. In the central and local administration they have increased by 25% for each. In the health sector they have increased by 16%, while in the preuniversity education they have remained approximately the same.

One of the most important increase trends is that of the number of posts for the public office at the level of the local administration (41%).

Until 2004, the approval of the number of posts in the local administration was carried out through an ordinance passed by the Government. After 2004, the number of posts has been approved by means of resolutions passed by the local (or county) councils according to the demands. The constant increase of income (by means of the balancing formula between the central and the local administration) has granted enough resources in order to allow this to happen.

The long-term increases of the number of posts was due to the extension of services or to the improvement of the quality of the public service. Currently there is no mechanism that checks whether this is happening (Table 5).

**Table 5: Total number of approved posts 2005-2008**

| <b>Staff category</b>  | <b>2005</b> | <b>2006</b> | <b>2007</b> | <b>2008</b> | <b>2008 / 2005</b> |
|--|-------------|-------------|-------------|-------------|--------------------|
| Special sector (military, police station, legal system, fire brigade, information) | 199,117     | 221,425     | 244,154     | 263,325     | 32%                |
| Public servants – central administration   | 65,314      | 70,232      | -           | 78,153      | 20%                |
| Contracted staff – central administration  | 37,981      | 41,595      | -           | 37,535      | -1%                |
| Public servants – local administration   | 55,417      | 58,282      | -           | 78,002      | 41%                |
| Contracted staff – local administration  | 202,262     | 227,784     | -           | 240,289     | 19%                |

Source: National Agency of Public Servants.

Another source of increase of the number of occupied posts was the special sector and the central administration.

Following the accession to the European Union, the supplementation of the number of posts for the border police and for the police unit was needed (by approximately 50,000 posts). Moreover, following the accession to the European Union new specific agencies were created (the most important: Agency for Payment and Intervention in Agriculture – that encompasses approximately 4,500 new posts). Due to the good economic increase of the period, there was no pressure to reduce the number of posts in the central administration. Moreover, the staff norms of the structures were suspended. For example, for office, services, directorates, etc. there was no imposition regarding a minimum number of posts; the 12%-percentage of the number of management positions of the total number of posts was suspended. The increase of the number of posts was paralleled by the increase of wages from 2004 onwards. All basic wages are updated each year by means of the Government ordinances. At the end of 2008 professors, police station and health employees received wages that were almost double compared to 2004.

The largest wage increases were experienced in 2007, when the basic wage increased by 19%, while inflation amounted to 6.8% (Table 6).



**Table 6: Annual increases of basic wage for the main staff categories**

| Staff category                               | Annual increase rate |                     |                     |  | Cumulative increase |  |
|--|----------------------|---------------------|---------------------|--|---------------------|--|
|  | Dec. 05/<br>Dec. 04  | Dec. 06/<br>Dec. 05 | Dec. 07/<br>Dec. 06 | Dec.<br>08 <sup>241</sup> /<br>Dec. 07 | Dec. 07/<br>Dec. 04 | Dec.<br>08 <sup>242</sup> /<br>Dec. 04 |
| Public servants                              | 17%                  | 11%                 | 19%                 | 12%                                    | 55%                 | 73%                                    |
| Contracted staff                             | 20%                  | 11%                 | 19%                 | 12%                                    | 59%                 | 78%                                    |
| Legal system                                 | 8%                   | 9%                  | 20%                 | 5%                                     | 42%                 | 48%                                    |
| Military staff                               | 8%                   | 10%                 | 25%                 | 5%                                     | 48%                 | 55%                                    |
| Police Station                               | 30%                  | 10%                 | 25%                 | 5%                                     | 78%                 | 86%                                    |
| Professors in the<br>preuniversity education | 14%                  | 12%                 | 29%                 | 12%                                    | 64%                 | 84%                                    |
| Health                                       | 20%                  | 11%                 | 22%                 | 12%                                    | 63%                 | 83%                                    |
| Annual inflation                             | 8.6%                 | 4.9%                | 6.8%                | 5.9% <sup>243</sup>                    | 22%                 | 29%                                    |

Source: National Agency of Public Servants.

Following the evolutions experienced by wages, the staff expenditure in the public sector increased at a higher rate than the total public expenditure or than the GDP.

Staff expenditure, as percentage of the GDP, increased from 5.3% in 2004 to 6.5% in 2007, namely an increase of 23%, and to 8.3% in 2008.

The increase of the staff expenditure was the highest for the state budget and it was followed by the staff expenditure of the local budget during the period comprised between 2005 and 2007. In both cases the increase rates exceeded those of the GDP.

#### 4. Conclusions

During the period analysed the Romanian economy experienced a considerable increase. Following this increase, public expenditure, as percentage of the GDP, also increased: 30% in 2005, 34% in 2007. The number of posts and the wages increased at a higher rate.

The future priority of the Government must be the guarantee that this “generosity” is translated into efficiency. From this point of view there are a series of weak spots for which measures must be undertaken in order to overcome the same in the medium term:

- Criteria and practices of performance assessment must be improved in order to facilitate a better performance of employees.

- There are substantial wage inequities between main staff categories. The annual update of wages is not carried out based on objective criteria (GDP, output, inflation, efficiency, etc.), but based on the negotiation power of trade unions.

- The complexity, the performance at work, are still insufficiently remunerated.

- The wage is completely untransparent. Bonuses, allowances, numerous benefits account for a much too high percentage of the total remuneration.

- The lack of a sole wage well-balanced law led to inequities within the remuneration system of various public servants categories.

- The establishment of bonuses, benefits stipulated by law followed by the suspension of payment thereof through the annual budget law led to the challenge thereof in court, given that gaining and payment disturbed the level of budget allowances granted and grafted the budget deficit.

241 Estimate based in the legislation adopted by the Government in 2007 and at the beginning of 2008.

242 Estimate based in the legislation adopted by the Government in 2007 and at the beginning of 2008.

243 Estimate of Banca Națională a României (National Bank of Romania).

- The relation between wage and work responsibility is quite weak. Positions that have the same requirements and duties have very different levels of payment. For example, a librarian who has graduated from high school receives an income that is four times higher than that received for other positions requiring similar training.

- Compensation policy differs according to various employee categories. Therefore, the basic wage ranges from 68% to 42% as percentage of the gross wage.

In the majority of the European countries, the basic wage accounts for at least 80% of the total gross wage. Maintaining the seniority benefit, a component with a maximum percentage of 25% of the basic wage, without taking into consideration the real performance.

In order to reduce the impact that the staff expenditure has on the budget deficit, rulers need to:

- draw up a sole wage law that encompasses all occupational categories, a well-balanced law that complies with the requirements encountered in the majority of the European countries;

- to perform a strategy of medium term wage reform in order to carry out an increase of future wages for those competences for which recruiting and maintaining in the public sector is a difficult task;

- elimination of special systems approved by special laws (wages, benefits, pensions, etc.) whose percentage lays pressure on the budget.

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## CONSIDERATIONS REGARDING THE INFLUENCE OF THE MINIMUM TAX ON THE FISCAL BURDEN OF THE COMPANIES

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*Taxation can be considered an efficient way to stimulate the real economy, but during economic crisis, an excessive and/ or a badly executed fiscal pressure can cause perturbations to the real economy, more exactly to the economic agents whose financial statu-quo is precarious: thus, if the owed taxes can not be placed at intervals, and, moreover, if they are "stimulated" to use new ways to diminish the fiscal duty, huge damages will be brought to the real economy and to the state itself, the imminent bankruptcy growing the economic crisis. Once the adoption of OUG no 34/ 2009, the situation becomes even more difficult, due to the impediments which the minimum taxation brings to the fiscal principles, causing a certain inequitable level among the tax payers whose incomes are situated to the limit of the instalments owing to the uncorrelation of the fiscal duty with the contribution power, and to the way of establishing the incomes.*

*Keywords: minimum tax, fiscal burden, fiscal pressure*

*JEL Classification: E62, M21*

In the periods of economic crisis , as it is the one we face at present , the need for financial public resources increases considerably mainly after the increase in volume of the public expenditures which are enforced to be applied in the field of assistance and social protection but also as a consequence of the need for public financing of certain economic programs meant to decline the effects of the economic crisis and , eventually surpass it .

At the same time, most of the times, it is witnessed a degradation of the degree of collecting the public incomes from compulsory fiscal levies, the natural tendency for the fiscal evasion of taxpayers as a origin factor of the phenomenon, manifesting more heavily than in any other period.

The attraction in the public system of many incomes can be carried out , in such situations, only by improving the collection , either through punitive methods by levying large fines , penalties and administrative sanctions, or concessive methods to postpone or reschedule the payment of debts to the budget and extend the payment period for the uncollected outstanding debt according to the possibilities to finance the budget.

In order to surpass the crisis many countries have passed fiscal legislations which allow the direct negotiation of incomes, on a legal basis, between the .taxpayers and the fiscal authorities, allowing some delays or reschedule the due time for the payment of incomes till the redress of the company , useful in case of liquidity crisis for the well-meant tax payers that are in a real

impossibility to pay the debts to the state , owing to the non collection of their own debts to the third parties and also the decrease of the fiscal duty in case of certain levied incomes.

Thus, in order to overcome a crisis which can lead to the instability of economy by 3% this year, Hungary has already taken several measures to reduce the taxes on companies and salaries, increase the taxes on consumption and property and decrease of the public expenditures. Bulgaria is another example, where, recently it has been introduced a tax relief for a period of 5 years for the investors in unfavorable regions. In the Czech Republic, the rate of taxes on income was diminished from 21% to 20%, the rate of social health was also diminished, and the reimbursements of value-added tax are being solved more rapidly for the taxpayers that submit the fiscal statement electronically.

Furthermore, the developed countries from the European Union act through various fiscal methods against the crisis, thus, in Belgium , for the first three semesters from 2009 , the companies which face financial difficulties will not be penalized if they delay the payment for the value- added tax. Another example is Great Britain where the rate of value-added tax was diminished for a year, from 17,5% to 15% and it was allowed the delay concerning the payment of taxes for the companies which were affected by crisis.

In Romania, a first fiscal measure with direct effect on the economic power of taxpayers-corporate bodies , the purchasing power and the living standard of taxpayers-natural persons, was the increase of contributions quota of social insurances. This measure determined, in fact, their decrease in 2005 (31,3%, from February 2009 instead of 31,5% in 2005<sup>244</sup>), thus cancelling a large part of the predicted effects of the measure meant to decrease the fiscal impact on the paid work. Moreover, if we take into account that the effects upon modification of the fiscal system, upon the increasing degree of taxpayers' fiscal conformation owing to their inertia, they do not feel the effects immediately, on a short term, we might assume that ,in fact, they did not have time to turn up at the provided level.

The fiscal relaxation in levying the incomes on salaries was considered one of the main barriers in order to eliminate or reduce the unqualified work, as a result , but also to maintain the labor force, especially the qualified one, from the perspective of the integration in the European Union and the free flow of labor force at the European level.

The increase of contributions at the public system of pensions, in the present period of crisis will act, as a pressing factor, in two ways: on the one hand, the net salaries of the employees will be decreased, on the other hand, such type of measure will press the budgets of the companies already affected by the deregulation of the national currency in comparison to the euro currency and the reduced access to finance.

Under these conditions, the solution for tax burden increase, with the hope of collecting an increased volume of public financial resources, does not appear to be indicated, the most probable effects being those of compromising the improvement of business enterprises affected by the financial crisis and the emphasis of tax evasion.

But the measures of enhancing taxation concerned, still, the growth on taxing pressure is directly exercised by company taxes (profit tax and micro-enterprises income tax).

Thus ,starting with the 1st of May 2009<sup>245</sup>, for economic units that pay profit tax and, also for those that pay micro-enterprises income tax and regardless of activity domain, the tax burden is established at a minimum level, determined by total yearly incomes. This tax is shown in table no.1.

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<sup>244</sup> Stela Aurelia Toader, "Fiscal evasion in Romania during the transition period", Pro Universitaria Publishing House, Bucharest, 2007.

<sup>245</sup> OUG no.34/2009, regarding the budgetary modification for the year 2009 and the reglementation of certain financial-fiscal measures, published in M.Of. no 249/2009, modified in M.Of. no.254/2009.

**Table no. 1: Minimal taxation grid under OUG no. 34/2009**

| Total yearly income (lei) | Minimum yearly tax (lei) |
|---------------------------|--------------------------|
| 0-52.000                  | 2.200                    |
| 52.001-215.000            | 4.300                    |
| 215.001- 430.000          | 6.500                    |
| 430.001 – 4.300.000       | 8.600                    |
| 4.300.001 – 21.500.000    | 11.000                   |
| 21.500.001 – 129.000.000  | 22.000                   |
| Over 129.000.001          | 43.000                   |

By introducing the minimum tax, they prejudice too, once again, fiscal principles, that already aren't very respected in our country.

The new fiscal settlement violates, first of all, the principle of imposing efficiency, provided in article 3 letter d) from the Tax Code ,under which the financial law must assure long term stability of rules and tax norms, so that unfavorable retroactive effects be avoided for individuals and legal entities, in relation to taxation in force on the date they made some major investment decisions.

Furthermore, to ensure compliance with the principle of imposing efficiency, article 4 from the Fiscal Code clearly states terms and conditions of modification and completion. So, the Fiscal code can be modified and added only by law, promoted, usually, 6 months before the date of it coming into force, respectively, the first day of the next year. Under these conditions, the minimum tax should have come into force from the 1<sup>st</sup> of January 2010.

Regarding the principle of tax equity, principle formulated for the first time in 1776, by the father of political economy, Adam Smith, who stated that „taxpayers of every state must contribute, as possible, with taxes depending on the revenue that they obtain”<sup>246</sup>, experts from a group of consulting firms from BIG 4<sup>247</sup> (PricewaterhouseCoopers, KPMG, Ernst&Young, Deloitte Tohmatsu&Touche) think that the new minimum tax set for companies, presents exactly the features of a gross sales tax, considering it a method of poor taxation, because:

-It implies reiterated taxes;

-It's inequitable;

-It isn't correlated with the paying capacity of taxpayers;

Regarding the correlation of tax burden with the power of contribution, the minimum tax introduces a certain degree of inequity amongst tax payers-legal entities, best illustrated in the case of incomes located on the edge cuts.

Thus, considering, two taxpayers that have a yearly income of 215.000 lei and, respectively 215.001 lei, at the same taxable profit of 25.000 lei, taxpayers will bear different tax burdens. The first will pay tax 4.300 lei, thus bearing a financial pressure of 17,2%, and the second will pay tax 6,500 lei, bearing a financial pressure of 26%.

On the other hand, by way of settlement the minimum tax, taxpayers are obliged to receive, depending on the income cut they settle on, bigger profits than the minimum tax. Thus , all of the profit will be seized as the minimum tax, taxation thus eliminating the reason from any economic activity.

The new tax measure is justified by the political governor through the attempt of discouraging taxpayers from registering unreal expenditures for tax reduction. But, by this measure the

<sup>246</sup> Iulian Vacarel and the co-authors, „Finante publice”, The 6-th Edition, Publishing house Didactica si Pedagogica, Bucharest, 2007, page.369.

<sup>247</sup> Memoir from the group of consultancy companies BIG 4 regarding the technical aspects from the Emergency Ordonance of the Government no.34/2009, regarding the reglementation of certain financial and fiscal measures for the year 2009.

political governor rather indicates to the payer, the level of expense that can be deducted from taxable incomes, so that he can limit his tax burden to the level of the minimum tax.

In determining this level of expense, we'll start from the taxable profit whose profit tax equals the minimum tax, and indicates the maximum threshold of taxable profit to which the tax payer can come under the minimum tax.

**Table no. 2: Maximum level of taxable profit, established on stages of income, till the taxpayers are subject to the minimum tax**

| Total yearly income (lei) | Taxable profit | Profit tax | Minimum tax under OUG no. 34/2009 |
|---------------------------|----------------|------------|-----------------------------------|
| 0-52.000                  | 13.750         | 2.200      | 2.200                             |
| 52.001-215.000            | 26.875         | 4.300      | 4.300                             |
| 215.001- 430.000          | 40.625         | 6.500      | 6.500                             |
| 430.001 – 4.300.000       | 53.750         | 8.600      | 8.600                             |
| 4.300.001 – 21.500.000    | 68.750         | 11.000     | 11.000                            |
| 21.500.001 – 129.000.000  | 137.500        | 22.000     | 22.000                            |
| Over 129.000.001          | 268.750        | 43.000     | 43.000                            |

Above these levels of taxable profit, the taxpayer doesn't come under the coverage of minimum tax and will bear a profit tax established at 16%.

It can be observed that, in the case of the first income cut, the taxpayer that makes a taxable profit of up to 13.750 lei, will bear a tax of fixed value of 2.200 lei, Thus, until this level of profit, the minimum tax shows a strong tendency to regress, because the share of the minimum tax included in the taxable profit gets bigger as it goes down. Otherwise, this regress manifests itself in every one of the income cuts, until it reaches that maximum level of taxable profit that determines the election of minimum tax.

Considering the income tax cuts that determine minimum tax application, the level of deductible expenses, that will limit the tax burden to its lowest, can be established.

For contributors that register total yearly incomes between 13.750 lei (approximately 3.200 euro) and 52,000 lei, the level of deductible expenses for which the taxpayer comes under the minimum tax is:

-at a level of income of 13.750 lei, regardless of the level of recorded expenses, the taxpayer will owe a minimum tax of 2.200 lei

-at a level of income situated at the upper limit of the cut, the taxpayer that registers deductible expenses that exceed 73,5% of the income, will come under the minimum tax.

For the second income cut, between 52.001 and 215.000 lei, the level of deductible expenses for which the taxpayer comes under, the minimum tax is:

-in case of an income situated at the lower limit of the cut, over any level of deductible expenses that exceed 48,31% of total incomes, he will owe a minimum tax of 4.300 lei.

-in case of an income situated at the upper limit of the cut, over any level of deductible expenses that exceed 87,5% of total incomes, he will owe a minimum tax of 4.300 lei.

-the minimum level of deductible expenses for which the taxpayer owes the minimum tax is illustrated in table no. 3.

**Table no. 3: Minimum level of deductible expenses that generate the minimum financial burden**

| Minimum share of deductible expenses in all registered incomes | Minimum tax |
|--|-------------|
| 0%-73,5%   | 2.000       |
| 48,3% - 87,5%  | 4.300       |
| 81,1% - 90,5%  | 6.500       |
| 87,5% - 98,7%  | 8.600       |
| 98,4% - 99,7%  | 11.000      |
| 99,3% - 99,9%  | 22.000      |
| 99,8%  | 43.000      |

The relation based on which it can be established over which the level of registered expenses, a taxpayer will come under the minimum tax is:

$$k = 1 - \frac{I_{\min}}{V * 16\%}, \text{ where}$$

$k$  - deductible expenses share in the total yearly income;

$I_{\min}$  - minimum tax under OUG no. 34/2009;

$V$  - total yearly income.

For example, a taxpayer that makes a total yearly income of 4.300.000 lei (approximately 100.000 euro) will pay a minimum tax of 8.600 lei, if his taxable profit is at most 53.750 lei. At this level of chargeable profit it is reached in the conditions in which the expenses share included in the total yearly income is at least 98,7%.

If the deductible expenses share would be 98.6% the taxable profit reaches 60.200 lei, and the owed tax will be 9.632 lei, bigger than the minimum tax.

In these conditions it can be appreciated that, actually, the minimum tax affects only those taxpayers that register very high expense levels, one of the reasons being that of tax burden shrinkage. From this perspective, adoption of minimum tax may be considered a good measure to attract an area of taxation of unstated income.

Collateral victims of such measures will however be financially disciplined taxpayers, but which are strongly affected by the economic crisis

Thus, minimum tax will affect equally, those taxpayers who, under previous regulations would owe a tax below the minimum established in the present, that is, exactly those with reduced contribution power. Here it is, especially in the case of taxpayers who earn income located in the lower limit of the second cut of income, approximately 125.000 euro.

Another aspect refers to the way of establishing incomes that sit at the base of the minimum tax grid. Thus, the new regulations specify that for framing in the total revenue cut, the total incomes will be taken into account, obtained from any source, registered at 31st of December of the previous year, with some exceptions. Under these conditions the new regulation oblige tax payers into paying a tax established on a material amount of taxable matter made in a period prior to the reporting one. One can easily foresee that, based on the current economic crisis, for most economic units, revenues and profit obtained or hoped to be obtained in the financial year 2009, will be greatly reduced compared to the ones in the financial year 2008, the tax burden needn't, once again, account for the contribution power of taxpayers.

In conclusion it can be said that the minimum tax introduces an elevated degree of financial inequity to the taxpayer, owing to the discrepancy of tax burden with the power of contribution,

regressive taxation but also determining revenues on which the correlation with certain minimum tax cut, encouraging, at the same time, new forms of diminishing the tax burden.

For micro-enterprises income tax payers, the discrepancy of owed tax with registered income, is even more obvious. So for payers with incomes situated in the second cut tax will be between 8,26% and 3% from the registered income, while, for payers with incomes in the third cut, tax remains 3% from the income. For the taxpayers with the lowest incomes, it will vary between 100% and 4,23%. Under these conditions, fiscal equity or social justice regarding incomes cannot be provided.

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# L'HARMONISATION DE LA FISCALITÉ ENVIRONNEMENTALE DANS L'UNION EUROPÉENNE : UNE ÉTUDE COMPARATIVE

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*Environmental protection issues took magnitude in recent years, being included on the list of priorities of the European Union. To reduce the negative externalities, a solution of compromise is taxing products whose consumption or production creates pollution, and too, the solution being offered by the European Union. Moreover, because taxation of these goods has impact of sale prices, concern for the harmonization of fiscal legislation in this area has become a priority. Thus, in this paper we will try to analyze the state of harmonization in the taxation environment, on the one hand; on the other hand, to show that the place is occupied by green taxes, we perform a comparative analysis of the share of tax revenues from this source, in GDP and total tax revenue, in EU Member States, based on official data available.*

*Mots clé: harmonisation fiscale, fiscalité environnementale, écotaxes, droit d'accise, revenu fiscal*

*JEL Classification : H23*

## **1. Introduction**

Les réformes fiscales sur l'environnement ont été fixées depuis la publication du Livre Blanc de Jacques Delors, sur la « Croissance, la Compétitivité et l'Emploi » en 1993. L'idée d'une réforme fiscale est devenue également politiquement attrayante, car elle a représenté aussi, un moyen de promouvoir l'accroissement de l'emploi et la protection de l'environnement en même temps. Cette mesure a été prise aussi pour assurer la protection des producteurs de tout effet négatif sur la concurrence, l'effet causé par la hausse du coût des matières premières, en particulier l'énergie; l'augmentation des coûts ayant lieu par l'introduction des impôts «verts» sous diverses formes, en plusieurs États Membres comme Danemark, Pays-Bas, Allemagne, Suède, Finlande, Royaume-Uni. Également dans les nouveaux États Membres, les réformes "verts" ont été élaborées en Slovénie, qui a introduit une taxe sur l'émission de dioxyde de carbone et, depuis 1997, en Estonie, les impôts verts ramènent importantes ressources financières, afin de couvrir la baisse des recettes fiscales de l'impôt sur le revenu. En outre, la République tchèque, en 2008, a développé une réforme fiscale globale.

Autre raison pour introduire les impôts verts a été la élaboration, dans le cadre ONU, du Protocole de Kyoto, en 1997, qui exigeait, aux différents pays, la réduction de leurs émissions pour certains polluants atmosphériques. Concrètement, pour les gaz à effet de serre l'Union européenne (UE) dans son ensemble est déterminé à maintenir les émissions moyennes au cours de la période 2008-2012 à un niveau de 8%, inférieurs à ceux de l'année de référence considérée, c'est-à-dire 1990.

Dans cette étude nous voulons d'analyser, d'abord, le stade de l'harmonisation fiscale en domaine environnementale et puis, de effectuer une analyse comparative dont le poids des taxes environnementales harmonisées dans les États membres de l'Union Européenne.

## **2. Délimitations conceptuelles sur la fiscalité environnementale**

Ce fait a attiré un intérêt croissant dans l'analyse de l'efficacité et la faisabilité des différents mécanismes pour atteindre un objectif environnemental donné. Il est bien connu que certains économistes en ont préconisé, dans la littérature économique, par l'utilisation de l'intervention des politiques publiques afin de contrôler émissions de polluants (Pigou, 1920) ou en créer d'autres mécanismes de marché (Coase, 1960). À ce égard, diverses mesures de protection de l'environnement ont été conçues, c'est-à-dire des subventions pour la réduction de la pollution, des

permis d'émission négociables marchés et / ou des taxes environnementales. On y ajoute autre deux modalités rencontrées en littérature économique: la interdiction ou la coercition et respectivement la réglementation<sup>248</sup>. En somme, l'ensemble de ces instruments sont conçus de manière à ce que les externalités produites par les activités de la pollution soient intégrées dans les prix du marché.

Parmi les cinq solutions offertes afin que les externalités négatives ont été réduites ou annihilées, la taxation est l'une parmi les meilleures variantes, ayant en vue la possibilité pratique de mise en œuvre; ainsi, on collecte des ressources provenant de cette source pour indemniser les personnes lésées par la manifestation des externalités négatives. Cependant, il y a des limites liées aux difficultés de mise en œuvre, car on ne peut pas estimer le dommage marginal et donc le recours à une série de suppléments (taxes spéciales sur la vente de voitures ou sur le carburant, etc.). Si dans la pratique, les mesures fiscales sont un remède moins cher que les autres solutions proposées, l'inconvénient est que la taxation des produits dont la demande est inélastique, va conduire à un excès de poids. Par comparaison, les subventions représentent une aussi bonne solution, mais ils deviennent souvent immoraux; la réglementation est très difficile à mettre en œuvre en raison de difficultés techniques pendant que la solution de coercition est faisable en partie.

Concrètement, les taxes environnementales, entre autres, ont la réputation d'être fondées sur le marché instruments de la politique environnementale. Il en est ainsi, parce que ce genre de taxes permet aux décideurs de augmenter les charges des entreprises qui, à son tour augmentent le prix des biens polluants. Avec ces prix résultants, le marché réaffecte les ressources économiques de manière à ce que des émissions de polluants atmosphériques on peut réduire.

### **3. L'analyse du procès de l'harmonisation fiscale en UE**

En vue d'éviter toute incompatibilité entre les systèmes fiscaux, et en particulier au niveau de la fiscalité indirecte, la question des taxes vertes est venue une problème d'actualité pour les autorités européennes. En plus, en même temps avec la signature, en 2001, à Göteborg, le Pacte pour le développement durable, le problème est que les prix doivent refléter les coûts réels, y compris les coûts sociaux de la pollution de l'environnement. Ainsi, en 2003, les discussions sur ce sujet, au niveau européen, ont été achevées par la Directive 2003/96/CEE, relative à la taxation des produits énergétiques et de l'électricité, qui représente, en même temps, la ratification du protocole Kyoto. Cette directive exige l'entrée en vigueur de ses dispositions immédiatement commençant avec 1 Janvier 2004; la directive accepte, dans le cas de certains États membres, des dispositions transitoires afin de rendre le passage plus facile.

La directive a fixé les taux minimaux de taxation (ad valorem) pour le carburant, combustible de chauffage et d'électricité, que les États membres ne peuvent pas enfreindre. En outre, il encourage une attitude favorable à la substitution des sources d'énergie propre grâce à une série d'exemptions qui s'appliquent à l'électricité d'origine solaire, éolienne, géothermique, etc.. Les modalités techniques de l'octroi d'exemptions restent à la choix des États membres qui ont la possibilité de choisir entre plusieurs variantes: directement, par le biais de taux différenciés ou de remboursement total ou partiel du montant de l'impôt. Il y a, également, la possibilité de introduire un certain nombre de réductions pour les produits énergétiques et l'électricité utilisés dans l'agriculture, la foresterie, la pêche ou le jardinage. Mise en œuvre des mesures prévues par la présente directive, au niveau national, on fait que sous la stricte supervision de la Commission européenne, qui autorise des mesures fiscales prises par les États membres, après en avoir informé préalablement la Commission.

La directive mentionnée, a été incorporée dans les législations nationales sous diverses formes, la majorité des États membres a inclus dans la législation du droits d'accises, mais il y a des

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248 Nemeş J., Wright G., Finanţe publice, Editura Ars Longa, Bucureşti, 2005, p. 52.

dispositions qui n'ont été entièrement harmonisées en domaine de l'énergie, comment on peut observer dans le tableau no.1.

Quand on parle de la taxation environnementale, on doit faire quelques délimitations conceptuelles. Ainsi, selon la définition donnée par l'OCDE, on appelle " fiscalité environnementale les impôts, taxes et redevances dont l'assiette est constituée par un polluant, ou plus généralement par un produit ou un service qui détériore l'environnement ou qui se traduit par un prélèvement sur des ressources naturelles renouvelables ou non renouvelables.

*Tableau 1: Le stade d'harmonisation de la législation environnementale, dans les Etat membres de l'Union Européenne, en 2008*

| <b>L'Etat Membre</b> | <b>Les types d'impôt harmonisé utilisé</b>  | <b>Autre type d'impôts non harmonisés</b>   |
|----------------------|---|---|
| Malte                | Droits d'accise sur les huiles minérales, électricité et pétrole  | -   |
| Lettonie             | Droits d'accise sur les huiles minérales  | -   |
| Lituanie             | Droits d'accise sur les produits énergétiques   | -   |
| Estonie              | Droits d'accise sur les produits énergétiques   | -   |
| Allemagne            | Droits d'accise sur l'électricité, les huiles minérales et charbon  | -   |
| France               | Droits d'accise sur les huiles minérales et produits connexes et sur les carburants   | -   |
| Espagne              | Droits d'accise sur les hydrocarbures et l'électricité  | Droits d'accise - Le commerce de détail de certaines huiles minérales                     |
| Portugal             | Droits d'accise sur le pétrole et produits énergétiques   | -   |
| Slovénie             | Droits d'accise sur les produits énergétiques   | Taxe sur le CO2   |
| République tchèque   | Droits d'accise sur le gaz naturel, d'autres gaz, sur les huiles minérales et l'électricité                                     | -   |
| Pologne              | Droits d'accise sur l'essence, du gazole et GPL   | -   |
| Roumanie             | Droits d'accise sur les produits énergétiques et de l'électricité   | Taxe sur l'huile provenant de la production nationale                                     |
| Hongrie              | Droits d'accise sur les produits énergétiques   | -   |
| Royaume-Uni          | Droits d'accise sur les huiles de hydrocarbures, les combustibles fossile et sur le gaz   | Taxe sur le changement climatique   |
| Italie               | Droits d'accise sur le gaz nature, les huiles minérales, sur le GPL et sur l'électricité  | Régionale d'accise sur l'alcool carburant;<br>Local surtaxe sur la taxe sur l'électricité |
| Belge                | Droits d'accise sur les huiles minérales<br>Cotisation sur l'énergie<br>Cotisation fédérale sur l'électricité et le gaz naturel | -   |
| Pays-Bas             | Droits d'accise sur les huiles minérales  | Droits d'accise: Taxe sur le charbon  |
| Autriche             | Droits d'accise sur les huiles minérales et sur l'énergie   | -   |
| Suède                | Droits d'accise sur l'énergie   | Taxe sur l'effet thermique des centrales nucléaires                                       |

|            |   | Droits d'accise - taxe sur le dioxyde de carbone                                    |
|------------|---|---|
| Danemark   | Droits d'accise sur l'électricité, le gaz naturel, les huiles mineras et énergie<br>Droits d'accise: Taxe sur le charbon, le lignite et de coke, etc. | Droits d'accise - taxe sur le dioxyde de carbone sur certains produits énergétiques |
| Chypre     | Droits d'accise sur les produits énergétiques   | -   |
| Luxembourg | Droits d'accise sur les huiles minérales  | -   |
| Bulgarie   | Droits d'accise sur les produits énergétiques   | -   |
| Finlande   | Droits d'accise sur l'électricité, sur les combustibles liquides et certains combustibles   | -   |
| Irlande    | Droits d'accise sur les huiles minérales  | -   |
| Grèce      | Droits d'accise sur les produits énergétiques   | -   |
| Slovaquie  | Droits d'accise sur les huiles minérales, le gaz naturel et sur l'électricité<br>Droits d'accise : taxe sur le charbon                                | -   |

Source : [www.ec.europa.eu](http://www.ec.europa.eu)

De même, une taxe environnementale n'est pas nécessairement peu élevée et destinée à financer des mesures de protection de l'environnement. On peut plus précisément distinguer les "écotaxes" (taxes indirectes sur les produits) des taxes environnementales existantes, comme les redevances sur l'eau ou les taxes sur les déchets. Ces dernières sont en effet levées pour financer des travaux précis comme l'épuration des eaux ou le traitement des déchets avant mise en décharge : elles se rajoutent donc à l'ensemble des prélèvements publics. Proportionnelles aux travaux à financer, elles sont d'un montant insuffisant pour se traduire par un signal prix influençant les comportements.

Les écotaxes sont, au contraire, destinées à lancer un signal prix (comme les taxes sur le tabac par exemple). Leur utilisation n'est pas affectée à un usage précis; elles participent donc au financement public général.

En ce qui concerne la fiscalité européenne d'environnement, les taxes environnementales peuvent être divisées en quatre grandes catégories : l'énergie, des transports, la pollution et les taxes sur les ressources.

La poids des taxe environnementale, en produit interne brut est réduit, la plupart de l'Etat membre n'attire que 2.5%, dont les taxes sur l'énergie donnent ni 2% en produit interne brut. En ensemble, c'est Danemark qui a la plus grande poids des taxes environnementales en PIB, à 6 %, suivi de Pays-Bas et Bulgarie. La moindre poids est enregistré en Lituanie, respectivement 1.8 % en PIB, comment on peut observé dans la figure no. 1.

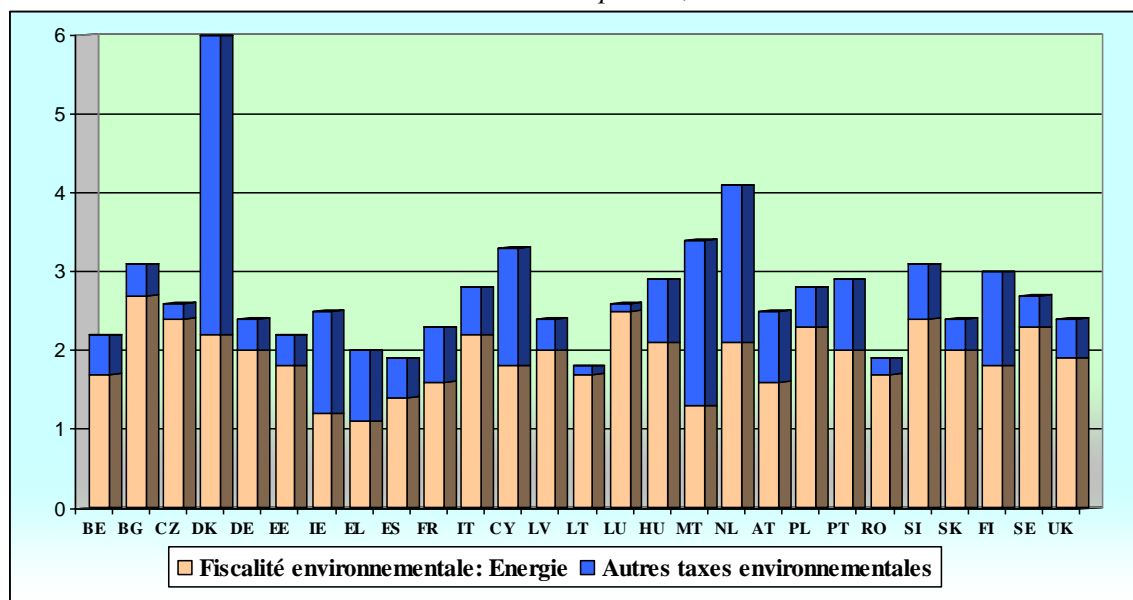
La prédominance des taxes sur l'énergie est commune à la plupart des États membres, toutefois, dans certains pays, la contribution des autre taxes est importante: par exemple, en Irlande et à Chypre, les taxes sur le transport, représentent près de la moitié de l'environnement impôts, alors qu'à Malte, ils représentent une part encore plus élevé de la fiscalité environnementale, de plus de 50%. Au Danemark, taxes de transport soulèvent presque le même montant de recettes que les taxes sur l'énergie, mais en raison du niveau élevé de la pollution et les taxes sur les ressources dans ce pays, ne constituent qu'un tiers des taxes environnementales.

En Roumanie, en 2006, les taxes environnementales ne représentent que de 1.9 % du PIB, dont un pourcent de 1,7 % a été donné par la taxe sur l'énergie; tellement, la part des impôts perçus à partir de cette source dans le PIB a été inférieur à la moyenne européenne. En outre, dans l'UE,

en 2006, la part de la fiscalité environnementale a été de 2,7% en PIB, dont un pourcent de 1,9% a été donné par les taxes sur l'énergie.

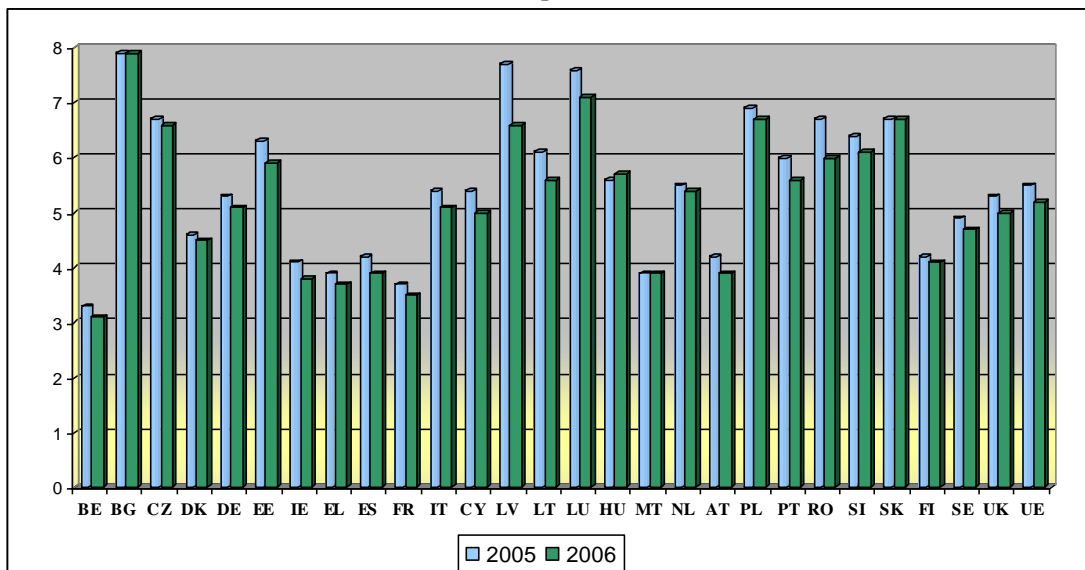
Dans la figure 2 on peut observer que, le poids des taxes environnementales sur l'énergie a été, en 2006, en Union Européenne, de 5.5 % en total recettes fiscales, moins réduit que le niveau enregistré en 2005, quand a été de 5.2 %. La tendance a été descendante dans tous les Etats membres, avec l'exception de Hongrie, qui a enregistré une croissance modeste en 2006. C'est la Belgique qui a encaissé les moindres de recettes fiscales dans cette source pendant que Bulgarie est situé au bout opus, avec 7.9 % en total recettes fiscales. Des niveaux soulevés de recettes fiscales ont été encaissé aussi par Luxembourg, Pologne, Slovaquie, République Tchèque, Lituanie et Slovénie, auprès de 6 %. En Roumanie, les taxes environnementales sur l'énergie, inclut en la législation d'accises, ont apporté au budget public, en 2006, un pourcent de 6 % en recettes fiscales totales.

*Figure 1 : Les taxes environnementales sur l'énergie, comme pourcent en PIB, dans l'Union Européenne, n 2006*



Source : Eurostat [2009], *Europe in figure. Eurostat Yearbook 2008*, [www.eurostat.eu](http://www.eurostat.eu)

Figure 2 : Le poids des taxes environnementales sur l'énergie en total revenus fiscales, dans l'Union Européenne, en 2005 et 2006

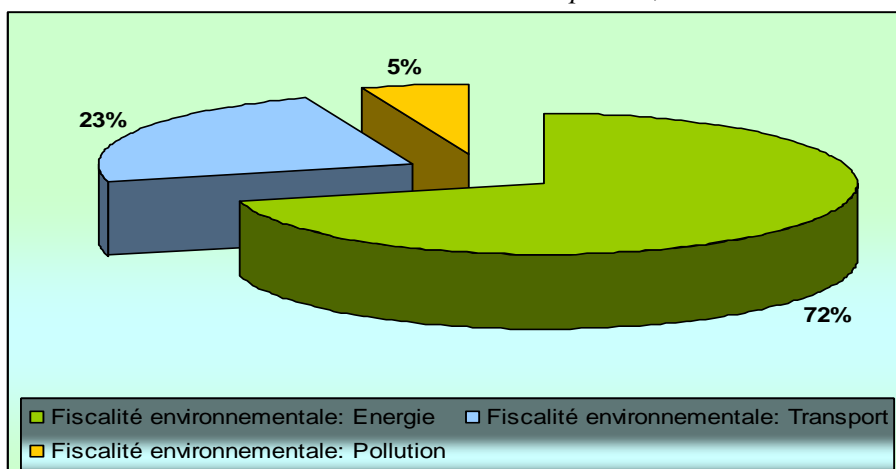


Source : Eurostat [2009], *Europe in figure. Eurostat Yearbook 2008*, [www.eurostat.eu](http://www.eurostat.eu)

On se peut observer que c'est les états membres nouveaux entres en Union Européenne qui ont prélevé des montants significantes dans cette source fiscale; on peut aussi observer que c'est ces états qui ont réduit significativement les taux d'imposition sur les impôts directes, dès 2005, et ont compensé la réduction de revenus fiscales dans cette source avec la croissance des impôts indirectes, dont les taxes environnementales sur l'énergie font partie.

Les taxes sur l'énergie sont de loin la plus importantes, représentant environ les trois quarts de l'environnement et les recettes fiscales de moins d'un quinzième du total des impôts et cotisations sociales comment on peut voir en figure numéro 3. Dans l'UE-27, les taxes correspondant à transport représentent , en moyenne, un peu moins d'un quart du total des recettes fiscales environnementales et de 1,5% du total impôts et cotisations sociales (dans la moyenne pondérée). Les deux autres catégories, les taxes de pollution et de ressources taxes, soulèvent qu'une faible quantité des recettes: ensemble, ils ne représentent que 5% du total des taxes environnementales.

Figure 3 : La structure des recettes fiscales provenant dans la fiscalité environnementale, dans l'Union Européenne,



n 2006

Source : Eurostat [2009], *Europe in figure. Eurostat Yearbook 2008*, [www.eurostat.eu](http://www.eurostat.eu)

#### 4. Conclusions

Les impôts verts ont gagné « un territoire » signifiant dans la politique fiscale de l'Union Européenne, qui a été concrétisé dans une Directive relative à taxation des produits énergétiques ; c'est les produits qui, par leurs production ou consommation dégagent un variable degré de pollution, créant des externalités négatives. La solution pour ça, a été constituée par la taxation, qui compense les effets négatifs auprès l'environnement et qui réduit la quantité offerte dans ces biens. Les revenus fiscaux dans cette source sont réduits, en ensemble de l'Union Européenne, mais ils peuvent compenser la réduction des autres revenus fiscaux, par exemple, la réduction de la fiscalité directe.

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# LA PRESSION FISCALE DANS L'UNION EUROPÉENNE : UNE ÉTUDE COMPARATIVE

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*In această lucrare vom analiza presiunea fiscală în statele membre ale Uniunii Europene pe mai multe planuri: presiunea fiscală globală, presiunea fiscală exercitată de cele două categorii importante de impozite, directe și indirecte, și nu în ultimul rând, implicit tax rate for labour and consum. In urma acestei analize, pe de o parte, vom determina valoarea medie a presiunii fiscale în EU și, pe de altă parte, vom încerca să individualizăm statele membre cu presiune fiscală ridicată, respectiv redusă. De asemenea, vom cauta să găsim cauzele care au condus la nivelele de presiune fiscală obținute.*

*Mots clé : pression fiscale, impôt sur le revenu, impôt sur le bénéfice, TVA, taux implicite d'impôt, PIB*

*JEL Classification : H20, H24, H25*

## 1. Délimitations conceptuelles

L'ampleur et la dynamique de la pression fiscale est mesurée et évaluée par le niveau de la fiscalité. La taille de ce niveau indique la part du revenu national prélevé par l'Etat, établies par les lois fiscales. La

pression fiscale est renforcée par la prise en compte des différentes manifestations de ses plans, au niveau national, au niveau des contribuables personnes physiques ou morales.

*La pression fiscale nationale (globale), en première lieu, a en vue essentiellement, la nécessité de recueillir des ressources pour faire face à des dépenses publiques. La pression fiscale représentée par le niveau de fiscalité, qui est calculé comme le ratio entre le total des ressources financières publiques, obtenues par l'État sous la forme d'impôts et taxes de nature fiscale, et un indicateur de résultats macroéconomiques (habituellement utilisé est le produit interne brut). La formule de calcul est la suivante:*

$$Pf_g = \frac{R_{fp}}{PIB} \times 100$$

Où:  $Pf_g$  - le niveau de la fiscalité

$R_{fp}$  - l'ensemble de revenus fiscaux prélevés par l'Etat

PIB - produit interne brut.

Dans l'ensemble des ressources financières prises par l'État, sont inclus les taxes et impôts de nature fiscale aussi des contributions obligatoires versées par les employeurs et les employés pour les fonds de formation pour soutenir les activités de la sécurité sociale.

L'indicateur tient compte soit seulement des prélèvements fiscaux, soit des prélèvements fiscaux autant que des prélèvements parafiscaux:

$$Pf_g = \frac{\sum Pf + \sum Pp}{PIB} \times 100$$

où:  $Pf$  - prélèvements fiscaux ;

$Pp$  - prélèvements parafiscaux.

Il est évident que la pression fiscale en prenant en compte les cotisations sociales est plus élevés que celui qui ne prend en compte que les prélèvements fiscaux.

En deuxième lieu, le niveau de la fiscalité aussi être revue *au niveau de groupes ou de catégories sociales*, sur la base de la proportion des prélèvements fiscaux prélevés par chaque groupe dans leurs revenus ou leurs avoirs réalisés. En ce sens, la pression fiscale se peut calculer à l'échelle du



groupe sociale, sous la forme de relation entre le montant des impôts encourus et le montant des recettes réalisées par lui, exprimé en pourcent, selon la relation:

$$249 \frac{\sum Pf_g}{\sum Rb_g} \times 100$$

où: - le montant des prélèvements fiscaux de revenu;

$\sum Rb_g$  - les revenus bruts réalisés par ce groupe.

De même, on peut déterminer le niveau de la pression fiscale supporté par *une personne physique*, en tant que le rapport entre le montant total des contributions fiscales et le revenu personnel, exprimées en pourcentages, selon la relation:

$$\frac{\sum Cf_g}{\sum Rb_g} \times 100$$

où:  $\sum Cf_g$  - le montant des cotisations fiscales pris en charge par la personne physique;

$\sum Rb_g$  - le revenu brut obtenu par cette personne.

Toutefois, la situation est différente, pour la charge fiscale déterminé à *une personne morale*, étant donné que certaines des impôts perçus par eux, ne sont pas effectivement engagés par eux, parce qu'ils jouent seulement un rôle d'intermédiaire dans la transmission au l'état de prélèvements réalisés, à partir des recettes fiscales d'autres personnes. En conséquence, le niveau de pression fiscale effectif, dans le cas des personnes morales (entreprises, organisations), peut être joué par les relations de la forme:

$$\frac{\sum Pf_s}{CA(Rt)} \times 100$$

où:  $\sum Pf_s$  - le montant des prélèvements fiscaux supportés;

CA (Rt) - le chiffre d'affaires / total des revenus obtenus.

## 2. L'analyse de la pression fiscale globale dans l'Union Européenne

Une analyse de la pression fiscale globale dans l'Union européenne en l'an 2006, on peut le voir à la figure 1, dans laquelle nous avons inclus dans le calcul de l'indicateur, d'une part, le montant des prélèvements fiscaux et, d'autre part, le montant des taxes parafiscales (cotisations aux différentes fonds pour la protection sociale), qui nous les avons rapporté un niveau de produit intérieur brut, enregistrée en 2006.

On peut constater que la pression fiscale globale est élevée en particulier dans l'UE15, sauf la Grèce et l'Irlande, qui a enregistré une valeur inférieure, en dessous de la moyenne européenne. Les valeurs de la pression fiscale la plus élevée sont enregistrées dans les pays nordiques comme Danemark, Suède, Finlande, la Danemark soient le pays avec la plus élevée pression fiscale, de 49,1%<sup>1</sup>. Les valeurs au-dessus de la moyenne européenne sont enregistrées aussi, dans autres Etats membres de l'UE15 comme la Belgique, la France, l'Italie, l'Autriche et les Pays-Bas. Les valeurs inférieures sont enregistrées dans les nouveaux États membres, respectivement, la Roumanie, la Lituanie et la Slovaquie, avec des valeurs de la pression fiscale sous 30% en PIB.

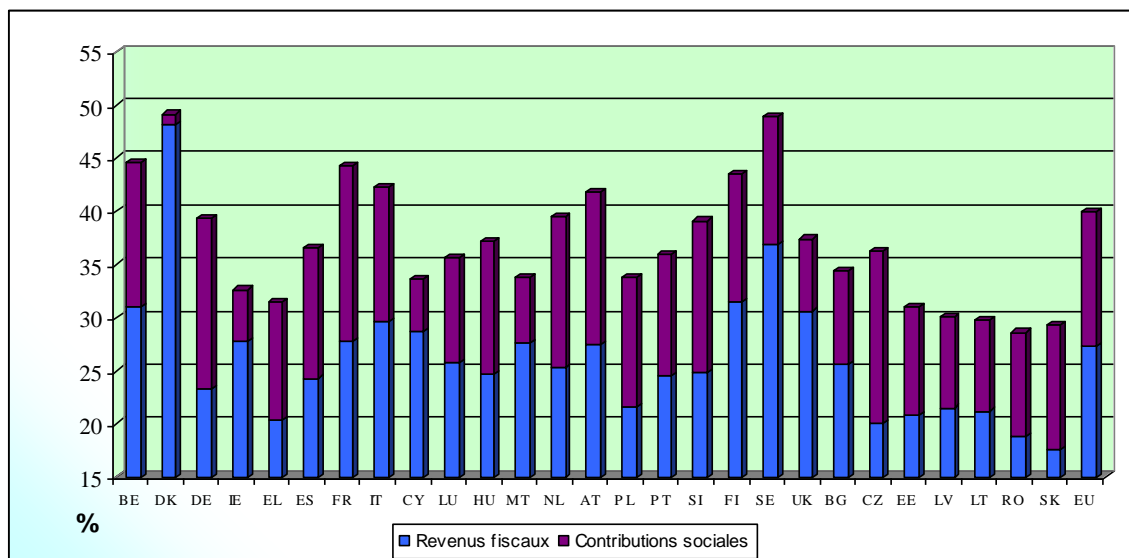
La pression fiscale exercée par les cotisations sociales sont, dans la plupart des Etats membres, plus de la moitié de la pression fiscale globale, spécialement dans les nouveaux États membres venus dans l'Union européenne (sauf Malte et Chypre font). En pays comme le Danemark, la Suède, la Finlande, la Grande-Bretagne et d'Irlande de cotisations sociales sont un peu réduit en

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249 The portal is available on the Internet address <http://www.ghiseul.ro>.

proportion du PIB, parce que la montant de revenus fiscaux provenant par l'impôt sur le revenu est très élevée, soient en vigueur des grilles de taxation très progressives.

**La figure 1: La pression fiscale globale (inclusivemet les cotisations sociales), dans l'UE, n 2006**



Source: modifié selon *Europe in figure. Eurostat Yearbook 2008*, [www.eurostat.eu](http://www.eurostat.eu)

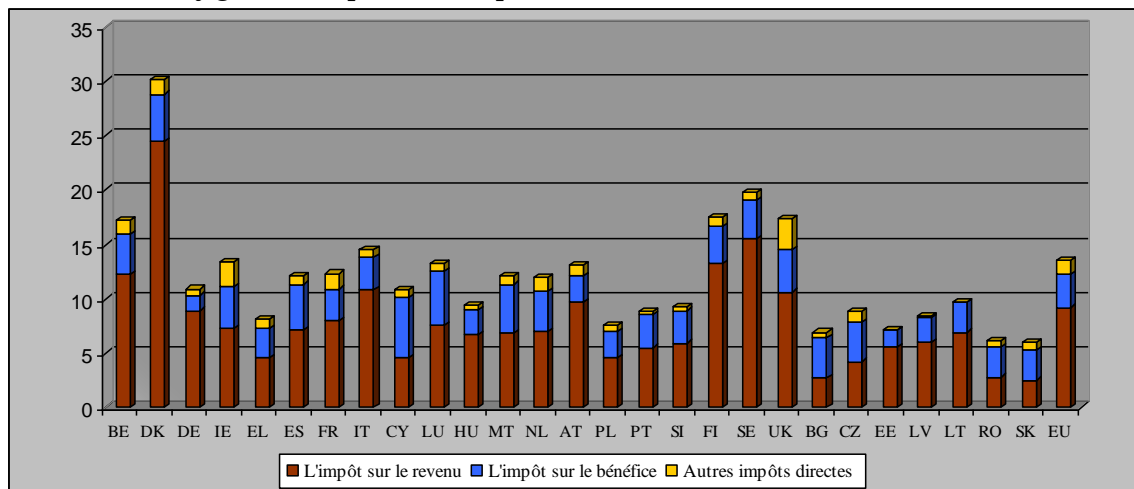
La plupart des recettes fiscales qu'il perçoit au Danemark, 48,1% du PIB, tandis que le plus bas est enregistré en Slovaquie où celles contribuent au budget public, seulement avec 17,6% du PIB.

Des valeurs réduites des recettes fiscales sont observées dans la plupart des Etats moins développés de l'Europe Centrale et du Sud-est, qui réussissent dans une moindre mesure, à redistribuer le produit créé, qui est également plus faible, d'une part, mais et les taux d'imposition est réduit à la suite des mesures visant à accroître l'attractivité régionale pour les investisseurs étrangers.

### 3. L'analyse de la pression fiscale par catégories d'impôts

Une analyse de la pression fiscale sur les catégories d'impôts directs et indirects est nécessaire pour nous former une image sur le mode de financement des dépenses publiques prédominant dans l'UE.

*La figure 2: Le poids des impôts directs en PIB, dans l'UE, n 2006*



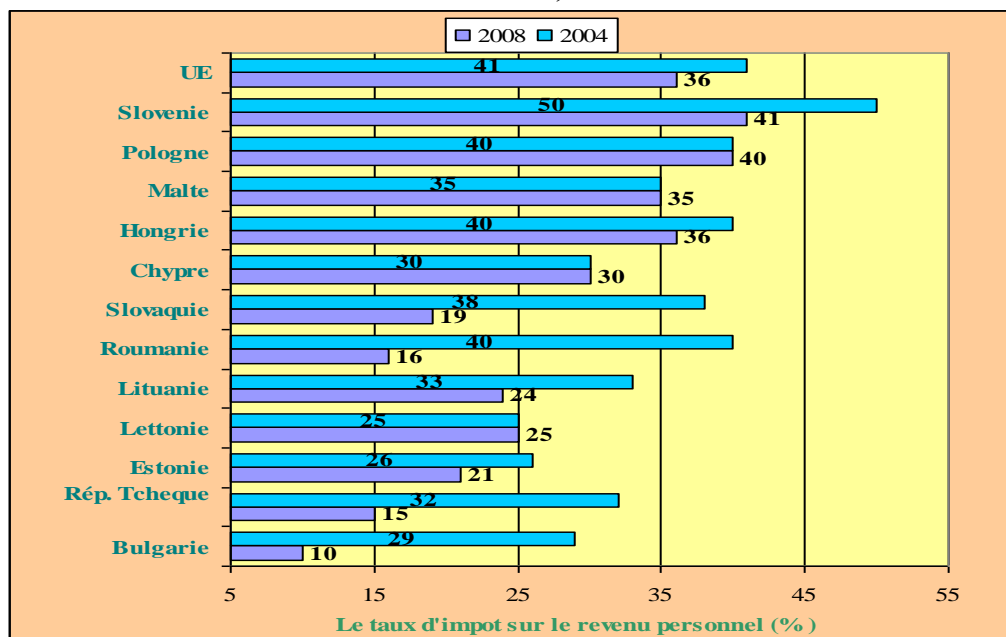
Source: modifié selon *Europe in figure. Eurostat Yearbook 2008*, [www.eurostat.eu](http://www.eurostat.eu)

D'abord, en ce qui concerne la catégorie des impôts directs, la pression fiscale exercée par eux dans

l'Union est de 13,5 %<sup>1</sup>. La plupart des États membres ont enregistré, comment on peut voir en figure no. 2, des valeurs inférieures à la moyenne ou près de la moyenne, seules États qui recueillissent des recettes fiscales des impôts directs, bien au-dessus de la moyenne européenne, sont le Danemark, la Finlande, la Suède, la Belgique et le Royaume-Uni.

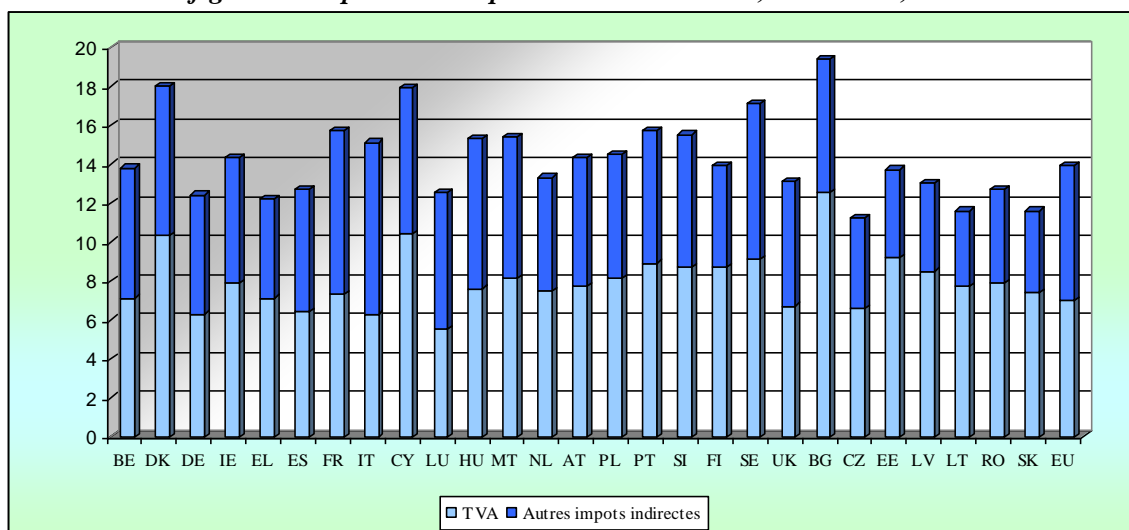
Puis, l'impôt sur le revenu personnel représente la plus grande part des recettes fiscales provenant de cette source, devant, dans la plupart des États membres, l'impôt sur le bénéfice, à l'exception de la Slovaquie, Chypre et la Bulgarie. L'explication est rendue par la réduction massive du taux d'imposition du revenu personnel, pendant les dernières années, comment on peut le voir dans la figure no. 3.

*La figure 3 : Le taux d'impôt sur le revenu personnel, dans les nouveaux Etats membres de l'UE, en 2008 t 2004*



Source: modifié selon *KPMG's Individual Income Tax rate Survey 2008*, in [www.kpmg.uk](http://www.kpmg.uk)

La figure 4: Le poids des impôts indirectes en PIB, dans l'UE, n 2006



Source: modifié selon *Europe in figure. Eurostat Yearbook 2008*, [www.eurostat.eu](http://www.eurostat.eu)

Comme on peut observer dans la figure no. 4, la pression fiscale dégagée par les impôts indirecte est située sur même niveau que les impôts directe; son niveau a été, dans l'Union Européenne, en 2006, à 13.9 % en PIB. Des valeurs au-dessus la valeur moyenne ont été enregistrées, en Bulgarie, Chypre, Danemark et Suède, pendant que la moindre valeur est en République Tchèque. La répartition de la poids des impôts indirectes est uniforme, par comparaison avec la situation des impôts directes.

#### 4. L'analyse du taux implicite d'impôt – le meilleure moyen de mesurer la pression fiscale

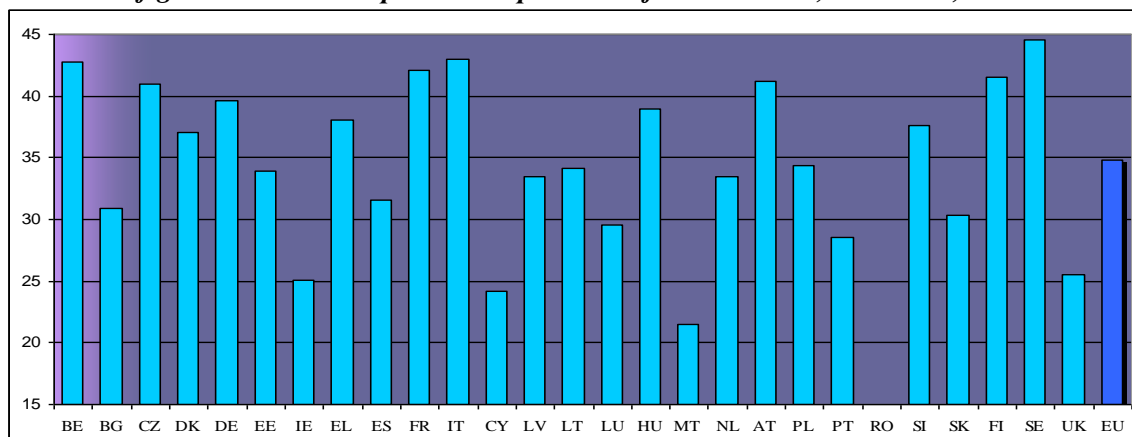
L'examen de la fiscalité n'est pas complète si nous établissons la part des cotisations de protection sociale, les impôts directs et indirects dans le produit intérieur brut. Pour aider à former une image précise de la pression fiscale, il est nécessaire de calculer la pression par les taux d'imposition implicite sur chaque impôt séparément. Ils reçoivent par la rapporte des différentes catégories de recettes fiscales à la base fiscale: les revenus d'emploi (revenu brut), le revenu de la propriété du capital (excédent brut d'exploitation), les dépenses de consommation.

En ce qui concerne le taux d'impôt implicite sur les revenus obtenus par travail, ce tient compte autant que les recettes fiscales collectées par l'impôt sur le revenu personnel et les recettes parafiscales des cotisations sociales versées par l'employé et l'employeur.

Pour calculer le taux implicite de taxation du capital doit tenir compte de taxes sur les revenus tirés du capital, l'impôt sur le revenu d'entreprise et les impôts fonciers qui sont rapportés en excédent brut d'exploitation.

Le taux effectif d'impôt sur la consommation est calculé comme le ratio entre les recettes de la fiscalité indirecte et la valeur de la consommation finale, à l'exclusion des salaires versés par le gouvernement.

**La figure 5: Le taux implicite d'impôt sur le facteur travail, dans l'UE, n 2006**



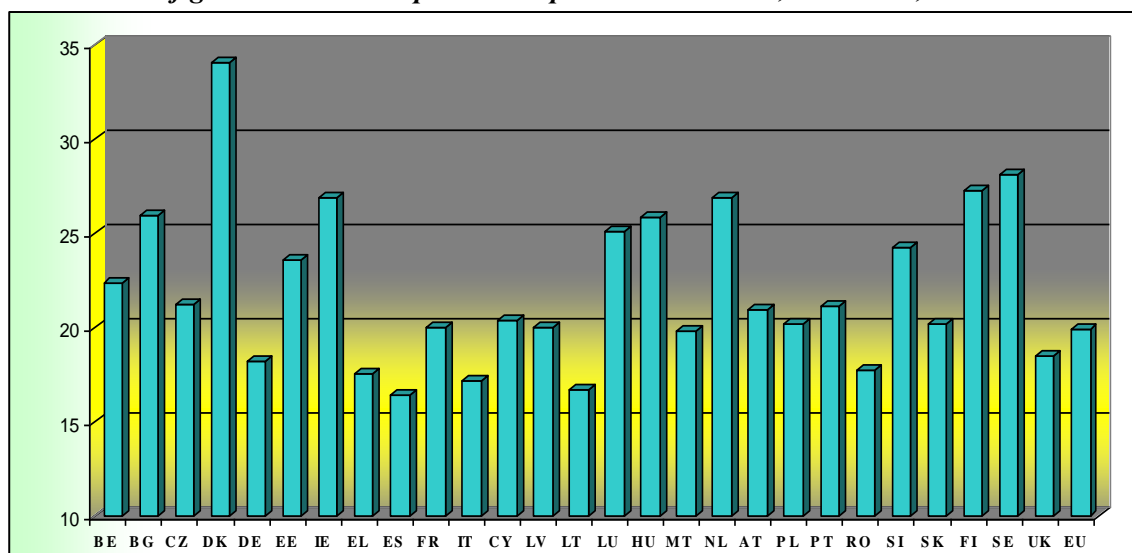
Source: modifié selon *Europe in figure. Eurostat Yearbook 2008*, [www.eurostat.eu](http://www.eurostat.eu)

La nécessité de calculer le taux implicite est rendue, en ce qui concerne l'impôt sur le revenu, par son mode d'imposition, en la plupart de Etats Membres il y a, soit des taux progressifs, soit proportionnels et, en même temps, un vaste system des déductions légales ou personnelles pour contribuables. Ainsi, une image de la pression fiscale réelle sur le facteur travail est donnée seulement par cet indicateur.

En analysant la *figure no. 5*, les plus grandes valeurs pour cet indicateur sont rencontrées en Suède, Italie, Belgique, Finlande, France, Autriche et République Tchèque, au-dessus de 40 % sur le revenu brut.

Même si le taux d'impôt sur le revenu est réduit, à 15 %, en République Tchèque la pression fiscale sur le facteur travail est assez augmentée, parce que les contributions sociales prennent des signifiants pourcents dans le revenu brut. La moindre valeur de la pression fiscale est enregistrée en Malte, à 21.5 %, bien que le taux d'impôt sur le revenu est un parmi les plus grandes en vigueur en nouveaux venus en Union. Les valeurs réduites de la pression fiscale sur le facteur travail sont enregistrées aussi en Grande Bretagne, Chypre et Irlande. Pour la Roumanie, les informations officielles n'ont pas été disponibles.

**La figure 6: Le taux implicite d'impôt sur le consume, dans l'UE, e 2006**



Source: modifié selon *Europe in figure. Eurostat Yearbook 2008*, [www.eurostat.eu](http://www.eurostat.eu)

Le taux implicite sur le consume est utile à déterminer, parce que la législation actuelle de l'Union permet l'utilisation des deux taux d'imposition pour TVA, l'une standard et autre réduit. En plus, les droits d'accises sont été imposées ad valorem, ainsi que la pourcent effectif en prix final n'est pas su facilement. Le taux implicite d'impôts indirecte s'est situé, en 2006, dans l'Union Européenne, au niveau moyen de 19.9 %<sup>1</sup>. La plus grande valeur de taux implicite d'impôt, comme on peut observer en *figure no. 6*, on rencontre en Danemark, suivi par Suède, Finlande et Pays-Bas, sur le niveau de 27 %.

Des valeurs autant élevées ont enregistré aussi les nouveaux Etats membres de l'Union, comme Bulgarie avec 25.9 %, Hongrie 25.8 % et Slovénie, de 24.2 %. Le moindre taux implicite d'impôt sur le consume l'a Espagne, où celui-ci ont été de 16.4 %. En Roumanie, le taux implicite sur le consume, en 2006, a été 17.7 %, sous le valeur moyenne dans l' Union.

## 5. Conclusions

En ensemble, la pression fiscale globale en Union est assez élevée, celle-ci s'approche au niveau de 40% en PIB. En même temps, c'est les pays nordiques qui ont une niveau de la fiscalité très forte, tant la pression fiscale que le taux implicite d'imposition. Des valeurs moins réduites enregistrent les Etats membre nouveaux venus en Union, mais en ce qui concerne le taux implicite d'imposition soit sur le facteur travail soit sur le facteur consume, les valeurs obtenues sont élevée soit pour le facteur travail (République Tchèque, Hongrie ou Slovénie), soit pour le facteur consume (Hongrie, Estonie ou Bulgarie). En généralement, la distribution de la pression fiscale dans les pays de l'Union n'est pas uniforme, entre le niveau minime et maximale il y a une plage diversifiée des valeurs.

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*This article treats on the behaviour of fiscal authorities of the twelve new state members of the EU during the post-adhesion period. We analyze the factors which determined the fiscal consolidations of the new member states, identifying two groups of states differing significantly in their fiscal behaviour. Because of the limited number of pages of this article, we presented the budgetary policies of only six countries, three from each group. Through the research made on the behaviour of the group of countries irresponsible from fiscal point of view, we concluded that the great budgetary deficits have their origins in the superficial approach and the lack of desire to politically implement the expenditures reductions, which can be observed in the repeated revisions of the budget and the inconsideration of the deficit reduction.*

*Keywords: stability pact, budgetary deficit, excessive deficit procedure*

*Classification JEL: H60, F36*

The concept of european integration is based on the coordination of the "great orientation of economic policies", based on a process of regular surveillance of the economic situation and economic policies from the member states. In order to assure the viability of the Economic and Monetary Union and the stability of a currency, there have been elaborated the so-called economic convergence criteria that must be accomplished by the states who want to adopt the euro currency: price stability implying the maintaining of the inflation at low rates, severe budgetary discipline which allows a deficit of maximum 3% and a rate of public debt of maximum 60%, monetary stability in certain limits and interest rate convergence for a long term. Through the Stability and Growth Pact, adopted by the European Council in 1996 at Dublin, one try to prevent the adoption of a relaxed and inadequate fiscal policy in one or more member states of the European Union. Essentially, this Pact provides penalties applied automatically to the member states which have an excessive deficit exceeding 3% of GDP, except the situations when strong recessions are registered (a decrease of GDP with more than 2% means a situation of recession). But the application of these penalties have been made in a flexible way, taking into account the economic difficulties of the countries not respecting the engagement (among whom France, Italy, Germany) and the political equilibrium in the European Union.

Even if Great Britain, Danemark and Sweden chose not to participate to the Economic and Monetary Union, they are obliged to respect the decisions taken by the EU regarding the coordination of the economic policies. These states are not obliged to respect the dispositions of common monetary policy, applied only to the states from the eurozone, but they must accept the monitoring of their own economies by the European Union, in order it be able to establish whether they accomplish the convergence criteria, in case they would like to adhere to the Euro Zone.

An important result emerging from the recent study of the authors Evzen Kocenda, Ali M. Kutan, Taner M. Yigit *Fiscal convergence in the European Union*, is the fact that there is a significant level of heterogeneity in fiscal convergence, implying concerns regarding the ability of monetary unions to provide fiscal convergence to their members. This observation proves the necessity to appoint future fiscal policies to improve the fiscal performances. Some countries, such as Poland and Holland, have already included fiscal rules in their legislations. Of course, the fact that the

member states have different fiscal positions causes implementation problems, at least at the beginning.

On the 1st May 2004, it took place the fifth enlargement of the European Union, receiving at once ten new member states: Czech Republic, Cyprus, Estonia, Latvia, Lithuania, Malta, Poland, Slovakia, Slovenia, Hungary, eight of which belongs to the ex-soviet orbit. After the enlargement, the population of the European Union counted 77 million of habitants, its surface increased to 700 000 km<sup>2</sup> and its medium GDP decreased to 5%. The adhesion of Bulgaria and Romania, on the 1st January 2007 ended the fifth enlargement begun on the 1st May 2004. All the twelve states declared to adopt the euro currency as soon as possible. In order to realize this, the ten new member states must adjust their economic policies – more precisely, their fiscal and monetary policies – but for the moment, it is the fiscal policy which proved to be the most challenging. Some of these states have a fiscal deficit higher than 3% of GDP and six from the ten states have been put under excessive deficit procedure from the beginning of their adhesion to the EU (among these, Hungary is still under excessive deficit procedure).

Fiscal policy proves to be even more difficult to be controlled by the authorities because of the political connotations. The Governments of these countries considered difficult to convince the electorate of the fact that this fiscal consolidation has a public interest and they entered into collapse the moment they introced or barely just brouched the fiscal reform.

The ten new member states can be devided into two major groups: states violating the rules of the Stability and Growth Pact and having been put under excessive deficit procedure in July 2004 (Cyprus, Czech Republic, Hungary, Malta, Poland and Slovakia) and states respecting the rules of the Stability and Growth Pact and having very few debts (Estonia, Latvia, Lithuania and Slovenia). For the moment, Romania and Bulgaria can be included in the second category.

The European Commission monitors the evolution of the public budget situation and the ministerial debt of the new member states of the European Union in order to identify the major errors of budgetary discipline. In turn, after having consented to the existence of the excessive budgetary deficit in the case of a member state, the Council of the European Union makes recommendations regarding the limitation of the ministerial deficit of the concerned state.

We consider that the states violating the rules of the Stability and Growth Pact increased the level of their previewed deficit, more frequently and more severely than those corresponding to the Pact. The more spendthrift (squanderer) are the governments the more they tend to be excessively ambitious regarding their concolidation plan, trying to convince the European Union institutions that they will be prepared on time for the Economic and Monetary Union. The major differences between the first member states from before 2004 and the new member states are obvious, because the new member states are based on the indirect taxes, especially on the value added tax (VAT). The massive usage of the indirect taxes may be explained by the fact that their procurement is more efficient than that of the direct taxes. The states from the EU-15 are more based on the direct taxes, which represent almost the third part of their budgets. Similarly, the countries under excessive deficit procedure are based more on VAT regarding the formation of their budgetary income, while the others on the incomes resulting from the taxes put on the incomes of the corporations and in a more reduced average on those resulting from the taxes put on the incomes of the private persons, in comparison with the other countries<sup>1</sup>.

We can define the **fiscal consolidation** as a period during which the budgetary deficit percentage of GDP improved with more than 1% of GDP in the first year and it continued to improve in the following years. It is sustained that the consolidation persists when the budgetary deficit percentage of GDP decreases.

In the following we will present a short description of the budgetary policy of six of the new member states: Cyprus, Malta, Slovenia, Hungary, Bulgaria, Romania based on their convergence program and we will try to discover the key factors which influenced the fiscal



position development, having priority for the integration of the Economic and Monetary Union of the six new member states.

In **Cyprus**, the negative development from September 2001, affected the minor Cypriot economy based on tourism, and had a negative effect on the position of the state's budget. Since January 2003, a new fiscal reform came into effect, in the fields in which Cyprus had to conform to the EU directives and the OECD indications to eliminate the practices of "fiscal paradise". The new fiscal law imposes the same level of tax for the international and national companies, but the rate of tax of 10% remains however reduced. Because of the bad and repeated implementation of the consolidation measures, as a consequence of the lack of political will and the impossibility to face the increase on the defence spending, agriculture and public administration spending, the position of the state budget damaged during the whole pre-adhesion period. As a result, Cyprus has been put under the excessive deficit procedure after 2004, which ended in June 2006. The introduction of a middle term budgetary framework, begun in 2006, improved the quality costs of the ministry resort, and meanwhile, promoted the reallocation of expenditures in favour of economic increase. Due to this budgetary reform, in 2007 Cyprus registered a budgetary excedent of 3,4% of GDP. Meanwhile, the Cypriot government repayed a major part of its debts, using the financial actives (sinking funds), which proves the improvement of the public finances quality. As usually, the monetary and currency policies in Cyprus turned to the maintainance of macroeconomic stability and a low inflation, and since the 1st January 2008 euro has been adopted as official currency. The deterioration of the current account form the last years seems to be first of all the result of the deficit of commercial balance, as a consequence of high demand for consumption and investments and the increase of the price of oil and other materials and wares. In the field of tourism, Cyprus faces in the last period a problem of competition, a fact reflected by the balance of current account in the field of tourism, which can be solved both by the adjustment of prices and the relative modernization of tourist products. In this period of major turbulence on the financial market, the general strategy of budgetary policy is to continue the consolidation of public finances, in order ti keep reducing the public debts, through the reduction of current expenditures and restructuring of public expenditures, in favour of capital expenditures and those allocated to research and education, which can boost the economic increase<sup>1</sup>.

**Hungary** reviewed continually its budgetary plans and postponed the setting in a straight line the budgetary deficit with the Stability and Growth Pact. The major reasons cited by the government are the unpredictable high expenditures for the pensions, the wages of public officers, the expenses related to health system and welfare and the unexpectedly increase in the costs of the ministerial debt service. Despite some reductions of expenditures, implemented during the fiscal years 2003 and 2004, the budgetary deficit exceeded 3% from GDP after the integration in EU, initializing the excessive deficit procedure. Until 2006, when the budgetary deficit reached the maximum rate of 9,3% from GDP, the Hungarian budgetary framework was extremely vulnerable to the fiscal slideslips. In 2006, it has been lanced an austerity plan, meant to decrease the budgetary deficit under 3% until 2010, aiming at a strengthen of fiscality (espacially of VAT), a reduction with 20% of the effective of public officers and the dramatic reduction of the payments for the health system. After the gradual improvement of the transparency, planification and budgetary control begun in 2006, in November 2008 it has been adopted the fiscal legislation reform, containing multianual numeric norms and providing the constitution of a new Fiscal Council. This new committee will elaborate independently macroeconomic and budgetary previsions, evaluations on the fiscality and budgetary situation and will make propositions in the budgetary field. Regarding the expenditures, there have been recently taken a series of positive measures. For 2008, the budgetary deficit is estimated at 3,4% of GDP, in the previsions of the Commission service from January 2009, this representing an improvement in comparison with the 5% from the GDP in 2007. Despite the improvement of the budgetary deficit in the last years in Hungary, the country remained vulnerable because of the high level of external debt. The main

aim of the budgetary authorities on middle term is to reduce the budgetary deficit from 3,4% of GDP in 2008 to 2,6% of GDP in 2009, followed by a slow reduction to 2,5% in 2010 and 2,2% of GDP in 2011. On the whole, this budgetary consolidation of 1,2% of GDP is planned to be equally distributed between the incomes and the payments. In order to assure a lasting fiscal convergence, Hungary is advised by the European Union Council to take the necessary measures to reduce the budgetary deficit under 3% of GDP in 2009, and to reduce for a middle term the public debt to the limit of 60% of GDP and to continue to reform the public debt, the medical care services and the education systems<sup>1</sup>.

**Malta** entered into the 21st century with an enormous budgetary deficit of 6% of GDP, that however has been a progress in comparison with the deficits registered in the second half of the '90. Malta's government lanced a consolidation program to reduce the deficit to a more reasonable level, but this has been only a partial success. Partially, because of the events from the 11th September 2001, and partially because of the increase of payments on the public officers wages, on pensions, Malta didn't manage to conform to the Stability and Growth Pact in 2004<sup>1</sup>. In 2001, there has been introduced the Business Promotion Act offering fiscal stimulents (reduction of the tax on the profit, reduction of the tax on the reinvested profit) to the industrial societies which demonstrated a potential of increase and creation of new jobs in the manufacturer field (including the software domain), reparations and maintainance. These fiscal facilities were available until 31.12.2008. In the last years, the fiscal policy of Malta has been submitted to some significant reforms, reflecting especially the effort to improve its efficiency, the opening of Malta's economy to the international commerce and the setting in a straight line of the tax system with those existing in the EU. It has been important the increase, in 2004, of the standard rate of VAT from 15% to 18%, which implied the increase of the fiscal incomes with about 1% of GDP. In the same year, another modification in the tax system represented the introduction of an eco-tax, meant to fight against pollution and to encourage the usage of containers. The incomes from the tax on the profit of the societies continued to increase and they raised to 0,3% of GDP in 2007<sup>1</sup>. In March 2007, the European Commission asked Malta to gipe up the discriminatory system of taxing the foreign and international commerce companies until the end of 2010, and Malta decided to abolish gradually the existing supporting system; thus, the international commerce companies are taxed until the end of 2010 with a rate of tax on the profit of 4%, while the rate of ta on the profit of national companies is of 35%. Malta escaped of the excessive deficit procedure in May 2007, but the remarkable tendencies to reduce the general public deficit in th period 2004-2007 ended temporarily in 2008, when the budgetary deficit is estimated to have grown from 1,8% in 2007 to 3,5% of GDP, because of the decision to increase the payments. On long term, the budgetary impact of aging is lower in Malta than in the average of the EU, with decreasing payments on pensions in the GDP for long term according to the estimations made in 2005. However, the reform of the pesnion system in 2006, which aims at improving the pension level at the same time with the increasing of the age of pension, implies higher payments on long term. Malta entered the eurozone on the 1st January 2008. The fiscal policy from 2009 represents the global consolidation of the budget which is adequate and according to the European Economic Recovery (adopted because of the high public deficit and debt), accepted in December 2008 by the European Council. Malta adopted several economic supporting measures in 2009. Most of these measures are favourable and directed and are meant to the fields considered stronger in face of the slowing down of the economic increase, for exemple, tourism and manufacturing. Though the percentage of public debt remains high at 61,9%, one previews it will diminish gradually to 60% taking into account the significant reduction between 2004 and 2007. Malta is advised by the European Union Council to resume the fiscal consolidation process to reach again a deficit in GDP of 3% in 2009 and to strengthen its budgetary framework on middle term in order to increase the efficiency of public expenditures, including the accleration of the projection and application of a reform of the healthcare system.

Because of the deterioration of the budgetary deficit level, **the Slovene government** negotiated a new social agreement for the period 2003-2005 which, among others, included new rules of wages index in the public field. It has also been made a similar attempt in the sense of index and rationalization of the social transfer system. On the other hand, the reduced tax rates of the incomes of individual persons and the modification of tax of the corporations put the public budget under negative pressure. The comprising fiscal reform initiated in 2005 keep being a key project, having as objective the reduction of the fiscal incomes weight in GDP with 2% in the period 2006-2009, expecting positive effects regarding the way of usage of work force and the economic concurrence. These measures have been completed with seven fiscal laws, applied in 2007, regarding the VAT, the taxes on the real estate wealth, taxes on ships, taxes on the incomes of the corporations and the fiscal procedures, concerning the abolition of the double-tax of the incomes and the increase of the transparency of the tax system. Regarding the payments, there have been made modifications concerning the assistance and social protection system; especially, the eligibility for the welfare and social assistance has been related to the disponibility to accept a job, while all the social transfers, except the pensions, are now indexed to the inflation instead of the wages, expecting the creation of economies with payments of 1% of anual GDP. Since 2002, Slovenia adopted simultaneously the budgets for two consecutive years depending on a base of calculation, a procedure that is kept continually. The public debt in Slovenia is very reduced in comparison with the eurozone, of about 25,6% in 2007. The budgetary deficit in 2007 was of 0,7% in comparison with that of 1,2% in 2006, and in 2008 it was of 0,1% of GDP. Slovenia registered a strong increase of GDP in the last years, reaching its maximum rate in 2007, the first adhesion year to the eurozone. For the future, it is considered to continue the fiscal consolidation to promote the macroeconomic stability and a lower inflation. However, the viability on long term of the public finances in Slovenia keeps remaining a challenge, taking into account the significant effects of the aging on the public budget in the lack of a new reform of the pension system<sup>1</sup>.

**Bulgaria** deals with the existing macroeconomic imbalances through the maintainance of the existing fiscal policies. Despite the reduced percentage of public debt in GDP and the high budget excess, the high rate of inflation and current account deficit prevented the government to adopt a fiscal stimulation package of the internal demand. On long term, the country confronts the necessity to improve the quality of public payments by improving the administrative capacity and the intensification of structural reforms. For 2008, the national budget surplus is estimated at 3% of GDP. Despite the significant increase of the import and of the high rate of inflation in 2008, the incomes gathered from indirect taxes represented 1,5% of GDP, less than it's been previewed. As a result of the introduction of reduced tax rate on the incomes of the individual persons of 10%, the incomes gathered from direct taxes represented 0,5% of GDP, less than it's been anticipated in 2007. Concerning the public expenditures, which represented 1,75% of GDP, the discipline was not entirely respected, because of the social payments and the supplementary infrastructure. The general conclusion is that Bulgaria had and still has as purpose the maintainance of a solid budgetary position for the following three years, too, intention reflected in the planification of the budget surplus. However, Bulgaria is advised by the European Union Council to continue the present fiscal policy and to maintain the restriction of the payments increase, in the purpose of correcting the existing internal imbalances and to continually consolidate the efficiency of public expenditures<sup>1</sup>.

In **Romania**, the fiscal policy, detensioned in the last years, has a key role in correcting the increasing external imbalances, especially through the reorientation to the investments generating economic increase. But the budgetary execution is prevented by the frequent rectifications during the budgetary exercise, which redirects the expenditures to the current expenditures, especially wages and social transfers, as a result of the supplementary incomes and the usage of the expenditures for investments. In the last years, Romania adopted a series of measures regarding

the consolidation of the budgetary program and execution and the improvement of fiscal administration. In 2005, it has been introduced the unique rate of 16%, taxing the incomes of the individual persons and the profit of societies. As a consequence, it has increased the weight of the incomes from the direct taxes in the total of fiscal incomes from 25,07% in 2004 to 32,04% in 2007. In 2006, it's been applied a budgetary framework on middle term and the principle of budgetary allocation based on programs. However, because of the wages slideslips in the public field, of the continuous registration of low results regarding the budgetary program and execution, of the pressure on the public expenditures as a result of the political cycle, it keeps existing a major risk of budgetary deficit increase. Thus, we remark a deterioration of the budgetary deficit, from 2,5% of GDP in 2007 to 5,2% of GDP in 2008, being possible to reach 7,5% of GDP in 2009, according to the studies made by the European Commission. The ministerial expenses doubled in the period 2005-2008 and the wage increases and the policy of massive engagements in the public domain determined the Romanian government to pay to the administrative employees almost three times more in 2008 in comparison with 2005. The European Union Council advises Romania to avoid the procyclical fiscal policy in order to limit the current account deficit which is increasing and the inflationist pressures, to improve the budgetary program and execution and to review the structure of the public payments, as well as the diminution of state aid.

Our analyze on the policies of fiscal consolidation shows the fact that many of the new member states implemented important reforms, some of them realizing even records of impressive reforms. But there remains still much to be done. The healthcare systems are more difficult to be reformed than the pension systems; the wages from the public domain remains high and the social security systems represented the source of some unexpected budgetary developments. The implementation remains a a problem in the case of many reforms, because many political situations from the new member states are unstable.

The fiscal perspective of several new member states is worrying in this sense. Their governments got used to their high deficits and the external pressure is less after the review of the Stability and Growth Pact. Moreover, if the new member states enter into the Economic and Monetary Union, the political desire to control the fiscal deficits could weaken and, even more, derisioned, as it happened in many countries in the EU-15. Taking into account the success of Finland, as member of the eurozone, and that of Sweden, not taking part of the eurozone, we can conclude that the status of member of the Economic and Monetary Union is nor decisive for the development of the new member states.

Prudent fiscal policies, which don't represent a threaten to the prices stability, and a monetary policy having credible purposes of low inflation represent the key of the success. Similarly, without a strong domain of production which operates on the open and flexible markets of goods and services and the capacity to be competitive abroad, the Economic and Monetary Union doesn't represent a success in itself.

Our paper suggests the fact that the countries being under "fiscal surveillance" of the European Union, especially Hungary and Malta, illustrate the failure while trying to stabilize their fiscal policies, even in a delicate situation. During an economic slowing down caused by the present economic crisis, these countries will confront again massive budgetary deficits.

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# MEASURES AND FACTORS WHICH LED TO THE INCREASE OF THE NUMBER OF RESOURCES FOR FINANCING THE PUBLIC PENSION SYSTEM

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*Public pensions represent the most costly component of the social protection system from most of the countries, including Romania. They involve significant financial flows which represent around 12% from GDP for the EU countries and represent a significant part of the public budgets which are continuously under pressure due to the modifications registered by the more general framework of development, such as economic growth, evolutions on the labour market, inflation etc. Moreover, the demographic aging and the migration represent other important challenges for the financial sustainability of the social protection systems, in general, and of the pension systems, in particular.*

*Key words: financing, financial sustainability, contributions to the social security system*

*Code JEL: H55, H59*

## **1. The public pension system. Problems regarding financing**

The social solidarity principle underlay at the base of the Romanian pension system, principle that led to a system presently known as being financed by the *principle of repartition (Pay-As-You-Go – PAYG)*. Such solidarity assumes the will of the working population (usually employees) to dispense with a part of their financial means in order to be raised in a common fund which shall cover the social protection needs (by social security benefits) of the previous generations. In essence, this financing principle consists of the payment of the compulsory social security contributions of those who really work or made on their behalf (payments made by employers) in order to create funds from which pensions (old-age, disability and offspring) are presently paid.

In order to identify and understand a part of the financing problems that the Romanian pension system has faced, it is important to specify some measures which had an important impact on the financing capacity. Such measures, which had a deep conjunctural character, can be classified into two main categories. One *category* includes the measures that led to the high growth of the number of beneficiaries. They mainly refer to: a) construction elements that in time led to the modification of the comprehension (covering) sphere and to the extension of the categories of beneficiaries, and b) measures that facilitated the retirement of a great number of employees as a result of the restructure requirements from the economy, especially in industry, massively at the beginning of 1990, but also subsequently, as an alternative to the unemployment.

*The other category* includes the measures by which they tried a relaxation of the tension regarding the covering of costs. In this category, one can include mainly the measures that concerned: a) the modification of the social security contribution rates, and b) the externalisation of some schemas (such as the one for the agricultural pensions or the one regarding social protection of children and families).

## **2. The problem of financial sustainability**

At the beginning of 1990, there were several pension schemas, as they were inherited from the old regime: the state social security pensions (the most comprehensive one, covering the civil employees); pensions of some small professional groups, such as writers, lawyers, priests (others than the Orthodox ones), craftsmen; pensions for military staff, for disabled persons, widows and war veterans; pensions of the members of agricultural cooperatives. These schemas had their own rules of eligibility, of calculation of the pension level, of financing and administration. Also, at

the beginning of 1990, there was a separate fund for complementary pension based on a contribution (first of 2%, then it raised up to 3% of the employees) paid by the employees (a form of financing by capitalization) which was considered at the pension calculation, by adding it to the basic pension obtained from the state social security system. This fund was later on abolished. Beginning with 1990, there were taken a series of *measures that modified the architecture of the pension system, as well as the financing sources, having effects on the modification (usually for the growth) of the number of beneficiaries whose pensions were supplied from the state social security fund*. During 1992-1993, into the schema of the state social security system, there were integrated some smaller sized schemas, such as those for writers, plastic artists, priests and craftsmen, due to the financial difficulties those funds had faced. Subsequently (in 1998), out of the same reasons of dramatic decrease of their own financing resources, the pension schema for agricultural workers – which kept its own rules of access and calculation of pension – was integrated into the public pension system from the financing point of view. That meant that, during 1998 and 2005, the expenses for the agricultural workers pensions were financed from the resources of the social security budget, for a number of 1.6 – 1.7 million persons, decreasing toward the end of the period (about 1 million persons in 2006). Since 2006, the agricultural workers pension schema was financed from the state budget resources. Such measures resulted in the significant growth of the number of beneficiaries and of the resources demand. Thus, the number of retired persons who received pensions financed from the state social security system doubled during 1990 and 2007.

**Table 1. The evolution of the average number of social security retired persons in Romania during 1990-2007**

|   | -thousands of persons- |        |      |      |      |      |
|---|------------------------|--------|------|------|------|------|
|   | 1990                   | 1995   | 2000 | 2005 | 2006 | 2007 |
| Total <sup>1</sup> , excluding agricultural workers, from which | 2380*                  | 3600   | 4359 | 4750 | 4780 | 4794 |
| - Age limit   | 1713*                  | 2568   | 3087 | 3146 | 3142 | 3153 |
| - Disability  | 193*                   | 433    | 609  | 827  | 866  | 882  |
| - Offspring   | 474*                   | 599    | 653  | 652  | 641  | 630  |
| From total, state social security retired persons               | 2380                   | 3358** | 4246 | 4611 | 4633 | 4643 |
| Agricultural workers  | 985                    | 1597   | 1751 | 1292 | 1005 | 932  |

<sup>1</sup>Include state social security retired persons, coming from the Ministry of Defence, The Ministry of Administration and Interior, The Romanian Intelligence Service, The State Secretariat for Cults and The Social Security House of Lawyers; \*from the state social security system; \*\* year 1994

Source: INS/UNICEF, Social Trends, București, 2001, pg. 161 (for years 1990-1994); INS, The Statistical Annual of Romania, edition 2001, pg. 161; edition 2003, pg. 167; edition 2006, pg. 287; edition 2007, pg. 306 and edition 2008, pg. 344.

Another factor that led to the increase of the retired persons number, from the beginning of 1990 until the entry in force of the Law 19/2000, was related to the early age of retirement and to the possibility of anticipated retirement [60 years old (60, at request) for men and 57 years old (55, at request) for women]. The early age retirement was facilitated by the relaxing provisions concerning the retirement before the standard age, from which the persons included in the labour categories considered as very dangerous (first category) and dangerous (second category) benefited from. The ones included in the first labour category were able to retire after 20 years of work, the men at 52 years old and the women at 50. The ones included in the second labour category were able to retire after 25 years of work, the men at 57 years old and the women at 52. Moreover, an impressive number of persons retired during that period due to “medical reasons”,

and thus the number of disability retired persons was significant out of the total number of state and social security retired persons, 18% in 2007.

The increase of the resource demand for financing the pensions from the state social security system and the serious difficulties related to a reasonable level of financing and supporting the public pension system led, within the pension reform started with the entry in force of the Law 19/2000 (since April 1<sup>st</sup> 2000) to the externalization starting with 2006 of the agricultural workers pension schemas (currently being financed from state budget resources), of the allowance for maternity leave and child care (also currently financed from the state budget) and of the benefits representing payments for medical leave (currently financed from the health insurance unique national fund).

The huge difficulties to face the rising resources demands for pensions and other social protection benefits led to the “initiation” of some measures meant to increase the collections of the state social security fund from which the pensions in the public system are paid. They were mainly based on the modification of the level of state social security contributions. The table 2 shows a chart of modifications in time of the contributions paid by employers and by employees.

**Table 2. The size of the social security contributions for pensions and other social security rights**

| Date             | Total (%)       | Payer        |              | Assessment base                    | Mentions   |
|------------------|-----------------|--------------|--------------|------------------------------------|--|
|                  |                 | Employer (%) | Employee (%) |                                    |  |
| 1990             | 14.0            | 14.0         | -            | Gross salary income                | At the state social security fund  |
|                  | 2.0             | -            | 2.0          | Base salary plus seniority benefit | At the complementary pension fund  |
| 1991             | 20.0            | 20.0         |              | Gross salary income                | At the state social security fund  |
|                  | 2.0             |              | 2.0          | Base salary plus seniority benefit | At the complementary pension fund  |
| 1992             | 25.0 (cat. III) | 25.0         | -            | Gross salary income                | At the state social security fund  |
|                  | 30.0 (cat. II)  | 30.0         | -            |                                    |  |
|                  | 35.0 (cat. I)   | 35.0         | -            |                                    |  |
|                  | 3.0             |              | 3.3          | Base salary plus seniority benefit | La fondul pentru pensia suplimentară   |
| 1994             | 25.0 (cat. III) | 25.0         | -            | Gross salary income                | 2% reserved and transferred to the Special health Fund (created in 1992)     |
|                  | 30.0 (cat. II)  | 30.0         | -            |                                    |  |
|                  | 35.0 (cat. I)   | 35.0         | -            |                                    |  |
|                  | 3.0             | -            | 3.0          | Base salary plus seniority benefit |  |
| 1999             | 30.0 (cat. III) | 30.0         | -            | Gross salary income                | At the state social security fund  |
|                  | 35.0 (cat. II)  | 35.0         | -            |                                    |  |
|                  | 40.0 (cat. I)   | 40.0         | -            |                                    |  |
| 2000<br>(1 July) | 30.0 (cat. III) | 18.33        | 11.67        | Gross salary                       | At the state social security fund  |
|                  | 35.0 (cat. II)  | 23.33        | 11.67        |                                    |  |
|                  | 40.0 (cat. I)   | 28.33        | 11.67        |                                    |  |
| 2002<br>(1 Jan.) | 35.0 (cat. III) | 23.33        | 11.67        | Gross salary                       | It is applied at a threshold equal to three gross salaries at national level |
|                  | 40.0 (cat. II)  | 28.33        | 11.67        |                                    |  |
|                  | 45.0 (cat. I)   | 33.33        | 11.67        |                                    |  |



|                                    |                 |       |     |              |   |
|------------------------------------|-----------------|-------|-----|--------------|---|
| 2004<br>(1<br>Jan.)                | 31.5 (cat. III) | 22.0  | 9.5 | Gross salary | It is applied at a threshold equal to five gross salaries at national level   |
|                                    | 36.5 (cat. II)  | 27.0  | 9.5 |              |   |
|                                    | 41.5 (cat. I)   | 32.0  | 9.5 |              |   |
| 2005<br>(1<br>Jan.)                | 31.5 (cat. III) | 22.0  | 9.5 | Gross salary | It is applied at a threshold equal to five gross salaries at national level   |
|                                    | 36.5 (cat. II)  | 27.0  | 9.5 |              |   |
|                                    | 41.5 (cat. I)   | 32.0  | 9.5 |              |   |
| 2006<br>(1<br>Jan.)                | 29.25(cat. III) | 19.75 | 9.5 | Gross salary | It is applied at a threshold equal to five gross salaries at national level   |
|                                    | 34.25 (cat. II) | 24.75 | 9.5 |              |   |
|                                    | 39.25 (cat. I)  | 29.75 | 9.5 |              |   |
| 2007<br>(July<br>)                 | 29.0 (cat. III) | 19.5  | 9.5 | Gross salary | No threshold  |
|                                    | 34.0 (cat. II)  | 24.5  | 9.5 |              |   |
|                                    | 39.0 (cat. I)   | 29.5  | 9.5 |              |   |
| 2008<br>(1<br>Jan.-<br>30<br>nov.) | 29.0 (cat. III) | 19.5  | 9.5 | Gross salary | - No threshold<br>- O deduction of 2 pp from the contribution paid by employees until 35 years old (optionally, 45) to a compulsory pension fund, privately managed (pillar II)   |
|                                    | 34.0 (cat. II)  | 24.5  | 9.5 |              |   |
|                                    | 39.0 (cat. I)   | 29.5  | 9.5 |              |   |
| 2008<br>(1<br>Dec.)                | 27.5 (cat. III) | 18.0  | 9.5 | Gross salary | - No threshold<br>- O deduction of 2.5 pp from the contribution paid by employees until 35 years old (optionally, 45) to a compulsory pension fund, privately managed (pillar II) |
|                                    | 32.5 (cat. II)  | 23.0  | 9.5 |              |   |
|                                    | 37.5 (cat. I)   | 28.0  | 9.5 |              |   |
| 2009<br>(1<br>Jan.)                | 28.0 (cat. III) | 18.5  | 9.5 | Gross salary | - No threshold<br>- O deduction of 2.5 pp from the contribution paid by employees until 35 years old (optionally, 45) to a compulsory pension fund, privately managed (pillar II) |
|                                    | 33.0 (cat. II)  | 23.5  | 9.5 |              |   |
|                                    | 38.0 (cat. I)   | 28.5  | 9.5 |              |   |

Source: The Romanian legislation and MISSOC – different editions

The data concerning the modification in time of the contribution rates to the public pension fund point out that there was a financing “game” which meant the permanent growth of the level of contributions paid by employers, as well as the transfer to the employees of a part (a third) of the tax burden imposed by public pension financing. The peak for the total of state social security contribution was the year 2002 when it was registered the highest tax level (for salaries) generated by pension financing. After this date, they promoted some reduction measures of the pension social security contribution size, more accentuated for those paid by employers, from 30% (third labour category) in 1999 when the highest level of employer-paid contribution registered to 23.33% (cat. III) in 2002 and 18.0% in December 2008, modified to 18.5% in January 2009. For employees, the contribution decreased from 11.67% in 2002 when it registered the highest level to 9.5% at present. Also, starting with 2008, this contribution is reduced for employees until 35 years old (optionally, until 45) with 2 pp. [*pension point*] from the gross salary which is directed to the second pillar of the public pension system, privately managed and capitalized-based. Therefore, the social security contribution rate paid by employees to the first pillar of the public pension system, from which they pay the pensions of the current retired persons, is 7.5% for those until 35 or 45 years old (estimated at over 3 million persons), reducing every year by 0.5 pp. that will go to the second pillar until the level of contribution to this pillar reaches 6% (in 8 years).

If the measures of modification the contribution rates to the social security fund meant the increase of the incomes of this fund which should support the financing of the pensions to be paid, there were many situations where many companies registered arrears for contributions or, worse, they were exempt by the government from the payment of some arrears. Also, in the Romanian budgetary practice, the state social security budget was a part of the consolidated general budget which caused that in some situations from the incomes of this fund be financed some expenses which were not specific to this fund.

What it is shown in this paragraph leads to the conclusion that, at least until 2002, the accumulation of resources for pension financing was dramatically threatened, and the measures taken that led to the increase of taxation of the labour force generated many tensions. The main cause that made the decision makers to appeal to such measures was related to the breach between the (employee) labour force and the social protection system, to the fact that the economic restructure led to the loss of a huge number of paid work places, deeply affecting the financial sustainability of the public pension system.

The data in the following table show a dramatic decrease of the number of employees (from 8.0 million in 1989 to 4.7 million in 2007) and a significant increase on the number of retired persons (from 2.1 million in 1989 to 4.64 million in 2007) which led to the deterioration of the ratio between the persons paying contribution and the persons benefiting from pensions. During 1989-2007, the total number of retired persons increased more than double while the number of tax payers reduced to almost a half (table 3).

**Table 3. Evolution of the sustainability rate in Romania**

| Ref. no. |   | 1989 | 1995 | 2000 | 2006  | 2007 |
|----------|---|------|------|------|-------|------|
| 1.       | Employee average number (mill. persons)                                 | 8,0  | 6,2  | 4,6  | 4,675 | 4,7  |
| 2.       | Average number of state social security retired persons (mill. persons) | 2,1  | 3,5  | 4,2  | 4,63  | 4.64 |
| 3.       | Sustainability rate   | 3,8  | 1,8  | 1,1  | 1,0   | 1,0  |

Source: INS, The Statistical Annual of Romania, 2001, pgs.104 and 161; 2005, pgs.124 and 282; 2007, pgs.125 and 283, Statistical Bulletin no. 1/2008

Thus, the sustainability rate (the ratio between the employee average number and the retired person average number) decreased from 3.8:1 in 1989 to 1:1 in 2007, which affected negatively the capacity of the social security budget and the level of pensions and of pegs applied. This factor strongly influences the possibility of maintaining a convenient level of pensions, i.e. the living standard of retired persons.

Within those constraints, important tensions appeared in the pension financing, because the money collected from a smaller and smaller number of employees should be distributed to a higher number of retired persons, thus affecting the level of pensions, being maintained at a lower level.

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## THE PROBLEM OF ADEQUABILITY OF THE PUBLIC PENSION

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*The documents and analyses made at European level, as well as the studies of the specialists in the field, underline the fact that the financial sustainability should be made in parallel to the adequability of pensions. The promises of adequability can generate some risks for sustainability, and the priority given to the financial sustainability can deeply affect the access to and the getting of some adequate incomes from pensions in order to avoid the extension of poverty and of social exclusion among old people which sometimes causes great demands for social benefits claims and, consequently, causes unforeseen pressures over the sustainability of public finances.*

*Key words: adequability, sustainability, average pension, replacement rate*

*Code JEL: H55, H59*

The financial sustainability, as a major problem of the validity of the pension system, is necessarily related to the necessity of maintaining an adequate level of pensions in time. Besides, the financial sustainability can also be achieved while reducing the pension level (following the public options of (non-) indexation related to the inflation or the salary rise, the change of the pension calculation formula etc. Such an option though cannot last as it contains the risk of extending the poverty among old people, generating new problem and social tensions. That is why the financial sustainability should be given priority in order to ensure the adequability of pensions.

In 2003, the European Commission Report concerning pensions underlined the interdependence between the financial sustainability and the adequability of pensions within some aging societies, and the need for comprehensive reforms in order to ensure some adequate pension systems, financially accessible and sustainable. In particular, the report appealed to the member states to improve the motivation of older persons to keep working, to strengthen the relation between contributions and pension size and to enhance the financing by capitalization in the public and private system, especially for the long-term implications of the increase of life span regarding the pension costs.

For Romania, the problem of adequability and of equity in the pension field is a very important one because the pension system represented a safety island for many of those affected by the economic reforms which made that, after 1990, the problem of adequability stay permanent. The level and evolution of pensions were affected not only by the decrease of the level of support (the ratio between the number of tax-payers and that of retired persons) and the difficulties of collecting the social security budget revenue, respectively the state budget revenue, but also factors such as inflation which mostly affects the lower level incomes; also, the application of some indexing methods, increment ones respectively, induced some important inequities in the system.

A series of inequities and irregularities, especially within the public pension system, were determined by the application of some different calculation formulas of pensions applied in different moments for those entitled to get a pension. That made that, in some cases, for similar incomes and work period and contributions, the difference was 2:1 order. The main used methods were the indexation ones related to the inflation rate and the increment of pensions in certain

moments. Also, there was the so-called “re-equalisation” meant to diminish the inequities accumulated in the system.

Starting with 2005, they proceeded to the recalculation, based on the yearly average rating regarding the whole career, recalculation achieved in several stages. The anticipated effect was to correct some inequities mentioned above, induced by the application of some different calculation formulas for persons with similar retiring conditions (seniority, level of wage etc.), but who retired in different moments of time. Here are some significant aspects to assess the degree of adequability and of equity of the pension system, focusing on the public pension system characteristics.

### Actual average pension

During 1990-2007, the actual average pension of the state social security retired persons registered a continuous decreasing tendency until 2000, when it was 44% of the pension in 1990. After 2000, there was a slight boom and in 2007 the actual average pension from the state social security system was 83% compared to 1990 (table 1).

**Table 1. Indicators of the actual average pension of the state social security retired persons and of the actual average wage**

- percents -

|      | Average pension | Average wage | Average pension | Average wage | Average pension | Average wage |
|------|-----------------|--------------|-----------------|--------------|-----------------|--------------|
| 1990 | 100.0           | 100.0        |                 |              |                 |              |
| 1991 | 74.3            | 81.5         |                 |              |                 |              |
| 1992 | 63.1            | 70.8         |                 |              |                 |              |
| 1993 | 56.3            | 58.9         |                 |              |                 |              |
| 1994 | 55.0            | 59.1         |                 |              |                 |              |
| 1995 | 61.4            | 66.5         |                 |              |                 |              |
| 1996 | 63.1            | 72.7         |                 |              |                 |              |
| 1997 | 50.3            | 56.2         |                 |              |                 |              |
| 1998 | 49.2            | 58.4         |                 |              |                 |              |
| 1999 | 47.2            | 57.,0        |                 |              |                 |              |
| 2000 | 44,0            | 59.4         | 100.0           | 100.0        |                 |              |
| 2001 | 46,6            | 62.4         | 105.9           | 105.0        |                 |              |
| 2002 | 48,2            | 63.9         | 109.5           | 107.5        |                 |              |
| 2003 | 51,6            | 70.8         | 117.4           | 119.1        |                 |              |
| 2004 | 57,7            | 78.3         | 131.2           | 131.7        |                 |              |
| 2005 | 62,3            | 89.5         | 141.8           | 150.5        |                 |              |
| 2006 | 68,1            | 97.4         | 154.8           | 164.0        | 100.0           | 100.0        |
| 2007 | 83,6            | 111.8        | 190.1           | 188.2        | 122.8           | 114.7        |

Source: INS, The Statistical Annual of Romania 2008, pg. 265 (for wages); pg. 348 (for pensions).

The actual average pension had an almost parallel evolution to the one of the actual average wage and, in time, the differences between the two indicators increased. If the actual average wage increased in 2007 by 11.8% compared to the one in 1990, the purchasing power of the average state social security pension was over three fourths compared to 1990.

The pension level remained non-adequate for most of the retired persons. Thus, the replacement rate (compared to the net minimum wage) in the case of the average social security pension (without agricultural workers) decrease from 44% in 2000 to 36% in 2007; for the average social security pension with the full contribution stage, the replacement rate maintained at the same level, about 58%, which supports the idea that the Romanian pension system favours the

achievement of the full contribution stage. the replacement rate for the state social security pension decreased from 43% in 2001 to 38% in 2007 (table 2).

**Table 2. The average level of some pension categories and the replacement rate (compared to the average wage)**

|      | Monthly average pension  |   |   | The average net monthly wage earning | Replacement rate for, %  |   |   |
|------|--|---|---|--------------------------------------|--|---|---|
|      | The average social security pension <sup>1</sup> (no agricultural workers) | The average social security pension <sup>1</sup> with full contribution stage | The average state social security pension |                                      | The average social security pension <sup>1</sup> (no agricultural workers) | The average social security pension <sup>1</sup> with full contribution stage | The average state social security pension |
|      | ROL  |   |   |                                      |  |   |   |
| 1995 | 88108  | 111714  |   | 211373                               | 41.7   | 52.9  |   |
| 1996 | 126842   | 160886  |   | 321169                               | 39.5   | 50.1  |   |
| 1997 | 259947   | 328994  |   | 632086                               | 41.1   | 52.0  |   |
| 1998 | 400489   | 515865  |   | 1042274                              | 38.4   | 49.5  |   |
| 1999 | 688799   | 914456  |   | 1522878                              | 45.2   | 60.0  |   |
| 2000 | 937170   | 1238051   |   | 2139138                              | 43.8   | 57.9  |   |
|      | RON  |   |   |                                      |  |   |   |
| 2001 | 104  | 176   | 131                                       | 302                                  | 34.4   | 58.3  | 43.4                                      |
| 2002 | 133  | 222   | 163                                       | 379                                  | 35.1   | 58.6  | 43.0                                      |
| 2003 | 156  | 265   | 187                                       | 484                                  | 32.2   | 54.8  | 38.6                                      |
| 2004 | 204  | 339   | 232                                       | 599                                  | 34.1   | 56.6  | 38.7                                      |
| 2005 | 246  | 404   | 267                                       | 476                                  | 33.0   | 54.2  | 35.8                                      |
| 2006 | 298  | 469   | 311                                       | 866                                  | 34.4   | 54.2  | 35.9                                      |
| 2007 | 380  | 609   | 399                                       | 1042                                 | 36.4   | 58.4  | 38.29                                     |

<sup>1</sup>Include the state social security pensions, the pensions of the Ministry of Defence, of the Ministry of Interior and Administrative Reform, of the State Secretariat for Cults and of the Social Security House of Lawyers.

Source: INS, The Statistical Annual of Romania, edition 2001, pgs. 132,164; edition 2008, pgs. 266, 345.

The agricultural worker pensions (1292 thousand persons in 2005, 1005 thousand in 2006 and 932 thousand in 2007), although they increased significantly lately, they remained at a very low level (RON 88 per month in 2005, RON 159 per month in 2007) compared to their needs. Besides, the current pension system in Romania does not have a minimum pension level as a tool used by many European countries in their policy to ensure decent incomes to retired persons.

One of the most relevant aspects that can define the adequability in the pension field is the dimension of poverty for old people. Besides, prevention of social exclusion is the first objective established at the EU level in the pension field within the application of the Open Method of Coordination. The accomplishment of this objective supposes the assurance of the conditions for old people not to find themselves under the poverty threshold and to be able to enjoy a decent living standard, to be able to benefit from economic wealth in their country and to actively participate in the public, social and cultural life.

The data show that the poverty rate for old people in Romania slightly increased from 17.1% in 2000 to 18.8% in 2007. Also, the worst situation is for the single persons of this age category. The poverty rate for retired persons is lower than the one estimated at national level and for the

persons of 65 or over, that means that the pension system plays a positive role in easing the economic situation of old people.

To prevent the occurrence of some problems related to the decrease of adequability to ensure a decent living standard to old persons, three possible ways were established.

One is related to the extension of work life. It is considered that the early retirement – by anticipated retirement schemas, awarding of unemployment benefits or disability pensions – should be reviewed dramatically. At the same time, for the retired persons to get higher incomes it is necessary to be offered opportunities in order to stimulate them to remain in the working activity over the retirement limit age or to combine the incomes from pension with incomes from part time jobs of other activities.

Another direction is the increase of the role of privately-administrated pensions within the total of pension incomes. We hope that, in the future, the provision of private pensions through occupational pensions or private insurances play a more important part, although the public pensions shall remain the most important pillar of a national pension system.

Finally, the adaptation of the pension systems to the evolution of the individuals' needs is considered as necessary. It is about taking into consideration the diversity of the occupation models (part time workers, temporary work, freelancers, generally less covered); also, the evolutions regarding the economic and social role of women and men, in the sense of facilitating the reconciliation of the family and work responsibilities of the two partners and of stimulating the greater participation of women on the labour market, having effects on their pension level.

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# SOME CONSIDERATIONS REGARDING THE SHARE PRICE FLUCTUATION, RISK MANAGEMENT AND INVESTMENT STRATEGIES

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*The share prices are in a continuous evolution, as a result of perception change regarding the performances of the issuing companies and according to the estimate of the economic conditions evolution in general.*

*Investors are aware that they can increase their profits if they can accurately foresee the share price fluctuations. In order to do this, two types of analysis can be mainly used. These are technical analysis and fundamental analysis.*

*Keywords: efficiency; share prices; effective market; hoped incomes; prices' fluctuation.*

*JEL codes: G*

## **1. Technical analysis**

The technical analysis is frequently used to foresee the share price fluctuations. In this case, graphics can help to determine the main trends and models. Therefore, this analyse type is frequently called a graphic analysis, and those who use it are called charters.

The technical analysis of the share price is based upon the analysis of the historical data. The trends and correlations are highlighted as they can be used to foresee the future fluctuations by observing the present ones. It is used only for short term analysis, it is based on subjective rules established by historians, and it does not consider future related aspects.

## **2. The fundamental analysis**

The goal of this technique is to identify the under-evaluated shares, as it is considered that sooner or later the market will recognize their real value. The ones who invested in these shares when they were under-evaluated, would meet a portfolio value growth (if they keep those bonds) or an immediate profit by selling them. A complementary objective is to avoid the over-evaluated shares.

The fundamental analysis of the share price considers those elements that affect both the level and the sustainability of the future incomes, such as:

- the financial state of the company;
- the market sector of the company;
- the large market share of the company within the sector;
- the position of the main competition;
- the impact of the new technologies.

That is why, the fundamental analysis of the share price supposes a rigorous financial analysis of the company's performances, combined with a subjective analysis of the strongnesses and weaknesses. Still, as in the case of anticipating the exchange rates, the results of the fundamental analysis have proven to be just an indicator regarding the right direction. There are two hypotheses that are trying to explain why thorough the technical and the fundamental analysis the price fluctuations can not be accurately anticipated. And they are as follows:

- the hypothesis of the share price random evolution;
- the efficient market hypothesis.



### ***2.1. The hypothesis of the share price random evolution***

Since the beginning of the 50's there have been critics about the idea that the share price fluctuations can be anticipated. Professor M.G. Kendall (1953) explains the share price fluctuations using the hypothesis of the share price random evolution. The later analysis support this hypothesis.

The hypothesis is based on the principle that the share price has an evolution which is not entirely random, but, in the same time, unpredictable. If the evolutions/fluctuations of the share price would be entirely random, then the share price in consecutive days would be uncorrelated with the price from the previous days.

The graphic of the price evolution in time is the continuation of the one from the previous day - higher, lower or the same. This is true even if the price is changing rapidly. Besides, the changes are following the trend for a short period of time, so the repeated, alternative fluctuations are rare. This suggests the impression that the price is following an unpredictable "track".

### ***2.2. The efficient market hypothesis***

A theoretical frame for the hypothesis of the share price random evolution is the efficient market hypothesis. This supposes that a regulated share market is efficient if the price contains all the available information at a given moment. The market participants only need to use all the available information in the decisional process regarding bond sale or purchase.

If the relevant information does not reflect in share price, for some market participants opportunities are created to buy shares at a low price or to sell at a high price. Their shares will establish price changes one way or the other until, finally, the price will reflect me information.

The efficient market hypothesis lays at the basis of the price efficient market hypothesis as follows: a new information regarding a certain share-the very moment it is known-generates an unpredictable movement, both for the price of that particular share and the price of other market shares.

The sale and purchase opportunities offered by other shares can be capitalized only if the investors accept to change the structure of their portfolio, because selling a share implies buying of another one and vice versa. Therefore, the information concerning certain shares can affect the demand and price for other shares.

The term "efficient" does not refer to operational efficiency in the traditional way, but it refers to the way the information is used. Many markets, are inefficient operationally speaking, still they can be framed within the definition of the efficient market. Depending on the degree of information reflection on the share price, there are three approaches to this hypothesis:

- the "weak" form - the prices reflect all information from the past ("weak information");
- the "medium" form - the prices reflect all public information ("medium" information);

considered an element that diminishes the costs of investments. Obviously, after the share payment, the share price returns to its initial value.

Close to the share payment date, the share is quoted either as a cum-share or as an ex-share. This happens because the share is payable to the share owner from the day he is declared one, even if the share is sold to another investor before the actual share payment.

A last situation is presented that practically often imposes evaluation, meaning evaluation of the subscription of share issue rights. The subscription of share issue rights is a way for a company to increase its capital. The rights of subscription for the new shares can be sold if the share holder does not want to use them. When evaluating these subscription rights, firstly the share value is established after exercising the subscription rights, and then one can establish the price of a new share by exercising the subscription rights. Let's take an example. Suppose the subscription relation is 3:1, meaning three subscription rights give the possibility of buying a new issued share, and the subscription price for a new share is 8.000 m.u. The current price of shares is 10.000 m.u./share.

The company value after the title issue is supposed to be the former one after adding the new capital value. Thus, a share value after the title issue, will be 9.500 m.u.

This is the value of a share after the subscription of share issue rights, whose subscription price is 8.000 m.u. This is why the subscription option value is  $9.500 - 8.000 = 1.500$  m.u., and it reflects the value decrease for the old shareholders, if they do not exercise their rights. It is worth mentioning that this is just a way of evaluating the subscription rights value. In many cases, when issuing subscription rights, the goal is to improve the long term benefits of the company and thus the subscription rights value is calculated according to the new potential earnings. Often this can cause additional growth of the subscription right value, even if the relying earnings are speculative.

### **Conclusions:**

True even if the price is changing rapidly. Besides, the changes are following the trend for a short period of time, so the repeated, alternative fluctuations are rare. This suggests the impression that the price is following an unpredictable "track".

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**THE SUBSTANTIATION OF STRATEGICAL DECISIONS IN UNCERTAINLY  
CONDITIONS FOR A EUROPEAN FINANCE INVESTITIONAL PROJECT:  
“SETTING UP OF A TURISTIC PENSION WITH 20 PLACES: SC TEONELIS  
AGROTURISM SRL”**

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*The strategically investments decisions determine the structure of the company dues and directly influence their liquidation degree. The global analyze of the investment is very important to have in view and to achieve the major objective of company value growth. The principally investments on middle and long term that the company effects are: investments in immobilized dues and financial dues.*

*Keywords: investment; the investment decision; initially investment expenses; the financial actualization rate; cash flow.*

*JEL codes: G*

The evaluation process of an investment project implies the organization of a economical documentation that contains: the opportunity study, the juridical situation, the feasibility study, the technical project, the notifications and the execution documentation. The essential elements from the objective of the technical documentation refer to: the project costs fixation, the cash movement estimation, the indicative budget, the project risk estimation, the actualization of cash waves etc.

The investment decisions in uncertain average are taking in consideration the cash movement determination, positive or negative movement, as long as the investment project functions.

In the case of investments in an uncertain average, the estimation of the cash movements is the most important, but also the most difficult problem that an investment project can produce. These estimations refer to the initial investment costs and to the annually net cash entrance, that refer to the project life period, detailed on months for the first year. The effort and the effect of an investment can be outlined by the following elements:

- the initial cost is the net size of the necessary capital for the start of the investment exploitation, that composes from the following elements: the cost of the fix immobilized dues; installation and assembling expenses, but also staff specialization expenses; growth of the circulating funds, respectively growth of the stocks and of the customers debts minus the growth of the exploitation debts, caused by the new production capacity; the resale price of the dues not-invested.

- the investment life duration is an another element that must be considered when we are estimating an investment project value, because it can be explained from more points of view.

Relatively to the life duration of the investment, this can be considered from the following points of view: the fiscal duration, that is also named the service rated duration of the permanent elements from the liquidation norms catalogue; the technical functional duration, that is influenced and caused by the functional technically characteristics, the commercial duration, that is influenced and caused by the life duration of the products fabricated with that investment; the juridical duration, that represents the duration of the juridical protection over the concessionary right over a terrain, over an exploitation etc, in the case in which the concession is allowed by the regulations in accordance with the investment project.

- the net treasury movements (free cash-flows) can be determined starting from the following assumptions: certain average; sufficient personal capitals; the income tax must be paid at the end of the financial budgetary year; the inflation rate doesn't modify.

- the residual value of an investment project represents the value that can be recovered after the finish of the investment life duration.

- the making actual rate for the estimation (the evaluation) of an investment project represents another appreciation element in the process of the investment decision, influencing also the present value (actualized value) of the following treasury movements.

The rate of the investment decisions in an uncertain average imposes the use of the methods based on actualization, that allow the determination of indicators that deliver an objective foundation, compatible in the appreciation of the investment projects efficiency. To bring possible the comparisons between the investments and the benefits generated by the project utilization, the time influence must be eliminated, and all the operations must function at the same moment of reference. With that end in view, there must be calculated the capitalization of the annually allocations (that has at its foundation the relation of the composed rate) and the actualization of the capital annually recuperations by the annually cash movements resulted during the life duration of the investment.

In the economic-financial practice are used, generally, the following option norms of actualization: the net actualized value (VAN), the intern profitableness rate (RIR), the actualized recovery period ( $T_{ra}$ ) and the profitableness or benefit index (IP).

a) The net actualized value method (VAN), named also actuarially value, is a cash movements' actualization technique. All the cash movements caused by the project are actualized at an actualization rate equal with the marginally cost of the capital, and than, these values are totalized.

The project is accepted if the sum, named net actualized value (VAN), is positive. As the actualized benefits will be bigger that the invested capitals, so the investment project will be more efficient. All the investment projects with a positive VAN are preferred for monetary investments, on a market interest rate "i". The investment project with the highest VAN will be the best and will determine the highest possible grow of the company benefits.

On the analogy of the notes mentioned above, VAN can be determined with the relation:

$$VAN = [VP(FN_n) - I_0] + V_r / (1+i)^n; \quad VV_n = VAN (1+i)^n,$$

where: VP(FN<sub>n</sub>)- the present value of the positive and/or negative cash movements in the period "n"; I<sub>0</sub>- the initially negative cash movements (initially investment expenses); V<sub>r</sub>- the residually value of the project; FN<sub>t</sub>- the cash movements from the year t; n- the years number of the project working; VV<sub>n</sub>- the following net value

To find VAN in the zero moment, you must use the relation:

$$VAN = \sum_{i=1}^5 \frac{FN_i}{(1+r)^i} + \sum_{i=6}^{12} \frac{FN_i \exp lt}{(1+r)^i} - VI$$

The reason that stands at the basis of VAN method is very simple: if a company wants to implement a project financed from extern sources, the company's value will grow up with the sum that represents the net actualized value of the cash movements estimated. If a project's VAN is positive, the growth of the company's value tops the sum of extern funds necessary to create the investment.

b) The intern profitableness rate of the investment (RIR), named also actuarial rate or actuarial cost, is defined as the actualization rate that makes the actualized value of the net cash entrances, estimated into the project, be equal with the actualized value of the costs (cash issues), estimated for the respectively project. Otherwise, the actuarially rate is the interest rate for which VAN is zero.

On the basis of what we said, we can write the equation from which we can get the RIR is the minimum rate allowed on which a money borrow for the project financing can be accepted. If it

is smaller than the profitability rate of the market, the investor is tempted to invest his capital rather on the financial market than in a productive investment.

The determination of RIR starts from the hypothesis that the future benefits (FN<sub>t</sub>) can be constantly reinvested at this rate.

The two actualization techniques VAN and RIR offer the same acceptance (rejection) decisions for independent projects, in the case in which the projects mutually exclude. If there emerge this kind of results, VAN method must be used and considered correctly. The both methods (VAN and RIR) are superior to the simple criteria of option, but VAN is a better method than RIR.

c) The actualized recovery period is defined by the number of years necessary for the investment recovery from the actualized cash movements. The recovery term, in this case, is the number of years “n”, for which has place the relation:

$$Dr = \frac{VI}{\left( \sum_5^1 Flux_{net\_actualizat} + \sum_{12}^6 Flux_{exp\ loatare\_actualizat} \right) / 12}$$

- the cash movement from the year t, actualized

In the case in which exist more different competitive readings, the project accepted is the project with the less recovery period.

d) The actualized benefic index (IPJ) express the actualized period of the project that correspond to the initial one unity investment expense (equally with one). This index is fixed as a report between the actualized value of the net treasure entrances (FN<sub>t</sub>) and the expense for the investment, corresponding to the relation:

But: VP= VAN, results:  $IP_a^m = VAN / A_0$

The project is profitable if  $IP_a > 1$ . “IP” is an index of relative profitability, because VAN measures the actualized value that corresponds to 1 leu of invested capital. The criteria  $IP_a$  is very important in the investments selection, being a part from the fructification criteria of the invested capital.

According to the rules in force in our country, the financial actualization rate is established on the basis of the minimum level of the financial profitability rate, more exactly: for the objectives financed principally from loans, the interest rate at which the loan has been obtained; for the objectives realised by auto-financing, the middle profitability rate from the under-branch from which the company is part.

The actualization rate determined (image of the capital cost) doesn't reflect also some facts that appear in the market economy, as: the inflation, the devaluating, the investment risk etc. That is why it is necessary its correction by adding at the profitability rate (R<sub>j</sub>) of a inflation or a deflation rate (R, that reflects the prices evolution), of a monetary (R-) depreciation rate (repreciation), of a risk investment reserve (M<sub>r</sub>). The calculus relation between the actualization' rate, in this case, is the following:

$$R_a = R_d + R_i + R_r + M_r$$

The substantiation of the investment necessity and opportunity results from the theme about the substantiation of the necessity and of the opportunity considered at the acceptance of the feasibility study. By this project, the interest is the build of a tourist pension and a multifunctional court named: “TOURIST PENSION POIANA- ILVEI 20 PLACES”, whose value is 470,000 euros. The time limit for the submission of the project was 30.10.2008, and the selection had place at March 2009.

At 29.09.2009, the exchange rate for euro was 3.7010 lei/euro, date when was established also the value for the future investment. The project was selected, but the company was faced with the

big difference of exchange rate, in the crisis conditions and because the project should be realized in the conditions provided by the feasibility study to benefit by the non-callable funds.

**The financial projections calculated to demonstrate the eligibility criterion for the investment viability consisted in:**

- 1 The incomes prognosis;**
- 2 The expenses prognosis;**
- 3 The projection of the benefit and loss account;**
- 4 Synthetic balance forecasted;**
- 5 Cash flow;**
- 6 Financial indicators.**

**The hypothesis that sit at the base of financial projections elaboration**

- 1.** The investment value (VI).
- 2.** The exploitation incomes ( $V_e$ ) = incomes realized from the current activity, according to the activity object of the applicant, calculated starting from the physic (quantity of products, production volume, services), making allowance for the prices/ tariffs on the measure unity, different for every activity object.
- 3.** Exploitation expenses ( $C_e$ ) = expenses generated by the deployment of the current activity. These are expenses related to the incomes from exploitation and they are calculated based on the activity domain and the specific consumptions, and they regard the expenses related to the project, but also those related to the activity of civil build.
- 4.** The rate of the exploitation result ( $r_{Re}$ ) must be minimum 10% from  $V_e$ . The result from the current activity ( $Re$ ) is calculated:  $Re = V_e - C_e$  – it must be positive, and the rate of the exploitation result must be minimum 10% from the exploitation incomes during the evaluated years.
- 5.** The duration of the investment recovery ( $Dr$ ).
- 6.** The profitableness rate of the invested capital ( $r_{Rc}$ ) - must be minimum 5% for the evaluated years.
- 7.** The rate of the coverage by the cash flow (RAFN) - must be  $\geq 1.2$  for the evaluated years;  
**RAFN**= exploitation cash flow/ (interests + leasing payments + dues reimbursement).
- 8.** The due rate on medium and long term ( $r_1$ ) – must be maximum 60% for the evaluated years;  
It is calculated as rapport between total dues on medium and long term and total assets, where:  
 $TD_i$ = total dues an medium and long term during the year  $i$ ;  
 $TA_i$ = total assets during the year  $i$ ;
- 9.** The actualization rate – is 8%, and it is used to actualize the future cash flows.
- 10.** The actualized net value (VAN) – must be positive.
- 11.** The available cash at the end of the period.

The decision to build the pension proved to be taken in uncertain conditions. Considering that the society disposes of the co-financing part, the exchange rate difference will be covered by a demanding credit and by a discount received at the acquisition of material, wiring and equipment. As such, the project will be realized.

**Conclusions:**

The evaluation of an investment project, when the financing is realised by European funds, has at the basis the profitableness rate waited by a holder.

The profitableness rate waited (the cash-flow) is the actualization rate for which the actualized benefit's hope is zero. The calculus of the profitableness that is waited has the bases on the uncertain (aleatory) dimensions of the expenses and of the cashing, which are stipulated and corrected with some possibilities. The calculus procedure is that from the RIR.

The investment risk is the essential parameter that must be taken in consideration in the investment decision. The appreciation of the risk level is absolutely necessary. This must be realised with the “mathematical hope for win”.

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# THE MODELING OF CERTAIN TAX ADMINISTRATION OPTIONS

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*How big will be the receipts in budgetary execution? Lower? Bigger? Referring to last year, is the situation better? How much will the receipts be next month? These are questions which flow inevitably in the end of each month, especially in times of economic crisis. The same question can be made clear for each taxpayer separately. This article proposes an equation of revenues' forecasting at a moment of time pending on previous periods of revenues, a method to the financing budget deficit by reducing arrear and a way to increase the quality of the risk analysis corresponding to the tax control.*

*Key words : tax administration, ARMA process, Forecasts of Budget, budget*

*Clasificare JEL : H68 - Forecasts of Budgets, Deficits, and Debt*

## **1 Revenue forecasts collection to the state budget using an economic model ARMA**

An efficient fiscal policy could become very important at depression times.

This policy involves several parts like public collection of revenue, public expenditures and, finally, budget deficit financing.

During the crisis period, certain changes must occur in the dominant logic of fiscal management, which could lead either to cut budget deficit or to a more efficient financing.

The question is: „How can be used fiscal administration as an efficient leverage under crisis conditions?

The prognosis is especially useful in periods of economic crisis due to a much higher impact.

Addressing the forecast revenue of a taxpayer to the state budget becomes very important for the purpose of a modern profitability-risk approach, in which profitability expected is the date of a prediction of future revenues and the risk is given e.g. the risk of insolvency.

In this respect in the first part of the study will be made a prediction using an ARMA model of the revenue the state budget.

The data the analysis was carried out was requested under the Law No 544/2001 on free access to public information which is a will to ensure the observance of the Romanian state a constitutional right of citizens: free access to information.

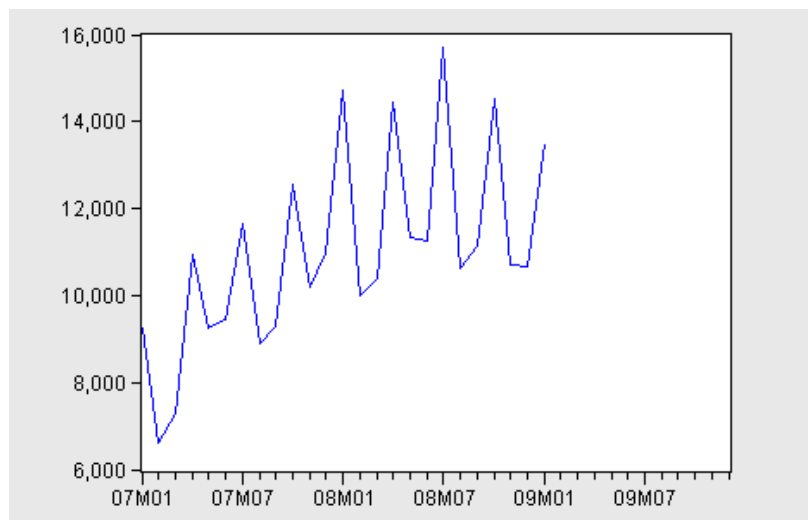
Thus, the total amounts collected in a given period of the state budget was called in, budget state welfare, the national health insurance fund and the budget unemployment insurance for the national agency for fiscal administration for the 2007-2008 period.

The series of data on monthly revenues examined shows trend and that's why it was carried out the stationarized sequence using a new series given by  $\text{totalbugetbun} = \text{totalbuget} - \text{totalbuget} - 3) - \text{totalbuget} (2) \text{totalbuget} (4)$ .

| SERIE INITIALA |          | SERIE STATIONARIZATA |           |
|----------------|----------|----------------------|-----------|
| LUNA /AN       | VENITURI | LUNA /AN             | VENITURI  |
| 2007M01        | 9236.500 | 2007M01              | NA        |
| 2007M02        | 6625.650 | 2007M02              | NA        |
| 2007M03        | 7295.790 | 2007M03              | NA        |
| 2007M04        | 10956.60 | 2007M04              | NA        |
| 2007M05        | 9257.720 | 2007M05              | 4572.780  |
| 2007M06        | 9445.650 | 2007M06              | -2181.090 |
| 2007M07        | 11660.45 | 2007M07              | -1258.080 |
| 2007M08        | 8889.480 | 2007M08              | 1142.710  |

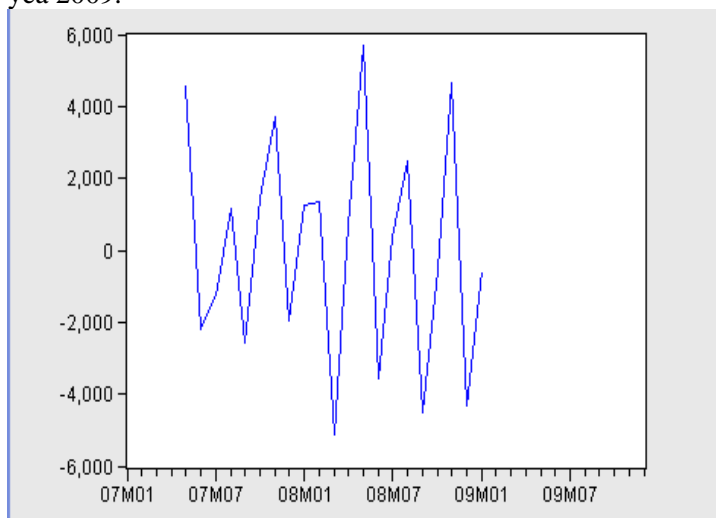


|          |          |          |           |
|----------|----------|----------|-----------|
| 2007M09  | 9288.330 | 2007M09  | -2560.050 |
| 2007M10  | 12560.65 | 2007M10  | 1456.370  |
| 2007M11  | 10212.27 | 2007M11  | 3694.910  |
| 2007M112 | 10977.58 | 2007M112 | -1950.55  |
| 2008M01  | 14739.90 | 2008M01  | 1255.310  |
| 2008M02  | 9993.300 | 2008M02  | 1364.100  |
| 2008M03  | 10398.77 | 2008M03  | -5106.440 |
| 2008M04  | 14429.08 | 2008M04  | 673.4600  |
| 2008M05  | 11323.80 | 2008M05  | 5671.630  |
| 2008M06  | 11256.99 | 2008M06  | -3577.560 |
| 2008M07  | 15700.28 | 2008M07  | 346.1700  |
| 2008M08  | 10642.86 | 2008M08  | 2491.150  |
| 2008M09  | 11136.16 | 2008M09  | -4497.310 |
| 2008M10  | 14522.81 | 2008M10  | -563.3400 |
| 2008M11  | 10713.86 | 2008M11  | 463.120   |



From the graphic representation of the initial series, we can observe a drop in revenues from the second period of 2008 fact characteristic for the year of economic crisis.

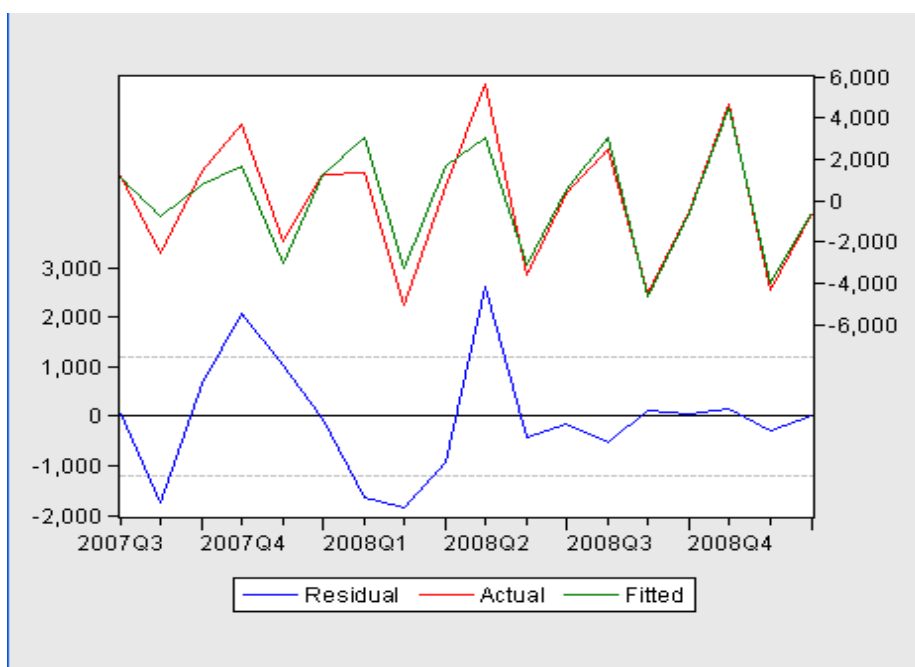
Analyzing the trend, we find out the increase of revenues during the 2008 tempered on the second half of the year 2009.



For the stationarized series an equation of forecasting was considered for a process ar (3) ma (6) obtaining the ar and ma coefficients and which can help in predicios.

Dependent Variable: TOTALBUGETBUN  
 Method: Least Squares  
 Date: 03/12/09 Time: 10:52  
 Sample (adjusted): 2007M08 2009M01  
 Included observations: 18 after adjustments  
 Convergence achieved after 8 iterations  
 MA Backcast: 2007M02 2007M07

|                    | Coefficient | Std. Error            | t-Statistic | Prob.     |
|--------------------|-------------|-----------------------|-------------|-----------|
| AR(3)              | 0.806079    | 0.160310              | 5.028236    | 0.0001    |
| MA(6)              | 0.946325    | 0.073726              | 12.83573    | 0.0000    |
| R-squared          | 0.862689    | Mean dependent var    | -27.13556   |           |
| Adjusted R-squared | 0.854107    | S.D. dependent var    | 3161.924    |           |
| S.E. of regression | 1207.727    | Akaike info criterion | 17.13531    |           |
| Sum squared resid  | 23337682    | Schwarz criterion     | 17.23424    |           |
| Log likelihood     | -152.2178   | Hannan-Quinn criter.  | 17.14895    |           |
| Durbin-Watson stat | 1.702523    |                       |             |           |
| Inverted AR Roots  | .93         | -.47-.81i             | -.47+.81i   |           |
| Inverted MA Roots  | .86+.50i    | .86-.50i              | .00-.99i    | -.00+.99i |



## 2 Possibility of financing public deficit

Budget expenses which are not financed through revenue and fiscal ones may lead to an inflammation of the aggregated demand and to inflation. Financing budget deficit through loans or by inflation might be a much better alternative by reducing arrears. And the need to maintain public debt at a sustainable level imposes appropriate measures.

Among the methods of recouping the goods subject enforcement exists, as well, the procedure of giving in payment. So, under the Fiscal Code Procedures, except those with deduction at source

and accessories relating thereto, the local budgets claims may be extinguished by passing into public ownership of the State. The minute of seizure for goods which will be recovered under the Fiscal Code Procedures will include a description of movable goods and estimated price of each, according to the appreciation of the fiscal officer, their identification and their specification, quoting the status and any particular signs of each good.

On the other hand, the entities that carry out public procurements draw up annual procurement plans in which appears the description of goods subject to be purchased.

Development of the procedure for putting in payment for financing public procurement may be more effective by the creation of "a market" in which is possible to confront the national demand corresponding public procurement and supply on assets held hostages, ensuring the financing of public institutions by arrears.

Thus, is possible to extend the measure on other goods, other than buildings, but also a simplified procedure which would allow selling goods in this manner whenever necessary. The solution is to match to offer with the demand, at national level, by using the same primary keys of two specific public finance documents : the minutes of seizure and the yearly plan on procurement.

The existence of a national database, to use the same primary key in the property held hostages, but also of the goods that will be the subject of public procurement and comparing them periodically would lead to a cheap financing of acquisition of public fiscal arrears .

### **3. The use of the signal related to the decrease of the own capitals profitability in the application of the tax control option**

In order to increase the quality of the risk analysis corresponding to the tax control, an index used as a signal, as well as the use of form recognition techniques are useful.

In order to determine an efficient signal indicator, a group of 111 companies having the same object of activity, respectively wood processing, were considered and data was excerpted from the Trade Registry, from the balance sheets submitted by these economic agents, also calculating the specific risk and profitability indexes, respectively:

Non-current assets, Stocks, Customers, Investments, petty cash and accounts, Current assets, Own capital, Debts > 1 year, Suppliers, Loans <1 year, Dividends, Bank loans, Debts <1 year, Liabilities, the Operational capital need, the Variation of the Operational capital need, Net current assets, the Variation of the Current assets, the Turnover, Sales, Income tax, Net profit, Roa, Roe, Current liquidity rate, Quick liquidity rate (acid test), Cash rate, Debts rate, Levier, Number of employees, Altman score.

The result was a database, the fields whereof were the financial analysis indexes.

Next, we tried, through form recognition techniques (using an audit software analysis package that generates rules), to determine specific rules to be found in the data.

The result was a rule according to which, if the number of employees at the bankrupts companies is 1, the own capitals profitability is low

#### **GENERAL DETAILS:**

File Name: D:\doctorat\anul 2\de publicat\data.mdb

Total No. of Records: 111

All Rules

Minimum Probability of If-then Rules: 0.95

Minimum Accuracy Level of Formula Rules: 0.95

Minimum Number of Cases in a Rule: 10

If the no. of employees is 1.00

and altmann score is bankruptcy

Then

The profitability of own capital is -0.33 ... 0.48 (average = 0.01)

Rule's probability: 1.000

The rule exists in 13 records.

Significance Level: Error probability  $< 0.01$

Any and all companies, regardless of whether they are in the business development stage or in the production capacities maintenance stage, needs to attract resources for the financing of its operations.

An important aspect in the management of a Company is the management of the direct financing cost, such as the interest rate or the rate granted to the shareholders for their participation to the company's capital.

The fact that the financing sources coming from the shareholders are free of charge is not very much noted. lower profitability is induced by the low risk, which also depends on the field of activity.

If the profitability of the own capital falls under a certain limit, this can be a sign that can also be used by the tax administrations in the identification of tax evasion.

The relationship between profitability and risk can, however, be modified, as compared to tax evasion outside the market game, i.e. the profitability can be greater due to the avoidance of tax, through the failure to declare income, or through additional income due to the legal VAT reimbursements.

Thus, there can be cases of VAT reimbursements for assets (stocks, non-current assets), followed by the payer's ceasing his activity, after having obtained important VAT amounts, to be reimbursed to the state

Even if the turnover trend, the current liquidity, the patrimony solvency are positive and the value of the assets is high, a low profitability of the own capital can be an indicator of tax evasion, in the context of the high assets volatility.

Thus, a low profitability of the own capital (net profit/own capital) during a longer period of time can be used as a signal in applying the tax control initiation option.

#### **4 Conclusion**

This article proposes an equation of revenues' forecasting at a moment of time pending on previous periods of revenues , a method to the financing budget deficit by reducing arrear and a way to increase the quality of the risk analysis corresponding to the tax control .

This would provide a more complex picture on this phenomenon and especially an equation to predict who might substantiate a specific target that he may choose the tax and a forecast of supplies to the public loans.

During the economic crisis technical analysis of the revenue may lead to a credible source that prediction may be used in decisions effectively.

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# BUILD-UP MODEL AS A DISCOUNT RATE FOR A PRIVATE SECTOR INVESTMENT

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*In this paper the author presents the build-up method as a discount rate for estimating a private sector investment, focusing on the rigorous estimation of the various risk premiums. The latter part presents an equity financed investment project launched on the domestic market, which is evaluated using the build-up model, starting from a similar project accomplished in USA, plus a range of specific risk premiums for Romania.*

*Keywords: build-up model, discount rate, capital budgeting, risk premium, country risk, cash flow*

*JEL clasification: G31: Capital Budgeting; Investment Policy*

## 1. Introduction

In capital budgeting decisions, using the correct discount rate to find the present value of cash flows is a critical process. The cost of capital or discount rate catches the risk of a project and it is defined as “the expected rate of return that the market requires in order to attract funds to a particular investment”<sup>1</sup>. Investment decision has major consequences for the future development of a company. Assessing a project under uncertainty may be an extremely complex task. Uncertain future events which could affect the entire economy, a business or a project, lead to variable cash flows, which have different values than the projected ones under certainty, in a deterministic environment.

Beside cash flows estimation, assessing discount rate is very important for Discounted Cash Flows method (DCF). We choose to present the build-up method, as this is a discount rate method widely used for its advantages, one of them being the elimination of beta with all its inconveniences, found in the other pricing models. Although build-up method may seem simple and it's widely used by practitioners, it must be applied with caution as the risk premiums must be rigorously estimated.

## 2. Build-up model

This model compounds the rate of return for a security (the discount rate) by adding different risk premiums to risk free rate. The traditional form for this model is:

$$E(R_i) = R_f + RP_m + RP_s + RP_u,$$

where  $RP_m$  is market risk premium,  $RP_s$  represents size premium and  $RP_u$  stands for unsystematic, firm specific risk. A new alternative<sup>1</sup> for the model also includes an industry specific risk premium (+/-  $RP_i$ ).

The build-up model has the important advantage of eliminating beta with all inconvenient that accompanies it. It is a simple model and this is the reason why many practitioners prefer it to other pricing models. Applying it is not such an easy task as we could think, because these risk premiums must be rigorously estimated.

Risk free rate ( $R_f$ ) is represented only by income return gained by investors for 10, 20 or 30-year constant maturity bonds. Total return includes also capital gain return, which implies some risk and it is not appropriate for riskless asset.

Market risk premium (R<sub>Pm</sub>) used for assessing discount rate is a forward looking concept, even if it is estimated from historical data. First, we have to choose a reliable market benchmark, usually a market index with a high coverage in number of industries and market capitalization (for example, S&P 500 is chosen to represent the US capital market). This time, rate of return for market portfolio is represented by total return, provided also by dividends and capital gain.

Another concerning aspect is how long should be the historical period for estimating market risk. A longer period presents the advantage that the analysis includes different past events, that may occur again in the future.

There are also disadvantages: using a longer period, the estimated value for market risk premium is affected with very high or very low values in some periods, because of events such as economic crisis, wars, that are not expected to happen again in the future period.

*Annin and Falaschetti (1998)* discussed about rolling average approach used in practice to estimate equity risk premium. The appraiser have to choose a significant window of historical data, calculates a risk premium, then moves the window one year forward and determines another premium. There are many disadvantages with this methodology. We do not know the exact length of the window for determining the rolling average (for USA, there were usually used 30-year data windows, because of changes in capital market in early '70s).

There are still many controversies and debate about equity risk premium, because of its impact on ultimate value derived under different approaches. The few risk premiums included in a model, the higher the impact of equity risk premium on discount rate (it decreases from CAPM and three-factor Fama-French to APT and build-up model).

It is widely recognized that small capitalization companies have higher expected returns than large companies in the same industry, because investors bear a higher risk. They expect to compensate this kind of risk through a specific risk premium called size premium.

*Barad (2002)* emphasized two approaches to measure size effect on return: first, there is a *small stock premium*, which captures the excess return for small companies to return expected for large companies; second, there is a *size premium*, focusing on isolating size effect on return of specific risk. The latest approach is used in developing the cost of capital for discounting purposes, in the buildup model, because it is more appropriate to catch return due to size effect and it is removed the possibility of twice capturing the risk, through different premiums.

*Martin and Seigneur (2001)* determined size premium as a margin between excess return to  $R_f$  (arithmetic average for actual return of a stock minus risk free rate) and excess return to  $R_f$  from CAPM (which is  $\beta \times (R_M - R_f)$ ).

The additional risk captured by beta in CAPM is now integrated in the build-up model with a *company-specific risk premium* (R<sub>P<sub>u</sub></sub>).

To asses industry risk premium, we have to estimate first beta for that industry, which is a complex procedure, because some companies (usually the large capitalization ones) operate in more than one field and that is why their overall risk is lower. These companies are often excluded from analysis when beta is computed. *Kaplan and Peterson (1997)* performed a study and demonstrated (like other previous studies) that beta calculated with *pure play* method (when there are included in analysis only those companies that operate exclusively in one industry) is higher, because they are, in most cases, small and undiversified companies, and its risk is higher than industry average. The authors developed a *full information* methodology for including in industry beta determination those divisions of large, diversified companies that belong to industry in discussion.

Industry risk premium (+/- R<sub>Pi</sub>) is determined as (beta industry × ERP) – ERP, where ERP represents equity risk premium and industry beta is calculated using full-information beta methodology.

If we use cost of capital computed from data for publicly traded companies, most of them held by minority stockholders (it is the case for cost of capital data published by Ibbotson Associates),

discount rate have to be adjusted with a risk premium for lack of liquidity (for privately held companies) and also for lack of control for minority shareholders, that can not influence company policies.

In estimating the discount rate we have to keep in mind some important aspects:

free cash flows must be discounted with a risk-adjusted discount rate, which is a weighted average cost of capital (not only cost of equity capital);

each project has a specific risk structure and that is why we are not allowed to use the cost of capital for the company as discount rate for all new projects, but only for those investments that maintain the same pattern of risk like the overall firm;

cost of capital is in fact an estimation, which is more accurate if we use a cost of capital for entire industry (taking as a proxy firms with similar features) instead of cost of capital for the analyzed company;

we use nominal discount rate for nominal free cash flows, which means that we have to integrate expected inflation, even if not all components of cash flows are affected by inflation (amortization and depreciation, for example); we start estimation with a real rate and after that we transform it in a nominal rate, using anticipated inflation rate;

it is preferable to use arithmetic average than geometric mean for assessing expected returns or risk premiums, because the second is more appropriate for compound rate of return, but not for expected return;

### **3. Case study concerning assesment of build-up discount rate for a private sector investment**

The objective of this section is to asses the discount rate for an investment in a polyurethan panels factory. A company from building materials industry, as unique shareholder of the new firm, fulfills the project. The project is all-equity financed.

The new company is privately held and for this industry we do not have enough information about traded companies in Romania, to use them as comparison to the cost of capital. Therefore, we proceed to a two stages procedure:

assessing discount rate for the project according to its risk category, assuming that it is accomplished in the United States of America (we chose USA because of data accessibility for estimating a proper discount rate);

assessing discount rate for the same project implemented in Romania, by adding some supplementary risk premiums to discount factor obtained in the first stage;

We start with risk free rate and then we add a range of risk premiums to reflect the level of risk for the analyzed project, in a **build-up model**.

#### **A. Assessing discount rate for a similar project operated in USA**

Expected rate of return for investor is computed with the following formula:

$$r = R_f + RP_m + RP_s + RP_i (\text{industry})$$

$R_f$  is assimilated to yield to maturity for treasury bonds issued by US Treasury, with 20 years constant maturity. Annual average (at 31st of December, 2008) for daily quotations of yield to maturity for US Treasury bonds with 20-year constant maturity is 4.25%<sup>1</sup>.

This average value represents expected return from two sources: income (coupon) and capital gain. The risk free rate corresponds only to the first component, because only debt payments promised by issuer to investor are riskless, while security price variations depend on changes in capital market.

$RP_m$  stands for risk premium of capital market in USA and it is determined as excess return for market portfolio (S&P 500 index) to risk free rate. Rate of return for market

index S&P 500 is calculated as annualized average from average of monthly total return for a period of 120 months (Avg), as follows<sup>1</sup>:  $R = (1 + Avg)^{12} - 1$

The annualized average return for S&P 500 for the last 10 years, at 31<sup>st</sup> of December 2008, was 8.91%, which leads to a market risk premium equal to  $8.91\% - 4.25\% = 4.66\%$ .

**RP<sub>s</sub>+RP<sub>i</sub> (industry)** stands for size and industry premium and it represents the supplementary risk assumed by an investor in this industry, if the new firm is small or medium size, with different features compared to average firm from industry field.

Ibbotson Associates publishes annually statistics for each industry regarding cost of capital determined through different models (we also wrote, in parenthesis, the average values for the cost of capital of small/medium size companies in building materials industry<sup>1</sup>):

- CAPM takes into account only the systematic risk, measured by beta (13%);
- CAPM + Size Premium establishes a proper discount rate for the risk of small or medium companies (17.01%);
- 3-Factor Fama-French uses market value of equity (MV), book-to-market ratio (BM) and a capital market factor for calculating expected return (17.9%);

The rate of return estimated with CAPM is not a reliable measure for the risk of the analyzed project. We have to choose between the second and the third model. As the two values are close enough, we appreciate that their average reflects more accurately the level of risk assumed by investor. The risk premium for size and industry in this case is 5.38% and the discount rate for a project in manufacturing industry, if it is implemented in USA by a small size firm, is 17.46%.

Concluding, the discount rate for the project cash flows in USA is:

$$4.25\% + 4.66\% + 5.38\% = 14.29\%$$

### ***B. Assessing discount rate for the project operated in Romania***

Estimating expected rate of return for investor starts with the rate of return for a similar project accomplished in USA, plus a range of specific risk premiums for Romania and for the new company:

$$r = r_{USA} + RP_{m(\text{Supplementary for Romania})} + RP_{\text{country risk for Romania}} + RP_{i(\text{supplementary for building industry in Romania})} + RP_{\text{supplementary for minority shareholders}}$$

**RP<sub>m</sub>(Supplementary for Romania)** catches supplementary risk assumed by an investor on Romanian capital market besides the case of a similar investment in US financial market. It is determined according to the surplus of risk taken on unit of return gained. We have determined the historical annualized rate of return and the standard deviation for BET from daily prices registered at Bucharest Stock Exchange, between 1st of January 1998 and 31st of December 2008. We used USD quotations for BET and the same formulas for mean and standard deviations (as well as for S&P 500 index) in order to get comparable results. We preferred the arithmetic mean to geometric mean, because it is thought that the first pictures better the annualized rate. Average return for this period is 24.5% and standard deviation is 49.77%. The quantity of risk on unit return gained is 2.03 (while the same ratio for US capital market is 1.75).

$RP_{\text{capital market in Romania}} = RP_{\text{capital market in USA}} \times \text{risk on unit return for Romania} / \text{risk on unit return for USA} = 4.66\% \times 2.03 / 1.75 = 5.4\%$ , which corresponds to a **RP<sub>m</sub>(Supplementary for Romania)** of  $5.4\% - 4.66\% = 0.74\%$ .

Country risk (or sovereign) is not diversifiable because investors hardly can constitute a portfolio of securities issued in different countries. In this respect, a risk premium must pay for the country risk.



It could be determined as country default spreads, according to notes granted for the two countries by the main international rating agencies. Romania received for foreign currency bonds the following ratings from these agencies:

**Standard&Poor's** and **Fitch**: BB+/Negative<sup>1</sup>, both worsened in October 2008, while **Moody's** is the only one which gives Baa3. USA rating is Aaa or AAA, which is the maximum note for all agencies (investment in US Treasury bonds is a safe one). According to sovereign ratings provided by Moody's<sup>1</sup>, the country risk premium for government bonds noted with Aaa (USA) is zero, for Baa3 (Romania) is 2%, while for Ba1 is 3.25%.

We took Moody's as a reference because this agency did the most recent change of rating for Romania and improved its note to Baa3, in October 2008. This method offers a value of 2% for

**RP**<sub>country risk for Romania</sub>.

Concerning the building materials industry, we estimate that for the specific field of producing polyurethane panels for warehouses there is a supplementary risk in Romania beside USA, because of the strong competition of similar products on the market. We refer here to polyester and similar panels, imported or produced in Romania.

Therefore, we consider that **RP**<sub>i(supplementary for building industry in Romania)</sub> is 2%. This value is subjectively fixed, without a rigorous appraisal, because of lack of data or detailed analyses concerning this specific industry in Romania.

The last component of discount rate is **RP**<sub>supplementary for minority shareholders</sub>. It is needed only if there are many small stockholders that have no control on decisions adopted by majority shareholders. The new firm has a unique stockholder that decides alone the future strategy. From this perspective, a risk premium for minority shareholders is not necessary for the project.

We conclude that discount rate for the project operated in Romania is:

$$r = 14.29\% + 0.74\% + 2\% + 2\% = 19.03\%$$

#### 4. Conclusions

Determining discount rate is an important aspect for every investment.. There are many discount rate models, some of them are unsophisticated but strongly disputed, and some of them are complex but little preferred by users. Choosing a model for estimating discount rate depends on available information and on user's reasons and preferences.

The discount rate estimated for the project consisting in a factory for industrial panels production must be taken with caution. The build-up model, presented in this paper, must be determined with caution, because every single risk premium is subjectively assessed. The more risk premiums to estimate, the little reliable the final result is. We can say how important these errors for a valuation process are only after we estimate the projected cash flows. Sensitivity analysis of the project reveals such information, because discount rate is one of the investment variables that must be modified (other variables are kept unchanged). The sensitivity of the project to the discount rate is given by the response of NPV and IRR to a change with one percentage point of discount factor.

If the project is sensitive to  $r$ , it means that a supplementary risk premium of 3% for building materials industry in Romania (instead of 2%) may drive to completely different conclusions concerning efficiency of the project or even the decision to adopt or to reject the project.

We chose this particular premium as an example because we mentioned before that it is not very well grounded.

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# THE IMPROVEMENT OF ROMANIAN LOCAL PUBLIC FINANCES MANAGEMENT AS A EUROPEAN UNION COUNTRY USING INFORMATION AND COMMUNICATION TECHNOLOGIES

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*Romania makes big efforts to implement information society in public administration creating the possibility of paying local taxes by individuals and legal entities using the Internet. eTax and Virtual Window to Pay represent a fundamental sea change in the local tax administration. Their evolution is largely based upon the impact of ICTs (notably the development of the Internet) on local public administration and has been driven by the twin impacts of globalization and technological change upon the public administration. The result is a reorganization of local tax administration involving the increased utilization of information as a key resource and the wider deployment of ITCs.*

*Key words: local public finances management, ICT, eTax, Virtual Window to Pay, European Union*

*JEL classification: H7, H83*

## **Introduction**

Information and communication technologies (ICTs) are considered to be a major driving force of building information societies and economies and are a new factor in improving existing local governance practices in all European Union countries. At the local level, using the power of ICT can enhance and support economic and social development through the accessibility, quality and cost-effectiveness of public services and to help to revitalize the relationship between customers and citizens and the public bodies who work on their benefit.

Transferring of competencies from the state to the local level, the municipalities are assuming greater development responsibilities for their communities. All this requires a serious effort and the use of the information and communication technology in this process can and should assist local governments to work more efficiently and provide better services to the citizens.

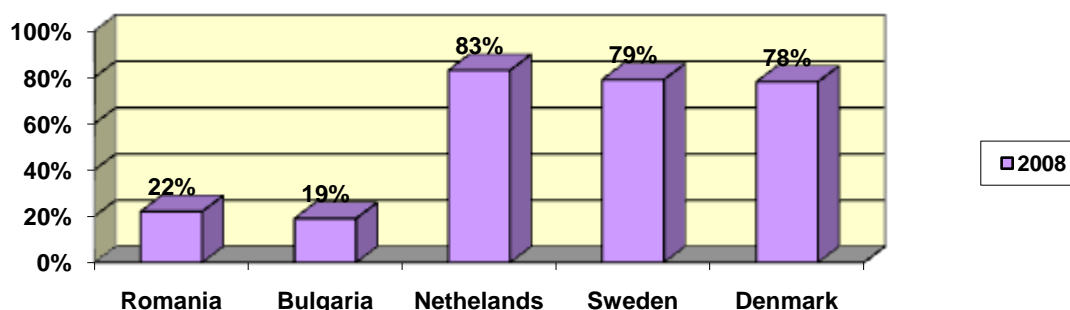
Implementation of ICTs in local public administration generates the transforming of services, making them more accessible, more convenient, more responsive and more cost-effective. Also, it can help improve the customer's experience of dealing with local public services.

## **Local public finances management in the EU countries using information and communication technologies**

The first steps in stimulating the establishment of the Information Society in Europe (Information Society) were made through Multi-annual Community programme (Council Decision 98/253/EC/30.03.1998) which establishes some key-objectives as follows: increasing public awareness and understanding of the potential impact of the Information Society and its new applications throughout Europe, stimulating people's motivation and ability to participate in the change to the Information Society; optimizing the socio-economic benefits of the Information Society in Europe, by analyzing its technical, economic, social and regulatory aspects, by appraising the challenges raised by the transition to the Information Society, interalia as regard employment, and by promoting synergy and co-operation between European and national levels; enhancing Europe's role and visibility within the global dimension of the Information Society.

The analyze demonstrate that is no single e-governance model, which would suit all European Union countries that are at different stages of development with varying degrees of decentralization process applied in real or declared governance practices. According European researches local governments in developed countries are offering up to 77% of public e-services. Often local government portal is the first step to reach also central government services. In North Europe, the Internet is more propagated in comparison with East and Central Europe. Romania is on the penultimate place in the European Union on the rate of Internet access to households, with only 22%, ahead of Bulgaria, which recorded a level of only 19%, according to Eurostat data, the Bureau of Statistics of the European Commission i

**Figure 1: Internet access to household in 2008**



2008.

In Romania, the share of households that were in the first quarter of the year a broadband connection rose from 5% in 2006 to 8% in the beginning of 2008. In the first quarter, the rate of Internet access to households was the highest in the Netherlands (83%), Sweden (79%) and Denmark (78%).

At European level, the share of households that were in the first quarter of the year a broadband connection is the highest encountered in the Netherlands (74%), Denmark (70%) and Sweden (67%), while the lower limit is Greece, by 7% and 8% in Romania, in conditions in which the European Union average is around 42% value.

At the end of June 2007, in Romania there were 4.5 million Internet connections, with 78.2% over the same interval in 2006, the penetration rate was 21%, according to data of National Authority for Regulation in Communications and Technology (ANRCTI).

### **Direction of legislative framework on implementing ICTs in Romanian local public administration**

With the fathers of our accession to the European Union public administration had to take their own measures of restructuring, modernization and even rethink the role and functioning, particularly in terms required by this new information society. Because the information to bring benefits to all, it should develop into a national framework to respond to local needs, in line with national regional and international. Romania made efforts in implementing the information society in public administration reform supported by objectives involving measures and actions for implementation with a cost of approximately €150 million until 2007.

*Romanian Government Program 2009-2012*, chapter 14 – Information Society establishes the following objectives: increase access of population to public services computerized at 20%; 45% increase in the percentage of households with Internet access; 60% increase in the percentage of firms using the Internet as the main means of interaction with state institutions; expanding the number of rural areas with access to communications networks, broadband.

To achieve these objectives, the Romanian government wants to follow the following *directions of action*: a. Creating a legal and institutional framework for coherent development of information society; b. Promotion experience and proposals in the Romanian legislation in the European institutions and experience transfer to third following the path of European integration; c. Encouraging common approaches to cooperation in the south-eastern European markets to creating a strong information and communication technology (ICT); d. Cooperation with other authorities for the introduction of provisions relating to communications infrastructure planning standards in the authorization for construction and other standards; e. Supporting the development of technological neutrality in the national communications infrastructure and encourage development of broadband Internet as the main medium of transmission and convergence; f. Establish a national information platform to bring in a dynamic and direct mail information to citizens, companies and real estate; g. Continue and expand the "Knowledge-based economy", financed by the World Bank, by increasing the number of rural areas who have access to a communication network broadband; h. Development and uptake of standards, standards and methodologies and the development and maintenance nomenclatures of general interest to ensure the uniform design, development, implementation and operation of computerized public services, which will ensure their interoperability and interaction; i. Construction of "cities of the information society", as models for pilot testing the use of ICT in all economic, social and cultural community by organizing a national competition to obtain funding (national, European, local and private); j. Achieving a national platform for information and action, disaster, to ensure rapid intervention and specialized authorities; k. Support the development of ICT infrastructure in public education at all levels and ensuring equal opportunities to information for all school children in Romania; l. Supporting the development and use of informational content dedicated to teaching all subjects in the process of public education; m. Providing infrastructure for secure access to personal medical information for medical services, anytime and anywhere in Romania; n. Providing infrastructure for secure access to personal medical information for medical services, anytime and anywhere in Romania; o. Promoting extensive electronic payment mechanisms; p. Promoting government interaction with citizens and business services for e-governance; r. Promoting the exchange of electronic documents, so as to become the principal means of transmitting information in public administration.

*Law no. 161/2003*<sup>1</sup> provided for the creation of the national electronic system that the public in order to ensure public access to information and providing public services to individuals and businesses whose operators are the General Inspectorate for Communications and Information Technology Ministry of Communications and Technology Information for "e-government system"; Ministry of Public Administration, for "e-administration system"; authority established by the Supreme Council for Country Defense, under conditions approved by it for the defense and national security.

Among the basic public services which are supplied by electronic means provided for in Article 12, paragraph 1 of law, the declaration, notification and make payments through electronic means, the fees and taxes paid by individuals and legal the state budget, the state social insurance budget, social health insurance, unemployment insurance budget and local budgets, as well as on customs declarations, plus other services.

To achieve the system, all government authorities send the Ministry of Public Administration, Ministry of Communications and Information Technology Ministry of Information and Public data on the existence of its own Internet pages, that public information and public services are provided through electronic media and data on existing systems and the services offered by public, and the categories of users to whom it is addressed.

Since 2008, *Decision by the Agency for Information Society Services No. 339/2008 on the general operation and use of "virtual payment window"*<sup>1</sup> created "Virtual window to pay", as

well as regulating the selection procedure in order to issue a license which is granted the right exclusively for the processing of electronic payment card in the “Virtual one-stop payment”.

“Virtual window to pay”<sup>1</sup> represents system of public utility, part of the e-governance, through which individuals and legal entities may pay by electronic card authorities central and local public administration in Romania.

The operator is the Agency for Information Society Services, public institution with legal personality, the Ministry of Communications and Information Technology.

### **The improvement of Romanian local public finances management using information and communication technologies**

Efficiency targets in the direction of public information are: a) providing quick and easy access to at least four types of data essential legislative and administrative information, cultural and environmental, real-time information on traffic conditions, b) expanding the use of the Internet to ensure public consultation on important policy decisions, c) providing two-way citizens access to documents used for current activities (tax forms, requests for funding, etc.), which will allow them to receive information and send replies.

A direction of action of local public finance management is to improve the procedure for preparation and submission of statements of taxes, given the need for preparing a record on paying, correct and complete to ensure that information on tax debts owed by the paying deadline for payment of local taxes. Administration functions and ensuring a balance between coercive methods and providing information and assisting taxpayers in connection with budgetary obligations, requiring redefining and improving relations with payers, to assist them because the quality is a key element in assessing the level of tax administration modernization.

**Table 1: Management of the business of assisting taxpayers**

| Basic <i>principles</i> of business of assisting taxpayers    | <i>Strategic objectives</i> of the business of assisting taxpayers  |
|---|---|
| a) the taxpayer’s right to receive the response from the tax, | 1. to identify problems of implementing tax laws, taxpayers   |
| b) unpaid assistance,   | 2. to assist the completion of tax returns and taxes, taxpayers   |
| c) support of (and authorized in time),                       | 3. to assist responsibilities for knowledge on the tax file the necessary documents, deadlines for submitting their and payment of taxes, |
| d) assisting indiscriminate                                   | 4. establishing limits of jurisdiction for the issuance of solutions to tax problems,   |
| e) confidentiality tax information                            | 5. to make database on tax issues resolved at the Ministry of Public Finance,   |
| f) the distinctive structures, specialized assistance,        | 6. mass-media solutions of general uniformly applicable.  |
| g) help assess the impact on revenue collection               |   |

*eTax* is the service through its portal, enables payer from taxes and duties to inform on current flows that are payable by the financial and payment electronically. Tax payer shall be issued an electronic proof of payment in the form of a letter of confirmation signed by the electronic certificate number, including the tax payer identification, identification of beneficiary payment transaction numbers for information on flows and payments made and details of transactions. Pilot system for paying taxes electronically treated as confidential information. In addition, electronic payment of taxes may offer the possibility to make payments on behalf of others,

ensuring complete safety of operations, a stream of payments quickly, easily and comfortable to use.

Law on electronic collection of local taxes and fees proposed a timetable under which the local government had to inform citizens on payment of taxes and local taxes through electronic: 1 February 2003, in the case of taxes collected by the administration local-level municipalities, 1 November 2003, in the case of taxes collected by local government authorities from the cities, 1 November 2003, in the case of taxes collected by local government authorities from the municipality, if any request to that effect.

According to art. 28 of the rules concerning the implementation of electronic collection of local taxes, it must satisfy several technical conditions considered minimal:

- System architecture must be on three levels;
- the system must be operational 24 hours a day, 7 days a week;
- System access must be made on the basis of identification and authentication;
- the system should allow the introduction of and generate new users for these items of identification and authentication;
- the system must use a protocol with the security level at least equal to the SSL protocol, version 3;
- the system must maintain a log of operations performed by users;
- The register must be available on the Internet, each user having exclusive access to of related information;
- the system must ensure registration system upgrade at least once a day;
- contents page of the entity tax must satisfy these rules,
- the system should allow simultaneous connection of at least 500 users,
- the decoupling of the system must be made automatically when closing the Internet browser;
- Hardware and software architecture must be scalable;
- electronic system for the collection of local taxes should provide a level of security systems, communications, transactions and data in accordance with recognized standards - ISO / IEC and 15408-1,2,3 ISO 17799;
- Register the system must conform to these standards;
- web interface should be friendly, allowing convenient and efficient operation of the facilities, the user must attend at least through the use of explanatory texts.

The first system for electronic payment of local taxes has been tested during 25-29 March 2002, at Sector 5 Bucharest City Hall and was opened on 3 April 2002. The solution chosen by the City of Sector 5 of the capital was one of Info-kiosk, a system that creates an electronic infrastructure access to information. The application was developed by a consortium composed of ICI Bucharest, Romania Siveco, Compaq, Ericsson and Intrarom. Through the 7 public terminals of Info-kiosk, Sector 5 people have access to information about fees and local taxes you must pay.

Currently, the system was eTax most cities in the country, but because of bureaucratic steps forward and that media coverage was minimal, service eTax is used to a lesser extent, the taxpayer still preferring direct contact with public officials.

Since 2008, because in Romania there are over 6 million people have Internet access, and cards issued by banks is approaching 10 million, was created **Virtual Payment Window**, system of public utility, part of the e-governance, through which individuals and legal entities can make electronic payment card by the central government and local authorities in Romania.

To be able to make payments through one-stop, the payer must be registered in the system. The registration system includes the following phases: a) completing the online registration form available on the homepage of one-stop b) Virtual window to pay transmitting a message via email to the payer, to confirm registration, c) Registration confirmation by the user by accessing the website listed in the email confirmation.

The payer can register and log into the system to access pages and introducing a fee to view payments made. Authentication system is secure, based on user account and password.

From October 2008, through one-stop virtual payments individuals can pay online, the state budget, through credit cards, tax obligations representing income tax, payments anticipated by the title of tax income for income tax and tax obligations related accessories, for the following categories of income: a) income from commercial activities, b) income from free professions c) income from intellectual property rights d) income from property transfer usage e) gains from

securities f) income from operations for sale term foreign currency-based contract; g) income from agricultural activities, h) income from transfer of property from the personal property; i) income from salaries for employees are required to establish, and declared the payment of income tax.

## Conclusion

Modern information processing will be combined with the traditional to the progressive elimination, the gradual of the latter. Implementation of electronic means is purposeful: a) reduction of public spending, combating bureaucracy and corruption in the public institutions, b) improving the transparency of the use and administration of public funds, c) eliminating direct contact between the officer and citizen to stop or trader, d) providing information and quality public services through electronic means, e) strengthening the administrative capacity of public institutions to fulfill the role and objectives and to ensure delivery in a transparent manner, information and public services, f) promoting the use of Internet and technology in the leading public institutions.

The impact of modern information processing management of resources in taxes is positive in all respects, because ICTs are a necessary enabler of reforms to the ways in which local public finances work. Improving internal operating systems – financial systems, purchasing and payment arrangements, internal communications and sharing of information – and programme processing and delivery arrangements can generate operating efficiencies and improve performance. More specific effects may range from impacts on ICT production, e-commerce diffusion and business productivity to indirect effects such reduced fiscal requirements owing to more effective programmes and efficiencies flowing through to the broader economy.

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# **BANKS**

# EARLY WARNING SYSTEM FOR THE ROMANIAN BANKING SECTOR: THE CAAMPL APPROACH

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*In the present study we intend to build an early warning system based on the banking ratings' deterioration, by means of the CAAMPL method. This technique supposes to identify the credit institutions the most exposed to risks. The analyzed period for the Romanian banking sector covers the time frame between 1998 and 2006. During this period, a deterioration of the banks' financial status, caused by the experienced banking crisis, can be observed in a first stage, followed by a risks reduction in the period forerunning the burst out of the global financial crisis. This method will help us demonstrate that, whereas the size of the bank has a positive influence on the banking ratings, the shareholders' quality does not have the same impact.*

*Keywords: financial stability, early warning systems, CAAMPL ratings, Romanian banking system.*

*JEL Code: G01, G21, G24.*

## **1. Introduction**

The early warning systems (EWS) enable to rapidly identify the difficulties of the economy, by means of signal disseminating indicators, fact which helps to undertake immediate measures so as to prevent the crises appearance. The goal of these methods used to quantify the stability is to provide a coherent structure in order to analyze the stability problems, to make possible the early identification of vulnerabilities, to encourage the preventive and corrective measures required to avoid financial instability.

Generally, the early warning systems are used due to their capacity to forecast the crisis' appearance, but they can at the same time be applied for other purposes. These techniques are equally used by the regulators to identify the banks which are the most exposed to risks.

In this study, we intend to analyse the evolution of the banking ratings in Romania by means of the CAAMPL method which enables the identification of the most exposed to risk banks. The analyzed period covers the years 1998-2006 and the database used for the study is Bankscope Fitch IBCA. The results indicate an improving of the banking ratings starting with 2003. According to this approach, this trend mainly occurs with the large banks of the system. However, in respect of the shareholders quality, the outcomes are contrary to the expectations. The banks which have Romanian majority shareholders show a superior solidity level.

The remainder of the paper is organized as follow. The second section presents a short overview of the EWS literature. In the third section, we describe the CAAMPL method used for the Romanian banking system. The next section analyzes the size effect and the shareholders quality effect (the literature point out the fact that the foreign shareholders have more important and consistent methods for controlling and managing the banking risks). The last section presents the conclusion of the paper.

## **2. Literature overview**

The most important category of EWS is represented by those enabling the calculation of the probability of a financial crisis appearance. This technique covers two big important EWS

approaches: the *signal-based approach* and the *limited dependent variable approach*, which is based on *logit* or *probit* models. Most of the studies test both methods in order to be able to compare the results. The first method is usually used for identifying the indicators which can be retained in the binomial or multinomial logit models.

The *signal-based approach* knew a real success with the studies carried out by Kaminsky and Reinhart (1999). The financial indicators' behaviour before and during crisis periods is analyzed in comparison to their behaviour during normal periods. Numerous studies have used this method, mainly to identify the signals related to the appearance of a currency crisis (Vlaar, 2000; Bussi eres et Fratzscher, 2006; R acar u et al., 2006).

However, a more modern method for the identification of the probability for a crisis appearance consists in the *binomial or multinomial logit or probit* type regression. Krkoska (2000) and Bussi eres et Fratzscher (2006) have used a binomial logit model to estimate the crisis appearance probability. Based on this model, Davis and Karim (2007) analyzed the probability of a banking crisis appearance. Finally, Berg and Patillo (1999) bring an important contribution to the application of the probit models.

At the same time, another purpose of EWS usage is to identify the banks which are the most exposed to risks. We deal, in this case, with early warning systems for the detection of banks' financial distress. Thus, Distinguin et al. (2006) have used a logit model to demonstrate the importance of the indicators built based on market data development (beside the accounting indicators) for the assessment of European banks' financial distress. This financial status deterioration was identified by means of the ratings provided by the external rating agencies and the outcomes led to the significant contribution of market indicators to the detection of banks financial distress. A similar exercise was performed by Poghosyan et  ih ak (2009) who analyzed the European banks' deterioration with the help of a logit model, focusing in the first phase on accounting data.

### **3. The CAAMPL approach for the Romanian banking sector**

Cerna et al. (2008) describe a particular type of EWS which provides information on the banks' solidity. This system is a banking rating or scoring system used by the National Bank of Romania (NBR) and it transmits signals on the fragility of credit institutions. We will use this technique to analyse the evolution of banking ratings in Romania and to relate these ratings to the size of the banks and to the quality of their shareholders.

The method is known as "*banking rating and early warning system*" and represents a microprudential EWS, which resembles to the Distinguin et al. (2006) method, but which uses however only accounting data and information on the quality of the banking management and of the shareholders. This technique is part of the "*early warning systems applied by the regulation and surveillance authorities to identify the banks which are the most exposed to risks*" (Lutton, 2006).

The architecture of the CAAMPL early warning systems used to determine the ratings' trend presents two components (Moinescu, 2007):

- a statistic model to assess the banking ratings downgrade probabilities;
- qualitative estimations made by experts by means of complementary information.

The "CAAMPL" system takes into consideration six elements which characterise a bank's activity and solidity: the capital adequacy (C); the assets' quality (A); the shareholders' quality (A); the management (M); the profitability (P) and the liquidity (L). These indicators enable the definition of a composite rating. Each of the six components is assessed on a scale from 1 to 5 where the value "1" characterises the best performance level and the value "5" the weakest level. Four components (C – the capital adequacy, A – the assets' quality, P – the profitability and L – the liquidity) are analysed in close connection with a set of indicators which can receive different ratings. The other components (A – the shareholders' quality and M – the quality of the

management) are estimated by the experts of the NBR on the basis of the information gathered during the control missions performed at the banks' premises (*on-site*).

After the assessment of the six components specific for the performance (CAAMPL), the composite rating is established according to a rating scale from 1 to 5. A particular importance is given to the quality of the management which receives a significant weight within the composite rating. If one of the components was evaluated to a rating equal to 5, the composed rating will not pass over the level "3"<sup>250</sup>.

The indicators used for the assessment of the CAAMPL system components (except for the quality of the shareholders and of the management) are presented in the Annex. There are 22 individual indicators which characterise the adequacy of the capital, the quality of the assets, the profitability and the liquidity of the banks.

Simplifying this technique (the composite rating is calculated as the arithmetic mean of the individual ratings), we make an analysis of the Romanian banking institutions' solidity, by means of the *Bankscope Fitch IBCA* database<sup>251</sup>.

Fourteen indicators among those presented are retained in the analysis (see the indicators with "\*" in the Annex). These indicators contain information on the capital adequacy (3 indicators), on the quality of the assets (6 indicators), on the profitability (3 indicators) and on the liquidity (2 indicators). Practically, these indicators are accounting indicators and they stand for the CAPL (*Capital, Assets, Profitability* and *Liquidity*) system.

In order to define the composite rating, we have kept the following assumptions:

H1: the composite rating is calculated, in a first phase, as an arithmetic mean of the individual ratings;

H2: if one of the individual indicators presents a rating equal to 5 (the worst rating), then the bank can not benefit from a composite rating over "3"<sup>252</sup>;

H3: for each score equal to 5 assigned to a component, we add 0,10 points to the composite rating in order to penalize the bank's corresponding mediocre performances;

H4: finally, the composite rating is rounded.

This way we obtain the trend of the banking ratings for the period 1998-2006, leading to the possibility to identify the factors which can influence the banks' solidity.

#### **4. The shareholders' quality and the banks' size effect**

In a first stage, we compare the quality of the ratings and the quality of the shareholders (Figure 1). In theory, it is supposed that both the management and the shareholders of banking groups performing their activity at international level have a superior risk management capacity (because these institutions dispose of an adequate risk management framework). That is why we expect

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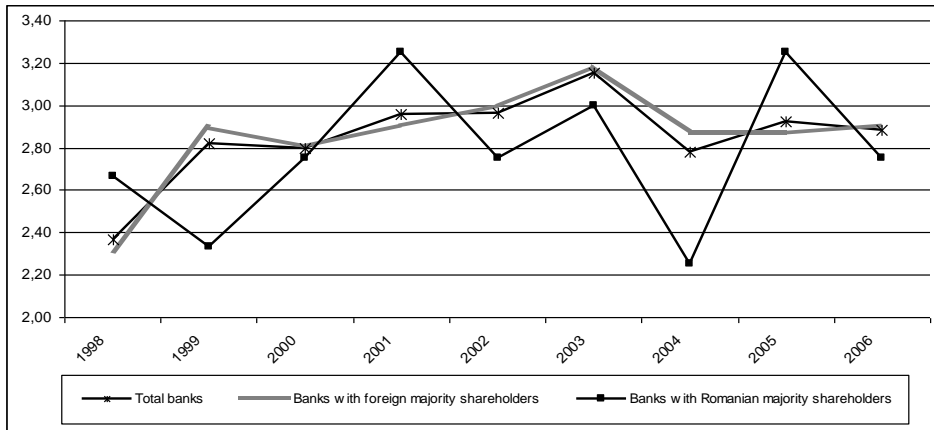
250 Briefly, the rating categories can be interpreted as follows: Composite rating 1 – The banks are viable in all the aspects and generally all their five components are assessed at the level "1" or "2". The existing deficiencies are minor and they can be easily eliminated. Composite rating 2 – The banks have a solid structure. Only the minor difficulties, which can be corrected by the Managing Board's decisions or by the management, can be pointed out. Composite rating 3 – The banks require a particular attention from the supervision authorities, for one or more of the mentioned components. Composite rating 4 – The banks are characterized by hazardous practices and they incur serious financial and administrative problems which can lead to poor results. Composite rating 5 – The banks perform an unsatisfactory activity and apply hazardous practices. They present deficiencies and use inadequate risk management techniques.

251 This database contains information on all the Romanian banks, except for Porsche Bank and Millennium Bank. The retained set includes 27 banking institutions, out of which 4 banks have Romanian majority shareholders in 2006 (2 banks with private shareholders and 2 with public shareholders). The most important banks of the system are the Romanian Commercial Bank - Erste Group and the BRD - Group Société Générale, with a share of the market reaching 29,37% and respectively 17,76% in 2006.

252 One exception to this rule is related to the rating 5 for the indicator "immediate liquidity", because this variable is equivalent to the worst score for most of the banks during the analysed period (1998-2006). The indicator is calculated by Bankscope which can use a method different from that applied by the NBR.

that the banks with foreign shareholders to be more solid than those having domestic majority shareholders.

Figure 1: The banking ratings trend correlated with the shareholders' quality



Source: Bankscope database

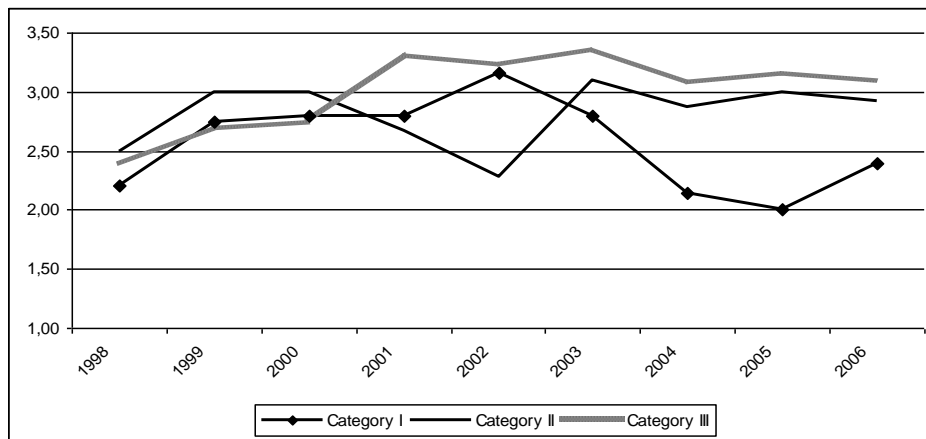
Figure 1 shows however the opposite situation – the domestic banks are, in average, more stable (except for the years 2001 and 2005)<sup>253</sup>. This observation has several explanations. In the first place, the Romanian Commercial Bank (the most significant bank of the system which possesses a good financial solidity) went through a privatization process completed only at the end of 2005. In the second place, the Transylvania Bank, which has Romanian majority private shareholders, disposes of the best composite rating during the analyzed period. Because the number of banks with domestic shareholders is quite reduced as compared to the number of banks with foreign shareholders, the composite rating of the entire banking sector is rather correlated with the rating of foreign shareholders banks.

Another element influencing the quality of the ratings is the size of the banks, measured as the market share, which is defined by the ratio between the bank's assets and the total assets of the banking sector<sup>254</sup>. In theory, the largest banks are the most solid because they have the capacity to better manage their risks and to attract competent managers. They also have the capacity to attract funds when needed. On the other hand, the costs related to risk management are considerable for the small sized institutions and the sharp battle for the market quotas makes them more vulnerable. Figure 2 shows that this assumption is confirmed because the largest banks recorded a superior rating (the average of the composite ratings indicates a solid financial status for the banks belonging to this category in 2005).

253 We remind that a superior rating means a score equal to 1 or 2 (see left scale in Figure 1).

254 Depending on the activity volume, there are banks included in the Category I – market share superior or equal to 5%, in the Category II – market share between 4,99% and 1% and in the Category III – market share under 1%.

Figure 2: Banking ratings tendency correlated with the banks' size



Source: Bankscope database

## 5. Conclusion

In conclusion, the identification of the factors which influence the ratings' degradation and the calculations of the probability for the banking financial distress can be considered as a particular type of early warning system.

In the case of Romania, we notice an improvement of banks' ratings in the period 2003-2006, even during a credit boom period. If the large banking institutions are more solid than the small sized ones (the *size effect* – according to the theory), we can assert that this affirmation does not apply to *shareholders quality effect*.

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### Annex

The criteria for banks' classification depending on the indicators used for the analysis of quantifiable components CAPL

|                             | Indicator (the formula)  | Interval    |                                 |
|-----------------------------|--|-------------|---------------------------------|
| <b>Capital adequacy (C)</b> |  |             |                                 |
|                             | Capital adequacy ratio 1 ( $\geq 12\%$ )*<br>(equity / risk weighted assets) | $\geq 15\%$ | well capitalized                |
|                             |  | 12 - 14,9 % | adequately capitalized          |
|                             |  | 8 - 11,9 %  | under capitalized               |
|                             |  | 5 - 7,9%    | significantly under capitalized |
|                             |  | < 5%        | strongly under capitalized      |
|                             | Capital adequacy ratio 2 ( $\geq 8\%$ )<br>(capital / risk weighted assets)  | $\geq 10\%$ | well capitalized                |
|                             |  | 8 - 9,9%    | adequately capitalized          |
|                             |  | 6 - 7,9%    | under capitalized               |
|                             |  | 4 - 5,9%    | significantly under capitalized |
|                             |  | < 4%        | strongly under capitalized      |
|                             | Equity ratio ( $\geq 5\%$ )*<br>(equity / total net assets)                  | $\geq 6\%$  | well capitalized                |
|                             |  | 4 - 5,9%    | adequately capitalized          |
|                             |  | 3 - 3,9%    | under capitalized               |
|                             |  | 2 - 2,9%    | significantly under capitalized |
|                             |  | < 2%        | strongly under capitalized      |

|  |   |  |
|--|---|--|
| Equity / share capital (>100%)*  | $\geq 150\%$  |  |
|  | 150 - 100,0%  |  |
|  | 80 - 99,9%  |  |
|  | 50 - 79,9%  |  |
|  | < 50%   |  |
| Other conditions   | There is no danger to preserve an adequate level of the equity according to the regulations.  |  |
|  | If the rating for the capital adequacy ratio is equal to 4, the capital adequacy component can not receive a rating superior to that assigned to the indicator. In addition, the bank's composite rating is adjusted and the institution will be noted with a rating at the most equal to the component's rating. |  |
|  | If at least one of the components was assessed to a rating equal to 5, the composite rating will not pass over the level "3".   |  |
| <b>Assets quality (A)</b>  |   |  |
| General riské ratio*   | $\leq$ (the average for the system - 30% of the average for the system)   |  |
| (risk weighted balance-sheet and off-balance-sheet assets / accounting value balance-sheet and off-balance-sheet assets) | > (the average for the system - 30%)  |  |
|  | $\leq$ (the average for the system - 10%)   |  |
|  | > (the average for the system - 10%)  |  |
|  | $\leq$ (the average for the system + 10%)   |  |
|  | > (the average for the system + 10%)  |  |
|  | $\leq$ (the average for the system + 30%)   |  |
|  | > (the average for the system + 30%)  |  |
|  |   |  |
| Total doubtful loans + in default loans / Total credit portfolio (net value)*  | $\leq 2\%$  |  |
|  | 2,1 - 4%  |  |
|  | 4,1 - 6%  |  |
|  | 6,1 - 8%  |  |
|  | > 8 %   |  |
| Credit risk ratio "2" non-   | $\leq 5\%$  |  |



|  |   |   |       |
|--|---|---|-------|
|  | adjusted exposure   |   |       |
|  | (Loans and interests in the categories “standard loans”, “doubtful loans” and “doubtful and in default loans” / Total classified loans and interests)                                     | 5,1 - 10%   |       |
|  |   | 10,1 - 20%  |       |
|  |   | 20,1 - 30%  |       |
|  |   | > 30%   |       |
|  | Weight of the banking loans and of the corresponding interests classified in “standard”, “doubtful” and “doubtful and in default loans” exposition non-adjusted to equity and provisions* | ≤ 5%  |       |
|  |   | 5,1 - 15%   |       |
|  |   | 15,1 - 30%  |       |
|  |   | 30,1 - 50%  |       |
|  |   | > 50%   |       |
|  | Outstanding + doubtful debts / Total assets (net value)*  | ≤ 2%  |       |
|  |   | 2,1 - 4%  |       |
|  |   | 4,1 - 6%  |       |
|  |   | 6,1 - 8%  |       |
|  |   | > 8 %   |       |
|  | Net doubtful debts ≤ n% Equity  | Cri ≤ 30% Cp et Cp > 0  |       |
|  | (net patrimony) (Cri ≤ n% Cp)   | 30% Cp < Cri ≤ 50% Cp et Cp > 0                               |       |
|  |   | 50% Cp < Cri ≤ 70% Cp et Cp > 0                               |       |
|  |   | 70% Cp < Cri ≤ 100% Cp et Cp > 0                              |       |
|  |   | Cri > Cp or Cp < 0  |       |
|  | Provisions coverage level* (banking risk reserves + credit provisions)  | ≥ 90%   |       |
|  |   | 80 - 9,9%   |       |
|  |   | 60 - 9,9%   |       |
|  |   | 20 - 9,9%   |       |
|  |   | < 20%   |       |
|  |   | Provisions coverage ratio / Total net assets                  | ≥ 8%  |
|  |   | 7 - 7,9%  |       |
|  |   | 5 - 6,9%  |       |
|  |   | 2 - 4,9%  |       |
|  |   | < 2%  |       |
|  |   | Consumption credit / Total assets (gross value)*              | ≤ 50% |
|  |   | 50,1 - 55%  |       |
|  |   | 55,1 - 60%  |       |
|  |   | 60,1 - 65%  |       |
|  |   | > 65 %  |       |
|  |   | Consumption credit / loans from attracted funds (gross value) | ≤ 60% |
|  |   | 60,1 - 65%  |       |
|  |   | 65,1 - 70%  |       |
|  |   | 70,1 - 75%  |       |

|                          |  |              |  |
|--------------------------|--|--------------|--|
|                          |  | > 75 %       |  |
| <b>Profitability (P)</b> |  |              |  |
|                          | ROA*   | ≥ 5%         |  |
|                          | (net profit / total net assets)  | 4 - 4,9%     |  |
|                          |  | 3 - 3,9%     |  |
|                          |  | 0,6 - 2,9%   |  |
|                          |  | < 0,6        |  |
|                          | ROE*   | ≥ 11%        |  |
|                          | (net profit / equity)  | 8 - 10,9%    |  |
|                          |  | 6 - 7,9%     |  |
|                          |  | 4 - 5,9%     |  |
|                          |  | < 4%         |  |
|                          | Basic activity profitability ratio   | > 150%       |  |
|                          | (current revenues – income from provisions) / (current expenditures – expenditures for provisions) | 125 - 150%   |  |
|                          |  | 115 - 124,9% |  |
|                          |  | 100 - 114,9% |  |
|                          |  | < 100%       |  |
|                          | Equity real increase index (depending on inflation)*   | > 120%       |  |
|                          |  | 110 - 120%   |  |
|                          |  | 100 - 110%   |  |
|                          |  | 90 - 100%    |  |
|                          |  | < 90%        |  |
| <b>Liquidity (L)</b>     |  |              |  |
|                          | Liquidity indicator  | ≥ 1,50       |  |
|                          | (actual liquidity / required liquidity)  | 1,20 - 1,49  |  |
|                          |  | 1,00 - 1,19  |  |
|                          |  | 0,80 - 0,99  |  |
|                          |  | < 0,80       |  |
|                          | Immediate liquidity*   | > 45%        |  |
|                          | (deposits at banks (net value) + treasury securities) / loans from attracted funds)                | 45 - 40%     |  |
|                          |  | 39,9 - 35%   |  |
|                          |  | 34,9 - 30%   |  |
|                          |  | < 30%        |  |
|                          | Consumption credits (gross value) / Clients' deposits*   | < 85%        |  |
|                          |  | 85 – 104,9%  |  |
|                          |  | 105 – 114,9% |  |
|                          |  | 115 – 125%   |  |
|                          |  | > 125%       |  |

*Source: Cerna et al. (2008)*

# THE FINANCIAL CRISIS' IMPACT ON ETHICAL FINANCIAL INSTITUTIONS

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*Into the broad context of the ethical behavior topic in economy, outlined mainly during the last two decades, the appearance of ethical banking was an event with a particular social, economic and competitive incidence. Banking ethics had become an imperative and a reference point in the context of sustainable development, reevaluating the report between economic and social return. Our study aims to examine the specific characteristics of ethical banks, compared with those of traditional ones, and provides a picture of the extent of this phenomenon in the European area. In addition, we analyze the extent to which the current international context, characterized by uncertainty and turbulence on financial markets, emphasizes the discrepancies existing between the two categories of credit institutions.*

*Keywords: ethical bank; sustainability indices; ethical financial products; financial crisis; data envelopment analysis.*

*Cod JEL: C14, G21.*

## **Introduction**

The idea that the current financial crisis is one of ethical proportions, which requires the focus towards a new fiduciary society, catches more clearly shape and brings in the center of concerns new concepts and approaches to finance and business. Thus, the idea of socially responsible investment or ethical investment is potentiated by the current financial climate, characterized by instability and turbulence on financial markets. In our opinion, we believe it is necessary to link financial performance with social ethics and solidarity, by realizing that socially responsible investing does not represent an impediment to getting the profit, but on the contrary, can yield at least at the level of the one offered by traditional investments products because they have a foundation for long-term vision.

In addition, because the ethical banks use the attracted capital to finance socially responsible projects, who manage in a cautious manner human, financial and environmental resources, may be a favorable assumption in order to restore confidence among investors.

### ***1. The role of ethical banks in enhancing sustainable development***

The consistent pursuits for improving the quality of living and the social and economic integration at European level revealed the difficulty of traditional banking systems in granting expertise and financing to investment projects with social impact, and therefore, to finance a particular segment of the economy, known as solidarity based.

The generalization of ethics in banking activity is reflected by the appearance of ethical European banks, whose activity is focused on social and human values, which emphasize the solidarity and responsibility for society and environment. In this context, one can talk about *sustainable banking activity*. This means that banks involve in financing businesses and projects characterized by social, cultural and environmental value-added, as an expression of capitals entrusted by depositors and creditors, which aim to encourage the development of responsible, durable projects.

To facilitate the investment decision by ethical banks was created, for example in Belgium a body named Ethibel that assesses, on the basis of sustainable criteria, the measure in which a company plays a major social role. If this independent certification body radiates a company

from its investment register, then it sends a signal to investors according to which they will review the decision of investing in that particular company.

The involvement of financial institutions into the ethical approach of finance has led to the creation and launch of some indices which include only companies that manifest consistent interests relative to sustainable development. The most relevant are: Advanced Sustainable Performance Index (ASPI), which includes 120 companies in the Euro area, selected according to six criteria that synthesize the performance in terms of sustainable development (human rights, human resources, environment, business behavior, corporate governance, community involvement) and The Ethibel Sustainability Index (ESI), which offers a global perspective on the performance of 132 companies, in terms of financial and social profit.

The ethical banks that operate in EU follow the same mission:

- contribute to the development of a society that favors human dignity and quality of life;
- determine a certain behavior, so that citizens, economic agents and organizations should use the financing obtained in a more responsible manner, to support sustainable development, solidarity and social cohesion;
- offer viable, high quality financial products and services, characterized by transparency in collecting the temporary disposable funds and in allocation on productive destinations, susceptible to generate economic and social value added;
- although they offer the same range of products as traditional banks, ethical banks operate on the strength of a strict investment policy, that takes into account not only the eligibility of the applicant, but also the viability and social impact of the project to be financed.

Ethical banks' aim is to bring into practice the concept of sustainable banking activity, by offering products and services with a direct positive influence on people and environment.

The following table synthesizes the main ethical banks that operate in the European Union, in order to emphasize the fundamental ethical objective adopted by each of them, the concrete impact on society, the source of funds, their ethical destination and other eventual destinations that are beyond the ethical ones.

| <i>Objectives</i>  | <i>Community involvement</i>                                 | <i>Financing sources</i>   | <i>Funds' ethical destination</i>   | <i>Other destinations</i>                |
|--|--|--|---|--|
| <b>Italy : Banca Popolare Etica</b>  |  |  |   |  |
| Sustainable social and human development, civilly oriented economic projects | Voluntary work; partnerships                                 | Deposit accounts from private citizens, companies, organizations | Social, sanitary, educational services; integration of disadvantaged people in the community; non polluting production techniques; ecological public transport; renewable energy sources; natural heritage. | Loans, investments                       |
| <b>Germany : Bank für Sozialwirtschaft</b>                                   |  |  |   |  |
| Specialized in the social and health sectors                                 | Partnerships with cooperative, mutual and non-profit sectors | Deposit accounts from private citizens, companies, organizations | Fights against social exclusion; integration of disadvantaged people in the community; trainings and education; promoting research in health.   | Loans, investments, payment transactions |

**Table 1. Ethical banks (*selective*)–comparative analysis**

| <b>Switzerland : Alternative Bank</b>   |   |   |   |   |
|---|---|---|---|---|
| Subordinates the entire banking activity to the ethical principles, instead of profit increases | Promotes women social emancipation donation of the additional profit  | Deposit accounts from private citizens, companies, organizations                              | Supports equal opportunities for women; issues loans for bio-agriculture, sustainable habitats, renewable energy; culture; health; education  | Loans granted to small and medium-sized companies active in environment, fair, social commerce, construction ecology. |
| <b>UK: Charity Bank</b>   |   |   |   |   |
| Subordination of financial services to a charity purpose  | 100% of savings are directed to charities, voluntary organizations and social enterprises   | Deposits from public, charitable trusts, foundations, banks and building societies; donations | Individuals, organizations and the charitable sector, in order to facilitate social change through investments; helps Islamic community organizations   | “for profit” companies if the loan is for exclusively charitable purposes   |
| <b>France: La Nef</b>   |   |   |   |   |
| Promotes the solidarity based finance   | Cooperates with correspondent partenaires, in a voluntary manner, in order to support the local economic development                    | Deposit accounts, current accounts  | Supports the creation and development of individual businesses, associations or companies having as main purpose the improvement of the social and environmental utility.   | Projects focusing on environment and society  |
| <b>Sweden: Ekobanken</b>  |   |   |   |   |
| The public good and general well being  | <i>Account forms directed to specific projects</i>  | Deposits from private persons, organizations and companies                                    | Projects within the areas: farming, ecology, health, treatment, children, youth, culture and education.   | Grants loans primarily to initiatives with social, environmental and cultural value.                                  |
| <b>Denmark: Merkur Cooperative Bank</b>   |   |   |   |   |
| Having a sustainable impact on society, by using money and finance as tools                     | Resource saving arrangements, facilities for the handicapped and the socially disadvantaged. Partnerships with voluntary organizations. | Donated funds, deposits   | Finances projects which promote a sustainable production, consumption based on real demand, fair living and working conditions for all citizens, projects that help individuals to develop their skills, organic farming, renewable energy, | Finances a wide range of projects and initiatives within the fields of environment, social life and culture           |

| <b>Netherlands: Triodos Bank N.V</b>    |   |          |  |                                   |
|---|---|----------|--|-----------------------------------|
| Being a pioneer and a leading innovator | <i>micro credits; partnerships with social investment</i> | Deposits | Finances companies and projects adding cultural value, benefits for people and environment, in fields as renewable energy, social housing, | Avoids investing in arms, tobacco |

The financial statements of the most representative ethical banks reveal that their financial intermediation activity gathers customers aware of the importance of social responsibility and solidarity. In Europe, the ranking of ethical banks term the amount of funds with ethical destination places on first place Great Britain, followed by Netherlands, Sweden, Switzerland and France. Therefore, some countries have an unexploited potential for the social value added.

However, the money placed in the ethical financial products is not sufficient to influence the financial market and investors' behavior. The critical mass has not been reached yet, the share of capital placed in socially responsible investments being only of 0.43% in Europe.

In table 2 we have systematized the most representative distinctive features of ethical and classical banks.

**Table 2. Ethical banks versus classical banks**

| <b><i>Traditional banks</i></b>  | <b><i>Ethical banks</i></b>  |
|--|--|
| The activity is subordinated to the reaching of several quantitative objectives, mainly the market share and profitability.                  | Operate with a clear set of ethical values, known, accepted and respected at all the hierarchical levels.  |
| The focus is on maximizing the financial gains.  | Pursue the obtaining of both financial and social gains.   |
| The investment strategy and risk profile are established by bank's management.   | The investment decision belongs, firstly, to customers (depositors, creditors), by choosing the ethical project to be financed with their funds. |
| Don't provide information concerning the destination of attracted and borrowed funds.  | Publish on a regular basis a list with all the investment projects that received financing.  |
| Grants financing without taking into account the ethical behavior of the applicant, or the impact of his actions on society and environment. | Finance those companies whose projects exercise a positive influence on society and environment.   |

## ***2. Implications of financial crisis on ethical banks***

The current financial crisis has trained, due to its magnitude, a number of concerns among policy makers and monetary authorities to address and reduce the effects manifested. While some experts have claimed that government interventions are the only way to rescue the economy, others argue that financial systems must be self-regulating. In this sense, is more often mentioned the idea that an alternative to the traditional banking activity can constitute an antidote to fluctuations faced by financial institutions.

The more unstable financial climate has generated customers' turning to ethical banks, which base their operations on several ethical principles. Thus, the main reasons for which, in the context of current uncertainties, investors are focusing on the ethical banks are:

- minimum investment in financial derivatives;
- no listing of ethical banks on a regulated market, which imply a lower concern for shareholders to aggressively increase profits and the market price of shares;
- do not participate in operations on the interbank market, in the sense that they don't attract funding neither they made investments in other banks. Consequently, ethical banks can't be

negatively affected, by means of the contagion effect, by the vulnerabilities faced by traditional credit institutions;

-transparency in granting loans, by notifying the depositors about the opportunity of the investment. Ethical banks guarantee that each of the projects selected comply with the ethical criteria and would have a positive impact on people and environment.

Although customers' turning towards ethical banks is less attractive from a financial standpoint, as the yield obtained is lower than that offered by traditional banks, in the current context of uncertainty and mistrust in traditional banks, we distinguish the orientation towards ethical products.

Thus, until year-end 2008 ethical banks have increased the number of small clients. For instance, UK profits have increased by over 50%, while the volume of deposits attracted from customers increased by more than 25%. In absolute numbers, compared to traditional banks, ethical ones are the beneficiaries of the new international financial context. According to Barbu, Dumitrescu (2007), the banking systems in Central and Eastern Europe proved to have a high growth potential in terms of traditional banking activity, but modest initiatives relative to the promotion of ethical financial products.

### ***3. Assessing the effectiveness of business ethics in the banking financial crisis***

In the following we have evaluated a sample of the most representative ethical banks which have been shown to have a good profitability, both in financial and social terms, even in this turbulent climate, without derogating from the ethical principles pre-established.

To provide a quantitative dimension of the efficiency with which the ethical banks' activity took place during 2007 -2008, we argue that Data Envelopment Analysis (DEA) is the most appropriate method, both because of its advantages (a technique of linear programming, which allows the testing of multi input- multi output models, without defining a functional relationship between input variables and output and without being affected by the multicollinearity problem), but also because of constraints on the data availability on a broad time horizon.

We implemented a model aimed at maximizing results (output oriented), the input variable being represented by the credits, with the output variables: volume of deposits and net profit, as a measure of the efficiency with which a bank manages its assets and liabilities. In defining the concept of efficiency we have taken account of the ethical banks' particularities. Thus, they are especially exposed at the risk of concentration of the loan portfolio in those sectors related to environmental protection, social welfare, culture and education. On the other hand, exposure to liquidity risk is low, as ethical banks hold sufficient liquid assets in the form of deposits with central bank or government bonds.

According to the maximizing output assumption, it is considered that the ethical banking business is characterized by efficiency if the input-output combination allows the achievement of a standard of financial performance governed by the best prudential practice, whose efficiency score is equal to 1. Scores that exceed a value of 1 indicate inefficiencies in the results optimization. The study was conducted using data with annual frequency for a sample of ethical banks operating in the UK, Malta, Germany, Spain, Italy, Netherlands, Belgium and Sweden.

**Table 3. Efficiency scores**

| Ethical banks           | Score   | loans<br>{I} | net profit<br>{O} | deposits<br>{O} | Benchmarks         |
|-------------------------|---------|--------------|-------------------|-----------------|--------------------|
| Triodos nederlands 2008 | 140,60% | 1            | 0                 | 1               | 6 (2,63)           |
| Triodos belgium 2008    | 103,89% | 1            | 0                 | 1               | 6 (1,14)           |
| Triodos UK 2008         | 134,71% | 1            | 0,05              | 0,95            | 6 (1,27) 14 (0,13) |
| Triodos spain 2008      | 356,26% | 1            | 0                 | 1               | 6 (1,08)           |

|                           |         |   |      |      |                    |
|---------------------------|---------|---|------|------|--------------------|
| Triodos nederland 2007    | 137,72% | 1 | 0,08 | 0,92 | 6 (1,89) 14 (1,40) |
| Triodos belgium 2007      | 100,00% | 1 | 0,03 | 0,97 | 13                 |
| Triodos UK 2007           | 128,80% | 1 | 0,09 | 0,91 | 6 (1,01) 14 (1,06) |
| Triodos spain 2007        | 308,08% | 1 | 0    | 1    | 6 (0,81)           |
| Banca Etica italy 2007    | 172,48% | 1 | 0    | 1    | 6 (2,33)           |
| Ekobanken sweden 2007     | 214,74% | 1 | 0    | 1    | 6 (0,13)           |
| Co-operative bank UK 2008 | 195,69% | 1 | 0    | 1    | 6 (2,68)           |
| Co-operative bank UK 2007 | 197,86% | 1 | 0    | 1    | 6 (2,40)           |
| Charity Bank UK 2007      | 162,86% | 1 | 0    | 1    | 6 (0,06)           |
| APS malta 2007            | 100,00% | 1 | 1    | 0    | 4                  |
| Merkur germany 2007       | 192,72% | 1 | 0,12 | 0,88 | 6 (28,6) 14 (75,3) |

The efficiency scores obtained showed that APS Bank in Malta and the Triodos branch in Belgium recorded a score of 100% in both 2007 and 2008, therefore, the basic objective of ethical banks, to have sufficient liquid assets in order to maintain a reduced exposure to insolvency risk and lack of liquidity risk has been fulfilled. This performance is even more important since it was obtained during the turmoil that has characterized the international financial markets last year. During the period analyzed, the less efficient proved to be the Triodos branch in Spain, for which we obtained an efficiency score of 308.08% in 2007 and 356.26% in 2008. The result does not surprise us, given that it is the only ethical bank that recorded a value of the liquidity indicator credits/deposits above one.

### **Conclusions**

Currently, we assist at a reconciliation process between two notions longtime perceived as being contradictory, namely profitability and solidarity. The trend is to incorporate in banking activity an ethical vision on projects funded, competitive prices and specialized consulting. Apart from being a current fashion, corporate social responsibility is manifested more significantly by involving companies in social projects such as education, environmental protection and humanitarian actions. In Romania, only one third of companies apply properly this strategy because it does not generate immediate results, and in the context of economic decline is less attractive.

In this European context we believe is timely to intensify concerns in the Romanian banking system, in terms of awareness of the credit institutions to support ethical and solidarity investments. A proposal in this respect consists in redirecting the activity of CEC Bank to the financing of investments with a positive impact on the environment, as it has a large territorial network of branches and its portfolio of clients is mainly oriented towards retail and therefore they would be more receptive to ethical considerations.

Also, we note the concerns of several credit institutions (BCR, BRD, BancPost) on the promotion of corporate social responsibility and involvement in the financing of activities with mainly social impact. In our opinion, BRD can be positioned on the first place in a top of the most ethical banks in Romania, since its main shareholder, Societe Generale is included in the two indices of socially responsible investments, namely, ASPI and Ethibel. In front of new challenges generated by the current financial crisis, the Romanian banks should adopt alternative strategies, to increase customers' confidence and to configure a banking activity based on social responsibility.



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# ROLE OF INFORMATION IN ADOPTION OF INVESTMENT DECISIONS ON CAPITAL MARKET

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*Keeping information is a hard thing to do nowadays, mostly because of the development of communication and informational technology. An individual can hardly administer the huge amount of information he's being bombarded with and that exceed his capacity of rational analysis. The limited attention, memory and the abilities to process information force people to focus their attention on certain information. The linear thinking risk in investment is due to the exaggerated attention given to the short term performances, regardless whether we're talking about a good or bad evolution. The causes of psychological nature may influence the behavior of rational investor when taking the decision, being necessary for the investor to make a difference between facts and opinion, between information and gossip, between reality and appearance.*

*Keywords: investor's attitude, investing strategy, informational asymmetry, capital market.*

*JEL Classification: G11, G12, G14*

## **1. Introduction**

The capital market's evolutions are influenced by the information' existence. Information is definitely a rare good, which has an essential role in performing financial operations. Having information before everyone else can generate important gains. This thesis is proved by many examples when people got rich because they were the first to have certain information.

Keeping information is a hard thing to do nowadays, mostly because of the development of communication and informational technology. Relevant market information is incorporated in the price almost instantly, so that only the first one who triggers the operation based upon it is the fully beneficiary of its effects. Accessing information generates interesting psychological effects. In this paper, we'll analyze the importance of information for the investors' attitude on the capital market and it's impact over the investing decision on the capital market.

## **2. Empirical evidence**

An individual can hardly administer the huge amount of information he's being bombarded with and that exceed his capacity of rational analysis. The supplement of information does not always generate a surplus of psychological comfort and a higher efficiency of the investment. Nevertheless, the huge amount of information available in real time creates the impression of understanding and controlling the micro variations of the capital market. But only the capital market's specialists can understand and use the capital market's micro variations, succeeding this way to anticipate the other investors' actions.

On one hand, the investor is constantly seeking for information and on the other hand he is incapable of processing infinite number of information he's being bombarded with. This investor's difficulty triggers a mental saving process and also an information selecting and

simplifying process, conditioned by his own expectations. The financial instruments that have brought satisfaction in the past are most often positively valued.

The limited attention, memory and the abilities to process information force people to focus their attention on certain information. The links created at the subconsciously level also creates a selective focus. Many studies proved that additional verbal information influence the decision process.

The selective associations lead to availability effects (Kahneman și Tversky). An informational signal is significant when it can captivate attention or it can generate associations which make recalling easier. According to the availability theory (Kahneman și Tversky), the most common things are the easiest to recall. This is normal, since the common situations are the most often observed and reported ones, and so their remembering is the easiest.

People are influenced by the way of formulating the problems because they can't select perfectly the relevant information from their memory. They underestimate the situations that aren't available in an explicit way. This suggests a form of overconfidence and also an overreaction of the market during the manifestation of these unpredictable situations.

The halo effect (Nisbett și Wilson) leads to the extension of a favorable evaluation which is made by an individual over a certain person or situation, having just one significant piece of information. When you compare, you can see that a subtle prejudice belonging to thi category can lead to the wrong price establishment on the capital market. On an efficient market, the fact that a stock is valuable (this is because in the future it is thought that the stock's price will rise) doesn't give you any information regarding the yield's adjustments to future potential risks, which are considered nul. If people extend their favorable evaluation (based on present results) over the future evolutions, the rising stocks will be overestimated (Shefrin și Statman).

The linear thinking risk in investment is due to the exaggerated attention given to the short term performances, regardless whether we're talking about a good or bad evolution.

An example of linear thinking is the rise and fall of the technology and telecommunication field in U.S.A, during the past ten years. A relevant index for the technology and telecommunication field is the NASDAQ Index. During three consecutive years (March 1997 – March 2000), the NASDAQ Index recorded an incredible value of 79,4%. Thinking that this trend will also continue in the future, many investors were deceived and they didn't manage to obtain the expected return; this happened because they addressed the investment in a linear way.

How does information influence the investing decision during a financial crisis? Empirical evidence proved that every economical crisis is preceded by several Stock exchange decreases and every stock exchange decrease cycle is accompanied by short term increase periods. In order to prove this, we selected the Dow Jones Indus. Avg. Index graphic during the U.S.A.'s recession, recession that is often compared to the present financial crisis. During almost three years of decrease, there were six increase intermediate trends. These trends lasted between a month and a half and five months, and the increases were from 12% to 45% for each such period (se the 1st Graphic). What is the explanation for this investing behaviour? The investors have a different attitude towards the risk and perceive in a different way the available information on the capital market.



Graphic no. 1. DJIA Index evolution during 1928 -1933

Source: [www.kmarket.ro](http://www.kmarket.ro)

The behavior and opinions of capital market's investors have an essential influence on the individual's behavior and opinions, especially during an uncertainty period. In the small size investor's case, the fear of a loss can substitute their rationality.

Andreassen and Kraus (1990) noticed that, when exogenous prices fluctuate modestly on an experimental market, the subjects buy when prices are decreasing and sell when prices are increasing. When a trend appears, the subjects are no longer following the previous pattern, but the trend. This reflects itself also on the real markets. Different empirical studies conclude that the assets' prices are more or less sensitive to novelties. Cutler, Poterba and Simmons (1991) studied different markets between the years of 1960-1988.

Jegadeesh and Titman's researches suggest a late reaction model: during a given period, the winning stocks' income surpasses the loser stocks' income. De Bondt and Thaler show that the situation is reversing itself on long term.

Kaminsky and Schmukler (1999) studied the investors' reaction to news during the Asian crisis (1997-1998). They observed the first twenty daily fluctuations and concluded that their causes aren't political or economical news. Kaminsky and Schmukler also deduced that the course's fluctuation is stronger as the crisis gets bigger and during times like these, the stocks' price is more influenced by the negative than the positive news.

Resembling with the primitive behavior, when seeing everyone around running, the first impulse is to follow them, the investors' behavior can cause a real mass hysteria and the individual's

personality completely vanishes (you can talk about primary emotionality). These extreme forms may lead to destructive results and to the stock exchange's collapse. (Ghosh and Ray, 2002).

Emotions play an important role in rational considerations regarding risk or time preference. Ellsberg's paradox (1961) shows that people have dislike towards ambiguity and this leads to irrational decisions. Dislike towards ambiguity has been confirmed by experimental market's tests. According to Camerer (1995), the dislike towards ambiguity can increase unduly the risk bonus when new financial markets appear, mostly due to the fact that there are uncertainties about the economic environment and potential results. A possible explanation of the dislike towards ambiguity is the obvious lack of an identifiable parameter of the decision problem, which can be taken as a higher risk.

The dislike towards risk, regret and loss shows a premeditated avoidance of unpleasant future feelings. But still, people's present feelings affect the perception and choices made regarding the taken risk. For example, the Lotto sales in the state of Ohio were higher during the days that followed the victory of Ohio State University (Arkes, Herren and Isen, 1988).

In general, people who have a positive state of mind are more optimistic about the election and judgments that they make instead of those who have a bad state of mind. Negative states of mind are associated with detailed and critical analysis strategies of information. Emotional states contain information that individuals can use in building its image about the environment. However, people often attribute feelings to the wrong source, leading to erroneous judgments.

While economists studied individual's psychology, social psychology didn't receive such attention. The conversation is essential in broadcasting the popular ideas about financial markets (Shiller, 2000). In an individual investors study, Shiller noticed that almost every investor who had recently purchased stocks, have drawn attention through direct interactive communication. Humans have a limited attention and tend to focus on the ideas and the facts that are brought by conversation, rituals and symbols. As a result, the cultural element becomes determinant for behavior.

On the capital markets, information is transmitted in cascade, causing a large dimensions group behavior. Shiller believes that a certain level of the market's quotations isn't the result of single made valuations, but rather the result of collective behavior.

The collective behavior is caused by the fact that individuals decide not to waste time and energy in order to identify the real market value of an instrument; they give up this way on the possibility to produce an independent impact on that instrument and adapt to the trend. This type of behavior contradicts the expected utility theory: one investor's behavior is independent from the others' choices, because it has its own utility function. This way, the collective investing behavior is more likely to be influenced by the information trade between the individuals.

When uncertain, the individual's opinions tend to be strongly influenced by the group's behavior and opinions. The market is therefore influenced by a group behavior that is different from the sum of individual behaviors.

The collective compliance of the investors is counterproductive, because the uncertainty makes the investors look for market information in the media (profile newspapers, TV shows), without checking the exacted and quality of received information. It matters more **who** says it and not **what** it is being said. This happens because there is a need of identifying a leader, a market „guru“, whose behavior can be imitated.

These leaders are so worshiped that they tend to become „gods“ in the collective imaginary. The mortals, incapable of making their own choices, expect the „gods“ to always make the right decisions. An example this way is Warren Buffet, who through his opinions moves the beverage's world. His declarations are seen as an anticipation of the future because, being in front, he's thought to hold information that mortal don't.

Often, the investors' losses are caused by their subjective decisions. The reason why problems occur on the stock exchange is that they are addicted to the other investors. Thus, the investors

often give up their own strategies and prefer following the path that the others have chosen. According to behavioral finance, the less an investor knows, the easier is for him to be affected by the „group mentality”. The less experience investors have, the sooner they panic.

### 3. Conclusions

Investors may be rational or not taking a decision on the capital market, which is reflected in the prices of financial instruments which may fluctuate, depending on either financial circumstances or in light of the interests of investors, oscillating between collective hysteria and indifference. Attempts by individual investors to be rational can sometimes seem downright absurd.

Macroeconomic forecasts are usually incomplete to have any value for small investors, particularly when economic development is influenced by small details, but fundamental, that nobody could forecast.

The causes of psychological nature may influence the behavior of rational investor when taking the decision, being necessary for the investor to make a difference between facts and opinion, between information and gossip, between reality and appearance.

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# SOME ASPECTS ABOUT THE REAL MEASURE OF FOREIGN BANKS' PENETRATION IN ROMANIA. AN APPROACH IN TERMS OF FOREIGN, INTERNATIONAL AND LOCAL CLAIMS

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*Romanian banking system experienced, especially after 1996, a constant growth of foreign capital's involvement, either directly, in the form of banks located in Romania, or indirectly, in the form of foreign claims. We will compute the broad penetration measure, that shows the share of the cross-border and local claims in the total credit, both cross-border and local from foreign and domestic banks. It's main advantage is that it takes into consideration the fact that multinational banks can participate in one country even without having subsidiaries and branches implanted, just by extending the cross-border credit. For Romania, the broad penetration measure reveals that 58% of the total stock of credit was provided by multinational banks in 1994, e.g. 6% of the GDP. The multinationals' credit was almost totally cross-border credit, while subsidiaries were almost absent, as it results from the narrow penetration measure.*

*Key words: Romania, foreign banks, broad and narrow measure*

*JEL code: G21*

## **1. Introduction and methodology**

Romanian banking system experienced, especially after 1996, a constant growth of foreign capital's involvement, either directly, in the form of banks located in Romania, or indirectly, in the form of foreign claims. We will analyse in this paper the development of the banks' foreign claims on Romania.

In order to analyse the extension of the presence and involvement of foreign capital in Romanian bank system, we will start with the analysis of the evolution of foreign claims of BIS reporting banks on Romania in the period 1998-2005, based on Consolidated Banking Statistics of the Bank of International Settlements.

We will divide these claims into two components, namely:

- international claims (column A in the tables corresponding to the reporting banks' claims on each country) – which is composed by the cross-border lending plus local claims denominated in foreign currency;
- claims of the local (Romanian) branches of the reporting banks denominated in local currency (column L), composed by the lending granted to Romania, in lei, by the Romanian branches of the BIS reporting banks<sup>255</sup>.

## **2. The Romanian case: situation of foreign, international and local claims**

The data obtained from the Consolidated Banking Statistics published by BIS and from the quarterly statistics about Romania are presented in the next table:

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255 See: Wachtel, P., Role of Foreign Banks in Central Europe Economies in Transition, în: J. Bonin, K. Mizsei, I. Szekely și P. Wachtel (ed.), „Banking in Transition Economies: Developing Market Oriented Banking Sectors in Eastern Europe”, Edward Elgar Ed., 1998, for the importance of distinguishing between cross-border bank activities and activities of local subsidiaries and branches in host countries

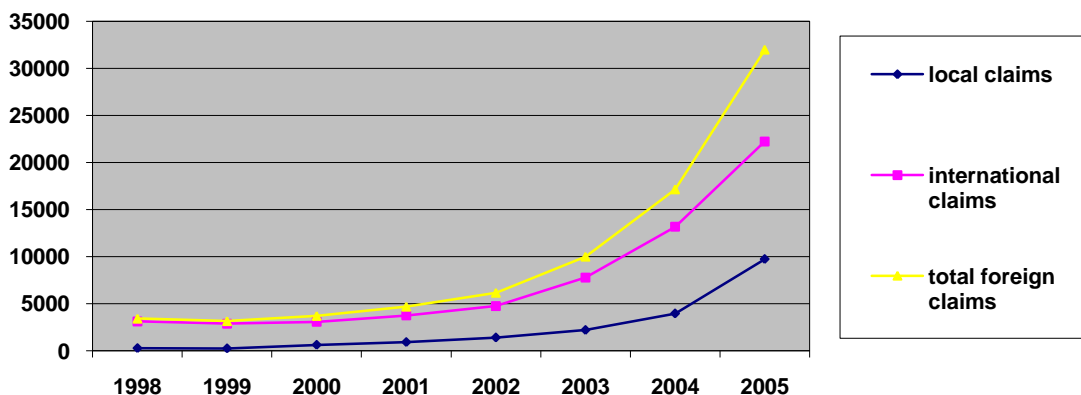


**Table 1. Claims of BIS reporting banks on Romania, 1998-2005 (million USD)**

| Year | Foreign claims (A+L) | International claims, total (A) | From which on:  |                   |                             | Local claims denominated in lei (L) | Local liabilities denominated in lei (M) |
|------|----------------------|---------------------------------|-----------------|-------------------|-----------------------------|-------------------------------------|--|
|      |                      |                                 | Bank sector (F) | Public sector (G) | Non-bank private sector (H) |                                     |  |
| 1998 | 3434                 | 3159                            | 917             | 290               | 1927                        | 295                                 | 272                                      |
| 1999 | 3175                 | 2905                            | 732             | 180               | 1990                        | 270                                 | 277                                      |
| 2000 | 3727                 | 3084                            | 600             | 333               | 2151                        | 643                                 | 451                                      |
| 2001 | 4708                 | 3773                            | 587             | 523               | 2655                        | 935                                 | 1154                                     |
| 2002 | 6184                 | 4761                            | 732             | 752               | 3275                        | 1423                                | 1613                                     |
| 2003 | 10015                | 7797                            | 1306            | 1911              | 4506                        | 2218                                | 3063                                     |
| 2004 | 17159                | 13186                           | 2880            | 2656              | 7648                        | 3973                                | 4267                                     |
| 2005 | 31984                | 22240                           | 5851            | 4358              | 11749                       | 9744                                | 6608                                     |

Source: *Consolidated Banking Statistics*, BIS, 1998-2004 and *BIS Quarterly Review* June 2006, www.bis.org

To have a clearer picture about the evolution of these claims, we will figure on the same graph (Chart 1) the international claims, local claims of the foreign branches and the total of foreign claims:



**Chart 1. Foreign claims of reporting BIS banks to Romania, 1998-2005 (in million dollars)**

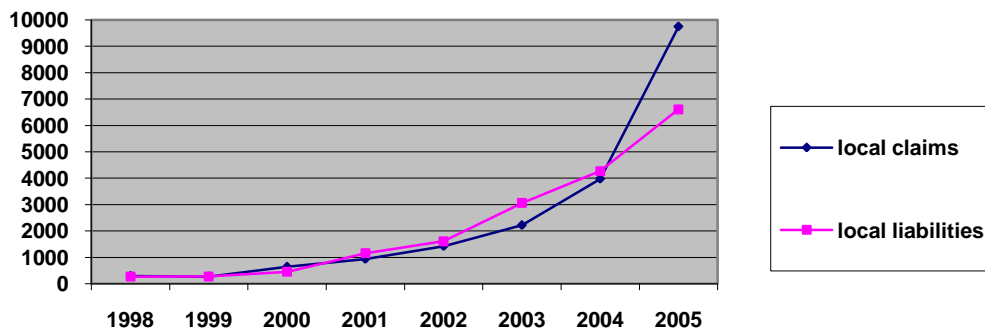
Source: as table 1

We can notice that, in the period 1998-2005, foreign claims grew 7 times. Their increase was achieved more and more on the basis of local claims and less on the basis of international claims. Indeed, local claims grew 33 times, while the international claims grew only 9.3 times. Thus, the share of local claims in the total foreign claims rose from 9% in 1998 to 30.5% in 2005. This means that the foreign capital's penetration was realized more and more by lending granted by branches and subsidiaries locally implanted, which practically exploded after 1998. The *global* aspect of the financing gains a more and more importance compared to the international aspect of the financing.

A more detailed analysis of these time series shows different intensities in the periods 1998-2001, respectively 2001-2005. We opted for the division in these two sub-series because the year 2000 is the mark of the end of the two periods of bank crisis in Romania (1996-1997 and 1999-

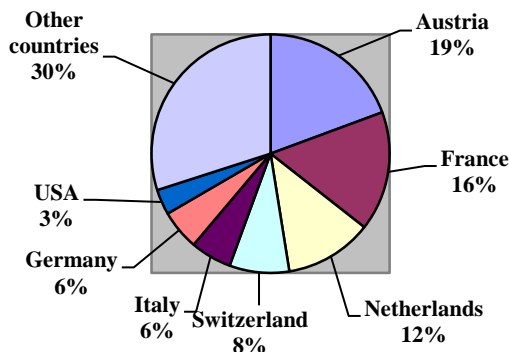
2000), so that after 2001 the level of financial stability of the Romanian bank system improved considerably. If between 1998 and 2001 international claims grew 1.19 times, in 2001-2005 these grew 5.9 times. Practically, the period marking the “take off” of international claims (and of the external ones’, out of which the international claims are part) is 2001-2002, with an obvious acceleration after 2002.

Concerning the local claims denominated in lei, if between 1998 and 2001 these grew 3.17 times, between 2001 and 2005 they grew 10.42 times. The “take off” took place here in 2000 (earlier than in the case of international claims, probably because of the fact that the branches physically implanted in Romania have a more direct and rapid contact – compared to the creditor banks non-implanted – with the new realities, such as the stabilisation of the bank system and policies of RNB about the a more healthy bank system), visibly accelerating after 2002. The growth is not as spectacular, however, because the multinational banks’ branches have a preference for lending in foreign currency, from at least two motives: on one hand, the great demand for such loans, especially in a high inflation environment, that makes loans in foreign currency more attractive because of lower interest rates; on the other hand, because of the comparative advantage that multinationals has over the domestic banks about the lending resources. By reallocation at group level, the branches in Romania (as from other emerging economies, in fact) are benefiting from their parent bank from cheaper resources in foreign currency, that can be provided as loans with more competitive interest rates compared both with what parent banks and branches from developed and over-bancarised countries could obtain and with what domestic banks could offer to Romanian clients. A comparison between the local claims and local liabilities denominated in lei can be interesting and it shows, as expected from the statements we already made, the prevalence of local involvement of multinational banks moreover in lending and other local claims that in deposit collection (see Chart 2). However, we can remark the period 2001-2004, when deposits exceeded loans (in lei), on the basis of the good reputation of these banks among the deponents (who wanted to beneficiate from the certainty offered by these banks), but also on the basis of the interest of many foreign banks in the last years in involving in *retail* activities, for which the need for resources in lei is greater.



**Chart 2. Evolution of local claims, respectively liabilities, denominated in lei, of the subsidiaries and branches of BIS reporting banks in Romania, 1998-2005 (million dollars)**  
Source: as table 1

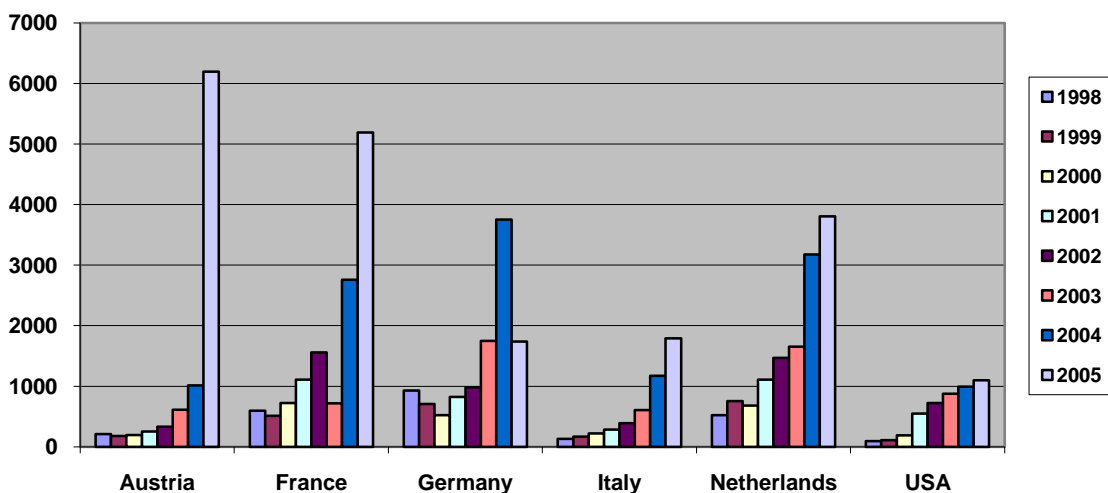
In the same time, the distribution of foreign claims by the lender bank nationality is as follows:



**Chart 3. The distribution of foreign claims, by lender nationality, December 31, 2005**

Source: idem as table 1

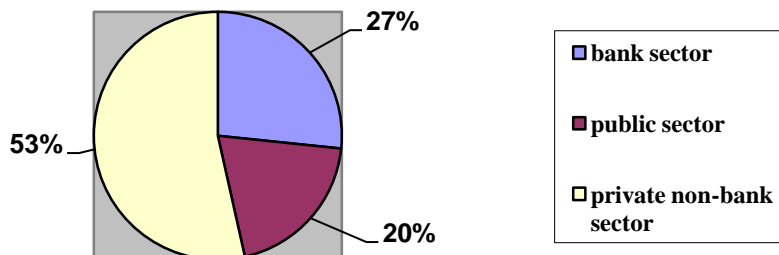
The main lenders are banks from, in the importance order, Austria, France, Netherlands, Switzerland, Italy, Germany, and USA. It is important to notice that 82% of the foreign claims are from European banks, and the first three countries (Austria, France and Netherlands) concentrate almost half of the total foreign claims. The evolution of the banks from different countries is very different: the case of Austria is interesting, in only one year (2005 compared to 2004) the claims on Romania of the banks from Austria increasing 6 times. If until the claims' "explosion" in 2001 all reporting banks had a slow and relatively non-differentiated growth, after 2002 it is recorded a much differentiated evolution: while the banks from Austria, France and Italy recorded a rapid growth, Netherlands and USA increased their involvement in a relatively lower pace.



**Chart 4. The evolution of foreign claims to Romania of the BIS reporting banks from the main lender countries, 1998-2005 (million dollars)**

Source: idem as table 1

Another analysis we can make related to the international claims this time regards their sectoral distribution (see chart 5):



**Chart 5. Sectoral distribution of the international claims of BIS reporting banks to Romania, December 31, 2005**

Source: *idem* as table 1

In the present, almost half of the international claims (cross-border plus local denominated in foreign currency) are toward the private non-bank sector, but the situation changed over the time. Thus, from 1998 to 2005, the share of non-bank sector in the total of claims decreased from 62% to 53%, the share of the bank sector remained relatively unchanged (decreasing with only 2 points) and the share of the public sector increased from 9.4% to 20%. As the main component of the international claims is the cross-border loan, we can explain the decreasing share of the private non-bank sector by the fact that this sector accessed local credit, as the gradually increase of the foreign banks' implantation in Romania. Romanian big companies preferred to borrow locally than cross-border. The statement can be sustained also if we analyse the sectoral orientation of foreign loans, where the share of private non-bank sector reduced constantly, reaching from three quarters some years ago to 52% in the present<sup>256</sup>.

*A more comprehensive measure of the degree of foreign capital penetration is the measure that takes into consideration both the cross-border lending and the direct penetration, in the form of foreign banks locally implanted.*

*Indeed, as we saw in the other countries in Central and Eastern Europe, the simple measures of the multinational banks' penetration, such as the number of banks and the share of multinational banks in total assets, underestimate the real activity of the multinationals in the area. The cross-border credit must be also taken into consideration.*

### **3. The broad and narrow penetration measures**

*We will use the standard methodology, used by Peek and Rosengren to the case of Latin America<sup>257</sup>, in order to compute the broad penetration measure as follows: first we compute the total credit of multinational banks as total BIS claims plus the credit from the subsidiaries of non-reporting BIS banks. Second, we divide the result obtained by the sum of the BIS claims plus credit from the subsidiaries of non-reporting BIS banks plus the credit from local banks. This broad penetration measure shows the share of the cross-border and local claims in the total credit (foreign and domestic), both cross-border and local from foreign and domestic banks. The*

256 Calculations made on the basis of the data in: Consolidated Banking Statistics, BIS, 1998-2004 and BIS Quarterly Review June 2006, [www.bis.org](http://www.bis.org)

257 Peek, J. și Rosengren, E., Implications of the Globalization on the banking sector: The Latin American Experience, în "New England Economic Review", sept.-oct. 2000, pp. 45-63

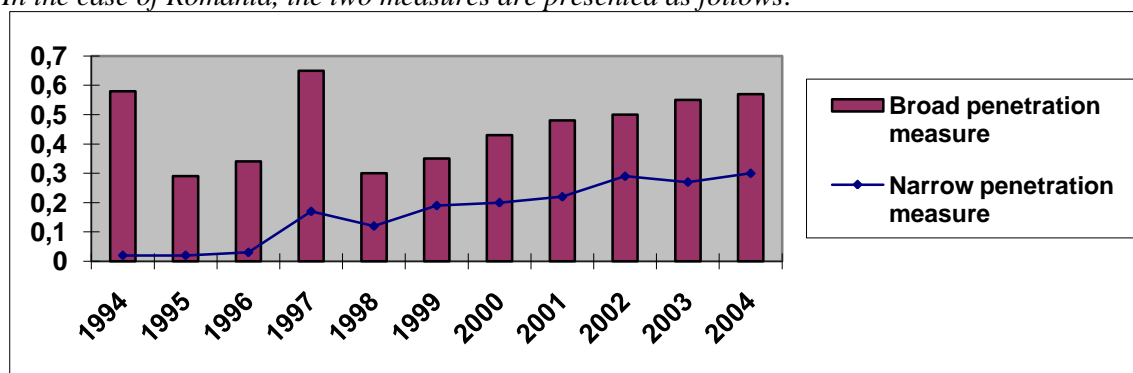
main advantage of this measure is that it takes into consideration the fact that multinational banks can

participate in one country even without having subsidiaries and branches implanted, just by extending the cross-border credit<sup>258</sup>.

The narrow penetration measure concentrates only on the credit granted by subsidiaries and branches, by ignoring the cross-border lending. This measure can be computed by dividing the credit from the foreign subsidiaries to the total domestic credit (granted by domestic banks and subsidiaries).

The difference between the two measures (broad penetration measure and narrow penetration measure) shows the importance of the cross-border credit in the total credit of multinational banks.

In the case of Romania, the two measures are presented as follows:



**Chart 6. The measure of the foreign capital penetration in Romania**

Source: calculations based on data in BIS Consolidated Banking Statistics and BankScope

The chart above reveals some interesting issues. Multinational banks were important players in Romania since the early stage of transition age. Some of them have financing relations even from 1989, the main activities being related to foreign trade and its financing.

Indeed, the broad penetration measure reveals that 58% of the total stock of credit was provided by multinational banks in 1994<sup>259</sup>, which is 6% of the GDP. The multinationals' credit was almost totally cross-border credit, while subsidiaries were almost absent, as it results from the narrow penetration measure. The 1999 year marks a big change, in the sense that, especially after the privatisations made, multinational banks started to be more active in lending; the credit began to be provided relatively less by the way of cross-border credit and more and more locally, by the implanted banks. The growth of the credit provided by multinational banks continued also after the privatisations, organically, and the trend was accelerated after 2006, after BCR was privatised. The trend is also confirmed by the evolution of Romanian private debt and of the credit granted by the foreign banks' subsidiaries and branches in Romania, as their entrance on the Romanian bank market goes on.

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2. Peek, J. și Rosengren, E., *Implications of the Globalization on the banking sector: The Latin American Experience*, în "New England Economic Review", sept.-oct. 2000, pp. 45-63

258 also until now big companies granted credit from banks not physically implanted in Romania, and after EU accession the phenomenon has been amplified, because foreign banks do not need anymore special license to operate in Romania

259 De Haas, R. T., *Multinational Banks and Credit growth in Transition Economies*, Universiteit Utrecht, 2006

3. Consolidated Banking Statistics, BIS, 1998-2004 and BIS Quarterly Review June 2006, [www.bis.org](http://www.bis.org)
4. Bank Scope database
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# FDI IN ROMANIAN BANK SECTOR - THE PRESENCE OF FOREIGN BANKS

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*Romanian banking system experienced, especially after 1996, a constant growth of foreign capital's involvement, either directly, in the form of banks located in Romania, or indirectly, in the form of foreign claims. In this paper we analyse the physical presence of foreign banks in Central and Eastern Europe, and particularly in Romania: the origin country of the capital as well as a picture of the main foreign banks active in Romania.*

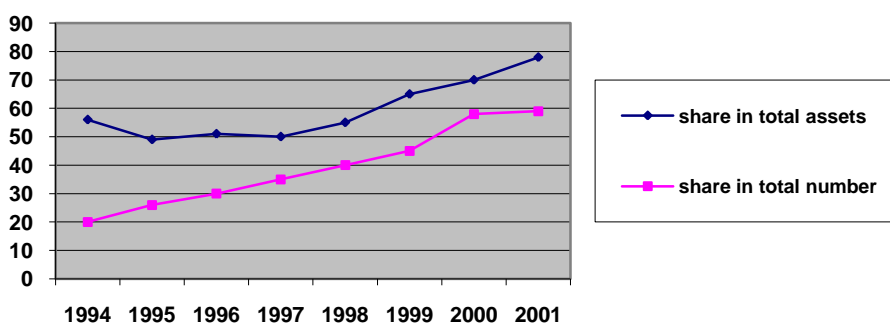
*Key words: Romania, foreign banks, capital origin, main banks*

*JEL code: G21*

## 1. Foreign banks' presence in Central and Eastern Europe

Foreign credit to Central and Eastern Europe (CEE) economies takes place more and more by the physical presence of foreign banks in region. Operations' evolution of multinational banks in CEE in the last 20 years reflects the rise of multinational banks' activity after 1990, and it's "explosion" after 1995. If in 1990 CEE was counting with 5% of the credit supplied by multinational banks in developing economies, in 2005 it reached 23% of these. In nominal values, the credit supply by multinational banks in CEE increased from 2047 million USD in 1985 to 187,278 million USD in 2005<sup>260</sup>.

Foreign banks reached to dominate nowadays the national bank market of these countries. After 1994 and to the present, the weight of foreign banks in total credit institutions in CEE raise from 20% (share in total number of banks) and 55% (share in total assets) to, respectively, 60% and 70% (see Chart 1).



**Chart 1. Foreign banks' participation in countries in CEE, 1994-2001**

Source: Uiboupin, J., *Implications of Foreign Bank Entry on Central and Eastern European Banking Market*, in „Kroon&Economy” no. 1/2004

In countries like Estonia, Slovakia and Croatia, domestic banks are essentially owned by foreigners, in Czech Republic, Lithuania, Romania and Hungary the weight of foreign capital is about or even more than 80%. The only important exception is Slovenia, with less than 30% presence of foreign banks. The dominant presence of foreign capital is relied on the privatization of formerly state-owned banks, the most preferred entry way being the settlement of subsidiaries by acquiring local banks and less the creation of branches.

<sup>260</sup> author's calculations based on data from Consolidated Banking Statistics, BIS, different years

The main foreign banks operational in CEE, ranked by the total value of assets in region, are: UniCredit Group (present in all countries in CEE), Erste Bank (present in 6 countries in region), KBC Bank NV (present in 5 countries in region), Raiffeisen International (present in 15 countries in CEE), Société Générale (present in 10 countries in region), Intesa Bank (present in 9 countries in CEE) and, maybe surprising (being a bank from Hungary, not Western Europe, as the others), OTP Hungary (present in 6 countries in region)<sup>261</sup>. It is interesting to notice that the first 7 “players” in the banking sector of CEE concentrate 26% of the market in region.

We can notice a certain regional specialization of foreign banks. The great Scandinavian banks (Swedbank and Skandinaviska Enskilda) are practically monopolizing the bank market of Baltic states, while the Greek banks (National Bank of Greece, Piraeus Bank, Alpha Bank, Emporiki Bank of Greece) are involved only in Balkans states. At the same time, the Austrian banks (Erste, HVB before it’s take over by UniCredit, Raiffeisen) control important market shares in all countries in CEE, except Baltic states. There are also some examples of banks from CEE buying banks in other countries in region: Hungarian OTP made acquisitions in Bulgaria, Slovakia and Romania, and the Latvian Parex bought the Lithuanian bank Lithuanian AB Industrijos Bankas<sup>262</sup>.

## 2. Foreign banks’ presence in Romania

### 2.1. The origin countries of the capital

A first image about the foreign capital in Romanian banks by country of origin is provided in the next table:

*Table 1. Share of foreign capital by country of origin (December 31, 2007)*

| <i>Country of origin</i>                             | <i>Participation of foreign capital in total capital of banks in Romania (in %)</i> |
|--|---|
| <i>Austria</i>                                       | <i>22.0</i>   |
| <i>Greece</i>  | <i>21.7</i>   |
| <i>Netherlands</i>                                   | <i>7.7</i>  |
| <i>France</i>  | <i>5.0</i>  |
| <i>Hungary</i>                                       | <i>4.9</i>  |
| <i>Italy</i>   | <i>3.9</i>  |
| <i>Israel</i>  | <i>1.9</i>  |
| <i>Cyprus</i>  | <i>1.8</i>  |
| <i>EBRD and IFC</i>                                  | <i>1.7</i>  |
| <i>USA</i>   | <i>1.3</i>  |
| <i>Portugal</i>                                      | <i>1.2</i>  |
| <i>Germany</i>                                       | <i>1.2</i>  |
| <i>UK</i>  | <i>1.1</i>  |
| <i>Other countries (Turkey, Monaco, Switzerland)</i> | <i>0.3</i>  |

Source: RNB, Annual Report 2007

261 Banking and Finance Monitor, 2006

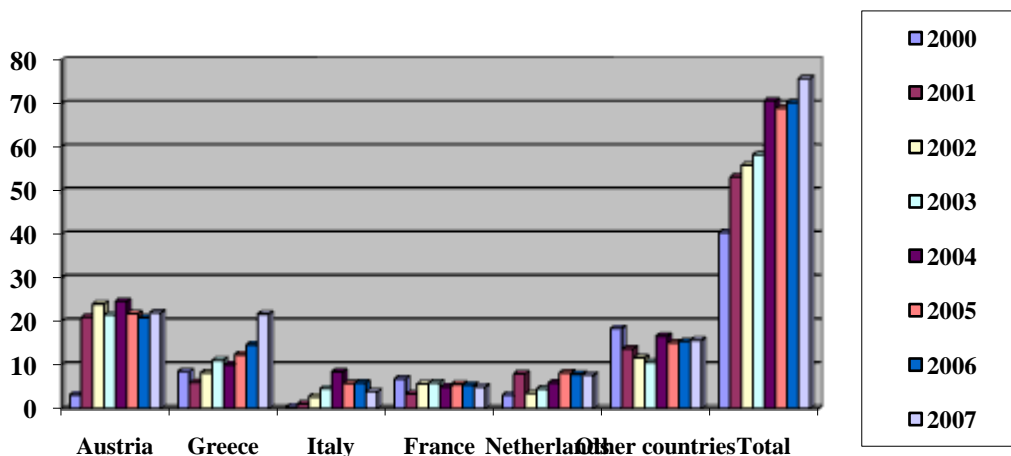
262 idem



The picture of the countries of origin of the social capital of foreign banks settled in Romania must be interpreted very carefully and with regard to other information, because it hides a lot of aspects less visible and not related with the real involvement of the big bank group in the Romanian economy. Methodologically, we mention that the foreign capital penetration can be measured both by the number of foreign banks and their assets.

In the case of Romania, we will find a lot of similarities with all CEE in regard with the presence on the market of countries like Austria, France, Netherlands, Greece, both in the number of participant banks, and in shares on the market or on the total social capital, data speaking in time of the participation of the bank capital from these countries in Romanian bank sector. A more detailed analysis, respectively the variations of the shares, sometimes significant from year to year, inside the same country refers to mergers or acquisitions, or to capital increase, future buying of residual packages (or settlement of new banks). Achieved in different periods of time, they can alter sometimes considerably the share from one year to another. For example, the Austrian capital's share was in 2000 3.16% of the total bank capital in Romania, but in the next year exceeded 20%. France went down from 11% in 2000 to 5% in 2007, in the context of spectacular increase of local banks acquisitions and other investment made by the capital from other countries, while France remained with the majority participation in BRD-GSG.

Some other cases can be noticed: Greece doubled it's participations to Romanian bank capital in few years, from 2001 to 2005; Italy grew from 0.35% in 2000 to 5.8% in 2005 (now 3.9%); Hungary, not in top 10 a few years ago, is now on the fifth place; Turkey went from 6.39% in 2000 to a insignificant position now. For every country, these variations are explained by the different extension (or contraction) activities, by organic growth or acquisitions and they will be analysed separately.



**Chart 2. The foreign capital share in total capital of the Romanian bank system, by main countries and overall, 2000-2007, in %**

Source: NBR Annual Reports, 2002-2007

The openness of the Romanian bank market, and also the privatisation of the bank sector resulted in a considerably growth of the share of the foreign capital in the last years, trend to be continued in the next period.

It is remarkable the absence of some traditional players from the Western capital: KBC Group from Belgium (with a pre-eminent presence in region), Credit Lyonnais, Banca Intesa from Italy. Most of the players in the other countries from CEE are present in Romania, too: Erste Bank,

Raiffeisen Zentralbank (Austria), UniCredit (Italia), Citibank (USA), Société Générale (France), ING (Netherlands) etc.

## 2.2. Main foreign banks in Romania

The most important presence belongs to the Austrian capital, with 22% of the total bank capital, represented by Erste (BCR), Raiffeisen, Volksbank.

Entered on the Romanian market as a subsidiary of the parent bank from Austria, Raiffeisen took over in 2001 the ex-Banca Agricola. Raiffeisen Bank România is a subsidiary of Raiffeisen International Bank-Holding AG (Raiffeisen International), a consolidated unit of Raiffeisen Zentralbank Österreich AG (RZB), which is one of the main banks in region, with involvement in Hungary, Slovakia, Poland, Czech Republic, Bulgaria, Croatia, Russia, Ukraine, Bosnia-Herzegovina, Serbia, Montenegro, Slovenia, Belarus and Albania<sup>263</sup>. Volksbank is an Austrian bank with significant involvement in leasing activities. Volksbank is a powerful regional player in CEE, with subsidiaries in 10 countries: Bosnia-Herzegovina, Croatia, Czech Republic, Hungary, Malta, Serbia, Montenegro, Slovakia, Slovenia and Romania<sup>264</sup>, with a network of over 180 bank units<sup>265</sup>. The presence of Erste Bank on the local market, after the take over of BCR, enforced the Austrian banks' position. With a history from 1819, Erste Bank is one of the most active and important players in CEE<sup>266</sup>, the biggest company in Austria, according to Forbes Global 2000, as assets' value and the biggest financial group in Central Europe, in terms of number of clients and assets. The bank holds the first position on the retail market in Czech Republic and Slovakia (27%, respectively 35%), second in Hungary (10%) and third in Croatia (10%). The bank management considers Eastern European economies as markets with the most growing potential in Europe, so Erste Bank operated in the last years a number of acquisitions in Hungary, Croatia, Czech Republic, Slovakia and, more recently, in Serbia and Romania<sup>267</sup>.

An important presence, and also an example of regional expansion, based on a familiar approach of the South Eastern Europe region, is the presence of Greek banks. Greece is the second country in terms of share in the total capital of the Romanian bank system (22%), share in significant growth in the last years. Alpha Bank, Piraeus, EFG Eurobank, Egnatia, National Bank of Greece (NBG) and Emporiki are all present in Romania since several years. Alpha Bank entered Romanian market in 1993, when settled, with EBRD and a small number of other Greek investors, Banca București SA, as commercial bank. Alpha Bank is the second bank as size in Greece, present also in Romania, Serbia, Cyprus, Bulgaria, Albania etc.<sup>268</sup>. Other Greek presence is EFG Eurobank, group involved in other countries in region (Bulgaria, Serbia, Montenegro, Poland and Turkey)<sup>269</sup>. In Romania, EFG Eurobank is the majority shareholder (77.5% of the shares) of Bancpost, the first bank fully privatised in Romania (2002). Piraeus Bank Romania, present also in Bulgaria, Serbia, Montenegro and Albania<sup>270</sup>, entered Romania by acquiring Banca de credit Pater S.A. National Bank of Greece (NBG) is the biggest financial group in Greece, with 905 bank units in and outside the country<sup>271</sup>. The Group is in full expansion in South-Eastern Europe, after acquiring the main bank in Serbia-Montenegro and the second bank by size in Bulgaria<sup>272</sup>. Entered in Romania in 1996 by setting a branch, National Bank of Greece extended its operation by the acquisition of a package of over 80% of the share of Banca

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263 cf. Annual Report Raiffeisen Bank, 2003-2007

264 see Banks - the Driving Force, in "InvestRomania", January 2005

265 <http://www.volksbankromania.ro/ro/>

266 <http://www.sparkasse.at/erstebank/group>

267 Prime Transaction December 23, 2005, [www.primet.ro](http://www.primet.ro)

268 [http://www.alphabank.ro/ro/despre\\_noi/domenii\\_de\\_activitate.htm](http://www.alphabank.ro/ro/despre_noi/domenii_de_activitate.htm)

269 <http://www.eurobank.gr/online/home/generic.aspx?id=3&mid=333&lang=en>

270 <http://www.piraeusbank.gr/ecPage.asp?id=242383&lang=2&nt=96&sid=>

271 <http://www.banca-romaneasca.ro/main.php>

272 [http://www.nbg.gr/en/investor.asp?P\\_ID=554](http://www.nbg.gr/en/investor.asp?P_ID=554)

Românească. In 2007, ATE Bank Romania (Agricultural Bank of Greece) acquired Mindbank. Other Greek banks, of a less importance, present in Romania are Egnatia Bank and Emporiki Bank.

Until Erste entered in the Romanian bank market, the first and most important investors were the French investors, with the presence of Société Générale Group. The Group is the 7<sup>th</sup> French company and one of the most powerful financial groups in the euro area, according to stock capitalisation, with activity on all continents. In CEE the group is also active in Russia, Czech Republic and Serbia<sup>273</sup>. Majority held by Société Générale since 1998 (now 58.32% of the BRD-GSG shares), Banca Română pentru Dezvoltare - Groupe Société Générale was the biggest private bank in Romania, until BCR was privatised.

Although strongly involved in Romanian industrial sector, the Italian presence in bank market is not as aggressive as, for example, in other neighbour states, in order to take advantage from the growing potential of the market. It is to be mentioned UniCredit, after acquiring the former bank HVB Tiriac. UniCredit has a good experience in regional and substantial resources<sup>274</sup>. In CEE, UniCredit Group controls the first private bank in Poland (Bank Pekao), the main banks in Croatia (Zagrebacka Banka) and Bulgaria (Bulbank), the 5<sup>th</sup> bank in Slovakia (Unibanka), one of the main commercial banks in Czech Republic (Zivnostenska banka)<sup>275</sup>. Another example of “small giant” is the Romanian subsidiary of the Italian bank group San Paolo IMI, the 3<sup>rd</sup> one in Italy, by size, physically present in 34 countries. The Group also has, at regional level, majority participations in banks in Slovenia, Hungary and Albania<sup>276</sup>. In Romania, the Group acquired, by two transactions, starting with 2001, the local bank West Bank<sup>277</sup>; now, the Group holds almost 99% of the shares. Remarkable is also the entrance on the market of the Italian Group Veneto Banca, as result of the acquisition of the majority package of Banca Italo-Romena from BCR in 2001. Banca Italo-Romena is a branch of the parent bank in Italy, with a small market share, located only in Bucharest and a few big cities<sup>278</sup>. A discrete presence on the market in the Romanian branch of the big Italian bank Banca di Roma, member of Capitalia bank group<sup>279</sup>, entered in Romania in 2000. C.R. Firenze Romania Bank, former Daewoo Bank, become part of the Group with the same name in March 2006, after the transfer Banca C.R. Firenze from Italy of the majority share package (56.23% of the social capital). Now, the network is still limited, planning extension in the near future<sup>280</sup>.

-A situation somehow similar, as discrepancy between the commercial transaction volume, the number of settled banks and, respectively, the presence on bank market, is the situation of the bank capital from Turkey. In the context of the internal problems of the bank system in Turkey, a number of bank active in Romania disappeared or were sold (Banca Turco-Română, Daewoo Bank, Demirbank), now being still present only two: Credit Europe Bank (former FinansBank) and GarantiBank International-Unlike the Greek or Italian penetration, assessed especially by acquiring local banks or foreign banks branches, the Dutch capital chooses the Greenfield investment. It was preferred the construction from zero the network in Romania, operating as subsidiary – ABN Amro (settled in 1995, now RBS), or as foreign branch – ING Bank (entered in 1994). This option comes mainly from the force of these banks (among the top 10 European banks), but also from their initial intention: focus on big multinational companies, state companies, government projects financing etc. Of course, later these banks reconsidered the retail

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273 <http://www.socgen.com/indexen.htm>

274 UniCredit is present in 9 countries in Central and Eastern Europe, with the biggest number of units (see Banks - the Driving Force, in “InvestRomania”, January 2005)

275 <http://www.unicredit.ro/unicredit.nsf/index?>

276 [http://www.grupposanpaoloimi.com/scriptItr/investor/eng/gruppo/eng\\_presenza\\_internazionale.jsp](http://www.grupposanpaoloimi.com/scriptItr/investor/eng/gruppo/eng_presenza_internazionale.jsp)

277 Banks - the Driving Force, in “InvestRomania”, January 2005

278 <http://www.italo-romena.ro/>

279 [http://www.capitalia.it:80/capwww/pages\\_en/inv01a\\_en.htm](http://www.capitalia.it:80/capwww/pages_en/inv01a_en.htm)

280 <http://www.bancacrfirenze.ro/>

market, but maintaining the priority to private banking and selective clients.-A mention has to be made about the expansion on Romanian market of Hungarian OTP Bank, the biggest bank in Hungary. The Group has operations in countries like Hungary, Slovakia, Croatia, Bulgaria and Romania, with the stated intention to become an important player in region and follow the regional development strategy by acquiring financial institutions from Central Europe countries. In Romania, OTP Bank acquired Robank, re-branded as OTP Bank Romania.

-The single representative of the American capital, Citibank Romania, is the subsidiary of the American group with the same name. Citigroup is a pre-eminent financial services provider, with more than 120 million clients in over 100 countries, involved in banks, investment, insurance, brokerage etc. Since 1996, the year when it entered Romania, the bank was involved only in major operations: syndicalised loans, government loans and grantees, bonds issues, the first transaction with interest rate derivatives (in 2000) etc.

-Other foreign banks operational on the Romanian market, with small market shares and, generally, settled after market opportunities or niche banks, are: MKB Romexterra Bank, acquired by a German land bank through its Hungarian subsidiary (former Romexterra Bank), Leumi Bank (former Eurom Bank, former Dacia Felix), Blom Bank France S.A. Paris, Romania Branch (former Blom Bank Egypt, which acquired MISR Romanian Bank), Libra Bank – member of the American investment group New Century Holdings, Porsche Bank, ProCredit Bank – held by ProCredit Holding AG, a microfinance bank in Germany, Romanian International Bank – held by an American citizen<sup>281</sup>. In 2007 were authorised to operate in Romania Millenium Bank from Portugal (former competitor to buy BCR), Fortis Bank – Romania branch, La Caixa Bank (Spain) – Romania branch, Romanian branch of the Portuguese group Finibanco (Finicredito IFC SA) etc. The simple nomination of these banks reveals the internationalisation and globalisation of the Romanian bank sector. Indeed, at the end of 2007, 79.4% of the aggregate capital belongs to banks with majority foreign equity (including foreign banks branches).

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<sup>281</sup> internet sites of the respective banks

# THE IMPACT OF EUROPEAN INTEGRATION AND FINANCIAL GLOBALIZATION ON PRUDENTIAL SUPERVISION

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*As a result of the financial market globalization during the last two decades, the conventional barriers between financial activities have diminished. This led to the emergence of financial holdings that operate both in the banking sector and on the stock and insurance markets, which provide the whole range of financial services. The consequence of this tendency is the increasing concern towards the identification of optimal institutional structures responsible for the regulation and supervision of the financial market. The aim of this article is to analyze the models for financial market regulation and supervision. We discuss the effect of European integration on prudential supervision in European Union. Finally, we examine the model of financial supervision in Romania.*

*Keywords: models of prudential supervision, consolidated supervision, traditional supervision, central bank*

*JEL Classification: G21*

## **Introduction**

In the last years of 20th century, the conventional obstacles separating financial activities have weakened due to the increasing level of integration of the financial markets. Thus, the number of financial holdings working in all segments of the financial market (banking, finance and insurance) has risen. These evolutions caused the strengthening in the debates concerning the most favorable institutional structures for the regulation and supervision of the financial system.

Specialized literature on this issue offers arguments both in favor of an integrated financial supervision, carrying out by a single regulatory and supervisory authority empowered to regulate and supervise all the categories of financial institutions, and in favor of a traditional supervision in which specialized authorities supervise separately banks, insurance companies and securities markets. Even so, the current developments in the financial sector show a tendency towards consolidated supervision. Consolidated supervision is applied in many countries under the influence of factors such as: the globalization of the financial markets and a greater degree of integration of the companies providing financial services; the weakness of the financial sector that caused the collapse of some financial institutions and serious crises of the financial markets, as well as changes in the responsibilities of central banks<sup>282</sup>.

The supporters of consolidated supervision argue that the expansion of financial institutions in multiple areas of activities requires strict and responsible supervision. Nowadays, consolidated

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282 Iordache F., Jordan M., Considerations on consolidated supervision of the financial system in Romania”, Institute for Economic Forecasting, 2005, <http://141.85.31.54/arhivapp/art008.pdf>, p. 2.

financial supervision is implemented in many developed countries such as: Australia, Great Britain, Canada, Japan, Germany, France, Austria, Ireland, the Scandinavian countries, etc. It has been also successfully implemented in emerging countries among which we mention: South Korea, Hungary, Poland, Latvia and Estonia.

### **1. Models for financial market regulation and supervision**

The financial market traditionally includes banking, financial and insurance sectors. It can be seen as an economic space within diverse operators as banks, financial intermediaries, mutual funds, insurance firms, pension funds, provide financial instruments and services. There are different regulatory agencies for banks (often central bank), securities firms and insurance companies at national and international level (Basel Committee on Banking Supervision, International Organization of Securities Commissions, IOSCO, and the International Association of Insurance Supervisors, IAIS). Financial market regulation aims three major objectives<sup>283</sup>:

1. the pursuit of macroeconomic and microeconomic stability;
2. the transparency in the market and of intermediaries and investor protection;
3. the safeguarding and promotion of competition in the financial intermediation sector.

Di Giorgio and Di Noia (2000) identified four approaches for financial regulation and supervision: institutional supervision, supervision by objectives, functional supervision, and single regulator-supervision<sup>284</sup>.

#### ***1.1. Institutional supervision***

In this approach, which follows the traditional segmentation of the financial market into three markets (banking, securities and insurance), the oversight is realized through three different supervisory authorities. These authorities control operators and markets mainly through access selection on the market, regular monitoring of the activities developed by the authorised operators and exits from the market.

#### ***1.2. Supervision by objectives***

According to this approach, all intermediaries and markets should be subject to the supervision of more than one authority, each single authority being in charge for one objective of regulation in spite of both the legal form of the intermediaries and of the functions or activities they carry out. Thus, there should function three authorities, other than the central bank – which is accountable for monetary policy and macro-stability –, each of them being responsible of one of the three objectives of regulation, above-mentioned.

#### ***1.3. Functional supervision***

This model, also known as supervision “by activity”, take into account the functions performed by the financial system such as clearing and settling payments, pooling of resources and portfolio diversification, transferring economic resources, managing risks, coordinating decentralized decisions and dealing with incentive problems. In view of this model, each type of financial services should be regulated by a given authority independently of the operators (banks, mutual funds, intermediation firms, insurance companies and other financial intermediaries) who offer it.

#### ***1.4. Single regulator-supervision***

This approach is founded on just a single supervisory authority, separated from central bank, responsible for all markets and intermediaries operating in banking, financial or insurance

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283 Di Giorgio G., Di Noia C., Financial regulation and supervision in the Euro area: a four-peak proposal, Wharton Financial Institutions Center, Working Paper Series, February 2000, pp. 4-5.

284 Ibid., pp. 6-10

system. This authority should be preoccupied with all the objectives of regulation: stability, transparency and investor protection, possibly competition.

The dominant model applied at the international level was institutional supervision, but recently the integrated financial supervision has gain an important role. The comparative advantages of these two dominant models are presented in the table below.

**Table 1. Comparative advantages of the dominant models in financial supervision**

| <i>Integrated financial supervisor</i>  | <i>Specialist supervisor</i>  |
|---|---|
| <ul style="list-style-type: none"> <li>- lower costs, regulatory neutrality and pooling of expertise</li> <li>- better collaboration between sectoral supervisors which leads to a single team of experts and a single rule book</li> <li>- higher transparency and economies of scale</li> </ul> | <ul style="list-style-type: none"> <li>- higher specialization, more clear tasks and more competitive</li> <li>- better knowledge and adaptation to the risk profile of the regulated financial sector</li> </ul> |

Source: Lannoo K. (2002), p.4

In spite of the existence of these four models, the structure of financial supervision was usually based on the division of the financial sector in three segments: banks, securities firms and insurance companies, each of them having its own distinct specialist supervisory authority. In the early '90s some countries have switch to the integrated supervision of financial market, adopting a single supervision authority (see table 2). The first integrated financial supervisory authority was created in Norway, which integrated bank and insurance supervision in 1986, followed by Denmark in 1988 and Sweden in 1992<sup>285</sup>.

The most notorious example of integrated supervision is UK Financial Services Authority (FSA), created in 1997, a single supervision authority, which came fully into effect only in 2001, after the enforcement of Financial Services and Market Acts 2000. FSA has four statutory objectives<sup>286</sup>:

- to keep the confidence of the public in financial system;
- to support public understanding of the financial system;
- to assure an adequate level of customer protection ;
- to diminish the financial crime.

Its example was followed by several countries such as Iceland, Japan, Korea, Hungary, Latvia, Estonia, Austria, Germany, Ireland, and Poland (see table 3).

**Table 2: Financial Supervision in the EU in 2000**

| <b>Country</b>    | <b>Banking</b> | <b>Securities</b> | <b>Insurance</b> |
|-------------------|----------------|-------------------|------------------|
| <b>Belgium</b>    | BS             | BS                | I                |
| <b>Denmark</b>    | U              | U                 | U                |
| <b>Germany</b>    | B              | B,S               | I                |
| <b>Greece</b>     | CB             | S                 | I                |
| <b>Ireland</b>    | CB             | CB                | G                |
| <b>Italy</b>      | CB             | CB,S              | I                |
| <b>Luxembourg</b> | BS             | BS                | I                |

285 Lannoo K. (2002), Supervising the European Financial System, Centre for European Policy Studies, CEPS Policy Brief no.21/2002, p.2.

286 Briault C. (2002), Revisiting the rationale for a single national financial services regulator, FSA, Occasional Paper Series 16, 2002, p. 10.

| Country        | Banking | Securities | Insurance |
|----------------|---------|------------|-----------|
| France         | B, CB   | B,S        | I         |
| Spain          | CB      | S          | I         |
| Netherlands    | CB      | CB,S       | I         |
| Portugal       | CB      | CB,S       | I         |
| Austria        | G       | G          | G         |
| Finland        | BS      | BS         | I         |
| Sweden         | U       | U          | U         |
| United Kingdom | U       | U          | U         |
| Norway         | U       | U          | U         |

Source: Di Giorgio G., Di Noia C. (2000), p. 17

Legenda: CB: central bank, BS: banking and securities supervisor, B: banking supervisor, S: securities supervisor, I: insurance supervisor, G: government department, U: single financial supervisor

**Table 2: Financial Supervision in the EU in 2008**

| Country        | Banking | Securities | Insurance |
|----------------|---------|------------|-----------|
| Belgium        | U       | U          | U         |
| Denmark        | U       | U          | U         |
| Germany        | U       | U          | U         |
| Greece         | CB      | S          | G         |
| Ireland        | U       | U          | U         |
| Italy          | CB      | S          | I         |
| Luxembourg     | BS      | BS         | I         |
| Spain          | CB      | S          | I         |
| Netherlands    | CB      | S          | CB        |
| Portugal       | CB      | S          | I         |
| Austria        | U       | U          | U         |
| Finland        | BS      | BS         | I         |
| Sweden         | U       | U          | U         |
| United Kingdom | U       | U          | U         |
| Poland         | U       | U          | U         |
| Hungary        | U       | U          | U         |
| France         | B, CB   | S          | I         |
| Latvia         | U       | U          | U         |
| Malta          | U       | U          | U         |
| Estonia        | U       | U          | U         |
| Norway         | U       | U          | U         |

Source: Enrico Maria Cervellati\*- Eleonora Fioriti, www.ecb.int, central banks' sites

## 2. Prudential supervision in European Union

ECB considers that three important responsibilities should be included in the supervision functions of EU member states<sup>287</sup>: 1) investor protection activities; 2) micro-prudential supervision, and 3) macro-prudential analysis. The opinion of ECB regarding the prudential supervision is the maintenance of an essential role for national central banks in this domain in the

<sup>287</sup> European Central Bank, The role of central banks in prudential supervision, 2001, p.3.



countries from euro zone. All central banks are responsible, somehow, by the macro-prudential analysis, even if they rarely respond for investors' protection, particularly in the securities market.

There are arguments both for and against combining prudential supervision with the monetary policy responsibilities at the level of central bank<sup>288</sup>. Three important arguments sustain the unification: 1) central bank's ability to get important insights about the general situation of the economy, since monetary policy and banking supervision are closely interrelated; 2) central bank's capacity to protect the payment system, a key channel for the potential dispersion of contagion risk; 3) central bank's involvement in assuring the systemic stability of financial system. By contrast, there are three strong arguments for the separation by granting wide supervisory powers to a single institution outside of central bank: 1) the potential trade-off between monetary stability and micro-stability of financial institutions; 2) the higher reputation costs for central bank in the case of the bank failure, which will influence the credibility of monetary policy; 3) the conflict between the pro-cyclical effects of micro policy (regulatory) and counter-cyclical effects of macro policy (monetary).

Recent developments of the financial system require for an single supervisor. Di Giorgio and Di Noia (1999) proposed the establishment of an independent European System of Financial Supervisors (ESFS) structure similar to the European System of Central Banks<sup>289</sup>. In 2000, the authors have conceived a "four-peak" model, in which the four institutions would share the responsibility of regulation<sup>290</sup>:

1) Central bank would be in charge of price and macroeconomic stability, continuing to perform the task of monetary policy and lender of last resort;

2) A second institution, which should closely cooperate with the central bank, would be responsible for micro-stability, supervising the whole financial system and managing deposit insurance and investor compensation scheme;

3) A third agency would be in charge of transparency and investor protection, supervising disclosure requirements and the proper behavior of the all banks, securities and insurance intermediaries.

4) A fourth institution would guarantee fair competition and avoid abuses of dominant position and limit dangerous concentrations in banks, securities firms and insurance companies.

Nowadays, in the context of the financial crisis, the European Commission has speeded up the implementation of this project in two stages: stage 1 (2009-2010) – preparation of the ESFS; and stage 2 (2011-2012) – establishment of the ESFS.

### **3. Financial market supervision in Romania**

The model of financial supervision in Romania has been the institutional approach. The authorities for the regulation and supervision of the financial system have been: 1) the National Bank of Romania (NBR) for the banking sector; 2) the Romanian National Securities Commission (RNSC) for the stock markets; and 3) the Insurance Supervision Authority (ISA) for insurance companies. As a rule, each of the three institutions has a limited control, but each is affected by the initiatives coming from the other two domains. That is why these institutions have signed a protocol of cooperation in the area of supervision.

Based on the tendencies manifest both on an international scale and at the EU level, in 2001 the Romanian government put forward a proposal for the foundation of an integrated agency for financial market supervision, but this idea was considered premature at that time and therefore

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288 Di Giorgio G., Di Noia C., "Should banking supervision and monetary policy tasks be given to different agencies?", *International Finance* 2(3), 1999, p. 362

289 *Ibid.* pp. 365-368

290 Di Giorgio G., Di Noia C., *Financial regulation and supervision in the Euro area: a four-peak proposal*, Wharton Financial Institutions Center, Working Paper Series, February 2000, p. 22.

rejected<sup>291</sup>. The opinions of the three authorities on this issue are divided. The NBR seems to be the most open to the development of a single supervisory institution since this will allow it not only to find irregularities and problems but also to maintain an important role in the activity of supervision and sufficient power to intervene in the monetary policy. By contrast, both the RNSC and ISA have a tendency towards independence, their main argument being the progress made in their consolidation as independent institutions of control at the recommendation of the EU.

Given that Romania's integration in the EU became a major objective, beginning with 2005 the NBR has switch to consolidated supervision of credit institutions exclusively. Since 2006 the NBR has also supervised the activity of the leasing companies, pawnshops, etc.

Consolidated banking supervision refers to the evaluation the financial position of an entire group, considering all the risk to which the bank is exposed no matter that these risks are reflected in the books of the bank or related entities<sup>292</sup>.

## Conclusions

The consolidated supervision has been the subject of many controversial debates between bankers, academics, governors and other officials. The supporters of consolidated supervision argue that the expansion of financial institutions in multiple areas of activities requires strict and responsible supervision and indeed the consolidated supervision have proved its success in many countries. At a European level a more flexible supervisory framework must be conceived in order to prevent financial instability and to keep up with the increasing number of cross-border financial groups, markets' developments and interrelationships. The current financial crises have shown that the regulators and supervisors have ignored the cross-sector propagation of risk. The European Commission is preparing the construction and regulation of a new entity, namely the European System of Financial Supervisors, meant to ensure a more competitive supervisory framework. The consolidated European supervision can play an important part in the reform of the international financial system architecture.

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291 Iordache F., Iordan M., *opere citato.*, p. 2.

292 MacDonald R.(1998).- "Consolidated supervision of banks", Centre for Central Banking Studies, Bank of England, London, 1998, p. 5.

## MODELS OF BANKING RISKS MANAGEMENT

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*Abstract: Banking risks management as a fundamental element of banking management aims at diminishing as much as possible the negative impact of risk factors, at minimizing losses by expenditures cut-off and maximizing direct and transferred influxes, changing the employees' conduct and improving the bank's image.*

*Keywords: model, insurance, risk*

*Cod JEL:G21*

There are, in theory, several known concepts to administrate risks and to organize the structures accountable. Some of the authors<sup>293</sup> consider that *risks should be managed separately*, independently and so should the relevant compartments.

The main reason appealed to is that of simplicity and promptness in establishing decisions for risk administration. In addition, the risk of taking wrong decisions or inappropriate ones is also smaller. A sure disadvantage of this approach is that of non-using (non-revaluating) the correlations between different exposures and, perhaps, over-registration of the same risk exposure.

Others<sup>294</sup>, on the contrary, state that *risks should be managed in an integrated manner*, consistent and coherent, in order to eliminate the above mentioned disadvantages. The main problems of such an approach are the complexity of the procedure, the great amount of necessary information, the high impact of taking wrong or inappropriate decisions, important costs for personnel and risk management integrated systems maintenance.

Several questions need to be answered in the process of risk management. The most evident is this one: *What would be better for the institution: to take on a certain type of risk familiar to its activity or to transfer it?*

An efficient risk management strategy must offer a clear and explicit answer to this fundamental question. Those responsible of the risks management must always analyze the answer to the above question through the costs and benefits related to the risk management. In case of massive risk exposure, it is preferable to transfer it by applying to a series of popular products on the insurance and capital markets.

At present, market designers of insurance products against various critical events offer a large scale of derived financial instruments, oriented towards meeting the ever diversifying clients' needs, at a cost reasonable for the transferred risks. In addition, financial market innovations and the boom of progress in the information technology allowed a better structuring and identification of the clients' needs, what led to a better identification of the transferred risk sources, the increase of these products' flexibility, liquidity establishment and increase on these markets, etc.

In case risk exposures may be managed at a lower cost as that offered on the derivatives market, the risk exposures become for the institution advantage sources, competitively and comparatively, as opposed to its competitors. Consequently, they must be rationally and efficiently revaluated.

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293 [http://www.trema.com-finance\\_online](http://www.trema.com-finance_online).

294 Dowd Kevin, Enterprise-Wide Risk Management For Corporatism, Global Treasury News, 1998, p.78.

Some<sup>295</sup> identify *the efficient risks management with the efficient institution management*. The elaboration of a business plan and of a business strategy should be structured in such a manner that would allow identification and analysis of potential risks as well as creating viable solutions for the potential impact of risks exposure. Or, integrating risk management into the general management of the institution is a major imperative of a successful management.

Considering the above, economical agents must vote for creating specialized divisions responsible with the *engineering process (elaboration, design, testing and implementation) of risks management*. This would permit any level managers to better understand the risks they are being exposed to, the factors of influence and the risks' impact on the business. Even if, on short term, such an action would imply high costs, on long term such a decision would prove quite benefic. Evidently, implementation of an own structure responsible for managing the risks of the enterprise would not imply isolating it and shut it down from the business environment and financial community. Consulting the specialized companies would be highly welcoming. Also, it is recommended the large scale use of methodology and advances techniques of renowned risk management policies (e.g. Monte-Carlo, VaR, Stress Testing, scenarios analysis, etc.).

There are several models of risks management known today. We shall present further the most important ones used in contemporary business practice.

One of the best known and used models in practice consists of the idea that the entire process of risks management is split in 4 big steps:

1) **Context establishment.** It is the basic phase of any efficient risk management process – the theoretic and conceptual step of the process. On its success depends the success of the coming phases and supposes the unwinding of the following sub-stages:

i) *establishing the strategic context.* The strategic objectives, organizational structure, authority and duty delimitation, etc. are being established and, perhaps, revised. The main conditions of the business environment in which the respective institution operates are being determined, the relevant features and connections as well as the tendencies and evolution perspectives from the near future. The main types of risk exposures are identified together with the characteristics and impact of the same on the institution.

ii) *establishing the context of risks management.* Whereas a bank philosophy and general concept is being elaborated in relation with the risk exposure: *aversion, neutrality* or *preference* for risk. Based on those exposed before, a policy of risk management is drawn up and designed, a *passive* one or an *active* (aggressive) one. After that the general objectives are established and the duties to be fulfilled as related to the risk management. Based on these, methods and methodologies of identification, attraction, monitoring, analysis and risk management are being developed. Still under this stage, proceedings of assessment and risks comparison are being elaborated and developed.

It is determined the subdivision responsible for risks management, its responsibilities and authority. If the case, there are designed proceedings and systems of risk control: verification and validation, authorizations, criteria and principles of integrity and safety, consecrated management control proceedings, etc. Still if the case, there are also informational systems designed relative to or assisting risks management, endowed with the following facilities: introduction and storage of data, proceedings of actualization and dissemination of information, methods of control and validation, proceedings of monitoring and reporting of information relative to administrated risks, etc. More, at this very sub-stage, there are also elaborated the standards of identification, monitoring, analysis and report of information relevant to risk exposures. There are either developed or purchased, as the case may be, software systems to help decisions and evaluate their performance. Still at this phase, previous risk management results are analyzed and monitored, strong points and weaknesses of the current system of risk management and control are pointed

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295 Idem, p.80.

out, recommendations for its amendment are formulated, measures and concrete actions are taken to improve and put to practice those recommendations and previous decisions about the risks.

**2. Identification, analysis and investigation of risks.** This is the most important and greater time consuming stage. Its objective is to elaborate a risk profile (relevant risks spectrum to which the bank's activity is exposed) to be tested at different scenarios (analysis of feasibility and viability of the profile). At first the concrete risk exposures are being identified, the risk sources and the influential factors. The following questions are tried to be answered: What will happen as a consequence of a certain type of risk exposure? When will it happen and under what conditions? Subsequently, the main characteristics of these exposures are determined, like frequency, nature of exposures, correlation to other risks, impact on business, etc. Still more questions wait to be answered: What is the probability of these risks to appear? What are the consequences for the bank? Now the internal control proceeding are determined related to certain types of risks and their efficiency for each and every exposure. The risks identified are assessed according to the previous stage established methodologies. Next the risk level is determined. The magnitude of a concrete exposure is analyzed in the light of maximum risk postures the bank can take, as well of its capacity to absorb certain exposures. The sensitivity of the bank's risk profile to a series of critical events and processes will permit the establishment of priorities in the risk management procedures. The risks will be grouped according to their financial impact and probability of occurrence. Thus we can obtain different priority rank risks. Their interdependence and correlation must also be identified and, if the case, reevaluated because of their portfolio effects.

**3. Risks remedy.** Based on former stages data and information as well on those related to the bank's experience in risks management (approaches and historical data), there are identified and evaluated the possible strategies of reduction and even elimination of the risks to which the bank is exposed. Concrete plans and measures are elaborated for attenuation of risks.

This is the *documentation stage*. Adequate solutions must be developed in order to attain the following objectives:

- Reducing the probability of risk occurrence.
- Reducing the financial impact of the risks.
- The transfer of the risk.
- Keeping and managing the risks (source of competitive advantage).
- Eliminating the risk (the case of discontinuous activities; non-recurrent risks).

**4. Implementing and monitoring the risk management plan.** Based on the risk management plan the selected strategies are implemented into practice, at the same time evaluating also the performances of these implementations. The results of previous assessments are being processed, reported and analyzed by the responsible people and the superior hierarchy level managers. Activities sensitive to risks are continuously monitored and the results are conveyed to the initial stage. It is important that the elements of the risks management strategy to be communicated both internally and externally in the bank. The specific responsibilities must be allocated to trained personnel. It is important that the model and strategy of the risk management to be dynamic and to reflect the inner and outer bank environment changes.

It is concluded, based on the detailed presentation of each phase, that this particular risk management variant is a dynamic one, self-critical and adaptable to the modifications of the management environment and practice. This is a continuum cycle method of risk management. In addition, elaboration and design of the conceptual and theoretic frame necessary for the risk management is assimilated to the process of risks management (being an integrated part).

The real benefits of the risks management process derive from the proper understanding of risk exposures and from establishing coherent and pertinent decisions about the manner to approach risks.

The benefits and risks related to the risks management process are never to be taken lightly.

There are several manners and models to approach efficiency and success of the risks management policy, one of them being the pyramidal model.

*The pyramidal model* or that of *risks management completeness* presumes that the success of any risk management policies is based on three fundamental elements, namely:

- *Notorious analytic models and proceedings of risks management.* The notorious character confers *credibility* to the used methodologies and *compliance* with the field or international standards and practices (e.g. Monte-Carlo, VaR, scenario analysis, etc.).

- *Technologies mixing.* Presumes appeal to the new technologies (both hardware and software) and technical proceedings of risks management.

The IT innovational boom as well the latest developments in the financial theory, made possible the application of the most sophisticated and complex models and methodologies of risk administration. The big banks mustn't be reluctant towards the development and consolidation of the existing management systems if they want to keep their positions and performances. The new millennium announces itself to be a new era in the matter of risks management, an *era of digital risk management*.

On a broad scale, at present, there is used *high performance risk engines* specialized in the optimal management of risks. A specific feature of these new technologies of information consists of the stability the risk management processes have as compared to the business volume: a bigger business volume requires a greater number of computer stations, the rest of the hardware and software system remaining invariable.

- *Integrated information.* The complexity and risk exposure variety as well as the ever tougher exigencies of the shareholders, investors or law givers, have determined the big financial institutions to revise and modernize the risk management process related informational system.

The informational technologies brought about a plus value of the services in every fields of activity. The development level of a country is associated with the degree of computerized services that establish directly the quality of life.

The banking and financial domain is one of the biggest beneficiaries of informational technologies and telecommunication networks. The new economy infrastructure is used with a maximum efficiency in this field. Mutually, through a positive reaction loop, the increase of competition and the demand for more complex banking services, boost up innovation and production of technologies destined to this sector.

The gradual process of automation of operations was the main source of change in the world's banking system.

In order to keep up with the growing competition and to consolidate their position on the market, banks have invested more and more in technology.

In the latest years these investments were dominated by two priority aspects: security of information and real time transaction accomplishments. Moreover, globalization of services asked the banks for investments in the informatics system in order to get connected to the international inter-banking networks.

Along with the benefits obtained from automating processes – efficiency increase, decrease of production costs, increase of services quality, etc. – there were also supplementary risks surfacing the international banking system.

*The equation of balance between innovation, information protection, decreasing the transaction time and risks management determine the tendency of modern banking technology development.*

The current tendency in what the informational systems are concerned is that of integration and standardization of data and information (obtained from different sources of monitoring,

information, evaluation and report) relative to the risk management, as well as of analytical methods of evaluation, analysis and reporting positions and risk exposures. A special focus is placed on the transparency of the risk management methodologies and on the effective costs due to these processes.

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# THE EVOLUTION OF THE ROMANIAN BANKING SECTOR AFTER ROMANIA JOINED THE EUROPEAN UNION IN ADDITION TO THE GLOBAL FINANCIAL CRISIS

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*The status of member state of European Union as well as Romania's assuming of economic and monetary adhesion at the horizon of the 2014 suppose certain mutations at the level of banking system as dominant component of romanian financial system, reason for which the present paper holds forth to offer a general view on its evolution, having as departure point our country's adhesion moment to European Union, the 1<sup>st</sup> of January 2007, presenting altogether its reactions under the present global economic-financial crisis impact.*

*Keywords: banking sector, credit, deposit, interest, global financial crisis*

*JEL Code: G21*

## **1. Introduction**

As a first step of the banking reforming process in Romania, the financial-banking process, designating the ensemble of the financial and credit institutions having estates or private assets that function at the level of an economy, is organized starting from December 1990 on two floors: *central bank*, respective the National Bank of Romania (NBR) as a basic system's component and altogether member of The European System of Central Banks (ESCB) at one time with Romania's adhesion to European Union and *commercial banks* (credit institutions) that are situated on a second level.

## **2. Some of romanian banking sector mutations after Romania's adhesion to European Union**

The status of member state of the European Union from the 1<sup>st</sup> of January 2007 supposes that Romania will align the Economic and Monetary Union's requires in the frame of assuming the adopting of the European unique currency in 2014, and one of the sectors that will bear essential changes is the financial-banking one, characterized by a moderate and relative stable focusing degree.

One of the main characteristics of last years romanian banking system is constituted by competitiveness intensification, especially as consequence of the fact that our country became component of European Union. On one hand this aspect allowed an emphasis of foreign investors on the domestic banking market, the romanian banking system displaying in its structure (*Table 1*) new entities, at the level of small and medium banks, on the basis of authorizing new credit institutions and fusion of the existent banks, and on the other hand facilitates the performing of banking systems by foreign financial institutions directly on Romania's territory.

Therefore, at the level of the romanian banking sector certain structural changes occurred, on the basis of its capitalization increase, mainly on the banks segment with private major shareholdings, from which the bigger part has domestic private capital.



**Tabel 1 – Romanian banking sector structure**

|  | <i>number of credit institutions</i> |                |                |                |                |
|--|--------------------------------------|----------------|----------------|----------------|----------------|
|  | <b>12.2006</b>                       | <b>06.2007</b> | <b>12.2007</b> | <b>06.2008</b> | <b>12.2008</b> |
| Banks with fully or majority state-owned capital | 2                                    | 2              | 2              | 2              | 2              |
| Banks with domestic majority private capital     | 3                                    | 3              | 3              | 3              | 3              |
| Banks with majority foreign capital              | 26                                   | 25             | 26             | 26             | 27             |
| Foreign bank branche                             | 7                                    | 7              | 10             | 9              | 10             |
| <b>TOTAL BANKING SYSTEM</b>                      | <b>38</b>                            | <b>37</b>      | <b>41</b>      | <b>40</b>      | <b>42</b>      |
| <b>CREDITCOOP</b>                                | <b>1</b>                             | <b>1</b>       | <b>1</b>       | <b>1</b>       | <b>1</b>       |

*Source: NBR (National Bank of Romania)*

Also, there should be emphasized that, in structure, at the level of romanian's banking system, the private component stabilized permanently the dominant position reaching to hold, at the end of the year 2008, 88,5 percentage points in total system (*Table 2*).

**Tabel 2 – Romanian banking sector structure by share endowment capital**

|   | <i>wight (%)</i> |                |                |                |                |
|---|------------------|----------------|----------------|----------------|----------------|
|   | <b>12.2006</b>   | <b>06.2007</b> | <b>12.2007</b> | <b>06.2008</b> | <b>12.2008</b> |
| Banks with fully or majority state-owned capital                              | 14,9             | 14,4           | 12,8           | 13,0           | 11,5           |
| Banks with majority private capital<br>(including foreign branche), of which: | 85,1             | 85,6           | 87,2           | 87,0           | 88,5           |
| Banks with majority foreign capital, of which:                                | 78,8             | 78,6           | 79,4           | 75,5           | 77,9           |
| Foreign bank branche  | 7,8              | 7,6            | 6,2            | 1,2            | 6,1            |
| <b>TOTAL BANKING SYSTEM</b>   | <b>100,0</b>     | <b>100,0</b>   | <b>100,0</b>   | <b>100,0</b>   | <b>100,0</b>   |

*Source: NBR (National Bank of Romania)*

The competition from the Romanian financial-banking system intensified during the last two years also as consequence of certain legislative changes, consisting of the elimination of administrative measures of tempering non-governmental credit dynamics, aspect that makes the content of NBR Settlement no.3/12.03.2007, valid from the 14<sup>th</sup> of March 2007, concerning the credit's value limitation for credits designed for natural persons and that led to a relaxation of crediting policy, the banks being stimulated to develop own credit granting policies, taking into consideration profit and their risk strategy.

Relative relaxation of credit condition stirred the loaning offer for credit institutions, and therefore, it can be discussed about an intensification of the non-governmental credit rhythm increase for the last years, in the frame that banks fought for the market quota increase and staked powerfully on operation expansion, that consisted among others from the territorial networks extension with approximately 1.000 units per year.

The non-governmental credit's expansion granted to non-banking clients, on the basis of population income's increase but also to the relative relaxed credit conditions, determined that the first position in the Romanian credit institutions placing to be taken by domestic market. Thus, the domestic actives represented at the level of 2007, 98,3% in the total of aggregated actives at the level of system, closing the year 2008 on the same first position with 92,5% from total actives, remaining the main component from the structure of aggregated active of Romanian banking system, sustained especially by debts on the domestic non-banking sector.

In what the credit's destination on institutional sectors is concerned, in 2007, the credit's growth rhythm granted to population maintained on high level, more over the one of the credit granted to non-financial societies, while at the level of the year 2008, the Romanian banking system represented a visible temperation of governmental credit's dynamics, both on the loaning towards population segment as a consequence of the validation of NBR Settlement no. 11/2008 for

modification and completion of NBR Settlement no. 3/2007 concerning the credit limitation risk for credits designed for natural persons, and on the one of credits towards companies. Non-currency financial institutions held in this two years a reduced percentage in the total volume of granted credits.

The non-governmental credit's structure registered in the subsequent period to Romania's adhesion to European Union certain mutations also at the level of its two components regarding the currency in which the credit was granted. Therefore, in 2007, the currency component characterised through a significant acceleration of the growth rhythm, placing the national currency on a second place, whose contribution diminished significantly as against the precedent year to our country's adhesion to European Union, 2006. Therefore, predominant in the structure of credits granted to population were the ones in foreign currency, and in the frame of the retail segment, the consumption credits were placed, representing 77,1%, while the credits for dwellings held an inferior percentage of 19,9% at the level of 2007, the last ones being mainly contracted in foreign currency.

From the perspective of non-governmental currency credit structure, its two components, both the one in foreign currency and the one in lei, continued its evolution in 2008 on a visible annual dynamics decreasing trajectory, but the lei/foreign currency composition of the non-governmental credit was not significantly changed in the analyzed period, the currency component maintaining its dominant position.

In the frame of retail component, in 2008, the credits' structure according their destination has not suffer major changes as against the year 2007, and the consumption credits remained dominants, holding 74,3% from the total, with a slight preference for the national currency superior to the foreign currency one, while this component is much more represented in the dwelling credits holding up to the end of 2008 a percentage of 92,1% from the total of dwelling credits.

Also, mutations at the level of domestic banking sector took place in what the credits' payment dates structure granted to private sector is concerned. Therefore, if during the first year after adhesion, 2007, during the whole period, an increase tendency of credits' payment dates manifested, the first place being taken by the long term non-governmental credit (52,2% from total), the second being taken by medium term credits (23,8% from total) and the last one being taken by short term credits (21,2%), the year 2008 recording significant rhythm variations on the long term credit segment (55,6% from total in December 2008), the other two categories, the medium and short time credits holding similar percentages 23,1%, respective 21,4% from the governmental credit sold.

### **3. Romanian banking sector reactions at the global financial crisis**

The global economic-financial crisis extended and can be felt at the level of Romanian economy as well, and, implicitly, on the financial-banking system too, that, "from a direct impact point of view, was little affected because it was not exposed to toxic actives, and also due to the cautious and administrative measures adopted during time by National Bank of Romania"<sup>296</sup>.

Unlike the granted credits, that, as a consequence of the sustained increase rhythm, conferred in 2007, for the first time, to the resident banking clients (companies and population) the net debtor position against the Romanian banking system, the deposits attracted by the not-banking sector registered an increase rhythm inferior to the former ones, but this situation changed after the half of 2008, because the problems generated by global financial crisis affected the mother-banks too, these reducing gradually the financing for subsidiary. In comparison with the period precedent to Romania's adhesion to European Union, the credit institutions with foreign shareholding had in

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296 Isărescu Mugur, Criza financiară internațională și provocări pentru politica monetară din România, Cluj, 26 februarie 2009

2007 as well as in the first half of 2008 a significant contribution to external passives percentage increase in the total passive of Romanian banking system, having the advantage offered by mother-banks by means of a more emphasized financing.

The credit's powerful increase tendency manifested not only at the beginning of 2007, but also in the former half of the following year, the situation on the local monetary market becoming a tensed one starting with the second half of 2008, especially in August, in the frame of United States of America problems' expansion at the level of global economy. From here on we assist both to a significant reduction of credit process, especially on retail segment, the credit becoming more difficult to obtain and to higher prices, as well as to deposits' constitution reducing rhythm.

The credit diminishing for the latter semester of 2008, was, on one side, a reaction of the Romanian banking system to the uncertainties existent on the global financial market from that period that lead to a limitation of finances that the banks disposed of, but on the other side, was due to the implementation of new more severe settlements imposed by central bank concerning the credit granting for natural persons through NBR Settlement no. 11/2008.

Thus, credit institutions enjoyed until the half of 2008 liquidity excess, practicing very advantageous interests in credit granting and laying a reduced stress on the deposit attraction. After the half of 2008, however, Romanian inter-banking market dealt with a liquidity crisis, banks that until then, in their relationship with the central bank made appeal to the deposit facility in a greater extent than to the credit one, and became to be practically in need of orientating towards the credit facility given by NBR, and the competition between the credit companies manifested in this period by attracting resources from the population. As a cause for this phenomenon, the interests increase up to historic levels was considered, aspect that determined altogether the increase of new granted credits' costs, increase to which contributed on a great extent the diminishing of financial lines received from some subsidiaries from Romania from the outside mother-banks and on the other side the rises in price of these resources as a consequence for Romania's country's rating decrease.

In comparison to credit institutions of other central and East-European countries, the banks from Romania applied, during the beginning phase of the crisis, the highest interest increase percentage, having the most "prejudicially" calculation method for variable interests for clients. Also, at the end of 2008, year when the global financial crisis started to be felt strongly in the European countries with emergent economies as well, Romanian credit institutions had an atypical behaviour in comparison with other countries from the region, the average interest in Romania registering the most significant increase from the area, increasing in just four months with 5% for personal needs credits, both in lei and in euro, and with 4,5% respective 3% for mortgage credits in lei and euro, under the conditions when banks from Bulgaria and Hungary took reduction decisions concerning interests for loaning, even though there were situated under the level of those practised in our country.

In what the margins and the perceived commissions by the entities from the Romanian financial-banking sector are concerned, these, as in the case of interests are the biggest from the area, the Romanian credit institutions overtaxing the clients through commissions. If in Austria the only commission that the bank requires for personal needs credit has a fixed value of 10-20 Euros and is quarterly paid, in Czech Republic banks require a monthly administration commission on a value of 49 crowns, meaning approximately 2 Euros, in Hungary exists an anticipated reimbursing commission, but also a monthly commission of 0,25%, in Slovakia, the personal needs credit involves the payment of two commissions: a monthly one and another one, payable at the beginning, in Romania's case, taking into consideration only the example of one of the most permissive bank from this point of view, we find at least four commissions: analysis commission, granting commission (unique in Europe), administration commission and anticipated reimbursed commission, and under certain circumstances, also the foreign currency risk commission.

On the basis of expansion policy of credit activity promoted by banks until the half of 2008, as well as on the basis of credits' endearment by practicing some high interests rates and introducing of new commissions or significant increase of the already existent one in the second half of the year, a significant increase for unperformed credits took place, the credit risk manifesting a constant tendency during the last years as well as in 2008.

#### **4. Conclusions**

In conclusion, we can consider the mutations from the Romanian financial-banking sector as generated by global financial crisis, due to certain factors, such as: economic climate's damage on global level, the turbulences from domestic credit market (consumption, mortgage ones) caused on their turn by hardening the credit conditions, by reducing the real investments appetite by practicing of higher prices, as well as by worsening of economic and financial situation of population and corporative sector.

In the frame of the present global financial crisis and Romania's adhesion intention to Economic and Monetary Union, we consider that the best solution for our country and for Romanian's financial-banking system is the respecting of euro currency adoption programme, by maintaining the calendar announced by central bank and especially through disciplined implementation of adequate and competent economic policies.

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# LIMITS OF ECB MONETARY POLICIES ON ADJUSTING MACROECONOMIC SHOCKS

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*Abstract: In this paper we intend to highlight the limits of ECB in managing the macroeconomic shocks in the Euro zone. We consider that in the last months the ECB monetary policy rate loses its effectiveness and, consequently, should be offset by other measures of economic and social policy. For demonstrating this conclusion we have analyzed inflation rate, GDP growth rate and output gap per country and per Euro zone as a whole.*

*Key words: inflation, Euro zone, European Central Bank, monetary policy, macroeconomic shock*

*The article's JEL code: E52, E58*

## **Introduction**

In this paper we intend to highlight the limits of ECB in managing the macroeconomic shocks in the Euro zone. For this purpose we analyzed the main macroeconomic indicators that can be influenced by the monetary policy of ECB.

To highlight the differences between the Economic and Monetary Union countries we analyze two macroeconomic indicators (inflation rate and GDP growth rate) per country and per Euro zone as a whole. Also, the analysis highlights the position of economic cycle in the Euro zone based on the output gap calculated by OECD.

## **Theoretical approaches**

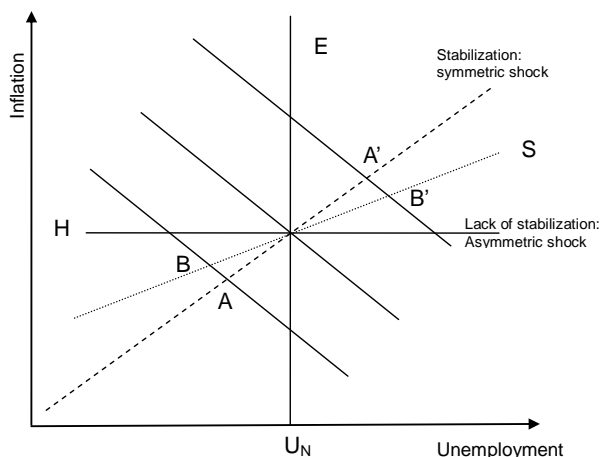
Theory of optimal currency areas examines the opportunity of renouncing at the exchange rate as a monetary policy instrument and of adherence to a monetary union. In his 1961 famous article, R. Mundell analyzes various adjustment mechanisms in a country (region) that is exposed to an asymmetric shock. Later, R. McKinnon, P. Kenen and other authors have focused on analysis of costs and benefits of joining the monetary union, including the survey of new policies and mechanisms for adjustment.

The Euro zone is likely to face asymmetric shocks, while the European Central Bank should respond through appropriate monetary policy. It is responsible for maintaining price stability and for the macroeconomic stabilization in the Euro zone as a whole.

In the case of a "pure" asymmetric demand shock (positive developments in a country are accompanied by negative developments of equal size in another country), aggregate inflation and unemployment at monetary union level remain unchanged. In this extreme situation the ECB cannot use any instrument to stabilize the economies of affected countries. The ECB's inaction will generate a higher inflation in the booming economy and higher unemployment in the economy in recession, compared with a situation in which the two countries enjoyed independent national monetary policy.

In the other extreme case, when a „pure” symmetric shock occurs, the demand in both economies evolves in the same direction. In this case, the ECB may use the instruments of stabilization as the unemployment (or inflation) is increasing in the Euro zone. Thus, from the perspective of the same country facing the same type of shock, ECB may adopt different policies, as these depend also on the other EMU countries economic situation.

A conclusion after analyzing these extreme cases is that the efficiency of the ECB's monetary stabilization instruments depends on the degree of shocks' symmetry or asymmetry. It should be noted that these extreme cases do not exist in reality, but there is a combination of symmetric and asymmetric shocks in EMU. Consequently, the symmetric component of a shock can be stabilized by monetary instruments and the asymmetric one will be managed by other types of policies. Figure 1 decomposes a mixed real shock in the two components and illustrates the movement of Phillips-curve along the stability line. The unemployment rate will fluctuate between the corresponding points B and B', which is unacceptable from the perspective of an individual country. There could be better results in the case of independent national monetary policies (points A and A').



Source: De Grauwe ,P., *Economics of Monetary Union, 6th Edition, Oxford University Press, 2005, p.196*

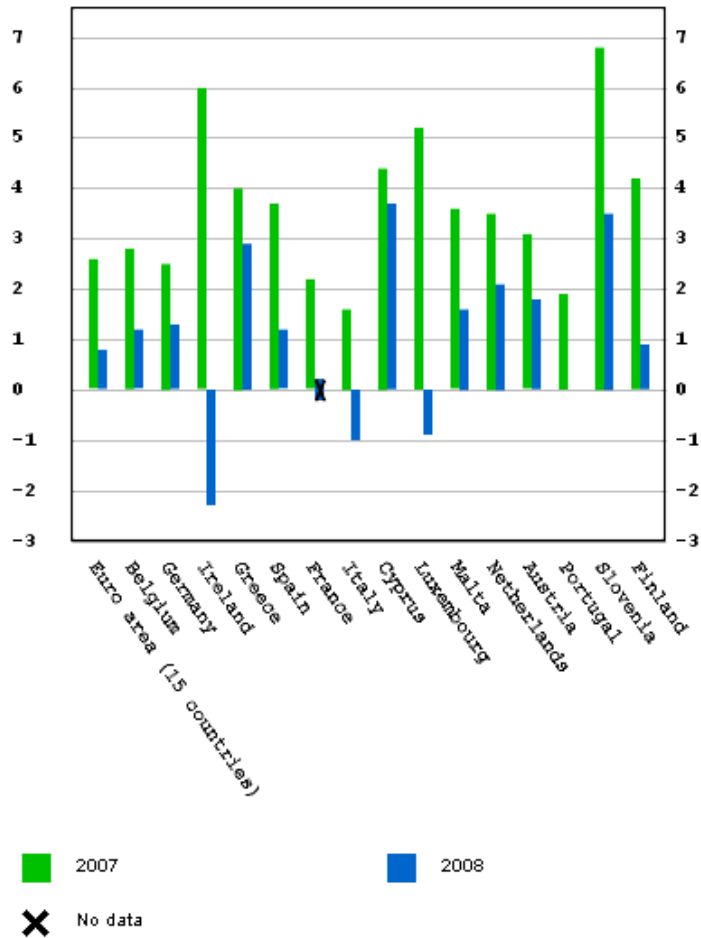
**Figure 1: ECB Stabilization monetary policy**

Therefore, the monetary union has a problem of insufficient stabilization, with no solution in the case of temporary asymmetric shocks. If the countries of the monetary union don't form an optimum currency area, the ECB will have a difficult mission and whether the optimum currency area criteria are met, the stabilization of employment and supply will be relatively easy.

### Data analysis

We start the analysis of the asymmetric shocks extent in the Euro zone<sup>297</sup> by observing the GDP growth rates and inflation rates in the monetary union member countries.

<sup>297</sup> Slovenia adopted euro on 01.01.2008 and Slovakia on 01.01.2009. We won't include the latter in the analysis.

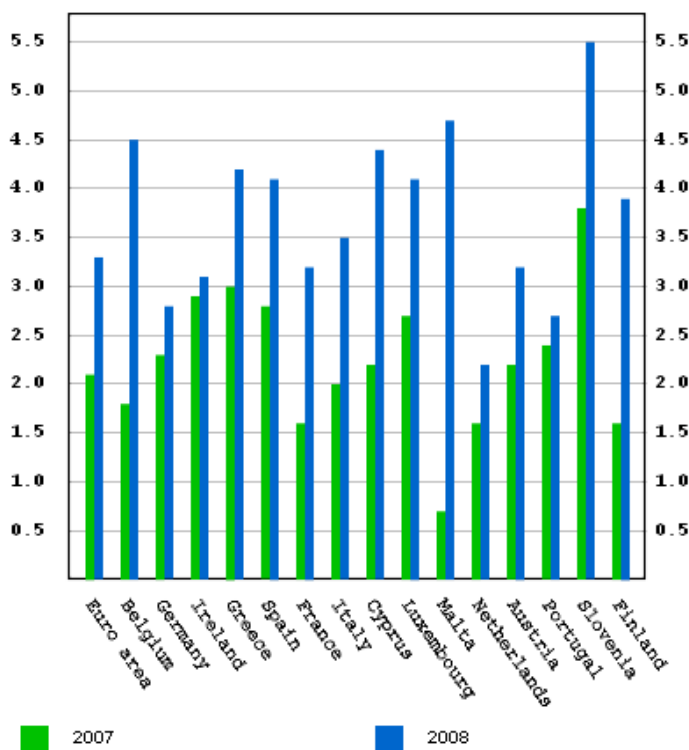


Source: Eurostat (<http://ec.europa.eu/eurostat>)

**Figure 2: Real GDP growth rate (%) in 2007 and 2008**

We note a very different evolution of the GDP growth rates in the Euro zone (Figure 2). Thus, growth rates were between 2 to 7% in 2007, while the Euro zone average was approximately 2.5%. For example, Ireland, Italy and Luxembourg faced a GDP decreasing, while in Cyprus and Slovenia GDP increased by more than 3%. In 2008, the growth rates reflected the international financial crisis. We note that countries such as Ireland, Italy and Malta had a GDP decrease, while the Euro zone as a whole had a GDP growth rate of less than 1%.

Thus, different (and sometimes negative) growth rates require the use of different economic policies. The ECB is unable to use monetary tools to support individual policies, since its policy is drawn for the whole Euro zone and not by the requirements of individual EMU countries.



Source: Eurostat (<http://ec.europa.eu/eurostat>)

**Figure 3: Inflation rate (%) in Euro zone in 2007 and 2008**

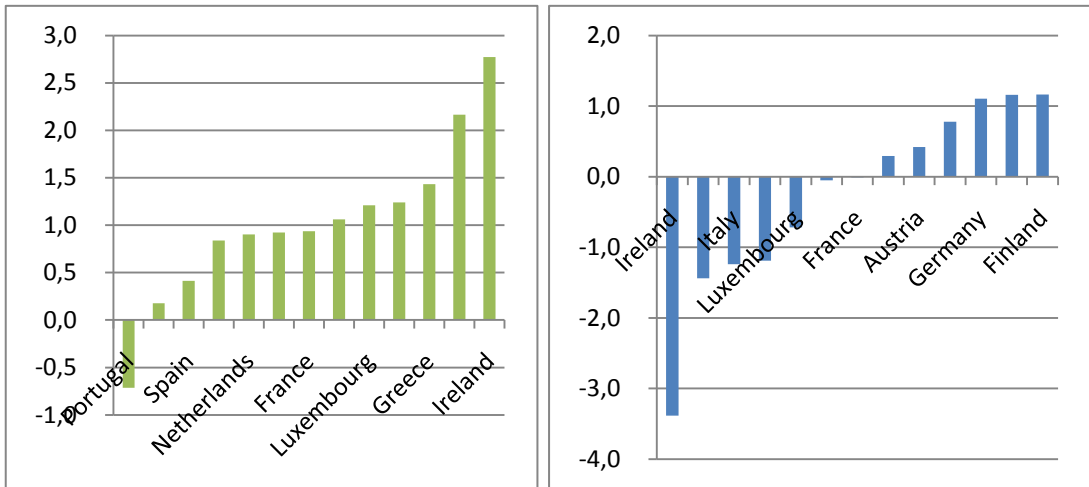
Figure 3 reveals various developments in the Euro zone countries in terms of inflation rate (calculated on the base of harmonized index of consumer goods prices). In 2007, inflation in France, Netherlands and Malta was below the Euro zone average (about 2%), while Slovenia and Ireland have experienced inflation rates above average (between 3 and 4%). In 2008, the sharp rise of the energy prices and the international financial crisis generated global price increases. However, we note the impossibility of ECB monetary policy to adapt to the realities of the individual EMU member countries.

Differences between growth rates and inflation rates in the Euro zone countries may partly be due to permanent asymmetric shocks. In this case, under optimal currency area theory, the solution is changing long-term relative prices<sup>298</sup>. The ECB monetary policy has minimal possibilities of influencing the asymmetric component of these shocks, but it can only soften the difficulties of adjustment for achieving long term equilibrium.

The asymmetric component of shocks and the stabilization problem may be emphasized by analyzing the Figure 4. It shows the output gap, i.e. the spread between the real GDP and the potential long run GDP of a country. This indicator, calculated by OECD, measures the *business cycle position of a country*.

298 De Grauwe, P., Economics of Monetary Union, 6th Edition, Oxford Univ. Press, 2005, p.36





Source: OECD Economic Outlook 84 Database

**Figure 4: Output gap in 2007 (left) and 2008 (right)**

We can observe that a number of countries such as Portugal, Spain and Italy confronted with a slow-down of their economies in 2007, while others, like Greece, Finland and Ireland had booming economies. The Euro zone as a whole<sup>299</sup> recorded a growth rate over its long run potential (expansion phase of the economic cycle). In 2008, the Euro zone economy had a GDP growth rate below its long run potential. In the latter year, the Euro zone economies slowed down due to global financial and economic crisis.

Hence, the growth and inflation rates of the Euro zone countries had important relative variations from country to country. Considering the inflation rates and the output gaps, it results a different optimum monetary policy interest rate for each country. For instance, a country like Ireland or Italy with a slowed down economy would require a monetary policy interest rate that stimulates the recovery. On the other hand, a higher monetary policy rate would be useful for Slovenia, a country with a booming economy and a higher inflation rate.

## Conclusions

The above analysis reveals that the inflation rate and the GDP growth rate had very different values for each Euro zone country compared to other countries and to the Euro zone as a whole. Additionally, the analysis shows that the position of the economic cycle of the Euro zone countries was different. These disparities magnified in 2008 as a result of increasing energy prices and of international financial crisis. Also, Balassa-Samuelson effect could have contributed to widening disparities in terms of inflation rates.

The reaction of the European Central Bank in 2007 and 2008 was a sharp decreasing of the monetary policy interest rates from a maximum of 4.25% in July 2008 to 1.25% in April 2009.

Given the evolution of inflation and GDP rates, if we were to apply the Taylor rule<sup>300</sup> for each EMU country, it would mean that the dispersion by countries of optimal monetary policy rates would increase. This observation could lead us to the conclusion that the ECB monetary policy rate loses its effectiveness and, consequently, should be offset by other measures of economic and social policy.

299 Excluding Cyprus, Malta and Slovenia, for which OECD hasn't published the output gaps and, respectively, Slovakia that adopted the euro at 01.01.2009.

300 Baldwin, R., Wyplosz, C., The Economics of European Integration, 2nd Edition, McGrawHill, 2006, p.393

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# COMMUNICATION AND TRANSPARENCY POLICIES PERSUADED BY THE CENTRAL BANKS IN ORDER TO REACH THE RESPONSABILITY REQUIREMENTS

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*Through the past decades, there has been a deep transformation in central bank's communication strategy then the previous ones when their intentions regarding the monetary policy and the following proceedings were shrouded in secrecy. These days, nearly all central banks announce publicly their intentions towards the monetary policies and they also provide constantly detailed information for the mass media about the periodic forecasts regarding their own monetary policies interest rates, projections that can facilitate the assembling of expectations on financial market and can also enhance the macroeconomic results. Today, transparency is not only an obligation for the central bank but it is also seen as a great asset to its policies. This paper aims to analyze the communication and monetary policy practiced by the central banks and how this facilitates the society's directive.*

*Keywords: the central bank's communication, monetary policy transparency, functional independence, credibility*

*The JEL classification: E52, E58*

## **1. Introduction**

After the '90s, central banks communication policies have undergone important transformations, reaching a general understanding between it selves, meaning that transparency does not come as an obligation but it is also a great asset to its policies. In the past, central banks fallowed different traditions when it came to the caginess towards the public. They kept secretly the intentions for the monetary policies and the measures that they wanted to apply. Nearly all central banks now announce publicly their monetary policy actions in the form of conferences, press briefings or transcripts. Furthermore, they explain their monetary policy intentions by announcing the inflation targets and they make publicly their economic projections and not to say the last, they also provide their periodic projections for their own monetary policy rates. We encounter here different practices, some central banks opted for the transmission of the interest rates for monetary policies, on determined periods, where others made publicly all their monetary policy intentions.

It is even more necessary to publish the projections for the monetary policy, with the increase in the economic agent's necessities to form prospects for the financial market and these can also improve the macroeconomic result.

The strategies for the monetary policy as well as the direct targeting of the inflation imply certain communication tasks. In this situation, the central bank has the maximum liberty to choose the way to adjust correspondently towards the desired rate. The communication and transparency represent freedom problems for the central bank and this has to evaluate the statement impact with regard to the monetary policy's efficiency, which has an important role related to the market's viewpoint, on medium and long term and which finally conducts to the strengthening of the monetary authority.

It is very important if the central bank's communication is understood as the unconditioned announcement for the future decisions on short term, and that the financial markets will reveal this expectations. Moreover, an important task is set for the central bank in the communication process, it is the responsibility to explain to the public the limits of its reign and the possibilities to complete the associated objectives. Today, the fundamental objective that the central bank has,

whether it is alone or in association with the other ones, in general it is to assure price stability and a low inflation level.

For a central bank to follow its primary and natural objective it presumes the existence of its functional independence being usually defined through a precise mandate and which it assures the use of the most adequate instruments specific to this institution. The functional independence for a central bank presumes the responsibility assumption towards the procedures followed to reach the primary objective (the obligation of „report“, liability which reinforces the credibility of an institution with independent rank).

Most of the central banks cases received independent status to fulfill their mandate. Consequently, the public communication does not represent the primary objective for central banks and transparency is not an objective in definition. Therefore, the central bank's responsibility is concentrated on fulfilling its mandate, which had been prearranged by the society by law, subordinating the tasks transparency and its final objectives. On this premises, a central bank has to be interested in demonstrating that it realizes a convincing communication policy so that the monetary policies should be efficient and in the end these should be a proof of its credibility.

## **2. Central Bank's approaches regarding transparency and communication**

There has been manifested a profound and rising interest for the central banks communication policies and for the effects of the bank's transparency regarding the market player's expectations. Many theoretical papers from the specialty<sup>301</sup> literature, on the subject of the effect made by the central banks transparency procedures have been focused more on the effects felt by the exogenous variables and those upon the economic projections and less on the projections for the monetary policy interest rate published by the central bank. Swanson believes that it is advisable to reach for a higher rate of transparency, because this reduces the uncertainty about the central bank's objectives and increases its responsibility grade.

Rudebusch and Willians (2006) consider that in the economic frame where economical agents detain imperfect information with regard to the course of the monetary policy, it would be necessary for the central bank to communicate the predictions for the interest rate, because these can form the expectations for the financial markets, having increased performance on a macroeconomic level.

Important authors from the advised literature mention frequently the fact that the central bank's forecasts on the topic of monetary policy interest rate imply the risk of a nonfunctioning market. These statements have been pointed out firstly asserting that informational efficiency can be reduced by the indicators related to the evolution of the monetary policy interest rate, by the fact that the financial markets give too much importance to the central bank's forecasts, not taking into consideration the uncertainty and the conditionality of it, and by their own analysis of the economical evolution. Secondly, there it is the possibility that the deviations from the monetary policies projections, which the market players trusted very much, can agitate the financial markets, this could make the decisional factors to follow a wrong calculated path. This is the reason why the clues with regard to the future monetary policy must always be seen as conditioned arguments, with sufficient clarity. The more direct the "statement" and the more simplified the used code is, the more difficult will be to explain ex ante the conditioning of it, Issing(2005)<sup>302</sup>.

Moreover, Richhild Moessner and William Nelson(2008) have evaluated the two risks for the functioning of the financial markets in USA, Euro Zone and New Zealand, in the light of the

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301 Swanson, Eric, „Federal Reserve transparency and financial market forecasts of short – term interest rates“, Finance and Economics Discussion Series, No 2004-6, 2004.

302 Issing, O, „Communication, transparency, accountability - Monetary policy in the twenty – first century“, Federal Reserve Bank of St.Louis Review, No: 87(2, Part 1), 2005, p. 70.

central bank's communication strategy. The results of the this analysis reveal the fact that the forecasts about the monetary policy interest rates influence the practiced prices on the market, but there have not been found records that will confirm the fact that forecasts change the market performance.

There exists the possibility that the regular publishing of the forecasts will have different implications towards the occasional publishing of it. The central banks that periodically publish forecasts for the interest rates do not take a tactical decision each time, this having said the forecasts elaborated by the central banks from the first category can seem more unconditioned arrangements than the predictions created by the central banks from the second category.

### **3. The impact of monetary policy over the healthiness of business environment**

The monetary policy does not always offer (give) immediate satisfaction for the business environment, it can even be in contradiction with this on short term, but on long and medium term, it does not exclude a crossroads of their interests. This explains the fact that, sometimes, the monetary policy, in the National Bank of Romania (NBR) case is identified as „reserved”, from the general accessibility and understanding point of view, and sometimes „excessively prudent”, without carrying about its real grade of restrictiveness. The two characteristics can sometimes motivate the attitude of the commercial agents towards appreciating on short term that the monetary policy can cause looses for the interest channel and also for the currency rate<sup>303</sup>.

These observations conduct to the idea that the business environment has started to realize the main objective for the NBR, which is the price stability, as an essential condition for the business stability through the stability of the financial system.

Today, the effects of the financial and economic crisis are becoming more and more present through the export decreasing and also the external finance help, all in an increasing volatility on the foreign currency market correlated with the regional tendencies and with the foreign investor's missing appetite, conditions NBR to maintain a detailed supervision over the internal evolution of the global economic environment, all this to reach the desired objectives. This process can be seen as an inconvenience for the commercial agents and can encourage their critic interest regarding the monetary policy. All in all, we can reckon the fact that the economic agents have improved their perception over the monetary policy, meaning that this helps and does not deform the business environment. This thing could conduct in the end to the achievement of a strict partnership which is needed for the central bank and the main actors of the business environment to both assume their mutual responsibilities.

### **4. Instruments and channels used in the communicational practice of national banks**

The promotion of a coherent informational policy for the public is essential for a central bank, because this fallows two elements: to consolidate the credibility and also the transparency of the institution's actions. Both contribute to the efficiency, effectiveness and credibility of the national bank's monetary policy.

The concept of periodic, detailed and in real time explanation, in some cases for some decisions and evaluations of monetary policy constitute an unique approach towards an open perspective and transparency at the communication level of the central banks. Usually, the central banks must address to heterogeneous groups, such as mass media, public authorities, academic communities, financial experts and large public which own different levels of knowledge in the financial-economic field. In this direction, central banks usually use a large variety of communication tools starting with short press releases after important monetary decisions, at the vote publishing; from

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303 The economic agent's performance can be influenced through the access costs for financial support for the investments and production, as well as through the economic and financial results outcomed from the currency course fluctuation of the national currency, as an effect of a flexible currency policy and/ or of market volatility. The effects of the exchange course upon the active and passive of the commercial agents are usually of wealth and balance.

monthly transcripts to quarterly or annual reports as well as organizing interviews, speeches and other relevant contributions from the central bank's representatives.

The Central European Bank's decisions are explained during a press conference organized immediately after it has been approved by the Governor's Council, but the press hasn't got access to the legal documents of the council's meetings and also not to the information related to the member's vote. Moreover, the monthly conference of the president of the BCE offers an comprehensive abstract upon the monetary policy strategy over the Euro Zone. The content of that abstract can be researched on the BCE's website.

During the NBR's practical communication, one's the „inflation targeting” is implemented there have also been introduced new public communication instruments and through it has been followed the improvement of the monetary policy transparency; the most important ones are: The Inflation Report, which represents the main document produced by the Administrative Board (CA), being elaborated with quarterly periodicity starting from august 2005 and press releases<sup>304</sup> which represent the result of the evaluation for the current situation and also the decision of maintaining/ modifying the parliamentary parameters. Starting from November 2007 and until present NBR makes publicly its monetary policy actions utilizing a certain communication style, especially regarding the press release after the monetary policy meeting. In this way, if the monetary policy becomes more challenging, there are used certain expressions such as: *vigilant supervision, determined management, supplementary prudential measures*, and in the situation of a continuous monetary policy there are used certain expressions such as: *attentive supervision, particularized administration* so that the message will be best understood by the market players.

NBR publishes a series of periodic studies and reports such as: The Annual Report, and starting from 2006, The Report on financial stability, Monthly Report and a Circumstance Report. From 1995, numerous studies realized by NBR specialists and others from the academic background are published in Study Notebooks. Furthermore, to mark the respect for the national history and for the people that have achieved it, at the level of the Economic Studies Directive there have been realized a few papers consecrated to some memorable personalities: Victor Slăvescu, Virgil Madgearu, Eugeniu Carada, Mitiță Constantinescu, Ioan G. Bibicescu and Radu Dudescu, which have been published in *Restitutio*. There are published annually the NBR's Audited Financial Situations and also the Financial National Accounts<sup>305</sup>.

The organization of interviews, radio and TV debates with the BCE representatives represents another modality of communication with the large public, as well as the development of seminars and conferences organized in collaboration with the financial institutions from Romania or from outside, which usually have as target public, the mass media representatives, in the scope of familiarizing them with certain concepts and with the evolution of the economic phenomena on an international perspective.

The observations presented before this, conduct to the idea that NBR has made special efforts in the direction of adapting its communication practice to requests and levels of the European institutions communicational environment.

## 5. Conclusions

Considering as the fundament of this paper the elements that have been presented, we can conclude that over the past decades the communicational practices of the central banks have changed dramatically, evolving in the sense of diversification of the techniques and tools used, furthermore concentrating on reaching the final target for the directive that had been assumed

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304 The NBR's press releases are usually discharged after each meeting of the CA, which take place at least once a month, and starting from 2006 these are preannounced.

305 To realize some correct, detailed and available macroeconomic and financial statistics in real time, at the EU level, there has been elaborated The European System of the National and Regional Accounts (SEC'95) which imposes an uniform architecture of statistical following of the economies belonging to the member states.

through the law. In this way, the central bank has to be interested and to demonstrate that it realizes a convincing communicational policy so that the monetary policies would be efficient and would have an essential role for the market's expectations on medium and long term. The central bank must provide clear and simple messages and in the same time must show that the monetary policy decisions are complex and that the operational environment is uncertain and changeable, especially during these days when the effects of the financial and economic crisis are been felt more and more at a global scale.

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# IMPACT OF FINANCIAL CRISIS UPON THE ROMANIAN CAPITAL MARKET AND PROPOSED MEASURES FOR ITS RELAUNCHING

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*Abstract: Having in consideration that the entire world has changed itself in a globalized economy, characterized by a more and more integrated and connected financial system, it becomes pretty difficult that a financial crisis from a certain economy not to be spread in others through the contagion effect, with more important effects upon the emergent countries, like Romania. In this paper, first of all, we have proposed analysing the impact of financial crisis upon the financing potential of the capital market in this difficult period. Moreover, there are considered some measures of relaunching the Romanian capital market for the further period.*

*Key words: capital market, financial crisis, financing alternatives*

## **1. Introduction**

Theoretically, the creation of a global, competition and functional capital market, must foster the efficiency of the financial system, allowing a reduction in the cost of capital and a better allocation of the capital between different countries and different sectors of activity, from which it can result a more rapidly growth of the global economy. After decades of changes and moves of managed capital, was being thought that a solution has been found: removal of the administrative barriers on the markets and of the impediments that brake the free competition among entities that operate on the market, owners of financial resources and those with need of financial resources meeting easier in this way and with reduced cost ( through deregulation); developing more and more the direct financing rather than the indirect one (through desintermediation); creation of connections and common departments between money markets and capital markets. This triple revolution has allowed companies worldwide to finance better their investment projects.

Globalization has not brought though just positive effects upon the financial system and upon the economy. Unfortunately, it has made also possible the rapidly transmission of volatility on European and global level, given the tight connection between different international financial centres, realized through multiple electronical methods of transport of information in real time, as well as by the previous mentioned defragmenting of the international financial market, through the contagion effect.

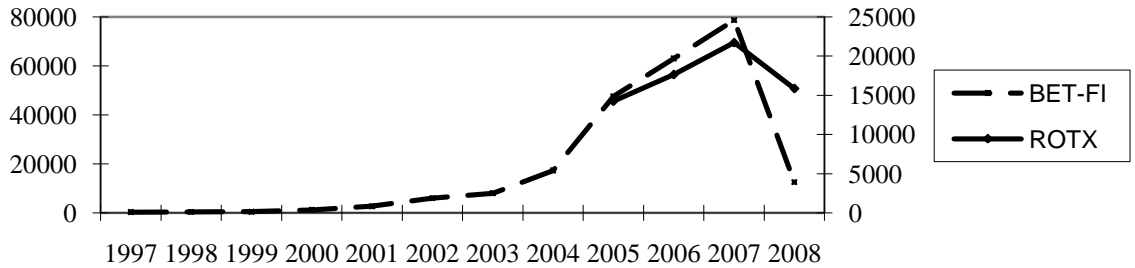
An adequate example for the contagion of the financial markets, in the context of the current financial crisis is represented by the collapse of the emergent capital markets, like Bucharest Stock Exchange (BSE), that doesn't make an exemption. The most important effects of the financial crisis upon BSE could be easily noticed in 2008 and are described in detail in the following paragraph.

## **2. Effects of financial crisis upon the Romanian capital market**

The year 2008 has represented for BSE and for all the participants on the Romanian capital market the most complicated year in its entire history of development. As we can see in the figures below (Figure 1, Figure 2), after a decade in which the main indexes of BSE have described an upward trend, the trend has been reversed for the first time, and the liquidity has fallen dramatically on the capital market. BET-FI index was the most exposed one to the

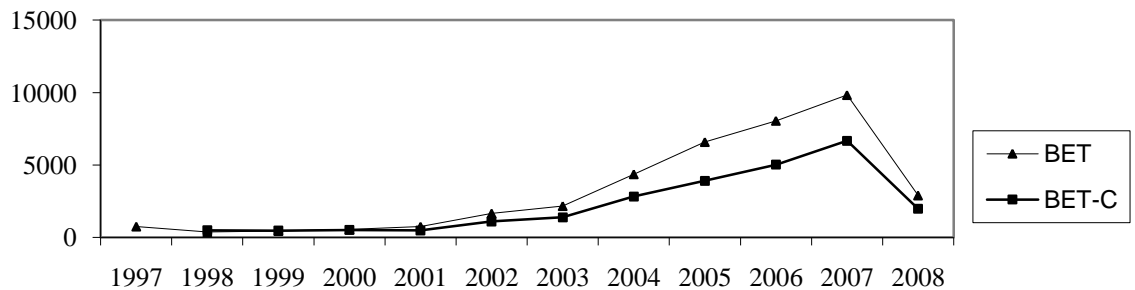


corrections registered on the capital market in 2008, dropping with 84,05 % at the end of the year 2008.



**Figure 1 – Dynamics of BET-FI and ROTX indexes (points)**  
 Source: realized by authors on the dates supplied by BSE

The year 2008 has influenced in a negative way also the values of BET and BET-C indexes, these fall as much as 70,47 % and 70,34 % respectively.



**Figure 2 – Dynamics of BET and BET-C indexes (points)**  
 Source: realized by authors on the dates supplied by BSE

The same phenomena of correlation with the developed capital markets, of sensitivity at external factors that has grown during the last years made the local capital market to be strongly influenced by the existing international turbulences, the current financial crisis roused important changes in the perception of the investors upon the market dynamics and upon the perspectives of the real economy and financial system. With the background of a reduced liquidity of the local capital market, unable to be compared with the one registered on developed capital markets (European, American or Asian), the contagion effect has affected in such a measure the correlation between the BSE indexes and the ones of international capital markets, that this correlation caused further an extreme volatility on the market. Moreover, the excessive volatility had lead to unrevealing the buying orders in the range +/-15% in some trade sessions from the 3rd trimester of the year 2008, that forced the managing authorities to close the trade sessions for the first time in the BSE history. The indexes have experienced one of the highest corrections on the European capital markets, of about 70 % (Figure 3).

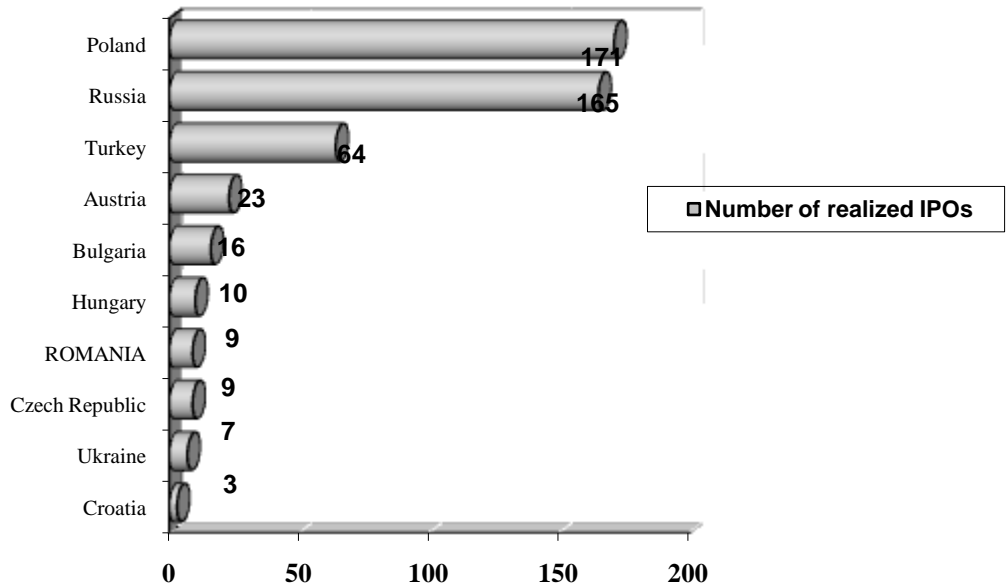


**Figure 3 – Dynamics of the main indexes in 2008**

Source: taken over kmarket.ro

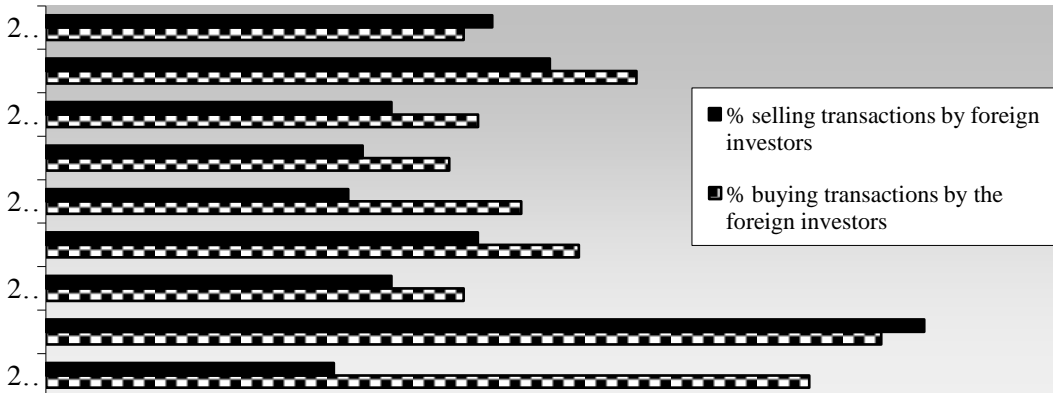
The financing potential of the capital market in the context of the current financial crisis it is strongly affected. The external financing alternatives for the companies, such as issuing initial public offers on the market or secondary issuing by the already listed companies represents a difficult process, given the fact that on a downward trend of the stock market, the buying price of the shares by the investors has an increased risk of getting under the market price in a short period of time. Nevertheless, neither before the financial crisis occur, the initial public offers were not numerous. But the years 2008 and 2009 were being announced as the first years when the process of financing the companies through the capital market could finally get the international recognized importance.

As far as concerns the number of IPOs realized at the level of Central and Eastern Europe, Romania did not rank itself in a very favourable position. As we can see in the figure below, the Romanian capital market ranked 7 out of 10, with the same number of IPOs as the Czech Republic and being get ahead by Bulgaria, Russia and Poland, among others:



**Figure 4 – Number of IPOs registered in the period 2003-2007**  
 Source: Raiffeisen Investment, Mergers and Acquisition Market

Unfortunately, the international financial crisis has caused at the level of the Romanian capital market, still an emergent market, massive withdrawals of capital by investors, potential bidders for IPOs. For the first time in a long period (2002-2008), the percent of the selling transactions was higher than the buying transactions one, inevitable consequence of foreign investors withdrawal out of emergent markets in the context of international financial crisis. More precisely, the buying transactions from foreign investors represented only 29% out of the total in 2008 (less the aggregated accounts), to 41% in 2007, while the selling transactions realized by foreign investors were 31% out of the total in 2008 (less the aggregated accounts), to 35% in 2007.



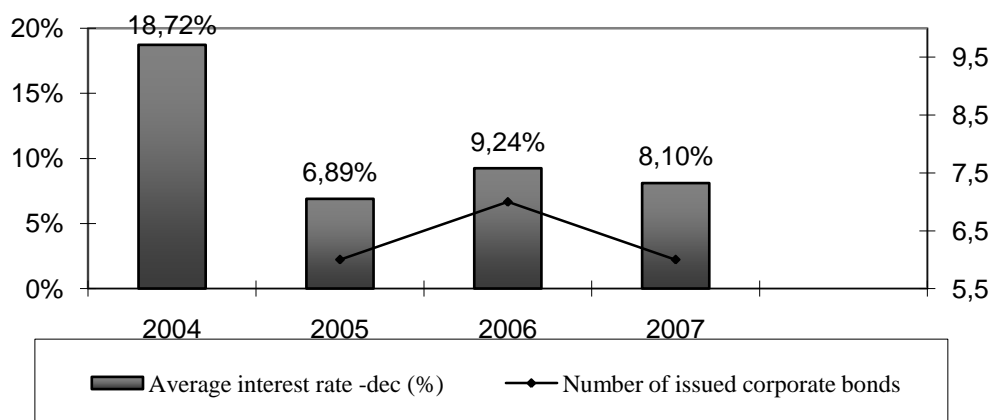
**Figure 5 – Percent of buying and selling transactions realized by foreign investors in total transactions realized on BSE in the period 2000-2008 (%)**  
 Source: realized by authors by dates supplied by Annual Reports of BSE

As far as concerns the other alternative of financing through the means of capital market, financing through bond issuing, at least on a theoretical level, we can state that its role should

increase in difficult periods, like the current crisis, given the reorientation of investors towards fixed income financial instruments, with lower risks. In the same time, the more difficult access to bank loans for companies in this period and the increased cost of bank capital can be considered a reason more for fostering the corporate bond market. On a developed capital market, the fixed income instruments play a significant role in the individual and institutional investors' portfolio. This method of financing presents numerous advantages for the issuers, among them the most important ones being a faster access to financing and an increased elasticity for their global indebtedness.

Unfortunately, the domestic capital market is characterized by a low level of development of this market. There is a low diversity of these instruments (there is a lack of asset backed securities and also mortgage bonds) and also a reduced liquidity on the market and a lack of initiative from the nonfinancial companies for choosing this type of financing. Thus, these facts leave the potential of development of the domestic bond market just on a theoretical level.

Through the BSE system, there were being traded at the end of the year 2007 six corporate bond issuings, (in comparison with seven at the end of the year 2005), and the average interest rate reached in the year 2007 a value of 8,10 %, an yield superior to the bonification for the existing deposits on the money market at the level of the year 2007.



**Figure 6 – Yield of corporate bonds and the number of transactioned corporate bonds in the period 2004-2007**

Source: realized by authors by dates supplied by Annual Reports of BSE

There can be easily noticed from the above figure that using the bond issuing for financing the companies' activity is a rare measure taken by the Romanian entities, mainly because of the low diversity of instruments on this market and because of the specificity of the domestic capital market that is not focused on fixed income instruments, with low risk.

The financial crisis period is disadvantaging for sure the domestic capital market, putting more barriers to equity issuing or bond issuing and given a certain incentive to private equity funds to take actions. These funds select unlisted companies, acquiring the majority of the share package, or a certain volume of shares, making sure that they will be involved in the management of those companies, and that they could sell what they have bought at an increased price in the future (this period varies among 3 and 5 years). In the context of adversity that exist currently on the capital markets, and of limitation of bank loans, these being very expensive, the private equity funds represent an attractive alternative for the companies.

### 3. Proposed measures for relaunching the domestic capital market

In our opinion, the financial and economical context will remain a complicated one during the next period of time, influencing upon the Romanian capital market's activity. This period of steep

decreasing on the market will continue for a while, and afterwards it is possible to be followed by a period with an unclear trend, with higher or lower increases, on the background of a very reduced liquidity. This period can take from few months to several years. *On this whole period, there will be a lot of fake signals coming from the market: on one hand, positive signals, that will give hope to the investors, but that will prove to be just breaks of the downward trend, and on the other hand, negative signals, descending periods, that will create confusion among investors. Finally, will start again the upward trend, once with the restructuring of the economy and fully maturization of the domestic capital market.*

We must understand though that the upward trend is possible to come again only if some conditions are met. These conditions refer to some measures that must be taken in order to relaunch the local capital market. Maybe the most important one, having in consideration the restricted access to bank loans, is related to promoting the bond market. The secondary market of fixed income instruments on BSE shows an increasing interest for this type of financial instruments and the offer must suit the demand. For supporting this initiative, in its essence favorable to the development of capital market, there must be found some measures to reduce in a significant way the costs related to issuing such instruments, so that local companies could be attracted to issue bonds.

The problem of *reducing the operational costs* on the capital market is the first measure that can be taken in consideration, with the aim of gradually increasing the volume of trade on the capital market. For the year 2009, it was planned by BSE a reduction with 10% of the transactional tariffs, in order to align to the other tariffs practiced on other regional capital markets. It is important though that the small tariff practice remains an objective for the following years, having in consideration an even more important reduction, in order for BSE to become the most attractive capital market from the region, from this point of view.

Other important measures can be of *fiscal nature*. The state has approved already the suspension of the computation and dole of the tax on the income achieved by trading on the capital market in 2009 (the programme was completed by CNVM through the suspension of the fee collected by Commission from the trade realized on BSE in the period october/december 2008). This measure could be completed in the future not by totally suspension of the income from trading on BSE, but by applying a reduced tax, of 1 % for example, for a longer period of time, of 2/3 years, or even more, until the domestic capital market becomes more mature.

**Not less important is creating an adequate legal background, through the elaboration of some clear, transparent and fair rules and norms for mobilizing, attracting and allocating in an efficient way the financial resources. There must be taken a series of legislative measures that must ensure the growing of protection of minority shareholders, the clarification of delisting procedures as well as the obligations of majority shareholders.** Extremely important is as well creating *an adequate operational background*, that allow the creation of a virtual platform meant to connect foreign investors and BSE and the Romanian investors with the other international capital markets.

One of the major problems to which the local capital market is confronting every day is the one of reduced liquidity, in comparison with the other developed capital markets from the region. Therefore, the objective of development of local capital market can only be achieved by taking *some measures meant to foster the market liquidity*. Such measures can have as goal finalizing the process of privatization of the private domain of the state through the means of capital market, supporting the most representative local companies to get listed on the capital market for getting non-inflationary resources. Not at least, listing on BSE at least 10 % of the main 100 state companies and selling at least 20 % of their shares through public selling offer on BSE would certainly increase the liquidity.

Finally, the BSE must continue and intensify the series of free trainings and classes, meant to increase the competences and skills about capital markets among investors and potential issuers.

Only by resorting to this package of complex measures, the Romanian capital market will have the opportunity of reaching in the shortest period of time an upward trend.

#### **4. Conclusions**

To conclude with, we consider that the financing potential of the capital market, pretty limited before 2008, is very limited nowadays due to the current financial crisis. There can be taken though a series of measures for supporting the domestic capital market, limiting the effects of the financial crisis, especially in what concerns the bond market, some of these measures being proposed in this paper. These measures can be carried out by reducing the operational costs on the domestic capital market, fiscal incentives for the investors, creating a legal and more operational background necessary for the development of the capital market, as well as some measures meant to make aware the investors and potential issuers of the benefits of financing through the capital market.

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## THE CAPITAL FLOWS IMPACT ON THE STABILITY OF THE FINANCIAL SYSTEMS

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*Capital account liberalization represents a frequent decision taken by the emergent countries in their integration process to the global economy. For the European Union members states, this is a necessary measure. If the capital flows assures the necessary reserves for the development of economical and financial sectors of these states, it could occur negative effects, also (to see the financial crises of the '90). For this reason, it requires some conditions, so that the potential negative impact of these capital flows on financial stability to be lower. On one hand, the paper presents how take place the transsmition of the financial vulnerabilities through the intermedium of the Central and Eastern Europe's capital flows, and on the other hand, presents what is the report between financial stability and prices stability, in the context of capital flows liberalization.*

*Keywords: financial stability, capital flows, transsmition channels of vulnerabilities, Central Bank.*

*JEL Code: E58, F21, F36.*

In the context of financial globalization, the permanent preoccupation of all central banks is represented by the assurance of financial stability.

There are several definitions, but there is not yet a common point of view regarding the content of the concept "financial stability". The Bank of England used this term for the first time in 1994, to appoint those objectives which didn't represent prices stability or the functioning of financial system efficeince.

*Romania's National Bank considers that the notion of "financial stability doesn't benefit, for the moment, neither by an acknowledged definition, nor by a model or a standard analytic framework of evaluation. The financial stability can be observed in case no systematic crisis is manifested. At the same time, one can appreciate whether a financial system is stable when this is able to assign efficient economic resources (spatial and temporal), to evaluate and manage adequately the financial risks and to autocorrect when it is affected by exogenous impacts. That is, the financial system is stable when it becomes able to exercise the intermediation function, facilitating thus the performances of an economy and to absorb the impacts by correcting the imbalances appearing as a result of some adverse evolutions". (www.bnr.ro).*

The capital flows liberalization contributed to the increase of financial instability in the world, on the background of the financial markets development with asymmetric information, leading to the "herd behaviour", to speculations and multiple balances.

If the external savings (the entrances of foreign capitals) don't eliminate completely the internal savings, the process is favourable for the country receiving the capital: new work places are created; the local work force productivity grows by the capital usage and by the learning of some superior techniques of production and management; the state collects more taxes (or incomes from privatization) and is able to offer more public goods (infrastructure, health and education services); on the whole, the increase is sustained and poverty is controlled. Moreover, the opening of capital account would impose more discipline on the internal capital market through

the appearance of some reference levels for different prices and through the increase of competition in the bank area.

Beside the bestowed advantages, the capital entrances may represent a serious threat for the macroeconomic stability and the external competitiveness, generating an overheating of the economy in case its volume exceeds its capacity to absorb them.

The main channels leading to the overheating of the emergent economies are: the *credit channel* and the *exchange channel*.

The **credit channel** must benefit of a major importance, in the conditions in which the banks occupy a dominant position in the financial system and the accessible capital volume, after the elimination of restrictions concerning the capital account, is much higher. According to Backé, Égert și Zumer (2006), the banks own 85% of all the financial assets, while the capital markets have a more reduced importance.

The quick increase of the credit represents a risk on the financial stability because: it stimulates the generating set of demand, if it grows much more than the production; leading thus to inflationist pressures; encourage the import, contributing to the increase of deficit of the current account; it proliferates the exchange risk and it increases the credit risk.

The consequences of a boom credit are often associated to the macroeconomic and financial crises, as a result of the macroeconomic imbalances and the worsening of financial situation in the bank area. G. Kaminsky, S. Lizondo și C. Reinhart (2007) shows that over 80% of the published papers have the conclusion that credit growth is an important factor that contributes to the banking/monetary crisis. M. Goldstein (2001) and an important study of IMF reveals the vulnerabilities of the credit boom for the countries with an emergent or in transition economy, too. These papers reveal the fact that, a strong credit increase determine almost automatically a fast growth of investments, a decrease of valutory reserves, a real appreciation of the money and finally, a decrease of production. So, the credit boom almost always determine banking and/or monetary crisis.

The macroeconomic disequilibrium can decrease the economic activity: the payment capacity of the debtor decrease, the volum of the bad debts increase, there is a bigger vulnerability of the credit channel and exchange channel. When the financial instability appears into a vulnerable system, the macroeconomical disequilibrium can be bigger, because the credit institutions and the other financial institutions decrease the lending activity and appears the situation when an economic agent cannot finance anymore their activity.

The increase volume of the credits determine the overdemand of the credit risk management system, so, the quality of the credit portfolio decrease.

Another risk factor is caused by the practices of currency credit lending, so that there is a decrease of currency risk, liquidity risk, insolvability risk, because these credits are mainly financed through other types of resources (not only through the deposits attracted from the clients), especially through the external credit lines. In this situation, the unexpected decrease of the exchange rate agravate more the vulnerability of the banking system.

That's why the authorities must maintain a viable balance between the assurance of macroeconomic and financial stability and the expansion of the credit that contributes to the economic increase and the efficiency of resources allocation.

The decisions to be taken, must base on the economic objectives of the respective country and to take into account the regime of the exchange value, the institutional constraints, as well as the determinatives and the structure of the capital entrances. On many occasions, the decisions base on incomplete information, especially in the incipient stage of capital inflows when it is still difficult to evaluate the nature of these entrances and whether these are temporary or permanent.

The identification of some viable solutions which can temper the quick credit increase is difficult. The increase of the interest rate in order to limit the inflationist pressures: (i) could encourage even more the credit in foreign currency (inclusively, due to the possible effect of appreciation of



the national currency) and (ii) could affect those who have already a service of high debt. Another solution could arise from the credit institutions, that is the rhythm of the credit increase must be in accordance with the capacity of managing this phenomenon (inclusively, according to the results of stress-testing) and the present and future level of the capital and of the commissions.

The **exchange channel** occupies an important role in the transmission of monetary policy. The capital inflows increase the efficiency of this channel, assuring a low rate of inflation in an extremely short period of time, both directly, through the lower of import prices, and indirectly, through the effects on the net exports, and implicitly, on the generating set of demand. However, though it is favourable on short term, the excessive usage of this mechanism of transmission risks to become a double-edged weapon, because it may aggravate the external imbalances and may increase the vulnerability to the capital flows reversibility which may take place sometimes through the simple changing of the investors feelings. Thus, there may exist situations in which the lower of interest rates may face the sudden appreciation of the exchange rate, but such a monetary policy act would be incompatible with the inflation target (Isărescu 2008).

In the conditions of some massive entrances of capital, the currency will continue to appreciate and the external competition of the economy will erode. The imports will increase in a quicker rhythm than the exports, contributing thus to the expansion of the generating set of demand. The current account deficit may reach unsustainable levels, as a reflection of the generating set of demand. In case these evolutions are not counteracted in time through the implementation of some reinforcing measures of fiscal policies and incomes, the investors feelings may modify which will determine the retreat of foreign capital. There has been observed that the scale of the capital exits may exceed the authorities capacity to protect the value of national currency and may be equivalent to a sudden correction in the sense of depreciation, respectively exchange crisis.

In the context of a dis-inflationist process and of an economic increase, there cannot exist at the same time free capital movements, a fixed rate of exchange and an independent monetary policy. This is what in literature is called the triangle of incompatibilities.

If the reduction of the inflation is desired and a fixed rate of exchange is adopted, the monetary policy is efficient only if the capital movements are limited. Otherwise, the entrances and exits of capital undermine the effort of liquidities control and impede the usage of rate of exchange as an instrument of monetary policy. (Cerna et al., 2008).

If a fixed rate of exchange is adopted and the capital movements are liberalized, then one must give up to the monetary policy autonomy (as it happens, for example, in the case of a small country that ties its national currency to the currency of another country).

If it is chosen a fluctuating rate of exchange, then the monetary policy autonomy and a high level of capital movement liberalization can be maintained.

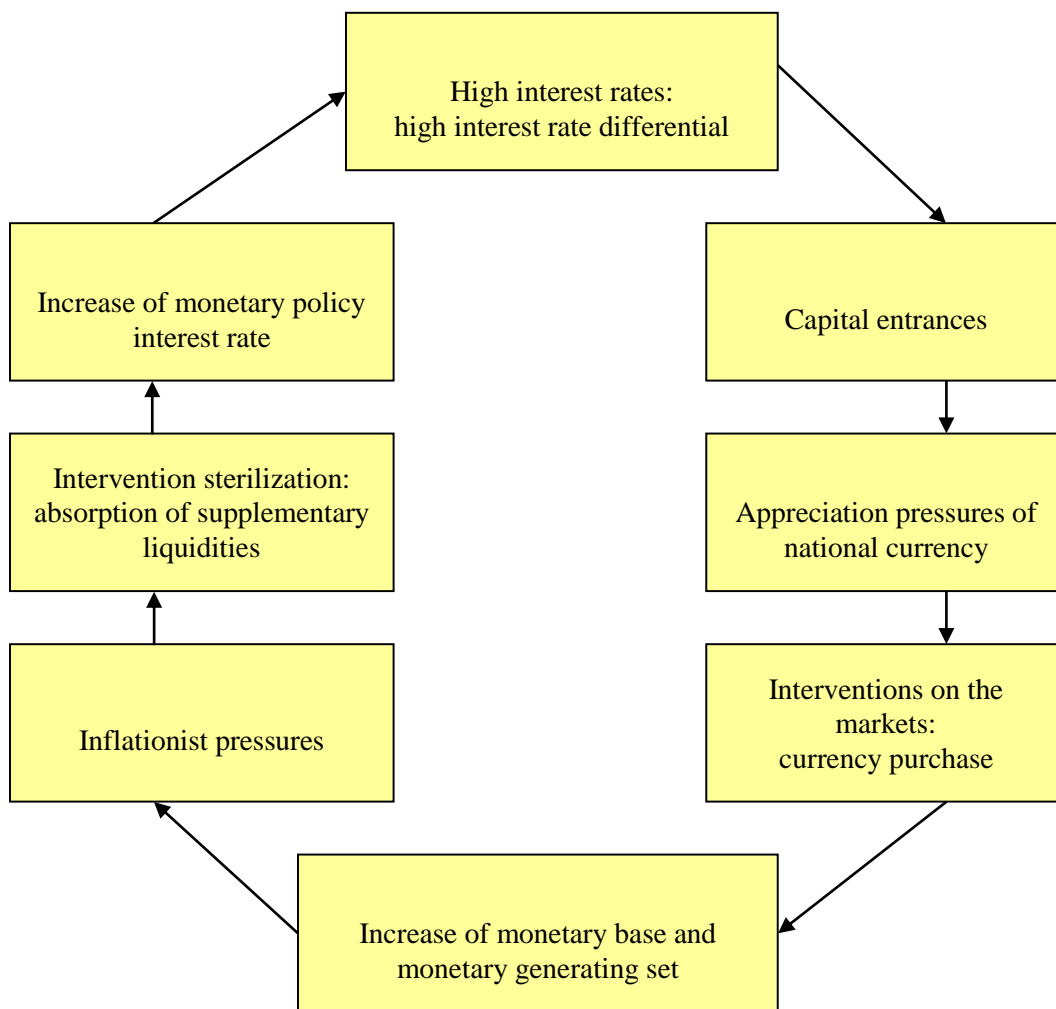
Different schemes of these three characteristics dominated the monetary arrangements of different areas in a certain period of time. In the monetary system based on the gold standard, in the 19th century, most of the countries have chosen the benefits of capital free movement and the stability of fixed relation between the currency and gold. In the Bretton Woods system, created at the end of the Second World War, several countries gave up to the capital mobility, in order to obtain both a regime of fixed rate of exchange and an independent monetary policy. In the present, at least in the case of the majority of industrial regions, has been chosen a regime which gives up to the fixed rate of exchange in favour of the two other characteristics.

In the ex-communist countries, it is specific the “Tošovský dilemma”. The continuous appreciation in real terms of the national currencies of the countries in transition from Central and Eastern Europe may attract – if the internal interest rates are maintained at a relatively low level – excessive capital entrances which follows the valuation of interest rate differential. On the other hand, the authorities must promote the sufficiently high interest rates, in order to assure a

balance between the internal savings and the investments. In these conditions, the dilemma of the monetary policy consists of the fact that a too high or a too low level of interest rate determine the inflation increase and the increase of the deficit of the current account.

"The vicious circle" of the monetary policy may be represented in the following way:

**Figure no. 1: "The vicious circle" of the monetary policy**

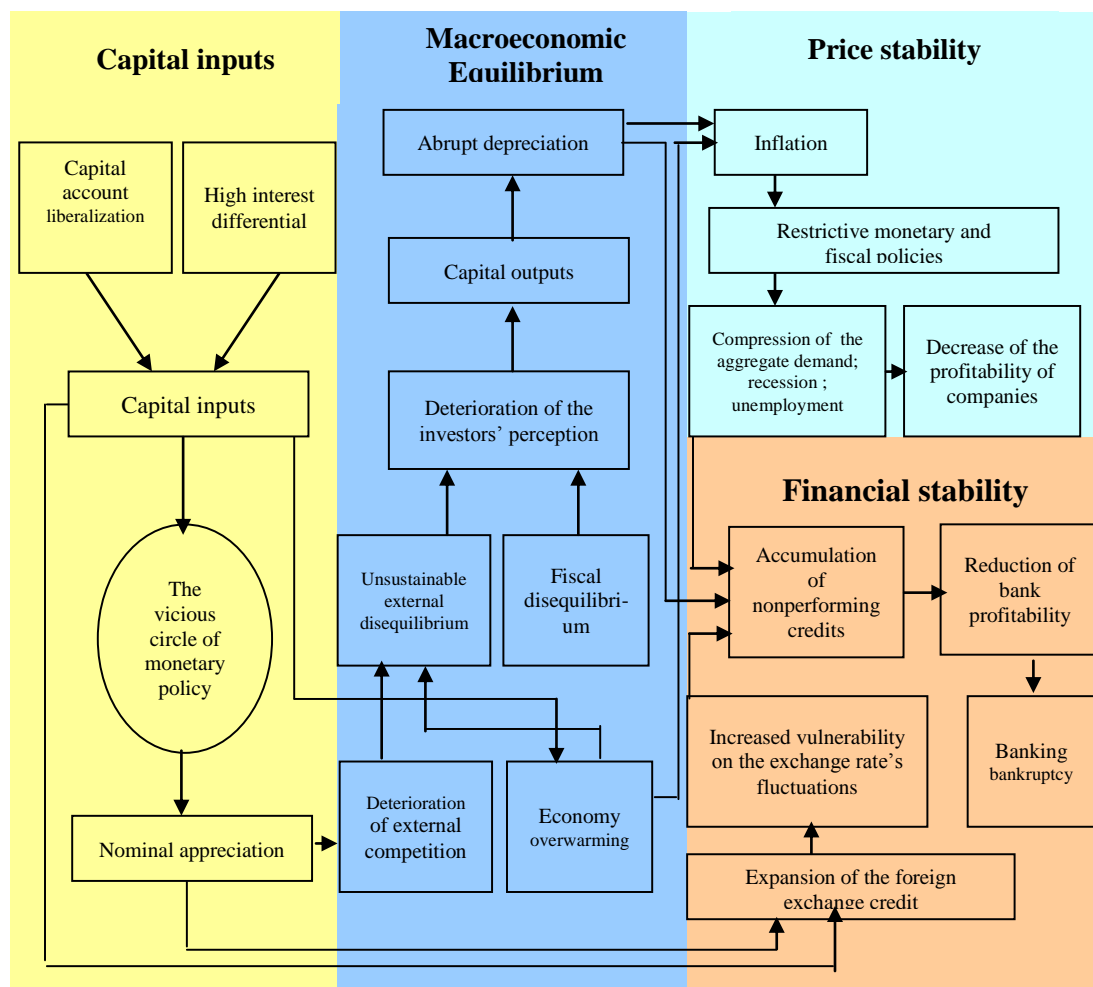


Source: Cerna coord., 2008;

In the context of economic globalization, the opening of contemporary economies generates a potential conflict between the prices stability and the financial stability. The masive entrances of capital aggravate the vulnerabilities and the existent macroeconomic imbalances in the host economies, existing the risk to generate both inflation and financial instability.

The intrance of capital flows can generate vulnerabilities for the price stability and the financial stability, as in this figure:

**Figure no. 2: The vulnerabilities for the price stability and the financial stability induced by the capital flows**



Source: Isărescu (2006);

In the conditions of some massive entrances of capital, the currency will continue to appreciate and the external competition of the economy will erode. The imports will increase in a quicker rhythm than the exports, contributing thus to the expansion of the generating set of demand. The current account deficit may reach unsustainable levels, as a reflection of the generating set of demand. In case these evolutions are not counteracted in time through the implementation of some reinforcing measures of fiscal policies and incomes, the investors feelings may modify, which will determine the retreat of foreign capital. There has been observed that the scale of the capital exits may exceed the authorities capacity to protect the value of national currency and may be equivalent to a sudden correction in the sense of depreciation, respectively exchange crisis.

It is evident the way in which the sudden depreciation influences the prices stability – the effect is both direct, through the import prices, and indirect, through the inflationist expectations. It is similarly evident the reaction of monetary policy, the major objective of which represents the prices stability. A more restrictive behavior of monetary policy will lead to a compression of the generating set of demand, generating economic recession and unemployment.

The financial stability may also be affected by exchange crisis, and the restrictive policies meant to rebuild the prices stability could have a contrary effect. In case the public opinion perceives the appreciation of the national currency as a phenomenon of long term, the preference for borrow in foreign currency becomes unavoidable and the monetary policy would not be anymore so efficient. However, a sudden correction in the sense of depreciation could lead to a deterioration of the balance situation in the households and in the companies, whose fortune will diminish.

The financial area will also be affected because of the constraints in the real area. A great part of the bank loan would become nonperforming in the context of non-execution of due payments by the economic agencies. The problems regarding the maturity noncorrelation in the bank balances would be added to the major balance noncorrelations, already existing, from the perspective of the designation of the incomes and the due payments, risking to transform all generalized financial crisis.

Despite the vulnerability caused by the capital flows liberalization, we hope that the advantages conferred by them will have priority and the final effect will be a favorable one.

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## BANK RISKS AND PERFORMANCE

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*The quality of warranties is appreciated based on the extent to which these warranties can cover the credit, as well as on their nature and legal character. Depending on the nature of the warranties, each bank takes into account their own percentages in appreciating the value of the warranties, according to their own crediting rules. This has resulted in a distortion of the value of the goods used as warranty, as each bank, depending on its own crediting policy, would under-valuate or over-valuate the value of the spinoffs.*

*Keywords: financial performances, bank risk, standards, debt service.*

*Cod JEL: G*

Following the assessment of the financial performances of the customers, the latter are included in several categories that don't always remain the same; they change depending on the evolution of the economic environment, the status of the economy, and the customers' situation.

The financial performance categories used to group customers into the following groups:

- Standard - A category – it includes the customers whose economic and financial performances are very good and allow the payment in due time of the interests rates and instalments, also forecasting a future maintenance of the financial performances at a high level.
- Under observation - B category – it includes customers whose financial performances are good or very good, but who can't maintain this level of their situation in a long term perspective;
- Sub-standard - C category – it brings together the customers with satisfactory financial performances, but with a visible tendency towards worsening.
- Doubtful - D category – it includes the customers with low financial performances and caught in a visibly cyclic process with short periods of time.
- At loss - E category – for the customers with financial performances indicating loss and for who the perspective is clearly negative in terms of payment capacity for either the interest rate or the instalments.

The debt service, respectively the capacity of the economic agent of paying off the credits when they are due and of paying the owed interest rates on their due dates; it is appreciated as being:

- Good, if the instalments and the interest are paid on the due date with a delay that doesn't exceed 7 days.
- Poor, if the instalments and the interest are paid with a delay of up to 30 days.
- Inappropriate, if the instalments and the interest are paid with a delay of over 30 days.

Following the coordination of the data on his financial performance, the customer was classified as per the following matrix table:

*The matrix of the financial performance of the customers*

**Table no. 1**

| <i>Financial performances/ debt service</i> | <i>Good</i>       | <i>Poor</i>       | <i>Inappropriate</i> |
|---|-------------------|-------------------|----------------------|
| <b>A</b>                                    | standard          | under observation | sub-standard         |
| <b>B</b>                                    | under observation | sub-standard      | doubtful             |
| <b>C</b>                                    | sub-standard      | doubtful          | at loss              |
| <b>D</b>                                    | doubtful          | at loss           | at loss              |
| <b>E</b>                                    | at loss           | at loss           | at loss              |

For each of the customer's indicator of financial performance, following his ranking between the established limits, each bank may give a different score.

By summing up the scores obtained by the customer for each indicator, a total score results, which serves as base for ranking the customer within one of the 5 categories mentioned before.

The quality of the warranties is appreciated based on the extent to which these warranties can cover the credit, as well as on their nature and legal character. Thus, depending on the nature of the warranties, each bank takes into account their own percentages in appreciating the value of the warranties, according to their own crediting rules. This has resulted in a distortion of the value of the goods used as warranty, as each bank, depending on its own crediting policy, would under-valuate or over-valuate the value of the spinoffs.

**As of November 200, the Rule no 2/2000 of the National Bank of Romania (BNR) and the Methodological Norms for the application of the BNR Ruling no 2/2000, have introduced the following notions:**

**a)** Debt service, which we discussed above and defined as representing the debt on its due date. Its size is expressed in number of days of delay starting from the due date.

**b)** Legal – initiating procedures that signify at least one of the following measures taken in order to recover the outstanding debts:

- Towards the debtor:

→ acceptance from the court of the request submitted by the bank, a third party, or the debtor itself for starting the procedures for judicial reorganization or initiating the bankruptcy procedure;

→ initiating the procedure for forced execution of the patrimony, in the case of a physical person;

- Towards the contract:

→investing the final court decision with an executor formula that covers the credit contract, as well as the warranty contracts, if that is the case, or the investment contract.

Credits and investments (deposits with other banks) are also classified into the following categories: standard; under observation; sub-standard; doubtful; at loss.

This classification is achieved by simultaneously using the following two criteria:

→ The debt service.

→ The initiation of legal procedures.

Given the relevance of these two criteria for appreciating the financial performance capacity of the customers, both the two criteria and the customer classification in itself have extended completely, which means that they also apply to the bank system, and not only to the non-banking one.

In the case of credits granted to the non-banking sector, the following matrix is applied:

*The matrix of the financial performance of the customers in the non-banking sector*

**Table no. 2**

| <b>Debt service / initiating legal procedures</b> | <b>Legal procedures have been initiated</b> | <b>Legal procedures have not been initiated</b> |
|---|---|---|
| no more than 7 days                               | at loss                                     | standard  |
| 8 – 15 days                                       | at loss                                     | under observation                               |
| 16 – 45 days                                      | at loss                                     | sub-standard                                    |
| 46 – 90 days                                      | at loss                                     | doubtful  |
| at least 91 days                                  | at loss                                     | at loss   |

For the banking sector, in the case of credits granted by one bank to another or deposits form with another bank, the classification matrix is as follows:

*The matrix of the financial performance of the customers in the banking sector*

**Table no. 3**

| <b>Debt service / initiating legal procedures</b> | <b>Legal procedures have been initiated</b> | <b>Legal procedures have not been initiated</b> |
|---|---|---|
| no more than 3 days                               | at loss                                     | standard  |
| 4- 15 days  | at loss                                     | sub-standard                                    |
| 16- 30 days                                       | at loss                                     | doubtful -                                      |
| at least 31 days                                  | at loss                                     | at loss   |

The BNR norms no.8/1999 on limiting the credit risk no longer refer specifically to the analysis over the financial performance of the economic agents, which may in time lead to an adverse selection of the customers, and it is somehow illogical, contradictory to the principle of bank cautiousness that the banking law refers to. At this time, we believe that it is necessary for each bank to organize their own rating systems for granting credits, which has been achieved by the Romanian Trading Bank by setting forth such a system adapted to the service of this bank, as well as to the volume and structure of the credits it granted.

Under the pressure of trading banks and in order to repair the illogical situation in which customers were no longer classified in terms of their economic and financial performance, in 2002 the National Bank of Romania issued a new Rule no. 5/2002 on the classification or credits and investments, as well as on the establishment, regulation and use of specific risk provisions, and the Methodological Norms no. 12/2002 for its application.

The most important provisions of the new Rule are as follows: introducing the financial performance of the companies on the list of criteria to be taken into account by banks when calculating the provision requirements (thus the Central Bank indirectly recognized the error included in Rule no. 2/2000, allowing for an application of the principle of bank cautiousness), accepting the deduction (subtraction) from the bank's exposal towards the debtor of the warranties accepted to be taken into account (as per the Methodological Norms no.12/2002 of the BNR), only if there were delays in the payment of the debts related to the credit (instalments, interests, commissions) of more than 90 days, and no legal procedures were initiated.

Another concession on the part of the National Bank of Romania, that aimed to develop the real estate credit and the consumption credit, was the automatic ranking of the physical persons, in terms of their financial performance, in the A category, so that the banks may grant credits to the physical persons (who have statistically been proven to be the best payers) and create new opportunities for diversifying bank investments. Thus, the list of classification criteria for non-banking customers was complete with the criterion of “*financial performance*”, which expresses the economic potential and the financial solidity of an economic entity, as resulted from the analysis of a set of quantitative factors (economic and financial indicators calculated based on the data in the regular accounting statements) and qualitative factors; also, there was a re-formulation of the criterion named “*initiation of legal procedures*”, which is considered to be at least one of the following measures taken in order to recover the outstanding debts:

1. Submitting to the court the decision of initiating bankruptcy procedures.
2. Initiating forced execution towards physical persons or legal entities.

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## QUALITY MANAGEMENT IN BANKING SYSTEM

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*Quality management banking perspective is extremely interesting, from the point of view of the activities specific, and of the permanent area competition improvement. Banks being aware of the quality problems also lead to the appearance and requirement of some area working standards. Standards imposing and issuing together with the performance measure system are to be the main elements of a quality program.*

*Keywords: competition, received quality, expected quality*

*JEL code: G21*

Almost all Romanian commercial banks have focused, till recently, on certain categories of clients when presenting their products and departments, such as artificial persons ( highly developed multinational and national societies with important turnovers), merely ignoring a wide category's of potential clients needs, requirements and expectations (such as SMCs, and, above all, the private individuals), but we have been recently encountering a more expansive approach, sometimes even an aggressive one, of these categories of clients. Referring to our country's situation, only a tenth of the banking system operating banks have succeeded to implement and certify some quality management system.

These ones have come to the conclusion that quality management's means and methods can and will be successfully put in practice also for banking, having as an example the international banks which have entered their way into national market. It is thus proved that the quality management can be a successful way to face the more and more soliciting concurrence from the banking market.

Only by knowing and anticipating the clients' needs and expectations throughout their dynamic, makes the success a possible one, also focusing on the achievement and maintenance of a maximum satisfaction degree and targeting to preserve clients.

Thus, the clients' behavior when coming to the acquisition of a banking product is influenced by a series of factors:

When referring to private individuals, their behavior is being influenced by:

- personal factors – associated to the age, occupation, life range, changes concerning life style, etc.;
- economic factors – referring to available incomes, savings, clients' attitude towards spending-saving money;
- cultural factors– associated to fundamental believes, morality, language, fidelity, artistic approaches, personal values and traditions etc;
- social factors – associated to the affinity to a sample group (target group, for marketing area), which has proved a certain experience and ascendancy towards the others;
- psychological factors –associated to an individual's psychological needs and to motivation and perception.

When referring to companies, their behavior is being influenced by:

- the company's size;
- the economical area in which they perform;

- the leadership/management;
- the company's decision maker's position;
- the company's financial and commercial outstanding;
- the company's status;
- the leaders' age and efficiency;
- the shareholders type and aspirations;
- the company's goals;
- the company's geographical location;

Banks should be aware, above all these, of the following essential aspects when interfering with artificial persons:

- this category's needs are usually more complex than the private individuals' ones, thus making them harder to be satisfied;
- successful collaborations with clients coming from the artificial persons' category can be difficult and expensive to preserve;
- certain artificial clients require a specific approach.

Theoretically speaking, for a private or artificial client to decide and acquire a certain product from a bank, it is compulsory to be both attracted to:

- interests' level (as low as possible when coming to bank credits, and higher for the active accounts), taxes and commissions;
- the serving quality including the client's way of welcoming into the bank;
- the specific product's receiving duration.

According to researches, the Romanian banks' private clients are both interested in the product's purchasing costs and also in the bank's vicinity to their homes. The added value for a bank's client also includes the following important specifications, which present one or more adequate target values and unique items, certain bank's structures being active for each of them:

- bank's accessibility – as great as possible;
- products merchandising conditions– as better as possible;
- the product's variety of the offer;
- products' purchasing costs- as low as possible;
- interests value –higher for the deposits and lower for the credits;
- staff's attitude and behavior– more turned to the client;
- products' purchasing durations –as fast as possible;
- products' and bank's security –as great as possible.

A lot of banking products have become more and more attractive, diverse and easy to achieve for the past few years, thus being able to draw attention and maintain an important number of clients and to continuously grow the main financial performances (market share, turnover, profit).

In spite of these, there are certain categories of clients (especially SMC and private individuals), reproaching to banks several products inadequacies and non-quality towards their needs and expectations.

The main Romanian SMCs complaining about banking are as it follows:

- excessive banking bureaucracy (especially imposed by laws and regulations) – useless nerves, time and money sources;
- credits excessively leveled costs (through too high interests and bank commissions – of analyzing, adjustment, risk, etc.- and many other taxes). The ratio interests/credits, interests/deposits is in our country of 4:6, comparing to only 2:3 for the UE partner states;
- required guarantee characteristics (mortgage, gage, blank cheques, collateral deposits, bank guarantee letters, transfer of debts) especially the solicitation for the guarantee value to surpass the given credit's value;
- too small duration of the reimbursement period of time (1-5 years compared to 5-15 years for the UE partners states).

SMCs in our country have had and still have low access, sometimes even impossible one, to credits, thus making difficult for the native products to properly develop. According to certain studies, only 10% of the Romanian SMCs are „bank proof” and can afford to achieve a credit from any bank, any time.

As for the private clients main claims, they refer to the fact that the present products offer does not suit to ALL their needs, demands and expectations. Taking by example, the communication approach to real and potential clients (through mass media, websites, e-mails) all data thus being partially transmitted in a truthful, accessible and useful way.

Banks should be aware of the fact that their offers’ flexibility, variety and congeniality are but a few of the advantages which attract the private clients and can make them permanent ones. Clients are more and more choosing their bank on the criteria of the relationships established with the bank’s personnel. But, there are unfortunately many situations in which clients are not at all satisfied with the staff’s attitude, especially because of the too big period of problems’ waiting to be solved time.

Public receiving programs, welcoming clients system inside the bank together with the wicket’s schedule, are other public’s discontents. They think it very normal for the bank to have an efficient flexible public receiving program, an inner orientation system and a certain accommodation.

There appear to be serious differences between the client’s „expected quality” and „ the perceived one”, after the acquisition of a banking product. There are also multiple causes for this situation, but the major one stands in the precarious interest manifested by many banks towards private clients (retail-banking) and their focusing upon certain artificial clients (corporate-banking) – who regularly undertake bigger and faster profits.

There are relatively recent items regarding banking area quality management (the start has been issued within the years 80s of the 20th century), but researches for constant improvement have proved their importance, especially for the developed states. For example, north-american and west- european banks have continuously worked for their clients’ support and the performance of their needs ( also by constant evaluation of their contentment).

The adjusted number of the banks lead to an increasing competition and to the market banking services’ awareness, in order for the „ desired quality/issued by the bank” together with the one perceived by the client, to be both taken into account.

Quality management banking perspective is extremely interesting, from the point of view of the activities specific, and of the permanent area competition improvement. Banks being aware of the quality problems also lead to the appearance and requirement of some area working standards. Standards imposing and issuing together with the performance measure system are to be the main elements of a quality program.

The need of having such a program is being emphasized in case of competition, banks establishing certain standards by themselves, as it is considered to be much more important to continuously evaluate clients’ perception of the provided products and to measure their expectations and needs degree.

The initializing and maintenance of certain operations within the bank, and their permanent comparison to benchmarking, are to reach some goals for the quality area. A certain bank’s objectives, strategies and policies are main quality factors for the specific bank.

Clients’ perception can greatly be improved by using a very efficient marketing and by sustained interest for quality improvement, their needs and requirements satisfaction. A client should be given the impression he is the most important, in order for him to be willing to attend the specific bank’s services. It is considered to be much more expensive for a bank to attract new clients, than to keep the old ones, so all banks should try by any possible mean to improve clients public department.

Still, there is not considered to be a priority for most of the east-european banks, to work upon a quality management system. There are but 4 banks in Romania at the moment, which implemented under license a quality management system in accordance to family international standards ISO 9000: Romanian National Bank ( meaning only the Informatics Services Department), Citi Bank Romania, Romanian Commercial Bank, EXIMBANK. As for all the other banks, they seem not to perceive the advantages offered by a quality system management and, as long as there is not imposed to them by a certain BNR regulation, they will continue to develop their activity the same way they used to do it.

Taking into account the increasing competition between commercial Romanian banks, there is a real problem to come up with new clients or to preserve the old ones. The only possible way to face this situation is to encourage potential or real clients confidence into services or products quality offered by a certain bank. Furthermore, because of the clients requirements continuous increasing, publicity is no longer reliable but in case of multicriteria, competent, objective evaluations of the banking services and products.

Thus being said, a bank's departments and different services added value becomes more and more important for the client (simultaneously created together with the one intended for other interests partners). It is to notice that each partner's shares for an added value should equally be established (also by negotiation), constantly being evaluated. Neglecting a partner for some other's interest is considered to be a non-productive behavior which tends to turn for the worst the long term business.

In conclusion, banks should, in a very near future, more and more turn their interest towards the client, as it is well-known the clients trend to own full financial services packages which are already put in practice by many banks. The competition will develop new products and services for these clients, especially in order to capture the „retail banking” market.

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## CORRELATIONS AND THEIR EFFECTS ON THE CREDIT PORTFOLIO

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*Combining risks does not follow the usual arithmetical rules, as it is the case with incomes. Totalling up two risks, each equalling 2, does not always have 4 as a result. The sum is usually smaller, due to diversification. The correlation-based calculation shows us that the sum will range between 0 and 4. This is the essence of diversification and correlation. diversification reduces the portfolio's volatility.*

*Keywords: correlations, credit portfolio*

*JEL: G21*

The losses generated by the credit risk do not manifest simultaneously.<sup>306</sup>

The portfolio's risk results from the individual risks of each of its components. The income brought by the credit portfolio equals the algebraical sum of the incomes generated by each individual loan. These incomes are defined as the amounts obtained from interest rates and fees produced by individual loans in a specific period of time. The distribution of possible credit values in the future is, in fact, the distribution of the above-mentioned incomes. The total income generated by the credit portfolio (based on the probability theory of distribution) does not depend on the correlations between credits. On the contrary, the portfolio risk, calculated by means of dispersion or volatility, will be more or less influenced by these correlations.

The individual risks of each granted loan and the correlations existing between them will determine the portfolio's risk as the result of diversification. It thus represents the difference between the arithmetical sum of individual risks and the risk of the entire portfolio. Since the portfolio risk is very much influenced by the correlations between the risks associated to individual transactions, these will also play an important part in shaping the portfolio risk evaluation models.

We shall analyze the change in the portfolio value in a considered period of time, between the present moment ( $t_0$ ) and another future moment ( $t_1$ ). We are speaking about the time horizon necessary to ensure the portfolio risk management, usually one year for the credit portfolio evaluation models. This change depends on common factors for all the debtors and can refer to economic or industrial conditions.

The portfolio value for any loan  $i$  in the considered period of time equals to:

$$\Delta V_i = V_{i,1} - V_{i,0} = V_{i,0} \cdot r_i$$

$r_i$  is the change rate of the initial credit's value. A negative value shows in fact a loss occurred in its development.

For the credit portfolio's risk, changing the value of each initial credit represents a loss or a profit. The portfolio's value ( $V_p$ ) is the sum of the individual values for all the granted credits (

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306 Bessis Joel, „Risk management in banking”, John Wiley & Sons, 2004, pag. 339-341

$V_i$ ) and the change in the portfolio's value is the sum between the changes in all individual transactions:

$$V_p = \sum_{i=1}^n V_i$$

$$\Delta V_p = \sum_{i=1}^n \Delta V_i$$

The credit portfolio's profitability in the interval  $t_0 - t_1$  is calculated as it follows:

$$R_p = \frac{\Delta V_p}{V_{p,0}} = \frac{V_{p,1} - V_{p,0}}{V_{p,0}} = \frac{\sum_{i=1}^n (V_{i,1} - V_{i,0})}{V_{p,0}} = \sum_{i=1}^n \frac{V_{i,0} \cdot r_i}{V_{p,0}} = \sum_{i=1}^n W_{i,0} \cdot r_i$$

In this formula, the portfolio's profitability is the weighted average of the profitability rates of each credit, while the weights ( $W_{i,0}$ ) are the initial ratios between the individual loan value and their sum. By definition, the sum of these weights is 1.

#### Distributing Loss for a Credit Portfolio

In the following example, we set two objectives:

-Showing the way in which the correlations between two credits influence the distribution of the portfolio's losses (we shall take a two-credit portfolio). The ratings of the two credits can be correlated, which also influences the loss distribution. The risk measurement is realized by means of specialized indicators, such as expected loss (EL) or loss volatility (LV);

-Calculating the probable common loss (PCL), depending on the conditioned or unconditioned correlation between the two credits.

In order to thoroughly evaluate the effects of correlation, we shall start with the analysis of a portfolio consisting of two uncorrelated credits. We shall encounter 4 distinct situations: neither of the credits brings losses, only one of them (A or B) brings losses and both of them bring losses. This division enables us to easily analyze any change in the analysis of loss distribution as a result of correlation.

Our example will take into account a portfolio consisting of two credits (A și B), whose loss risks can be inter-correlated. In the next table, we present the two loans, either conditioned or unconditioned by their loss probabilities.

**Table 1**  
**The two-credit portfolio**

|             | <b>Probability of non-reimbursement (PD)</b> | <b>Exposure</b> |
|-------------|--|-----------------|
| A           | 8%   | 500             |
| B           | 10%  | 800             |
| $\rho_{AB}$ | 0% sau 20%                                   |                 |

The loss distribution will take 4 values (as previously mentioned). Depending on the correlation or non-correlation between the two loans, we can have two distinct situations.

We shall start with the situation where the two credits are not intercorrelated ( $\rho_{AB} = 0$ ).

Building the loss probability distribution is quite easy, due to the fact that the losses that may occur with the two credits are not conditioned. We are obviously dealing with common loss probability (respectively for the entire portfolio).

In the following table, we calculate the common loss probabilities for the portfolio:

**Table 2****Calculating the common loss probabilities for a portfolio consisting of two uncorrelated credits**

| Unconditioned probabilities |     |        |     | Conditioned probabilities $B A$ | Common probabilities |
|-----------------------------|-----|--------|-----|---------------------------------|----------------------|
| A                           | B   |        |     |                                 |                      |
| Loss                        | 8%  | Loss   | 10% | 10%                             | 0,8%                 |
|                             |     | Profit | 90% | 90%                             | 7,2%                 |
|                             |     |        |     | 100%                            | $P(A) = 8\%$         |
| Profit                      | 92% | Loss   | 10% | 10%                             | 9,2%                 |
|                             |     | Profit | 90% | 90%                             | 82,8%                |
|                             |     |        |     | 100%                            | $P(B) = 92\%$        |

The calculation of probabilities in the previous table is quite simple, as the occurrence probabilities for the two credits are not interconditioned.

The main formula to create the table is:

$$P(A, B) = P(A) \cdot P(B)$$

The probability that the two credits bring losses is:  $8\% \cdot 10\% = 0,8\%$ .

The probability that A brings losses and B scores a profit is:  $8\% \cdot 90\% = 7,2\%$ .

In the following tables, we review the results obtained in the previous table, in order to emphasize the correlations between the two credits forming a portfolio::

**Table 3****The matrix of common probabilities:  
unconditioned losses**

|   |        | B    |        |      |
|---|--------|------|--------|------|
|   |        | Loss | Profit |      |
| A | Loss   | 0,8% | 7,2%   | 8%   |
|   | Profit | 9,2% | 82,8%  | 92%  |
|   |        | 10%  | 90%    | 100% |

**Table 4****The matrix of common probabilities:  
unconditioned losses**

|                      | Loss  | Total probabilities | Cumulative probabilities |
|----------------------|-------|---------------------|--------------------------|
| A and B - loss       | 1.300 | 0,8%                | 100%                     |
| A - loss, B - profit | 500   | 7,2%                | 99,2%                    |
| B - loss, A - profit | 800   | 9,2%                | 92%                      |
| A and B - profit     | 0     | 82,8%               | 82,8%                    |

The calculation of the expected loss (EL) and loss volatility (LV) results directly from the accumulated occurrence probabilities of previously analyzed events.

The expected loss (EL) is the weighted average of all possible losses. The loss volatility (LV) equals the square root of the loss variance. It is calculated by totalling up the squares of differences between possible losses and expected loss (EL), all weighted with the corresponding probabilities.

**Table 5**

|                      | Loss  | Total probabilities | Prob · Loss     | Prob · (Loss – PA) <sup>2</sup>                 |
|----------------------|-------|---------------------|-----------------|---|
| A and B - loss       | 1.300 | 0,8%                | 10,4            | 11.139,2  |
| A - loss, B - profit | 500   | 7,2%                | 36              | 10.396,8  |
| B - loss, A - profit | 800   | 9,2%                | 73,6            | 42.540,8  |
| A and B - profit     | 0     | 82,8%               | 0               | 11.923,2  |
|                      |       |                     | <b>PA = 120</b> | <b>VP = <math>\sqrt{76.000} = 275,68</math></b> |

Subsequently, we study the situation in which the two credits are correlated ( $\rho_{AB} = 0,2$ ). We will have to calculate the common loss probabilities for the two correlated credits. Conditioned probabilities are different from unconditioned probabilities. Correlation increases the common loss probability and the loss volatility.

The process of calculating the probability distribution for the correlated credit portfolio also uses the conditioned probabilities of the credit A's rating compared to the credit B's rating and vice versa.

This is why we shall define  $P(A=\text{loss}) = a$ , which means the unconditioned probability that A suffers a loss and  $P(A=\text{profit}) = 1 - a$ . The same goes for B ( $P(B=\text{loss}) = b$ ,  $P(B=\text{profit}) = 1 - b$ ).

The probability of two such events (profit or loss) unfolding at the same time is calculated by means of the formula:

$$P(A, B) = a \cdot b + \rho_{AB} \sqrt{a(1-a) + b(1-b)}$$

$$P(A, B) = 8\% \cdot 10\% + 20\% \cdot \sqrt{8\%(1-8\%) + 10\%(1-10\%)} = 1,37\%$$

**Table 6****Calculating the common loss probabilities for a portfolio consisting of two correlated credits**

| Unconditioned probabilities |     |        |     | Conditioned probabilities $B A$ | Common probabilities |
|-----------------------------|-----|--------|-----|---------------------------------|----------------------|
| A                           | B   |        |     |                                 |                      |
| Loss                        | 8%  | Loss   | 10% | 17,14%                          | 1,37%                |
|                             |     | Profit | 90% | 82,86%                          | 6,63%                |
|                             |     |        |     | 100%                            | $P(A) = 8\%$         |
| Profit                      | 92% | Loss   | 10% | 9,38%                           | 8,63%                |
|                             |     | Profit | 90% | 90,62%                          | 83,37%               |
|                             |     |        |     | 100%                            | $P(B) = 92\%$        |

We used the formula  $P(B|A) = \frac{P(A, B)}{P(A)}$  to calculate all the other probabilities. The

conditioned probability column shows the probability of credit A's influencing credit B.

Thus:

$$P(B = \text{loss} | A = \text{loss}) = \frac{P(B = \text{loss}, A = \text{loss})}{P(A = \text{loss})} = \frac{1,37\%}{8\%} = 17,14\%$$

$$P(B = \text{loss} | A = \text{profit}) = \frac{P(B = \text{loss}, A = \text{profit})}{P(A = \text{profit})} = \frac{6,63\%}{8\%} = 82,86\%$$



$$P(B = profit|A = loss) = \frac{P(B = profit, A = loss)}{P(A = loss)} = \frac{8,63\%}{92\%} = 9,38\%$$

$$P(B = profit|A = profit) = \frac{P(B = profit, A = profit)}{P(A = profit)} = \frac{83,37\%}{92\%} = 90,62\%$$

The other common progress probabilities for the two credits were calculated as it follows:

$$P(B = loss, A = profit) = 10\% - P(B = loss, A = loss) = 10\% - 1,37\% = 8,63\%$$

$$P(B = profit, A = loss) = 8\% - P(B = loss, A = loss) = 8\% - 1,37\% = 6,37\%$$

$$P(B = profit, A = profit) = 90\% - P(B = profit, A = loss) = 90\% - 6,63\% = 83,37\%$$

In the following tables, we review the results obtained in the two previous situations, in order to emphasize the correlations between the two credits forming a portfolio:

**Table 7**

**The matrix of common probabilities:  
conditioned losses**

|   |        | B     |        |      |
|---|--------|-------|--------|------|
|   |        | Loss  | Profit |      |
| A | Loss   | 1,37% | 6,63%  | 8%   |
|   | Profit | 8,63% | 83,37% | 92%  |
|   |        | 10%   | 90%    | 100% |

It is interesting to notice and comment on the differences between this case and the case when the credits were not correlated.

Thus, in the first situation ( $\rho_{AB} = 0$ ) the common loss probability was as high as 0,8% , while in the second ( $\rho_{AB} = 0,2$ ) the probability rose to 1,37%. This is explained by the fact that a factor which negatively influences a credit will have the same effect on the other credit.

The standard loss distribution with corresponding probabilities, including the negative ones, is presented in the following table:

**Table 8**

**The matrix of common probabilities: conditioned losses**

|                             | Loss  | Total probabilities | Cumulative probabilities |
|-----------------------------|-------|---------------------|--------------------------|
| <b>A and B - loss</b>       | 1.300 | 1,37%               | 100%                     |
| <b>A - loss, B - profit</b> | 500   | 6,63%               | 98,63                    |
| <b>B - loss, A - profit</b> | 800   | 8,63%               | 92                       |
| <b>A and B - profit</b>     | 0     | 83,37%              | 83,37                    |

Further calculations will demonstrate that the expected loss (EL) stays unchanged, as it is not influenced by the degree of correlation between the two credits. In exchange, the loss volatility will get higher as the credits get more correlated. Anyway, in the end, we shall notice the advantages of diversifying credit portfolio.

The expected loss (EL) for the entire portfolio results directly from the loss distribution and it is correlated for the two credits in case as it is shown in the following table:

**Table 9**

|                             | Loss  | Total probabilities | Probability of loss | $Prob \cdot (Loss - PA)^2$ |
|-----------------------------|-------|---------------------|---------------------|----------------------------|
| <b>A and B - loss</b>       | 1.300 | 1,37%               | 17,81               | 19.075,88                  |
| <b>A - loss, B - profit</b> | 500   | 6,63%               | 33,15               | 9.573,72                   |

|                             |     |        |                 |   |
|-----------------------------|-----|--------|-----------------|---|
| <b>B - loss, A - profit</b> | 800 | 8,63%  | 69,04           | 39.905,12                                       |
| <b>A and B - profit</b>     | 0   | 83,37% | 0               | 12.005,28                                       |
|                             |     |        | <b>PA = 120</b> | <b>VP = <math>\sqrt{80.560} = 283,83</math></b> |

Therefore, the expected loss is the same in both cases and it equals the sum of expected losses for the two credits.

$$PA(A) = 0\% \cdot 500 + 8\% \cdot 500 = 40$$

$$PA(B) = 0\% \cdot 800 + 10\% \cdot 800 = 80$$

$$PA(A + B) = 40 + 80 = 120$$

The loss volatility (LV) was calculated as it follows:

$$VP^2 = (1300 - 120)^2 \cdot 1,37\% + (500 - 120)^2 \cdot 6,63\% + (800 - 120)^2 \cdot 8,63 + (0 - 120)^2 \cdot 83,37\%$$

$$\Rightarrow VP^2 = 80.560 \Rightarrow VP = 283,83$$

This value is higher than the one obtained when the two credits are not correlated (275,68).

The loss volatility will be lower than the sum of the two credits' volatilities, as long as the correlation coefficient is lower than 1.

The loss volatility for each loan is calculated by means of the formula:  $VP = E \cdot \sqrt{p(1-p)}$ , where E is the exposure and p the loss probability for the respective credit.

$$VP(A) = 500 \cdot \sqrt{8\%(1-8\%)} = 135,64$$

$$VP(B) = 800 \cdot \sqrt{10\%(1-10\%)} = 240$$

$$VP(A + B) = 283,83 < VP(A) + VP(B) = 135,64 + 240 = 375,64$$

As a result, the expected loss is not sensitive to the effect of diversification and the loss volatility (which gives us the portfolio risk after all) gets lower as the portfolio diversifies.

In the following table, we review the results obtained in the two previous situations, in order to put the highlight once more on the effects of the correlations between the credits forming a portfolio:

**Table 10**

**Comparing the statistical results**

|                 | $\rho = 0$ | $\rho = 0,2$ |
|-----------------|------------|--------------|
| Expected loss   | 120        | 120          |
| Loss volatility | 275,68     | 283,83       |

## Conclusions

We appreciate that the portfolio risk results from the individual risks of each of its components. The income brought by the credit portfolio equals the algebraical sum of the incomes generated by each loan. These incomes are defined as the sums obtained from interest rates and fees generated by each individual loan in a given period of time. The distribution of possible credit values in the future is in fact the distribution of these incomes.

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# THE EUROPEAN CENTRAL BANK'S MONETARY POLICY UNDER GLOBALIZATION

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*Globalization has fundamentally changed many areas of modern society, such as media, culture, politics and, even more, modern finance. National financial systems have become interdependent and moved towards an integrated financial system on a world level. Financial markets are now increasingly globalized, information flows much more rapidly around the globe and, through the telecommunication systems, can change the expectations of market participants in a split second. The euro area is an important part of this globalized world, and the Eurosystem, as one of the major players, has in this respect a special responsibility. Stability in the euro area through a stable internal value of the euro is the only means by which this responsibility can be met and the single monetary policy can contribute to the stability of the world economy.*

*Keywords: globalization, central bank, monetary policy, price stability, inflation*

*JEL classification: F42, F36, F33*

## **1. Introduction: business, trade and financial globalization**

When Marshall McLuhan has introduced in 1962 his famous concept about the world being a global village, he didn't predict how fast will advance the globalization process. Since then, globalization has fundamentally changed many areas of modern society, such as media, culture and politics. This is particularly true in the case of business activities and trade, as production and trade became globalized and companies adopted international approaches for sales and marketing strategies. The process of globalization has shaped the modern financial world and even more. The national financial systems have become increasingly interdependent and progressed to an integrated financial system on a world scale. This is a result of the ongoing process of markets and financial institutions liberalization in the main industrialized countries that has been going over the last two decades and has driven to an enormous growth in the international capital flows. Nevertheless, this is also a result of the development in the communication technologies and computers.

Financial globalization can be characterized by the development of new financial products, integration of national financial markets and clients into a global financial market, the segmentation value between financial institutions and markets, the emerging of financial conglomerates, and last, but not least, the increased importance of the institutional investors. Regarding the latter, insurance companies, investment funds and pension funds have increased their share in the capital of holdings, thus, having a larger impact on the financial markets and on the decisions for saving and investments.

In this setting, the introduction of euro was a crucial moment. The states from the euro area entered in a new era of monetary integration by adopting a single currency. The euro area economy managed to cope with the United States and Japan's economy in terms of economic power and openness. The euro zone has a population of 307,8 millions inhabitants, which is slightly bigger than the population of 287,5 millions in United States and more than twice the Japan's population of 127,3 millions. As for the share of GDP in the world GDP, USA has

21,1%, bigger than euro zone who provides 15,7% of the world GDP, and almost triple the Japan's share in the world GDP, the GDP per capita being fairly comparable (Table 1-1). Japan has the best results for unemployment rate, with only 5,4%, followed by USA with 5,8% and the Eurozone with 8,4%. On the other hand, the euro zone has an economy with a higher degree of openness than the economies of USA and Japan. The international trade, calculated by the sum of imports and the exports as a percentage in GDP is 33%, while in the US is only 24%. Moreover, since the beginning, the euro was the world's second major currency after the dollar. Thus, it is expected that euro and the monetary policy to play major roles in a globalized financial world.

**Table 1-1 the real economy of Euro area, USA and Japan**

|  | <b>Euro area</b> | <b>USA</b> | <b>Japan</b> |
|--|------------------|------------|--------------|
| <b>Population</b> (millions)                         | 307,8            | 287,5      | 127,3        |
| <b>GDP</b> (share of world GDP)                      | 15,7%            | 21,1%      | 7,1%         |
| <b>GDP per capita</b> (thousands euro)               | 23,0             | 32,3       | 23,4         |
| <b>Sectors of production</b> (share of GDP)          |                  |            |              |
| - Agriculture, fishing, forestry                     | 2,3%             | 1,3%       | 1,3%         |
| - Industry (including construction)                  | 27,4%            | 21,6%      | 29,4%        |
| - Services   | 70,6%            | 77,1%      | 69,3%        |
| <b>Unemployment rate</b> (share of the labour force) | 8,4%             | 5,8%       | 5,4%         |
| <b>Exports of goods and services</b> (% of GDP)      | 19,7             | 9,3        | 10,7         |
| <b>Imports of goods and services</b> (% of GDP)      | 17,7             | 13,3       | 10,1         |
| <b>Exports</b> (share of the world exports)          | 31,2%            | 12,4%      | 5,8%         |
| <b>Current account balance</b> (% of GDP)            | 0,9              | -4,6       | 2,8          |

Source: Eurostat and ECB calculations, 2008; IMF, *Global Financial stability report*, 2008

## **2. The setting for the Eurosystem's monetary policy**

The most important contribution to economic growth, increasing the active labour force and the financial stability which the monetary policy of the Eurosystem may bring in this context of financial globalization is to achieve the main objective, preserving the prices stability, as it was mentioned in the Maastricht Treaty. This treaty created the foundation for the monetary policy which will help secure the price stability, generating the necessary framework in order to benefit from the Monetary Union opportunities.

For achieving the primary objective, i.e. price stability, the European Central Bank's Governing Council adopted the monetary policy strategy which is neither pure conventional monetary targeting, nor is it only direct inflation targeting, but a combination of the two. The monetary policy strategy has three important elements.

The first element is its essence, defining the price stability. According to The Governing Council "price stability is defined as inflation (measured by the Harmonized Index of Consumer Prices) of below 2%". Moreover, The Governing Council stipulated that the price stability, by this definition, must be sustained on a medium term. By specifying "below 2%" it is created an explicit superior limit of the HICP which is consistent with the price stability objective. The other two elements of the Eurosystem's strategy are what we call "pillars": the first is the prominent role played by money, and the second, is an estimation based on the price evolution forecast.

According to all evidence, the long term relation between money (money supply) and prices has been robust for the last years in the euro area. However, it is risky to mechanically adjust the monetary policy to all monetary evolutions. For short periods of time the evolutions might be

volatile and it's always necessary to analyze the causes of these evolutions in order to determine whether they are distorted by special factors or they present serious risks to price stability. The second pillar, beside the analysis of the monetary conditions, leads to an estimation based mainly on the forecast of price evolution and risks for price stability. This is obtained by analyzing many variables and indicators as well as using various estimations for the price evolution. Some observers mistakenly interpreted this process as an inflation forecast, which is usually the core of the direct inflation targeting strategy, and asked the ECB to publish this forecast.

### **3. The monetary policy in the financial globalization setting**

From a general perspective, the monetary policy decisions are aimed on the financial markets and use these channels for transmitting monetary stimulus. As these financial markets have become more and more globalized, the information now flows much more rapidly around the globe and, using modern telecommunication systems, can change the expectations of the financial market participants in a split second. In this matter, Alan Greenspan commented: "the present environment for the central banks and, of course, for the private participants on the financial market, is characterized by immediate communication". Thus, in implementing the monetary policy, the central banks must consider this increase in sensibility of the financial markets regarding expectations, which is, for a central bank, one of the most important issues of the globalization process.

Considering the increasing role of players' expectations, it is most important that the Eurosystem is perceived as strongly involved and very clear about its objective: price stability. This is the monetary policy most important contribution on the expectations in today's global financial world. Inflation has clearly raised its ugly head as risk covering and high interest rates under financial market globalization. This experience was a real source of inspiration for fighting against inflation.

The euro area is an important part of the growing globalized world, and the Eurosystem, one of the major players, having a special responsibility in achieving its primary objective. Stability in the euro area, through a stable internal value of euro, is the only possibility for satisfying this responsibility and the unique monetary policy is able to maintain the global economic stability.

For such a large economic area like the euro area stability needs to be created and maintained. The euro area, unlike a small and highly open economy, can not efficiently conduct a monetary stabilization policy with a fixed exchange rate. That is why, the Eurosystem, similar to the Federal Reserve, never considered a strategy involving a fixed exchange rate. The euro exchange rate is, however, observed as an important indicator of the monetary policy in the second pillar. If the exchange rate threatens the price stability in the euro area, this threat must be evaluated, and a response is to be expected if necessary.

As for euro area contribution to the economic stability in the globalization setting, it is clear that the monetary policy can't accomplish this task on its own. The benefits derived from an European single currency are not complete unless there is an additional support from other policies, especially fiscal policy and labour policy, and if the structural reforms are continued in these areas.

In this matter, it is extremely important that member states governments to continue applying solid fiscal policies, aimed to achieve the objective of a fiscal balance close to equilibrium and even surplus on the medium run. This condition is mentioned in the Stability and Growth Pact, which ensures the long term sustainability of fiscal policies. From the Central Bank's perspective, a major reason for including this requirement in the pact was the concern that the lack of fiscal discipline will distress the Eurosystem's ability of achieving its primary objective. Thus, the Stability and Growth Pact is one of the most important guarantees that the price stability remains a cornerstone of the Economic and Monetary Union.

The biggest concern for Europe at this point is the high level of unemployment, a source of deep worries which should be dealt with fundamental measures. There is no doubt that the roots of this high unemployment rate in the EU are the structural rigidities of the labour and the strict legislation regarding the market products. Moreover, taxes and redistribution policies obviously play their part. It becomes obvious that the structural problems must be dealt with structural measures, even if structural reforms are not always easy to implement. The benefits are often on a medium term, while on the short run the costs for some groups could determine a serious opposition on these reforms. But the structural reform is the only way to accomplish the necessary reduction in the unemployment rate.

#### **4. Conclusions**

It should be clear that there is no other alternative to a monetary policy aimed to price stability, especially in a globalized financial world. Closely related with this objective is the best possible contribution of the Eurosystem to avoid costly and undesired ruptures in expectations in the financial market, who play a key role in today's globalized financial world. In this uncertain world it should be applied those policies that have proved successful in reducing risks and gaining the financial markets confidence. This is also the case for other policies, other than monetary policies, and, especially, for fiscal policy and labour policy. Implementing only consistent policies aimed to achieve stability will prove to the financial markets players the determination of those who construct the European policies to gain the maximum benefits from the EMU.

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## EXCHANGE RATES AND VOLATILITY IN CENTRAL AND EASTERN EUROPE: A TEST FOR UNCOVERED INTEREST PARITY<sup>307</sup>

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*At times of heightened global capital market volatility, high-yielding currencies tend to depreciate, while low-yielding currencies tend to serve as “safe heaven”. We present the results of a test for Uncovered Interest Parity for selected European currencies, in defined moments of capital market high-volatility. We conclude about patterns of sensitivities of currencies to changes in global market volatility.*

*Key words: Exchange rates, Volatility, Central and Eastern Europe, Uncovered interest parity, Financial crisis*

### **Interest rate parity: an overview**

For open economies, the concept of interest rate parity is an important component of the macroeconomic analysis and one of the basic models used in international finance. The validation of interest parity has essential implications for international corporate finance decisions and for international investments. First, the assumption that interest parity builds upon is financial markets' integration, so that empirical tests on interest parity may be also seen as tests of international financial markets integration. Second, when deviations from interest parity occur, which opens the room for arbitrage in money and foreign exchange markets, monetary authorities may intervene in order to defend interest rates and exchange rates against potential speculative pressures. Third, corporations and international investors may fundament their decisions in different manners in a framework described by interest rate parity as compared to one where interest parity does not hold. Fourth, the widespread, large and persistent violations of interest parity indicate that speculation in money and foreign exchange markets may be profitable for the astute traders.

Interest rate parity has been developed in two forms, known as covered interest parity (CIP) and uncovered interest parity (UIP) or international Fisher effect. Both forms of interest parity provide simple relationships between money market variables, more specifically interest rates, and foreign exchange market prices, as spot or forward exchange rates.

Investors at any time  $t$  dispose of two basic alternatives in terms of holding assets: one alternative refers to holding assets denominated in their domestic currency, while the other alternative refers to holding assets denominated in foreign currencies. When the domestic alternative offers an interest rate denoted by  $r$  between times  $t$  and  $t+1$ , the payoff of this investment at time  $t+1$  equals  $(1+r)$ . To benefit from the interest rate provided by the foreign investment alternative,

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denoted by  $r^*$ , the investor must first convert his amount in the domestic currency in foreign currency units using the spot exchange rate at time  $t$ ,  $s_t$ <sup>308</sup>, then invest in foreign assets, obtaining at time  $t+1$  a payoff equal to  $s_t \times (1+r_t)$ , which is afterwards reconverted in domestic currency units.

If the domestic and foreign assets differ only with respect to the currencies of denomination, and if investors have the opportunity to cover their exposure to exchange rate risk by converting their know proceeds in foreign currencies at time  $t+1$ ,  $s_t \times (1+r_t)$ , at the forward exchange rate at time  $t$  for maturity  $t+1$ ,  $f_t$ , then market equilibrium leads to the *covered interest parity*:

$$\frac{f_t}{s_t} = \frac{1+r}{1+r^*} \quad \text{or, rewriting, } (1+r) = f_t(1+r^*)/s_t \quad (1)$$

If condition (1) did not hold, risk-free covered interest arbitrage is possible, with investors borrowing in one currency, converting the amounts in the other currency at the spot rate, investing the proceeds at the other interest rate, selling the resulting amounts in the forward market and repaying the loan to end up with a net positive and known amount at time  $t+1$ .

Instead of covering their foreign currency positions in the forward market, investors have the opportunity of leaving their positions uncovered at time  $t$  and waiting until time  $t+1$  in order to convert the amount  $s_t \times (1+r_t)$  in the spot market, at the spot rate prevailing at time  $t+1$ ,  $s_{t+1}$ . Under this arrangement, known as *uncovered interest rate parity*, markets will reach an equilibrium point when the return on the domestic currency equals the expected value at time  $t$  of the return provided by the uncovered position in the foreign currency:

$$\frac{E_t(s_{t+1})}{s_t} = \frac{1+r}{1+r^*} \quad \text{or, rewriting, } (1+r) = E_t(s_{t+1})(1+r^*)/s_t \quad (2)$$

As Isard (2006) notes, this is equivalent to combining CIP with the assumption that exchange rates are driven, at the margin, by risk-neutral market participants who are ready to take uncovered spot or forward positions whenever the forward rate deviates from the expected future spot rate.

Rearranging the terms of equation (1) above, we obtain

$$\frac{f_t - s_t}{s_t} = \frac{1+r}{1+r^*} - 1, \text{ or for small values of } r^*, \frac{f_t - s_t}{s_t} \approx r - r^* \quad (3)$$

Equation (3) may be interpreted as the observable premium or discount on the foreign currency implied by the interest rate differential between the two currencies, as follows: whenever the interest rate in the domestic currency,  $r$ , is higher than the foreign currency interest rate,  $r^*$ , the forward rate is higher than the spot rate, which implies a forward premium on the foreign currency and a forward discount on the domestic currency; conversely, whenever the interest rate in the domestic currency,  $r$ , is smaller than the foreign currency interest rate,  $r^*$ , the forward rate is smaller than the spot rate, which implies a forward discount on the foreign currency and a forward premium on the domestic currency.

On other hand, rearranging the terms of equation (2) leads to

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308 The spot exchange rate is denominated in units of the domestic currency per one unit of the foreign currency – or is a direct quote from the perspective of the domestic currency.

$$\frac{E_t(s_{t+1}) - s_t}{s_t} = \frac{1+r}{1+r^*} - 1, \text{ or for small values of } r^*, \frac{E_t(s_{t+1}) - s_t}{s_t} \approx r - r^* \quad (4)$$

Equation (4) understanding follows the interpretation for equation (3), only that now the interest rate differential between the two currencies is linked to the spot exchange rate prevailing in the market at time  $t$  and the expectations related to the value of the spot rate at time  $t+1$ : whenever the interest rate in the domestic currency,  $r$ , is higher than the foreign currency interest rate,  $r^*$ , the investors in the market expect the future spot rate to increase as compared to the current spot rate, which indicates an expected appreciation of the foreign currency and an expected depreciation of the domestic currency in the spot market; conversely, whenever the interest rate in the domestic currency,  $r$ , is smaller than the foreign currency interest rate,  $r^*$ , the investors in the market expect the future spot rate to decrease as compared to the current spot rate, which indicates an expected depreciation of the foreign currency and an expected appreciation of the domestic currency in the spot market. Thus, the uncovered interest parity differs from the covered interest parity by a dynamic element introduced through the relationship between the observed values of the money market and foreign exchange market variables at time  $t$  and the value of the spot exchange rate that participants in the market anticipate at time  $t$  to prevail at time  $t+1$ . This relationship has important implications for exchange rate forecasting, as Porter (1971) suggests: if the UIP condition was valid at all time horizons, the observed values of the spot exchange rate and the term structures of domestic and foreign interest rates could be used to infer the expected future time path of the spot exchange rate.

### **Empirical evidence on interest rate parity**

The issue of capital markets volatility as a factor influencing UIP validation has been recently researched, with the rather general finding that UIP holds better in times of high market volatility and/or large interest rate differentials, while in times of lower volatility tests seem to reject the UIP condition. In one of the few attempts to test UIP on emerging markets, Cairns et al. (2007) conclude that in times of heightened global equity and bond market volatility, high-yielding currencies tend to depreciate, while low-yielding ones tend to serve as “safe haven”, but the entire spectrum of currencies’ sensitivity to global volatility is represented among Asia-Pacific currencies.

The influence of volatility on the UIP validity has been also tested using a regime switching model that allows for exchange rate switches between volatility regimes over time. The use of regime switching models to exchange rate data has been proposed by Engel and Hamilton (1990), Bekaert and Hodrick (1993), Bollen et al. (2000), Dewachter (2004), Huisman and Mahieu (2006), and Ichiue and Koyama (2008). Huisman and Mahieu (2006) use weekly data for the 1992 to 2006 period for developed countries’ currencies against the US dollar and apply a regime switching methodology that allows the exchange rate to switch between two regimes over time: the first regime is a UIP regime in which changes in exchange rates are described by the observed interest rate differential between the two currencies involved, while the second regime is a random walk with drift. Based on the estimated regime probabilities, the authors investigate whether specific interest rate market conditions can be related to the periods with a high probability of being in the UIP regime. They conclude that an exchange rate switches between periods in which it is likely to be in a random walk regime and periods in which it is likely to be in an UIP regime, but the exchange rate is more likely to be in the UIP regime in high volatility periods and periods with large absolute interest rate differentials. Ichiue and Koyama (2008) advance as a possible explanation for the UIP invalidation in low volatility times the market participants’ carry-trade activities, and as an explanation for the UIP validation in high volatility times the rapid unwinding of carry-trade. They also observe that low-interest rate currencies

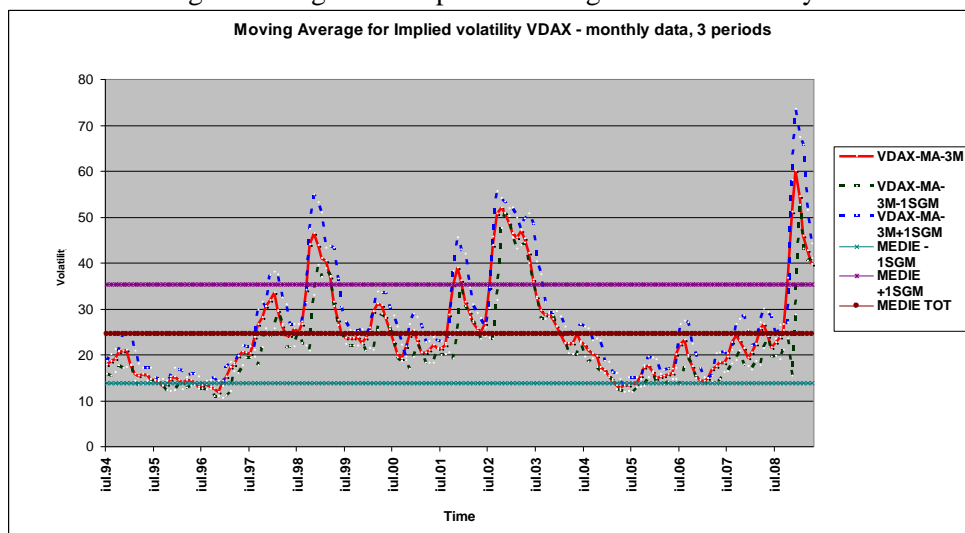
appreciate less frequently, but once the appreciation occurs, its movement is faster than when they depreciate, and the authors also interpret this as a result of carry-trade unwinding.

### Research methodology and results

Our research involves a comparative analysis between low-yielding currencies (we take into consideration the euro, the Japanese yen, the British lira and the Swiss franc) and several high-yielding currencies from Central and Eastern Europe (the Turkish Lira, the new Romanian RON, the Russian Ruble, the Polish Zlot and the Czech Crown) in the moments of high volatility for the capital market, as shown below. We consider as proxy, for European Capital Market Volatility, the VDAX indicator<sup>309</sup>.

Looking back at the 1994 – 2009 period<sup>310</sup>, Figure 1 shows several significant episodes of high market volatility, as indicated by swings in the VDAX indicator.

Figure 1 - Significant episodes of high market volatility



Of all these episodes of high volatility we selected a number of 9 periods, following a threshold in 3-months (60 days) moving average of VDAX values (we used monthly data). In case the daily increases in VDAX were equal to at least two standard deviations up from the moving average and were occurring in at least eight days out of any consecutive 20 days (or 1 month, approximately), we considered it as the debut of an episode of high volatility. The end of the high volatility episode (or its peak) was defined in such a way as the daily declines in VDAX are above one standard deviation of the moving average. Of these episodes we considered only the ones that have the percentage range (the difference between the highest value and the lowest value of VDAX) above the distance between the standard deviation and the average of VDAX over the entire period (44%). Table 1 below shows all the remaining six episodes we identified.

309 VDAX is expresses the implied volatility of the Deutsche Borse DAX Index anticipated on the derivatives market. The VDAX indicates in percentage points the volatility to be expected in the next 30 days for the DAX. The basis for the calculation of this index is provided by the DAX option contracts.

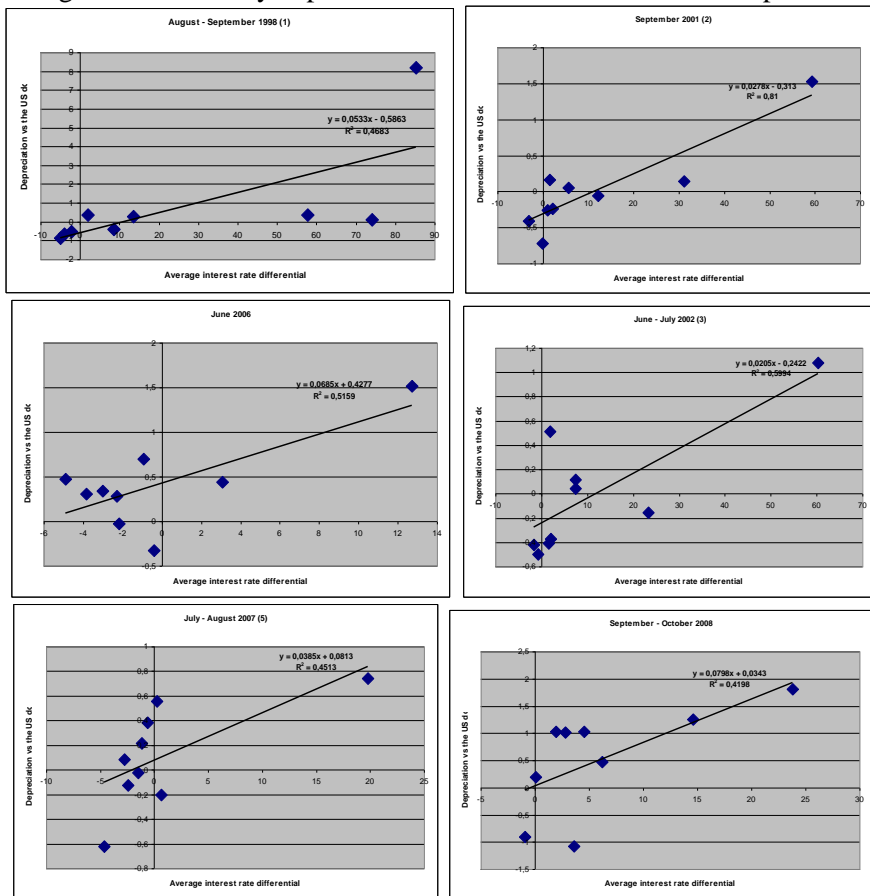
310 From 13 April 1994 to 13 April 2009

**Table 1. Episodes of high volatility, 1994-2009**

| Episode | Beginning day      | Ending day         | Maximum value of VDAX | Minimum value of VDAX | Percentage range |
|---------|--------------------|--------------------|-----------------------|-----------------------|------------------|
| 1       | August 13, 1998    | September 21, 1998 | 54.23                 | 29.92                 | 81.25%           |
| 2       | August 30, 2001    | September 25, 2001 | 54.59                 | 26.30                 | 107.57%          |
| 3       | June 4, 2002       | July 25, 2002      | 58.76                 | 28.61                 | 105.38%          |
| 4       | June 12, 2006      | June 13, 2006      | 27.42                 | 17.26                 | 58.86%           |
| 5       | July 10, 2007      | August 16, 2007    | 31.42                 | 20.42                 | 53.87%           |
| 6       | September 12, 2008 | October 28, 2008   | 83.23                 | 25.34                 | 228.45%          |

For each episode of high volatility for European Capital Market in terms of VDAX we considered the average daily interest rate differential (the term for comparison is the US dollar interest rate) and the depreciation of each selected currency versus the US dollar (log changes on a daily basis, annualised).

Figure 2 – Currency depreciation and interest rates in volatile periods



## Conclusions

For each of the six moments of high-volatility for the capital market, we found an overall positive relationship between the average daily interest rate differential and the depreciation of each selected currency versus the US dollar. This means that in moments of increased capital market volatility, the higher the interest rate differential, the higher would be the depreciation.

Our findings are consistent with the empirical results existent in the literature (ex: Cairns, 2007). Thus, we found that in also Central-Eastern European economies the UIP holds better in moments of increased capital market volatility.

We will abort further research by analysing the connection between interest rate differential and currencies depreciation by the mean of regime switching models.

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# THE EURO AND FINANCIAL MARKETS

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*Adopting the euro eliminate the currency risk within the Euro Area. In principle, therefore, the ones that save should not worry about the place where the securities were issued, so long as they are issued in euro and those who lend can explore the whole euro area making debts contracts in euro. A single financial market means, first, greater competition, as long as national currencies that were used as non-tariff barriers are eliminated. The need to maintain and attract new customers will push financial institutions to improve their performance. A unified market will also enable a better exploitation of scale economies with the development of expanded financial institutions and markets.*

*Keywords: financial markets, the single market, bonds, shares, Euro Zone*

*JEL Classification: G15*

## **1.Introduction**

Adopting the single currency is intended to radically alter the landscape, providing equally for those who save and those who borrow more and better opportunities. Therefore, it is expected to improve overall productivity of the European economy, and possibly to affect the operation of monetary policy.

An important aspect of this experiment is the one that the institutions and financial markets were designed by centuries in the national traditions. The single market has already profoundly changed the financial markets, but there are still important differences. The single currency could announce a new era of transformation, bringing light to many limits of the single market and requiring future actions, which will be examined here.

Finally, monetary policy works through financial markets. Central banks act on very short term interest rates, but the effect of monetary policy on the economy came from, mostly long-term rates and exchange rates, and availability of credit. Each national central bank has developed its own strategy to deal with local conditions, but now the Euro system operates simultaneously through the various national financial markets, with possible effects different from country to country. The possible asymmetric effects of the monetary policy are an additional challenge.

If these aimed benefits are valued is another problem. It may be too early to evaluate the effects of the single currency, but some changes are already observable, sometimes but not always, as well. Preliminary evidence is rare, but absolutely encouraging.

## **2. Results and discussion**

Financial services industry is also dedicated to making the granting of loans. What makes this industry special is that the loaning process is risky. A loan involves give up of money in exchange to the promise for recovery in future. Meanwhile, the borrower can face difficulties leading to impossibility of payment of credit, partially or totally, and some borrowers may simply be dishonest.

The most well known financial institutions are banks: they receive deposits; actually they lend from customers, offer credit and often provide assistance for managing portfolios. In context with these universal banks, investment banks specialize in managing portfolios, they may even not accept deposits and sometimes deal only with wealthy clients. Many fund management companies are not working with individuals; they provide services "wholesale" to banks and insurance companies. Insurance companies and also considered financial institutions. Part of their work is to provide insurance, which, strictly speaking, is not a financial service. In addition, to

face situations of massive payments, they accumulate large reserves, which, obviously, want to manage in order to achieve higher benefits. In fact, they take "deposits" - insurance paid by customers - which they use to "lend" since investing in financial assets. In addition, many insurance companies offer pension schemes and life insurance which can be viewed as deposits with a very long maturity. In fact, in recent years has been noticed the development of financial conglomerates that combines classical universal bank with investment bank and insurance company.

Bonds and shares markets are the other component of the financial system.

Bonds are debt issued by companies and governments on a fixed term at an explicit interest rate, which can be indexed and therefore variable. Stock shares are evidence of ownership of the company: they have no maturity whereas lasts how long the company itself and the yield is determined by company performance. Lender (also named, investors) usually operate through intermediaries - brokers, investment banks - whom it delegates to buy or sell assets in their behalf on markets. Most small investors, as many large ones, actually buy funds that are ready-made packages of shares and bonds managed by financial intermediaries. Each has its characteristics: the relative importance of shares and bonds, industry or country in which they invest the degree of risk and associated security, as will be explained in the next section.

Financial institutions are all forms and sizes. Several huge international banks coexist with some small and local ones. Some financial markets attract lenders and borrowers around the world (New York's Street and City of London is the largest such market), while others deal with a very narrow local market. As will be explained further, financial markets are more efficient, as are bigger.

### ***Functions of financial markets***

The function of financial markets is to make lenders and borrows to meet and provide each entity and each borrower saves the best solution. This, of course, includes the yield, but a scheme available sizes and maturities of assets and ability to sell or buy any amount at any time.

Let us imagine an individual who wishes to save an amount, say, for two years. Any person may submit this amount to the bank, but the interest rate available is too small. She may also do better buying bonds, which offer a fixed interest rate, or actions, which do not offer guarantees and which can be highly paid or may endanger the entire amount. Depending on the inclination to risk and return, the person will choose where he would like to be. May then find an individual to borrow and will provide the mix of profitability and risk analysis on which the person wishes it, to the amount available for the one has in mind for the end of two years.

The person may also be interested to have the opportunity to obtain cash or sooner to keep their savings longer. Then enter the financial markets

This example illustrates how the financial markets indirectly connect millions of people who save and borrow. Efficient financial markets are characterized by deep-liquidity or ability to sell or resell the assets quickly - and expansion - availability for a range of ongoing needs and offers. Those who save will seek different points of the scheme trade-off the return-risk because they have different degrees of aversion to risk. Nobody loves the risk, at least in the financial field, and this observation has two implications. First, risk has a price. Those who hate risk are prepared to compensate players with low aversion to risk that are ready to provide protection against risk situations' solution for those with aversion to risk is to change those who are brave a very active against risky one more secure. Naturally, caeteris paribus, less risky assets will be cheaper. The price difference is price risk. There are many ways, some of them very sophisticated exchange risks. The end result is that markets determine the price of risk attached and that all assets conform to the same risk-return scheme risk-return record set price risk and financial markets allow anyone to negotiate a higher return for higher risk, or conversely, depending on personal preferences.

A second implication is that risk reduction is desirable, and the financial markets carry out this function. The fundamental principle is diversification, which can be described with a simple example. Take two assets, one that brings EUR 100 days of sunshine and one that brings 100 euros in rainy days. Assume further that the average number of days in the sun is equal to the rainy days, so on average each asset to 50 euro per day. Taken separately, each asset is risky: for example, long sunny days leave without the money an investor who holds only active for those rainy days. However, preservation of assets for half of sunny days and rainy days for half completely eliminates risk. Indeed, most of those who keep saving diversified portfolio of assets, in addition, financial markets are large whereas the most effective offers a wide range of risks and enable the saving to reduce the risk they face.

## ***2.2 The characteristics of financial market***

Financial markets are created to fulfill the functions described above: namely, putting the needs and preferences contact the lender and the borrower who is establishing the price of allowing risk diversification and risk.

The contact and risk diversification are simple if there is a large number of borrower and lender that person. The financial industry is subject to massive economies of scale, affecting banks and financial markets. Where markets and small banks survive is not difficult to find barriers to competition. Existence of different currencies is one. indeed, an investor who bought Irish assets Portuguese faces currency risk in addition to normal credit risk and this makes the assets more attractive to Irish person. Creating a single currency eliminates this barrier via specific competition.

A response to economies of scale is the development of financial institutions and markets high. Another response, which goes hand in hand with the first, is to strengthen the networks. When a company receives funding to financial savings, it should give loan with these funds as soon as possible because "time is money." With some luck, it will find its customers among anyone who wants to borrow, putting in contact needs and preferences, but most will not happen that way. The solution is to give money to loan to another financial firm may soon find someone willing to loan or identified another financial firm that has found an immediate customer is willing to borrow, etc.. This is why the financial markets operate as a network. Indeed, the switch rapidly from one firm to another to find a home - a convenient customer who wants to borrow it - somewhere in the network and very possible, in a very remote corner of the world.

A financial firm is a telephone connection: if you're the only one who has a connection, the phone does not work. A phone is more useful as more people are connected to the network. This effect is called network externality. A financial firm can provide better opportunities if it is in contact with a large number of other companies working with many customers, investors and individuals who wish to borrow. The best network could be the world, hence the trend toward globalization of financial services.

A fundamental characteristic of financial activities is that those who borrow always know more about their risk than a creditor. This information asymmetry produces profound implications. Those who can lend intentionally try to hide some damaging information in order to obtain a loan very desirable. As a result, lenders are very careful, not to say suspicious. They can simply refuse the loan rather than to take unlimited risks. as an alternative, they may set a very high price for risk, that may require a larger risk premium. This, in turn, may discourage those who wish to borrow and low risk, but may not report their actual risk, while desperate people who want to borrow are ready to pay any risk premium.



### ***2.3 Effects of the single currency on financial markets***

Adoption of the euro eliminated currency risk within the euro area. In principle, therefore, the saver should not worry about where they were issued securities, so long as they are issued in euro and those who lend can explore the whole euro area in euro debt.

There is no reason for financial markets to be Finnish, Greek and German.

A single financial market is, first, greater competition, as long as national currencies that were used as non-tariff barriers are eliminated. Rents associated with dominant positions will disappear, and the need to maintain and attract new customers will push financial institutions to improve their performance. A unified market will also enable a better exploitation of economies of scale with the development of financial institutions and markets expanded. Only three banks in the Euro Zone are in the top ten (until recently, U.S. banks were disadvantaged by the law, which forbade them to operate more than one state). Similarly, the stock exchanges in the Euro Zone (Frankfurt, Paris, Milan, etc..) are small compared with Wall Street and City of London. Moreover, developing a single financial market, accompanied by the elimination of rate risk, will allow greater deepening and widening as the market serves several lenders and borrowers.

A negative aspect however is that the potential for diversification decreases. Before the euro, a Belgian economist could diversify their portfolio by buying securities from German, Italian and other European countries. Now, these securities are less diverse since they are expressed in the same currency, and the cycle becomes more homogeneous. To achieve a high degree of diversification, they should move to places less known in the world. One over another, however, the positive effects of the economy of scale in a unified market on a large scale is likely to exceed the negative effects of reducing diversification.

Thus, more competition and more opportunities will create benefits for savers, and recent lenders and borrowers. This, in turn, will encourage growth as a consequence of better opportunities to borrow. It will also allow countries with significant needs to borrow to feel better savers anywhere in the euro area, adding to the effect of growth.

### **3. Conclusion**

In principle, the introduction of the euro should speed up financial market integration in Europe. The main reason is that the elimination of the exchange risk also eliminates an obstacle to the free flow of financial assets and services. As long as national currencies existed there was an exchange risk preventing full integration of financial markets.

There can be no doubt that the euro has the potential of becoming a major international currency. There are a number of factors that will help the euro to establish a firm position as a world currency. One is the economic size of the Euro zone, the other is the existence of macro and monetary stability. These are necessary conditions for a currency to become widely used in the world. Another condition is the depth and the sophistication of the financial backing of the currency markets. Although the creation of the Euro zone has led to a significant integration of the Euro zone financial markets (mainly the money and bond markets) which has increased the depth and the liquidity of these markets, much remains to be done. In particular, the equity and banking markets are still segmented considerably hampering the euro in its quest to become a world currency on a par with the dollar.

We also argued that further financial market integration in the Euro zone should be pursued so as to provide an insurance mechanism against asymmetric shocks, thereby facilitating the smooth functioning of the monetary union. Such integration will require further steps towards integrating legal and regulatory systems. In other words it requires further political integration.

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# UPGRADING OF INDICATORS WHICH QUANTIFY THE RISKS AND DIMENSION THE CREDITS AS A RESULT OF CREDIT CRISIS

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*The credit crisis has generated a lack of liquidities at the whole national economy level which finally will lead to decapitalizations among the economic agents and the banks. Under these conditions the financing of the capitalization process gets new capacities in this stage of our country development imposing it as an objective necessity. The problems the national economy confront with and of whose solving depends the reaching of objectives in the process of market economy strengthening and of economic welfare increase, can be surpassed only by an adequate capitalization of all the activity sectors. For it the banking system should re-examine the crediting policy that should have as a central axis the national economy capitalization at the level of all its economic links meaning that the instruments of credit volume dimensioning and those of risk quantification should be re-defined according to the new purpose.*

*Key words: capitalization, non-financial aspects, economic performance, SWOT analysis.*

*Code JEL G10 G21*

## **1. Introduction**

In 2006 the World Bank performed a study on 100 countries published at Oxford University Press – *Doing Business in 2007: How to Reform* regarding the impacts of credits upon the national economy. Starting from this study, Martin Brown and Christian Zehnder in the article *Credit Reporting, Relationship Banking and Loan Repayment* (Swiss National Bank Working Paper No. 2006-3) and afterwards taken by Journal of Money Credit and Banking have raised the problem of effects the credit has upon the financial markets performances and the borrowers standing for a relation between the borrowers and the banks to contribute to the performances increase.

The confronting of banking financial institutions with new risks but also the accentuation of the existing ones means the starting point in issuing the new international regulations regarding the capital suitability these being doubled by an adequate management at the organizations level in the crediting process.

At the international level lots of magazines of international circulation (quoted ISI) offer places for articles dealing with the problem of capitalization in banking sector and business environment. Among these we mention: Journal of Money Credit and Banking (U.S.A), Journal of Finance (Oxford), Journal of Banking & Finance (Amsterdam). In Journal of Money Credit and Banking in 2007 was published Valeriya Dinger and Jurgen von Hagen's article intitled *Does Interbank Borrowing Reduce Bank Risk*. They empirically analyze Central and East Europe banks concluding that they need an urgent recapitalization.

## **2. A SWOT analysis drawing up at the national economy level in the process of its capitalization financing.**

One of the most used modalities of analysis and successfully applied at international level is the SWOT analysis (strengths, weaknesses, opportunities, threats). This analysis is based on the investigating style and consists of:

-strengths;

- weaknesses;
- opportunities;
- threats.

The analysis can be used for the economic agents which aim at the capital increase, their partners and the banking institutions but also at the proper activity of banks financing the process of capitalization.

We will try to present for the first time a model of SWOT analysis for the national economy considering that it is opportune in the process of capitalization. Although this technique of analysis is used at microeconomic level we will extrapolate further on the investigating style at macroeconomic level according to table no. 1.

**Table no. 1**

***SWOT analysis at the national economy level in the process of capitalization process***

|               |            |
|---------------|------------|
| STRENGTHS     | WEAKNESSES |
| OPPORTUNITIES | THREATS    |

**Strengths** in the process of capitalization at macroeconomic level can be as follows:

- banking system has a network of banks strongly capitalized;
- clients portfolio belonging to banking institutions assures an adequate dispersion of risks;
- products offered by the banking system support national economy capitalization;
- deviation between active and passive interests is adequate;
- credits portfolio is performant enough.

**Weaknesses** in the process of capitalization are given by:

- decision makers which are not progressive;
- banking products which do not adapt to the requirements of capital increase;
- big interests for investment credits;
- unsatisfactory rate of exchange;
- the economy is sub-credited and sub-capitalized.

**Opportunities** means external factors that should be considered in the process of capitalization:

- more and more important role of foreign banks in the process of capitalization;
- integration of Romanian money market;
- joining the European Community;
- introduction of European unique currency;
- participation to the external capital markets.

**Threats** can be achieved or not but they must be known and quantified:

- appearance on internal financial market of some foreign banks which are aimed at speculative purposes by the performed operations;
- competence at European level is stronger and stronger;
- national economy specialization aimed at certain branches according to the instructions got from outside the country;
- co-optation of some Romanian specialists by other national economies;
- pressure of rates of exchange.

In the proposed model of analysis are combined internal factors with external factors that should be unitary treated with the biggest responsibility. In practice, the model applied at microeconomic level tends to insist more upon strengths and opportunities. This mood of approach is very harmful and it does not represent the interests of an economy whose main objective is the process of capitalization.

### **3. The analysis of non-financial aspects in the process of capitalization**

In the process of national economy capitalization banks should consider the non-financial as well as the financial aspects regarding the activity of economic agents applying for credits. The capitalization of economic agents as a basis of national economy capitalization depends on a complex of factors among which some are shallowly dealt with in the specialized literature and in practice. In this respect, a greater care should be taken of non-financial aspects whose action in the process of capitalization can have surprising effects.

Within the non-financial aspects an important place is held by the type of property on capital knowing that the base of capital increase means the capital itself. In this respect it is very important to know what is the capital nature, private or state-owned. If the capital is of mixed type, the owners should be known in details and if there are not difference in opinions regarding the strategy of capital increase. In practice was found out the inclination to the consumption of the received profits by some proprietors with administrative jobs with negative consequences on the process of capitalization. Such a state can be eliminated by appointing in managing jobs some administrators whose payment should be done in accordance with the achieved economic and financial indicators as well as the future strategy regarding the capital preservation and increase.

If there are more shareholders it is possible to follow only the increase of the shares value for the stock exchange purpose (stock exchange capitalization), commercial banks being obliged to find out these intentions but the central bank will have to impose some restrictions to finance such cases.

Another non-financial aspect is represented by the general information about the society among which we are particularly interested in the capital amount and the level of competence of the associations regarding its increase or decrease. The financial and the credit institutions are required to check these information at the Commerce Registry where they can get information about the capital increase or withdrawal as well as about its structure. Concomitantly information about the field of activity should be obtained because the capital amount differs from one branch to another in the national economy being bigger for industry, transports and smaller in trade or services.

The company managerial team as another non-financial aspect is interested by progress. In other words, the leaders should be seen how much they are progressive. A progressive managerial team will always adopt strategies of capital increase as well as of their structure improvement.

The human capital as a component part of the company capital nowadays becomes more and more interesting. This is a non-financial aspect with response in the process of capitalization for which it is important to act for a continuous perfection, the participation with suggestions in management, the stimulation in order to increase fidelity and not the least to use all the intellectual and professional aptitudes at the highest level.

The business is interested by its added value which will be the support of the capital increase. The value increase should not be followed at any rate but its dimensioning so that it should assure the capital increase as well as the market segment maintenance and increase.

A market of a business means the support of the achievement of the new created value as a base of the capital increase its winning depending on a complex of elements of which more important are product, clients, competition, suppliers, marketing policy (price policy, distribution policy, advertisement and advertising are more important).

As I previously stated, the process of national economy capitalization is not possible without a proper crediting by the financial and credit institutions. The analysis performed by banks should emphasize the analysis of non-financial aspects. In several countries has been found out that a non-financial aspect of a crucial importance in granting performant credits is the quality of borrowers managerial team. This criterion has begun to be introduced in our country too, being even accepted by some norms introduced by The Romanian National Bank.

To create an equilibrium between the bank risk profit, incomes and the capital, in practice has been imposed an analytic background called „Windows on risk” (departments regarding the risk to control concentrations on each country, products, industry and client, to reduce the vulnerability regarding portfolio, operations, technology and legislation). This concept implies:

- short-term forecasts drawing-up regarding the external global environment, underlining major risks;
- examination of risk banks profile which affects business and money operations;
- initiation of actions which determines the risk profile as a response to the risks perceived by environment and portfolio analysis.

#### **4. Upgrading of indicators used in the analysis of financial performance**

After the analysis of non-financial aspects it is required as a second stage of the credit risk analysis the determination of financial performances. According to BNR norms the analysis of financial performances will be done on the basis of accountant financial states existing at the end of the year or the term. The analysis should consist of information of the existing last checking balance so that the data should be more relevant.

If the credit granting are not especially aimed at the capitalization of the economic agents the analysis done on the basis of more recent states could be sufficient. But if the financing is aimed at the capitalization of the economic agents then the analysis is necessary to be done on the basis of the financial states at the end of the last three years and the latest checking balance.

Using this type of analysis we could draw pertinent conclusions on the politics approached by the economic agents in the process of capitalization. If the own capitals and the loans have increased in the analyzed period then the conditions in which this increase has been registered should be found out: as a result of permanent capital re-valuation, as a result of new capital subscription or as a result of contracting new loans. If permanent capitals have been revaluated the revaluated shares will be identified and how this revaluation was done. If there are contracts for new loans will be identified the amounts, the periods of time, the financed activities and the guarantees formation.

If there is a decrease of capitals it will be analyzed if the business dimensions have been reduced, if shares selling have been done, which is the nature of the sold shares as well as the reason of the shares selling (they are not necessary or they have been sold to face some due debt).

To form a reason for capitalization it is not sufficient that the economic and financial performance of economic agents should be determined strictly in accordance with the introduced regulations. The economic and financial analysis should also emphasize the way the indicators will look after the loan has been granted because by debts increase with this credit amount the liquidity, the solvency and the debt level will get worse. Thus, the performance becomes a concept that comprises at the same extent the past information as well as information with forecast character. Under these conditions the calculation of the main indicators of the credit analysis should take into account also the credits amount for which the analysis is done according to table no. 2.

Table no. 2

**The main indicators of credit analysis**

| Indicator                            | (1)   | (2)   |
|--------------------------------------|---|---|
| <b>Liquidity</b>                     | <b>Floating assets</b><br>----- x 100<br><b>Debts with due date under one year</b>                      | <b>Floating assets</b><br>----- x 100<br><b>Debts with due date + Credits under one year</b>                      |
| <b>Solvency</b>                      | <b>Total assets</b><br>----- x 100<br><b>Total debts</b>  | <b>Total assets</b><br>----- x 100<br><b>Total debts + Credits</b>  |
| <b>Leverage</b>                      | <b>Total debts</b><br>----- x 100<br><b>Own capitals</b>  | <b>Total debts + Credits</b><br>----- x 100<br><b>Own capitals</b>  |
| <b>Gearing</b>                       | <b>Financial debts</b><br>----- x 100<br><b>Own capitals</b>  | <b>Financial debts + Credits</b><br>----- x 100<br><b>Own capitals</b>  |
| <b>Liquidity for a future period</b> | <b>Own money resources + Forecasted returns</b><br>----- x 100<br><b>Debts due for crediting period</b> | <b>Own money resources + Forecasted returns</b><br>----- x 100<br><b>Debts due + Credits for crediting period</b> |

The calculation of the indicators in column number (1) it is actually done by each bank correcting the positions at dominator as well as at numerator by various balance positions according to the strategy applied in the risk credit analysis. In column number (2) were put into calculation also the credits the bank clients apply for and for which the risk credit analysis is done even at the date of the analysis these are not registered in the checking balance.

The putting into calculation of the credits amount the debtors apply for leads to decrease the risk regarding the appearance of some non-performant credits. At the same time this way of calculation is to change some bank clerks' false ideas according to which the credits are granted when the client "goes well" but also of some company managers according to which the credits are granted when the client "goes wrong".

## 5. Conclusions

A performant bank strategy should consider the reducing of banking risks. The premises of risks appearance in crediting derives from the very complex character of relations which appears in the process of capitalization financed by credits. The increase of banking performance and the decrease of risks can be determined by the diversification of credits portfolio.

In the trial to finance the process of capitalization the risks approach should be done first of all, starting from the bank capitals that should be protected and afterwards strengthened, finally allowing a better finance of the process of capitalization at the level of all sectors of activity. Secondly, the risks avoiding should concern also the results by which the activity of economic agents is ended after the credit has been returned. That is why the economic indicator upgrading which analyzes the economic agent financial performances becomes an objective necessity under the present economic conditions.

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# THE IMPACT OF CAPITAL INTERDEPENDENCE ON THE FINANCING OF NATIONAL ECONOMY CAPITALIZATION

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*The capital interdependence has contributed to the amplification of negative effects of the present credit crisis. This thing has been felt both at the economic agent level and at the banking level. The effects of the credit crisis have emphasized the false capitalizations among the economic agents which finally will lead to de-capitalizations among them and the banks. Under these conditions it is required a re-orientation of policies regarding the finding out and forming of groups asking for financing. Also, this paper reveals the importance of banking balance auditing and consolidation in the process of banking capitalization advancing arguments to support the idea of a more severe control on behalf of the state authorities. In the future the effects of such a crisis could be much diminished by an adequate capitalization of economic agents and banking system.*

*Key words: group, false capitalization, unique debtor, audit, balance*

*Code JEL G21 G32*

## **1. Groups and false capitalization**

To quantify the risks generated by the capital structure must be studied the juridical links between the economic agents from the property rights upon capitals point of view.

In practice, an economic agent can own parts of the other economic agent's capital and thus, by his exercised right to vote he can have a decisive influence upon his economic activity. The B.N.R and of other commercial banks norms pay a great attention in the case of capitals interpenetration defining the implied economic agents as belonging to a group which is treated as a unique debtor.

The notion of unique debtor is defined as being any person or group of natural and/or juridical persons to which the crediting institution has a statement and:

-which means only one risk, if it is not proved otherwise, because one of them directly or indirectly, controls the other or the others; or

-among which does not exist a control relation as it has been shown above, but which should be considered as representing only one risk because there are such links between them so if one of them should face up to financial problems there is the great possibility that the other or all the others to face up to return difficulties.

Taking into account greater and greater dimensions of some business under the impact of the trans-nationalization phenomenon the commercial companies begin to have a very expended capital structure. In this respect, the legislation in our country foresees that these companies can have subordinated units that do not have juridical personality, they draw up only certain account documents and they do not have their own property. Not having their own property, they do not have the right to have links with third parties, but only the right to manage it.

If the subordinated unit wants to make a decision in the process of capitalization in point of capital increase by investments, the decision should be approved by the central one. Also, if it wants a des-investment or a capital diminish because of loses, it is required the approval from the mother-company. Thus, the process of capitalization is limited, in practice proving that a territory distance to the concrete realities at place can be an obstacle.

Denatured relations which could appear between the mother-company and sub-units at a certain moment, can generate what we name "false capitalization" in the national economy. The false capitalization can be achieved by repeated transfers of amounts between the companies of the

group, the amounts that contribute to the false capital increase, too. Therefore, very big capital amounts are reached to at the unit level under the conditions in which real capitals can be several times smaller.

The false capitalization can be achieved also by fixed means between the companies of the group in documents being as investments and being incorrectly taken at the national economy level in the calculus of fixed capital gross formation. If we have a capital of  $x$  millions lei then the false capitalization is given by the sum of all the transactions between the component units, that is  $n \times x$ . If it is about the false transfers of fixed means of a declared purpose to participate in the process of production at least for one year, then the false measure of the fixed capital gross formation is also  $n \times x$ .

The artificial increase of capitals and money turn over as a result of such transactions can allow a more rapid penetration to financing from the banking sector with negative implications on the quality of credit portfolio at the national level.

The false capitalization determines a supra-crediting which can be avoided only by a very exact knowing of the relations that develop between the mother-company and sub-units. In this respect we distinguish:

-relations of contracting nature developed on the basis of statutory term or of an independent contract;

-juridical and financial relations, the control of mother-company being done because of owing capital share;

-personal relations where the main role is owned by one person who controls more companies which have a link between them in point of capital.

The notion of group is defined according to the VII norm regarding the consolidated accounts adopted by the Council of European Community on 18<sup>th</sup> July 1983: "a dominating company and one or more companies depending on it form a group in the sense of this norm if the dominating company effectively influences it so that the assembly of these companies should be placed under the unique rule of the dominating company. Each of these companies is a group company".

The internal legislation that is the order of the ministry of finance no.1414/29.07.1997 defines the group as an "assembly of companies including the company which consolidates (consolidating) and the Romanian and foreign companies (consolidated) in which it directly or indirectly, makes an exclusive control, a joint control or a notable influence".

The right to control can be exercised as a result of having a majority percentage of the capital or of the rights to vote or merely, exclusively by virtue of a contract or statutory term.

The joint control implies to make decisions in common by a limited number of shareholders but the notable influence implies the right to participate directly or indirectly in the financial and operational policy upon one company but without having the exclusive and even joint control.

To limit the risks which can appear in the process of capitalization financed by the banking system it is necessary to know as detailed as possible the relations ruling these economic entities concomitantly with the improving of present legislation in point of a more strict regulation of money and fixed means transfers between companies belonging to the same group.

## **2. The necessity of banking balance auditing and consolidation in the process of capitalization**

The importance of capitalization or the impact of banking de-capitalization upon the banking system in Romania necessarily implies a very exact knowing of their levels and tendencies under the conditions in which the banking transaction is strengthened. Nowadays, more than ever, banks have diversified and branched out their activity so that the capitals they own within the bank or within other economic and financial entities have become very complex. More and more banks in Romania lay the foundation of companies in the field of insurance, financial

investments, leasing, etc. The exact knowing of the group business can be achieved by the consolidation of the whole group financial state.

The mother-company is defined by the Banking law no.58/1998 republished, as being the entity which is in one of the following situations:

-directly and/or indirectly owns the majority of the rights to vote in another entity called subsidiary;

-has the right to name or to revoke the majority of the members in administration and control bodies or the majority of managers of the other company called subsidiary and at the same time it is a shareholder or a partner of that entity;

-has the right to exercise a great influence upon one entity for which he is a shareholder or a partner by the virtue of a term included in the contracts concluded with the respective entity or some provisions included in the constitutive document of that entity if the legislation governing the subsidiary state allows the existence of some terms or provisions;

-he is a shareholder or a partner of the entity and in the last 2 years he himself named, as a result of his right to vote, the majority of the members of administration and control bodies or the majority of subsidiary managers;

-he is a shareholder or a partner of the entity and he himself controls on the basis of an agreement concluded with the other shareholders or partners, the majority of the rights to vote.

The same law defines in art.24 as being “strong links” those relations existing between two or more natural and/or juridical persons being in one of the following states: one of the persons owns a direct participation or with the help of a control relation of at least 20% of the social capital or of the rights to vote of the other person; one of the persons controls the other; the persons are permanently linked to one and the same person by a control relation.

Considering the above mentioned, the capital branching and increasing can become risky for the bank because it can be affected by the risks specific to the proper banking activity but also by the risks on the insurance, securities and currency markets, etc.

The collapse registered by Baring Brothers Bank in Great Britain in 1995 is very relevant. The reducing of banks income traditional sources in the United States of America and Great Britain as a result of unprecedented development of capital market has determined the banks to emerge these markets founding specialized companies or participating in the capital of some companies already existing on the market. It has determined very rapid changes in the structure of banking capital, at the same time the banks making compromises by accepting some persons who did not have anything in common with the conservative strategies and the principles of banking prudence. Under these conditions, the manager of Baring Futures in Singapore did not only meet such conditions but he dangerously had two incompatible jobs: one of the chief of the transaction settlement department and the other of the chief of the transactions done on financial markets without being a control between the performed transactions and the assumed risk.

Under the conditions of the earthquake in Kobe Japan in 1995 the insurance market and the capital market were visibly affected by its implication, the positions got by Baring Futures remaining unprotected.

The used strategy did not by far respected the norms of the banking prudence, on the market being thrown big amounts of money trying to protect Futures contracts, techniques specific to capital markets. The registered losses were of about one billion dollars. In order to avoid its implication on the banking system, the Bank of England reunited the representatives of the main banks trying to find the one billion dollars in order to re-capitalize the bank. They answered the central bank appeal in order to avoid the implications the Baring bank collapse could have on their banks. But after long negotiations the representatives of these banks considered that they did not want to risk their payers' money in order to support this bank whose operations were based on term contracts.

From Baring bank lesson derives some conclusions as follows:

-the necessity of a more severe control on behalf of banks and central banking authorities upon the branches developing transactions on capital and insurance markets being inexplicable how the Baring Futures managerial team could hide to its auditors all the disorders between February 1994 – February 1995;

-stock-exchange authorities should communicate more between them, the markets could not protect their member capitals without a strong centralization of information.

To prevent such situations, the Banking law no.58/1998 republished foresees in its article 85 that the financial auditor yearly will draw up a report with his opinion from which should derive whether the financial states presents a true image of the financial image, treasury fluxes and to the Romanian National Bank it will offer any information and explanation. The auditor will inform the National Bank about any deed which could affect the property state or which means a grave infringement of the law.

The shares a bank can own in companies other then credit institutions, the financial and insurance institutions cannot exceed 15% from its proper funds and 20% from the social capital of the respective company. All shares portfolio owned by a bank under the above mentioned conditions cannot exceed 60% from the own funds of the bank. These conditions that again limit the banking activity according to the capitals amounts mean another argument in supporting the importance of capitals on the banking market.

That is why, in order to diminish the risks which can appear but also to insure the amounts necessary to gain participants, the law stipulates that it is submitted to a previous approval by the Romanian National Bank:

-any share the bank intends to own in credit, financial and insurance institutions or other entities which as a result of getting the respective share would enter the perimeter of account consolidation;

-any participation whose value is at least 10% of the own funds of the bank which it intends to have in shares or other securities of participating nature unquoted on a regulated market;

-any participation whose value is at least 10% and 15% of the own funds of the bank which it intends to have in shares or other securities of participating nature quoted on a regulated market, issued by entities other than credit, financial, insurance institutions or auxiliary or connecting services institutions companies.

### **3. Conclusions**

The real evaluation of banking capitalization at a certain moment as well as its tendencies is mediated by the banking balance strengthening which allows the achievement of unique accounts for the banking company and the companies independent in juridical point of view but which are linked between them by a center for common decision. By consolidation, the account of profit and losses and the balance of these companies are presented as if they form a single entity.

For a correct evaluation of the process of banking capitalization this way of presentation gives extremely important information regarding the social capital and own funds capital dimensions. Thus, the profile of the other companies with which the bank forms a group, in fact, can be a loss which cumulated with the banking company profile leads to its diminishing or even to registration of losses for the banking unit. Keeping of the bank participations at the companies belonging to the group implies the participation both to the profiles and to the losses. Under the above mentioned conditions the bank will be forced to “finance” the loss registered by companies where it has participations by diminishing the capitals kept by them or by the capital infusion from its own resources.

This actual fact will reflect itself after the account consolidation in diminishing the banking profit or even the banking capitals.

Regarding the consolidated account of profit and losses it is very important to separate the profit in three levels: exploitation, financial and exceptional. Even if the group registers profit it can

overwhelming derive not from exploitation which characterizes the banking object of activity but from certain speculative operations of the capital market of a very high risk. It is good that after the account consolidation to be calculated an indicator we will name “the capitalization risk” calculated as a report between the profit from exploitation and the amount between the financial and the exceptional profit. It would show the possibility, at a certain moment, not to achieve the increase of capitals by non-achieving the financial profit as well as the exceptional one because of new market conditions.

If in the first stage the consolidation of the account of profit and losses could give the measurement of the tendency to increase and decrease the capitals as a result of the ended financial exercise, the banking balance consolidation gives precise information about the capital levels.

It is opportune that after the financial state consolidation to re-calculate certain indicators of banking prudence and banking profitability. Thus, the calculation of some indicators as solvency rates and the proper capital rate is to be done according to the own capitals at the group level showing a more complex state about its solvency. The indicators of banking profitability are to consider the total consolidated net profit and the total consolidated assets as well as the own consolidated capitals. These re-calculated indicators are to be an informative support in the process of the Romanian National Bank monitoring and supervising

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# FINANCING OF ROMANIAN ECONOMY UNDER CONDITIONS OF FINANCIAL MARKETS IMBALANCE

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*Financial system represents the engine of the economy. Any disequilibrium of this has an impact on the whole economy.*

*Lately, in spite of the firm interventions of authorities, the feeling of distrust of the investors persists, thing that makes more segments of the financial market, particularly those referring to security and financing in long term, to remain vulnerable. Increase of the risk premium and the rise of financings, affect directly and indirectly a large range of economic "actors", having consequences to the level of real economies which give clear signs of slowing down of economic increase or even of recession.*

*On conditions that the Romanian banks do not have exposures on the financial instruments being at the origin of the actual problems from the international financial markets, the turbulences from these markets can affect the financial stability from Romania directly, on the way of the real economy and of banking liquidity.*

*Keywords: financial markets and monetary evolution , exchange rate , interest of monetary politic*

*JEL Classification System : D53 ,E50, G00 ,G20*

## 1. Foreword

Responding to the challenges of currency, the banks, as institutions whose activity was initially bound by the monetary creation, have passed through decisive phases with impact upon operating the economies along decades.

The last trimester of 2008 registers an important point in the dynamics of internal economic activity, reacting by a substantial diminishing of external demand for Romanian products, as well as by difficulties increased by financing the economic agents, which during October-November led to significant diminishing of the values of some indicators as: industrial production, confidence index in industry, turnover in the field of services performed for people, rhythm of increase of the turnover in the retail trading.

In October 2008, the Romanian National Bank decided holding the rate of monetary policy interest to 10,25% per year, aiming the accomplishment of the medium-term objective of disinflation in a sustainable way. In the same time, it has been decided the diminishing of the rate of minimum reserves mandatory and applicable to the liabilities in Lei from 20% to 18% stating with 24<sup>th</sup> of November to 23<sup>rd</sup> of December 2008. In case of amplifying the international financial crisis and of curtailment of the liquidity surplus from the Romanian banking system, the measure was for the improvement of liquidity management from the inter-banking monetary market with the purpose of insuring a sustainable financing of economy.

In the following, we shall try to notice the role and importance of the financial services as a source of financing the economy, in overtaking the financial crisis and starting the economic revival.

Besides its own savings, the banks are or should be in a healthy economy, the main financing source. The role of a bank within an economy can be analyzed, mainly, using the concept of mediation between the debtor and creditor agents from economy.

Is the Romanian banking system ready to confront the challenges imposed by recession?

Is it solid enough to support the enterprises by their financing in advantageous conditions so that the economic blockings not to increase?

We shall try to find pertinent answers to these questions in the following lines. Having a general look, the identified causes of the problems from the financial systems of the developed countries were: the significant surplus of liquidities

in the context of some small rates of the interest, development of the financial innovations that were accomplished without a proper understanding of the assumed risks and without implementation of some corresponding methods of administration of the risks and transparency of placements in the innovative products, as well as within the appropriate framework of rules which were insufficient.

The effects of the international financial and economic crisis are more and more present by decrease in exports and external financings, by an increased volatility on the currency market, correlated to tendencies from the region and to lack of appetite towards the risk of the foreign investors. The analysis of the data show that the dispersion of these effects is already reflected in reduction of the credit given to the private sector with effects on decline of the economic increase, maintaining further on a high degree of uncertainty regarding the importance of these effects.

## **2. A priority for a viable business: attraction of financial resources**

A good planning of the economic development also implies the insurance of money funds needed for financing from internal sources (banks, investment funds, cooperative institutions of credit, factoring and insurance companies, credit agencies, governmental and non-governmental organizations) or from external sources (World Bank, International Monetary Fund, The European Bank for Reconstruction and Development (EBRD, European Bank of Investments).

The fact that financial resources, as well as the currency or material resources are limited, and the destinations are challenging, requires their usage in conditions of maximum efficiency. Accepting the charges of expenses for accomplishing an objective or an action, there must be carefully analyzed all susceptible solutions to be taken into consideration to choose the optimum variant which has the most advantageous report between the required effort and the obtained effort. The financial policy must follow the systematic increase of efficiency of all expenses.

Regarding the public funds, to get a better efficiency in their usage, besides the dimensioning and the judicious distribution, it is necessary the stimulation of the beneficiaries by financing and administration methods or by other specific instruments. This thing can be done by choosing an adequate method of financing: self-financing with own resources regarding the credit, self-financing with completion of the own resources regarding the budgetary allowances, full financing with definite and non-returnable security from the budgetary funds or extra-budgetary funds, as needed.

Non-refundable financings are meant to support some important activities for certain segments of the company or for general development of the economic and social system, in fields for which, due to the conjuncture situation there are not enough financial resources to be accessible permanently (for example the rehabilitation of infrastructure in poor areas, professional requalification, support of developing the ONG sector in the capacity of partner of the public authorities) or from domains in which there is a need of financial resources more than the liquid assets.

The currency has also serious implications upon financial stability (as well as upon macro-economic stability): external financing of the banking sector is increased, population and companies practically make loans equally in national currency as well as in foreign currency (moreover, the companies make loans from exterior on a large scale). Volatility of the national currency is increased (comparing with the volatility of currency from the region), being also explained by structural features of foreign exchange market, which distinguish it from other regional markets: quite small volume, maturity of operations is most of the time on short term, small weigh of derived financial instruments (held almost entirely by non-residents). This quite

raised volatility of the leu rate, with its implications mainly negative, can be reduced by development of the foreign exchange market, but especially by hardening the coherence of macro-economic policies.

The private consumption continued to record a real rhythm extremely raised (over 19%) on one hand, and on the other hand, the appeal to borrowed funds has substantially decreased – trajectory suggested by a new slowing down of the dynamics proper to the balance of consumption credit allowed by commercial banks (more evident in the segment of the foreign exchange credit), as a result of raising the interest rate and depreciation of national currency.

### **3. The world of banks in the new world – quality versus quantity**

Permanent preoccupation of the central bank of achieving a safe, modern and competitive banking system which insures a well mediation and generates the confidence of public, is effected, among others, in systematic monitoring of the internal market and banking products and services and of tendencies recorded in the European banking sector.

The identified causes that are at the origin of the problems from financial systems of the developed countries were: significant surplus of liquidities in case of some small rates of the interest that promoted the assuming of higher risks to get higher efficiency, development of financial innovations that were created without an adequate agreement of the assumed risks and without implementation of some corresponding methods of administration of the risks and transparency of the placements in the innovative products, as well as the appropriate regulation framework which were insufficient.

Capital market can take over the role of financier of real economy with limits in case of some disequilibriums of banking sector, although it benefits of a good capacity of absorption tested at the level of subscription of the public offers. Companies of services of financial investments have a determinative role regarding the mediation on stock exchange market, but the number of assets held by these entities is low.

The low level of economic training, and especially banking training of the effective and potential consumers of products and banking services, as well as the professional preparation still in deficit as average per banking system of the staff of the credit institutions, stops an efficient communication between the two parts. Thus, on one hand, many economic agents with necessities of financing do not appeal to banks but only at last, and on the other hand, there are still banks that do not pay enough attention to the aspects regarding the entry in their offer of the services of consultancy destined to the customers.

One of the factors that might affect stability of the financial system is the majority weight of foreign capital in financing institutions. On calm periods, on the European financial markets (the main area of origin of foreign investments in domestic financial system), non-resident investors bring a surplus of stability and support development of domestic financial market. But, under present conditions of turbulences and high incertitude on external markets, the foreign capital can transmit a part of risks towards the Romanian financial system by contagiousness.

It becomes more and more evident the fact that the banks allowed credits on medium and long term without a thorough analysis of the effects generated by crediting the population without being correlated with the power of absorption of the real economy.

This thing has repercussions on Romanian economy by difficulties as liquidities reduction in financial-banking sector, simultaneously with the increase of the cost of internal and external financing, hardening the conditions of credit access for population, economic agents, but also for the public sector, raise of persons who are in the impossibility to return the rates and the interest to the banking credits, decrease of internal production with negative effects upon labor income, keeping the jobs, as well as upon the profitability of companies, decrease of the purchasing power and life quality.



In such circumstance, macro-economic internal weaknesses (outrunning of increase of labor productivity by the one of salaries, increasing deficit of the current account and predominance of financing by credits, economic increase based more on consumption and less on exports) started to be penalized.

Ascendant tendency from 2005-2007 was correlated to the positive evolution of other markets from the Central and Eastern Europe, and the total number of credits allowed by the monetary financial institutions from Romania exceeded 50% from GDP at the end of 2007. At the same time, the credits exclusively allowed to the resident financial institutions represented 17,70% from GDP, total weigh of allowed credits being the highest from the analyzed countries. Thus, the banking market has been characterized by a high degree of liquidity, under the capacity of absorption of the real economy, but with a slight tendency of decrease in 2007.

According to the provisions of NBR (National Bank of Romania), in trimester IV of 2008, the annual rate of inflation attenuated its deviation towards the superior limit of the variation interval of +/- 1% correspondent to the aim of 3,80% (from 2,4 to 1,5 percentage points), reaching at the end of the year the level of 6,3%.

During October-November 2008, the reduction of the annual real dynamics of the credits allowed to the population till an average level of 37,40%, seems to have been mainly determined by a series of factors of the offer of banking services, from which we could mention: decrease of banks access to the external financing in case of international crisis, limitation of the liquidity surplus from the banking system, increase of the prudential norms practiced by banks, as well as reduction of degree and eligibility area of the possible customers.

On the other side, also the dynamics of request of banking systems recorded significant modifications. Also, a constraining effect had the increase of interests rates to the new credits, but also to the previously contracted ones, and also depreciation of the Leu and the increase of uncertainties regarding the evolution of exchange rate. In their turn, the investments of the population in banks recorded a high decrease of the annual rhythm of raise in October-November 2008.

On the basis of intensification of ascendant movement of the inter-banking yield and of necessities augmentation of internal resources of the banks, but also of accentuation of prudence in case of reverberation of the effects of international financial crisis upon Romanian economy, the average rates of interests on credits and on new deposits on term, accentuated their increase during September – November 2008, accomplishing the most ample positive variations from the last two years.

During September-November 2008, the speed of increase of the credit allowed to the private sector continued to decrease rapidly, thus, reaching the lowest level from the last three years (-9,30%). The tendency of decline characterized both the loans in Lei and the credits in foreign currency, these representing the minimum of the last years. The foreign currency credits continued to be more dynamic than the ones in national currency, so that the average value of loans in foreign currency in the total credits allowed to the private sector recorded a top of the last three years (55,90%).

After 1990, in the developed countries, the banks started to be affected by orientation of the population preference for other instruments of saving, comparing to the deposits, and namely to the mutual funds, pension funds as well as the companies of investments, and the big economic agents are advantaged by procurement of resources from the capital market, comparing to the monetary market.

#### **4. Capital market – an advantageous option?**

The capital market can take over in a limited way, the role of financier of real economy in case of some disequilibriums of the banking sector, although it benefits of a good capacity of absorption, tested by the subscription level of public offers.

The structure of the financial mediation sector shows a native financial culture mainly oriented towards the banking system, while the investments on the capital market hold for the moment a low weight (Table No.1).

**Table no.1 – Evolution of assets of the financial system.**

|  | <b>percents in GDP</b> |              |              |              |              |
|--|------------------------|--------------|--------------|--------------|--------------|
| <b>Financial Mediators</b>                   | <b>2003</b>            | <b>2004</b>  | <b>2005</b>  | <b>2006</b>  | <b>2007</b>  |
| Credit institutions (1)                      | 30,80                  | 36,60        | 44,60        | 50,60        | 61,50        |
| Insurance companies (2)                      | 1,80                   | 1,90         | 2,20         | 2,50         | 3,00         |
| Investment funds (3)                         | 0,10                   | 0,20         | 0,20         | 0,30         | 0,30         |
| Financial investment companies (4)           | 1,40                   | 1,30         | 1,80         | 2,30         | 2,80         |
| Leasing companies (5)                        | 1,80                   | 3,00         | 3,60         | 3,40         | 5,00         |
| Other non-banking financial institutions (6) | 0,40                   | 0,60         | 0,90         | 1,30         | 1,50         |
| <b>Total</b>                                 | <b>36,30</b>           | <b>43,60</b> | <b>53,30</b> | <b>60,40</b> | <b>74,10</b> |

Source : BNR, CNVM, CSA, ALB, INS

1) Net assets of credit institutions, including CREDITCOOP; 2) Value of total estimated assets; 3) Assets of the investment funds; 4) Net assets of the Companies of Financial Investments (CFI); 5) Net financed assets; 6) Total assets proper to the companies that develop activities of allowing consumption loan, of issuing guarantees and incurrence of liabilities, as well as proper to the ones that develop many activities of crediting.

The degree of financial mediation from Romania has accelerated its increase starting with 2007, on the basis of substantial advance of the volume of allowed credits, but also of the investments on the capital market.

The companies of services of financial investments have a determinative role regarding the mediation on stock-exchange market, but the volume of the assets held by these entities is low. The modern financial theory was grounded almost exclusively for a long period on the hypothesis that the financial markets are efficient. The concept of the efficient financial market, introduced and developed by the American professor Eugene Fama, is grounded on the idea of integration in the stock-exchange price of the shares issued by a firm of all information regarding the issuing company. In this respect, each person interested in this field creates a correct evaluation of the financial securities and of the firms in general, on the basis of some fair judgments regarding their perspectives.

Due to these premises, no investor from the market can get earnings from speculations of some disequilibriums between the stock-exchange price and the real and correct value of the security. Any rational agent shall aim the maximization of the earning. What differentiates the investors is the attitude towards the risk. The risk in the financial field can be defined at least in two ways: either as possibility of apparition of a loss or as an incertitude. In fields as the banking one or the insurance one, the risk usually has an acceptance exclusively negative: a risking phenomena is unpleasant and thus, it must be avoided. But, in theory and practice of private finances, of financial markets, of portfolio administration, the risk term is mainly used as incertitude.

Property value represents for the issuing firm, an instrument used in attracting external spare capitals. In this respect, it is highly important the insurance of an increasing trend of the stock exchange price which confirms the favorable evolution of the performance indexes proper to the firm. On an efficient market from informational point of view, one of the most sure signs of the performance of a firm is its stock exchange price, an increase of price being interpreted as an anticipation by investors of some performances in a continuous improvement and vice-versa. Even if the level of stock-exchange price is a veritable “barometer” of future performances of the

firm, there should not be missed the possible effects on it due to some causes external to the enterprise. Financial markets can be characterized, at least in some moments, by irrationality, that might imply a under-valuation or, on contrary, an inexplicable super-evaluation of the securities, taking into consideration the performances of the firm. Moreover, the supply and demand for some securities, different liquidity of them can constitute real problems for insuring the balance between the stock-exchange price and the value of the securities.

## 5. Conclusions

The rapid economic growth, which we have heard about lately, generated mainly by the request of consumption and is characterized by a strong negative supply of net exports, proved to be evidently unsustainable.

In January 2009, the current account of payment balance recorded a deficit of 525 million Euro, decreasing by 54,60% in comparison with January 2008. Determinant influence upon the decrease of current balance had the deficit of commercial balance which amounted 385 million Euro, in decrease with 66,40% in comparison with January 2008.

Taking into consideration the several challenges which the Romanian economy must face, NBR emphasized many times the necessity of adequation of the macro-economic policies of mixes to the changes occurred in economy.

This mix of macro-economic policies implies: continuation of the structural reforms, so that it stimulates the growth of labor productivity and external competitiveness of the Romanian products and services, the raised restrictiveness of monetary policy, a more severe fiscal policy, destined to correction of macro-economic disequilibrium by measures as improvement of budgetary planning by approving the multi-annual budgets, insurance of a uniform and predictable budgetary execution, limitation of increase of budgetary expenses, their direction mainly towards investments, a policy of adequation of evolution of salaried earnings to that of labor productivity.

There should not be missed either the fact that the state, in a market economy cannot interfere directly in activity of the commercial companies, but it can bring into action, by several measures and by its action instruments, the orientation of the commercial companies towards a national policy of sustainable growth.

Prevention of the financial crisis is based on adoption of micro- and macro-prudential measures. Regulation and surveillance represent the most important instruments of micro-prudential kind, aiming the maintaining of financial stability, instruments which allow early detection of the possible problems which the individual financial institutions can face. Besides the micro-prudential instruments, prevention of the banking crisis must be also consolidated at the macro-prudential level, both to the market level and implementation of the international standards and codes, as well as the improvement of the performances of the financial system.

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## THE WORLDWIDE ECONOMIC CRISIS VS. THE QUALITY OF THE LOANS PORTFOLIO IN THE ROMANIAN BANKING SYSTEM

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*Traditionally, banks conduct standard credit evaluation such as credit scoring following the receipt of loan request and make the accept/reject decision accordingly. The major cause of the serious banking problems continues to be closely related to: the standards of the granted loan, the weak management of the loans' portfolio, a lack of attention to the changes in the economic circumstances, which can lead to a deterioration of the credits granted by banks. The non-performing loans generate the biggest risk management expenses for the bank. The maximum level of the costs is reached for loans passed as losses, which can't be retrieved and are covered from the provisions' fund or the risk fund. Covering these losses leads to an adequate diminution of the bank's assets and liabilities, therefore to a reduction of the activities' volume.*

*Keywords: non-performing loans, quality of the portfolio's credits, risk, causes.*

*JEL code: G21, G24*

### **The stages of the banking activity in countries going through a transition process**

Vulnerability of a national economy to volatility in the global markets for credit, currencies, commodities, and other assets has become a central concern of policymakers. Lindgreen et al. (1996) report that, between 1980 and 1996, 133 of the 181 of IMF's member countries have experienced significant banking sector problems, including numerous banking crises. Along the same lines, Caprio and Klingebiel (2003) report that between the late 1970s and 2002, there were 117 systemic banking crises - defined as much or all of the banking capital being exhausted - in 93 countries. The currently unraveling banking crisis only adds to this rather long list.

The banking activity in countries going through a transition process has rapidly covered four stages (see Bonin and Wachtel 2003). The first stage of the banking development in the transition economies required setting up the banking institutions at the start of the 1990s. During the planned economic era, the only financial institutions were appendices of the state mechanism and the banking activity, in today's sense of the word, was largely unknown. The commercial banks were detached from the central payments banking system. Still, the role of these institutions was mostly unchanged. The banks owned by the state were financing state enterprises, thus becoming bankrupt in a short time. The second stage of the banking transition process marked banking collapses and systemic crises which impacted all the transition economies after the 1990s (see Bonin and Wachtel 2005). The third stage implied an abiding restructuring process done through privatizations and intromissions from foreign banks. At the end of the century, most banks were privately owned and in countries going through a transition process the banks were mostly foreign. The fourth stage brings us to present. In most transition economies the banks are safe, competitive and adequately regulated institutions.

### **The quality of the portfolio's credits**

The contract for a bank loan is in its essence a trade deed; the particularity of the commercial obligations consists in the additional exigency needed to honour these obligations.

A first notion that was imposed by the banking realities present in Romania was “non-performing loan”.

The non-performing loan is a credit that consists of a sum of money granted by the bank as a loan, which was not reimbursed and whose future reimbursement is doubtful.

A performing loan is the one insured as being refundable from the moment it was granted, which means there are insuring guarantees, a financially stable and prosperous state of the debtor, a good future solvency and liquidity index and an adequate and real reliability.

All the parameters are fluctuant in time and variable, including the element regarding the existence of securities which can't be hedged from the negative social-economic interferences or from the worldwide economic crises.

This can be appreciated depending on the structure of the loans. From this point of view, the loans are divided in the following categories:

1. Standard loans: reimbursing the granted loan is done according to the maturity schedule, and the bank has no reasons to question the repayment ability of the debtor. There are no provisions for this type of loan.

2. The loans under observation: a payment term was not kept or the bank has additional information that question the reimbursement capacity of the debtor.

3. The substandard loans: the provision must be at least 20% of the credit's value.

Doubtful loans are the ones for which the bank has already reduced the credit's value after renegotiations, because it believes it won't be able to get back the full value of the receivable.

4. Losses occur when the bank assesses that nothing from the receivable's value can be retrieved and doesn't consider the loan an investment. These losses must be covered in full percentage from the provisions. The bank can continue to try to partially retrieve the receivable from guarantees or from the assets' amortization.

### **The analysis of the non-performing loans in the Romanian banking system**

The non-performing loans are the ones with occurring events in the maturity schedule and are always the loans from the questionable, substandard and losses categories.

The non-performing loans generate the biggest risk management expenses for the bank. The maximum level of the costs is reached for loans passed as losses, which can't be retrieved and are covered from the provisions' fund or the risk fund. Covering these losses leads to an adequate diminution of the bank's assets and liabilities, therefore to a reduction of the activities' volume. A part of non-performing loans are kept in the portfolio because they are not yet losses and have real chances not to become losses if managed properly.

The set of expenses related to their management is very large for the bank and includes:

1. Increasing the mandatory sampling for the provision fund: 50% of the loan's value for doubtful loans and 20% for substandard loans;

2. The rise of the administrative expenses imposed by the separate and preferential management of these loans which already create problems; these can occur as an opportunity cost or as an additional expense. The opportunity cost occurs because the bank's employees give special attention to these loans, without insuring a growing profit for the bank, but only to protect the previous investments. Additional time is spent on direct contact with the client, with analyses and additional check-outs. The alleged additional expenses occur if the bank turns to third parties to solve certain specialized problems: evaluation and consultancy services, lawyers;

3. The rise of the legal expenses if the bank is brought to court;

4. The bank's image could be hurt in the eyes of the share-holders, the banking authority and the clients if the non-performing loans ratio is increasing or has already reached a high quantum in comparison to other banks in the system.

The most economic way to minimize these expenses is to increase the quality of the loans' portfolio. This depends not only on the bank's actions because, in some cases, a set of internal

and external factors compete to hurt the client's quality and to reduce his capacity to reimburse the loan.

**Table no. 1. THE STATEMENT OF THE LOANS' DISTRIBUTION (An exposure from loans granted to clients outside the credit institutions)**

millions ron

| Period<br>Month/year | Total    | Standard | Under<br>obser<br>vation | Sub<br>standard | Doubtful | Loss    | Non-performing<br>loans Weight<br>in total loans |
|----------------------|----------|----------|--------------------------|-----------------|----------|---------|--|
| 12/2007              | 145105,3 | 67371    | 63607,4                  | 8315,4          | 2074,6   | 3736,9  | 9,73 %   |
| 12/2008              | 192478,9 | 118628,5 | 47370                    | 13906,2         | 3993,3   | 8580,9  | 13,75 %  |
| 01/2009              | 198337,2 | 119376   | 48580                    | 15278,8         | 4774,6   | 10327,8 | 15,31 %  |
| 02/2009              | 198585,5 | 117892   | 48494,6                  | 15440,5         | 5641,4   | 11117   | 16,21 %  |

A growth of 4.02% of the non-performing loans' weight from the total loan portfolio was recorded in December 2008 in comparison to December 2007 (from 9.73% in 2007 to 13.75% in 2008). On the background of the worldwide economic crises' intensification, which gradually started to impact Romania since the middle of 2008, the weight of the non-performing loans from the total loan portfolio has increased with 1.56% in only one month (since December 2008 till January 2009). The growing tendency of the non-performing loans continued also in February 2009, because the percentage changed from 15.31% to 16.21% (almost one percent).

Credit markets are further beleaguered by another problem created by (ex post) asymmetric information—moral hazard. After the loan is approved and disbursed, the borrowers might seek riskier projects for higher rates of return, which enhance the credit risk faced by banks. The compound effects of adverse selection and moral hazard prevent the traditional price mechanism to work. Even with an excess demand in the credit market, banks may hesitate to raise lending interest rate for two reasons. First, high interest rates force high quality borrowers to leave the market. Second, higher interest rates induce borrowers to take more risk. Both lead to an increase in the chance of default by the debtors.

Credit assessments are meant to help a bank measure whether potential borrowers will be able to meet their loan obligations in accordance with contractual agreements. However, a credit institution cannot perform credit assessments in the same way for all of its borrowers. This point is supported by three main arguments, which will be explained in greater detail below:

1. The factors relevant to creditworthiness vary for different borrower types.
2. The available data sources vary for different borrower types.
3. Credit risk levels vary for different borrower types.

The banks form risk provisions (as a reserve for the bank to cover the possible non-refundable loans) for the loans granted to clients, loans which reimbursed at maturity don't require the use of the provisions, this way they become a profit for the bank.

The constitutive elements of the risk are:

1. The risk occurrence probability and
  2. The risk's amplitude
1. The risk occurrence probability's assessment can be quantified based on the perception of the partners affected by the risk. In the case of a loan relation between the bank and the client, each of the two partners has its own perception over the non-payment risk. Taking into consideration a fair value of the risk occurrence probability is possible if during the analysis process regarding the granting of the loan the partners communicate by offering each other all the elements of potential risk.
  2. The amplitude and the size of the consequences generated by the risk occurrence, as its constitutive element, are estimated when the transaction is closed.

The risk can be illustrated schematically through the following equation:

Risk = a x p

where:

a = amplitude

p = probability

The level of the losses generated by risks is in direct ratio with the size of the risk occurrence probability, on one hand, and the risk's amplitude, on the other hand.

The credit institutions must take into account at least the following when evaluating the loan risk:

- a. the current and foreseen financial performance of the countertrade;
- b. the concentration of the exposures towards the countertrade, the markets where they operate, the economic sectors and the countries where they are established;
- c. the ability to put into practice the contractual commitments, from a legal point of view;
- d. the capacity and possibility to execute the guarantees, by taking into account the market conditions;
- e. the contractual commitments with the persons involved in special relations with the credit institutions, own employees, as well as their families.

The loan institutions must take into consideration at least the following regarding the contractual framework:

- a. the loans' specific nature;
- b. the contractual clauses afferent to the loan;
- c. the exposure's profile till the due date through the potential evolutions of the market;
- d. the existence of real or personal guarantees;
- e. the probability not to comply with the legal obligations, established by an internal rating system.

The credit institutions must run the loaning activity on the basis of healthy and well defined criteria.

The loan institutions must take into account at least the following regarding the loaning activity:

- a. the loan's destination and the reimbursement source;
- b. the current risk profile of the countertrade and the presented guarantees, as well as the guarantees' c. sensitivity to the economic and the market evolutions;
- c. the history of the debt's service afferent to the countertrade and the current and future reimbursement capacity, based on historic financial evolutions and the future projections of the cash flows;
- d. the countertrades' experience and the economic sector where it runs its activity, as well as its position within the sector for commercial loans;
- e. the terms and conditions written in the loan contract, including the clauses destined to limit the changes in the future risk profile of the countertrade;
- f. the loan institution's capacity to execute and capitalize the guarantees, in a period as short as possible if the situation imposes this.

In order to maintain a good quality of the loan's portfolio, is necessary to eliminate the errors committed by the bank's personnel by determining beforehand the deterioration potential of the debtor's quality.

The main cause of the non-performing loan's occurrence is the incompetence or carelessness of the bank's employees, as well as the insolvency due to the general economic conditions. The most frequent errors committed in practice by the bank's inspectors are:

- the inadequate interview;
- the unsuitable financial analysis;
- the faulty granting of the credit;
- the incorrect and incomplete documentation;
- the control and tracing of the clients' quality.



The main causes that favoured and lead to imbalances in the financial statement of different banks and then to their insolvency state, can be grouped in three categories:

1. political and strategic mistakes;
2. the passing over of the banking prudence requirements;
3. the non-compliance of the analysis requirements and even of the own directions regarding:
  - the documentation needed for the loan granting and knowing the clients;
  - loan approval;
  - tracing the compliance with the imposed conditions of the persons who received loans;
  - tracing the loan reimbursement and the cashing-in of the incomes from interests.

### **Conclusions:**

In my opinion, the risk management for a loan is governed by four main principles:

- *Establishing an adequate risk environment for the loan;*
- *Operating a healthy process for the loan granting;*
- *Maintaining an adequate management of the credit and of the measuring and monitoring processes;*
- *Ensuring adequate controls of the loan risk.*

Certain risk management practices for loans vary from one bank to the next, depending on the nature and complexity of their loan activity.

The banks dispose of uncomprehending information when getting involved in a loaning process, because only the debtors know the real risk of their investment projects. Still, there are a few clauses which the banks can include in their loaning contracts in order to fight the lack of information. Bester (1985) showed that the guarantees can serve as warning instruments, because the real risk degree is revealed by the size of the guarantees the debtors are willing to offer. It is essential to have a legislation which regulates the guarantees and, at the same time, proper institutions to apply it in order to have efficient warning instruments, such as the one for guarantees. A high reliability of the laws and agreements regarding the guarantees could lead to an amplification of the guarantees' use in order to fight the insufficient information and a general lowering of the risk. In a weakly regulated environment, a debtor could use the same good as a guarantee for several loan credits or could refuse to give the goods back when he is unable to reimburse the loan. A more solid institutional environment is associated with a higher inclination to use the guaranteed loans and with an intense loaning activity. This is in accordance with information from the legal and financial literature, which shows a positive relation between the creditors' rights and the development of the loan market.

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# IMPLIED VOLATILITY ON THE ROMANIAN OPTIONS MARKET – DIFFERENCES AND COMMON FEATURES WITH THE DEVELOPED EUROPEAN MARKETS

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*The implied volatility of an option contract is the volatility implied by the market price of the option based on an option pricing model, in this case the Black-Scholes model. The model assumes that the price of an option follows a geometric Brownian motion with constant drift and volatility. By computing the implied volatility for traded options with different strikes and maturities, the Black-Scholes model can be tested. If the Black-Scholes model held, then the implied volatility for a particular stock would be the same for all strikes and maturities. In practice, the volatility surface (the three-dimensional graph of implied volatility against strike and maturity) is not flat, this phenomena being known mostly as the “volatility smile” or “volatility skew” and the term structure of volatility. The article’s aim is to show if there are any differences between the implied volatility structures of the options traded on the Sibiu Monetary-Financial and Commodities Exchange and the well known implied volatility characteristics of the developed European option markets and to try to explain any differences that might appear.*

*Keywords: financial options, implied volatility, volatility smile, volatility skew, term structure of volatility, volatility surface, Black-Scholes model*

*JEL codes: G13, G14*

## Introduction and a Brief Review of the Empirical Literature

From the early '70's the issues regarding option pricing became more and more important this fact being confirmed also by the growth of the literature which parallels the spectacular developments of derivative securities and the rapid expansion of markets for derivatives.

In the last decades, numerous parametric and nonparametric investigations were made, in continuous and discrete time, the empirical option pricing literature revealing a considerable divergence between the risk-neutral distributions estimated from option prices after the 1987 crash and conditional distributions estimated from time series of returns on the underlying index. Three facts clearly stand out. First, the implied volatility extracted from at-the-money options differs substantially from the realized volatility over the lifetime of the option. Second, risk neutral distributions feature substantial negative skewness which is revealed by the asymmetric implied volatility curves when plotted against moneyness. Third, the shape of these volatility curves changes over time and maturities, in other words the skewness and the convexity are time-varying and maturity-dependent.<sup>311</sup> Therefore, our survey's goal is to explore these divergences.

Option pricing has been extensively studied in the mathematical finance literature since the publication of the Black-Scholes formula in 1973<sup>312</sup>. The analysis of Black and Scholes however assumes a perfect market. These assumptions are clearly idealizations. The Black-Scholes option-pricing formula has gained significant popularity for its simplicity and adequate pricing of near-the-money options. However, systematic pricing biases emerge when the formula is applied to options whose strike price differs significantly from the underlying price. MacBeth and

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311 Garcia, L., Ghysels, E., Renault, E., 2003

312 Black, F., Scholes, M., 1973

Merville (1979)<sup>313</sup> find that the implied volatilities are high (low) for in-the-money (out-of-the-money) options indicating that the Black-Scholes model underprices in-the-money options and overprices out-of-the-money options. The effect increases with the time to maturity. Similar results are established in Rubinstein (1985)<sup>314</sup> for his pre-1977 sample. The reverse pricing biases are found for Rubinstein's (1985) post-1977 sample.

From the empirical point of view, two different approaches show that the assumption made in the Black-Scholes formula regarding the fact that the underlying asset's volatility would be constant is not valid. Regarding the historical time series of financial assets returns, many studies indicate that volatility is not constant along time (Barndorff-Nielsen and Shephard 2002<sup>315</sup>; Kim et al. 1998<sup>316</sup>). Regarding the pricing measure, if we use market option prices on the same underlying with different maturities and exercise prices, and invert the Black-Scholes formula to obtain implied volatilities, we observe that volatility is not constant. This phenomenon, denominated volatility smile, has been strongly evident on US option market data, especially after the stock market crash of 1987 (Ait-Sahalia and Lo 1998; Dumas et al. 1998)<sup>317</sup>

There is a great variety of option-pricing models that correct the well-known biases in the Black-Scholes prices, nevertheless, the latter remains a widely used model by the practitioners. The simplicity of the model is presumably the primary reason for its popularity. Despite its success, the Black-Scholes formula has become increasingly unreliable over time in the very markets where one would expect it to be most accurate.<sup>318</sup>

Our goal in this article is to identify the main qualitative characteristics of the volatility process that drives the dynamics of the most liquid option contract in the Romanian market.

## **Basic review of the implied volatility patterns**

### ***“Volatility smiles” and “volatility skews”***

If we consider call options on a given underlier, having different strikes but the same expiration and we obtain market (settlement) prices for those options, we can apply the Black-Scholes (1973) model to back-out implied volatilities. Intuitively, we might expect the implied volatilities to be identical. In practice, as shown by the brief review of the empirical literature too, it is likely that they will not be.

The pattern of implied volatilities forms a “smile” shape, which is called a “volatility smile”. Such a smile persists over time on the developed European options markets with in-the-money and out-of-the-money volatilities generally higher than at-the-money volatilities.

Most derivatives markets exhibit persistent patterns of volatilities varying by strike. In some markets, those patterns form a smile. In others, such as equity index options markets, it is more of a skewed curve. This has motivated the name volatility skew. In practice, either the term “volatility smile” or “volatility skew” (or simply skew) may be used to refer to the general phenomena of volatilities varying by strike. You may even hear of “volatility smirks” or “volatility sneers”.<sup>319</sup>

When implied volatility is plotted against strike price, the resulting graph is typically downward sloping, or downward sloping with an upward bend at either end. For markets where the graph is downward sloping, such as for equity options, the term “volatility skew” is often used. For other

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313 MacBeth, J. and L. Merville, 1979 as cited in Savickas, R., 2001

314 Rubinstein, M., 1985 as cited in Savickas, R., 2001

315 Barndorff-Nielsen, O.E. Shephard, N., 2002 as cited in Almeida, C. I. R. de, Dana, S., 2005

316 Kim, S., Shephard, N., Chib, S., 1998 as cited in Almeida, C. I. R. de, Dana, S., 2005

317 Ait-Sahalia, Y., Lo, A., 1998 as cited in Almeida, C. I. R. de, Dana, S., 2005

318 Rubinstein, M.: Implied Binomial Trees, July 1994, Journal of Finance

319 [http://www.riskglossary.com/link/volatility\\_skew.htm](http://www.riskglossary.com/link/volatility_skew.htm)

markets, such as equity index options, where the typical graph turns up at either end, the more familiar term “volatility smile” is used.<sup>320</sup>

There are multiple explanations for these phenomena, different explanations applying in different markets. Some explanations relate to the idealized assumptions of the Black-Scholes approach to valuing options. Almost every one of those assumptions - lognormally distributed returns, return homoskedasticity, etc. - could play a role. For example, in most markets, returns appear more leptokurtic than is assumed by a lognormal distribution. Market leptokurtosis would make way out-of-the-money or way in-the-money options more expensive than would be assumed by the Black-Scholes formulation. By increasing prices for such options, volatility smile could be the markets’ indirect way of achieving such higher prices within the imperfect framework of the Black-Scholes model. Other explanations relate to relative supply and demand for options. In equity markets, volatility skew could reflect investors' fear of market crashes - which would cause them to bid up the prices of options at strikes below current market levels.<sup>321</sup>

### ***Term Structure of Volatility***

Volatility term structures list the relationship between implied volatilities and time to expiration. For options of different maturities, we also see characteristic differences in implied volatility. The typical time skew pattern observed is higher implied volatility for options with shorter time to expiration than for longer-time-to-expiration options.

One possible reason is that most speculators are probably more interested in betting on “surprises” that are expected to occur in shorter term than those in longer term.

As such, they would also prefer options with shorter time to expiration, as it carries less time value than longer-time-to-expiration options, and hence can potentially provide higher returns when the extreme price movement does take place as expected.

This would consequently increase demand for shorter time options, and hence push the options’ price up through higher implied volatility.<sup>322</sup>

### **Testing Methodologies and Data**

As subject of our empirical research we chose the call option contracts having as underlying asset DESIF5 futures contracts, with maturity in March, June, September and December 2009 with all the strike prices these contracts are made transactions at. The motivation of our choice consist in the fact that the DESIF5 options contracts are the most liquid ones, in January being contracted 1410 DESIF5 call contracts from the total of 1552, in February 1394 DESIF5 call contracts from the total of 1507.

The utilized data covers the January-February 2009 period.

The steps of our research process were as follows:

- using the Black-Scholes model to back-out implied volatilities for all strikes and maturities using actual closing options and futures prices (using Visual Basic Editor);
- calculating the average implied volatilities from options with the same maturity at different strike prices;
- calculating the average implied volatilities from options with the same strike price at different expiration months;
- confront the well-known implied volatility patterns observable on the developed European and American options markets with the Romanian patterns (volatility smile, volatility skew, term structure of volatility) by plotting the implied volatility values of options across various strike prices respectively maturities.

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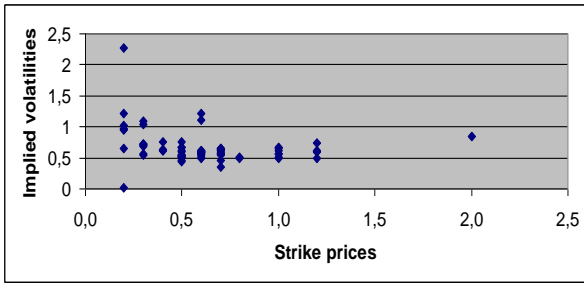
320 [http://en.wikipedia.org/wiki/Volatility\\_smile](http://en.wikipedia.org/wiki/Volatility_smile)

321 [http://www.riskglossary.com/link/volatility\\_skew.htm](http://www.riskglossary.com/link/volatility_skew.htm)

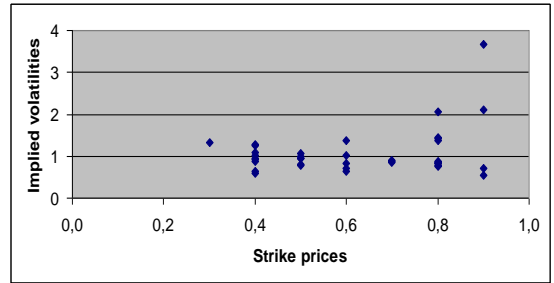
322 [http://www.optionstradingbeginner.blogspot.com/2008/06/volatility-smile-and-volatility-skew\\_15.html](http://www.optionstradingbeginner.blogspot.com/2008/06/volatility-smile-and-volatility-skew_15.html)

## Results and Conclusions

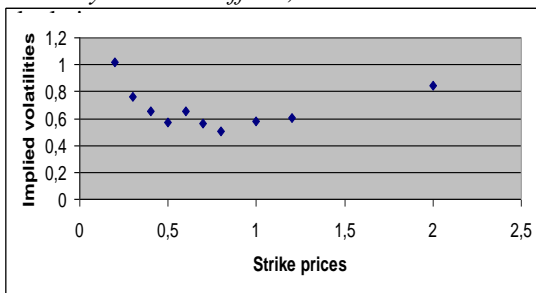
The results of the calculations are shown in the next few figures.



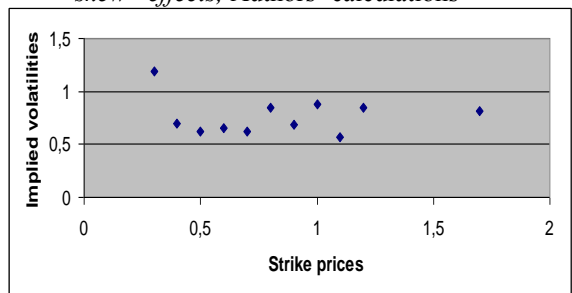
**Figure1:** Implied volatility as a function of strike price – DESIF5 options with maturity in December 2009, January-February 2009 data – Testing the “volatility smile” and “volatility skew” effects, Authors’



**Figure2:** Implied volatility as a function of strike price – DESIF5 options with maturity in March 2009, January-February 2009 data – Testing the “volatility smile” and “volatility skew” effects, Authors’ calculations

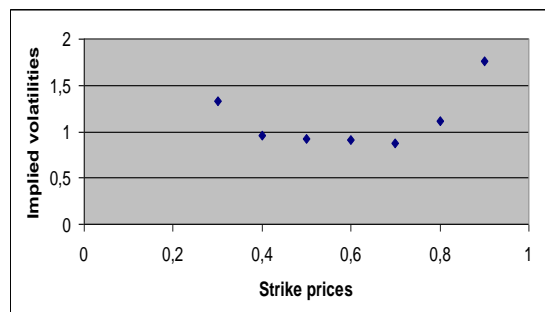
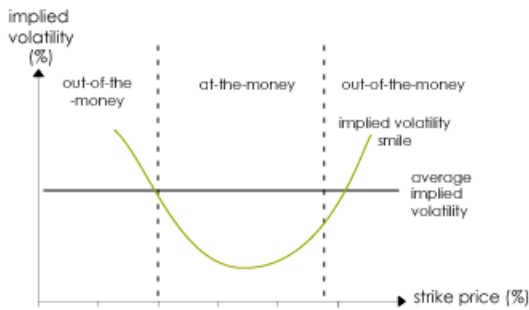


**Figure3:** Average implied volatility as a function of strike price – DESIF5 options with maturity in December 2009, January-February 2009 data – Testing the “volatility smile” and “volatility skew” effects, Authors’ calculations

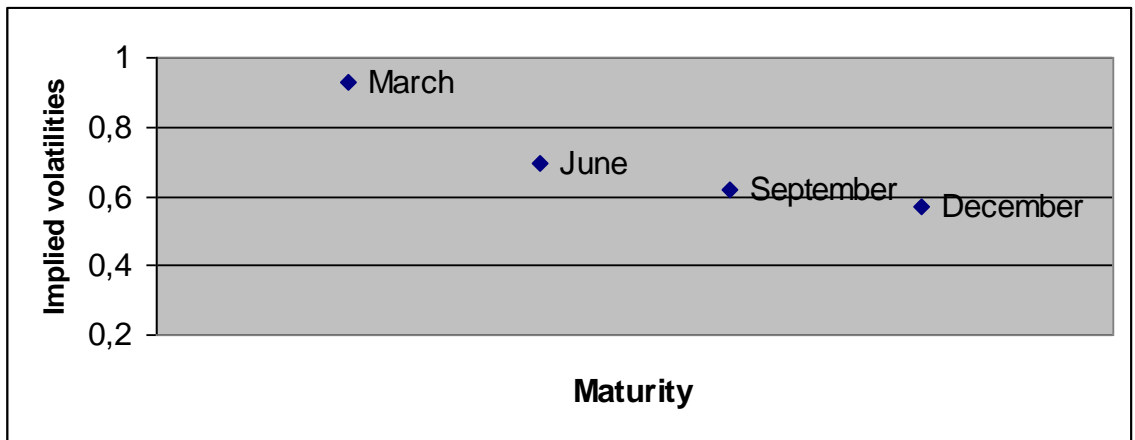


**Figure4:** Average implied volatility as a function of strike price – DESIF5 options with maturity in September 2009, January-February 2009 data – Testing the “volatility smile” and “volatility skew” effects, Authors’ calculations

As one can clearly see, the typical volatility patterns observed recently on the well-developed European and American markets are observable also on the Romanian options market: for call options, the implied volatility is the highest for deep in-the-money options and then is decreasing as it moves towards at-the-money options, rising again as it approaches out-the money options, the figures also being an empiric proof of the existence of the “volatility smile” pattern.

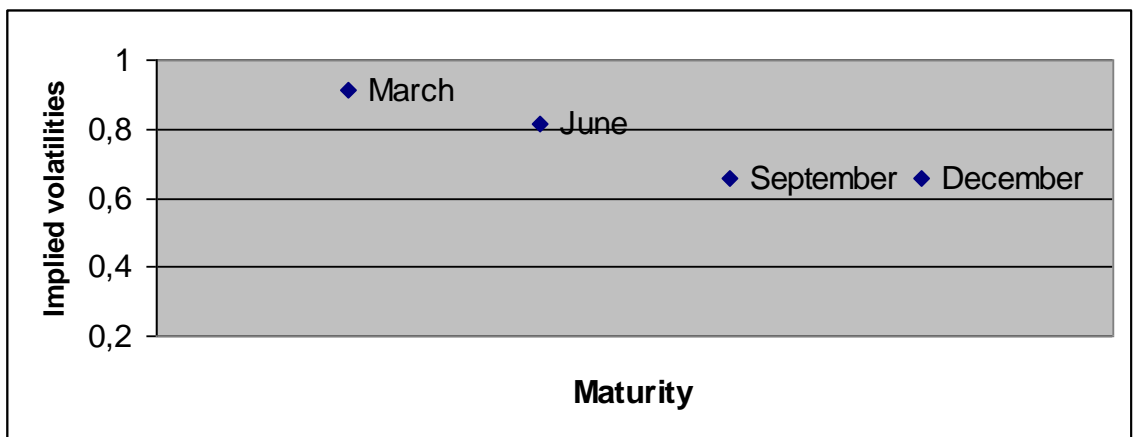


**Figure1:** Volatility smile, [www.erisk.com](http://www.erisk.com)



**Figure5:** Average implied volatility as a function of strike price – DESIF5 options with maturity in March 2009, January-February 2009 data – Testing the “volatility smile” and “volatility skew” effects, Authors’ calculations

**Figure7:** Average implied volatility as a function of maturity – DESIF5 options at 0,5 lei strike price, January-February 2009 data – Testing the volatility term structure, Authors’ calculations



**Figure8:** Average implied volatility as a function of maturity – DESIF5 options at 0,6 lei strike price, January-February 2009 data – Testing the volatility term structure, Authors’ calculations

As looking at Figures 7 and 8, it becomes evident that the volatility term structure of the most liquid Romanian option’s implied volatility has the same behavior as the ones observable on the developed markets.

In general, financial institutions in emerging markets are aware that illiquidity plays an important role on their daily trading game. In particular, illiquidity in the primary stock market directly propagates illiquidity to the option market, generating more pronounced smile patterns. On the Romanian equity market, although an acceptable level of liquidity exists in the primary market, it is the option market that is affected by the illiquidity phenomenon. For instance, even for the most liquid options, the moneyness pattern for a single stock is very sparse. Even though, this article proves the similitude between the emerging and developed markets regarding the patterns of the implied volatilities of financial options.

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# OPERATIONAL BANKING RISK MANAGEMENT – RESEARCH PERFORMED AT THE ROMANIAN COMMERCIAL BANK

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*The main objective of this research is to provide a detailed perspective of the operational risk in the case of commercial bank. The research is based on the main regulations and procedures in the field of the operational banking risk, and it presents the method commercial banks use to manage operational risk. The case study presents the results of the research performed at the Romanian Commercial Bank, Cluj County Branch, with examples of operational risk management. Both from the theoretical approach and the description of operational banking risk quantification, the results of this study emphasize the importance of operational banking risk measurement and the identification of major issues that need improvement.*

*JEL Classification: G00, G21, E50, M19*

*Key words: operational, banking, risk, research, management*

## **1. Main Objectives in Operational Risk Management**

Romania's adhesion to the European Union from the 1<sup>st</sup> of January 2007 has brought the requirements of implementing the Basel II Capital Agreement, the name of the International Convergence of Capital Measurement and Capital Standards - a Revised Framework. The purpose of this study is to provide an analysis of the operational risk management in Romanian commercial banks, presenting the main types of risks and showing some preventing and decreasing measures for the Romanian banking societies – as provided by the case study analysis at the Romanian Commercial Bank.

Romanian banks have adopted a well-defined strategy regarding Operational Risk Management. The objectives regarding the Operational Risk Management are becoming focused on the responsibilities in managing operational risk at the whole bank's level in order to maintain the risk at adequate parameters to permit the development of the bank's activity in best conditions.

The strategy regarding the Operational Risk Management concentrates upon the observation of the following principles:

- The management of the operational risk is mainly realized at the level of each organizational entity in a bank.
- The integration of operational risk's management in the development of the bank's daily activity.

According to the national regulations, Romanian banking societies must have policies for the management of the operational risk. These policies must take into consideration at least the following types of events that generate operational risk:

1. Internal fraud (for example bad-faith reporting the positions, theft, concluding of transactions by employees on their own)
2. External fraud (for example robbery, fake, breaking informatics systems' codes)
3. Conditions for hiring the personnel and the safety of working place (for example compulsory demands of the personnel, not respecting the labor protection regulations, promoting discriminatory practices)
4. Deficient practices regarding the customers, products and activities (for example inadequately using the confidential information about the customers, money laundry, selling unauthorized products, wrong use of products and services regarding the electronic banking system by the clients)
5. Endangering the tangible assets (for example terrorism or vandalism acts, fires, earthquakes)

6. Interrupting the activity and defective functioning of systems (for example defections of hardware and software components, telecommunication troubles, defective projection, implementation and maintenance of the electronic banking system)
7. The treatment applied for customers and commercial counterparts, as well as the defective processing of customers' data (for example wrong recording the income data, defective management of the real guarantees, incomplete legal documentation, unauthorized access to the customers' accounts, disputes)
8. The security of the electronic banking system (for example engagements of the credit institution coming out in false pretences by fabricating the electronic money or getting extra losses or engagements by the customers in case of a defective access in the system).

## **2. The process of managing the operational risk in the Banca Comerciala Romana**

The Romanian national regulation consists of two extra categories of risk, compared to those included in the Basel II Agreement: the treatment applied for customers and commercial counterparts, as well as the defective processing of customer data, and the security of the electronic banking system. An argument in favor of the electronic banking system is the one that these systems simplify transactions and are relatively new in Romania.

The management of operational risk is continuously adjusted to the risk profile of the bank at a certain moment, to the internal risk management abilities, but also to the changes appeared in the economic, financial, political and regulatory field in which the bank develops its activity.

The process of managing the operational risk respects the following steps in the case of the Romanian Commercial Bank.

**Identification:** identifying the risks is a first step which further has to be the basis for developing the viable systems for monitoring and controlling operational risk. This process begins with the definition of the operational risk from the bank's point of view, identification of the main elements and description of the generating elements, separation of the operational risk from other risks that appear in the bank's activity.

Internal factors: bank's structure, nature of the bank's developed activities, human resources implied, organizational changes.

External factors: changes appeared in the banking system, technological progress which may have a negative impact on the achievement of the bank's strategic objectives.

The process of identifying the operational risks will be developed in the following ways: identification of the operations and activities vulnerable to the operational risk, and identification of the operational risk's manifestations meaning the impact on the bank's financial results, following those with potential impact, those efficiently remediate, preventing in this way getting losses, and those that have determined getting losses. This last process means identifying and catching the losses generated by the operational risk's development. Thus, importance is given to the identification of the type of followed losses, the persons responsible for reporting the losses, the criteria and methods of validating the registrations. After validating and insuring the information's consistency, these will be stored in a database regarding the losses from operational risk, and this will be the foundation for the future valuations of this risk. The database will contain information regarding the registered losses, and also regarding their retrieval, for example the retrieved amounts, the moment of retrieval, sources of retrieval.

**Valuation** - this step of the process of managing the operational risk is based on the information obtained in the previous category. This process will follow the next directions: in order to value operational risk, Romanian Commercial Bank will follow the registered losses through a database regarding the losses of operational risk; identifying and calculating some key ratios for risk, and also analyzing them. Also, the bank has in view to analyze the opportunity of introducing in the future self-valuating systems for the operational risk based on the experience and capacity of the implied personnel to assess this risk. Valuating the operational risk in a bank

implies a straight aggregation of individual risks, despite other risks for which the portfolio risk is lower than the sum of individual risks having in view the portfolio effect.

The valuation of operational risk focuses also on the correlations of this risk with other risks affecting the bank, as this risk may determine the development of other risks, mainly the credit risk, but also the market risk and reputation risk.

**Monitoring** – on the risk-owners' level, the risk management implies analyzing the operational risks generated by each activity, operation, transaction engaged, product, so that the decisional process to have in view aspects regarding the operational risk. After identifying and valuating the risks that affect the risk entities activity, their risk-owners must ensure the taking of appropriate measures for the activity to develop in good conditions, as well as for preventing the risk's manifestation. The risk-owners will efficiently send observations and proposals to the adequate bodies for permitting them to generalize the measures for all the entities affected by the same type of event.

**Management** - after identifying, valuating and monitoring the operational risk the bank is confronted with in its activity, the management will decide on the attitude adopted toward them. The bank may decide upon the following:

- Assuming the operational risks resulted from a certain process, activity;
- Decreasing the risks – as regards the strictness or frequency – by adequate means of control, by training the personnel or the clients;
- Transferring the risks to third parties;
- Eliminating the risks by closing the activity.

Such a decision will take into account aspects regarding the proportion between the costs of control or transfer and the impact of the respective operational risk.

The risk-owners will take the appropriate measures to maintain the risk between the desired parameters, to restrict the probability of appearance for an event or to reduce its impact. In order to transfer a part of the operational risks she is confronted with, the bank pursues to sign some insurance policies regarding some types of events generating operational risks.

Each banking society configures its own operational risk profile, identifying the activities generating operational risk events. In the case of Romanian Commercial Bank, it consists of the following:

1. The operational risk event – internal fraud, including:

- The bank's engagement in operations with clients, based on the wrong analyze of their activity and potentially loss generating for the bank;
- The deceiving of the clients, by neglecting, errors, deliberate or involuntary elision in clients' information;
- The fabrication of documents by the bank's employees or their complicity in making fake documents (credit contracts, underwriting contracts, cash documents, payment instruments)
- The performance of unauthorized banking operations, or operations that are not in the employee's responsibility;
- The registration in the bank's accountancy of operations without documents in proof;
- The information changes made in the bank's informatics applications, without necessary competence and authorization;
- Material and money theft.

2. The operational risk event – external fraud, including:

- Introducing fake banknotes or coins in the bank by clients
- Cash deposits made by clients deliberately in a smaller amount than mentioned in documents;
- Robbery at the bank;
- Unauthorized access at the bank's informatics system which leads to the bank or clients' prejudice.

3. The operational risk event - the conditions for hiring the personnel and the safety of the working place, including:

- Disciplinary diversions of the bank's employees;
- Banking activities that can be executed only by several employees, for whom had not been predicted substitutes for unavoidable casualties;
- Work assignments that overwhelm the employees' knowledge

4. The operational risk event - deficient practices regarding the customers, products and activities, including:

- Unequal, preferential, subjective and ungrounded treatments applied to clients;
- Not identifying the money laundry operations;
- Initiating and developing unauthorized banking activities with the clients or operations without contractual documents;
- Not investigating clients' data, according to the requirements for knowing the clients and the internal working regulations;
- Not respecting the internal procedures referring to the maximum limits of exposure on groups or individual clients and the proficiencies on territorial units;
- Incorrect use of the IT applications by the clients.

5. The operational risk event - endangering the tangible assets, including:

- Natural events with impact on the tangible assets;
- Unpredicted events involving third persons or bank employees, generating destructions of the bank's tangible assets

6. The operational risk event - interrupting the activity and defective functioning of systems, including:

- Problems in the functioning of informatics systems, leading to data loss;
- Viruses in the banking informatics system;

7. The operational risk event - the treatment applied for customers and commercial counterparts, as well as the defective processing of customers' data, including:

- Insufficient study of the quality of values and cash manipulated by the operative bank units;
- Incomplete or wrong contractual documentation signed with the bank's customers;
- Inadequate transportation and taking over of cash from other banking units or from the branches of the National Romanian Bank;
- Inadequate preserving, recording and processing the clients' documents and banking operations;
- Deficient knowledge of the legal and internal banking regulations regarding the clients;

8. The operational risk event - the security of the electronic banking system, including:

- Improper activities performed in the system, thus generating liabilities for the banking society or for the customers, including fabrication of electronic money.

## **Conclusions**

In conclusion, the actual stage of development regarding the banking operational risk management shows a generalized assuming of the Basel II Agreement's requirements.

In spite of the positive aspects, there are some disadvantages to be considered, too, because the banks have more responsibilities in determining the activities that generate banking operational risk. If there existed a national general valid frame, possibly enforced by legal regulations, the banks would have the possibility to configure their own management strategies for the operational risk, based on an existing frame. One cannot deny each bank's specificity or individuality in the operational risk management, but the innovation of its approach in the banking field has to be emphasized, not only on a national level, but also on international level.

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# THE IMPORTANCE OF FINANCIAL STABILITY REPORTS FOR THE CENTRAL BANKS' FINANCIAL STABILITY FUNCTION

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*Abstract: One of the obvious signs of increased interest in financial stability is the growing number of countries that publish financial stability reports (FSRs). These reports offer an image on the way that Central Banks deal with the financial sector stability, how they foster it, what are the tools used in order to maintain it, how they measure it and what the impact of some risks is or could be on financial institutions and finally on population, hence ensuring the Central Bank's policy transparency and credibility. In this paper we analyze the reports published by different central banks with the aim to establish the common features that should characterize a good report that reaches its proposed objective, as well as highlight their importance for financial stability of a country.*

*Key words: financial stability, Financial Stability Report, objectives, instruments*

*Jel classification: G10, G20, E58*

## **1. Introduction**

The FSRs are meant to diagnose the way in which the recent evolutions of financial institutions, of the economy as a whole, as well as of the companies' and population sector, could affect financial stability. The risks associated with these evolutions are being analyzed through a set of indicators and, if possible and available, there are also stress tests carried out in order to directly measure the impact of possible shocks on the financial sector's solvability.

Martin Čihák (2006) defines the FSR as "regular, self-contained central bank publication that focuses on risks and exposures in the financial system". he also identifies some key elements that should characterize such a report, such as focus on risks, exposures and vulnerabilities in the financial system, systemic coverage, publisher (most FSRs are published by central banks), the self-contained nature and, the regularity of publication, as FSRs are regular (typically annual or semi-annual) publications, while a one-off report on the financial sector cannot be considered an FSR.

The first published reports can be traced back to the middle 90s in the UK and some Nordic countries. The number of countries that publish FSRs has rapidly grown from two in 1995 to fifty in 2005. This increase of the number of reports also coincides with the interest growth in financial stability issues. If we study the geographical area of the FSR publishing we could notice that Europe has the majority. In Romania the first FSR was published in 2006.

The FSR are being published not only by central banks and financial authorities, but also by some international institutions, like the International Monetary Fund. Together with the World Bank it has launched, in 1999 the Financial Sector Assessment Program (FSAP), offering countries an evaluation of their financial sector and of the regulation framework (IMF and World bank 2005). Čihák (2006) shows that most of the FSR published at the beginning of the program have been published by countries that accepted and started taking part in the program. Detailed assessments of observance of relevant financial sector standards and codes of each country, which give rise to Reports on Observance of Standards and Codes (ROSCs) as a by-product, are a key component of the FSAP. The IMF also publishes the Global Financial Stability Report that looks at the evolution of the financial sector from a global perspective.

The main reasons for which some countries have decided not to publish FSRs can be found in the fact that the problems of their financial sector are too delicate to be made known to the public. Secondly, the central banks have an incomplete control over the results of the policies carried out for financial stability fostering and, third, the publication of FSRs needs financial resources. Maybe this third point of view is also the reason why mostly countries with high to middle income publish these reports and fewer countries with low income. Even though these reasons seem pertinent, the importance of financial stability is more important. An example of its importance can be found in the financial crises in the last decades and, more importantly in the current financial crisis. Hence, central banks, or other financial authorities, if that is the case, should constantly monitor the evolution of risks to financial sector and publish periodical reports, in this way insuring the transparency of its actions to the public and, hence its actions' credibility.

The FSRs can contribute to financial stability through an improved understanding of risks that threaten financial institutions and through alerting both financial institutions and other market participants on the possible impact of their actions on the whole system. There has also emerged the need for educating the public on the costs of financial instability.

## **2. Objectives, characteristics and instruments**

The FSRs can have a multitude of objectives that contribute to financial stability fostering, subordinated to the final objective. The FSRs highlight the importance of monitoring and publicly presenting the evaluations carried out by the Central Bank, relevant to the financial sector. Some central banks see the FSRs as an instrument for promoting the cooperation between surveillance and regulation authorities and, others as an instrument for the clarification of the Central Bank's role in financial stability. Others see it as way to increase confidence in financial services, based on the permanent risk monitoring, through these reports. Bowen, O'Brien and Steigum (2003) suggest that FSR publication strengthens the surveillance's quality and discipline, at the same time proving that the Central Bank complies with its mandate. So, these publications can play an important role in improving Central Bank's transparency and credibility. The aims can also be found in informing stakeholders of potential financial stability risks and ways to mitigate them, encouraging informed debate on financial stability issues, serving as an accountability instrument and, helping to provide information that major participants in the financial industry may use as part of the input into their own risk assessment procedures. Some central banks define the objectives of their FSRs according to the target public. An example is the Bank of England, which specifies the fact that the FSR is intended to those that have an interest in maintaining financial stability at a national or international level, to the academic world, to journalists and financial market participants.

Closely related to the aims of the FSRs is also the definition of financial stability. Most FSRs include different definitions of the financial stability For example, in the 2006 Financial Stability Report, the National Bank of Romania specifies that "central banks also have a well established role in financial stability, defined as a ability of the financial system to face systemic shocks, on a durable basis and without major perturbations, to efficiently allocate financial resources in the economy and to efficiently identify and manage risks."

Franklin A., Francke L. and Swinburne M (2004) propose some elements that should characterize a FSR in what regards its objectives and financial stability definition:

- Clarifying the definition of financial stability helps the reader, and in particular a first-time reader, to understand the FSR's statements on financial stability.
- Clarifying the aims helps the reader, and in particular a first-time reader, to understand why certain topics are covered or omitted in the FSR.
- The definition of financial stability should be a standard part of the report, presented consistently across reports.

- The statement of aims should be a standard part of the report, presented consistently across reports.

- Financial stability should be defined both in general terms and in operational terms.

- The aims of the report should be comprehensive.

The elements discussed in reports have diversified in time, along with financial system diversification and with the increased ability of the authorities to compile and analyze data. Most FSRs, at the beginning, have only focused on the banking system, in time also getting to present the nonfinancial sector, the payment systems, as well as the regulation framework. The attention given to the nonfinancial sector is rising, because companies and population are more and more seen as potential risk sources. More recently, the FSR have also started to focus on the activity of the nonbank financial companies, like insurance companies, pension funds, stock exchange intermediaries, that tend to gain a higher importance in the financial sector.

In what concerns the risk factors, the credit risk is presented in all FSR (Čihák, 2006), as the most important risk source. Many central banks also analyze the exchange rate risk and the risks derived from the payment and settlement systems. The interest rate risk and liquidity risk are also presented in almost half of the reports. Other less important risks presented are the country risk and contagion risk. The National Bank of Romania analyzes all of these risks and presents conclusions regarding them in its annual FSR.

The FSRs use a series of analytical instruments, which are usually useful to the macro prudential analysis. As compared to the traditional macro prudential analysis, usually used in inflation reports and in other more general reports regarding the economical development, these instruments are orientated mostly on the analysis of the balance sheets of the financial institutions, on extreme scenario construction, that include problems in the transmission mechanisms or multiple equilibrium.

The techniques used have diversified in time. All FSRs analyze macro prudential indicators, usually complying with the Financial Soundness Indicators promoted by the IMF. Identifying some macro prudential indicators and monitoring their evolution, represents a way to provide information regarding the risks to which the financial system is exposed. The variable set must contain a subset that tries to quantify<sup>323</sup> how well the finances facilitate financial and economic processes. Moreover, they must also take into consideration the fact that the nature of the systemic risks has changed and specific risks can be more concentrated than in the past. That being the case, financial and nonfinancial institutions have enlarged their activities, at national and international level and, hence, their risk exposure, while the risk protection and diversification instruments<sup>324</sup> have rapidly evolved. All these lead to the necessity of a large and explicit set of indicators, which should provide two important categories of information, regarding economic and financial development (monetary, businesses, variation in the real price of assets) and regarding financial vulnerability (debt amount, asset quality, liquidity) (Heteş R., 2009).

Although the range of macro prudential indicators is rich, these only ensure a partly evaluation of the system's vulnerabilities, especially because *ex ante* identification of the growth of these vulnerabilities is still difficult and, for the moment, the measurement of these indicators remains imprecise. Financial stability analysis is complicated by nonlinearities and the need to concentrate on exceptional, but plausible, events, often being necessary to take into consideration the evolution of variables and to assess what is happening if the risks take place simultaneously. Stress tests represent such an alternative, allowing the measurement of the elasticity of different parts of the economy in extreme conditions. The method itself has certain limits, in the way that, although stress tests can be made for individual financial institutions as well as for the whole

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323 Even if not perfectly

324 securitization, swaps, credit risk transfer



banking system, using them at the level of the whole financial system is very difficult, a major problem being the lack of data.

Stress factors are associated with macroeconomic shocks that can intervene in the normal functioning of the financial system. The tests take into consideration vast shocks that can appear, but whose frequency of appearance is reduced<sup>325</sup>. The testing system tries to highlight the impact of different risks, with the help of different scenarios. The results of such tests show the sensitivity of a portfolio to particular shocks. The tests carried out on the system as a whole are different, being meant to identify common vulnerabilities for institutions, which can affect the stability of the whole financial system. The main advantage of such tests is that they allow the *ex ante* identification of vulnerabilities, as compared to an aggregate macro prudential indicator, that allows only an *ex post* evaluation of the financial vulnerabilities (Cerna et. al., 2008).

**3. Financial Stability Reports’ structure, frequency and availability**

The structure of the FSRs differs from country to country. They usually start with the evaluation of the financial activity. First, risks are being presented at the international level, getting then to the national level. A problem that appears is that of the dimension that the international framework presentation should reach. If the available resources for an FSR are limited, then it can only highlight some important international and regional aspects, orientating its attention to elements of national interest.

There are also some parts of the report that repeatedly appear in each report and parts that appear only according to their importance to financial stability in the analyzed period. In our opinion the parts that appear in each report should cover the main part of the report, leaving the other a more reduced part of up to 25-30%. This allows for diversification, as well as consistency. The common structure of a FSR consists of:

- Macroeconomic Developments.
- Financial sector infrastructure
- Developments in the financial sector
- Risks to the financial sector
- Special Topics
- Annexes

**Table: Examples of FSR structures**

|  |   |
|--|---|
| Austria - ANB  | France - BdeF   |
| <ul style="list-style-type: none"> <li>- Executive Summary</li> <li>- Reports               <ul style="list-style-type: none"> <li>- International environment (focused on CEE countries)</li> <li>- Domestic financial intermediaries</li> <li>- Domestic real economy and financial markets</li> </ul> </li> <li>- Special topics</li> <li>- Annex (tables)</li> </ul> | <ul style="list-style-type: none"> <li>- Editorial</li> <li>- Overview               <ul style="list-style-type: none"> <li>- Summary</li> <li>- International environment and markets</li> <li>- Financial sector</li> </ul> </li> <li>- Articles</li> </ul> |
| Czech Republic - CNB   | European Central Bank   |
| <ul style="list-style-type: none"> <li>- Summary</li> <li>- Macroeconomic Environment</li> </ul>   | <ul style="list-style-type: none"> <li>- Overview of risks to financial stability</li> </ul>  |

325 like the sudden drop in the economic growth rate, important deviations in exchange rates, or sudden drop in stock exchange indicators

|   |  |
|---|--|
| <ul style="list-style-type: none"> <li>- Corporate and household sectors</li> <li>- Financial sector</li> <li>- Financial infrastructure</li> <li>- Annexes</li> </ul>  | <ul style="list-style-type: none"> <li>- Macro-financial environment</li> <li>- Financial system</li> <li>- Special features</li> <li>- Statistical annex</li> </ul>   |
| Finland - BoF   | UK – BOE   |
| <ul style="list-style-type: none"> <li>- Summary, conclusions</li> <li>- International operating environment</li> <li>- Domestic operating environment</li> <li>- The banking and insurance sector</li> <li>- Infrastructure</li> </ul>   | <ul style="list-style-type: none"> <li>- Overview</li> <li>- Credit risk <ul style="list-style-type: none"> <li>- By regions</li> </ul> </li> <li>- Risks in international financial system <ul style="list-style-type: none"> <li>- Markets, institutions</li> </ul> </li> <li>- Domestic financial sector resilience</li> <li>- Selected issues</li> </ul>   |
| Germany - DBuBa   | Romania - BNR  |
| <ul style="list-style-type: none"> <li>- Overview</li> <li>- Macroeconomic outlook and risk factors</li> <li>- International financial system</li> <li>- Domestic financial intermediaries</li> <li>- Legal framework and financial infrastructure</li> <li>- Annexes <ul style="list-style-type: none"> <li>- Indicators of international investors risk aversion</li> <li>- Stress tests</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>- Overview</li> <li>- Macroeconomic international framework</li> <li>- Financial system and its related risks: <ul style="list-style-type: none"> <li>- Financial system structure</li> <li>- Banking sector</li> <li>- Nonbanking financial sector</li> <li>- Capital market</li> </ul> </li> <li>- Domestic macroeconomic risk</li> <li>- Companies and households</li> <li>- Annexes/Studies on financial stability</li> </ul> |

**Source:** Čihák M. – *How do Central Banks write on Financial Stability?*, IMF Working Paper, June 2006, and the National Bank of Romania website [www.bnr.ro](http://www.bnr.ro)

An important aspect regarding the clarity of the reports is data availability. Through publishing FSRs there is an increased quantity of information available to the public, regarding the financial system. However, most of them are based on graphs and figures presented in text, with fewer statistical annexes.

An important part in the clarity of the reports is data availability. The publishing of FSRs increases the available information to the public regarding the financial system. However, most of them are based on graphs and figures presented in text. The use of numerical data could be useful to those with analytical inclinations, but, on the other hand would make the report too long and disorganized, with too much information, risking losing the key messages. One solution adopted by some reports is to present the numerical data separately, usually through appendices. In this way they insure an enhanced utility for the users of that information. Presenting numerical data separately diminishes the risk of losing the key messages that the report tries to highlight.

In what concerns the frequency of the reports, 29 central banks publish semiannual reports, 17 publish annual reports and one, Ghana, publishes such reports five times a year. In what concerns the length of the FSRs, it varies from 10 pages, in the case of Ghana, to approximately 220 pages for some annual reports. In Romania, the National bank of Romania publishes annual Financial stability Reports, with a variable length (121 pages for the 2006 FSR, 80 pages for the 2007 FSR and 95 pages for the 2008 FSR).

In what regards the availability of the FSRs they are usually made available to the public through the central banks' websites. They are also available in printing. In most countries the launch of an FSR is accompanied by media announcements, by announcements made through market analysts and sometimes through members of academic institutions.

#### **4. Conclusions**

In conclusion, we agree that the Financial Stability Reports are an important tool for fostering financial stability, but mostly for educating the public regarding the consequences of their actions on the stability of the financial system. The publishing of FSRs is one obvious sign of the central banks' increased interest in financial stability. Their aim is to offer an image on the way that central banks deal with the financial sector stability, how they foster it, what are the tools used in order to maintain it, how they measure it and what the impact of some risks is or could be on financial institutions and finally on population. FSR publication strengthens the surveillance's quality and discipline, at the same time proving that the Central Bank complies with its mandate. So, we could say that they play an important role in improving Central Bank's transparency and credibility. However, given the presented aims of the FSRs, they should also try to be as comprehensive as possible and their structure should comply with some unwritten rule, like the clarity of the objectives and measures, in order to ensure that the messages sent through them are correctly perceived by the public.

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## ASSESSING SYSTEMIC RISK IN BANKING SYSTEMS

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*Economists have tended to think of systemic risk in terms of financial institutions such as banks, and only infrequently in terms of financial markets. With the growth of disintermediation, in which companies can access capital-market funding without going through banks or other intermediary institutions, greater focus should be devoted to financial markets and the relationship between markets and institutions. In such a system(ic) perspective banking authorities has to implement a new framework for banking system risk assessment. Conceptually, it is possible to take this perspective by carrying out a systematic analysis of the impact of a set of market and macroeconomic risk factors on banks in combination with a network model of mutual credit relations. Following the lead of many European countries (including U.K., Austria) it becomes necessarily Romanian banking authorities to develop systemic risk surveillance.*

*Keywords: systemic risk, credit risk models, stress testing banks, financial stability.*

*JEL classification: G21*

### **1.Systemic Risk: the Term Meaning**

Scholars historically have tended to think of systemic risk primarily in terms of financial institutions such as banks. The European Central Bank and other monetary agencies have likewise expressed concern about systemic risk and its potential systemic effects, dramatically illustrated by *the recent subprime mortgage crisis* and its impact on the mortgage-backed securities and commercial paper markets. Governments also have been concerned about the potential for systemic failure stemming from hedge-fund collapses, originally raised by the collapse of Long-Term Capital Management in 1998 and more recently prompted by the unregulated spread of hedge funds as a favored investment tool. Financial leaders also are calling for increased focus on systemic risk that extends past the traditional, bank-oriented approach.

There are, nonetheless, some confusions about what types of risk are truly "systemic" - the term meaning "of or pertaining to a system" - and what types of systemic risk should be regulated. There is not even agreement on whether systemic risk should be defined by reference to market losses or just market participant losses. Although, a common factor in the various definitions of systemic risk is that *a trigger event*, such as an economic shock or institutional failure, *causes a chain of bad economic consequences* (sometimes referred to as successive and cumulative losses). These could include *financial institution and/or market failures*. *Less dramatically*, these consequences might include *significant losses to financial institutions* or *substantial financial-market price volatility*. In either case, the consequences *impact financial institutions, markets, or both*.

Banks and other financial institutions are important sources of capital. Therefore, their failure, especially in large numbers, can deprive society of capital and increase its cost. Increases in the cost of capital, or decreases in its availability, are the most serious direct consequences of a systemic failure. The classic example of systemic risk in this context is a „bank run," in which the inability of a bank to satisfy withdrawal-demands causes its failure, in turn causing other banks or their creditors to fail. The chain of subsequent failures can occur because banks are closely intertwined financially. They lend to and borrow from each other, hold deposit balances with

each other, and make payments through the interbank clearing system (whereby banks with equity and deposit accounts exceeding their liabilities can offer these excess funds to other banks who wish to increase loans to their customers). Although a *chain of bank failures* remains an important symbol of systemic risk, the ongoing trend towards disintermediation - or enabling companies to access the ultimate source of funds, the capital markets, without going through banks or other financial intermediaries - is making these failures less critical than in the past. Companies today are able to obtain most of their financing through the capital markets without the use of intermediaries. As a result, capital markets themselves are increasingly central to any examination of systemic risk. Systemic disturbances can erupt outside the international banking system and spread through capital-market linkages, rather than merely through banking relationships.

Under modern finance theory, investors and other market participants can protect themselves from risk by diversifying their investments. To the extent risk is negatively correlated, or uncorrelated, with market risk, the randomly distributed risks of a diversified investment portfolio "would tend to cancel out, producing a riskless portfolio." To the extent systemic risk affects markets, however, it is positively correlated with the markets and cannot be diversified away. The near-failure of Long-Term Capital Management ("LTCM") helps to illustrate the potential for this type of systemic risk. To avoid losses for hundreds of millions of dollars and raising the cost of capital, the Federal Reserve proactively stepped in to broker a settlement of LTCM's debts. There are overall similarities, however, between *bank systemic risk* and the kind of *systemic risk represented by LTCM*. In both, market shocks triggered institutional failures which in turn led, or could have led, to a chain of institutional and market failures. Both also were transmitted through linkages in a chain of relationships: in bank systemic risk, the linkages are interbank borrowings and the interbank clearing system for payments; in LTCM, the linkages arose from its derivatives-based hedging strategy with other institutions, which, in turn, had linkages with yet other institutions and markets.

Institutional systemic risk and market systemic risk therefore should not be viewed each in isolation. Institutions and markets can be involved in both. Another way to think about systemic risk is that its focus is sometimes on critical financial intermediaries, like banks, that are pivotal to the funding of companies, and other times its focus is on markets and/or institutions, such as hedge funds, that are either not financial intermediaries or at least not critical financial intermediaries. This integrated perspective is useful because a chain of failures of critical financial intermediaries, by definition, would significantly affect the availability and cost of capital. Synthesizing these factors, a working definition of systemic risk could be: the risk that (a) an economic shock such as market or institutional failure triggers (through a panic or otherwise) either the failure of a chain of markets or institutions or a chain of significant losses to financial institutions, (b) resulting in increases in the cost of capital or decreases in its availability, often evidenced by substantial financial-market price volatility.

This definition must be clarified in two ways. First, systemic risk should be distinguished from downturns that are caused by normal market swings. Although these downturns are sometimes conflated with systemic risk, they are more appropriately labeled systematic risk, meaning risk that cannot be diversified away and therefore affects most, if not all, market participants. As regulators call for management of systemic risk, it is important not to constrain market freedom in ways that deter systematic risk, which facilitates market equilibrium and curbs excessive interest rates or periods of inflation. Second, systemic risk is an economic, not a political, definition. It should not be used uncritically as an ex post political label for any large financial failure or downturn.

## **2.Integrated Models for Systemic Risk Surveillance and Stress Testing of Banking Systems**

The primary mandate of central banks is to achieve and maintain price stability. Safeguarding and maintaining financial stability has always been regarded as a necessary prerequisite for this task. Institutionally, this combination of tasks was until very recently achieved by putting the central bank in charge of the oversight of individual financial institutions. More countries, from EU, have transferred responsibility for the oversight of individual financial institutions to some newly established financial supervisory authorities, while the central banks kept the mandate to safeguard and maintain systemic financial stability. These institutional changes have forced central banks to develop integrated models – such as *Systemic Risk Monitor* (SRM) - for maintaining systemic financial stability without having ultimate responsibility for the oversight of individual financial institutions and off-site banking supervision. The technical purposes of a systemic risk monitor could be to assess systemic risk in the banking system at a quarterly frequency and also to perform regular stress testing exercises. The basic idea of a systemic risk model is to combine standard techniques from modern quantitative market and credit risk management with a network model of the banking system. In contrast to standard risk management models, systemic risk model makes the step from the individual institution perspective to the system level. This step is the major challenge to be met by any systemic risk model. Only at the system level the two major reasons for simultaneous problems become visible: correlated exposures and financial interlinkages. The risk of simultaneous difficulties of institutions and the financial losses incurred in such events is the key focus of systemic financial stability analysis. Conceptually, it is possible to take this perspective by carrying out a systematic analysis of the impact of a set of market and macroeconomic risk factors on banks in combination with a network model of mutual credit relations. Whereas the modeling of noninterbank market and credit losses is rooted in standard quantitative risk management techniques, the combination with an interbank network model to arrive at total gains and losses in the banking system in a monitoring systemic risk model is new. Both the generalizations of standard individual risk management techniques and the simultaneous consideration of portfolio values across the system for given risk factor changes as well as the resolution of bilateral claims via a network clearing model focus on the main issues for an institution in charge of monitoring systemic financial stability: the probability of joint problems of institutions and their financial consequences. The system perspective un-covers exposures to aggregate risk that remains invisible for banking supervision that relies on the assessment of single institutions only. There are distinguishing problems caused directly by a macroeconomic shock from those triggered by problems of other banks in the interbank market.

### ***2.1.An overview of the general ideas used by systemic risk model***

The basic structure of the systemic risk preventing model can be described showing the individual model components as well as their interrelation: *market risk losses, noninterbank credit risk losses* and *interbank network model*.

Systemic Risk Surveillance model may describe a National Banking System at the end of each quarter as a system of portfolios. Each portfolio in the system belongs to one bank. It typically consists of collections of securities (stocks and bonds across domestic and foreign markets reflecting the market risk losses), a collection of corporate loans and loans to households (reflecting the noninterbank credit risk losses) as well as interbank positions (reflecting the interbank network model). The value of each portfolio is observed from the data at the end of each quarter. The future portfolio values one quarter later are random variables. Thus the difference between the portfolios values at the observation date and the portfolio values a quarter from the observation date (i.e. the gains and losses in the banking system), is subject to uncertainty. It is *the distribution* of these *gains* and *losses* that makes the subject. The usual risk management practices consist of imagining of future portfolio values as a function of time as well

as of *risk factors*. Risk factors are market prices that determine portfolio values (stock market indices, interest rates and foreign ex-change rates), as well as macroeconomic variables that have an impact on the quality of loan portfolios. All individual modeling steps as well as the practical challenges that arise in systemic risk surveillance have to do with the details of *how describing the functional relation between risk factor changes and portfolio losses*. In systemic risk surveillance a *multivariate risk factor change distribution* is estimated every quarter based on *past observations of market price changes and changes of macroeconomic variables* that have an impact on problem event probabilities. The modeling strategy treats *the marginal risk factor distributions* and the *dependency structure* separately. Together, the marginal distributions and fitting a grouped t-copula to the data characterize the multivariate risk factor change distribution. Each drawing of risk factor changes from the multivariate distribution characterizes a scenario. Scenarios could be then translated into profits and losses at the system level in two steps. In a first step each scenario should be analyzed with respect to its impact on the value of market and noninterbank credit positions. In a second step, these positions should be combined with the network model. Thus the network model combines all financial positions and bank capital in an overall system of bank net values. The net-work model does this by applying a clearing procedure that provides the final system of bank net values for each scenario. Simulating many scenarios, we get a distribution of problem events and gains and losses that allows us to make probability assignments for problem events over a three-month horizon. The *market risk losses* and the *losses from noninterbank credit risk* are generated by two sub models that **translate scenarios of risk factor changes into the respective scenario losses**: a market and a credit risk model. Systemic risk surveillance has to use **a credit risk model** to calculate losses from loan portfolios and it has to be carefully adapted to explicitly take into account the dependency of default rates on the state of the macro economy. The default probability of a loan in a particular industry sector depends on a set of macroeconomic variables according to a function the parameters of which are statistically estimated from historical data. Given a realization of macroeconomic variables and the implied probability of default for different industry sectors, a loan loss distribution can be derived for each bank for each value of macroeconomic risk factor changes. Loan losses are then calculated by independent draws from these loan loss distributions.

### ***The Credit Risk Models***

The last decade credit risk modelling has been evolving faster than ever and many commercially available models have appeared on the market. This phenomenon could be explained mainly by the two following reasons. The first reason is the Basel II Capital Accord. The three pillars of the recently reinforced Basel Capital Accord, are, (1) minimum capital requirements, (2) supervisory review of an institution's capital adequacy and internal assessment process, and (3) market discipline through disclosure of banking practices. In particular, with the Basel Capital Accord of 1998, banks around the world have been allowed to assess regulatory capital issues related to credit risk using internal models. The second reason is the development of the securitization of bond portfolios that has brought to light the need for quantitative estimation of credit risks. In the following sections we are going to present the most well known approaches to credit risk measurement.

*Traditional methods* try to estimate the probability of default (denoted PD), rather than the potential losses in the event of default (denoted LGD = the loss given default). Furthermore, these models typically specify "failure" to be bankruptcy filing, default, or liquidation, thereby ignoring consideration of the downgrades and upgrades in credit quality that are measured in mark to market models. The three broad categories of traditional models used to *estimate the probability of default* are: (1) Expert systems, including artificial neural networks; (2) Rating systems; (3) Credit scoring models.

*Modern methodologies* of credit risk measurement can be divided in two alternative approaches with respect to their relationship with *the asset pricing literature* of academic finance and to accomplish the estimation of default probabilities: the options-theoretic structural approach and a reduced form approach utilizing intensity-based models to estimate stochastic hazard rates. The *structural approach* models the economic process of default (calculating the firm's Distance to Default, KMV Expected Default Frequency – EDF – scores, KMV EDF scores for private firms); whereas *reduced form models* decompose risky debt prices in order to estimate the random intensity process underlying default.

*Exposure models* estimate credit exposure conditional on a default event (are complements to all of the above models). They are statements about how much is at risk in a given facility, not the probability of default for these facilities. Exposure models also include estimations of the recovery rate, which vary by collateral type, seniority, and industry.

*Portfolio`s* are also complements to above models. Given probabilities of default and the exposure for each transaction in a portfolio, a summing up is required. Due to correlations and the asymmetry of debt returns (as opposed to equity returns) it has to use the correlations of these exposures and then calculate extreme of the portfolio valuation (the 99.9% adverse value of the portfolio). Examples include *Credit-Metrics*, *Credit-Risk+*, and rating agency standards for evaluating diversification in CDOs (collateralized debt obligations).

*Hybrid models* (Moody's model) combine two credit risk modelling approaches: (a) a structural model based on Merton's options-theoretic view of firms, and (b) a statistical model (a statistical reduced form model using a non-linear regression approach) determined through empirical analysis of historical data. The key inputs to this hybrid model are: (a) agency rating when available, (b) modified version of the Merton model (expressed as *a distance to default*), (c) company financial statement information, (d) additional equity market information; and (e) macroeconomic variables that represent snapshots of the state of the economy or of specific industries which are used for preprocessing model inputs. KMV, EDF RiskCalc v3.1 is a powerful default prediction technology available for assessing middle market credit risk. Over the past decade, Moody's KMV has refined its techniques for gauging credit quality in the middle market. The EDF RiskCalc v3.1 model outperforms all other models examined by substantial margins, both in terms of predictive power and in terms of the accuracy of the probabilities that are produced by the models.

## **2.2.Using Systemic Risk Surveillance for Stress Testing**

One advantage of a quantitative model is that it allows the consideration of hypothetical situations. In the context of *systemic risk assessment*, one kind of thought experiment is of particular importance. Usually it is of interest to know how the risk measures for the banking system will behave when there are extreme risk factor changes. Such thought experiments are known as stress tests. Systemic risk monitor provides a coherent framework to consistently conduct such stress testing exercises. In a stress test, one or more risk factors of interest are constrained to take extreme values, like a certain drop in GDP (gross domestic product) or a hike in interest rates. Since a complete model of the multivariate risk factor distribution is defined then can be performed a model simulation under the constraint that certain risk factors are at their stressed values. The risk measures of the model can then be studied relative to the baseline simulation based on the unconditional risk factor change distribution calibrated to historical data. The main advantage of this approach is its consistency with the dependency structures of the risk factors and therefore its consistency with the quantitative framework.



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# DETECTING REGIME SWITCHES IN THE EUR/RON EXCHANGE RATE VOLATILITY

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*In the present study we develop and implement a short term exchange rate forecasting methodology using dynamic confidence intervals based on GARCH processes and we analyze whether this methodology can be used to model a regime switch in the volatility of the EUR/RON exchange rate generated by the change of the reference currency from USD to EUR in March 2003. In order to capture this switch we use in our analysis daily exchange rate returns from 1st of January 1999 to 1st of January 2004. We model the dynamics of the daily returns for the exchange rate by estimating a series of GARCH models, with various specifications for the conditional mean and for the conditional variance. The best specification is a FIGARCH (1, d, 0), a long memory process accounting for volatility persistence. The main finding is that there was a significant decrease in the volatility of the EUR/RON exchange rate after March 2003.*

*Keywords: conditional heteroskedasticity, regime switch, exchange rates, long memory*

*JEL Classification: C01, C15, C51, C87, E44, E47*

## **1. Introduction**

Daily frequency financial data series present some specific characteristics, such as the „volatility clustering” phenomenon. This phenomenon refers to the fact that on the capital market the conditional variance of the return series is not constant, but variable in time. Nowadays, modeling the volatility of assets returns is the research frontier in financial theory. In order to have a proper analysis of the „volatility clustering” phenomenon, Engle (1982) introduced ARCH (AutoRegressive Conditional Heteroskedasticity) processes and Bollerslev (1986) developed a more parsimonious model, GARCH (Generalized ARCH).

To account for the high levels of kurtosis in the distribution of daily returns, a series of GARCH models with “fat-tails” innovations were developed. The Student distribution was employed by Bollerslev (1987) and Kaiser (1996), Nelson (1991) analyzed the „Generalized Error Distribution” (GED) and Lambert and Laurent (2001) developed a GARCH model with an asymmetric Student distribution. Numerous studies (Harvey, 1993; Ding, Granger and Engle, 1993; Briedt, Crato and Lima, 1998) conclude that the volatility of financial assets is persistent. To model this persistence various GARCH processes with long memory were proposed in the literature. In this category one can mention FIGARCH models (Fractionally Integrated GARCH) developed by Baillie, Bollerslev and Mikkelsen (1996), Bollerslev and Mikkelsen (1996) and Chung (1999).

In the present study we develop and implement a short term exchange rate forecasting methodology using dynamic confidence intervals. The confidence intervals length is variable, since it depends on the volatility forecast obtained from a GARCH process. We analyze whether this methodology based on GARCH stochastic processes can be used to model a regime switch in the volatility of the EUR/RON exchange rate generated by the change of the reference currency from USD to EUR in March 2003. We model the dynamics of the daily return for the exchange rate by estimating a series of GARCH models, with various specifications for the conditional mean and for the conditional variance.

The paper is organized in three sections. In the first section we develop a dynamic confidence interval forecasting methodology based on GARCH processes. In the second section we estimate a series of GARCH model specifications using daily EUR/RON the exchange rate returns. The final section concludes.

## 2. Exchange Rates Forecasting using Dynamic Confidence Intervals

In order to model the dynamics of daily exchange rate returns, we employ a series of GARCH models with various specifications for the conditional mean and for the conditional variance. Therefore, the daily return series is modeled as

$$r_t = E_{t-1}(r_t) + \varepsilon_t \quad (1)$$

where  $E_t(\cdot)$  is the conditional mean, and  $\varepsilon_t$  represents the innovations, with the following properties  $E(\varepsilon_t) = 0, E(\varepsilon_t \varepsilon_s) = 0, \forall t \neq s$ . GARCH models imply that conditional variance is not constant in time. Therefore, one can write

$$\varepsilon_t = z_t \sigma_t \quad (2)$$

where  $z_t$  i.i.d with  $E(z_t) = 0, Var(z_t) = 1$ , and  $\sigma_t^2$  is the conditional variance that will be modeled using different specifications.

In order to discriminate between various model specifications we employ several informational criteria. We also perform a series of stability tests for the parameters of these models.

Regarding exchange rate forecasting, we employ a dynamic confidence interval methodology based on the conditional variance forecast obtained from the GARCH models. Hence, the 95% confidence interval for the one day return is

$$\left( \hat{r}_{t+1|t} + z_{0.025} \hat{\sigma}_{t+1|t}, \hat{r}_{t+1|t} + z_{0.975} \hat{\sigma}_{t+1|t} \right) \quad (3)$$

where  $\hat{r}_{t+1|t}$  is the forecast for the expected one day return,  $\hat{\sigma}_{t+1|t}$  the one day forecast of the volatility, and  $z_{0.025}$  and  $z_{0.975}$  are the 2.5% and 97.5% quantiles of the theoretical distribution employed in the GARCH model. In conclusion, the 95% confidence interval for  $\ln P_{t+1}$  (i.e. the logarithm of the spot exchange rate at  $t + 1$ ) is

$$\left( \ln P_t + \hat{r}_{t+1|t} + z_{0.025} \hat{\sigma}_{t+1|t}, \ln P_t + \hat{r}_{t+1|t} + z_{0.975} \hat{\sigma}_{t+1|t} \right). \quad (4)$$

In case one wants to obtain confidence intervals for a period of  $h$  days, one can use the  $h$ -days expected return forecast

$$\hat{R}_{t+h|t} = \sum_{i=1}^h \hat{r}_{t+i|t} \quad (5)$$

and the  $h$ -days volatility forecast

$$\hat{V}_{t+h|t}^2 = \sum_{i=1}^h \hat{\sigma}_{t+i|t}^2 \quad (6)$$

In these conditions, the 95% confidence interval for the  $h$ -days return is

$$\left( \hat{R}_{t+h|t} + z_{0.025} \hat{V}_{t+h|t}, \hat{R}_{t+h|t} + z_{0.975} \hat{V}_{t+h|t} \right) \quad (7)$$

and the 95% confidence interval for  $\ln P_{t+h}$  is

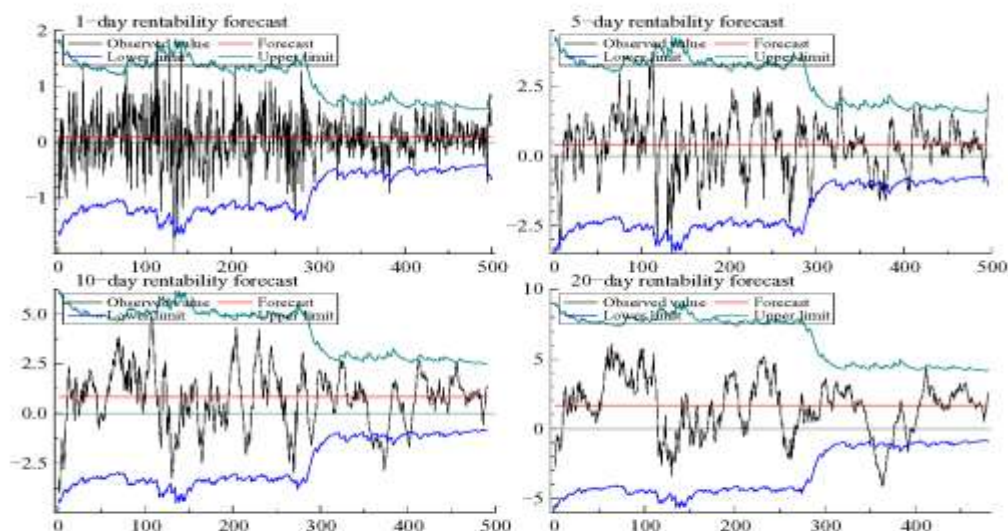
$$\left( \ln P_t + \hat{R}_{t+h|t} + z_{0.025} \hat{V}_{t+h|t}, \ln P_t + \hat{R}_{t+h|t} + z_{0.975} \hat{V}_{t+h|t} \right) \quad (8)$$

## 3. Forecasting the EUR/RON exchange rate volatility

In this section we analyze whether the methodology based on GARCH processes can accurately model a regime switch in the volatility of the EUR/RON exchange rate generated by the change of the reference currency from USD to EUR in March 2003. In order to capture this switch we use in our analysis daily exchange rate returns from 1st of January 1999 to 1st of January 2004. First we tested for normality and for heteroskedasticity in the daily EUR/RON exchange rate returns. The Jarque-Bera test rejects the null hypothesis of normal returns. The existence of the autocorrelation in the squared returns (according to Box Pierce Q test) and the existence of the ARCH effects (according to the Engle's ARCH LM test) entail the usage of a GARCH model to account for volatility clustering.

The first estimated model is a classical GARCH (1, 1) model with normal innovations and a constant in the equation of the conditional mean. The estimated parameters are statistically significant, the GARCH process is stationary, but with volatility persistence. The BoxPierce Q test and the ARCH LM test for the squared standardized residues imply that the conditional variance equation is correctly specified. The BoxPierce Q test for the standardized residues suggests that the mean equation is also correctly specified. Since only a constant is required to explain the conditional mean, the EUR/RON exchange rate return dynamics is quite difficult to forecast. The Nyblom stability test rejects the null hypothesis that parameters of the estimated model are stable (i.e. constant in time). As a consequence, we introduced a dummy variable to account for the moment the Central Bank changed the reference currency in March 2003. Henceforth, we estimated a GARCH (1, 1) model with normal innovations and a dummy variable in the conditional variance equation. The parameters of this model are stable, implying that there are no more volatility switches in the analyzed period. Also, according to the informational criteria, this model is superior to the previous one. Figure 1 depicts 1, 5, 10 and 20 days forecasts for the EUR/RON exchange rate return generated by the dummy – GARCH (1, 1) model with normal innovations.

**Figure 1** - 95% confidence intervals for the EUR/RON exchange rate return for the estimated dummy - GARCH (1, 1) model with normal innovations and a constant in the mean equation



As one can notice, the EUR/RON exchange rate volatility decreased from the moment the

Central Bank introduced euro as the reference currency. This shift in volatility was probably generated by Central Bank interventions on the FOREX market.

The tests conducted on the residues of the two estimated GARCH models imply that the innovations are not normally distributed. This distribution is leptokurtic and asymmetrical. As a result we estimated a series of dummy - GARCH (1, 1) models having innovations with GED distribution, Student distribution or asymmetric Student distribution. Table 1 presents quality indicators for these models: Akaike informational criterion (AIC), Schwartz informational criterion (BIC), Pearson distribution comparison test, and Nyblom stability test.

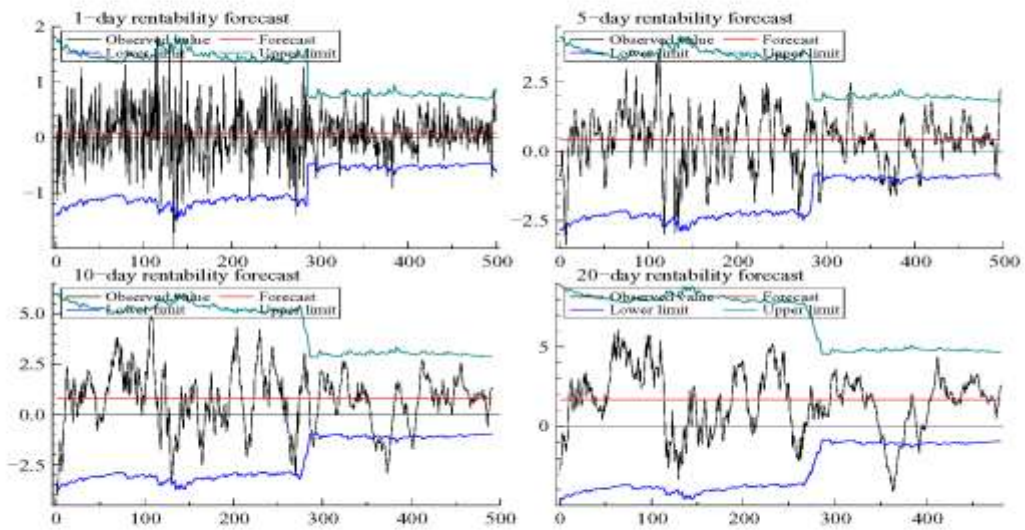
**Table 1** Quality indicators for the estimated dummy - GARCH (1, 1) models with various distributions for the innovations

| Indicator        | Innovations` distribution |          |          |                    |
|------------------|---------------------------|----------|----------|--------------------|
|                  | Normal                    | GED      | Student  | Asymmetric Student |
| AIC statistic    | 1.932326                  | 1.908004 | 1.894860 | 1.889276           |
| BIC statistic    | 1.952563                  | 1.932288 | 1.919145 | 1.917608           |
| Pearson p-value  | 0.021586                  | 0.059488 | 0.056443 | 0.176441           |
| Nyblom statistic | 0.970891                  | 1.42561  | 1.32591  | 1.43361            |

The Pearson test for the estimated GARCH (1, 1) model with an asymmetric distribution of the innovations indicated a higher probability than for the other estimated models that the theoretical distribution is identical to the empirical one. In addition, according to the informational criteria, the asymmetric Student distribution model is superior to the other GARCH (1, 1) processes. This can be explained by the fact that the theoretical distribution is not only leptokurtic, but also asymmetrical, implying a better fit to the empirical distribution.

Next, we used some other specifications for the conditional variance equation. For the beginning, we tested for the existence of a leverage effect in the EUR/RON exchange rate return series. The test was conducted using two asymmetrical GARCH models. The estimations of the TARARCH and APARCH models concluded that the parameter that account for the leverage effect is not statistically significant. It is important to mention that all the estimated models present a high persistence of the volatility. In order to model this persistence we estimated a series of integrated GARCH models. First an IGARCH (1, 1) model was used. The parameters are statistically significant and stable in time. But, according to the informational criteria, this model is not superior to the estimated GARCH (1, 1) models. As a consequence, we modeled the persistence in volatility using a long memory process. Therefore, we estimated a FIGARCH (1, d, 0) model with asymmetric Student distribution. The Box Pierce and ARCH LM tests imply that the mean and variance equations are correctly specified and the Nyblom test suggests that the parameters are stable. Also, the Pearson test can not reject the null hypothesis that the empirical and theoretical distributions of the innovations are identical. In addition, according to the informational criteria, this model is the best from the ones estimated for the EUR/RON exchange rate. Figure 2 depicts 1, 5, 10 and 20 days forecasts for the EUR/RON exchange rate return generated by the dummy – FIGARCH(1, d, 0) model with asymmetric Student innovations. Also, as in the case of the other models, one can notice a significant decrease in the EUR/RON exchange rate volatility after the moment the Central Bank introduced euro as the reference currency.

**Figure 2** - 95% confidence intervals for EUR/RON exchange rate return for the estimated dummy - FIGARCH (1, d, 0) model with asymmetric Student innovations and a constant in the mean equation



Having identified the best specification for the variance equation, next, we modeled the conditional mean using autoregressive processes. The only statistically significant specification consists of an ARFIMA (1, d, 0), a long memory process. The Nyblom test implies that the parameters are stable, and the Box Pierce Q and ARCH LM tests suggest that the mean equation and the conditional variance are correctly specified. However, according to the informational criteria, this model is not superior to the models that have only a constant in the equation of the conditional mean.

#### 4. Concluding remarks

In the present study we analyzed whether a dynamic confidence intervals forecasting methodology based on GARCH processes can be used to model a regime switch in the volatility of the EUR/RON exchange rate generated by the change of the reference currency from USD to EUR in March 2003. In order to capture this switch we used in our analysis daily exchange rate returns from 1st of January 1999 to 1st of January 2004.

We estimated a series of GARCH models, with various specifications for the conditional mean and for the conditional variance. The best specification for the mean equation is a constant specification. Due to the simplicity of the mean equation the EUR/RON exchange rate return dynamics is quite difficult to forecast. The best specification for the variance equation consists of a FIGARCH (1, d, 0), a long memory processes that accounts for the persistence in volatility. The results of the parameter stability tests entailed the introduction of a dummy variable to account for the moment the Central Bank changed the reference currency.

The main finding of the study is that there was a significant decrease in the volatility of the EUR/RON exchange rate after March 2003. This shift in volatility was probably generated by Central Bank interventions on the FOREX market.

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## **RULES AND MEASURES FOR AVOIDING RISK IN THE CREDITING ACTIVITY**

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*The purpose of credit analysis is to avoid profit losses or business losses caused by bad debts, that is, by granting credits to customers who don't pay off the loan or by failing to grant credits to potentially good customers.*

*Keywords: bank cautiousness, credits, interest rates, insurable risk, uninsurable risk.*

*Cod JEL: G*

### **1. The general crediting rules**

The crediting operations performed by trading banks are based on bank cautiousness, as well as on the following general rules:

- As per the provisions of Law no. 58/ 1998 on the banking activity, in the process of granting credits, trading banks must verify that the applications display credibility and they will have to log all the crediting operations in contractual documents that must clearly reflect all the terms and all the crediting conditions.
- The crediting activity must be based on an analysis of the viability and realism of the business activity, in order to identify and assess the payment capacity of the customers, respectively their capacity of generating income and liquidity as main source for paying off the loan and the interest.
- The credits, regardless of their amount or length of time, are granted only for the purpose stipulated in the credit agreement, having a precise credit destination being a compulsory requirement for those who get the credit.
- The trading banks apply interest rates to the credits they grant, and the levels of these rates are established by the bank, which also establishes penalties, as per the applicable law, if the credits and/or interest rates are not paid off on their due date.
- The credits are always granted based on certain warranties and the minimum amount of such warranties must cover the maximum debt of the bank loan, made of credits plus applicable interest rates. The bank is allowed to verify its customers to ensure the integrity of all warranties throughout the whole crediting period.
- Throughout the crediting period, credited customers – legal entities, must provide the bank with copies of the balance sheet, regular accounting statements and any other documents requested by the bank.
- The paying off of the credit in due time is the principle that ensures the permanent commencement of the crediting process, and it is achieved by correctly establishing the debtor's capacity of generating income, by choosing and agreeing on insurance warranties as well as by permanently supervising the way the credit is utilized.
- Credits are granted upon request from economic agents who meet all the following conditions:
  1. They are legally established.
  2. They own paid-up share capital, as per the Articles of Incorporation.
  3. They conduct legal and effective activities.
  4. They reach an optimum level of financial solvency ratios.
  5. The analysis of their liquidity flow points to the existence of real possibilities for paying off in due time, both the credit installments and the applicable interest rates.



6. The value of the material warranties accepted must be higher or at least the same as the value of the requested credits plus the applicable interest rates, calculated for the entire crediting period.
7. They have opened accounts with the banks at which they are applying for credit.
8. They submit a statement of the commitments involved in the accounts opened with other banking companies, and of the related warranties.
9. They accept the clauses of the credit agreement.
  - Physical persons may be granted credits if they meet all the following requirements:
    1. They generate certain and permanent income throughout the whole crediting period.
    2. They establish and utilize own financing sources.
    3. They underwrite the paying-off of the credits they request with the income they generate, as well as real warranties.
    4. They don't have debts or other obligations that weren't paid on due time, towards banks or third parties, when applying for the loan.
  - In order to manage risk and cover any possible losses from credits and interests, trading banks form a general reserve for credit risks and specific provisions for credits and interests.

## 2. Checking the credit risk

In a general framework, the credit risk appears as losses caused by the debtor's breach of the contract through his renouncing of the psychological motivation of **mutual trust**. It appears as a worsening of the debt service through a delay in the payment of interest rates or loan installments. This risk may take two forms: **risk that can be insured** (insurable risk), if the probability of the occurrence can be calculated and measured and **risk that can't be insured** (uninsurable risk) if there is no way to calculate the probability of the event's occurrence and no measuring of it.

It would be interesting to discuss in more detail the aspect of renouncing mutual trust - the cause that determines the debtor to breach his initial commitment dating from the signing off of the credit agreement.

In his paper *"Free to Choose. A Personal Statement"* Milton Friedman synthesized: *"the essence of applications in Adam Smith's <The Wealth of Nations> is illusively simple, - if a transaction between two parties is freely agreed on, it will only take place if the parties believe they will benefit from it. Most economic errors stem from ignoring this simple proof of wisdom, out of their tendency of considering it like a slice of a pie, which one party can only win if the other party loses it"*.

That which drives the parties involved in the contractual credit relation to cooperate in order to achieve distinct interest is the **price system** that is used in this case, which is the **level of interest**, which fulfils primarily three functions:

**a) Transmitting information** for the debtor, with regards to his financial costs, as he must compare the increase of the financial expenses against the selling price of the products (goods or services) on various markets.

**b) Stimulating the debtor to organize his production** (activity) **in the most cost-effective way**, by mobilizing available resources, including borrowed ones, for obtaining highest quality products.

**c) Allocating income** (how much of the product is assigned to various parties). The debtor constantly supervises how much of his work's output is distributed to the creditor (financing bank) by means of paid interest and, obviously, how much is left to him.

In this relational feed-back any perturbation of the freely agreed transaction leads to a distortion in the image of the benefit, which entails the apparition of the principle or thought of wronging the other party in favor of the own entity (the pie becomes too tempting and that party is no longer willing to share it), by allowing subjectivism to take over and abandoning the rational

consciousness. This is the quick effect of the conservation response that is fundamental in any system, whether biological, social, or economic.

The perturbation factors for the debtor may come in a large variety, of internal nature, related to the creditor's organization, such as: the management of the financing entity and the wrong strategy applied by the financing entity, which results in the financing bank trying to cover the losses of the previous trading year by an increase in the selling price of the financial resources invested in the newly contracted debtor's business. Such a procedure will create even from the start of the relation a premise of non-payment, through the obvious incapacity of the management decision-makers to improve the quality of the credit portfolio.

In this case most debtors penalize the contractual report, in order to preserve their own economic status, by refusing to pay the interest rates and credit installments, and then it is required to re-establish the relation of mutual trust through a new negotiation. In its extreme form, credit risk causes losses to the financing bank by entailing the debtor's bankruptcy, in which case the losses are permanent.

Another internal perturbation factor is the corruption of credit officers at the level of the banking network, within the directly operative units (branch offices, banking agencies), or the corruption of the top management at the level of the parent bank.

Having a top position in the management of any entity, including a banking company, may be the means for fast enrichment (primitive accumulation of capital), which works in direct relation to the existing bureaucracy. The higher is the number of clerks, the more important is the boss, and thus the faster his enrichment. This principle functions within a pyramid system in which corruption operates from the base of the pyramid towards its top.

Although long-term banking practice has proved the existence of various risks, there are only two fundamental banking risks, which are: the insolvency risk and the locking-up risk.

**The insolvency risk** occurs as a non-payment risk or non-redemption risk and may be written-off on the beneficiary, on the reserves, or on the capital. The non-payment risk may refer to full non-payment, payment delays, or may refer to the capital and/or interest rates. Non-redemption may refer to failure of paying-off in due time the credit and/or the interest.

**The locking-up risk** may occur as the interest rate risk and results from granting credits with a fixed interest rate from funds collected in deposits with variable interest rates. This type of credit is attached to deposits collected by the bank and for which the bank must obtain profit by granting credits from these funds.

Banking risks may also be classified as:

1. *The enterprise risk* that includes:

- The organizational risk, related to human actions, also known as professional quality risk.
- The non-operating risk or breakdown risk.
- The environment risk.

2. *The countertrade risk* (partnership risk), which include:

- The credit risk.
- The liquidation risk.
- The interest rate risk.

3. *The market risk.*

4. *The exchange risk.*

5. *The bank solvency risk.*

6. *Operational risks* – they refer to:

- The fund transfer system.
- The operation of payment tools.

In that which regards assuming the banking risk, this is done based on the economic support of the credit operation and of the warranties.

The means for avoiding credit risk are very complex in nature and may be classified into three categories:

- Preemptive measures.
- Operative measures.
- Remedy measures.

#### **a) Preemptive measures**

In order to reduce and avoid risk in the crediting activity, the bank must fully comply with the limitations imposed by the NBR norms no. 8/1999. The capital related risk stands in the risk of the customer's insolvency, which may result in losing the loaned amount, and the risk of locking-up the resources, when the customer fails to fulfill the commitment of paying the agreed amount at its due date.

The risks that stem mostly from the debtor's insolvency can be overcome by forming warranties in favor of the bank. The warranties may be *personal*, formed according to the debtor as a person (which don't ensure any legal advantage over the debtor) and *real* warranties, formed in accordance with the consistency of the goods (which ensures real rights over the debtor's patrimony).

The general principle to be taken into account when assessing the timeliness of each credit operation is that the bank must not grant a credit without prior assessment of the possibility for recovering it at its due date, or at the moment when the bank decides to withdraw its credit, which are exceptional, and obviously well justified, cases. The Law no. 58/1998, article 44, provides that "...when granting credits, banks must ensure that the applicants display credibility with regards to their paying them off at the due date. To this aim, banks must request applicants to underwrite their credits as per the conditions set forth through their crediting norms". It is for the first time that the legislative gives an imperative character to the concept of credibility, doubled by underwriting (credible-warranties), but the legislative doesn't refer expressly to the type of warranties requested, as the very viability of a business might be considered as a warranty.

#### **b) Operative measures**

Through their very nature, such measures aim to avoid risk, to identify any imminent possibility of its occurrence, and to intervene. In fact, it's actually a system of concrete measures meant to prevent the bank from finding itself facing a completed fact. Their character is obviously preemptive, but using other means than the ones in the above described category.

A first measure of this kind is the signing of the credit bank under such conditions that are favorable for the bank. Other measures taken by the bank include:

- Verifying the operations in the special credit cash account and charge the non-usage fee if the debtor doesn't use the money as agreed in the credit agreement.
- Charging an administration fee.
- Charging a **risk commission** calculated for the value of the commuted amount; this is charged upon signing of the commitment, from the customer's cash account or from his running account.
- The daily verification of the customer's bank statement, both for the cash account and for the credit cash account, for monitoring credit destination.
- Verifying the regularity of the receipts and payments from the account.
- Strict compliance of the credit's object, as set forth in the credit agreement.
- Regular verification of the accounting documents of the economic agent.
- Supervising the way the customer fulfils his contractual obligations.
- Collecting income from interest rates in the "*interest income*" account and from due fees in the "*fee income*" account.
- Supervising the warranties throughout the whole period of the credit.

- Permanently supervising the debtor's status on the market, by calculating the indicators: turnover, net profit, number of contracts, stocks, suppliers, customers, and debts.

To ensure a normal performance of the operative activity, it is required to have an informational system and to correctly use the computer. In case of failure to pay-off, after the bank's notification to the client, the next step consists of coercive measures.

### c) Remedy measures

If, in the course of the operative measures, the bank realizes that the contractual obligations have not been fulfilled, it has the right to end the credit agreement which is, in fact, one of the remedy measures.

The ending of the credit agreement can be made either when granting it or, in the case of credit granted in installments, whenever the client fails to comply with the clause in the credit agreement.

In the case when, and after notification from the bank, the debtor doesn't redeem his debts (on their due date), the bank resorts to **extreme measures** such as: the execution of the real warranties; filing complaint against the customer at a trading court within whose radius the debtor is seated; recovering the amounts from warrantors.

Another remedy measure is to **avoid risks by forming a reserve fund**. Banking companies allot 20% of the annual gross profit for forming reserves, until the fund that was thus established equals the capital, and another 10% until the fund becomes richer than the capital. The **general reserve for the credit risk** is of 2% from the balance of existing credits.

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# THE ANALYSIS OF THE QUALITY OF ADMINISTRATION OF COMPANY RELATIONS WITH COMMERCIAL PARTNERS

## Pop Fănuța

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## Făt Codruța

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*The proper development of the activity of a company depends largely upon the way it administrates its relations with commercial partners (suppliers and clients), as they support the activity of exploitation, which is the main activity of the company. The quality of administration of these partnership relations is reflected by means of certain specific indicators and will influence the level of profit, liquidity and cash flow within the company.*

*Key words: clients, suppliers, negotiation power, partnership relations, receivables, debts, income, expenses, cashings, payments, indicators of activity, indicators of liquidity.*

*JEL classification: G33, G39, L14, M40*

## 1. General aspects

In the paper „Competitive Strategy”, M. Porter defines five forces (intensity of the rivalry from the sector of activity, new possible competitors, substitution products, suppliers and clients) which determine the profitability of the company. The five forces determine the profitability due to the „power” they provide to the company, suppliers, clients and competitors. This power is based on structural advantages such as the report of dimensions between purchaser and seller.<sup>326</sup> It is obvious the fact that within a certain branch of activity and within economy on the whole, each company holds both the status of client (purchaser), and of seller (supplier) for a different company. Therefore, the relations resulted from sale-purchase operations must be taken carefully into account, which is, after all, the purpose of the present paper. According to the anglo-saxon perspective, relations between seller and purchaser are regarded as adversity relations, namely if a purchaser (client) is stronger as compared to the seller (supplier), he will impose the seller a transaction to his own advantage, and the other way around. These relations of adversity can be „translated” through *the power of negotiation of clients and suppliers*<sup>327</sup>.

*The power of negotiation of suppliers* regarding companies from a given industry can manifest through majoring of prices or reduction of quality of products provided. Its power increases if the resource is important for the beneficiary company, if the number of suppliers is reduced from one reason or another (monopoly, low profits etc.), if change of the supplier brings forth important transference costs or if there runs the risk for the supplier to purchase the business of its beneficiary (client).

*The power of negotiation of clients* is bigger if they purchase a product in greater quantities, if the respective product is standardized and costs involved through change of supplier are small, or if they represent significant extent within the cost of the own product. Other reasons might be: low profit in case of the purchaser, which makes him offer low prices, the relative lack of importance for the product of the purchaser, the reference product or lack of serious impact upon

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326 Coates Charles, “Managerul total [Total Manager]”, Teora Publishing, Bucharest, 1999, page 19.

327 Băcanu Bogdan, “Management strategic [Strategic Management]”, Teora Publishing, Bucharest, 1999, page 47.

the financial state of the client, the threat of purchasing the supplier's business increase the power of the client in what regards certain relations, when we speak of an industrial type consumer. Luxury products influence the clients' power of negotiation, when their income is low and prices of products are big, since they are sensible to price variations.

The factors influencing the relations of the company with commercial partners can be viewed numerically (quantitatively) by means of the Financial Statement of the company. These situations provide necessary information for the calculation of specific indicators of quantitative description, but they offer as well, by analysis and interpretation in correlation, qualitative information regarding the qualitative level of administration of relations with commercial partners. From a financial point of view, both clients and suppliers of the company represent **commercial credits**. The fluxes of operations generated by relations with commercial partners as they appear in Financial Statement, can be figured in the following scheme:

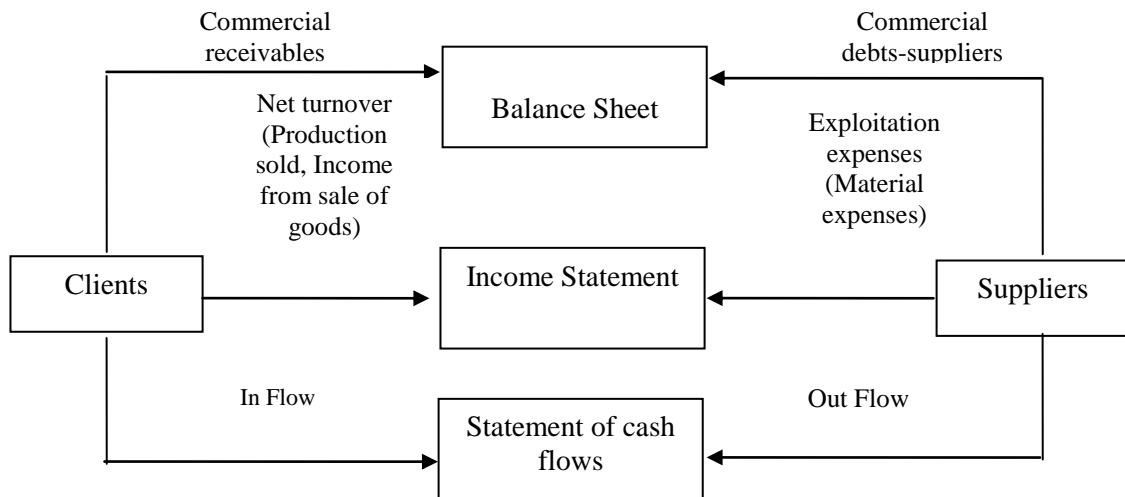


Fig. 1. Fluxes of operations with commercial partners reflected in Financial Statement

**Clients** represent, in financial terms, company receivables (Accounts Receivable or „Commercial receivables” of the company, as they appear reflected in the Balance Sheet) resulting from provision of goods and/or carrying off services and which have a certain falling due of return. The factors influencing, from a financial point of view, partnership relations with clients, are: the net turnover; the contract stipulations regarding return terms; the sales structure; the quality of products/services sold/carried off.

In general, the increase of net turnover determines an increase of the volume of commercial receivables, which in the mean and long run could create problems of financial liquidity when bills issued are not returned in due time. In case commercial receivables are not returned in due time and there runs the risk of not recovering sums immobilized at clients, this situation has unfavourable consequences upon the financial liquidity of the company.

If sales structure changes in favour of some products of bigger/smaller value, then the receivables balance increases/reduces. In case that sales structure changes in favour of products of bigger value (more expensive, lux products) commercial margins are expected to be higher, however the attention of the company should especially focus the qualitative level of these products, because the client will accept to pay more and take up bills on term if he is served at time set, with the quantity requested and the qualitative level expected. In this situation (which also holds for lux products) hauling times will be smaller and commercial margins obtained, bigger. If sales structure changes in favour of products of smaller value, this fact could be a consequence not necessarily of decrease of qualitative level of products (only in case of losing an important and

pretentious client), but especially of diminution of purchase power of clients. Commercial margins would normally be smaller, but the company will be able to attenuate this problem by hauling times of sales in bigger quantities (if possible).

In case of products/services of inferior quality, or with hidden flaws, there might arise problems in returning receivables, caused by remedy of flaws, reduction of prices imposed by clients or by what might be even worse, the worsening of the company image (especially if these flaws have been discovered before delivering the product). In the case of products/services of superior quality the company will have a bigger power of negotiation with clients, with more reduced return terms, a fact which is likely to influence favourably in financial liquidity.

Company **suppliers** (Account Payable or „Commercial debts – suppliers”, as they appear reflected in the Balance Sheet) represent, from the financial point of view, money resources temporarily attracted from third parties. They are not usually associated with interest rates and ensure supplementary financing for the company. These debts are however free sources of capital, which means that, in essence, it's benefic for the company to record a bigger volume of shifts of payments than in the case of shifts of returns. On the other hand, if the company has an important (probably even unique) supplier of raw materials, payment bills must be honoured in due time, because losing that supplier could lead to temporary or even total breach of activity of the company, or its orientation towards other suppliers providing raw materials, in the best case at the same qualitative level, but probably at much higher prices. The company suppliers also generate provision costs (material expenses) which are particularly significant through the percentage they hold (50-80%)<sup>328</sup> from the total cost and through possibilities of reduction that could appear in case of efficient provisioning.

## **2. The calculus, analysis and interpretation of specific indicators which reflect the quality of administration of the relations with commercial partners (indicators of activity, indicators of liquidity)**

The way these commercial credits (clients and suppliers) are administrated determines the short term financial balance of the company, reflected through its financial liquidity. Within Financial situations, in the Explanatory note no. 9 „Examples of calculation and analysis of the main economical-financial indicators”<sup>329</sup>, we point out indicators (indicators of activity or administration and indicators of liquidity) that reflect the way in which these resources are administrated<sup>330</sup>. The indicators of velocity of accounts receivable and accounts payable belong to the group of indicators of activity (of administration), and their calculation and interpretation offer information regarding the administration of these resources, with influences upon the financial liquidity of the company. The table no.1 presents the modality of calculation of these indicators at the level of a company, over a period of 4 years:

Table no.1

| <b>INDICATORS</b>  | <b>2005</b> | <b>2006</b> | <b>2007</b> | <b>2008</b> |
|--|-------------|-------------|-------------|-------------|
| <b>INDICATORS OF ACTIVITY (OF ADMINISTRATION)</b>                        |             |             |             |             |
| Commercial receivables (CR-com) (from the Balance Sheet rd. 25)<br>-lei- | 5.950.399   | 7.076.058   | 8.835.548   | 11.797.050  |
| Net turnover (CAN) (from the Income Statement rd.1)<br>-lei-             | 52.315.685  | 59.421.267  | 64.629.433  | 73.659.502  |

328 Cârstea, Gheorghe (coord.), “Analiza strategică a mediului concurențial [Strategic analysis of the concurențial environment]”, Economic Publishing, Bucharest, 2002, page 37.

329 \* \* \* O.M.F.P. no. 1752/17.11.2005 2005 privind aprobarea reglementărilor contabile conforme cu directivele europene [regarding the approval of accounting regulations in accordance with European directives], in the Official Monitor of Romania Part I, no. 1080 / 30.11.2005.

330 Bernstein Leopold, Wild John, “Analysis of Financial Statements” Fifth edition, McGraw-Hill, New York, 2000, page 130.

|   |                |                |                |                |
|---|----------------|----------------|----------------|----------------|
| Income from exploitation ( $V_{Exp}$ ) (from the Income Statement rd. 10) -lei-   | 52.565.835     | 60.483.046     | 67.900.801     | 76.258.486     |
| Cashing of receivables (Variation of receivables) (from the Statement of Cash Flows IAS 7) -lei-  | 3.343.065      | 1.125.659      | 1.759.490      | 2.961.502      |
| <b>COMMERCIAL-RECEIVABLES VELOCITY</b>  |                |                |                |                |
| - commercial-receivables turnover<br>$K_{CR-com} = CAN/CR\ com$ (number of rotations)   | <b>8,79</b>    | <b>8,39</b>    | <b>7,31</b>    | <b>6,24</b>    |
| - commercial-receivables collection period<br>$Dz_{CR-com} = (CR\ com/CAN)*T$ (T = 365 days) (days)   | <b>42</b>      | <b>43</b>      | <b>50</b>      | <b>59</b>      |
| Account payable (Commercial debts- suppliers) (Fz)(from the Balance Sheet rd. 40) -lei-   | 5.443.974      | 4.691.610      | 8.118.695      | 9.210.297      |
| Material expenses-total (from the Income Statement rd.11 + rd. 12 + rd.13) -lei-  | 19.126.686     | 20.874.929     | 21.233.708     | 21.234.385     |
| Exploitation expenses (from the Income Statement rd. 32) -lei -   | 47.133.713     | 54.931.626     | 59.523.579     | 66.137.243     |
| Payments suppliers (Variation of suppliers) (from the Statement of Cash Flows IAS 7) -lei -   | 2.612.052      | - 752.364      | 3.427.085      | 1.091.602      |
| <b>ACCOUNT PAYABLE (COMMERCIAL DEBTS -SUPPLIES) VELOCITY</b>  |                |                |                |                |
| - accounts payable (commercial debt-supplies) turnover $K_{Fz} = CAN/Fz$ (no. of rotations)   | <b>9,61</b>    | <b>12,67</b>   | <b>7,96</b>    | <b>8,00</b>    |
| - accounts payable (commercial debt-supplies payment) payment period<br>$Dz_{Fz} = (Fz/CAN)*T$ (T = 365 days) (days)                                    | <b>38</b>      | <b>29</b>      | <b>46</b>      | <b>46</b>      |
| <b>INDICATORS OF LIQUIDITY</b>  |                |                |                |                |
| Current assets (from the Balance Sheet rd. 35 + rd. 36) -lei-   | 17.506.275     | 20.327.105     | 24.782.018     | 25.970.958     |
| Current liabilities (from the Balance Sheet rd. 45 + rd. 62) -lei-  | 10.438.946     | 9.834.751      | 13.361.839     | 15.477.089     |
| Inventories (S) (from the Balance Sheet rd. 24) -lei-   | 9.144.969      | 9.878.097      | 12.118.820     | 11.947.514     |
| Short term investments (Cash equivalents) (from the Balance Sheet rd. 33) -lei-   | 63.006         | 67.655         | 2.469          | 10.407         |
| Cash and bank accounts (from the Balance Sheet rd.34) -lei-   | 1.101.530      | 1.411.218      | 1.987.644      | 1.815.897      |
| Treasury (TR = Short term investments + Cash and bank accounts) -lei-   | 1.164.536      | 1.478.873      | 1.990.113      | 1.826.304      |
| <b>CURRENT (GENERAL) RATIO</b><br>$R_{LG} = (AC^*/DTS^*)*100$ (according to the Explanatory note no. 9). $R_{LG} \in [120\% - 200\% \rightarrow 250\%]$ | <b>167,70%</b> | <b>206,67%</b> | <b>185,47%</b> | <b>167,80%</b> |
| <b>QUICK RATIO (ACID RATIO)</b><br>$R_{LI} = [(AC^* - S)/DTS^*]*100$ (according to Explanatory note no. 9) $R_{LI} \in [50\% 100\% \rightarrow 150\%]$  | <b>80,09%</b>  | <b>106,25%</b> | <b>94,77%</b>  | <b>90,61%</b>  |
| <b>CASH RATIO</b> $R_{LE} = (TR/DTS^*)*100$ $R_{LE} \in [40-60\%]$  | <b>11,16%</b>  | <b>15,04%</b>  | <b>14,89%</b>  | <b>11,80%</b>  |

**Source:** the Balance Sheet, the Income Statement and the Statement of Cash Flow from a company (real statement)

**Note:** the lines from the Balance Sheet and the Income Statement whence the data for the calculation of indicators were taken, respect the form of the two Financial Statement, cf. O.M.F.P. 1752/17.11.2005

We further proceed to analyzing and interpreting indicators calculated in table no.1, in order to grasp some conclusions concerning the modality of management of relations with commercial partners. In what regards the indicators of activity, they can be expressed by means of velocity. In general, **velocity** can be calculated in two ways: as **turnover** (showing how many times the respective element – commercial receivables or commercial debts - suppliers, in the given case – can be recovered through a financial exercise, regularly over one year) and as **collection/payment period** (showing the number of days in which the respective element –



commercial receivables or commercial debts, in the given case – is recovered, or in how many days is a rotation being made). Velocity can accelerate or slow down from one period to another. The interpretation of results obtained after calculations made in table no.1 reveals the following: **The commercial-receivables velocity** slows down from one year to another. If in the first two years the value of receivables was collected in a mean of 42 days, in the next two years the difference between returns grows to 50, respectively 59 days, which is likely to produce unfavourable effects upon liquidities (we can also observe the turnover decreases). The measure of this indicator is influenced by<sup>331</sup>: *the strategy of the supplying company; relations established with clients; the specific of the production; the economic conjuncture; the diminution of clients' purchase power in situations of crisis; the crediting policy practised on the market; the level of inflation.*

**The commercial debts – suppliers velocity** grows in the first two years, while the payment period reduces from 38 to 29 days and slows down in the following year (with 20 days), maintaining itself constant in the last year (46 days).

Separate analysis of the two velocity is not enough. Even if one can observe from the very beginning a situation unfavourable for the company, this even becomes twice unsatisfactory if one analyzes the two indicators in correlation. We can thus observe the fact that differences of returns from clients and suppliers are unfavourable to the company all over the given time. If in the first two years commercial receivables were collection meanly at 42-43 days, debts to suppliers were paid at 38 days on average and then at 29 days (deviation in favour of suppliers, year in which one can observe from table no.1 that the sale of commercial receivables reduces from 3.343.065 lei in 2005 to 1.125.659 lei in 2006, but payments to suppliers grow faster, the sale of suppliers in 2006 as compared to 2005 being smaller by 752.364 lei). In the following two years the payment period to suppliers grows (from 46 to 29 days on average), getting closer to the commercial-receivables collection period, however the deviation is unfavourable in this situation as well (while the period of payment to suppliers remains constantly to 46 days, the collection period of commercial-receivables grows to 50 days from 43 days, and respectively to 59 days in the last year). This fact is also obvious in the Statement of Cash Flows through the growth of commercial-receivables remaining to be returned (to approximately 2-2,5 million lei), but also of sale of suppliers (to approximately 3,5 million lei in 2007, but increase to approximately 1 million in 2008).

We can conclude the fact that both collection and payment period are normal (one month, one month and a half) considering that many companies face financial blockings, thus farther return/payment terms. However, these unfavourable deviations influence the **liquidity of the company**, which reflects in liquidity ratio, especially the Cash ratio.

**Current (general) ratio ( $R_{LG}$ )** reflects the capacity of current assets to transform into cash which could cover for the falling due current liabilities of the company. The optimum for the current (general) ratio ( $R_{LG}$ ) is placed around the value of 200% (acc. to O.M.F.P. no. 1752/17.11.2005). In what concerns the company in study, the current ratio can be considered to fall within the safety interval all over the given period (around the value of 200% with small fluctuations according to the change of value volume of current assets and current liabilities), namely the company holds enough inventories values, receivables and treasury to face the payment of current liabilities (the greatest proportion of which belongs to suppliers).

**Quick/Acid Test Ratio ( $R_{LI}$ )** points out the capacity of current assets, other than inventories (S) to participate in financing short term debts of the company. In fact, this ratio shows the capacity of the company to cover short term debts from sums immobilized at clients (commercial receivables), disposals and the amount of cash it disposes (treasury). The safety interval for the

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331 Buglea Alexandru, „Analiza situației financiare a întreprinderii [The analysis of the financial situation of the company]”, Mirton Publishing, Timișoara, 2004, page 126.

Quick/Acid Test Ratio ( $R_{LI}$ ) is [50%-100%; max.→150%]. Over fulfilment of the optimum level might represent inefficient administration either of receivables (difficulties regarding their cashing), or of monetary resources (lack of an efficient disposals policy). On analyzing the values of this ratio all over the given period we can observe the company places within the safety interval, namely it possesses enough values to fulfil in the short run (receivables) and treasury to cover current liabilities. By comparing the values of this ratio with the Quick/Acid Test Ratio we can see it halves every year, which enables us assert the fact that the company holds great inventories values.

Although the analysis of the two rates allows us to conclude the respective company has a favourable situation (as ratios fall within safety intervals), the study of the *Cash ratio* ( $R_{LE}$ ), proves the company does not in fact holds enough monetary resources to face falling due current liabilities. This ratio actually points out the capacity of payment of the company, which is on average approximately 13% all over the interval analyzed. The precarious value of the ratio is caused by the unfavourable deviation between the commercial-receivables turnover and commercial debts-suppliers turnover, as the ratio represents the „barometer” of the state of liquidity, whose calculation only takes into account treasury (Short term investments or Cash equivalents + Cash and bank accounts).

The optimum value of this ratio is comprised within [40% - 60%]. If we take into account in the calculation of the ratio only the Cash and Bank Accounts without Short term investments (stocks held, bought, issued or rebought bonds and other values) which are anyway insignificant at the level of the company analyzed, the optimum value is included in the interval [20% - 30%]. A low level of this ratio can ensure maintaining of the financial equilibrium if the company holds inventories, receivables or short term investments easy to transform in liquidities, in accordance with the maturity of short term debts. The analysis of the cash ratio (especially the second rate, that based only on cash) must be undertaken under reserves<sup>332</sup> because: cash change significantly over short periods of time, as a result of the report between returns and payments; substantial returns from a certain period do not necessarily represent a sign of financial disequilibrium, but can be caused by slow returns in the right preceding period; the relatively low level can be seen not only as signal of difficulties met in recovering receivables, but also as a policy of strict management of cash.

In practical activity, optimum levels of indicators of liquidity can be considered facultative and thus can be changed accordingly if one takes into account other factors also such as <sup>333</sup>: concrete conditions of development of the activity of exploitation of every company; ability to negotiate with clients and suppliers; efficient use of material resources by obtaining of their velocity (regarding turnover) bigger than the mean level of the branch. Indicators of liquidity characterize the quality of economic-financial activity which diminishes when money means are represented by elements of current assets with delayed or interrupted turnover (goods hard to sell, clients with late returns, degraded raw materials). In what concerns the numerical example, we can note the fact that the company „takes bigger concern” in paying its suppliers in due time and is „more flexible” regarding the collection period for the bills issued to clients. This situation can be „translated” by the fact that both suppliers and clients have a bigger power of negotiation with the company, on the one hand due to the fact that the latter has few (or one important) suppliers of basic raw materials, and on the other hand, competition from other companies determines the assignment of more relaxed collection period for clients. This fact is justified especially in situations of crisis when companies face diminution of demand and the loss of an important client and/or supplier can lead to bankruptcy.

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332 Tabără N., Horomnea E., Toma C., „Analiza financiar-contabilă [The accounting-financial analysis]”, Editura Tipografia Moldova, Iași, 2001, page 159.

333 Buglea Alexandru, op. cit., pag.178.

### 3. Conclusion

In conclusion, we can assert that in a world of competition, of sophisticated demand and of an economy affected by crisis, companies that fight to survive the crisis try to keep their clients by satisfying as good as possible their demands, since clients themselves are the very reason of existence of the company. However, as we have already shown, the company activates in a competitive environment and is, in its turn, client to other companies, thus waiting to be treated correctly by its suppliers. In this respect, what is important in the current economic and social context is trust together with setting right prices for products/services sold/bought, based on economic reasons (increase of the level of quality, diversification of the range of goods, post-sale service etc.).

Trust is founded on the truth of concrete situations and clarity of explanations; correctness and transparency of actions and of their consequences; involvement and concentration of different “actors”<sup>334</sup> (clients, suppliers, shareholders, owners, employees etc.). In addition to that, one has to move over the rivalry between purchasers and sellers. One can say today the ideal relation seller-purchaser is of partnership, contrary to the Anglo-Saxon perspective, which asserts that these relations are based on adversity. Many companies, especially Japanese ones, consider their suppliers partners in their operations and thus try hard to set and maintain a philosophy of cooperation – based on trust, respect and reciprocal advantage - to govern their relations.

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334 Purcărea Theodor, “Renașterea și promovarea consumatorilor - o permanentă sfidare [Rebirth and promotion of consumers - a permanent challenge]”, in “Management of quality and protection of consumers”, vol. 3, ASE, Bucharest, 1997, page 56.

# THE ROLE OF THE FOREIGN INVESTMENTS AND THE CAPITAL MARKET IN THE RESTRUCTURING OF THE ROMANIAN FINANCIAL SYSTEM

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**Abstract:** *One of the most visible and most important effects for the stability of the financial system is the restructuring and the consolidation of the banking system, as main component, so that the credit institutions to meet the requirements of some functional banking markets, in full globalization process. Then, we can't talk about a qualitative development of the Romanian economy and especially of the financial system, without the development of the capital market. The banking system must truthfully reflect the development and decentralizing level within the economy, representing not only a result of the reform, restructuring and privatization process, but also a very active and mobilizing factor of this process.*

**Key words:** *privatization, banking system, restructuring, foreign direct investments.*

**JEL Code:** *G21, G32, G33, G34.*

## **1. The development of the Romanian financial system**

In the new EU accession countries, Bulgaria and Romania, foreign banks have moved rapidly to take dominant positions. In Bulgaria 83% of the banks are controlled by foreign owners. In Romania, Austrian banks are leading (23%), followed by Greek banks (10%) and Italian banks (7%). Romania may offer the best prospects for FDI by foreign banks since, although it is the second largest market in Central and Eastern Europe, it has the least developed banking system.

In Romania, the banking field has been and it is one of the most dynamic and active segments within the economy, registering important growths from year to year, both regarding capital, number of employees, investments, and the credit level of the economic activity. Nevertheless, there had been some deficiencies materialized in some aspects of banking system leanness, non performing credits, important losses or even bribery.

The banking system must truthfully reflect the development and decentralizing level within the economy, representing not only a result of the reform, restructuring and privatization process, but also a very active and mobilizing factor of this process.

It is very important to underline that the current Romanian banking system is „a creation and a major success of the passing process from market economy which happened after 1989”<sup>335</sup>. Recognizing this reality calls for a specific approach, distinct of this field of activity, at least under the following points of view:

- represents achieving an objective which, by structure and functional finalities, constitute a fundamental premise in edifying a real market economy;
- it's the conjugated result of the Romanian society, after 1989, as part of practicing a strategy whose finality is found in the consent of the entire national political spectrum;
- the respective system covers the entire national area, constituting a lever and perhaps the most coherent way of implementing and achieving major mutations in the other fields of activity.

The restructuring process, as fundamental guiding mark of the transition to market economy, mandatory also includes the banking system, mentioning that it must keep into account, on one side, of the above mentioned, and on the other side, of the necessity of a real capital input within the system. One can add aspects which are to be taken into account of elaborating any national development strategy, with direct influences upon some defining elements of national interest.

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<sup>335</sup> Constantin Benchechi, “Banking restructuring techniques”, Financial Market no. 10 / 1997, p. 8.

As a result, the number of bank investments included in this process, and also the implication percentage of private capital, internal or external, become the expression of a will with a double motivation: economical and political.

The tendency registered in Romania, of growth of the presence of foreign banks, is available in the entire Central and Eastern Europe. The growth of roles of the foreign banks on emergent markets is due, originally, to financial segment globalization, which led to an intensification of competition from non banking lending sources and financial services – partially from the capital market, with inference over the registered profits. This fact determined a reduction of traditional banking activities capacity, banks choosing for regional diversification and achieving other banking activities. The expansion of the foreign banks and gaining new market shares had been favoured also by more permissive regulations and technical progress.

The presence of foreign banks leads to a growth of stability and efficiency of the banking system of the host country. In this way is registered a direct and indirect improvement (as a result of competition) of the quality, prices and banking services availability. In addition, it is considered that foreign banks have a more efficient assignment of credits due to the fact that they have more sophisticated systems for risk evaluation. Also, it is appreciated that foreign banks can better estimate the risks associated to different financial products due to their experience on international financial markets.

Moreover, unlike local banks having state capital which can be submitted to some political pressures for granting some of the credits or neutralizing the economic levers for recovering the credits, foreign banks are more intransigent, thus contributing to strengthen business discipline.

„Thus, in a country in which residual payments are a constant of economic life after 1989, due to non restructuring the state sector and changing the behaviour of profitable economic agents, foreign banks had adopted a determined solution: bankruptcy”<sup>336</sup>. Thus, Romanian Bank for Development – Societe Generale demanded in the court the bankruptcy of the company *Rulmentul Slatina*. The Bank had granted in 1997 a credit line for the production activity, with reimbursement term at the end of the year. The term had been extended until the half of 1998, and in the beginning of the next year, the bank had granted another additional credit. The debtor company had not been able to return the loan contracted, reason for which the bank requested the bankruptcy. The act made by BRD – GSG drains the economy and, certainly, it shall be pursued by other private banks, considering the reduction of the number of state capital banks, which, for many years, had good relations with the state companies.

Local banks confront with a series of disadvantages, compared to the foreign banks: limited access to capital, lack of geographical diversification, lack of experience on several markets, delays in implementing new services and products, limited capacity to achieve investments in information and communications technology.

The entrance of foreign banks on the local market means the import of some more strict prudent regulations, at least for a part of the banking system. Moreover, in times of crisis of the banking system, the branch offices of the international banks can contribute to stabilizing the situation, the depositors going to such banks than the ones outside the country. Foreign banks are considered to be more stabile sources for granting credits, which make the banking system of the host country to be more robust to shocks. Thus, the subsidiaries and branches of the foreign banks have access to additional funds from the mother companies. The banks having international activity have a better access to international financial markets, benefit from the diversification of the portfolio and have larger incomes, which are less correlated with the local shocks. The Asian crisis in 1997 revealed another policy of the foreign banks, and namely one of cut and run.

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<sup>336</sup> Mirela Matei, “Foreign Direct Investments. Functions and evolutions. 1990 – 2000, Expert Publishing House, Bucharest, 2004, p. 207.

Some specialists consider that the foreign banks adopt a focus policy over the companies with a stable financial situation (“cherry pick”), letting to the local banks the clients with problems, thus contributing to the growth of the autochthonous banks risks. Moreover, as a result of competition development, local banks having a weaker position shall develop more risky, with the purpose of improving their position, the final result being the bankruptcy.

Besides the defiance which the foreign banks address to the monetary authorities within the host country, a stronger focus of the banking segment can create a monopoly situation, with immediate effects over the local banking system efficiency.

## **2. The restructuring of the Romanian financial system**

According to a survey made by the National Bank of Romania, the privatization had been and it is still a factor with a special influence over the banking system.

The changing environment in which banks function, generates new business opportunities, but at the same time it assumes more complex and different risks, which are a challenge for the traditional approaches of the banking management, which the bank must administrate more properly in order to survive the competition and in order to sustain the economic growth induced within the private sector.

The Romanian financial system includes different entities, but the most representatives are: credit institutions, non-banking financial institutions, credit co-operatives, financial investment services companies, investment funds, insurance, leasing and financial investments companies. The dimension of the financial fluxes estimates the range of the economic fluxes and they are directly proportional. Of all the sectors of the financial system, the most remarking are: banking industry, insurances, financial investments companies and – more and more significantly within the past years – the financial investments services companies. On the first place within the banking system there is the banking industry, the first financial sector restructured 4 years long, process started since 1998.

In essence, the property structure in case of the banking system is a quality indicator, reflecting the intensity degree of the banking reform and restructuring, being directly proportional to the property structure within the economy.

In the years while the banking restructuring process had lasted and then as a result of the banking consolidation process, the banks assets had been restructured in a manner underlined in the following configuration<sup>337</sup>:

1) the downturn of the major state capital bank assets from 71,02% of the total of the banking system assets in 1998 to 6% in 2005. The rate had been significantly influenced by the liquidation of Bancorex and BCR privatization;

2) the emphatic reduction of the assets of autochthonous major private capital Romanian banks, as an unpleasant consequence of bankruptcy of most Romanian major private capital (from 13 banks in 1998, to 6 banks in 2001, 4 banks in 2002, so that barely in 2004, the number to grow to 7, being in 2005 at the same level also), fact reflected in the decrease of their market share from 9,03% in 1998 to 3,2% at the end of 2002. Except for some banking frauds, the bankruptcy of some private banks was due to the alternation of the phases of the economic course, of the restrictive monetary policies, combined with very large real positive interests, which had marked up the interest of the credit over the profitability limit of the economic agents and had created for many of them an insolvency risk translated into credit risk (or sources immobilization) for the banks which had bankrupted. Subsequently, by the BCR privatization, the share of the Romanian private major capital banks majored to 31,08% in 2005;

3) the assets of the foreign major private capital (including the branches of the foreign banks) had grown in a progressive rhythm from 14,25% to 62,2% at the end of 2005. 2002 was the year in

which the foreign capital managed to take over the control of the Romanian banking market, the market share of the commercial banks having foreign major capital (calculated as assets share in total system assets) was of 56,4%, exceeding the market share of the commercial banks having state major capital, respectively 40,4% of the banking total assets. This had not been possible without a quantitative development (the number of foreign major capital had grown from 13 in 1998, to 23 in 2004, even if the number of the branches of foreign banks in Romania had dropped from 9 to 7), but also by a qualitative extension in the banking products and services range, fact confirmed by the growth of public confidence in foreign capital banks. The process had been favoured also by the liquidation of Bancorex, fact proved by the growth with 26,22% of the market share of foreign major capital in a single year (1998 – 1999) from 14,26% to 40,48%, even though the number of foreign capital bank operators had grown only with 3 units, while the number of foreign banks branches had reduced with 2 units;

4) the assets of the foreign banks branches had slowly grown from 5,69% in 1998 to 8,5% in 2004, so that in 2005 to be reduced at 7,5%.

If the banks had doubled the assets of the financial system, about the capital market one can say that they had registered in 2004 a growth of 1.6 times compared to 2002, but anyway the share of the net assets of the SSIF's within the financial system and of these assets reported to the GDP had stayed the same. The development of the market had been noticed also from the growth of the stock exchange capitalization as a share in the GDP, from 10,6% in 2003 to 17,6% in 2004, against a superior growth rhythm (109,6% in 2004, superior to the one of 48,1% in 2003). On another side, it had also been noticed a very high dynamics of the capital market in 2005, where the capitalization had grown from 10% of the GDP in 2002 to over 22% at the end of 2005. Parallel with this, there had been a consolidation of the SSIF's on base of fusions and withdrawing authorizations of some financial investments services companies followed then by a growth of the number of financial investments services companies, currently being 72 such companies. The relative boom of the capital market determined the purchase of some financial investments services companies by domestic credit institutions, process which probably shall continue under the empire of the new capital market law and under the requirements of regulation imposed by the C.N.M.V. The process shall be stimulated also by the appetite of the banks for the diversification of the incomes gained in the conditions of an effectiveness superior to the banking market, but also by the lack of Human Resources specialized in market operations (brokers) within the banking personnel structures, which makes more attractive the purchase of a financial investments services companies than creating a direction: The capital market within a bank.

The significant development of the capital market had been favoured by the continuous reduction between 2002 and 2004 of the nominal level of the bank interests for clients' deposits, which had enhanced a special perception upon stock exchange registered effectiveness. This development of the capital market had not yet tale place by a proper widening of the choosing possibilities between the listed titles. The great unbalance between banking assets and those of other financial institutions equally suggest the long absence of some pro-active policies for developing alternative markets and the reduced volume of the local financial resources in search of investment.

Along with the slow – down of the decrease rhythm of the interests, this perception shall disappear, and the growth of the effectiveness could be favoured by the listing of new issuers to the stock exchange, including the private banks within Romania, even the ones owned by foreign capital. The restructured and consolidated banks can represent underwriters, drawing the public investor. That is why the banks can propel the capital market on an ascending trend in a near future.

One of the most visible and most important effects for the stability of the financial system is the restructuring and the consolidation of the banking system, as main component, so that the credit

institutions to meet the requirements of some functional banking markets, in full globalization process. Then, we can't talk about a qualitative development of the Romanian economy and especially of the financial system, without the development of the capital market. In economy manuals, the stock exchange is presented as the economy barometer. Beyond this plastic expression, a financial system can't demand to be a developed system without a healthy capital market, solid, as it began to be the banking market within the last years. Another aspect which had been suggested in the financial press and literature within the last years is the one of competition between the capital market and the banking market. Outwardly, correctly, profoundly, all wrong. The great financial groups own brokerage houses, they also administrate important stock exchange placements investments, so that the margins lost when the interest decreases (when it is assumed that money are moved to the stock exchange) to be recovered and maybe even more of that from ratings acquired on the capital market. Turning the reasoning, what does the capital market lose when the banking market evolutes on a growth waive? Especially in the conditions in which the three listed banks have a capitalization which is 27% of the total capitalization of the stock exchange (information from august 2006), which are added indirect relations to (the SIF's own important participations to banks). The two markets don't compete or if they do, they both gain. It is only up to us to understand this thing and act in order to achieve it.

### **3. Conclusions**

In the beginning of the 21<sup>st</sup> century, one of the main tendencies of the world economy is the globalization. Adhering step by step to a sole economic complex, regulated by the same game rules, the national economies get new modernization and economic growth possibilities.

Currently, without direct foreign investments, the fast overflow of economic crisis and staying behind of the countries in course of development is very difficult to achieve, sometimes even impossible. More than ever, the development of a healthy economy based on the principles of the competitive market can't be achieved beyond its connection to the world economy, as well as economic progress and growth can't be achieved without investments, including those direct foreign.

In the conditions of the Romanian society being in transition process to a market economy, the need of capital and investments, which are up to a level way over the economic possibilities, imposes as an objective condition to turn to foreign capital as drawing direct foreign investments. The role of foreign capital derives both from the necessity of supplementing the financial resources of the country, and from the structural status to the economic reform process. The foreign capital is more than a flux of exterior resources, it's the main support for making inevitable structural adjustments by which the Romanian economy can get out of the tighten inherited structure, of inefficient assignment of the resources which currently stop it and by which to enter into the structural economic reform process.

Thus, the impact of foreign capital over our economy is double. First, as financial flux, the foreign capital plays a complementary role in the transition context, because it supplements the limited financial resources of the country in the effort of reversing the tendency which had been exercised in the first years of reform, that of continuous deterioration of the economy condition. A massive foreign capital flux as direct investments can represent a support for the governmental policy, aiming the stabilization of the domestic financial - monetary system against the completion of the price liberalization process.

Secondly, as investment flux, the foreign capital plays a structural role. In the conditions in which the pitching of the functional biased errors and of the chronicle inefficiency can be overflowed only by an influx of modern technology, management expertise and economic administration, the structural role of the foreign capital being determinant, because it can generate and maintain, in the current conditions, such an influx.



Direct foreign investments stimulates the development of all sectors of the economy, determines the growth of the production and of the number of work places, the improvement of working conditions, the growth of labour productivity, of the economic efficiency and of the living level of the population, and the main advantage of them is that they don't create exterior debts.

If the investment input is materialized in equipments, gears, know how, etc., the investments can become real reception and framing channels within the world economy of some exterior impulses of technology, management and marketing experience.

Transnational companies, which are the main promoters of foreign investments and, implicit, of the globalization process, are the ones which should try to create stronger connections to the host countries, in the conditions in which this type of relations had not always had the best results. Currently, when the role of self image became so important, it can be positively influenced not only by economic and financial performances, but also by the ones achieved regarding the social security granted especially to the states in development, as it's the case of Romania. Thus, transnational companies must involve more in forming and reconverting the work force in the countries in which they make branches, make scientific research centers and attempt to make a permanent connection between them.

Foreign capital investments can bring an important input for the development of the domestic market and, step by step, to the activation of the exports, having their own distribution networks.

Drawing direct foreign and portfolio investments contribute to the rebalancing of the balance of payments by foreign capital inserted into the economy, which can reduce from the pressures over the rate of exchange generated by an adverse trade balance.

The state can directly interfere through many levelers and mechanisms for the balance of the exterior balance of payments, but the foreign investments are considered the most benefic because they have a synergic effect much larger over the domestic resources.

Despite the continuous opening of the exterior trade and of the significant performance of the export, these are not yet enough diversified, matter due to the fact that few companies have innovating or research activities in developing their products and services. In addition, most of the Romanian exports are traditional sectors.

That is why, Romania's strategic priority must be the competitive advantages, the development of capacity and competence of the exporting sectors, drawing direct foreign investments, and creating an economy which would be able to develop in the free trade conditions in a more and more globalized market.

Considering that the DFI are a source of capital, know how, technology and management aptitudes, and that they stimulate the economic growth, Romania must become a better pretender for the immersion of direct foreign investments, especially those oriented to the export. The main matters which require solutions are regarding the creation of an attractive environment for the foreign investors, them being interested in: diminishing the domestic market, the existence of important natural resources, cheap work force, the possibility to access exterior outlets, the liberalization of the economic domestic policies, the technical progress level and the quality of the human resources, the elimination of bribery and bureaucracy, etc.

Near the impact the DFI have over the exterior trade and over the competitive advantage of the host country, we must also mention the DFI catalyst role in the restructuring process of the national economy and of the local companies, both directly, in case of those having connections with the transnational companies, and indirectly, by enhancing the competition between the local companies and foreign branches.

Due to the negotiations and requirements of the European Union, in order to receive the functional market economy statute, Romania had to accelerate the privatization process. Thus, the banking sector had been strengthened by the privatizations of the state banks in the previous years, the most important in the likeness of value until now being the privatization of the

Romanian Commercial Bank with the Austrian partner Erste Bank, but also by the opening of the foreign banking and non-banking capital input.

The banking activity in Romania is not yet, at least, not currently, situated according to the requirements and standards of the European banking industry. The local banks have some disadvantages, comparing to the foreign banks: limited access to capital; the lack of a geographical diversification; the lack of experience on more markets; delay in implementing new services and products; limited capacity to make investments in information and communication technology.

The real challenge for our country shall begin once with the completion of the privatization process, thus not contributing to the growth of the direct foreign investments flux.

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## CREDIT RISK IN THE CONTEXT OF THE WORLD ECONOMIC CRISIS

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*The risks have always been the subject matter for banking companies. To define a banking activity as one for obtaining a profit it is necessary to take into account the risk factors. For most banks lending is the main banking operation. The risk can be estimated using the credit analysis. The credit analysis – starts from the loan application and ends with the repayment day. In the context of the world economic crisis, in our country, since November 2008 we have noticed an ascending trend of the outstanding credits, both in lei and foreign currency, and because this trend still remains, banks will have to face with big troubles regarding liquidity and solvency.*

*KEYWORDS: credit, credit risk, the management of banking risks, the evaluation of credit risk, the world economic crisis, outstanding credits, bad credits, the methodology of the NBR, backlog, lei credits, foreign currency credits, credit repayment*

*The JEL code of the paper: G21*

The risks have always been the subject matter for banking companies. To define a banking activity as one for obtaining a profit it is necessary to take into account the risk factors. The novelty in management of risks aims at enhancing the prevention of losses and attempts to make the risk from an abstract, intangible element a measured one. The management of banking risks is closely related to the management of bank's profitability. Usually, big risks are associated to some operations with high profitability.

The bank takes charge of some risks to obtain good results. For example, the bank takes the chance to lend more risky clients for obtaining a spare income, which is usually higher than the one obtained from good customers. The management of risks has several main objectives: ensuring the continuity of banking activity by reducing the losses resulted from the risks actions; expanding the internal control to increase the banking performances and create the possibility of comparing the risks on different centers of responsibility, types of activities, clients; providing necessary information to people responsible for taking decisions regarding the capitalization of resources. In this case it is possible to present some measurable consequences resulted from the variant chosen by the one who decides; to generate the information needed for creating a portfolio of balanced activities and so the bank will obtain results in terms of minimum risk.

For most banks lending is the main banking operation. The intermediation function between banks is based on it. The lending risk, called risk of double entry or risk of insolvency is the main banking risk. The risk of lending refers to the possibility that the debtors (borrowers or issuers of debt securities) will not pay back the loan at the maturity. It refers to the fact that the debtor may not respect the contract clauses. The loss may be total or partial and the increase of this risk depends on the number of clients, the credit volume and the level of the rate interest.

If the management of lending risk is carried out before the decision of lending we can say that we are dealing with a previous management which is necessary for taking those measures and establishing the criteria for granting the loan so as to avoid or reduce losses. After the bank takes the decision of lending, the management will be a posterior one. The posterior management of

lending risk first aims to check up the payments of the loan and in case of default of payment, to reduce the risks through an optimum revaluation of the guarantees. The lending risk can be managed globally by the rules and actions that concern the entire loan portfolio or large parts of it, or individually by those measures taken by the bank for each applicant and then the debtor. The decision of granting a loan is based on a forecast of future incomes of the debtor. As a basic principle, the bank does not grant a loan if it cannot predict that the debtor will reimburse the entire loan.

The risk can be estimated by using the loan analysis. The loan analysis – starts from the loan request and ends with the repayment day. The lending decision is sequential and it is taken on four steps: a managerial and economic-financial analysis of the debtor; an analysis of the loan request; taking the lending decision; a periodical analysis of the loan portfolio. The managerial and economic-financial analysis of the debtor – starts when the credit applicant comes with a loan request to the bank. Actually, he comes with the following documents: the loan request, signed by authorized persons; the situation of stocks and expenses for which the loan is requested; the balance sheet; the trial balance; income statement and loss account; the list of assets and values used as guarantees for requested loan; an authorization of shareholders for obtaining and using the loan. The bank can analyze the situation of a company by calculating some indicators: *liquid ratio* – evaluates the coverage rate of current liabilities with current assets; *profitability indicators* – determine the efficiency of using the company's capitals. The analysis of the loan request – if the applicant is accepted after the managerial and economic-financial analysis he becomes the bank's client. The analysis of the loan request is realized by the followings: identifying the purpose and the level of the granted loan; identifying the sources of the loan repayment; identifying the loan guarantees. Taking the lending decision – after the bank analyses the situation of the debtor and the loan it has to take a decision about granting or not the loan. In this phase it takes place: the correlation with bank's resources; taking and communicating the lending decision; the analysis of completing the lending decision.

The management of global risk of the credit aims to limit the risk assumed by the bank when lending its clients. This can be possible through a credit monitoring and by taking some measures at the entire credits portfolio. The global risk of the credit is determined by using some indicators: - Structure indicators: total credits / total assets; the losses of lending / total credits. As the result of these indicators is much higher the credit risk assumed by the bank is higher; - Dynamics indicators: *the evolution of reserve fund to cover losses, the evolution of credits*. An increase of these indicators is associated with an increase of the credit risk assumed by the bank; - Relative indicators – these indicators are the connection between the risk assumed by the bank in the lending process and its funds, as a source of covering the possible losses.

An important role in the management of global risk of the credit is played by the existence of some banking caution rules in the field of the bank commitment that is in investment operations especially in lending operations. The main issues covered by these regulations are: *the maximum exposure to a single debtor* – according to the Romanian rules, a bank may grant loans to a single client in a maximum 20% of its own funds. This rule is made to limit the bank's losses in case that the customer becomes insolvent; *the maximum aggregate exposure* – included large volume of loans granted by the bank up to 8 times its own funds. A credit is considered high when all commitments to a single borrower exceeding 10% of the bank's own funds; *creating specific risk provisions depending on the quality of granted loans* – banks are required to have the provisions to a percentage of the loan depending on the quality of the loans. To determine the quality of loans are used two appreciation criteria: debtor's financial performances and debt service. Through its lending policy the bank may set its own standards and rules carried in credits. These lending rules can refer to general banking prudential regulation outlined above, by increasing their demanding application, or may create new restrictions to be respected in the lending process.

The non-financial analysis verifies the client's credibility, as an essential psychological element that has the role to convince the bank of the professional and moral qualities of the loan's applicant, of the main partners and collaborators and also of the applicant's reputation analyzed through the products quality, services and by the way of dealing with business partners. For taking the lending decision, the credit officer will take account of the following non-financial factors: the leadership activity (the management); the client's activity; the strategy. The external non-financial factors are: field of activity; the introduction of the client activity in general economic policy and in the trends of future strategies regarding the field of activity; the influence of legislation on client's activity; the goodwill; the influence of macroeconomic factors on client's business; social characteristics of market outlets: food habits, a certain way of consuming, religion.

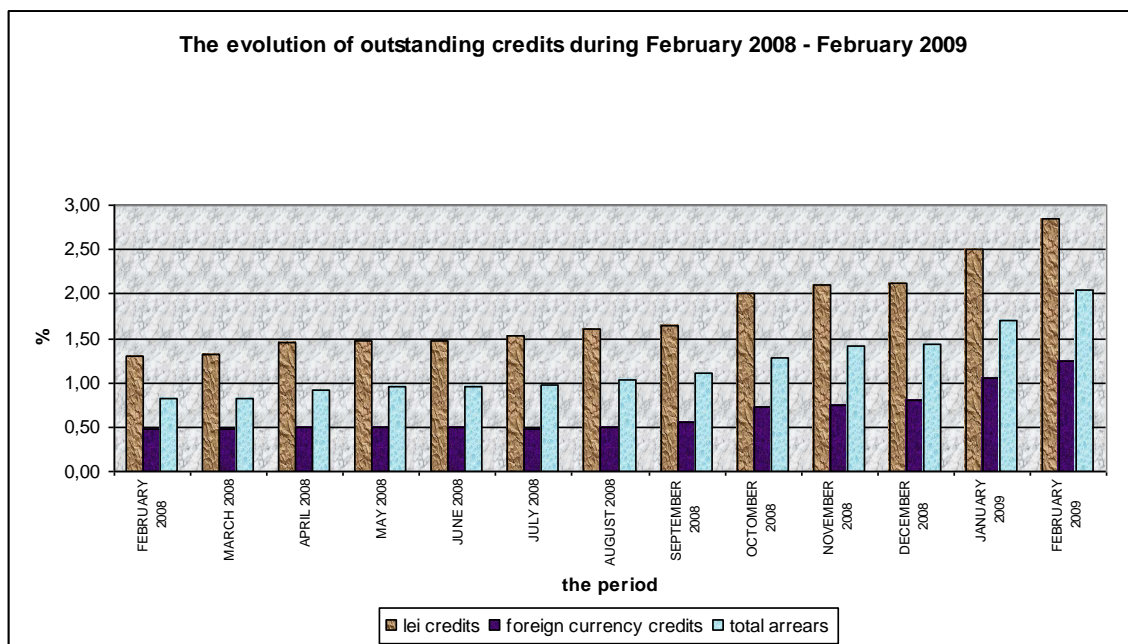
In the context of current global economic crisis, in our country the total volume of loans granted by commercial banks, classified as outstanding, has increased by 13% in September 2008, reaching nearly 4.750 billion lei (about 123 million euro). This situation occurred after in August 2008, the outstanding loans were increased, on average, by others 12-13 percentage points. Even if the bankers do not recognize that they are facing with problems in recovering the granted loans, the figures show from month to month that the volume of outstanding credits becomes bigger and bigger. The outstanding short-term credits were, at the end of September 2008, 1.860 billion lei, by 7,3% more than in August 2008, while the outstanding medium and long-term credits have increased by 4%, reaching 233 billion lei. As a result of the competition between banks for market shares, the lending conditions become more flexible and, in the future, this situation may affect the activity of banks. In September 2002, the volume of outstanding short-term credits granted in national currency has increased by nearly 40%, while the outstanding medium and long-term credits have increased by 300%.

Also, very interesting is the evolution of the credits granted in a foreign currency: the outstanding short-term credits granted in a foreign currency were increased by 14% in September, while for those on medium and long term the increase was over 51%. The most credits were for buying consumer durable goods - these were estimated at 500 million euro, three times more comparing with the end of the third quarter of the last year.

Although the percentage of the durable goods granted in lei was over 72,84% of the total, the banks granted also the population in foreign currency. A new threat, also in this context, seems to come from the restructuring of the state-owned companies (which will be accelerated in the next period) that will be certainly a surprise to the banking system, or at least for banks that have competed in lending to individuals in the last period. The restructuring implies in most cases a staff restructuring and we have to keep in mind that the employees of these companies are the bank's favorites.

Based on data published by the National Bank has identified a trend of the arrears situation recorded in 2008, January 2009 and February 2009 and so we can notice that the share of the currency credits arrears has grown more easier than the share of the national currency credits arrears, increased by almost 1% from the beginning of the year until November.

The evolution of outstanding credits during February 2008 - February 2009



It is noticed a slightly increasing trend of the outstanding credits, both in lei and foreign currency, during February 2008 – October 2008 and a further more increasing trend during November 2008 – February 2009.

According to data published by the National Bank of Romania in the statistics, in November, the percentage of the balance arrears of the credits granted in lei represents 2,21% of total balance of credits granted in the national currency. Compared with February 2008, the value of arrears has increased over 3,2 times, both in the companies area and population. In the context of the actual economic crisis, the arrears increase was expected but the bankers appreciate that the situation is under control. Regarding the credits bigger than 20.000 lei in equivalent, 13,80% of these are arrears.

According to the methodology of the National Bank of Romania, the arrears represents the cumulate value of the capital rates, of the interests and the commissions and they are the result of a late payment, even if it is a day late. All this is regarded from an accounting point of view. In terms of cautiousness, the credits with payment delays are divided in five categories – standard, in observation, under standard, doubtful (delays between 61 and 90 days) and loss (over 90 days). For example, if a customer has delayed more than 90 days with payment rates, the entire value of the granted loan (including interests and commissions) will be considered loss, and bank will make 100% provisions.

Also, according to data received from The National Bank of Romania, the value of bad loans (doubtful and losses) reached 16,76 billion lei at the end of February (8,42% share in total credits), with 4,2 billion lei more than December 2008. Meanwhile, because of the loans arrears, banks made in the first two months of this year provisions that worth more than two billion lei, actually the total was 9,64 billion lei. According to Radu Gratian Ghetea, president of the Romanian Association of Banks, the banks have the situation under control and so they don't have to worry too much but on the other hand, this situation may evolve for the better or for worse and in the context of increasing arrears, some banks will try to recover their claims from specialized companies.

This year in March, in the banking system, the outstanding and doubtful credits represented around 4% of total portfolio of the banks. In the third and fourth quarter of 2008, the clients had

suffered a combined effect of the successive interest increase and the depreciation of the national currency is expected to accelerate the trend of worsening the quality of investment portfolio. It is noticed a big pressure on both individual clients as well companies and it is very difficult to predict how far will raise the share of the outstanding loans.

Even if the companies have less credits than people have, actually they come to 100,3 billion lei compared with 103,2 billion lei, their credits arrears are two times higher than population's – according to data provided by The Directorate of Bank Supervision of The National Bank of Romania. Thus, if at the end of February the arrears of the population came to 1,464 billion lei, with a share of 1,43% in loans, the arrears of the companies reached 2,79 billion lei (2,78% of loans). The arrears of the population and companies from Bucharest have risen only in the first two months of 2009 with 72% and, at the end of February, they have come to 1,42 billion lei.

### ***Conclusions:***

Referring to lei and foreign currency credits, the arrears of the clients, both individuals and businesses, have increased significantly since October 2008.

Thus, in October, the rate of outstanding credits in total credits was 1,1% and in February 2009 it was 2,05%. In February 2009 there has been a level of arrears for lei credits of 2,8% and for credits granted in a foreign currency 1,25%. We can say that the rate is still in reasonable limits, but there is still a risk that the volume of outstanding loans to increase depending on the evolution of financial crisis, and certain clients, individuals or legal persons, may be unable to pay the credit interests and also to pay back the entire loan.

Since November 2008 we have noticed an ascending trend of the outstanding credits, both in lei and foreign currency, and because this trend still remains, banks will have to face with big troubles regarding liquidity and solvency.

Stabilizing the exchange rate of the national currency would have positive effects on the reimbursement of a loan, especially for loans borrowed in a foreign currency. Also, reducing the interest of monetary policy by The National Bank of Romania and the interests of granted loans by the commercial banks will have the same effect.

It is very important that The National Bank of Romania and the commercial banks to apply appropriate policies in order to reduce the outstanding credits or at most to be maintained at current levels.

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# STOCK EXCHANGE MARKETS INTEGRATION – A CAUSE OF QUASI-SIMULTANEOUS TRANSMISSION OF FINANCIAL CRISIS

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*Financial mondialization designate the enlargement movement and the opening of capital markets at a global level which began at the beginning of the '70s. Because of the capital markets integration, the economies are more and more exposed to the common impacts which have as result the global dimension crises. Several examples confirm the quasi-simultaneous reaction of all stock exchange markets during the crisis period. Even if the markets have lost of their materiality, there still remain major financial centers and their integration appears, first of all, through the simultaneous evolution of stock exchange indexes. This synchronization reflects the high interdependence of the economies, both during the crises period and during the calm periods.*

*Keywords: stock exchange indexes, stock exchange markets integration, contagion phenomenon, financial crisis*

*Classification JEL: G15, F36*

The evolution of stock exchange indexes of the main capital markets (Frankfurt, London, New York, Paris and Tokyo) represents one of the best way of illustration of financial mondialization, the increase and decrease phases coinciding almost perfectly.

Other indexes also show a quick consolidation of the interdependence between the national stock exchanges. The markets liberalization and the new technologies of information and communication have very much favoured the integration of stock exchange markets. Instead, the consequences of these integrations raise some questions whose answers are less peremptory. The enlargement and the opening of the markets supported the competition between the stock exchange markets, some stock exchange markets melting in order to maintain their dominatory position<sup>338</sup>.

Two factors have played a major role in the powerful integration of the international stock exchange markets since the beginning of the '80s: the change of the financial area and the development of the new technology of information and communication.

The change of the financial area, which began in the '70s in the Anglo-Saxon countries, may be described briefly by the formula of "3D-s phenomenon"<sup>339</sup>, that is, disintermediation, deregulation and discompartementing . The evolution of financial systems was actually marked by a strong development of the stock exchange markets, a liberalization of them and a wide opening which even though didn't eliminate all the barriers.

The enlargement of the new technologies of information and communication also permitted a strong lower of the transaction costs and facilitated the title exchanges at international level and the portofolios diversification. At the same time, the developement of the international investors and their implication at a higher level in portofolio investments abroad, desiring the diversification of the placements lead to the increase of capital markets integration. In 1970, the foreign actives owned by the residents of the USA represented about 6% of the U.S. capital stock, and the non-residents had 4% of this stock. In 2006, these figures were of 44%, respectively 56%.

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338 Gunther Capelle-Blancard & Jézabel Couppey- Soubeyran L'intégration des marchés boursiers ,Questions internationales no34 November-December 2008, La Documentation Française, p. 43

339 The formula belongs to Henri Bourguinat.



The most visible example of the stock exchange integration is the fusion from 2000 between the Stock Exchanges from Amsterdam, Bruxelles and Paris, in view of the creation of the first paneuropean stock exchange: Euronext, and it was for the first time in the world that three stock exchanges from different countries merged. Then, in 2001, this merged with the Portuguese stock exchange and the main market of derived products from London (LIFFE). In 2007, Euronext merged with New York Stock Exchange, forming NYSE-Euronext, the first world stock exchange group. The new society named NYSE Euronext is a holding society with American right, having its American headquarter in New York and its European headquarter both in Paris and Amsterdam, London representing the center for the activities on the financial derivatives markets.

NYSE – Euronext is a stock exchange capitalization of about 20 billion USD (15 billion euro) and the value of all societies coted to the new platform is about 27.000 billion USD (21.000 billion euro). Each part directly implied: operators, coted societies and investors benefit by this fusion:

- The operators have the advantage of using a completely integrated system of negociation and liquidation, modern and reliable;

- The investors benefit by an increase of liquidities and transparency, a unique regulating framework, the cotation in one currency on several markets, the decrease of transaction costs;

- The societies coted on the new markets have as advantage the unification of the regulations, the increase of the potential investors, the increase of liquidities and the reduction of capital costs.

Another example of stock exchange markets integration is Eurex, created in 1998 by the association of Deutsche Termin Borse with Swiss Options and Financial Futures Exchange. Benefiting from a negociation platform and electronic liquidation, conceived as an integrated system, Eurex offers to its participants operative, qualitative and low transaction costs services. In December 2007, Eurex took over International Securities Exchange, too. Nowadays, Eurex is the world leader on the financial derivatives market, creating a world decentralized market and managing to offer a set of products, standard, different, liquid and available at an international level, the volume of transactions exceeding 1,5 billion contracts per year.

The introduction of the unique currency, Euro, was considered as a factor of accelaration of the paneuropean capital market creation. If the introduction of the euro currency acts as a stimulus in the consolidation of the paneuropean bank system, it doesn't favour in the same way the integration of different capital markets, more precisely the market shares. Actually, the European stock exchange area is dominated by traditional factors, often national factors. The impulse to integrate the Eurpean stock exchange market seems to be given by the bond market. The fact that the bond markets integration on European scale is more advanced than that of the market shares is due to the fact that the market shares don't belong to the regulated stock exchange markets, but to the *over the counter* markets.

Despite the associations between the realized stock exchanges, of the registered progress regarding the integration of the bond market and techincal infrastructure, a certain fragmentation provoking inefficiency, marks a paradoxe of the European stock exchange system: the fragmentation in 15 different European market shares contrasts with the international dimension of European groups of industry and services, having as consequence much higher transaction costs in Europe. This situation is strongly in opposition with that from the USA where there are two dominant stock exchanges, in well separated areas: NYSE for the mature enterprises and NASDAQ for the increasing enterprises.

So we are still far from the stock exchange market, globally unified, functioning 24 hours a day on the five continents.

There are several indexes to measure the degree of integration of stock exchange markets. One can measure the degree of integration of the markets, testing the reaction of the markets by the news broadcast, the existence of the relations between the earning performances on long term, the

coincidences of extreme events, etc. But the most simple method consists of the analysis of the correlation between the stock exchange earning performances. In the '70s, the correlation between France, Great Britain and USA was between 40% and 50% and it was inferior to that with Japan, of 30%. Since then, it didn't stop increasing<sup>340</sup>. In the present, the correlation between Germany, France, Great Britain and USA is of 80%, and the correlation with Japan reached 50%. These datas can be interpreted in the following way: in the '70s, in case the New York Stock Exchange closed the month with increase, there were chances of about 50% that the Paris Stock Exchange close also the month with increase.

Beside the advantages regarding the lower of transaction costs, a greater diversification of the portfolios and a more optimal repartition of risks, the integration of stock exchange markets increased the fear of the contagion phenomenon.

In October 1929, the United States of America experienced one of the most serious stock exchange crisis from history. Between October 24 and November 13, New York Stock Exchange Market loses 40% of its value. At the same time, in October 1929, Paris Stock Exchange registers a lower of about 4%, then it loses again 3% in November and December. This fact is certainly important, but yet we are far from the panic appeared on the Wall Street. Actually, France didn't suffer because of the crisis, but since the beginning of the second semester in 1930, six months after the beginning of New York Stock Exchange Market's collapse.

In October 1987, the Dow Jones index loses almost 23% of its value, in October 19. All the stock exchange markets from the world collapse that day: the stock exchange indexes decreased with 20% in France and Canada, with 25% in Great Britain, with 40% in Australia and Hong Kong. Of course, the consequences were very different from those in 1929, especially due to the intervention of monetary authorities in order to avoid that stock exchange panic unleash a bank crisis.

The rapidity of the crisis transmission is hence a new phenomenon: while several months were necessary for the spread in the entire world of the financial crisis from 1929, in 1987, all the markets have immediately reacted. And the collapse of the stock exchanges from 1987 is not an isolated case. Since then, several examples confirm this quasi-simultaneous reaction of all the stock exchanges during a period of crisis. We can mention the Asian crisis from 1997, the reaction of the stock exchange markets at the moment of the attacks on the 11th September 2001 and the turbulences of the stock exchange markets from all the world in October 2008.

Only American at the beginning, the actual financial crisis started on the subprime mortgages markets, as a result of the prices fall in the real estate area. Then, it spread through the financial channel with the announcement of the bankruptcy of the two *hedge funds* which have invested in titles based on mortgages. Everywhere in the world, inclusively in China, the financial institutions have invested massively in this kind of complex products resulting from the securitization (the transformation of negociable titles) of *subprime* mortgages<sup>341</sup>, the start of crisis exposing them thus to massive loss. On a real plan, the prices fall in the real estate area lead to a strong economic lower in the United States of America. But, on an international level, from the very beginning of the crisis, there can be preview depreciations suffered by the banks which lead to the collapse of the stock exchanges.

The consequences of the actual financial crisis represented a greater depreciation registered at the foreign stock exchanges, especially those from Europe than those from the United States of America. Thus, CAC-40, the stock exchange market index of the capital market from Paris lost

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340 François Longin și Bruno Solnik, „Is the Correlation in International Equity Returns Constant: 1960-1990?“, *Journal of International Money and Finance*, vol. 14, no.1, February 1995, pp. 3-26.

341 Patrick Artus, Jean-Paul Betbèze, Christian de Boissieu and Gunther Capelle-Blancard, *La crise des subprimes*, "Rapports du CAE", no. 78, La Documentation française, Paris, 2008.

25% in the period June 2007-August 2008, while S&P 500, its homologous from New York didn't diminish but with 15%.

Many observers have interpreted the simultaneous reaction of the stock exchange markets as a phenomenon of contagion. The word contagion means the transmission of the impact of a stock exchange market to another one. More precisely, according to some researchers<sup>342</sup>, there exists contagion only if, after an impact, the relation between the stock exchange markets is significantly consolidated.

The authors J. Forbes and R. Rigobon evidenced in their study entitled „*No Contagion, Only Interdependence: Measuring Stock Market Co-Movements*” the fact that, in the moment of the stock exchange market collapse from October 1987 or the Asian stock exchange crisis, the correlation coefficients permitting the analysis of the relation between these crisis outbreaks and other regions from the world having been affected by them, didn't increase significantly and were strong before the crisis, too. As a result, the transmission of the crisis could be rather explained by a phenomenon of interdependence of the stock exchange markets, than by a contagion. This means that the link unifying the capital markets became permanent, both in crisis period and in normal period.

The internationalization tendency of market shares and development global capital market may have thus negative consequences, too. Moreover, some specialists consider that the globalization of the capital markets in the last decades of the past century was a determinative factor for the successive financial crisis, starting from Mexico, Thailand, South Korea, Russia and Bresil.

Similarly, the reduced level of regulation of the international capital market increases the opportunities for speculations and may affect the stability of national capital markets. A globalized financial system, where hundreds of billion dollars may circulate simultaneously as a reaction to the last news or only based on some psychological factors may become an unstable system<sup>343</sup>.

The problem of recurrent crises and their transmission is raised with an extraordinary acuity in the context of the actual imbalance. The financial crises will spare neither the emergent areas (Latin America, Asia, Russia), nor the regions where the financial systems are more mature. Not necessarily the nature of financial crises, but their way of transmission is what has changed because of the actual financial globalization. For a long time, the spread of financial crisis was represented as a phenomenon of repercussion by means of different channels (commercial, financial), or more simply expressed, as an effect of domino<sup>344</sup>.

In conclusion, because of the integration of capital markets, the economies are more and more exposed to the common impacts which result the crisis of global dimension. In order to illustrate the contagion of financial crises, one may resort to a metaphor, well-known by the financial specialists: "when the Wall Street sneezes, Paris catches cold!"

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342 Kristin J. Forbes&Roberto Rigobon „No Contagion, Only Interdependence: Measuring Stock Market Co-Movements”, The Journal of Finance, vol.57,no. 5, October 2002, pp.2223-2261.

343 Ovidiu Stoica Mecanisme și instituții ale pieței de capital. Piețe de capital emergente, Ed. Economică, 2002, p.59

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# AN ANALYSIS OF THE SEPA CARDS FRAMEWORK (SINGLE EURO PAYMENTS AREA) ADOPTION IN ROMANIA

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*Abstract: The study examines the actual status and the future application of Single Euro Payments Area SEPA Cards Framework, based on Romanian experience. The paper highlights the fact that there is no national card scheme in Romania and that the local cards market is still way behind its peers in the European Union advanced countries, aspects proved through the inconsiderable part of chip cards, the reduced numbers and small values of cards operations and through the cards terminals technologies non-EMV standard (ATM, EFTPOS). Our considerations focus on the achievements and the challenges Romania faces regarding the national implementation of SCF. We express our uneasiness regarding the need to finalize the regulatory national framework according to the PSD (Payment Services Directive - Directive 2007/64/EC of the EPC on payment services in the internal market) and SEPA.*

*Key Words: Single Euro Payments Area (SEPA) Cards Framework SCF, National card scheme, Challenges of the SCF implementation in Romania.*

*JEL Codes: G21, F36, F55.*

## **1. Introduction**

Single Euro Payments Area SEPA is a project backed and monitored by the Eurosystem and the European Central Bank for harmonizing and restructuring the national financial infrastructure and aimed at establishing a single market for payment services, efficient processing infrastructures and cheaper payments by standardization of procedures, information and payment processing technologies. SEPA Project consists of the following components: the SEPA credit transfers, the back to topSEPA direct debit, the SEPA Cards Framework and the Single Euro Cash Area.

The aim of this paper is to provide a global perspective of the Romanian banking card market from the perspective of the future implementation of SEPA Cards Framework. The SEPA for Cards started on 1<sup>st</sup> of January 2008 and we would describe the actual stage of the national banking card market development and plan for the SEPA implementation process.

After presenting the general frame of reference of our theme in the specialty literature and in the specific national and international legislation, the paper approaches the present stage of the SEPA Cards Framework implementation in Romania. Our personal contributions refer to the applicative description of the SEPA Cards Framework implementation, based on Romanian experience.

The information on our theme was realized by studying national and international specialty literature in this field and by consulting the available information from the institutions level which studies and researches on the banking card operations and on SEPA project, such as the European Commission, European Central Bank, European Payments Council, Bank of International Settlement, National Bank of Romania, Romanian Banking Association, TransFonD - the operator of the national retail payment infrastructure and National SEPA Committee from Romania.

## 2. Theoretical background

In the field of the theme we approached, the specialty literature holds theoretical analysis and empirical studies of the banking card operations. Studies prefer a descriptive or much too technical approach of banking card operations or infrastructures while recently more studies present the challenges of the SEPA application across the European countries.

Financial services in Europe have undergone dramatic changes in recent years. Much of this is due to development in information and communication technologies, the arrival of European Monetary Union and aging population. These will continue to be important drivers of change as the industry continues to progress<sup>345</sup>. An overview of the status of contemporary e-finance is offered by Shahrokhi<sup>346</sup>, who discusses related issues and challenges. His paper provides data about e-finance growth in the last decade and introduces advances and innovations in e-finance and challenges regarding the financial services and IT industries.

Studies on application of SEPA are relatively limited and were elaborated over the last few years. This subject did not arise only the interest of the international banking community directly interested in the future application of SEPA, but also that of the scientific communities. Bolt and Humphrey<sup>347</sup> present the goal of SEPA, which facilitates the emergence of a competitive, intra-European market by making cross-border payments as easy as domestic transactions. With cross-border inter-operability for electronic payments, card transactions will increasingly replace cash and checks for all types of payments. Using different methods, they estimate card and other payment network scale economies for Europe. This indicates substantial cost efficiency gains if processing is consolidated across borders rather than “piggy-backed” onto existing national operations. Schaefer<sup>348</sup> develops answers to the question regarding the advantageous conditions for countries to form a single payments area. This question is analyzed in a model of spatial bank competition for a better understanding of the economic foundations of the SEPA. An economic perspective research on the mostly informal policy debates about SEPA being developed. The analysis suggests that expectations about the positive effects of SEPA may be exaggerated as most channels for enhancing public welfare seem rather weak. Using a spatial competition model of retail payment networks, Kempainen<sup>349</sup> approaches economic consequences associated with formation of the SEPA. The model considers an expansion of positive network externalities on the demand side and adjustment cost on the supply side and reveals that the introduction of SEPA may not lead to a fully competitive and integrated retail payment markets.

At the national level, the majority of the scientific references to the SEPA implementation belong to some authors, who describe three major projects in respect to the European payment systems: Payment Service Directive PSD, TARGET 2 and SEPA<sup>350</sup>. They present the implications of these projects for the market participants, for the operators, for the National Bank of Romania.

At the level of the European Union, the importance given to the national banking payment systems is for now the biggest one. Arguments over this importance are offered by the Directive on Payment Services, adopted in 2007 - Directive 2007/64/EC of the European Parliament and of

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345 May, G. (2004). The future of financial services in Europe, Foresight, vol. 6, issue 5, p. 271-280.

346 Shahrokhi, M. (2008). E-finance: status, innovations, resources and future challenges, Managerial Finance, vol. 34, issue 6, p. 365-398.

347 Bolt, W., Humphrey, D. (2007). Payment Network Scale Economies, SEPA, and Cash Replacement, Review of Network Economics, Concept Economics, vol. 6, issue 4, p. 453-473.

348 Schaefer, G.K. (2008). An economic analysis of the Single Euro Payments Area (SEPA), FIW Working Paper series, no. 11.

349 Kempainen, K. (2008). Integrating European retail payment systems: some economics of SEPA, Bank of Finland Research Discussion Papers, no. 22.

350 Dedu, V., Bratu, R. (2008). Romanian Payment System Perspectives in the context of the integration in EU, Studia Universitatis Babeş-Bolyai Oeconomica, no. 1, p. 92-101. Beju, D., Filip A. (2008). The impact of European Integration on the Payment System, Analele Universitatii din Oradea Stiinte Economice, no. XVII, p. 685-690.

the Council on payment services in the internal market are detached, which provide the legal foundation for the creation of an EU-wide single market for payments. After the formal adoption by the Council and the European Parliament and the publication, the provisions of this Directive will need to be implemented by all Member States by 1<sup>st</sup> of November 2009. The countries implied in SEPA projects have developed their own migration national plans and the success of SEPA depends on an adequate governance of the project.

### **3. A current approach and the challenges of SEPA for Cards in Romania**

The results achieved in the field of business card development in Romania emphasize the fact that the number of issued cards has increased with as much as 2.86 million in the course of the last year only. Today there are over 8700 ATMs, 162000 POS and EFTPOS terminals in Romania. Almost 14 million transactions in Romania were performed via payment cards with the debit function in the third quarter of 2008 with a value of 2737.9 millions RON and 4 millions transactions in Romania were performed via payment cards with the credit function in the third quarter of 2008 with a value of 704.91 millions RON. Romanian customers rather use debit cards than credit cards, both in terms of transactions' value and volume. Card payments have grown rapidly, but the use of cards is still far behind that of other countries. We observe the dynamics in the number of transactions at POS located in the country with cards issued in the country amounted to over 16 millions in the third quarter in 2008, with value of 2551.13 millions RON<sup>351</sup>. The Romanian banking cards market is still subject to deep changes and competitive pressures, on its way to maturity. But, all these mentioned above remarks show a considerable potential for growth.

In Romania there is no national card scheme and only VISA and MasterCard payment schemes are currently in use. The local card market<sup>352</sup>, although on an upward trend, is still way behind its peers in the European Union advanced countries – the average per one thousand inhabitants is below the European Union - wide average (567 against 1508 in EU) and the average of operations per inhabitant (3.34 against 50.02) is also lower than the average in the European Union.

Starting with March 2007, the Romanian Banking Association - a body representing the national banking community within the European Payments Council - played a leading role in the unfolding and implementation of the SEPA project. The governance structure of SEPA project at national level includes the following boards: SEPA National Committee, SEPA Commission and SEPA project team. SEPA National Committee is a decision-making body having responsibilities in drafting the strategy of SEPA and coordinating its implementation across the entire local community. It was established in March 2008 with the participation of the Romanian Banking Association, the Ministry of Public Finances and Transfond - the operator of the national retail payment infrastructure. The committee is responsible among other things for the approval of the SEPA National Implementation and Migration Plan.

The SEPA National Implementation and Migration Plan includes the strategy adopted by the local community for the implementation of SEPA and the migration towards the use of the new payment instruments (the organization of SEPA project at national level, the components related to project planning, organization and management, as well as the commitments and cut-off dates assumed by all stakeholders in order to complete the migration). SEPA Commission, established at the level of the Romanian Banking Association in March 2007, is in charge of organizing debates on the issues pertaining to the manner of implementing SEPA at national level. SEPA project team was founded under the patronage of the Romanian Banking Association, having a

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351 National Bank of Romania, Statistics report – Cards and numbers of terminals Indicators, 2009.

352 Pascu, C. (2008). Romanian Banking Overview, <http://rbd.doingbusiness.ro/en/2008/september/overview-of-economic-sectors/2/90-romanian-banking-market-overview.html>.

structure similar to that of the European Payments Council, responsible for the roll-out of SEPA project at national level and, most notably, for drafting the SEPA National Implementation and Migration Plan. Moreover, the Romanian Banking Association has begun setting-up SEPA National Forum, i.e. an advisory body comprising representative associations of all SEPA stakeholders (companies, small- and medium-sized enterprises, large merchants, utility providers, consumers, etc.).

As for SEPA, the NBR National Bank of Romania assumed the following tasks: to guide and foster the expectations of Romanian stakeholders regarding SEPA, to co-operate with the public administration which is expected to be among the frontrunners in using SEPA products in Romania, to co-operate with consumers in general so that their expectations would be known to SEPA National Committee, to contribute to the co-ordination of communication efforts at national level and to monitor the progress in implementing SEPA at national level.

In March 2009 Romania adopted the SEPA National Implementation and Migration Plan (second version), which defines and draws up the national strategy for implementation and migration to SEPA payment instruments for credit institutions, payment systems and users of payment services in Romania.

In order to draw up the National SEPA Implementation and Migration Plan, the Romanian Banking Association and TransFonD, the operator of the national retail payment infrastructure, have elaborated a questionnaire which was sent to the credit institutions in order to be filled in. The questionnaire regards the credit institutions' plans to implement SEPA standards, the settlement channels which will be employed in order to send/receive SEPA instruments, the plans for migrating to SEPA Credit Transfer scheme starting with 28 January 2008, the plans for implementing SEPA Direct Debit, the phase of the EMV standard adoption process for card systems, data regarding the volume of Euro payments, the critical mass, as well as information on communication strategy with their customers<sup>353</sup>. EMV represents a Standard initiated by Europay, MasterCard and VISA in order to provide interoperability for IC cards (Chip Card), and IC capable ATM & POS terminals, in order to authenticate card payments.

From the data provided by the 39 credit institutions, members of the RBA Romanian Banking Association, which were operating in Romania on 30 June 2008, the following are worth mentioning that the branches of EU credit institutions have adhered or intend to adhere through their parent banks and:

- 19 credit institutions - that process an average monthly volume of about 259.000 Euro payment orders (initiated and received), accounting for about 98% of the total monthly volume of Euro payments – have migrated to SEPA credit transfer scheme SCT;
- 9 credit institutions have responded that they are in the phase of drawing up their own plans for SEPA implementation and migration;
- one credit institution has not expressed its option concerning SEPA implementation;
- 3 credit institutions have stated that currently they do not make or plan to make Euro payments before the Euro adoption in Romania (given the particularity of their business, such activities are not currently required);

#### **4. Conclusions**

The actual Romanian banks stage of development reveals that in order to be SEPA-compliant with regards cards transactions, banks:

1. Offered the new SCF-compliant schemes and cards from 1<sup>st</sup> of January 2008.

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353 National SEPA Committee from Romania (2009). SEPA National Implementation and Migration Plan, <http://arb.ro/sepa.php?id=28&c=SEPA-National-Implementation-and-Migration-Plan-V2.01-March-2009-Edition>, p. 7-8.



2. Have to ensure that after the end of 2010 all general purpose payment cards in circulation and issued in SEPA will be SCF-compliant.

3. Have to complete the implementation of EMV. Also, banks have to realize the compatible infrastructure EMV-equipped terminal networks ATM and POS. As concerns the ATM terminals, the Romanian credit institutions committed to finalize the conversion to the EMV standard in 2008, with only one exception whose deadline was set to December 2009. At the end of Quarter Q2, 2008, 85.16% of the ATM terminals were EMV-compatible. Out of 25 credit institutions having ATMs, 20 were involved in the conversion process, and 18 had even managed to achieve the full conversion of their ATMs to the EMV standard. Regarding the POS networks of acquiring credit institutions, from the hosts' point of view, these will be totally EMV-compatible by 2008. Acquiring credit institutions, with 2 exceptions, have reported the migration of POS terminals to EMV in 2008. Nevertheless, only 37.67% of the terminals were converted at the end of Q2, 2008. In fact, out of 18 credit institutions having POSs, 10 have already initiated the migration process, while 7 have 100% the terminals they manage. In what regards card issuance, out of 24 active credit institutions, only 3 were actually issuing international EMV cards at the end of Q2, 2008. Other 5 credit institutions started projects for EMV certification.

Undoubtedly, SEPA will mean the cross-border efficient payment transactions and the decisive advantages lie in the fact that the many different instruments, formats and rules for Romanian payments will be harmonized with European payments. We remark the advantages of SEPA at the level of financial institutions (which will be able to operate in a common pan-European environment) and advantages for banking customers (which will be able to make their Euro payments throughout the SEPA from a single bank account for credit transfers, direct debits and card payments). For all its positive aspects, SEPA presents a disputable item regarding to omission of cheques and bills of exchange, which are discouraged as much as possible.

We studied the stages of SEPA adoption in Romania and found the following:

- a) There is a governance structure of SEPA project at national level, which contains the following boards: SEPA National Committee, SEPA Commission and SEPA project team.
- b) SEPA National Committee is a decision-making body having responsibilities in drafting the strategy of SEPA and coordinating its implementation across the entire local community.
- c) Romania had established its national migration plan (In March 2009 Romania adopted the SEPA National Implementation and Migration Plan, second version).
- d) Consistent communication has taken place between the national banking authority (National Bank of Romania), Romanian Banking Association, other financial institutions (e.g. TransFonD, the operator of the national retail payment infrastructure) and banking companies. The Romanian Banking Association has begun setting-up SEPA National Forum, an advisory body comprising representative associations of all SEPA stakeholders -companies, small- and medium-sized enterprises, large merchants, utility providers, consumers, etc.
- e) The need to finalize the regulatory national framework according to the PSD (Payment Services Directive - Directive 2007/64/EC of the European Parliament and of the Council on payment services in the internal market) and SEPA.

Examination of the SEPA implementation in Romania reveals numerous challenges and uncertainties related to the national interpretations of European legislation on payment services, particularly PSD. The connection between this European Directive and the future creation of SEPA is obvious. We consider that the Payment Services Directive PSD is a complicated directive and its adoption in Romania implies imminent national interpretations. The difficulty of PSD application results from its complexity and length and from the possibility of each country to choose certain options in PSD transposition. In order to adapt their conditions to the PSD and SEPA, banking companies will need to invest in their infrastructure. Romanian banks have to adopt the European policy regarding cards. EPC recommends banks to have specific functional and security requirements. SEPA SCF supports the introduction of CHIP and PIN throughout the

region, thereby facilitating secure and transaction authorizations. Our research reveals that Romanian banks are still focusing on compliance and reachability of SEPA SCF. We consider that it is important for banks to invest in the new card SCF-compliant technologies in the near future. The main challenges and objectives for the Romanian card market in respect to adopting SEPA Cards Framework will be the establishment of a deadline for the migration to SEPA cards and the compulsory requirements regarding the cards, which must have a chip and comply with the EMV standard in order to be SCF compliant. We believe that the national migration to SEPA Cards Framework compliant standards concerns the entire banking community, customers, mergers and the banks' attitude and national regulators will be defining.

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# ANALYSIS OF THE DYNAMIC RELATIONS BETWEEN BET AND RASDAQ-C

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*This paper explores the dynamic relations between two indices of Romanian stock markets: BET and RASDAQ-C. The results of our analysis cannot strongly support the hypothesis of the cointegration between the two variables. A Vector Autoregression model revealed weak interactions between the two indices. We find evidence of an unidirectional causality from BET to RASDAQ-C.*

*Keywords: Romanian Stock Markets, Cointegration, Vector Autoregression, Granger Causality*

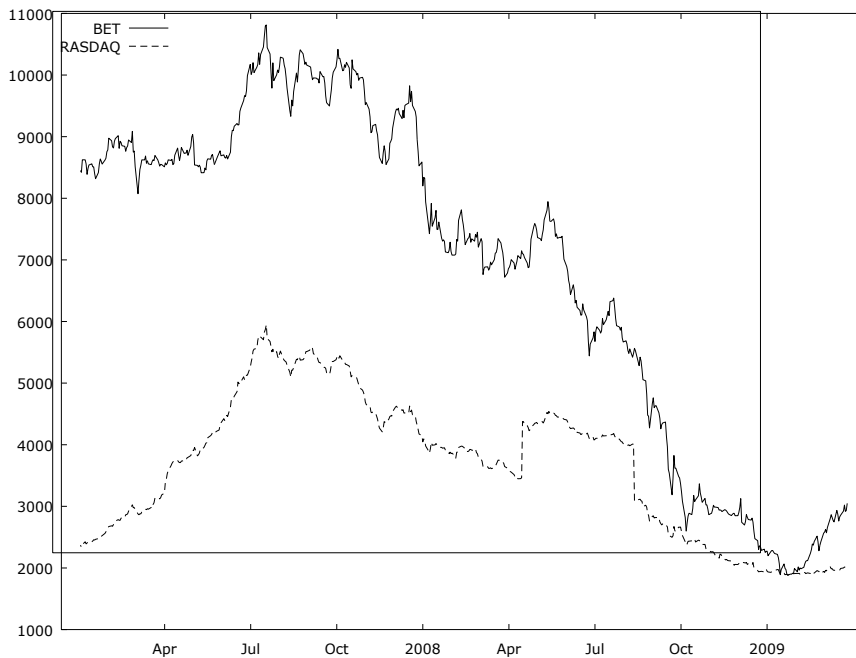
*JEL Classification: E44, C22, C32*

## **Introduction**

In this paper we approach the relationship between two major indices of the Romanian stock markets: BET and RASDAQ-C. The first is computed from the prices of the ten most liquid stocks (except Investment Funds) of Bucharest Stock Exchange, while the second reflects the evolution of RASDAQ, a less regulated stock market modeled on NASDAQ.

The study of the relationship between two or more financial markets indices has many applications. The revealing of linkages among markets could help investors in their efforts to manage risks by diversifying investment portfolio. It is also useful for predicting the financial markets evolution.

In the recent years, several studies approached dynamic relations between prices from various financial markets. The main tools used were the cointegration techniques, the Vector Autoregressive (VAR) framework, GARCH models and causality tests. These analyses led to mixed results. Jeon and Furstenburg (1990) proved, using VAR techniques, that after the world stock markets crash of October 1987 the linkages between international stock exchanges had strengthened. Ahlgren and Antell (2002) found that international stock prices were not cointegrated. Wong et al. (2005) proved that Indian stock market was integrated with the stock markets from the major developed countries. Cho and Ogwang (2006) analyzed the dynamic relations between two Canadian stock prices: TSX Composite Index and TSX Venture Composite Index. The results suggested that there were no cointegration between the two variables although it was proved a unidirectional causality between them.



**Figure 1** - The evolution of BET and RASDAQ-C between January 2007 and April 2009

In the last years both BET and RASDAQ-C experienced complex evolutions (see Figure 1). The period of significant growing from the first half of 2007, was followed by a drastic decline under the impact of the global crisis. In these circumstances, we have to apply in our analysis some techniques specialized for structural breaks.

The remaining part of this paper is set out as follows. The second part approaches the data and methodology we used. The results of the analyses are presented in the third part and the fourth part concludes.

### **Data and Methodology**

In our analysis we employ daily close values of the two indices provided by Bucharest Stock Exchange. The sample we use covers the period from January 2007 to April 2009. We use four variables:

- $l\_BET$  for natural logarithms of BET;
- $l\_RASDAQ$  for natural logarithms of RASDAQ-C ;
- $d\_l\_BET$  for first differences of  $l\_BET$ ;
- $d\_l\_RASDAQ$  for first differences of  $l\_RASDAQ$ .

The stationarity of the time series is analyzed by two unit root tests: the classic Augmented Dickey Fuller (ADF) and a test proposed by Saikkonen and Lutkepohl (2002) and Lanne et al (2002) which allows taking into account the eventual structural breaks. The numbers of lagged differences are selected using four criteria: Akaike Info Criterion (AIC), Final Prediction Error (FPE), Hannan-Quinn Criterion (HQC) and Schwarz Criterion (SC). To test the cointegration between indices we use two methods: Engle-Granger (1987) and Johansen trace test (1995) which allows the including of structural breaks.

The interactions between the two indices are studied using a VAR model that allows the disentangling such relations (Lütkepohl 2007). In this framework we also analyze the Granger – Causality between the two indices investigating if the information relevant to the prediction of them is contained solely in the two time series data (Granger 1969).

## Empirical Results

We test the stationarity of  $I\_BET$  and  $I\_RASDAQ$  using intercept and time trend as deterministic terms. We start with the ADF tests resulting that for both of the two time series we cannot reject the null hypothesis of a unit root (see Table 1).

**Table 1** - Augmented Dickey Fuller Unit Root Tests for levels values of the two indices (with intercept and time trend as deterministic terms)

| Variable    | Lagged differences | Test statistics |
|-------------|--------------------|-----------------|
| $I\_BET$    | AIC, FPE, HQC: 1   | -1.8586         |
|             | SC: 0              | -1.7966         |
| $I\_RASDAQ$ | AIC, FPE: 1        | -2.6594         |
|             | HQC, SC: 0         | -2.6055         |

We continue the analysis of the stationarity by performing unit root tests with structural breaks (see Table 2). We use two kind of shift function for the structural breaks: with impulse dummy and with shift dummy. Again it resulted that both of the two time series are not stationary.

**Table 2** - Unit root tests with structural breaks for levels values of the two indices (with intercept and time trend as deterministic terms)

| Variable    | Shift Function | Break Date | Lagged differences   | Test statistics |
|-------------|----------------|------------|----------------------|-----------------|
| $I\_BET$    | Impulse dummy  | 449        | AIC, FPE: 2          | -1.0005         |
|             |                | 449        | HQC: 1               | -1.0158         |
|             |                | 449        | SC: 0                | -0.9501         |
|             | Shift dummy    | 503        | AIC, FPE, HQC: 1     | -1.0831         |
|             |                | 503        | SC: 0                | -0.9854         |
| $I\_RASDAQ$ | Impulse dummy  | 420        | AIC, FPE: 1          | -0.7713         |
|             |                | 420        | HQC, SC: 0           | -0.6903         |
|             | Shift dummy    | 421        | AIC, FPE, HQC, SC: 0 | -0.7370         |

In order to establish the order of integration for the two variables we extended the stationarity analysis for their first differences using only intercept as deterministic term. The ADF tests results indicate that the null hypothesis of a unit root could be rejected for both time series (see Table 3).

**Table 3** - Augmented Dickey Fuller Unit Root Test for the first differences values of the two indices (with intercept as deterministic term)

| Variable       | Lagged differences   | Test statistics |
|----------------|----------------------|-----------------|
| $d\_I\_BET$    | AIC, FPE, HQC, SC: 0 | -21.7884***     |
| $d\_I\_RASDAQ$ | AIC, FPE, HQC, SC: 0 | -22.0457***     |

\*\*\* Indicates that the results are significant at the 1% level of significance.

We perform unit root tests with structural breaks for the first differences of the two indices using impulse dummy and shift dummy. It results that in all forms the two time series are stationary (see Table 4). We can conclude that  $I\_BET$  and  $I\_RASDAQ$  could be considered as integrated of order one  $I(1)$ .

**Table 4** - Unit root tests with structural breaks for the first differences values of the two indices (with intercept as deterministic term)

| Variable | Shift Function | Break Date | Lagged differences   | Test statistics |
|----------|----------------|------------|----------------------|-----------------|
| d_I_BET  | Impulse dummy  | 503        | AIC, FPE, HQC, SC: 0 | -21.4017***     |
|          | Shift dummy    | 450        | AIC, FPE, HQC, SC: 0 | -4.6536***      |
|          | Impulse dummy  | 421        | AIC, FPE, HQC, SC: 0 | -21.1558***     |
|          | Shift dummy    | 432        | AIC, FPE, HQC, SC: 0 | -14.8597***     |

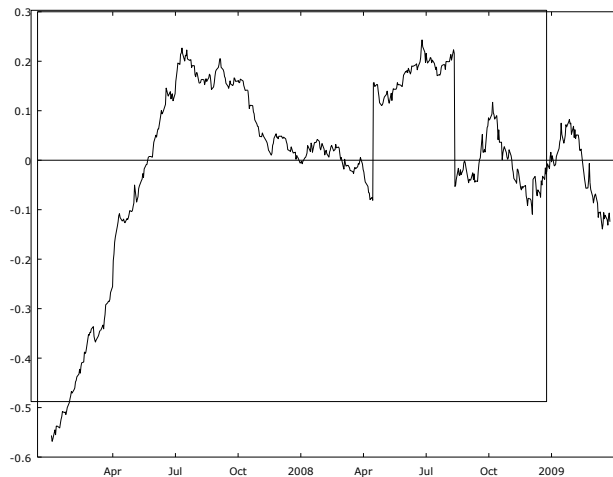
\*\*\* Indicates that the results are significant at the 1% level of significance.

We start analyzing the cointegration between  $I\_BET$  and  $I\_RASDAQ$  using the Engle Granger technique. In the first step we perform a regression between the two variables (see Table 5).

**Table 5** - Cointegration regression (Dependent variable:  $I\_RASDAQ$ )

| Variable                | Coefficient | Std. Error | t-statistic | p-value     |
|-------------------------|-------------|------------|-------------|-------------|
| const                   | 3.16728     | 0.125219   | 25.2939     | <0.00001*** |
| $I\_BET$                | 0.570643    | 0.0143294  | 39.8233     | <0.00001*** |
| $R^2$                   | 0.731875    |            |             |             |
| Durbin-Watson statistic | 0.0117251   |            |             |             |

\*\*\* Indicates that results are significant at 1% level of significance.



**Figure 2** -The residuals of the cointegration regression

**Table 6** - Augmented Dickey Fuller Unit Root Test for the cointegration regression residuals

| Deterministic terms      | Lagged differences   | Test statistics |
|--------------------------|----------------------|-----------------|
| Intercept                | AIC, FPE, HQC, SC: 0 | -3.1337**       |
| Intercept and time trend | AIC, FPE, HQC, SC: 0 | -2.36303        |

\*\* Indicates that results are significant at 5% level.

In the second step we analyze the stationarity of the regression residuals by performing two forms of ADF tests: first with only intercept as deterministic term and second with intercept and time trend as deterministic terms (see Figure 2). Only in the first case we can reject the null hypothesis of a unit root (see Table 6).

We continue the analysis of cointegration using Johansen technique including two structural breaks and two lags. The likelihood ratio (LR) tests indicate a cointegration rank  $r = 0$  (see Table 7). Since Johansen technique is considered more powerful than Engle Granger technique we conclude that we cannot establish a cointegration relation between  $I\_BET$  and  $I\_RASDAQ$ .

**Table 7** - Johansen test for cointegration between  $I\_BET$  and  $I\_RASDAQ$ 

| r | LR    | p-value | 90%   | 95%   | 99%   |
|---|-------|---------|-------|-------|-------|
| 0 | 47.72 | 0.0001  | 27.96 | 30.45 | 35.50 |
| 1 | 16.22 | 0.0415  | 13.64 | 15.69 | 20.05 |

We analyzed the interactions between  $d\_I\_BET$  and  $d\_I\_RASDAQ$  using a VAR framework with one lag. The first equation, with  $d\_I\_BET$  as dependent variable, indicates a low impact of  $d\_I\_BET\_1$  and  $d\_I\_RASDAQ\_1$  (see Table 8).

**Table 8** - VAR Equation 1:  $d\_I\_BET$ 

| Variable                | Coefficient | Std. Error  | t-statistic | p-value  |
|-------------------------|-------------|-------------|-------------|----------|
| const                   | -0.00158221 | 0.000989768 | -1.5986     | 0.11046  |
| $d\_I\_BET\_1$          | 0.0846596   | 0.0438859   | 1.9291      | 0.05421* |
| $d\_I\_RASDAQ\_1$       | 0.0459197   | 0.0561125   | 0.8184      | 0.41349  |
| $R^2$                   | 0.0103875   |             |             |          |
| F-statistic             | 3.03348**   |             |             |          |
| Durbin-Watson statistic | 1.98602     |             |             |          |

\* Indicates that results are significant at 10% level;

\*\* Indicates that results are significant at 5% level.

The second equation, with  $d\_I\_RASDAQ$  as dependent variable, indicates again a low impact of  $d\_I\_BET$  and  $d\_I\_RASDAQ\_1$  (see Table 9).

**Table 9** - VAR Equation 2:  $d\_I\_RASDAQ$ 

| Variable       | Coefficient  | Std. Error  | t-statistic | p-value    |
|----------------|--------------|-------------|-------------|------------|
| const          | -5.29206e-05 | 0.000767997 | -0.0689     | 0.94509    |
| $d\_I\_BET\_1$ | 0.0922525    | 0.0340526   | 2.7091      | 0.00695*** |

|                         |            |           |        |         |
|-------------------------|------------|-----------|--------|---------|
| d_1_RASDAQ_1            | 0.0492214  | 0.0435397 | 1.1305 | 0.25874 |
| R <sup>2</sup>          | 0.0201403  |           |        |         |
| F-statistic             | 5.94017*** |           |        |         |
| Durbin-Watson statistic | 2.0041     |           |        |         |

\*\*\* Indicates that results are significant at 1% level of significance.

We analyzed the causality between d\_1\_BET and d\_1\_RASDAQ. It resulted from d\_1\_BET to d\_1\_RASDAQ (see Table 10).

**Table 10** - Granger causality between d\_1\_BET and d\_1\_RASDAQ

| Null hypothesis                         | F-statistic | P-value | Causal inference                        |
|---|-------------|---------|---|
| d_1_BET do not Granger-cause d_1_RASDAQ | 7.3393      | 0.0068  | d_1_BET Granger-cause d_1_RASDAQ        |
| d_1_RASDAQ do not Granger-cause d_1_BET | 0.6697      | 0.4133  | d_1_RASDAQ do not Granger-cause d_1_BET |

### Conclusions

In this paper we investigated the dynamic relations between BET and RASDAQ-C. We found that the two variables were non stationary in level values, but stationary in their first differences. We failed to prove firmly the cointegration between the two indices. Weak interactions were revealed between the two variables and a unidirectional causality from BET to RASDAQ-C.

These results could be explained by the significant differences of the firms listed in the two indices. While BET reflects the performances of only large companies, RASDAQ-C refers in general to smaller firms. The foreign investors which play a major role on the Romanian stock markets are probably interested mainly in the firms listed on BET. In these circumstances the two indices are not necessary moving together although they are frequently influenced by similar factors. However, the abrupt fluctuations of BET could be considered as a signal for the investors on RASDAQ market.

The research over the dynamic relations between the two indices could be extended by using GARCH models that allow the study of the volatilities. Another direction for future researches could consist in the study of the financial crisis impact over the main components of the Romanian Stock Market.

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# RECENT TRENDS IN BANK CARD MARKET IN THE EUROPEAN UNION

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*The bank card is more and more common worldwide. From its beginning, it suffered profound transformations, that led to a modern product, alternative to cash money. Nowadays, the new technologies opens the road for offering high quality and flexible financial services, more securely and at lower costs. The article analyses the main trends in bank card markets in developed countries and especially in the European Union and compares with the state of market in Romania, trying to highlight the future trends, transformations and challenges.*

*Keywords: cards, banks, competition, trends, technological challenges, European Union*

*JEL code: E42, G21*

## **1.Introduction**

The bank card is more and more common worldwide. From its beginning, it suffered profound transformations, that led to a modern product, alternative to cash money. Nowadays, the new technologies opens the road for offering high quality and flexible financial services, more securely and at lower costs.

## **2.Trends in the card market in the developed countries**

Analysing the card market in the last decade, we can identify some major trends, both technological trends and behavioural trends. Thus, as *behavioural trends*, it can be noticed the transition from debit to credit cards and the one from bank cards to co-branded cards; from a *technological point of view*, from magnetic stripe cards, the future clearly belongs to the chip cards, the smart cards (r)evolution, being compatible with the transition from classic to smart and contactless cards.

*The rhythm of technical innovation* is higher and higher. The problem is to select the most promising characteristics and to promote them in order to be implemented worldwide, to become generalised – *new standards in the very dynamic bank card industry*. The question is: what are the realistic prospects of integrating multiple applications in a single card (public and private applications)? *Not if technically is possible, but if it will be accepted by the market.*<sup>354</sup>

From another point of view, the market (the clients) wants more and more freedom: the cards leave traces; *the electronic money sometimes invades the intimacy*; for those wanting some privacy, *the prepaid cards* are the solution; as result, those cards are more and more used in developed countries. Even, there is a Prepaid Trends e-Newsletter that analysis the *trends and transformations* in the field.

*The technological innovations* are nowadays present in the cards industry, including biometrics (fingerprint control and sophisticated sensors, voice response systems). The idea of combining ID and card technologies in order to enable offering secure services, applications and payments; it means to integrate the sophisticated card technology with the biometric capability for exploiting its synergies. The challenge for the card industry will be *to manage the cost of implementing the new technologies*, in order to offer reliable products, easy to use and at an *affordable price*. For example, European Card Review,

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354 Stewart, John, “The 10 most pressing issues in e-payments”, Digital transactions, volume 5, number 11, November 2008

estimated in 2001 at over 30 billions of USD the total cost of implementing the smartcards worldwide.

*Technological developments targets more and more convenient use for bank cards.* Thus, a series of devices are offered by banks in order to increase the use of cards and to make them more and more convenient. For example, *the mini cards* (plastic cards, nearly half the size of a standard-sized cards, with a perforated hole at the bottom left corner, in order to attach it to a key chain, usually a companion card to the standard card, because can be used in a point-of-sale terminal but not in a ATM) are more and more common worldwide.

*Contactless cards* are developing very fast for small payments. All important players are improving their offer; thus, it exists *Visa payWave*, *J/Speedy* (the JCB Global Contactless Payment Program), *MasterCard PayPass* and *American Express ExpressPay*. For payments usually under 25 USD, the contactless cards seems to be a solution for the future: simply waving the card in front of the special reader device in close proximity (with or even without signature on receipts), makes the transactions more convenient and rapid, beside reducing the risk of fraud as result of retaining the control of the card during the transaction (there is also a computer chip embedded in the card). *The idea of contactless cards can be connected with the micro tags* (key fob payment device embedded with contactless technology, also a companion device to an existing card).

But, the necessity of globally standardized contactless payment service for markets around the world still was not completely solved and the common merchant acceptance (an agreement for the use of a common protocol for conducting contactless payments signed by all card networks is recognized).

The security issue is still the main barrier when using cards online; potential users are thinking about the security of their own money. A new direction for development is to ensure secure remote ID authentication in the area of Internet, telephone and mobile commerce use, including fight against phishing and scammers. Identity theft challenges could find an answer with some new hi-tech solutions; protection of sensitive data need high security. This challenge supposes both sophisticated architecture and security system integrators.

The security standards are improving continuously, in order to face the challenge: the increasing losses due to card frauds. EMV (Europay, MasterCard and VISA) standard and CCD (Common Core Definitions) compliance, 3-D secure protocol, recently improved, or PCI Security Standards Council are proofs of the efforts to strengthen the security. Payment Card Industry Security Standards Council was created to enhance payment account data security by driving education and awareness of the PCI Security Standards.

According to Javelin's 2008 Online Retail Payments Forecast, the alternative payment methods will gain some market share compared with bank cards, for online payments<sup>355</sup>, meaning that the competition in the market will increase.

POS services are also diversifying; the POS equipments are more and more affordable and more and more intelligent. The new POSs allows the use not only for debit and credit cards, but also for prepaid cards; they not only allow payments for goods and services offered by a specific merchant, but also offer the general payment of bills (in specific paypoints). The suppliers are offering now new and innovative POS devices. The terminals are endowed with privacy shields (for introducing the PIN in total confidence), are mobile (GPRS or WIFI), are colour touchscreen with signature capture, accept chip,

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355 \*\*\*, "Online Retail Payments Forecast Market Factors Square Credit Cards Against Alternatives—Both Bank and Non-Network", <http://www.javelinstrategy.com/2008OnlineRetailPaymentsForecast.html>

magnetic and contactless cards; they even permit to print a tip line on the receipt for restaurants and other specific locations, meaning that are continuously customer-focused. Gift cards programs; loyalty programs and products; card personalisation, prepaid cards, proximity cards, SIM cards, all are part of the current life in the developed countries<sup>356</sup>. The bank cards are continuously evolving due to technological improvements, due to more and more exigent clients and the increasing competition; however, the cash is still very convenient to use and will be in the next period<sup>357</sup>.

### **3. Characteristics of the EU bank card market**

The EU bank card market is still very fragmented; there is no one unique bank card market, but still 27 national bank card markets. In fact, beside the EU area, at European level, taking into account especially the candidate countries, only Turkey has an important bank card market, being, from the innovativeness point of view, one of the most dynamic, with spectacular developments.

Of course, those EU national card markets have nowadays more and more similarities; more than half of them are leading world bank card markets, being developed markets. Sixteen of them having euro as national currency confers more coherence. In fact, the single currency and the EU integration as process brings the most important challenges. One single bank card market supposes more than the possibility to pay with a certain EU bank card in another EU based POS or to access a certain EU ATM. *The main problems are about particularities in acceptance, difference in developments, trends and especially charges.*

The Single Euro Payment Area brings in front the local treatment for a payment made with a bank card made in another EU country. VISA and MasterCard faced charges from the European Commission several times due to this different treatment. On 1<sup>st</sup> of April 2009, MasterCard agreed to slash the fees it charges banks across Europe as part of a deal with the European Commission. On 6<sup>th</sup> of April 2009, the European Commission sent preliminary antitrust charges against Visa Europe, saying certain fees assessed on some Visa card transactions are too high and violate the EU competition rules. The main concern is that the interchange fees that Visa Europe sets for all transactions in which the two banks (merchant's and cardholder's) are in different countries raise costs for retailers and consumers, and that card networks act essentially as cartels when setting them.

The EU market as a whole, is one of the most dynamic in the world; the French, British or German market, are leading markets in the world, both from technological or behavioral point of view, as well as from the point of view of deepness and consistency.

### **4. Trends in the Romanian bank card market**

#### ***4.1. Radiography of the Romanian card market – Main characteristics:***

Romanian bank card market suffered profound transformations especially in the last decade. Currently, in Romania there are 95 types of cards, issued by 23 banks and 6 non-bank financial institutions. An analysis of the Romanian card user behaviour shows that plastic money gains; now being more than 10 millions card users.

In the market, can be noticed the *high presence of VISA and MasterCard*, American Express being more and more visible (after the partnership with Bancpost). Comparing with other EU markets, *it can be noticed the absence of JCB and Diners Club, both of them accepted not only in all developed countries, but also with significant power in CEE*

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356 Cheney, Julia, An Update on Trends in the Debit Card Market, Discussion Center, Payment Cards Center of the Federal Reserve Bank of Philadelphia, June 2007

357 Lee, Mike, Another 100 years of cash?, <http://www.atmmarketplace.com/article.php?id=9819&prc=11&page=>

countries. Also, there is a *lower development of proprietary cards*, comparing with other EU countries.

The lack of consistence and maturity in the market is proven by the *still low visibility and low advantages for elite cards* (gold and platinum), compared with the higher charges and with the advantages offered abroad.

In the last couple of years, the bank cards with *collateral advantages* were emerging and are growing fast, as result of competition: *discount cards* (like Selects programme at AMEX, Alpha Club from Alpha Bank or Partner card from RBS, formerly ABN AMRO Bank); *bonus cards* (like Card Avantaj from Credit Europe, Bonus Card from Garanti Bank or Punct Card from BRD-GSG); *co-branded cards* (like AMEX Tarom, Raiffeisen-Vodafone); *cards issued by non-bank financial institutions* (like EuroLine or Estima Bonus).

#### **4.2. Main trends in the Romanian bank card market**

As *main trends*, nowadays in the Romanian bank market we could identify the followings:

1. *The savings are increasingly connected with the card* (like Card Cont'Rol from ING, or the savings card offered Libra Bank), offering more flexibility and increasing income.

2. *The e-payments are more and more connected with the credit cards*, comparing with a couple of years ago, when it were connected with the debit cards.

3. *The (slow) transition from magnetic stripe card to chip card*. In 1995, when in Romania was issued the first card (magnetic stripe card) and was realised the first POS payment, the smart cards market was growing fast in the developed countries. The transition to smartcards started in 2001, for the acceptance part, and it was estimated to take two to three years, but it took more than that: Romanian Commercial Bank was the first bank that adapted his network of ATMs and POS for accepting smart cards in April 2005.

Even now, *the development of the smart cards* (chip cards) market is still at the beginning, with only four issuers banks. Procredit Bank was the first issuer (in November 2005 - for example, Hungary issued the first smartcard in 2002), in a moment when at global level were more than 175 millions of smart cards. It was followed in early 2006 by ING Bank, in November 2007 by Garanti Bank and in September 2008 by Alpha Bank. The *"hybrid" cards*, those that had both magnetic stripe and chip are continuously developing in some countries, like Romania. *This trend is somehow different with the developed countries*. Card reader devices must read now both magnetic stripe and chip cards and maybe also the same merchant would offer the contactless alternative. From the safety point of view, having both chip and magnetic stripe means the same vulnerability as having only magnetic stripe, so until the transition is complete (as acceptance infrastructure), the security issue will continue to be very delicate.

4. *The development of credit cards offered for companies*, a segment where the offer is still at its beginning; most of the cards in the Romanian market are for individuals, not for companies. Soon, the potential to growth in the market share for individuals will be reached and thus the banks will need to look forward for new interesting segments.

5. *The development of contactless cards*. In November, 2008, Garanti Bank, one of the most advanced at international level in the field of technological innovations for smart cards, started its pilot project in Romania, choosing MasterCard with PayPass technology. Also, as a world premiere, in November 2008 ING Bank chooses Romania for its 6 months contactless pilot project, developed together with Nokia and using the Maestro PayPass account in order to realize small payments.

This short review highlights that Romania has still an important potential to growth, being sometimes among the pioneers in the world, but more often one of the underdeveloped markets in Europe, but the catching up being possible, if we take into consideration the growth rate in the last couple of years.

## 5. Conclusions

These *cornerstone technologies* used alone (smart cards, terminals, infrastructure and transaction security) would not offer the key to success. The secret is to approach all those separate technologies and components together, *the integrated development and upgrade being the guarantee to offer in the future end to end secure, low cost* (low transaction cost, low cost of infrastructure, low cost of ownership), *reliable and fast electronic transactions*.

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## EXTERNAL FINANCIAL LOANS - A CHANCE FOR ROMANIA

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*Key words: external financial loans, economic growth, budget deficit, banks liabilities, minimum mandatory reserves*

*Abstract*

*In order to gradually align to the European Central Bank standards and provide a sustainable lending to the Romanian economy, aiming at the sectors with a development potential on a longer term, the Board of Directors of the national bank decided to reduce to zero the rate of minimum mandatory reserves for liabilities in foreign currency with residual maturity of more than two years, compared to 40 percent in present, starting with the application May 24-June 23 2009.*

*At the same time, the Board of Directors of the national bank decided to maintain the current rate of minimum mandatory reserve for liabilities in lei and for the other currency liabilities of credit institutions. The Board of Directors of NBR believes that the implementation of the balanced mix of macroeconomic policies agreed in the arrangement of external financing from the international financial organisms, will allow a gradual and prudent adjustment of monetary policy in conformity with the resumption of disinflation and strengthening of financial stability. NBR will closely monitor the developments of domestic and global economic environment so that, through the adequacy of the tools from NBR, to reach the objectives of achieving and maintaining price stability over the medium term and financial stability.*

Romania would have been borrowed at much higher costs than the interest of IMF, on the domestic and foreign market<sup>358</sup>, too, in order to cover its financing needs, if the agreement with the IMF and the EC had not been concluded, said on March 26 BNR governor, Mugur Isarescu.

According to this, if Romania had borrowed 12 billion euros in the present, it would have made it at much higher costs on international markets and, furthermore, it would have had a limited access to these markets, despite the interest which have decreased, said Isarescu. The Governor said that all private funding from last year, about 20 billion euros, was made at costs of 4, 5 or 6% per year.

On the domestic market, the NBR is obliged, according to the law, to increase the interest paid to minimum mandatory reserves of banks, with 2.9% for the euro, in the present, in case the interest rates in market are growing. From the external arrangement of 19.95 billion euros, the amounts drawn this year should rise to 11.8 billion, those from 2010 to 7.1 billion euros, and in 2011, the remaining of 1.05 billion euros. The agreement with the IMF includes, for 2010, an estimate of economic growth between 0 and 1%, if, taking into account inputs from the package of external financing, the Romanian economy could remain in a positive territory this year.

The economy can remain in positive territory this year, with the support of external funding. The Governor said that the data contained in the agreement with the IMF are "conservative." Regarding the budget deficit forecast for this year, 4.6% of GDP, Isarescu said that it represents a projection that is "much more pressed, taking into account the estimation of contraction of the economy" than the projections in previous years.

Structurally, 4.6% of GDP, to a contraction of the economy of 4%, represents a projection more closely than a budget deficit estimated at 2% of GDP, for an economic growth of 2%.

We still do not change the level of minimum reserves, but only their composition concerning the foreign currency. The National Bank of Romania (NBR) will not perform yet any change in the level of minimum mandatory reserves for liabilities in foreign currency of banks, but it may change their composition, said BNR governor, Mugur Isarescu. The rate will not be changed,

maybe only the composition. We start with the currency, because the liquidities in lei have improved considerably through repo operations that BNR had done, in order to put up the financing of budget deficit surplus. Previously, the governor said it would be wise for the National Bank of Romania to remove in calculating the liabilities for the minimum mandatory reserves, those on the long term.

In this way, we also help financing on the long-term, which will support creditation, and we will reduce discomfort of banks for having short-term liabilities.

Also, through such a change of the base for calculating the minimum mandatory reserves, their level would reduce. Bank liabilities include sources incurred by them in deposits from customers or other types of financing that can be used to grant credits - which come in the bank assets.

Currently, the minimum mandatory reserve levied by the national bank of Romania to commercial banks is of 18% from liabilities in lei and 40% of those in the currency, the highest level in the EU and one of the highest in the world. The minimum mandatory reserves to liabilities in foreign currency of banks are included in the international reserves of Romania, managed by the national bank.

Thus on March 26, in Vienna, representatives of the IMF and of the NBR, met with the nine major international banking groups who promised to increase the capital of subsidiaries in Romania, where necessary, and to support the stress test that will make NBR to verify the stability of the banking system. Thus, the understanding of the IMF and the NBR is to conduct some stress tests based on a methodology established by the IMF to estimate the potential losses that could affect banks in Romania according to several scenarios during the IMF / EU.

We support this exercise and we agree to support our subsidiaries in order to confirm that the proper position in financial terms will be maintained during the period of market turmoil and the macroeconomic slowing, to demonstrate our long-term engagement for the economic development of Romania and to cooperate in the effort of the international community in order to put up a well coordinated response when dealing with the crisis, this was shown in the announcement of IMF, which also presented the conclusions of the meeting in Vienna. The nine banks whose representatives met on March 26 in Vienna with officials from the International Monetary Fund (IMF) and the National Bank of Romania (BNR) are Erste Bank, Raiffeisen International, EFG Eurobank, National Bank of Greece, Unicredit, Societe Generale, Alpha Bank, Volksbank and Piraeus Bank.

Under these conditions, the nine major banks made a promise that, if necessary, to supplement the capital of banks in Romania. „ An additional need of capital can not be excluded and will be offered, if necessary”, was also specified in the official announcement. Also, in the context of "substantial" investments, which they made in Romania, the nine groups support business in the country and admit that “we are aware that it's in our interest and Romania's, too, as we engage in a coordinated manner to maintain exposures”.

The meeting of the nine groups happened due to the money received by Romania from the IMF, which will supply an increase in the international reserves of the NBR, and this might allow a reduction in minimum mandatory reserves for liabilities in foreign currency levied to banks, from the current level of 40%, the highest in the EU.

NBR Governor, Mugur Isarescu, revealed on March 26 that talks with holding banks took place mainly in the form of an agreement, so that NBR could not compel holding banks in any way, to withdraw the money from Romania obtained from the decrease of minimum mandatory reserves and use it to financing.

„ It is a voluntary agreement. We can not do something compulsory, because we would intervene in the free movement of capital. We play with holding banks and their subsidiaries in Romania with the same rules of the game, based on incentives, not on restrictions, "said Isarescu. He gave signs of a possible reduction of RMO in the next period, but the reduction will be made, “very gradually”.



Concerning the rate, we will not change it, yet, but the composition is possible to be modified. We start with the currency, because the liquidities in lei improved considerably through repo operations that BNR had done, mainly for putting up the financing of budget deficit surplus. Also, if necessary, the NBR will expressly require to banks in Romania to increase its capital. Romania received on March 25 an aid of 20 billion from four international lending institutions in the context of current global financial crisis, being the fifth country in Central and Eastern Europe which resorted to the IMF, after Hungary, Lithuania, Serbia and Ukraine. This year, Romania will receive the loan contracted for two years of about 11.8 billion euros, of which 8.5 billion will come from the IMF. Romania's agreement with the IMF could be followed by similar packages for Lithuania and Turkey, analysts estimated, at a time in which Eastern Europe is coping with a crisis that has already led to the entrance of the euro area, of the U.S. and Japan, in recession.

Romania could meet the requirements of inflation and budget deficit in the Maastricht Treaty in 2011, as a consequence of the agreement with the International Monetary Fund (IMF), said recently, chief economist of the Romanian Commercial Bank (BCR), Lucian Anghel .

Under the agreement with IMF, Romania will faster get closer to the requirements of the Maastricht Treaty in terms of inflation and budget deficit in 2011. To reach this, Romania must observe, firstly, the conditions assumed with the Fund, and, secondly, to focus on some plans on a very long term, to the detriment of some on a very short-term, even if this is an election year.

I think it will be essential that this collaboration between the Ministry of Finance and central bank to continue, and the central bank can maintain its independence, which is something very important. Chief economist of BCR considers that "the amount (of 19.95 billion euros, no) is sufficient to cover the needs of 2009-2010", but it is likely to draw less than the amount allocated.

"Without this agreement, on the long term we would have been much worse. This safety net puts us at the shelter for the next two years, even if the financial crisis will worsen".

From my point of view, this agreement will teach us how to consume less. Probably, the number of unemployed will increase and I think that will influence our behavior regarding investment and consumption. On March 25, the IMF announced officially that it reached an agreement with Romania for a grant of 12.95 billion euros, part of a package of about 20 billion euros, to which also contributes the European Commission, EBRD and World Bank.

The National Bank announced the elimination of mandatory currency reserves for liabilities with residual maturity of more than two years.

The Board of Directors decided the application period for this condition to be May 24-June 23 2009. The Board of Directors decided to maintain the interest rate of monetary policy at 10.00 percent per year. The Council reviewed and also approved, the letter of intent submitted to the International Monetary Fund on obtaining an external financing arrangement with the international financial institutions and the European Union. The current rate of minimum mandatory reserves for other liabilities in lei and foreign currency was maintained at 40 per cent in currency and 18 percent in lei. The Board of Directors of the NBR will closely monitor the evolutions of domestic and global economic environment, so that through the adequacy of tools of NBR, to reach the objectives of achieving and maintaining price stability over the medium term and financial stability.

According to an official announcement of the NBR, the analysis of the latest statistical data shows an increase in the annual rate of inflation and slowness in the economic growth as a result of reduced exports and external financing due to a deepening of the global economic and financial crisis. The annual inflation rate rose at 6.89 percent in February 2009, compared to 6.3 percent in December 2008, because of the increase in some administered prices and fuel charges, as well as because of the services prices, due to the national currency depreciation, as a result of an emphasis of aversion towards the risk of investors confronted by economies of Central and

Eastern Europe. The annual rate of inflation of basis Core2 adjusted - calculated by removing the impact of administered and volatile prices (vegetables, fruits, eggs and fuels) and vice tax - was 6.6 percent in February 2009 compared to 6,3 per cent in December 2008. At a monetary level, it is noticed a relative stagnation of intermediation in the conditions of significant slowing in the expansion of credit granted to the private sector. The factors mentioned above emphasize the need to maintain a prudent attitude of the monetary policy in the context of the need to continue adjusting the external deficit to sustainable levels over the medium term, and to avoid excessive volatility of exchange rate of domestic currency.

Based on available data, and in order to continue the process of approaching the level of interbanking interest rates from the monetary policy interest rate, the Board of Directors of the national bank decided to maintain the rate of monetary policy at 10.00 per cent per year and continued the use of active operations on the market for proper management of liquidity in the banking system.

In order to gradually align to the European Central Bank standards and provide a sustainable lending to the Romanian economy, aiming at the sectors with a development potential on a longer term, the Board of Directors of the national bank decided to reduce to zero the rate of minimum mandatory reserves for liabilities in foreign currency with residual maturity of more than two years, compared to 40 percent in present, starting with the application May 24-June 23 2009.

At the same time, the Board of Directors of the national bank decided to maintain the current rate of minimum mandatory reserve for liabilities in lei and for the other currency liabilities of credit institutions. The Board of Directors of NBR believes that the implementation of the balanced mix of macroeconomic policies agreed in the arrangement of external financing from the international financial organisms, will allow a gradual and prudent adjustment of monetary policy in conformity with the resumption of disinflation and strengthening of financial stability. NBR will closely monitor the developments of domestic and global economic environment so that, through the adequacy of the tools from NBR, to reach the objectives of achieving and maintaining price stability over the medium term and financial stability.

According to the announced timetable, the next meeting of the CA of NBR dedicated to monetary policy will take place on 6 May 2009, when it will be reviewed the new quarterly report on inflation. Governor of National Bank of Romania, Mugur Isarescu, presented on April 1 to the Romania's Parliament leading, the position of the Romanian central bank on macro-economic situation and the agreement with IMF and EC, the governor assuring that Romania will be able to continue economic growth. "I said that this arrangement is not only necessary for the current period, but it's also a good one. I expressed my conviction as part of the negotiating team, that the Agreement provisions are those that Romania needed, that these public funding sources will compensate for lower generosity of private capital from Romania and that, based on our resources but also on these sources borrowed, we'll continue the economic growth and will ensure macrostability of the country, showed Isarescu. He stressed that, now, it is essential to rebuild trust and called for cooperation of all political and economic factors. "I assure once again the Romanian parliament that we are ready, with arms, to come and present whenever it is necessary, the macroeconomic situation of the country; and as regards the National Bank, to do our duty stipulated in our law and laws in the EU, according to which we are functioning" said Isarescu. In turn, the president of the House of Deputy Roberta Anastase, qualified the meeting with the governor as an "an interesting, as well as a useful one."If you want, it is included in a normal program that the political class in general should have in this period, a program that focuses on solidarity and communication, too (...) The opinion that emerged from this meeting is that such a financing arrangement is necessary. In these conditions, so as the costs were discussed, some are beneficial. Finally, the Senate president, Mircea Geoana, said the National Bank has a very important role, being the "guardian angel" of macroecostability of the country, including, in terms of price stability. It was also underlined the desire to restart lending so not to

reproduce the conditions that led to the crisis that we cross today. It is important to restart the economy lending, but with greater vigilance in terms of credit quality and their effects on economic and social life of our country.

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## INTEGRATION DES MARCHES DE CAPITAL EUROPEENS - ASPECTS PRESENTS ET DE PERSPECTIVE

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*European financial market integration is an unfolding process and an economic fact that affect not only the countries involved but the whole world economy. The success of this process depends on many factors, various challenges and obstacles that have to be over fulfilled but the evolutions demonstrate that significant steps have been made. The paper don't propose a historical approach of the European capital market integration, it is a succinct presentation of the degree that this process has been achieved until now, taking into account the increasing role of the euro on the international financial markets. The evolution of the integration process is analysed on the significant segments of the capital market: bond market - government and corporate bonds - and equity market.*

*Keywords: capital market, financial integration, Europe*

*JEL Classification: E44, G15*

L'un des objectifs de l'Union Européenne est la consolidation du fonctionnement des marchés financiers par la stimulation de leur intégration. Un marché financier plus intégré accroît les opportunités de la distribution et de la diversification du risque et mène à la croissance de la liquidité du marché. Cependant, l'intégration accentuée du marché amplifie le risque de la transmission des turbulences et des crises financières au niveau transfrontalier. La Banque Centrale Européenne considère qu'un marché d'instruments et de services financiers est entièrement intégré si tous les participants potentiels: se soumettent à un seul set de règles lorsqu'ils décident d'opérer avec ces instruments-là ou services; ont accès d'une manière égale aux instruments et services du marché; sont traités d'une manière non - discriminatoire lorsqu'ils opèrent sur le marché respectif. Cette définition présente une situation idéale, un état d'intégration parfaite. En réalité, le marché financier européen se trouve en plein processus d'intégration, avec des différences en ce qui concerne le degré d'intégration entre les segments de ce marché.

Les dernières années, le stade et le degré d'intégration des marchés financiers européens sont remarquables. Les marchés monétaires et d'obligations européens ont atteint un degré d'intégration très avancé, surtout dans le cadre de la zone euro, alors que les marchés de capital se sont intégrés plus lentement, le processus étant ralenti à cause du manque de l'infrastructure afférente.

Le marché des obligations gouvernementales et de ceux corporatives a évolué vers l'intégration, le processus étant presque complet. Une fois la monnaie unique introduite, **le marché des obligations gouvernementales** a connu une intégration presque complète. Les rendements pour les obligations d'Etat sont encore assez différents dans le cas des nouveaux pays membres (UE-12) et lors du premier semestre de 2008 on observe une accentuation des différences entre les rendements des obligations d'Etat tant pour la zone euro qu'aussi pour l'UE-27. Il est possible que cette évolution soit liée à la croissance du risque pays et à la majoration des primes pour le risque crédit. Le stade avancé d'intégration du marché des obligations gouvernementales se relève d'une manière évidente aussi des niveaux très proches des taux d'intérêts pratiqués pour ces titres dans les pays de la zone euro par rapport à ceux hors zone euro (Tableau 1).

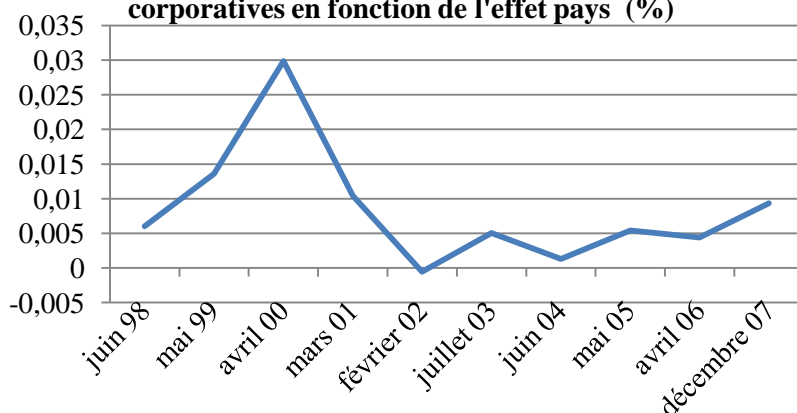
**Tableau 1. Evolution des taux d'intérêt à long terme (pour des titres d'Etat à échéance à 10 ans) dans l'Union Européenne (%)**

| Pays                   | 2007             | Juin 2008 | Décembre 2008 |
|------------------------|------------------|-----------|---------------|
|                        | <b>Zone euro</b> |           |               |
| Belgique               | 4.41             | 4.84      | 3.87          |
| Allemagne              | 4.21             | 4.52      | 3.05          |
| Irlande                | 4.45             | 4.91      | 4.57          |
| Grèce                  | 4.53             | 5.17      | 5.08          |
| Espagne                | 4.35             | 4.79      | 3.86          |
| France                 | 4.35             | 4.73      | 3.54          |
| Italie                 | 4.54             | 5.11      | 4.47          |
| Chypre                 | 4.60             | 4.60      | 4.60          |
| Luxembourg             | 4.68             | 4.98      | 4.17          |
| Malte                  | 4.81             | 5.26      | 4.17          |
| Pays-Bas               | 4.34             | 4.73      | 3.65          |
| Autriche               | 4.34             | 4.74      | 3.74          |
| Portugal               | 4.47             | 4.96      | 4.01          |
| Slovénie               | 4.55             | 4.95      | 4.56          |
| Finlande               | 4.34             | 4.78      | 3.72          |
| <b>Zone non - euro</b> |                  |           |               |
| Bulgarie               | 5.08             | 5.17      | 7.76          |
| Tchéquie               | 4.68             | 5.13      | 4.30          |
| Danemark               | 4.33             | 4.82      | 3.50          |
| Lettonie               | 5.10             | 6.25      | 9.03          |
| Lituanie               | 4.94             | 5.33      | 9.00          |
| Hongrie                | 6.93             | 8.50      | 8.31          |
| Pologne                | 5.86             | 6.42      | 5.70          |
| Roumanie               | 7.05             | 7.15      | 8.38          |
| Slovaquie              | 4.61             | 4.94      | 4.72          |
| Suède                  | 4.31             | 4.43      | 2.67          |
| Royaume-Uni            | 4.70             | 5.16      | 3.37          |

Source: www.ecb.int - Statistics

*Les obligations corporatives* ont un degré relativement élevé d'intégration, le taux de variation des rendements influencé par l'effet pays en se situant presque à zéro, fait mis également en évidence dans la figure suivante.

**Figure 1. Variation des rendements des obligations corporatives en fonction de l'effet pays (%)**



Source: www.ecb.int - Statistics

Une image d'ensemble comparative est illustrée dans le tableau 2, qui présente le pourcentage des placements transfrontaliers par les établissements monétaires - financiers d'obligations gouvernementales et corporatives émis par la zone euro et par de pays membres de l'UE, hors zone euro.

**Tableau 2. Evolution des placements transfrontaliers d'obligations gouvernementales et corporatives émis par la zone euro et par des pays membres de l'UE, hors zone euro (%)**

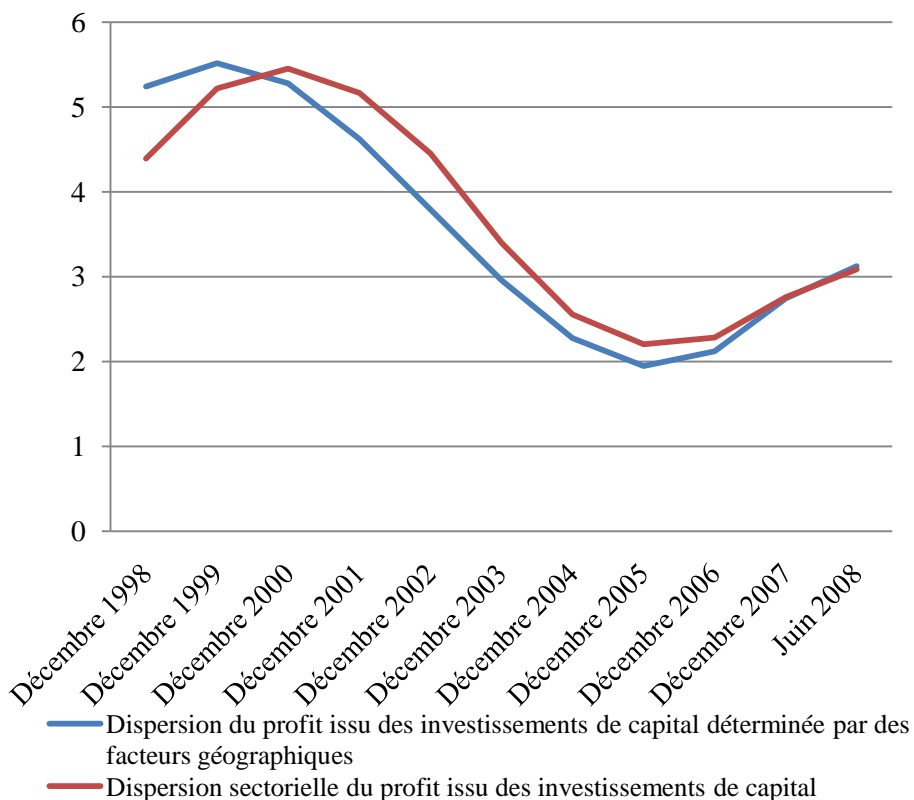
| Date          | Placements d'obligations gouvernementales et corporatives dans des pays de la zone euro | Placements d'obligations corporatives dans des pays de la zone euro | Placements d'obligations gouvernementales dans des pays de la zone euro | Placements d'obligations gouvernementales et corporatives dans des pays de l'UE, hors zone euro |
|---------------|---|---|---|---|
| Décembre 1997 | 16.157079   | 3.727192  | 12.429887   | 2.487281  |
| Décembre 1998 | 18.946224   | 3.215163  | 15.731061   | 2.617912  |
| Décembre 1999 | 24.178609   | 4.367879  | 19.810730   | 3.532850  |
| Décembre 2000 | 26.142170   | 6.308584  | 19.833586   | 4.815985  |
| Décembre 2001 | 29.934881   | 8.279377  | 21.655504   | 3.729404  |
| Décembre 2002 | 33.084187   | 9.701646  | 23.382541   | 3.865016  |
| Décembre 2003 | 36.001929   | 10.959446   | 25.042483   | 4.037270  |
| Décembre 2004 | 37.452835   | 11.260705   | 26.192131   | 5.643106  |
| Décembre 2005 | 40.253668   | 12.278941   | 27.974727   | 6.149915  |
| Décembre 2006 | 39.016479   | 14.768276   | 24.248202   | 7.329168  |
| Décembre 2007 | 38.260167   | 18.311660   | 19.948507   | 7.179681  |
| Juin 2008     | 37.977277   | 18.503895   | 19.473381   | 7.192622  |

Source: www.ecb.int - Statistics

On observe une tendance croissante de ces taux pendant la période 1997-2007, à une faible baisse des taux des placements transfrontaliers d'obligations gouvernementales dans les pays de la zone euro en 2008, de 19.94% en décembre 2007 à 19.47% en juin 2008.

**Le marché des actions** enregistre un niveau d'intégration relativement élevé, même si le début de 2008 a apporté en même temps avec les effets de la crise financière globale une croissance de la dispersion entre les profits issus des investissements tant au niveau des pays qu'aussi du point de vue sectoriel, tel que l'on observe dans la figure suivante.

**Figure 2. Dispersion transfrontalière du profit issu des investissements de capital (%)**



Source: [www.ecb.int](http://www.ecb.int) - Statistics

Le stade d'intégration des marchés de capital européens peut être également analysé par le biais de l'origine des investissements étrangers sur ces marchés de l'UE. Même si des dernières données disponibles résulte une stagnation de ces investissements, le pourcentage des investissements réalisés par les pays membres de l'Union Européenne a augmenté de 53% en 2001 à 56% en 2006 pour la composante actions et de 63% à 67% pour la composante obligations, pour la même période. Tout en tenant compte de ces taux, on peut affirmer qu'il y a une tendance de "régionalisation" des investissements à long terme, notamment pour la composante obligations. Une telle tendance est bien révélatrice aussi pour les pays UE-12, où les investisseurs UE en obligations détiennent environ 90% du montant des investissements en de tels titres. En 2006, les Etats-Unis étaient les plus grands investisseurs étrangers hors UE en actions UE, avec un pourcentage de 29% du montant des investissements étrangers. En même temps, les investisseurs américains ont augmenté leur présence et sur le marché des obligations,

de 7% en 2005 à 9% en 2006.<sup>359</sup> Sur le marché des émetteurs d'actions, le processus d'intégration se trouve en un stade basique, avec de très peu de cas où c'est lister transfrontalièrement en bourse.

La liquidité du marché des actions a augmenté d'une manière significative en 2007, tout spécialement suite à la croissance des volumes des transactions. En 2007, la capitalisation du marché s'est majorée de 3% en UE et de 2% aux Etats-Unis, étant donné que la valeur des actions en transaction a suivi un trend croissant, en augmentant de 33% dans l' UE et de 35% aux Etats-Unis.

Pendant la dernière période, le marché de capital européen a été le but de certaines transactions importantes de *fusions et acquisitions*: par la fusion entre New York Stock Exchange et Euronext en 2006, s'est formé le plus grand groupe boursier, NYSE Euronext; en février 2008, Nasdaq Stock Market a finalisé l'acquisition du marché scandinave OMX AB, en donnant naissance à la plus grande compagnie boursière du monde entier, Nasdaq OMX Group.

L'intégration des marchés européens d'instruments financiers souffre à présent des transformations importantes grâce à la mise en place de la Directive concernant les marchés des instruments financiers - MiFID (Markets in Financial Instrument Directive), qui encourage la libre concurrence entre les marchés réglementés, tout en établissant des standards plus élevés en ce qui concerne la transparence et l'intégrité des marchés. Un résultat de la mise en place de cette directive a été l'apparition, à la fin de 2007, de certains *systèmes multilatéraux de transaction*, qui offrent des services plus rapides et à des commissions plus réduites par rapport à celles offertes par les bourses de valeurs. La création de ces systèmes est uniquement l'une des mesures censée à améliorer l'environnement entrepreneurial et à faciliter l'accès des PME aux transactions à des instruments financiers. Parmi les systèmes multilatéraux de transaction de l'Union Européenne on retrouve: POSIT, Chi-X, Project Turquoise, Equiduct Berliner-Börse et Bats Europe. Ceux-ci ont rapidement atteint des parts de marché importants (par exemple, Chi-X détient environ 15% des actions listées à London Stock Exchange pour la transaction sur le marché secondaire, et Turquoise 5%).<sup>360</sup>

En vue du soutien du processus d'intégration du marché financier européen, en général et de celui de capital, en particulier, on a envisagé deux *initiatives* importantes, voire: *le Plan d'action pour des services financiers* – FSAP (Financial Services Action Plan) et l'établissement de la *procédure Lamfalussy pour la surveillance et la réglementation financière*. La première de ces initiatives a visé le système financier en entier, mais notamment le marché des titres. Le plan a été initié en 1999 et a compris 42 propositions législatives de la Commission Européenne pour l'actualisation des réglementations existantes et pour l'extension du degré d'harmonisation des réglementations européennes, en conformité avec l'objectif du marché unique. Parmi les mesures concernant le marché de capital il y avait la Directive sur les marchés des instruments financiers, la Directive à l'égard de la transparence financière, la directive concernant les abus de marché et la Directive prospect. En même temps, la Commission Européenne a adopté en décembre 2005, une Charte Blanche de l'UE pour ce qui est de la politique des services financiers dans l'UE pour la période 2005-2010. La deuxième initiative, la procédure Lamfalussy pour la surveillance et la réglementation financière, a été mise en place en 2001 et a mené à la croissance significative de la vitesse et de la flexibilité du processus de réglementation dans l'UE et à la mise en place homogène des réglementations UE au niveau national.<sup>361</sup> A la mise en place des deux initiatives participent activement et la Banque Centrale Européenne avec l'Eurosystème.

Un facteur clé pour une intégration complète et efficace du marché du capital européen le constitue l'infrastructure, représentée par les systèmes de décompte des opérations à des

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359 European Commission - European Financial Integration Report 2008, January 2009, p. 10.

360 European Commission - European Financial Integration Report 2008, January 2009, p. 25.

361 ECB - Buletin Mensuel – 10ème anniversaire de BCE, 2008, p. 112.



instruments financiers et par les systèmes des contreparties centraux. Il y a encore de grandes différences particulièrement liées aux pratiques, aux régimes juridiques, de réglementation et fiscaux sur les différents marchés nationaux, étant donné la complexité implicite des titres financiers. L'utilisation des systèmes de décompte des opérations à des instruments financiers pour des opérations transfrontalières n'est pas encore significative, en dessous de 1% du total volume et valeur. De l'autre côté, l'infrastructure post-transaction est fragmentée tant au cas des obligations, que surtout dans le cas des transactions avec des actions. Les opérations transfrontalières avec des obligations sont décomptées dans le cadre de deux systèmes internationaux de dépôt des titres, alors que les transactions avec des actions s'appuient encore sur les systèmes nationaux de dépôt. La fragmentation du marché des instruments financiers a pour conséquence des coûts post-transaction élevés pour les opérations transfrontalières et la réduction du potentiel pour les économies d'échelle. Pour répondre au besoin d'avoir une plateforme de décompte commune et neutre pour les transactions avec des instruments financiers, l'Eurosystème a lancé la proposition de la mise en place du système TARGET2-Securities (à partir de 2013), censé à stimuler l'interopérabilité et la concurrence entre les fournisseurs de services liés aux instruments financiers. Cette chose mènera à l'opérabilité de transactions transfrontalières avec des titres tout autant bon marché comme ceux opérés à ce moment au niveau national en réalisant ainsi des économies d'échelle.

L'intégration financière européenne est ainsi un processus en plein déroulement, tout spécialement en ce qui concerne certains segments du marché, voire le marché de capital et le segment de détail du marché bancaire. Le plus haut degré d'intégration l'ont atteint jusqu'à présent le marché monétaire et celui des obligations. La monnaie euro représente le lien qui a mené à la création d'un vrai marché unique et qui a un rôle important dans le bon fonctionnement du marché financier européen. Les marchés financiers des pays membres de l'Union Européenne hors zone euro enregistrent les plus grands retards dans le processus d'intégration. Une fois que ces pays adopteront l'euro et harmoniseront leurs structures financières internes avec ceux de la zone euro, le processus d'intégration connaîtra une accélération visible.

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## POLICIES OF THE COMMERCIAL BANKS LIQUIDITY MANAGEMENT IN THE CRISIS CONTEXT

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*The article focuses on liquidity management in Commercial Banks, and presents the steps that a good management has to follow to ensure that the position of the bank is not put into jeopardy following a lack of liquidity. Different management decisions and liquidity strategies are studied, with an emphasis on currency strategies, strategies for funding liquidity risk, financing and planning liquidity after different scenarios. The paper also takes into consideration and studies what happens with the liquidity management during crisis situations.*

*Keywords: liquidity management, liquidity risk, liquidity planning procedures, alternative scenarios, liquidity crisis management.*

*JEL Classification: G32, G33.*

Banking liquidity represents the capacity of a bank to finance itself efficiently the transactions. The liquidity risk, for a bank, is the expression of the probability of losing the capacity of financing its transactions, respectively of the probability that the bank cannot honor its obligations to its clients (withdrawal of deposits, maturity of other debt, and cover additional funding requirements for the loan portfolio and investment) The management of the liquidity risk presents important at least from two points of view: primarily an inadequate level of liquidity may lead to the need to attract additional sources of with higher costs reducing profitability of the bank that will lead ultimately insolvency; and secondly an excessive liquidity may lead to a decrease of the return on assets and in consequence poor financial performance.

A bank has a potential of appropriate liquidities when it's in condition to obtain the funds immediately and at a reasonable cost, when these are necessary. In practice, achieving and maintaining optimum liquidity is a real art of bank management. Maintaining an adequate degree of liquidity in the whole banking system is extremely important, because the registration of a liquidity crisis at a single bank can have negative repercussions over the whole banking system thanks to the risk of contagion through interbank settlements.

The sophistication of liquidity management and liquidity risk depends on the size and characteristics of each bank as do the nature and complexity of activities held by it.

The management of liquidity policies of a bank has to include a decisional structure for the risk management, a pattern (a strategy) for approaching operations and funding, a set of exposure limits to liquidity risk and a set of procedures for planning liquidities after alternative scenarios including crisis situations. (Greuning, Brajovic Bratanovic, 2004, p.102).

The structure of decision-making reflects the importance that the management is showing to liquidity in general: the banks which emphasize the liquidity normally implement a structure for managing liquidity risk from ALCO (Assets and Liabilities Committee) and includes the

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<sup>362</sup> „Investeşte în oameni!” doctorand bursier în "Proiect cofinanţat din Fondul Social European prin Programul Operaţional Sectorial Dezvoltarea Resurselor Umane 2007-2013"

responsibility to establish a liquidity policy and decision – making to the highest level of management.

### **The banking strategy for funding operations and liquidity**

Each bank has to have an approved strategy for the operational management of the liquidity, a strategy that must be communicated within the organization, because in many banks, the liquidity management is no longer the entire responsibility of the treasury (Dănilă, Dănilă, Anghel, 2002, p. 105). New product or business strategies (example: Commercial loans convert into shares to be sold to investors) or the collapse of the information system/information may have an impact on liquidity risk. Therefore all entities with impact upon the liquidity have to know the liquidity strategy and to operate according to the procedures and the organization policies.

The liquidity banking strategy has to present specific policies, relevant to liquidity management such as assets and liabilities aspects of liquidity risk management, liquidity management in different currencies. The liquidity management is connected to the net financing (future needs of liquidities) both short-term and long term, a bank can raise its level of liquidity through asset management, debt management or (and most often) a mix of the two. Management of assets in this case includes the potential to be sold and used as collateral that would increase the incoming cash-flow. Traditionally, many banks, mostly small sized, have covered their liquidity needs by manipulating the assets structure based on the stock of liquid assets, thus having a small influence on debt.

In order to maintain liquidity banks which are based solely on asset management are concentrating on the price adjustment, credit availability and the level of liquid assets that they keep. Their number is however, is rapidly decreasing, because of the evolution of the banking markets evolve. Often, seasonal factors cause increasing demand for loans from the resources available, thus leaving the banks with the alternative to meet liquidity sources through debt on the money markets.

Therefore, the bank can cover its liquidity needs through debt management this may be achieved by increasing debt and/or short-term deposits, by increasing the debt maturity and ultimately increasing the capital.

If for small banks, direct loans from the market are not possible or are under contract for the emergency removal of a liquidity crisis, for high prices, major banks, international banks, holding banks have as a main source of liquidity loans in favorable market conditions, since, liquid assets have a major opportunity cost for these banks and are regulated by the requirements of the treasury management (minimum book binding).

A major difference between liquidity of greater banks and the small sized ones is that, beside the deliberate determination of the asset balance part, the higher banks can control their level of debt better. Therefore they have a larger variety of options that would select the most inexpensive method of raising funds from the monetary market as a source for discretionary purchasing funds on a short term, based on the interest rate competition process that can help meet liquidity needs. Although the acquisition of funds on the market at a competitive cost would allow profitable banks to satisfy increasing demand of customers for loans, a wrong or unsuitable implementation of debt management can have hard consequences, materialized in risks associated with the liquidity management based on market financing:

- the funds could not always be available when needed;
- if the market loses confidence in a bank, its liquidity will be threatened;
- the concern of the banks to obtain funds at the lowest possible cost and insufficient attention toward maturity distribution may enhance much exposure of the bank to the risk of fluctuations in interest rates.

Another challenge for liquidity management is the contingent liabilities. Any bank should pay special attention to the influences of off-balance elements (contingent liabilities), such as bank

guarantees, on the cash-flow. In particular, during unsure periods, these can generate significant outflows of funds, output which generally does not depend on conditions of the bank. During a macroeconomic crisis generated by the use of letters of credits, it is highly probable that this will lead to bankruptcy.

### **Strategy on the foreign exchange**

Specific items that will be considered in the liquidity management currency depend on the nature of business conducted by the bank. For some banks use of currency deposits and lines of credit to finance short-term assets in the internal currency can be the main area of vulnerability, while the other banks will fund their activities in internal currency. In general, the bank should have a management system (meaning assessment, monitoring and control) for liquidity positions in all currencies in which it is active. The bank should also assess the needs aside from currency liquidity aggregate, would conduct a separate analysis liquidity strategy for each currency.

A bank that operates with foreign currency but does not have a network of branches abroad usually makes liquidity management of currencies at the head office. For a bank with overseas representation the policy development, the general coordination and supervision is at the head office, but the responsibility for the liquidity of the bank is delegated to the branch of the issuing country.

The strategy for financing liquidity risk represents a key aspect of liquidity management, being materialized particularly in deposits and loans on the market. Debts and diversified funding sources usually indicates that a bank has a well developed liquidity management .Banks holding deposits portfolio in stable and high varied value are likely to face liquidity problems less than the banks without such deposits.

A cardinal principle of liquidity risk management lies in diversifying the deposits in terms of number of clients individuals/corporate, the geographical distribution, the types of accounts and instruments, the maturity spectrum. The diversity insures a proper stability and avoids the output of funds in a certain day or over a specific period. Assessing the structure, type and condition (stability and quality) of deposits is a starting point for assessing risk and liquidity. Thus information is need about:

- product range of existing deposits, with the number of accounts,, balance for every depositors, and following certain classifications such as currency, maturity and interest rates;
- concentration deposits, deposits of individual customers that exceed a certain value of total assets, should be classified after the term and interest rate;
- administration of deposits, information relating to the adequacy of registration and control of operations and depositors with access to the internal customers and the calculation of interest and payment form.

Because of the competition for funds, the management of a bank is interested to adopt a development program for attracting all types of deposits, both in terms of increased volume and quality of the structure of deposits to determine the share of deposits that are stable or basic, fluctuating and volatile, and to have adequate information about anticipated and potential withdrawals.

### **Loans in the financial market**

Another key ingredient of the liquidity is the ability to attract other funds-debt (also known as potential liquidity). This is of major importance in evaluating sources of liquidity taking in consideration the additional cost of funds raised (marginal cost of liquidity) and other factors such as: the frequency with which the bank would be due refinancing obligations and its ability to obtain funds from the treasury. For a bank which frequently operates on the money markets in the short term, the crucial determinants capacity to borrow new fund is its location on the respective market.

To control liquidity risk management, the bank requires certain limits for exposure to liquidity risk, through internal regulations correlated with obvious settlements on liquidity imposed by the N.B.R. These limits are in accordance to the annual management liquidity strategy elaborated by the Management Committee.

- sources of liquidity for the bank: - Primary-reserve: cash deposits with NBR , deposits in partner banks corresponding minimum or maximum "x"% in total banking assets;
  - secondary reserves held in a portfolio of securities representing the "x"% in total banking assets;
  - portfolio diversity, the maximum amount for a type of investment is "x"% of total assets, there have to be multiple types of investments;
  - resource deficit – in a currency , the limit would be maximum "x"% equity – in national currency, with a maximum limit ( equity-fixes values);
  - resource attracted from partner banks – "x"% of total liabilities;
  - correlation terms/maturities of assets and liabilities: the banks maturity investments have to be adjusted permanent due to its liabilities the gap (RON equivalent) per maturity period, would have its limits of variation contained within a certain "XY"% of total assets, determined on the basis of their objectives of each bank and inclination toward their risk shareholder;
  - maximum admitted tolerance in the establishment of the minimal compulsory reserve (RMO): for lei and for foreign currency;
  - the solvency rating has to be 1;
  - a limit of the report on loans/deposits;
  - a limit of the report on credit/capital;
  - instructions on funding sources and destinations;
  - liquidity parameters, for example, the fact that liquid assets would not be lower as "x" percent or rise above "y" percent of total assets;
  - a rate limit on the relationship between anticipated funding needs and available resources to meet those needs , for example , that the primary sources over the anticipated need would not be lower as " x" percent;
  - a limit percentage on the base of a certain category of debt, for example, the fact that the negotiable certificates of deposit would not be a maximum of "x" percent of total debt;
  - average maturity limit on minimum / maximum of the various categories of debt, for example, the average maturity of negotiable certificates of deposit would not be smaller of "x" months.
- These risk limits are confidential, and are used only for internal use of the bank.

### **Funding and planning liquidity after alternative scenarios**

Although liquidity is generally managed under normal conditions, the bank has to be prepared to realize its management in special conditions (abnormal).The liquidity management in special conditions (abnormal) includes management of assets and liabilities in special conditions.

Thus, under normal conditions, liquid assets can be quickly converted into liquidity and reasonable cost many banks also include assets in the analysis that aimed to identify sources of funds. However, the occurrence of crises in markets have shown that the assets sale would no longer provide a source of viable funds in order of providing liquidity and the bank will have to decide how would the liquidity of an asset be affected by the various scenarios. Certain assets that are very liquid in the current conditions can substantially reduce the liquidity in adverse market conditions. This asymmetry of liquidity is an important element of a growing thanks to instruments developed in the market. Therefore, a bank asset will fall in different maturity bands, depending on scenario forecast.

Regarding liabilities of banks, firstly a bank must examine the evolution of their liabilities under normal business, including establishing the following elements:

- normal level of deposit that is to renew the maturity and other liabilities with similar characteristics;

- maturity deposits that don't present a contractual maturity like current account and other savings accounts;

- the normal growth of new deposits.

The analysis of the cash-flow determined by a bank's liabilities in abnormal conditions (specific to the bank or due to general problems with whom the market confronts itself) needs the following questions:

- what funding sources register a high probability of staying within the bank, regardless of existing conditions and if these sources can be increased?

- what funding sources can gradually leave the bank if certain problems occur and to what extent?

The interest rate subsidy can control the volume output of resources?

- does the bank hold facilities like the back-up that can be held and under what conditions?

Liabilities which constitute the first category could be considered to remain in the bank's system even in the most pessimistic scenario. Some basic deposits, generally, remain at the bank because in some countries (including Romania), deposits of individuals and small businesses are guaranteed or thanks to bank transfer cost, which are prohibited for very short term, these deposits cannot be transferred.

The second category are the liabilities with a high probability to remain within a bank in case of certain problems of average intensity. These resources will come gradually in the case of a crisis, may include some deposits that can be equated with basic stores and were not included in the first category. Aside from these basic deposits, a certain level of interbank deposits can remain within the bank during such periods.

A third category of resources is those without contractual maturity.

One essential part of liquidity planning and managing the risk, represents forecasting of possible future events. Banks must regularly estimate expected cash-flows instead of focusing on the contract during periods in which the inputs or cash outflows may appear. Management of the liquidity risk would be taken into account the different variants to determine if a bank is or isn't liquid enough depending on the cash-flows under different conditions. Thus, understanding the context of liquidity risk management involves the examination of the approach toward a bank of financing and after planning alternative liquidity scenarios.

A bank has to analyze the liquidity using a variety of scenarios type "what if". Within each scenario a bank has to evaluate the fluctuations of the liquidity assess (positive and negative). These scenarios would take into account internal factors (specific to that bank) and external (market dependent). Scenario „continuous activity" (Greuning, Brajovic Bratanovic, 2004 p. 110) is usually applied to the management of the bank deposits destination, setting a benchmark for the cash-flows related to balance during the normal activity.

A second scenario refers to the bank's liquidity in a crisis situation specific to the bank, when a significant part of its debt cannot be replaced or refinanced, requiring measures of liquidity supervision.

A third scenario applies to general market crisis which affects the liquidity of a significant part or even the entire banking system. Liquidity managing under this scenario reflects on the loan quality; there are significant differences in accessing finances between banks. From the perspective of liquidity management, the implicit presumption can be made that the central bank will ensure access to finance in a certain form, because the central bank has a special interest in studying this scenario, thanks to the need of creating a total „buffer " liquidity for the banking sector and an operational liquidity burden-sharing issues between the most important banks.

The table below provides a simple tool to forecast liquidity needs under normal business conditions, in liquidity crisis conditions and conditions general market liquidity crisis:

**Table no. 1: Stairs maturities under alternative scenarios**

| Cash entries                                 | Normal activity conditions | Specific banking crisis | General market crisis |
|--|----------------------------|-------------------------|-----------------------|
| Maturing assets (contractual)                |                            |                         |                       |
| Receivable loan interest                     |                            |                         |                       |
| Selling assets                               |                            |                         |                       |
| Interbank Transfers                          |                            |                         |                       |
| Others                                       |                            |                         |                       |
| Total entries                                |                            |                         |                       |
| Cash entries                                 |                            |                         |                       |
| Maturing debt (contractual)                  |                            |                         |                       |
| Loan interest of payment                     |                            |                         |                       |
| Payment lending commitments                  |                            |                         |                       |
| Withdrawals before the deadline for deposits |                            |                         |                       |
| Operational expenditure                      |                            |                         |                       |
| Others                                       |                            |                         |                       |
| Total output                                 |                            |                         |                       |
| Surplus (deficit) of liquidity               |                            |                         |                       |

**Liquidity management in crisis situations**

Liquidity crisis manifests itself in two stages:

- apparent stage (operative) – observed in real time by the functional entities of the bank, who work directly with clients; is manifested through increasing the resource output from the bank in a short period of time through various ways – withdrawal of cash, payment orders and other substitutes for cash;

- confirmation stage – in which the actual dimensions of the crisis quantify; they calculate data contained in the balance and accounting databases of the bank.

The potential crisis is operational signaled by constant and continues lowering of the positive difference between inflows and payment at the bank, and constantly lowering excess of the amount recorded on the first band of maturity , calculated daily in the indicator of liquidity situation.

A bank has to own plans regarding the management of unanticipated events in order to realize the strategy regarding liquidity crisis management and procedures to cover the shortage of liquidity in times of crisis.

Developing plans, projections on a liquidity bank at crisis has to begin in a systematic and rigorous way, as soon as the bank anticipates persistent liquidity shortages or confronts itself with difficulties of refinancing or replacement of its debt. In case of a period of market crisis, liquidity projections would need to be made at the first sign that the *macroeconomic* situation is changing or that the presumption of assets or bank debts under normal activity are not valid. A bank can avoid a potential crisis by changing deliberately the behavior of its assets or debts, for example , becoming more aggressive on the market, giving up anticipated profits or breaking relationships with certain types of customers. The plans should answer the following two major questions:

Does the bank have a strategy to manage a crisis?

Does the bank have procedures for accessing funds in unpredictable cases?

The management of the bank should answer these questions in order to identify how the bank would act in crisis situations.

### *a) The strategy*

A plan for managing crisis situations in liquidity assurance has to contain several components. More important are the actions that involve the management's coordination. This plan would need the assurance procedures of continuance flow of information and would provide the executive leadership of the banks' accurate information on making quick decisions. A clear division of the responsibilities has to be established so that all staff would understand what is expected from them in case of critical situations.

Another important element in the strategy plan to be used is the altering of assets and liabilities „behavior” during the crisis. The banks should be able to change „behavior” of assets and liabilities through various forecast scenarios. For example, if a bank concluded that it will suffer a shortage of liquidity in a crisis, the bank will have to decide what assets to sell even if at a lower value in order to cover a deficit of liquidity. In general, banks review the entire portfolio of available assets to be sold and which generates a smaller impact on public opinion and perception of market on balance of the bank.

Other components of the plan on unpredictable events involve maintaining relationships with leading providers of funds in the trade and the sheet. The banks' strategy may need to maintain an intense relationship with commercial counterparties, correspondent banks, corporative customers, payment systems and owners of important deposits whereas the construction of such lasting relationship with major suppliers of funds may be a „defensive line „within the period of crisis, which would allow a better position in the accumulation of funds in the abnormal circumstances of the market.

### *b) The liquidity Back-up*

The liquidity back-up lines refers to funding back-up. Depending on the severity of liquidity problems, a bank can choose – or can be forced to choose – to use one or more funding sources. The plan should be made possible by consistently anchored in reality and so it would know the amount that the bank may rely for funding from these sources and in which scenario. The banks have to be careful not to rely solely on these funding lines like back-up plans, they should have management plans of liquidity crisis and if those lines can't be used and have to know the conditions (in which circumstances and to what purposes can I use these lines for which I pay commission, which will be shot in the abnormal market conditions) that would impair the ability to access them in the short term.

### **Procedures to be followed in case of crisis**

The message received of a potential crisis requires setting up a headquarters for crisis – including people from the Treasury and the coordinator of the Management Committee. The command of the crisis decides operational measures and the order in which the will be taken, the powers of the members of this command are:

- Director-General has the powers of strategic decision both in relation to Treasury direction, and in relationship with Executive Committee and Board of Directors;
- Director is responsible for treasury operations, he is the one who receives information from all branches and departments of the plant, the one who analysis and applies operational decisions taken by crisis command.

In the case of crisis liquidity, there will be taken measures in the following order of priority:

1. use of cash and money from the bank account;
2. resources attracted from banks – limited by the maximum exposure limits of partner banks toward that specific bank;
3. suspension of uncommitted lines of credit, temporary limiting of lending through the usual commercial levers, keeping under control maturities of rates charged by credit, interest, charges and commissions;



4. reduction in foreign exchange position limits at the level of regulations in force;
5. liquidating of the portfolio of government bonds or by operation repo/reverse repo, either by definitive selling;
6. obtaining loans for longer periods from corresponding banks and/or NBR;
7. measures that violate the laws of which sanctions are quantifiable, reducing currency position below the minimum required standards , the use of available RMO (failure to meet RMO standards);
8. expanding social capital, subordinated loans.

After our analysis we have concluded that, liquidity management represents one of the most important tasks of running a bank. Thus, in case of general market crisis due to internal or external political changes, seasonal effects, economic cycles, management would be likely to evaluate the effect of these trends and events on the financing of banks. A healthy financial management can counteract negative changes and accentuate the positive.

Interaction risk with the liquidity and solvency of credit, generally, leads to produce systemic risk, which defines, in fact, „collective nightmare" of financial markets.

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# ANALYSIS MODEL ON THE RELATION BETWEEN MACROECONOMICAL VARIABLE TENDENCIES AND COMERCIAL BANK'S CREDIT RISK

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*The main goal of this study is to apply a macroeconomic credit risk model which links a set of macroeconomic factors and industry-specific corporate sector default rates using Romanian data over the time period from 2002:2 to 2008:2. Using the modeled and estimated industry specific default rates we will simulate with Monte Carlo method a loss distribution of a hypothetical corporate credit portfolio and we will analyze the impact of the different macroeconomic variables on the credit portfolio loss distribution.*

*Keywords: credit risk, industry-specific default rate, credit portfolio loss distribution.*

*JEL Classification: C15, G21, G28.*

## Introduction

The macroeconomic environment has a major impact on the credit risk. In the credit risk models this exposure to the macroeconomic environment can be captured in different ways: in several studies the relation between credit losses and macroeconomic environment<sup>363</sup> is modeled, in other studies the relation between the individual data of debtors and the macroeconomic environment<sup>364</sup> is modeled. In this study we follow the methodology developed by Wilson, T. C. (1997). The studies based on Wilson's methodology modeled the relation between corporate default rate and macroeconomic variables. This model was applied by Boss, M. (2002) in Austria on corporate aggregate data. His results indicate that the industrial production, the inflation rate, the stock exchange index, the nominal short-term interest rate and the oil price are the most important determinants of the corporate default rates. Virolainen, K. (2004) applied the Wilson's model in order to analyze the sector-specific default rate of the nonfinancial companies in Finland. Virolainen used the following macroeconomic variables to determine the default rates: GDP, interest rate and the level of corporate sector indebtedness. Misina, M. et al. (2006) analyzed the effect of the modification of GDP and interest rate on the Canada's bank credit portfolio losses. Valentinyi-Endrész, M. & Vásáry, Z. (2008) applied the model in Hungary. The results suggest that the most significant factors of the credit risk are: the business cycles, the interest rate and the leverage.

Following the methodology developed by Wilson, in this study we will apply a macroeconomic credit risk model<sup>365</sup> which links a set of macroeconomic factors (GDP growth rate, consumer price index, exchange rate on forex market RON/EUR, industry-specific indebtedness rate) and

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<sup>363</sup> For example, in the study of Kaliari, H. & Scheicher, M. (2002), Bikker, J. A. & Metzmakers, P. A. J. (2002), Laeven, L. & Majnoni, G. (2002), Pain, D. (2003), Delgado, J. & Saurina, J. (2004), Marcucci, J. & Qualiariello, M. (2006).

<sup>364</sup> For example, in the study of Hamerle, A. et al. (2004), Chava, S. & Jarrow, R. A. (2004), Jacobson, T. et al. (2005), Carling, K. et al. (2007).

<sup>365</sup> The results of previous research were published in the following studies: Benyovszki, A. & Petru, T. P. (2008), Benyovszki, A. & Trenca, I. (2008).

industry-specific corporate sector default rates (industry, services, construction, agriculture) using Romanian data during the 2002:2 to 2008:2 time period.

### 1. Methodology

As a *first step* we start with the modeling of the average default rate for industry  $i$  by the logistic functional form<sup>366</sup> as:

$$p_{i,t} = \frac{1}{1 + e^{y_{i,t}}} \tag{1}$$

where  $p_{i,t}$  is the default rate in industry  $i$  at time  $t$ ,  $y_{i,t}$  is the industry-specific macroeconomic index, whose parameters will be estimated,  $i, i = \overline{1, m}$  indicates the number of industries.

We adopt Wilson's original formula and model the macroeconomic index in such a way that a higher value for  $y_{i,t}$  implies a better state of the economy with a lower default rate  $p_{i,t}$ . Thus we obtain that:

$$y_{i,t} = \ln \left( \frac{1 - p_{i,t}}{p_{i,t}} \right) \tag{2}$$

The logit transformed default rate is assumed to be determined by a number of exogenous macroeconomic factors, i.e.:

$$y_{i,t} = a_i + x_{j,t} \mu_{i,t} \tag{3}$$

where  $a_i$  is a set of regression coefficients to be estimated for the  $i^{\text{th}}$  industry,  $x_{j,t}$  is a set of explanatory macroeconomic factors in  $t$  period, ( $j = \overline{1, n}$ ) and  $\mu_{i,t}$  is a random error assumed to be independent and identically normally distributed,  $\mu_{i,t} \sim N(0, \sigma^2)$  and  $\mu \sim N(0, \Sigma_\mu)$ , where  $\mu_t$  indicates the array of error terms  $\mu_{i,t}$  and  $\Sigma_\mu$  is its variance-covariance matrix.

The equations (1) and (3) can be seen as a multifactor model for determining industry-specific average default rates. The systemic component is captured by the macroeconomic variables  $x_{j,t}$ , with an industry-specific surprise captured by the error term  $\mu_{i,t}$ .

Follows the *second step*, where we model and estimate the development of the individual macroeconomic time series. We use a set of univariate autoregressive equations of order  $n$ <sup>367</sup>:

$$x_{j,t} = b_j + \varepsilon_{j,t} \tag{4}$$

where  $b_j$  is a set of regression coefficients to be estimated for the  $j^{\text{th}}$  macroeconomic factor  $x_{j,t}$  indicates the value of macroeconomic factor  $j$  in the period  $t$ , and  $\varepsilon_{j,t}$  is a random error assumed to be independent and identically normally distributed in  $t$  period,  $\varepsilon_{j,t} \sim N(0, \sigma^2)$  and  $\varepsilon \sim N(0, \Sigma_\varepsilon)$ , where  $\varepsilon_t$  indicates the array of error terms  $\varepsilon_{j,t}$  and  $\Sigma_\varepsilon$  is its variance-covariance matrix

Equations (2)-(4) together define a system of equations governing the joint evolution of the industry-specific default rates and associated macroeconomic factors with a  $(i+j) \times 1$  vector of error terms,  $E$ , and a  $(i+j) \times (i+j)$  variance-covariance matrix of errors,  $\Sigma$ , defined by:

$$E = \begin{pmatrix} \mu_{i,t} \\ \varepsilon_{j,t} \end{pmatrix} \quad \Sigma = \begin{bmatrix} \Sigma_\mu & 0 \\ 0 & \Sigma_\varepsilon \end{bmatrix}$$

<sup>366</sup> Which is widely used in modeling bankruptcies to ensure that default rate estimates fall in the range (0,1).

<sup>367</sup> In the initial model the macroeconomic variables was modeled by univariate autoregressive process of order 2.

The *final step* is to utilize the parameter estimates and the error terms together with the system of equations to simulate future paths of joint default rates across all industries over some desired time horizon. By assuming that defaults are independent is possible to determine credit loss distribution for portfolios with Monte Carlo method. The simulation over one year time horizon will have the following steps:

- *First*, the Cholesky decomposition of the variance-covariance matrix of the error terms  $\Sigma$  is defined as  $A$ , so that  $\Sigma = A \cdot A'$ .
- *Second*, for each step of the simulation an  $(i+j) \times 1$  vector of standard normal random variables  $Z_{t+s} \sim \mathcal{N}(0,1)$  is drawn. This is transformed into a vector of correlated error terms in the macroeconomic factors and the industry-specific default rates by  $E_{t+s} = A Z_{t+s}$ . Using the simulated realizations of the error terms and some initial values for the macroeconomic factors, the corresponding simulated values for  $x_{j,t+s}$ ,  $y_{i,t+s}$  and  $P_{i,t+s}$  can then be derived using the system of equations (2)-(4). The procedure is iterated until the desired time horizon and the desired number of simulated path of default probabilities is reached.

The simulated path of future default rates can be used to determine loss distributions for hypothetical corporate credit portfolio. The defaults of individual debtors can be considered independent events and assuming further that the recovery rate is fixed, loss distributions can be determined under the assumption of binomially distributed defaults. The loss given default (*LGD*) parameter is assumed to be equal with 0.45 throughout the simulation.

## 2. Data used

In this study we used the quarter-yearly data of the nonfinancial corporate sector defaults by main industries and on macroeconomic factors over the 2002:2 to 2008:2 period. We can obtain default rates for a time period by dividing the number of bankruptcy proceedings instituted by the number of active companies. We analyzed the default data for the following *four main industries* according to the methodology used by the National Institute of Statistics: industry, construction, services<sup>368</sup> and agriculture<sup>369</sup>.

We analyzed the explanatory power of the following *macroeconomic variables*: annual GDP growth rate, the deviation of GDP from trend, the GDP index<sup>370</sup>, consumer price index, the interest rate of credit institutions on loans (real and nominal), the interest rate of credit institutions on time deposits, ROBOR, reference rate, average exchange rate on forex market (RON/EUR), average exchange rate on forex market (RON/USD), annual percentage changes of the industrial output, annual percentage changes of the domestic trade, real sales, current account, employment in economy, registered unemployment total, registered unemployment rate, medium and long term foreign debt, consolidated general government deficit.

In order to quantify the corporate sector indebtedness (*L/GVA*), industry-specific variables have been used, being measured by the volume of loans for an industry divided by the seasonally adjusted gross value added of that industry, all in current prices.

We obtained the quarterly input data from the following sources:

- number of bankruptcy proceedings instituted, the number of active companies – *The National Trade Register Office*

<sup>368</sup> Comprise activity of trade, transports, post and telecommunications, tourism, hotels and restaurants, general government and defense, education, health and social assistance and other services for economic units and for the population.

<sup>369</sup> Comprise activity of agriculture, silviculture and pisciculture.

<sup>370</sup> Volum index.

- the interest rate of credit institutions on loans (real and nominal), the interest rate of credit institutions on time deposits, ROBOR, reference rate, average exchange rate on forex market (RON/EUR), average exchange rate on forex market (RON/USD), annual percentage changes of the industrial output, annual percentage changes of the domestic trade, real sales, current account, employment in economy, registered unemployment total, registered unemployment rate, medium and long term foreign debt, consolidated general government deficit, volume of loans by industries – *National Bank of Romania, Monthly Bulletins, 2002-2008*
- GDP index, GVA by industry, consumer price index – *National Institute of Statistics, Monthly Statistical Bulletin, 2001-2008.*

### 3. The estimation results

The results of univariate test indicate that the most significant explanatory variables are the GDP growth rate, the consumer price index (*CPI*), the average exchange rate on forex market (RON/EUR) (*RON/EUR*) and the industry-specific corporate indebtedness (*L/GVA\_Ind*, *L/GVA\_Serv*, *L/GVA\_Constr*, *L/GVA\_Agr*). *Table 1.* presents the results of the univariate autoregressive estimation of order *n*. The results indicate that the GDP index and the average exchange rate on forex market RON/EUR follow univariate autoregressive process of order 2. The consumer price index, the sector-specific corporate indebtedness rate in industry, services and constructions follow univariate autoregressive process of order 1, but in the case of agriculture only the 4<sup>th</sup> term was statistically significant.

*Table 1. Estimates for AR macro factor models*

|                     | <b>GDP</b> | <b>CPI</b> | <b>RON/EUR</b> | <b>L/GVA<br/>_Ind</b> | <b>L/GVA<br/>_Serv</b> | <b>L/GVA<br/>_Constr</b> | <b>L/GVA<br/>_Agr</b> |
|---------------------|------------|------------|----------------|-----------------------|------------------------|--------------------------|-----------------------|
| Const               | 0.572***   | —          | 0.723*         | —                     | —                      | —                        | —                     |
| AR(1)               | 1.091***   | 0.860***   | 1.259***       | 1.022***              | 1.102***               | 0.997***                 | —                     |
| AR(2)               | -0.628**   | —          | -0.457**       | —                     | —                      | —                        | —                     |
| AR(3)               | —          | —          | —              | —                     | —                      | —                        | —                     |
| AR(4)               | —          | —          | —              | —                     | —                      | —                        | 1.410***              |
| Adj. R <sup>2</sup> | 0.825      | 0.952      | 0.875          | 0.918                 | 0.985                  | 0.976                    | 0.923                 |
| DW                  | 2.190      | 2.139      | 2.029          | 2.210                 | 2.252                  | 2.431                    | 1.520                 |

Note: \*\*\*, \*\* and \* indicate significance level 1%, 5% and 10%

Source: Own calculations in STATA

The adjusted R<sup>2</sup> indicates a good determination of the dependent variable by independent variables in all of the equations. The Durbin-Watson (DW) statistics indicate no significant autocorrelation in the data, with values near 2.

According to empirical studies, the GDP index is positively related with the industry-specific macroeconomic index, meanwhile the consumer price index, exchange rate and the corporate indebtedness is negatively related with it, since a higher value for the macroeconomic index implies a better state of the economy with lower corporate default rates. We estimated the macroeconomic index equations for the four industries as static model with the seemingly unrelated regression (SUR) method in STATA. Our results are presented in *Table 2.*

Table 2. SUR estimates for the static model (sample period 2002:2-2008:2)

|   | YIND      | YSERV     | YCONSTR  | YAGR      |
|---|-----------|-----------|----------|-----------|
| GDP(-1)   | 4.980***  | 7.326***  | 6.634*** | 4.700***  |
| CPI   | -7.083*** | -2.949**  | -3.848*  | -4.837*** |
| RON/EUR (-1)  | -0.405*** |           |          |           |
| L/GVA <sub>i</sub>  | -1.415*** | -1.536*** | -1.232** | -0.093**  |
|   |           |           |          |           |
| R <sup>2</sup>  | 0.9968    | 0.9980    | 0.9957   | 0.9968    |
| $\chi^2$  | 7632.17   | 12160.41  | 5595.14  | 7574.00   |
| P   | 0.0000    | 0.0000    | 0.0000   | 0.0000    |
| Breusch-Pagan test of independence: $\chi^2(6)=109.521$ with p-value p=0.0000 |           |           |          |           |

Note: \*\*\*, \*\* and \* indicate significance level 1%, 5% and 10%

Source: Own calculations in STATA

The factors which influence the macroeconomic index in case of industry are: the GDP index, the consumer price index, the average exchange rate on forex market (RON/EUR) and the corporate indebtedness. In case of other sectors (services, construction and agriculture) the influencing factors are: the GDP index, the consumer price index and the corporate indebtedness. The variables are statistically significant; the signs are in correlation with the economic theory. The values of adjusted R<sup>2</sup> show that the models have good predictive power.

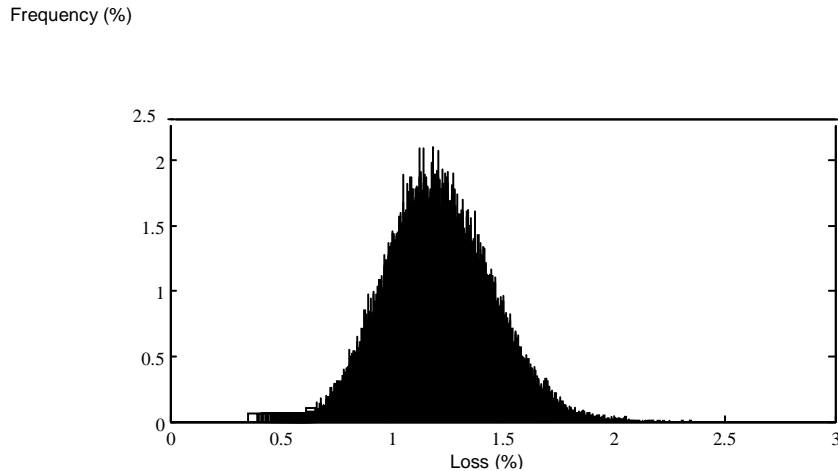
### 3.1. The results of the simulations on the credit portfolio loss distribution

Our analysis is based on a hypothetical credit portfolio consisting of 3,000 corporate loans. Constructing the credit portfolio we took in consideration the loan value distribution by sectors (industry 31.01%, services 53.54%, construction 11.86%, agriculture 3.92%) and the distribution of those companies which had credit applications, by sectors (industry 26.92%, services 62.57%, construction 6.82%, agriculture 3.68%), based on data from National Bank of Romania. The total credit portfolio value is 100 million RON.

The simulation of the credit loss distribution was made in Matlab using the Monte Carlo method. One hundred thousand simulations have been made in similar conditions to determine the credit portfolio loss distribution and its probability. *Figure 1.* presents the simulated loss distribution for the defined credit portfolio over an one-year time horizon.

The quarterly expected loss of the credit portfolio (conditioned to the macroeconomic environment) is 1.23% of total credit exposure on 1 year time horizon. The expected loss is the expected value of the individual losses. The unexpected losses are defined as the differences between the losses pertaining to the 99th and 99.9th percentile and the expected losses. The value of the unexpected loss is 2.15%, respectively 2.30% of total credit exposure.

Figure 1. Simulated loss distribution of the hypothetical corporate credit portfolio in 1 year horizon



Source: Simulations in Matlab (100,000 simulations)

### 3.2. The results of the stress test analysis

Stress test is an important tool in financial institutions' risk management, are used to complement financial institutions' internal model, such value-at-risk (VaR) models. Standard VaR models have been found to be of limited use in measuring financial institutions' exposure to extreme market events, i.e. events that occur too rarely to be captured by statistical models, which are normally based on relatively short periods of historical data (Isaic-Maniu, I., 2006:92).

An artificial shock can be introduced in the vector of error terms for stress testing purposes. The corresponding element in the vector  $Z_{t+s} \sim \mathcal{N}(0, I)$  of random numbers is replaced by the assumed shock. This shock is introduced in the first step of each simulation round and it has its impact to the other macro factors through the variance-covariance matrix.

In stress analysis we assume the following hypothesis:

- the default rate are equal for each loan for each sector
- the credit portfolio is representative of the corporate sector, thus the default rate can be approximated by the generated bankruptcy rate
- in the lack of individual data, the concentration risk of the portfolio is ignored
- the loss given default is set to 45%
- the composition of the loan portfolio does not change over de investigated period.

We analyze the impact of the following stress scenarios on the credit portfolio loss distribution:

1. GDP shock scenarios: the decrease/increase of the GDP index by 2% for four consecutive quarters;
2. consumer price index shock scenarios: the decrease/increase of the consumer price index by 0,5% for four consecutive quarters.

#### 3.1.1. The impact of the GDP shocks

We assumed that for some exogenous reason the consumer price index increases by two percent for four consecutive quarter years. As result of this shock the default rates and the expected and unexpected losses will increase.

Similarly to the above generated simulation we made 100,000 simulations to determine the credit portfolio loss distribution and its probability. Comparing the outcome with the initial results we

can observe some decrease in the expected loss and in the unexpected losses, because the relation between the GDP index and probability of default is indirect. The expected loss of the portfolio decreased from 1.23% to 1.01% of total credit exposure. The unexpected loss (for the 99<sup>th</sup> percentiles) decreased from 2.15% to 1.85% of total credit exposure, meanwhile the unexpected loss for the 99.9<sup>th</sup> percentiles increased from 2.30% to 2.04% of the total credit exposure. The expected losses, due to bad macroeconomic environment, increase to 1.44%, the unexpected losses (for the 99.9<sup>th</sup> percentiles) increased to 2.60%.

### **3.1.2. The impact of consumer price index shocks**

The results of the consumer price index shock scenarios indicate that the expected and the unexpected loss decreases as result of the consumer price index decrease, to 1.06%, respective to 2.22% (for the 99<sup>th</sup> percentiles).

On the other hand, the increase of the consumer price index by 0,5% for four consecutive quarters causes the increase of the expected loss (to 1.43%) and of the unexpected loss (for 99.9<sup>th</sup> percentiles, to 2.52%).

## **Conclusions**

We have modeled and estimated a macroeconomic credit risk model for the Romanian corporate sector. The modeled and estimated industry-specific default rates let us obtain more accurate credit loss estimations than those obtained with more aggregated models.

The empirical results suggest a significant relationship between industry-specific default rates and macroeconomic factors including GDP growth rate, consumer price index, average exchange rate on forex market (RON/EUR) and industry-specific indebtedness. These results are in line with previous studies. We use the model to analyze the impact of stress scenario on the credit risk of a hypothetical corporate credit portfolio.

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## INVESTOR SENTIMENT IN THE STOCK MARKET

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*The main thesis of this paper represents the importance and the effects that human behavior has over capital markets. It is important to see the link between the asset valuation and investor sentiment that motivate to pay for an asset a certain prices over/below the intrinsic value. In the first paper I briefly presented a comparison between behavioral finance and academic finance based on the Efficient Market Hypothesis. The main behavioral aspects discussed are: emotional factors such as: fear of regret, overconfidence, perseverance, loss aversion, heuristic biases, misinformation and thinking errors, group coalitions and their consequences and the limits to arbitrage as another main pillar of the Behavioral Finance. In the second part of the paper I presented the effects of the Romanian investors' sentiment over the local capital market for the last few years.*

**Keywords:** Behavioral finance, Investor sentiment, “Random walk” pattern, Behavioral biases, Arbitrage, Abnormal return, Asset valuation

**JEL Classification:** G12, G14, G17, D81

During the last decades, the world equity markets have shown important volatility and made a lot of finance researcher to study the behavior of the markets. In some cases, conventional economics and academic finance have failed to explain how asset valuations by the market had been made.

Behavioral finance is a new area of financial research that studies the psychological factors and behavioral biases that affect investors and investment decisions. It tries to explain the market anomalies that cannot be explained by the academic quantitative finance. Behavioral finance is considered to be a broader social science, related to psychology and sociology. In most cases, behavioral finance contradicts the academic finance and the efficient markets theory. Over the last 20 years, the researchers have tried to explain scientifically that investors act irrationally or do not disseminate all the information that is available in their decision making procession.

Academic finance, the conventional part of the finance literature, is built on the arbitrage principles of Miller & Modigliani, the portfolio construction of Harry Markowitz, CAPM theory of Lintner and Sharpe, Black-Scholes, and Merton theories.

The origin of the Efficient Market Hypothesis (EMH) is attributed to Eugene Fama, because of his paper “Random Walks in Stock Market Prices”. In his study, consisting of serial correlations between daily prices of 30 stocks compounding the Dow Jones Industrial Average, concluded that the stock markets would function in a way that all the information were incorporated in the prices, similar to the perfect competitive market. “In an efficient market, on the average, competition will cause the full effects of new information on intrinsic values to be reflected “instantaneously” in actual prices. According to EMH, all the assets are well priced and the abnormal return cannot be reached by looking for miss priced assets. But the “random walk” pattern of the stocks violates the Efficient Market Hypothesis, and market anomalies are the one that lead to abnormal returns (semi-strong form of EMH):

*Price Earnings Ratio (PER) effects:* there might be some stocks with the same return, but one of them with lower PER. Lower PER means higher risk, at least by the perception of the market participants, but anyhow, why buying something more expensive with equal return?

*Book Value to Market Ratios effects:* companies with high Book Value to Market Ratios are expected to outperform comparing to stocks trading with lower ratios

*Earning Announcements:* stocks prices may decline or rise depending of the expected versus actual results.

*Small Caps Effect:* small companies tend to outperform larger companies because they are more robust and have a better relative potential of growth.

*Liquidity Effect:* Small Caps have a reduced free-float and institutional investors tend to neglect them due to their illiquidity. Illiquidity makes them appear riskier because of their larger bid/ask spreads and investors expect a higher risk-return compensation.

Practically, behavioral finance studies mainly two aspects: cognitive psychology and the limits of arbitrage:

Psychologists discovered many patterns, *cognitive biases* regarding people behave:

- *Overconfidence:* despite that most of the investors do not have a solid knowledge regarding investments; they are very confident in their abilities. It is well known that investors tend to allocate less time in analyzing companies in order to buy stocks in a certain amount of money than analyzing home appliances, cars or other things in a quarter percent of that amount.

- *Loss aversion:* people feel pain of loss twice as much as they derive pleasures from an equal gain.

- *Perseverance and Conservatism:* investors tend to persist in a certain strategy even if it tends to be a losing one. The hesitation to act firmly after new information arrived, leads to momentum gaps between the reactions to the news.

- *Fear and regret to act:* investors tend to hold positions too long in hope that will recuperate losses. Averaging down is not always a good solution, especially not in a bearish market.

- *Crowd effect:* investors are very influenced by others or by persuasive news and analysis. They don't always check the real facts.

### ***Misinformation and Errors***

- *Biased information, wishful thinking:* the personal objective analysis are distortion because of the personal biases

- *Representativeness:* investors tend to believe and extrapolate the results based on limited assumptions, observations, or too recent period of observation that can not grant a enough trust.

- *Mental accounting:* thinking about an asset as a singular investment and not as a part of an portfolio in terms of driving performance.

- *Forecasting errors:* it is quite usual that on tops many people to see that stocks prices may never fall and on the bottoms that the stock market may never recorded. The same thing could be seen with the oil prices: when oil was near 150\$/ Barrel many researchers and analysts predicted that there will be shortages of oil and the price will rise even more than 250\$/ Barrel in the near future term. But it went less than 50\$ in less than 12 months after those "predictions". When was reaching less than 40\$, many analysts forecasted that it could go even lower the price because of the world recession and the dumping global demand for oil – they were targeting the oil barrel price somewhere less than 25\$/barrel. Of course, that it did not happen that and the reversal to 50\$/ Barrel has begun.

### **Limits to arbitrage**

Why some of the stocks are more speculative than others and why arbitrageurs don't take in consideration the advantage of miss pricing stocks and arbitraging them until their prices reaches intrinsic values? The answer might depend by the market conditions. If we are living tremendous and long turbulences, the miss pricing could get even worse and therefore present a higher risk to arbitraging. The influence of the market biases could be larger than the force of arbitrageurs, and it is also possible to misinterpret and miscalculate the real intrinsic value. After all past results does not guarantee future success. Financial models might be inaccurate and short selling could

be sometimes very risky and costly for certain stocks. Arbitrage it is sometimes too risky and many institutional investors are not permitted to sell short.

The greatest critique of behavioral finance is that it is not considered an actual science, like the quantitative finance. It is too general. It is not possible to calculate and quantify exactly behavioral factors neither for one person nor for a crowd. It is important for professional money managers, academics and other investors to spend time learning about the investors psychology because understanding better the investors and the market sentiment, the price momentum and price reversals can be better found and this way allows creating wealth for themselves and for their clients.

### **Measuring Investor Sentiment**

*Investor Surveys* : among investors to see the changes in their confidence

*Retail investor trades / new accounts opened* : the retail investors are usually individual investors without too much experience and access to professional information and disclosure. They usually entered the markets based on the crowd effect, on top formatting asset bubbles.

*Sentiment Proxies and Correlation with others stock exchanges*: for the last two years has been recorded a pavlovian style of trading in the Romanian stock market, after global exchanges. Intraday and eventually minute differences between the main global stock exchange indices: FTSE100, DJIA, S&P500, DAX.

*Mutual fund flows*: the appetite for risk may be seen when they inflows are larger for equity funds and lower when outflows migrate to bonds, less risky assets or even cash.

*IPO First Day Returns*: After the Transgaz listing to Bucharest Stock Exchange, all the IPO's First Day Return were severely negative (Casa de Bucovina, Stk Emergent), the first day prices falling more than half their asking price.

*Dividend Premium* : the companies offering important dividends are considered to be more predictable and more stable.

*Trading volume, and Option implied volatility*: When the prices of stocks record a greater volatility, the options prices' volatility rises. Since its introduction in 1993, VIX has been considered by many to be the world's premier barometer of investor sentiment and market volatility.

### **The effects of the crisis on the Romanian Capital Market and on the Romanian Investor's sentiment**

The today's world is facing one of the most severe global recession determined by a deep financial crisis. The current crisis began in August 2007, when Federal Reserve's concern replaced inflation with financial stability.

The root causes of the current financial crisis are both macro and micro economic level: mismatches between assets and liabilities (held by financial institutions or by the non financial sector), currency mismatches, excessive leverage, adverse market conditions or insufficient assets to cover liabilities, fraudulent management activities, conflicts and interests of credit rating agencies, shadow financial systems, credit default swaps and other complex or misunderstood derivatives, greed and fear.

During the last decade, large amounts of capital flew into the emerging financial markets. The exchange rates tended to appreciate, asset prices and commodities bubbled and the wages rose rapidly. On the other hand, when the optimistic investors' sentiment got worse, the flows reversed or even suddenly stopped, and the asset prices gave back their gains, forcing hard landing adjustments and the economy and on local financial markets.

### **Domestic Causes**

Some possible causes for the collapse of the stocks prices listed on BSE and the loss of investors trust might be:

Structural problems of the Romanian stock market and structural problems of the Romanian economy (chronic deficits and lax, evasive, confusing regulation)

Lack of institutional reform for BSE / Sibex and for the market participants in general

Interference of politics with economics in the stock market

Excessive regulation for intermediaries (so they cannot protest or take initiatives in order to reform the market) and very lax and ambiguous regulation if not inexistent regarding some aspects for the issuers listed to BSE

The unwillingness of the brokers to merge BSE with a regional modern stock exchange, to have a common regional trading platform.

All above reasons presented above were stringent and were necessary to correct them also when the markets were in good shape, but probably then, the local participants greed, the limited financial education among investors and the abundant funds oriented to emerging markets and under valuated listed companies, made possible to seem those structural and strategic problems of the Romanian capital market, less important. On the contrary, because of the greed and because “it was possible”, the stocks prices rose very much due to an irrational exuberance. During 2003-2007 the main indices recorded double and triple digits gains year by year. During 2006-2007 companies listed on Rasdaq recorded three and four and some even five digits gains. Some of them conquered in global tops of gains.

2008 was far the most difficult year for the Romanian Capital Market since last two decades. The main indexes BET, BET-C and BET-Fi lost more than 70% of its value in 2008. Practically, the final part of the year 2008, the investors have lost all the profits since 2007, 2006 and most of 2005.

According to SSIF Intercapital SA, the most dramatic return from price, variation, dividends and share capital in EUR, at the end of 2008, were the following issuers: SSIF Broker Cluj (-95.7%), Compa Sibiu (-94.78%), Impact Developer & Contractor (-94.31%), Flamingo International (-92.12%), Electroputere Craiova (-91..51%), Dafora Medias (-90.63%) Turbomecanica (-90.22%), and the list may continue. The evolution of the prices on BSE was totally unusual. It is largely accepted that the evolution of a company is directly influenced by the economic sector that it activates. Usually, in recessions, the defensive companies are the utilities company (energetic, utilities, food and beverages, health).

| Indexes | 21.12.2007 | 23.12.2008 | Max 2007 | Min 2009 | Evolution 2008 | Evolution Max 2007 – Feb 09 |
|---------|------------|------------|----------|----------|----------------|-----------------------------|
| BET     | 9827       | 2901       | 10813    | 1887     | -70,4%         | -82,54%                     |
| BET-C   | 6665       | 1997       | 7432     | 1231     | -70,04%        | -83,43%                     |
| BET-FI  | 78669      | 12549      | 95111    | 7861     | -84,05%        | -91,74%                     |

**Table 1 The evolution of the main BSE indexes during 2007-2009.**

Source: Bucharest Stock Exchange website

Because of the illogic evolution and non-fundamental situation (according to the financial statements of the moment), the investors effectively have lost any rationality and confidence in the issuers and in the markets. In October 2008 there were companies with the cash/capitalization ratio well above 1 (listed on Rasdaq mostly) and some cases that cash covered almost all the capitalization (Impact Bucuresti, Zentiva , Prodplast, Armas Gaz, Transelectrica). Practically, Transelectrica (-74.39% in 2008) and Transgaz (-57.05% in 2008), because of their strategic and

national importance, simply cannot fail, but their prices crashed. The panic surrounded all the market and investors could not think and act logic.

Practically, he would have lost almost the same (in term of percents) if he had bought Sifs in 23.07.2007 (Betfi 93710 – loss up to date of 87%) comparing to 12.05.2008 (more than 75%). The losses are dramatically for the same investments. That is why the panic surrounded investors. They say that no matter what they buy, they will have losses. The fundamental long term values had nothing to do with the spot prices. The trust had been lost and the investors watched very carefully the evolution of the global markets. Some investors even made jokes about the pavlovian style of trading stocks on Bucharest Stock Exchange. Practically, the intraday evolution of the main stocks (Sifs, BRD) and especially futures contracts DESIF listed on Sibex (Sibiu Monetary and Financial and Commodities Exchange) followed in majority of the cases, the intraday evolution of FTSE100, DAX, CAC40 and electronic CFD/futures based on DJIA / S&P500 indices. After a year and a half of dramatically losses, very few investors had trust to buy and hold for a long period of time, because of the sound fundamentals. Many of them preferred to speculate intraday or swing transactions trying to anticipate the short term evolution of regional and global financial markets.

It is very interesting the perception of investors, how can the sentiment of investors be changed so drastically. In 2006 and 2007 it was something very normal to buy stocks with Price / Book Value more than 3, Price Earning Ratios more than 20, 25 even 40 in construction field companies. It was considered that economy would boost and the “today” PER of 30 will be the PER of 5 after one year. The economy and the companies will grow forever, due to the emerging economy and the potential that Romania has, the gap that we have to fill in order to complete the process of “catching up” the rest of the Europe. We had companies bought even with last 4Q’s PER in 2007 of almost 100 (Dafora Medias). It was considered a star.

Today, the perception is totally opposite, we have many companies listed on Rasdaq with yield dividend (of course not very liquid stocks) more than 15%,-20%, capitalization less than the liquid assets and PER less than 3. They are considered “very risky” because of the “great potential” of default. Some of them have net assets double or even triple their capitalization but investors are still afraid to buy them because they don’t trust the financial statements and they don’t believe that the historical profits earned in 2007 will be repeated for the next 5 years.

It is considered much safer speculating the rebounds based on the evolution of the foreign main indices. This might be also a consequence for the lack of the financial education among investors for the last decade. They were used to win no matter what with “buy and hold” strategy, they bought everything during 2002-2007 no matter the price paid related to the intrinsic value, because the majority of the stock climbed and now they don’t buy anything because they all crash, no matter what the price might be. For instance, Sif Oltenia’s capitalization at 25.02.2009 was 197.256.343 RON. Only the package owned at BRD valued more than 130 million RON (aprox 5%). Sif Oltenia owns also 6% of BCR and 3.48% of Bancpost. The packaged owned at BCR must be at least valuable as it is the package at BRD (6% not 5% and the value of BCR should be greater than BRD). And we have not taken yet another hundreds of small participations to other companies listed on Rasdaq and other not listed companies or the deposits opened to several Romanian banks. Practically, Sif Oltenia’s capitalization is hilarious, but investors still did not regain trust in investments.

As the investors exaggerated upside during 2000-2007 buying stocks at any price, because their prices will always rise, now they are exaggerating downside, in the meaning that no matter what you buy, you will lose, all the companies might default. Practically, the actual prices and capitalization include a global collapse of the real economy. It is known that the stock exchange anticipates. If the BSE anticipated 18 month ago the problems of the Romanian economy, probably BSE will anticipate the economy recovery at least 12 months before, so how much

stock prices may fall? As a joke, will we have to bring more money from home, because the prices will be negative? Will we have to pay the buyers only to get rid of the stocks?

When written in Chinese, the word crisis is composed of two characters. One represents danger and the other one represents opportunity. I do believe that if we are more responsible we can win tremendous from this crisis. It is almost a once or twice life opportunity. No crisis has last forever. In these times of crisis, investments can be very profitable. It is a bargain period and bargain hunting should gain importance. Probably is not yet to right moment for bargain hunting, but the moment definitely will be one day, and depends only by us whether we will choose it right or not. “*Be Fearful When Others Are Greedy and Greedy When Others Are Fearful*” - Warren Buffett.

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## PORTFOLIO RISK AND RETURN

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*In this paper we will briefly present the main concepts and an application regarding the Portfolio Risk and Return. In the first part of the paper we will present some general theoretical concepts referring the theme, and in the second part, we presented an approach of a Portfolio Risk and Return, consisting of two assets, together with a practical application.*

**Keywords:** *Portfolio, Optimal Portfolio, Portfolio Risk and Return, Efficient Frontier*

**JEL Classification:** *G11, C61*

### **Main concepts**

A portfolio can be defined as an collection of investments owned by an individual or by an organization, which through the process of diversification, the risk may be reduced.

The optimal portfolio represents the portfolio with the smallest level of risk registered for a certain return. The portfolio risk is compounded by two main risks: systematic risk (cannot be avoided through the process of diversification) and the specific risk (it can be reduced through the process of diversification).

The systematic risk depends on various external factors, macroeconomic influences: average market interest rates, inflation rate, foreign exchange, political and social factors, economic cycle (recession or boom). The variability of the macroeconomic factors have an important influence over all portfolio return. The specific risks (may be reduced by diversification) depends by the nature of the issuer. For individual stocks, depends by the profitability of the company, debts ratio, market share, management staff, economic cycle of the sector/industry that the company activates, different current news or rumors regarding the company, etc.

The relation between the risk and return for individual assets, the global return of the portfolio comparing to the average return of the market, has been studied by numerous financial theorists, developing quantitative financial models. William Sharpe has developed a model referring to the correlation between the individual return of every portfolio asset ( $R_i$ ) and the global return of the market ( $R_p$ )

$R_i \sim R_p$  and

$$R_i = \alpha_i + \beta_i R_p + \varepsilon_i \text{ (Regression line)} \quad (1)$$

where:  $\alpha_i; \beta_i; \varepsilon_i$  = parameters

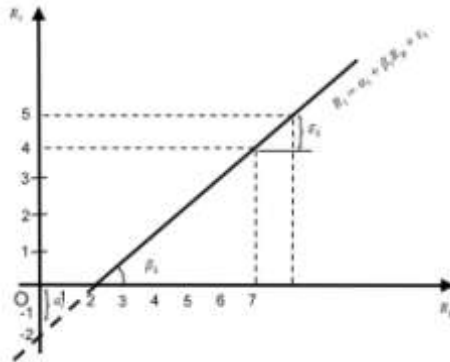
$$\beta_i = \text{regression coefficient (volatility)} \quad (2)$$

$\varepsilon_i$  = specific parameter for the asset  $i$ : (measures the individual risk)



Observation

The regression line is graphically presented below:



**Fig.1 The regression line**  
(Linear model of the Portfolio Return)

**2. Portfolio Risk and Return, consisting of two assets** (particular case for n=2)

$I$  = Investor

P = Portfolio consisting of two assets,  $t_1$  and  $t_2$ , in amounts of  $x_1$  and  $x_2$ ; then

1) The Investor  $I$ , constitutes its portfolio P, using the assets,  $t_1$  and  $t_2$

The capital invested (available funds) in  $t_1$  and  $t_2$  will be: (3)

$x_1 + x_2 = 1$ ; with the following conditions  $x_1 \geq 0$ ,  $x_2 \geq 0$  and  $0 \leq x_1 \leq 1$ ,  $0 \leq x_2 \leq 1$

The investor's behavior regarding the assets in the near future, is given by the following elements:

$$t_1: \begin{cases} E_1 \\ \sigma_1 \end{cases}; \quad t_2: \begin{cases} E_2 \\ \sigma_2 \end{cases}; \quad \text{si } cov_{12} = \rho_{12} \sigma_1 \sigma_2 \quad (4)$$

where:  $E_1 = E_1(t_1)$  - average values expected

$E^2 = E^2(t^2)$  - (or equivalent: mathematical expectation with the return on investment rate for the assets  $t_1$  and  $t_2$ )

$$\sigma_1 = \sqrt{\sigma_1^2}$$

$$\sigma_2 = \sqrt{\sigma_2^2} \text{ standard deviation for the assets } t_1 \text{ and } t_2$$

$$cov_{12} = \rho_{12} \sigma_1 \sigma_2 \text{ - co variation between the return of the assets } t_1 \text{ and } t_2$$

$$\rho_{12} \text{ - Correlation coefficient between the return rates of the assets } t_1 \text{ and } t_2.$$

(5)

2) The mathematical expectancy of the return rate for the P Portfolio, can be written as:

$$E(R_p) = \sum_{k=1}^2 x_k E(R_k) = x_1 E_1 + x_2 E_2 \quad (6)$$

3) The dispersion in the rate of return for the P Portfolio is :

$$\sigma_p^2 = \sum_{k=1}^2 \sum_{j=1}^2 x_k x_j \sigma_{kj} = \sum_{k=1}^2 x_k (\sum_{j=1}^2 x_j \sigma_{kj}) = x_1^2 \sigma_1^2 + x_2^2 \sigma_2^2 + 2x_1 x_2 cov_{12} \quad (7)$$

Observation:

O<sub>1</sub>) Taking in consideration the values of the correlation coefficient  $\rho_{12}$  for the assets  $t_1$  and  $t_2$ , we have the following situations:

1<sup>st</sup> Case: If  $\rho_{12} = 1$ , the assets  $t_1$  and  $t_2$  are perfect and positive correlated, and can be written using the relation :  $\sigma_p^2 = x_1^2\sigma_1^2 + x_2^2\sigma_2^2 + 2x_1x_2\sigma_1\sigma_2 = (x_1\sigma_1 + x_2\sigma_2)^2$  (8)

So  $\sigma_p = x_1\sigma_1 + x_2\sigma_2$  (standard deviation) (9)

O<sub>2</sub>) Taking in consideration that  $x_1 + x_2 = 1$ , and  $E_p = x_1E_1 + x_2E_2$ , we will obtain the following expression for the mathematical expectation of the Return Rate of Portfolio P:

$$E_p = x_1E_1 + (1 - x_1)E_2 \quad (10)$$

From the last relation (10), we obtain:

$$x_1 = \frac{E_p - E_2}{E_1 - E_2}; \quad \text{cond : } E_1 - E_2 \neq 0 \quad (11)$$

From: (10)→(11), we obtain the expression of the  $\sigma_p$ :

$$\sigma_p = E_p \left( \frac{\sigma_1 - \sigma_2}{E_1 - E_2} \right) + \frac{E_1\sigma_2 - E_2\sigma_1}{E_1 - E_2} \quad (\text{standard deviation for the case scenario of } \rho_{12} = 1) \quad (12)$$

O<sub>3</sub>) The same way we may treat the other cases :

2<sup>ND</sup> Case :  $\rho_{12} = -1 < 0$ , and :

3<sup>rd</sup> Case:  $\rho_{12} = 0$ .

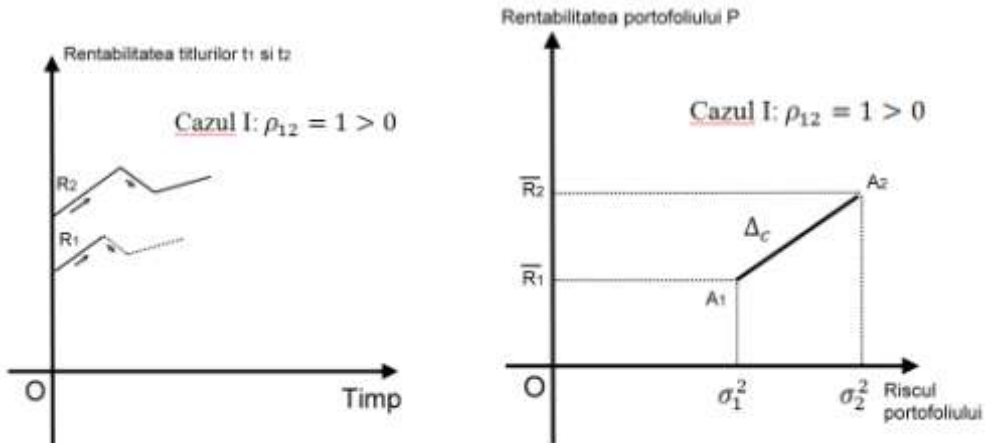
#### 4) Conclusions

Taking in consideration the correlation coefficient :  $\rho_{ij}$  (for the general case) or  $\rho_{12}$  (for the particular case of : n=2), between the return of the assets:  $t_1$  and  $t_2$ , we may find 3 (three) types of extreme positive correlation ( $\rho_{12} = 1 > 0$ ); zero ( $\rho_{12} = 0$ ) and negative ( $\rho_{12} = -1 < 0$ ).

Briefly, the three types of the correlation may be defined as:

**1<sup>st</sup> Case : Strictly Positive Correlation** ( $\rho_{12} = 1 > 0$ )

1. In case of increasing / decreasing the return of the asset  $t_1$ , there will be an increase / decreasing proportionally for the asset  $t_2$



Graph no. 2 **Strictly positive correlation:**  $\rho_{12} = 1 > 0$       Graph no. 3 **Correlation line**  $\Delta_c$

2. The Portfolio's Risk consisting of the two assets  $t_1$  and  $t_2$ , in this case will be higher, so, on the correlation line, the Return-Risk line, (represented in the Graph no.3, on the line  $A_1A_2$ ), will be the most performing assets

**2<sup>nd</sup> Case: Zero Correlation:**  $\rho_{12} = 0 \Rightarrow \sigma_p^2 = x_1^2\sigma_1^2 + x_2^2\sigma_2^2$  (13)

In order to diminish the risk of the Portfolio P, consisting of two independent assets  $t_1$  and  $t_2$ , there will be an optimal (efficient) combination between the  $t_1$  and  $t_2$  components, that will get to the Portfolio of assets with minimum absolute variance, as may be seen in the Graph 4, below:

**3<sup>rd</sup> Case: Strictly Negative Correlation:**  $\rho_{12} = -1 < 0$

1. In this case:  $\rho_{12} = -1 < 0$ , the correlation coefficient  $\rho_{12}$  it is equal with the inferior limit and
2. The rising (decreasing) of the first asset  $t_1$  determines a decreasing (increasing) of the second asset  $t_2$  (we are referring to the return of the investments)

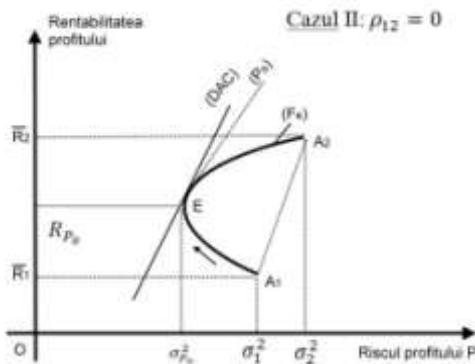


Fig. 4 **Zero Correlation** (for two independent assets)  
Portfolio of assets with minimum absolute variance: (PMAV)

3. The Portfolio's (P) Risk, in this case scenario, is the smallest, because of an efficient combination of the two titles. This could allow even risk free conditions for the Portfolio mentioned above.

(to be seen : Point M that belongs to the "axis" of the Return (Profitability of P – Graph no. 6)

In this case, the Portfolio's Risk, becomes:

$$\sigma_p^2 = x_1^2\sigma_1^2 + x_2^2\sigma_2^2 - 2x_1x_2\sigma_1\sigma_2 = (x_1\sigma_1 - x_2\sigma_2)^2 \quad (14)$$

$$\text{And } \sigma_p = \pm(x_1\sigma_1 - x_2\sigma_2) \quad (15)$$

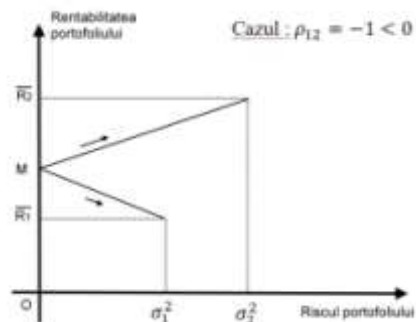
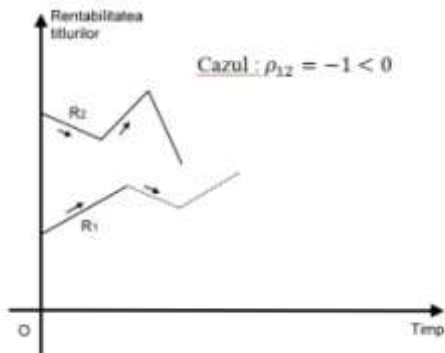


Fig. 5: **Strictly Negative Correlation** :  $\rho_{12} = -1 < 0$

Fig. 6: **Minimum risk**, for the two assets mentioned

### 3. Application

For the given “P” Portfolio consisting of the certain assets “i” and “j”, let’s presume that: the returns of the asset given “I”, corresponding to all the four trimesters of 2008 are:

$$R_{i1} = 2; \quad R_{i2} = 4; \quad R_{i3} = 3 \text{ and } R_{i4} = 1$$

a) Calculate the parameters of the return distribution for the “I” title, and

$$\bar{R} = ? \text{ (Average return)}$$

$$\sigma_i^2 = ? \text{ (Return dispersion)}$$

$$\sigma_i = ? \text{ (Standard deviation)}$$

b) The near future return expected? (its interval)

#### Answers:

We know from the hypothesis that:

$R_{i1} = 2; \quad R_{i2} = 4; \quad R_{i3} = 3 \text{ and } R_{i4} = 1$  (return on the asset for the asset „i”) than, according to the theory exposed above, we will have:

$$\bar{R} = \frac{R_{i1} + R_{i2} + R_{i3} + R_{i4}}{4} = \frac{2 + 4 + 3 + 1}{4} = \frac{10}{4} = 2,5$$

$$\text{So: } \bar{R} = 2,5\% \text{ (average return (operated))} \quad (16)$$

The dispersion return for the asset „i” may be solved with the formula:

$$\sigma_i^2 = \sum_{k=1}^4 \frac{1}{T-1} (R_{ik} - \bar{R})^2 \Leftrightarrow \sigma_i^2 = \frac{(R_{i1}-\bar{R})^2 + (R_{i2}-\bar{R})^2 + (R_{i3}-\bar{R})^2 + (R_{i4}-\bar{R})^2}{4-1} =$$
$$= \frac{(2 - 2,5)^2 + (4 - 2,5)^2 + (3 - 2,5)^2 + (1 - 2,5)^2}{3} = \frac{5}{3} = 1,666 \dots \cong 1,667$$

$$\text{So: } \sigma_i^2 = 1,667 \text{ (dispersion)} \quad (17)$$

Having the result for the dispersion return of the asset “I”, the standard deviation will be:

$$\sigma_i = \sqrt{1,667} \cong 1,291 \quad (\text{standard deviation}) \quad (18)$$

Knowing the values of  $\bar{R}$  and  $\sigma_i$ , results that:

The return of the asset „i” in the near future is expected to be between  $2,5\% \pm 1,291\%$  or equivalent to (1,209; 3,791) (19)

Conclusion:  $\bar{R} = 2,5\%$  (average return )

$$\sigma_i^2 = 1,667 \text{ (dispersion of the return to asset “i”)}$$

$$\sigma_i = 1,291 \text{ (standard deviation)} \quad (20)$$

The return of the asset expected in the near future ( $2,5\% \pm 1,291\%$ ) q.e.d.

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# RISK MANAGEMENT STRATEGIES FOR A BONDS PORTFOLIO

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*On the international capital markets there have been stated numerous strategies which have as main objective, in the process of selection and management of financial instruments such as bonds, to minimize the impact of the interest rate fluctuation risk on the performance of this type of portfolio. The performance level of the managers of investment funds, with a portfolio structured primarily on fixed-income instruments (treasury bonds, corporate bonds, possibly preferred shares), is a direct consequence of the ability to use proper strategies.*

*In this paper I intend to present some of the techniques of risk management for a bond portfolio and to illustrate a model of risk protection through immunization technique, applied to the bond portfolio of SIF Banat-Crișana.*

*Keywords: credit risk, immunization, dedication, financial derivatives.*

*JEL Clasification: G11: Portfolio Choice, Investment decisions*

## **I. Introduction**

The exposure to credit risk arises from the acquisition of corporate, bank and municipal bonds.

The credit risk is associated with the treasury certificates and bonds issuers' ability to pay the interest and principal and can be controlled by selecting those companies with high financial performances, which provide security of interest and principal payments.

The implementation of evaluation techniques and of risk analysis in the portfolio manager's selection and management process is of great importance. The specific risk of investments in fixed-income financial instruments is given by the interest rate variability.

The mostly used components of the risk management on the developed bond markets are: **immunization, dedication** and the use of **financial derivatives**.

## **II. Bond portfolio immunization**

The immunization strategy is based on the selection process of financial instruments having the same sensitivity to changing interest rates as the investment fund's payment obligations. This criterion allows the same method of adjustment to be used on assets and liabilities. The updated flow of assets is sized so to cover at any moment the flow of liabilities, given the amounts and maturities.

The immunization strategy is riskier than the dedication strategy because is influenced by the precision in estimating the assets' sensitivity to interest rate shifts. If we take into account that it is a predictions and estimates based technique, immunization can be considered an active portfolio management strategy. By implementing the market tracking strategy, the structure of an immunized bond portfolio will undergo periodic adjustments through replacements determined by the higher periodic rentability of certain financial instruments. It is known that active strategy portfolio managers have low risk aversion and will accept the risk of not covering the liability flows.

Aiming to better yields from the managed portfolios, they can also select variable income financial instruments, such as shares and their derivatives, instruments that are not recommended in immunization as they imply a higher risk than bonds and bank deposits.

The determinant factor in taking this decision is the balance between assets and liabilities. In the case of an active strategy, with frequent asset structure adjustments by including variable income,

high volatility financial instruments, the increased level of liabilities will generate a higher exposure to the risk of debt nonpayment.

A strategy similar to the immunization strategy is dedication, by connecting inputs to outputs, without sensitivity correlation.

### **III. Bond portfolio dedication**

The structure of a fixed-income, zero-risk financial instruments portfolio, such as treasury notes and treasury bonds, is an example of a dedicated portfolio, with minimal risk and yield. The dedication strategy is based on the adjustment of inputs to the outputs of financial flows (exact matching).

The starting point of this strategy implementation consist in selecting the eligible bonds for this purpose. The bonds with high bankruptcy risk or those with advance repayments option will be rejected because the real cash flow can differ considerably from the forecasted cash flow. The intial portfolio acquisition cost can be minimized using the linear programming technique.

While immunization is an active portfolio management strategy, dedication is a passive strategy. As long as the asset flow matches the liabilities flow, there will be no additional interventions (bonds *shall* not be sold in order to meet the nedd of funds), even if financial instruments' yields change. Interest rate shifts do not affect the balance, even if the market could provide rewarding alternatives for secutiries selection.

Assuming that managers seek am additional increase of the portfolio performance, they can still take decisions regarding the active management, disconsidering the original premises of balancing the two categories of flows. For example, they can include predictable flows assets in the portfolio, with higher yields than treasury bonds, such as corporate bonds or preffered stocks of certain issuers. The risk associated with this portfolio is higher because of the coupon or dividend nonpayment risk implied by the corporations compared to the state.

### **IV. Using financial derivatives**

The derivatives are frequently used on international bond markets, where the main actors are the governments, the major companies treasurers, corporations, pension funds and individuals. The main types of derivatives are futures, forwards, options and swaps. They are also called *random receivables* because of their random regulation at settlement, depending on the underlying asset price.

The goals of the users of financial derivatives consist of:

- financing diversification;
- decrease of the international financing cost;
- reduce the price risk;
- availability of favourable exchange rates on international markets;
- diversification of risk management techniques.

By implementing the hedging strategy for a loan, the exposure to interest rate shifts is offset by an opposite exposure to the existing one. The hedging limits not only the risk, but also the opportunity of additional profit in favourable market circumstances. Speculators are willing to undertake the risk (the opposite of hedgers) expecting to gain some profit from price differences. Individuals and companies may also look for arbitrage opportunities, looking for profits deriving from price differences between markets.

Returning to the protection of a bond portfolio of an investment fund, the futures on bonds can be used as means of interest rate risk management, without altering the portfolio structure. If the interest rate decreases, the bond price increases. The risk analysis for bonds is based on the following indicators: maturity, length, adjusted length, base point value and convexity. The process of interest rate risk management implies the calculation of these indicators.

High liquidity in international financial markets<sup>371</sup> has provided the conditions for a professional management of bond portfolios and stimulated the innovative ability for new financial products. On these market there are often used both types of strategies (active and passive). The approach depends on the performance level requested and on investors' risk tolerance. The changes occurred in financial instruments prices are reduced as amplitude, considering the high rate of price predictability. The technical analysis of prices provides reliable and feasible data for identifying the entry-exit points for the financial instrument.

The Romanian capital market is an emergent market, with a reduced informational efficiency and highly volatile. The options of the portfolio manager are constrained by the reduced number of available financial products and the market liquidity<sup>372</sup>. The price variations are more extensive and the technical and financial analysis tools are unefficient.

Obviously, compared to developed financial market, the Romanian capital market provides higher opportunities for profit or loss.

## **V. Case study: Immunization model applied to SIF Banat-Crișana's bond portfolio**

**Analysis date:** 3rd quarter, 2008

We considered the immunization model of SIF Banat-Crișana's bond portfolio.

### **Problem data:**

A portfolio manager intends to regroup in a portfolio six (6) bonds issued by: BCR, EIB, EFG Hellas, EBS, Procredit, Primăria Timișoara, having different features.

The main goal is to minimize the loss of portfolio value risk as a result of interest rate shifts and to ensure the necessary funds for certain future payments in the conditions of fluctuating interest rates.

The portfolio is considered immunized for a given period of time if its value at the end of this period in fluctuating interest rate conditions is equal to the portfolio value in constant interest rate scenario.

The problem consists in identifying an optimal portfolio structure, indicating each bond weight, in order to achieve the goal.

The necessary condition is that **the average length of the bond portfolio to be equal to the investment horizon**, expressed in years.

The other constraints of the model concern positive values for weights, and the sum of the weights must be 100%.

### **Premises:**

**- I assumed a liquid bond market;**

*Note:*

In practice, this premise is met for only 3 of the 6 bonds: Erste Bank (EBS – listed on Wien Stock Exchange), EFG Hellas (EFG – listed on Luxembourg Stock Exchange) and European Investment Bank (EIB – listed on Luxembourg Stock Exchange). BCR bonds, Timișoara municipal bonds and Procredit Bank corporate bonds, are also listed on the Bucharest Stock Exchange, but their liquidity is extremely low. The BSE recorder 49 trades with BCR bonds in the last 52 weeks, 12 trades with Timișoara and 16 trades with Procredit Bank bonds. The treasury bonds, existing in SIF Banat-Crișana's portfolio and listed on BSE, have not been included in this model as there are no trading quotes for these instruments. Even if 24 treasury bonds were listed on BSE in august 2008, by the time of this analysis there were only 2 trades.

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371 We consider the evolutions prior to subprime crisis (august 2008)

372 We cannot talk of a liquid bond market on BSE, and the treasury bond market was initiated in the second half of 2008. Sibiu Monetary-Financial and Commodities exchange does not allow a proper protection for all listed instruments on BSE, not even the first tier ones.



- I assumed that all bonds issued have the reference interest rate related to the market interest rate;

- I assumed an investment horizon of 3 years for the bond portfolio.

I maintained the data regarding the maturity of each bond, the nominal value and coupon payment dates according to the issuance prospectus.

On the basis of this information I calculated the lengths expressed in years for each bond:

**Table 1** Bond portfolio immunization model

|                                 | <b>BCR</b>  | <b>EIB</b>  | <b>EFG</b>  | <b>EBS</b>  | <b>PRO</b>  | <b>TIM</b>  | Total       |
|---------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Optimal portfolio structure [%] | <b>0%</b>   | <b>11%</b>  | <b>89%</b>  | <b>0%</b>   | <b>0%</b>   | <b>0%</b>   | <b>100%</b> |
| Maturity yield                  | 7.25%       | 7.00%       | 13.50%      | 12.14%      | 8.50%       | 8.25%       |             |
| Coupon [RON]                    | 7.25        | 7.00        | 27,000      | 1,214.00    | 42.5        | 8.25        |             |
| Nominal value [RON]             | 100         | 100         | 200,000     | 10,000      | 500         | 100         |             |
| Maturity [years]                | 3.0         | 7.0         | 3.0         | 2.0         | 3.0         | 5.0         |             |
| Length [years]                  | <b>2.80</b> | <b>5.77</b> | <b>2.66</b> | <b>1.89</b> | <b>2.77</b> | <b>4.29</b> |             |

Investment horizon: 3 years

Portfolio length: 3 years

Portfolio yield: 12.78%

The constraint of investment horizon (3 years) revealed an investment solution consisting in keeping in the optimal portfolio only EIB bonds, having a weight of 11% and EFG bonds with a weight of 89%. In these conditions, the maximum yield for the immunized portfolio would be of 12.78%. The solutions differ in accordance with constraint changes.

## VI. Conclusions

Considering the realities of the Romanian financial market and the evolution of international financial markets as a result of subprime crisis, it is difficult to estimate which is the best investment strategy today for increasing the portfolio performance.

The financial crisis effects will be felt for a hard to estimate time horizon. Even the firm intervention of governments for stopping the crisis cannot help changing the investors sentiment toward the economy. This will continue to generate a high vulnerability degree for long-term financing, increasing the cost of financing and the risk premium on financial markets.

The assets value corrections on the residential mortgage market influenced the prices of other financial assets, such as corporate and municipal bonds. It is considered that the mortgage market shock generated an overreaction (overshooting) on financial markets, translated into uncertainty and higher investment risks for financial instruments.

The financial environment is responsible for today's effects regarding the innovative ability to develop complex financial products and the methodology for risk assessment implemented by rating agencies.

The strong financial turmoil highlighted the complexity and vulnerability of proper identification and evaluation mechanisms for investment risk and represents an additional argument for the importance of risk management strategies.

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## CREDITING BY MEANS OF INTERMEDIARIES

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*In an economy which is facing more and more the consequences of the international financial crisis, one should find solutions to answer the population's credit demands first and foremost.*

*Since the banks' crediting conditions have become harder, their clients started looking for alternative financing sources. The nonbanking financial institutions and credit brokers represent the players who have strategically positioned themselves to win a place on the market in this period. Even if the financing given by the IFN are more expensive than those in the banking system, in the present circumstances they could represent a breach for more and more persons searching for credits. According to the BNR statistics for the year 2008, the credits given by IFN have increased by 45% comparatively to 2007 and the percentage from the total amount of financing given to the population has increased from 13.6% in 2007 to 16% in 2008.*

*Keywords: intermediary, nonbanking financial institution, credit broker, credit at the client's domicile*

*JEL code: G21*

In a quasi-blocked financial market, only those with a perfect file or a greater advance can still hope to get a loan. But what possibilities of financing have those who want just a common credit for the immediate consumption?

Solving this problem could be represented by the appeal to nonbanking financial institutions (NFI), from the leasing companies to the popular banks. NFI represent the players who have strategically placed themselves to win a place on the market in this troubled period. Thus, even if in general the financing given by the NFI are more expensive than those from the banking system, in the present conditions they can represent a solution towards which more and more Romanians looking for credits may turn to.

The credit broker or the financial nonbanking institution is the person who ensures consulting for the establishment of the most advantageous crediting versions and intermediates the credit file, separately from the banking institutions existing in Romania. A credit broker cannot approve or reject a credit file, this decision usually belonging to the bank which proceeds to the analysis of the respective file.

Working with a credit broker has the advantage of offering the client the possibility to choose the best credit existing in the banks' offers.

The broker establishes partnerships with the banks on the basis of collaboration contracts. These partnerships are preferred by the banks due to the high amount of credits generated by means of the broker, but also due to the fact that the broker is the person who fills in the credit file entirely. Thus, the bank saves human resources and allocated time.

The bank pays a commission of contract intermediary for the services undertaken by a broker. Thus, the broker is an autonomous partner, an intermediary without an exclusivity contract with a certain bank.

**Credit Care** is a credit broker – an intermediary society for the consumption credits destined especially to natural person. On the account of the numerous partnerships with important banks in Romania, Credit Care ensures intermediary services to get credits at the best possible costs.

Credit Care facilitates the access to the credits for personal needs, construction credits and mortgage credits, car credits and ensures maximum visibility over all financing possibilities at the demand moment.

Credit Care offers free consulting and the intermediary of the credit file with no commission, thus saving a large sum of money.

Another credit broker is the firm **PROFI CREDIT Romania IFN S.A.** part of the financial group, Profireal Group which started its activity in the middle of 2007, Romania becoming the fifth country in which the group activates at the moment.

On 15<sup>th</sup> October 2007, Profi Credit IFN S.A. has been registered at the General Register of the National Bank of Romania, getting the right to effectuate crediting operations for personal needs.

Profi Credit mainly addresses those clients who prefer a personalized approach, whereas loans and credits are accessible through the network of credit counselors who can go to clients at home at any time and counsel them to get the best financing option.

Profi Credit S.A. is part of the multinational financing group Profireal Group which activates in five countries – The Czech Republic, Slovakia, Poland, Bulgaria and Romania. The development plans of the Profi Credit Division include launching in two other two countries: Ukraine and Russia.

The clients' advantages in their relationship with Profi Credit Romania refer to:

- accessible loans and credits offered to all those who have a permanent and verifiable income;
- accessible loans and credits with sums ranging between 900 RON and 15,000 RON, nominal value, for periods between 6 and 36 months;
- the way the received sum is going to be used needs no justification;
- simplified documentation;
- free services and consulting offered by the credit counselors at the place and time established by the client;
- collection of no taxes to look through the file.

The main activity of Profireal Group is represented by the offer of loans and credits through the Profi Credit division. In 2007, the companies of the Profi Group division offered credits and loans of 136 million worth to more than 75,000 clients.

**Provident Financial Romania** started its activity in April 2006 through a pilot operation in Bucharest after marketing research which has lasted for more than two years. At present, the company has over 3000 employees and over 1,000 independent representatives. In the more than two years of activity on the Romanian market, over 50,000 clients have resorted to its services, the value of the loans issued by the company surpassing 12 million Euros.

Provident Financial Romania is part of the British group called International Personal Finance (IPF), international leader in the delivery of consumption credits at the client's domicile. IPF is included in the FTSE 250 index of the London stock exchange and has around 2 million clients and over 5,000 employees who work together with approximately 30,000 representatives in seven countries on two continents.

Provident Financial Romania is a nonbanking financial institution registered at the General Register of the National Bank of Romania and specialized in giving short term low loans directly at the clients' domicile.

The model was first tested on the British market and more than 10 years ago they started exporting it on other markets, mainly in Central and Eastern Europe. Choosing trails known for so long and a business model relatively simple and standardized on all markets where they are present, the British do not seem to fear too much the effects the financial crisis has upon them.

For Provident Financial, the bankers' reticence to largely provide financing for consumption is an unexpected advantage which comes to complete the expansion plans already traced at a crossing point for the company.

From its launching until the end of 2007, the business in Romania functioned as a pilot project, a phase in which the expanding investments are reduced.

For Provident, testing the market through a pilot project is a standard procedure for any new market on which it is launched. For example, there is the case of Russia where IPF bought a small bank and where the operation is in an incipient phase. The same happened in Poland (the first market they were launched on), in the Czech Republic (1997), Hungary (2001), Slovakia (2001), Mexico (2003).

Returning to the Romanian market, what do the British have to offer and what expectations do they have so that, after the first ten years of activity, they managed to raise in their portfolio half a million clients, the equivalent of a bank of smaller dimensions. The offer is essentially as simple as possible: the company supplies consumption credits at the client's domicile, with values ranging between 400 and 2,000 lei on a period of maximum 39 weeks in the case of the clients with whom they have a first collaboration and of maximum 3,000 lei for 52 weeks at most, in the case of those who already have a history.

The total cost for the loan is established through a very transparent credit contract. Thus, from the beginning the client knows which the total cost is and how he is supposed to refund the loan. There are no hidden commissions or taxes for not paying on term and the owed sum cannot increase. As a consequence, the clients have the certainty that the loaned sum of money will not get out of control if they are faced with unexpected difficulties on paying their installments.

Since the PROVIDENT representative meets his client weekly, he will be able to offer him flexible solutions for any of his financial difficulties by simply spreading out payments again. He does this with no additional costs, this being one of the motives why the loan at the client's domicile is so appreciated by the PROVIDENT customers.

The short term strategy of the group is based on three important components:

- the first refers to the maximization of the profit obtained on the mature Central European markets, such as Poland, The Czech Republic, Slovakia and Hungary. The immediate objective for these four markets is getting a raw profit of at least 95 million pounds until 2010;
- the second component refers to the passage to profit of the local divisions in Mexico and Romania and then the optimization of businesses in these countries. The group is expecting the activity in Mexico to become profitable starting with 2009, and that in Romania, from 2010;
- IPF intends to expand this successful business model on new and much bigger emergent markets. In this respect, IPF undertakes market research in India and Ukraine, and the initial results show that both countries have a huge potential. The group will launch a pilot operation in one of these countries until the middle of 2009 the latest.

Taking all these aspects into consideration, one could mention the fact that the sector of the nonbanking financial institutions is very dynamic, the specialists asserting that from the point of view of the administrated actives, IFN represents "something equivalent to the third bank in the system". More precisely, the percentage of the IFN actives is 10% of the total actives of the banking system and represents about 6.5% in comparison with the only 2.2% five years ago.

Undoubtedly, these financing channels cannot even by far compensate the effervescence with which the Romanian clients have become accustomed in the latest years. Nevertheless, these alternative financing sources will become more important in the following periods.

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# EVOLUTION OF THE ROMANIAN BANKING SYSTEM AFTER THE INTEGRATION IN THE EUROPEAN UNION

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*The development of the banking system in Romania has been, these latest years, “spectacular”, because of the credit quick dynamics maintained by a strong economic growth and the European integration prospect. The article presents the whole of the regulations voted within 2007-2009 regarding the Romanian banking system reorganization and progress and, implicitly, its alignment to the European Union directives. The research consisted in the presentation of the best banks depending on the market share, profitability and the financial indicators and banking prudence in system. Based on the analysis of the financial-banking results, I have described the Romanian banking system expansion after the European Union integration and also the problems faced in the framework of the international financial crisis.*

*Keywords: banking system, integration, financial indicator.*

*JEL Classification:G21, G0.*

## **Introduction**

Because of the historical evolution and peculiarities engendered by the requirement of the integration in the European Union, the Romanian banking system has its own features and problems which are common to the banking systems from other countries. Taking into account the model of the European structure of a banking system, a banking system on two levels has been created: the National Bank of Romania, as the central bank, and the commercial banks. In consideration of the role and importance held by the banks in the good operation of the economic agents and economy as a whole, it has been necessary, during the period after the Romanian banking system new regulations definition till present, for a modern system to be created, which meets the requirements of all the categories of economic agents in the market economy as well as of the physical persons – beneficiaries of credits, depositors, s.o.

A remarkable evolution of the Romanian banking system can be noticed within 2000-2004 when, through the Law no.200/2002 regarding the credit cooperatives organization and operation, amendments of the Laws 101/1998, 83/1998, 58/1998, the new bank law issued in 2003 and other NBR's regulations the following achievements have been registered: an alignment of the Romanian banking system to the European Union directives by means of a domestic and international transparent reporting system, adoption of the Basel I regulations, increase of NBR's<sup>373</sup> authority as surveying body of the banking activity and a clear definition of the bank adjudging bankrupt.

Within 2004 - 2006, through the Law no.312/2004, concerning the adoption of the National Bank of Romania articles of association, law no. 253/2004 regarding the final character of the settling up in the payment systems and in the settlement systems, Law no. 278/2004 and Government Ordinance no.10/2004 concerning the judicial reorganization and bankrupt procedure for the credit institutions, Government Emergency Ordinance no. 98/Dec.6<sup>th</sup> 2006 concerning the over survey of the financial institutions included in financial conglomerates, the Romanian banking system development went on. By means of the above mentioned regulations, the main responsibilities of NBR have been established, the Credit Office became operational in August 2004 and the judicial reorganization and bankrupt procedure of the credit institutions has been established as well as the over survey of the financial institutions included in financial

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373 <http://www.bnr.ro/Legislatie-financiar-bancara-735.aspx>.

conglomerates<sup>374</sup>. Other projects carried out during the same period have been: implementing the provisions of the New Agreement of Capital – Basel II, whose most important objectives have been the assurance of a more flexible framework for the capital needs establishment to coincide with the credit institutions risk profile and premises creation for the financial-banking system stability funding, ReGIS, SaFIR and SENT systems development for the central bank operations, inter banks transfers, payments in LEI, settling up in real time and with an immediate finality, as well as for the deposit and settling up of the public securities and deposit certificates issued by NBR<sup>375</sup>.

### **Evolution of the banking system after the integration in the European Union**

The process of the Romanian banking system modernizing has been going on within 2007 – 2009 and new regulations have been adopted, the most important of them being: Law no.227/2007 and the Emergency Ordinance no.25/2009 regarding the approval, supplement and modification of the Government Emergency Ordinance no.99/2006 concerning the credit institutions and their adequate capital. In January 2007, NBR has published on website the monthly Gazette of the European Central Bank. As a result of the integration in the European Union, the banking community of Romania is represented in EPC structures by the Banks Romanian Association and take an active part in the SEPA project implementing and the accounting regulations meet the requirements of the European directives, applicable to all the credit institutions, non-banking institutions and deposit warranty fund inside the banking system. At the same time, the following actions are carried out: classification and provisioning of the credits and investments, certification of the credit institutions, Romanian legal persons and Romanian branches of credit institutions from third countries, transformation of the financial institutions in credit institutions, appraisal of the origin third country surveying framework compliance and checking the equivalence of the survey done by the qualified authorities from third countries with the one governed by the provisions of Government Emergency Ordinance no.99/2006 concerning the credit institutions, their adequate capital and credit institutions status modification, Romanian legal persons and Romanian branches of credit institutions from third countries.

The first year of integration in the European Union resulted with the growth of the economic activity which has consequences for the banking area as well. The bank market registers the highest increase in the Romanian banking history by the establishment within three quarters 2007 only of four new banks: Millennium Bank, La Caixa, Fortis Bank and Finicredito.

### **Romanian banking system structure and features**

On the whole, 2007 has been an excellent year for the bank market, the assets weight in GDP grew with 11.5% reaching a level of 61.8%. The banking concentration maintained a high level, the first five banks from the system owing 56.4% from the total of the assets, since the Romanian majority capital owed a market share of 12% from the assets, with 0.6% more than in 2006, in contrast with the foreign banks branches which registered a fall of 5% in the assets weight.

2008 is the year of the surprises for the banking area. On the one hand, as a result of the competition increasing, on the other hand, because of the banks incomes decreasing due to the external financing slowing down and depreciation of the ratio credits-deposits, so fewer customers have been drawn into the banks.

The banking system included another member – BCR Bank for dwellings (from Erste Greek group), which is present on a niche weakly covered, the one of the bank market for dwellings, and so the number of the institutions present in the NBR register became 37.

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374 <http://www.bnr.ro/Publicatii-ocazionale-3231.aspx>.

375 Constantin Rotaru, Sistemul bancar romanesc si integrarea europeana, Ed. Expert, Bucuresti, 2008, page 74.



Table 1. Type and number of credit institutions

| Types of credit institutions | Number |
|------------------------------|--------|
| - commercial banks           | 37     |
| - branches of foreign banks  | 10     |
| - cooperative credit         | 3      |

Source: <http://www.banknews.ro/cauta.php?s=15&q=bnr>

During 2008, the domestic banking system assets reach a level of 73.4%. The concentration degree of the banking system registers a decreasing trend, the first five banks concentrating more than half of the banking system assets - 54.6%, 3% less from the market share compared to the second quarter of 2008. The first three banks in Top (see table 2) owe an impressive share of 42.1%, even if an important decreasing is registered compared to the previous period.

In 2008, the Top 10 structure remains the same as in 2007, even during the whole year 2008 the banking system knew a permanent moving, the classification registering important modifications from a quarter to another. Since some banks registered a linear growth, other ones enjoyed short lasting victories, failing to strengthen the reached position at a moment.

The first three banks in Top 10 in 2008 are BCR, BRD and Volksbank. A good evolution registered the Volksbank and Alpha Bank banks, which were on the positions 8 and 7 in Top 10 of 2007 and in 2008 are on the positions 3 and 5, registering a rapid progress. Other banks as: Raiffeisen Bank, Banca Transilvania, Unicredit Tiriac and Bancpost have lost one - two positions compared to the previous year.

BCR, the first position in Top 10, registers the most abrupt diminishing of its assets in 2008, from 26,2% in 2006 to 20,4% in 2007. Even if BCR is under an in progress reorganization process, it continued its expansion: through the opening of specialized centers for loans on mortgage granting – *Centrum Imobiliare* – a contract signed with the Agency for Payments and Agriculture in order to finance the farmers, increasing the number of the installed ATMs, diversifying its offer for bank products and services (fixed interest credit), approaching various niches from students to investors, but also launching social responsibility programs (CSR) such as the partnership with the H Foundation.

Table 2. Rankings of banks based on market share

| Nr crt | Banks              | Market share of banks % |      |       |      |           |      |       |      |
|--------|--------------------|-------------------------|------|-------|------|-----------|------|-------|------|
|        |                    | Year 2007               |      |       |      | Year 2008 |      |       |      |
|        |                    | March                   | Jun. | Sept. | Dec. | March     | Jun. | Sept. | Dec. |
| 1      | BCR                | 26,0                    | 26,4 | 26,0  | 23,8 | 23        | 21,7 | 20,8  | 20,4 |
| 2      | BRD                | 16,0                    | 16,2 | 15,9  | 15,5 | 15,7      | 15,5 | 15,0  | 14,9 |
| 3      | Volksbank          | 3,3                     | 2,9  | 4,3   | 5,1  | 5,7       | 5,9  | 6,3   | 6,1  |
| 4      | Raiffeisen Bank    | 7,9                     | 6,5  | 8,0   | 6,3  | 5,8       | 6,0  | 6,3   | 6,1  |
| 5      | Alpha Bank         | 4,6                     | 4,9  | 5,8   | 5,1  | 5,0       | 5,4  | 6,2   | 6,0  |
| 6      | Banca Transilvania | 5,0                     | 5,2  | 5,3   | 5,5  | 5,7       | 5,7  | 5,6   | 5,4  |
| 7      | Unicredit Tiriac   | na                      | 6,0  | 5,3   | 5,1  | 5,2       | 5,4  | 5,4   | 5,2  |
| 8      | Bancpost           | 4,4                     | 4,9  | 4,9   | 5,3  | 4,9       | 5,1  | 5,1   | 5,0  |
| 9      | CEC Bank           | 4,2                     | 4,2  | 4,1   | 4,2  | 4,4       | 4,4  | 4,4   | 4,4  |
| 10     | ING Bank           | na                      | na   | na    | 3,2  | na        | na   | na    | 3,1  |

Source: The Financial Market no.11/ November 2007, December 2008

A very good evolution registered BRD Groupe Societe Generale in spite of the reducing with 3.4 p.p. of its market share. The highest profit, a ratio costs/incomes of 39%, an almost unitary ratio

between deposits and credits (88%), the most extended territory network after the giant CEC – these are few of the BRD's strengths. The bank maintains its equilibrium in the two business credit lines – retail and corporate and succeeds to cover all the financial services developing its own brand on the insurance market – *BRD Life Insurance*.

The latest in the top is Volksbank, an outsider in 2007, whose aggressivity allowed jumps of even four positions. Using a strategy on the retail sector, Volksbank reached in 2008 a market share of 6.3% compared to 6.1% in 2008.

Table 3. Banks in Top 5 percent in the total system (%)

| Nr crt | Indicators | Banks in Top 5 percent in total system % |      |       |      |           |      |       |      |
|--------|------------|--|------|-------|------|-----------|------|-------|------|
|        |            | Year 2007                                |      |       |      | Year 2008 |      |       |      |
|        |            | March                                    | Jun. | March | Jun. | March     | Jun. | March | Jun. |
| 1      | Active     | 60,1                                     | 59,1 | 58,0  | 56,4 | 55,9      | 54,7 | 54,6  | 53,9 |
| 2      | Credits    | 62                                       | 61,2 | 59,1  | 57,1 | 55,1      | 53,8 | 53,4  | 52,1 |
| 3      | Deposits   | 59,5                                     | 59,8 | 61,9  | 60,0 | 54,1      | 53,2 | 53,7  | 52,5 |
| 4      | Equity     | 53,2                                     | 54,1 | 48,6  | 50,1 | 51,4      | 49,6 | 47,9  | 45,7 |

Source: The Financial Market nr. 5/May 2008

Sharing the third position for the first time since its holding, Reiffeisen Bank registers a relative defeat, owing a market share of 6.1%, the same as Volksbank. In spite of this situation, the bank had an effervescent activity, directed towards all the business lines and strengthening its position of universal bank. This last period, Reiffeisen brand became more and more visible thanks to the numerous CRS and partnership campaigns with various organizations (such as Bucharest Police institution for the bank frauds prevention).

Table 4. Indicators of prudent financial and banking system (%)

| Nr crt | Indicators   | Indicators of prudent financial and banking system (%) |       |       |       |           |       |       |       |
|--------|--|--|-------|-------|-------|-----------|-------|-------|-------|
|        |  | Year 2007  |       |       |       | Year 2008 |       |       |       |
|        |  | March  | Jun.  | March | Jun.  | March     | Jun.  | March | Jun.  |
| 1      | Report solvency  | 16,16  | 14,90 | 14,03 | 13,78 | 12,94     | 12,72 | 11,79 | 12,34 |
| 2      | The rate of equity                                       | 8,44   | 8,18  | 7,91  | 7,32  | 7,02      | 6,92  | 6,51  | 6,23  |
| 3      | Arrears and doubtful loans/ total loans                  | 0,23   | 0,29  | 0,29  | 0,22  | 0,20      | 0,29  | 0,24  | 0,28  |
| 4      | Arrears and doubtful loans / total assets                | 0,17   | 0,22  | 0,24  | 0,17  | 0,18      | 0,24  | 0,22  | 0,26  |
| 5      | Arrears and doubtful loans / equity                      | 2,00   | 2,65  | 2,91  | 2,28  | 1,90      | 2,66  | 2,36  | 2,75  |
| 6      | The liquidity (effective liquidity / liquidity required) | -  | -     | 2,31  | 2,13  | -         | -     | na    | 2,56  |
| 7      | ROA  | 1,46   | 1,51  | 1,9   | 1,02  | 1,74      | 1,65  | 1,81  | 1,78  |
| 8      | ROE  | 11,63  | 12,62 | 10,3  | 9,40  | 12,45     | 16,9  | 19,71 | 18,67 |

Source: The Financial Market no.11/ November 2007, December 2008

For the banking system, the first year of integration in the European Union has been one of expansion of the territorial units, as well as of the banks personnel number. To the 58,090 banks employees registered at the end of 2006 for 4,401 bank units, 7,565 employees are added for the 1,080 units open within 2007. Even the effects of the financial crisis at the end of 2008 were felt

on the Romanian market, the banking institutions had continued to open other 927 bank units, employing other 6,264 employees who do not have their activity object these latest months.

The bank assets weight in GDP rose from 50.3% in 2006 to 61.8% in 2007 and diminished to 39.6% at the end of 2008. The banking system shareholders have been rewarded for their invested capitals with a return slowly reduced by 2 p.p. comparing to 2006 up to 10.21% in 2007, level assured by the 757.8 millions euro in the banks net profit accounts. In 2008, although the bank capital shareholders returns slightly diminished to 14.92%, however it is clearly higher compared to the results of 2007.

The severe competition of the market and a structure of the assets found under the retail credit major influence can explain not only the important reducing of the solvency ratio up to 13.7% in 2007, 2.34% in 2008, but also the marginal growth of the volume of remaining and not sure credits volume reported per the bank assets<sup>376</sup>. The costs of the excessive speed of brokerage increase meant the provisions increasing with 300 millions euro in 2007 to 462 millions euro in 2008, which represents the highest nominal increase in the costs structure at the banking system level. As a matter of fact, in the banking costs structure, the provisions costs weight increased from 19.8% to 23% in 2008, dynamics which starts to put under a question mark the future level of the profitability. On the first place in the speed of the banking costs increase there are the administrative and investment costs with 89.9%, the banks spending in 2008 around 325 millions euro for their market position strengthen.

As a result of the expansion bank strategy practiced at the system level, the ratio costs/incomes was deteriorated from 72.9% in 2006 and 75% in 2007 up to 78% in 2008.

From the system profitability point of view, the banks structure in Top 10 is unchanged, the first places being occupied by BCR and BRD with a quota of 33.6% and 28.2%.

Table 5. Banks with more than 1% of net profit per unit (%)

| Nr crt | Banks              | Net profit on the system (%) |      |       |      |           |      |       |      |
|--------|--------------------|------------------------------|------|-------|------|-----------|------|-------|------|
|        |                    | Year 2007                    |      |       |      | Year 2008 |      |       |      |
|        |                    | March                        | Jun. | March | Jun. | March     | Jun. | March | Jun. |
| 1      | BCR                | 32,1                         | 33,3 | 38,6  | 18   | 39,1      | 39,8 | 33,8  | 33,6 |
| 2      | BRD                | 25,7                         | 29,9 | 36,2  | 33,5 | 26,5      | 26,9 | 28,7  | 28,2 |
| 3      | Volksbank          | 1,8                          | 2,4  | 3,2   | 1,9  | 2,2       | 2,8  | 3,0   | 3,0  |
| 4      | Raiffeisen Bank    | na                           | 10,6 | na    | 11,5 | na        | 14,2 | Na    | 13,5 |
| 5      | Alpha Bank         | 2,3                          | 2,4  | 3,6   | 4,2  | 5,4       | 5,3  | 4,1   | 4,1  |
| 6      | Banca Transilvania | 4,7                          | 5,7  | 7,1   | 12,4 | 4,2       | 5,8  | 10,9  | 10,7 |
| 7      | Unicredit Tiriac   | na                           | 10,9 | 12,5  | 9,6  | na        | 9,3  | 7,7   | 7,5  |
| 8      | Bancpost           | na                           | 1,7  | na    | 3,8  | 3,5       | 1,1  | 3,6   | 3,4  |
| 9      | CEC Bank           | 3,0                          | 3,4  | 3,7   | 3,3  | 3,6       | 1,5  | 9,0   | 8,7  |
| 10     | Piraeus Bank       | na                           | na   | na    | 2,1  | 4,8       | na   | na    | 2,0  |

Source: The Financial Market no.4/ April 2009

**As a conclusion**, realizing this system of banks organization, an important bank activity increase and development potential has been created, not only for the area of the juridical persons customers, but also for the area of the physical persons for medium and long term.

The development of the specific operations, services and instruments will allow, in time, to diversify the bank activity. This will have as result the competition increase, the former sectors being replaced by a real banking specialization which will depend on the carried out operations nature and volume, customer category to whom each bank will address and, not at last, offered

376 Financial market no.11/November 2007, no.5/May 2008, no.12/December 2008, no.4/April 2009.

services quality. The new banks have the possibility to carry out, from the beginning, a modern bank activity, using computer systems and also can attract the most efficient new companies as customers.

The bank market main goal will remain the offer of additional advantages to the banks customers, advantages which will result from two important grounds:

1. The customer will benefit of the choice freedom increase by means of the redirection of the activity towards institutions which offer for smaller prices products and services better meeting the customer needs or some services previously not available.

2. The prices (tariffs, interests, commissions) for the most of the financial products and services have to diminish as a result of a bigger domestic market. The competition will be the main factor in the prices reducing.

At the same time, the banks must embrace new models of business which include features such as: a trustworthy brand, distribution steady partnerships, a diversified and continuously renewed products portfolio and efficient operational structure regarding the costs. More flexible models of business and of organization of the financial-banking institutions will allow them to easier adapt to the market changes and to rapidly renew their products, the banks having as an advantage the dimension, products portfolio diversification and various financing sources. Due to the lack of external financing strongly felt because of the financial crisis, the banks should pay more attention to the selling activity. The specialized entities belonging to the banking groups can be concentrated on the marketing and risk management and can help the banks in diversifying their portfolio and also in the refinancing activity.

The banks present on the market must mainly rely on flexibility and innovation and, at the same time, to assure themselves financing sources at reduced costs taking advantage of the opportunity to strengthen their position on a market where the majority of the competitors are in abeyance.

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# THE PERFORMANCE OF INVESTMENT FUNDS IN ROMANIA IN THE CONTEXT OF CRISIS

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*Romania as an emergent country has an underdevelop stock markets which is strongly connected with the markets from Western Europe and the US, so the Romanian Stock Market was one of the first market touch by the wave of financial crises. We analyze the investment fond performance during 2007-2009 opposite to an appropriate benchmark the BET Index. The analyse*

*Cod JEL : G11- Portfolio Choice; Investment Decisions*

## **1.Romanian Investment Funds**

Romania has an emergent stock market- taking into consideration the fact that Bucharest Stock Exchange ( BSE) has reopened its gates in 1995- that's why this kind of investment is out of reach to the masses. Based on the 24/1993 act, in November 1993 the Mutual Fund for the Business People ( MFB )is established<sup>377</sup> ( administrated by SAFI );these first funds had a direct investment policy in all sorts of companies and the formula for calculating the value of the fund's units was not regulated which led later on to famous bankruptcies ( MFB, NIF ) in the field and further on to the lack of confidence in this type of investment . In order to reinforce the financial markets in our country and especially the capital market the 297/2004 act regarding the Collective Investment Institutions ( CII ) was enacted. The CII can be split into two categories: investment funds and investment societies; the most important provisions refers to the organizational and functional aspect of the CII and also an important part is dedicated to the financial instruments in which the funds could invest<sup>378</sup>. The authority that regulates and monitorizes the capital market and the CII is The National Securities Commission ( NSC ); it authorizes the establishment of new investment funds and of the society that administrates the fund , the launch of a prospectus as well as the functional aspect of the fund. Also in 1996 , besides the N S C , the National Association of Funds Administrators was established; this association is a non governmental organization made up of 21 investment administration societies that administrates 50 opened investment funds and 8 closed investment funds, 5 investment societies and 2 depository banks<sup>379</sup>; the association has a series of goals : enforcing the capital market, promoting the concept of collective investments, forming and developing the organizational, legal and professional frame; to enhance the access to information for the investors and also for the masses .

In order to function, the open investment funds in Romania need three entities:

- the administration society, that adopts the decisions regarding the investment fund and manages the investment portfolio
- the depositor, who safely guards all the funds assets and calculates the value of the bonds ( securities ) independent of the administration society

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377 After The History of Mutual Funds in Romania, <http://ifr.kmarket.ro/documentare/arhiva/evolutie.html>.

378 Especially after the adoption of Directive 2007/16/CE, which adds a complement and clarification of Law 297/2004.

379 Especially after the adoption of Directive 2007/16/CE which adds a complement and clarification of Law 297/2004.

- the distributor: it can be a securities company or a commercial bank, and it has the role to sell the securities.

The open investment funds issue the securities that confer their owners' equal rights and are paid when subscribing. The security is bought at the issuing price, established from the net assets plus some commissions and could be rebought at the owners' request. The rebuying price is made out of the unit value of the net asset calculated by the administration society and certified by the depositor. The unit value of the net assets is calculated daily by reporting the net value of the funds assets to the total funds' units in circulation.

The funds' investment policy is established by the administration society according to the law and the prudential conduct. According to the law, the open investment funds can invest in :

- exchange securities and other monetary markets' instruments in Romania and UE and with the approval of the NSC even in non-member states.

- bonds issued by other collective investment institutions ( opened or closed )

- deposits

- derived financial instruments

- other monetary markets' instruments.

The investment funds can be classified according to the liquidity and the risk of the investment<sup>380</sup>:

1.Stocks funds; they invest preponderantly in listed stocks; minimum 66 % in stocks

2.Bonds funds; they invest maximum 10 % in stocks and the rest in bonds.

3.Mixt funds.They invest maximum 66% in stocks, the rest in non risky securities; they have a medium risk and are considered to be medium and long term investments.

4.Monetary funds. These are considered short term investments, having benefits comparable to the interest rates for bank deposits; they invest in monetary instruments ( treasury bonds, deposits, etc ) more than 90 % and just 10 % in stocks.

5.Other funds- investment funds that invest in lower exposed stocks than that of the stocks funds.

## **2. The evolution of the investment funds in Romania ( 2004 – 2009 )**

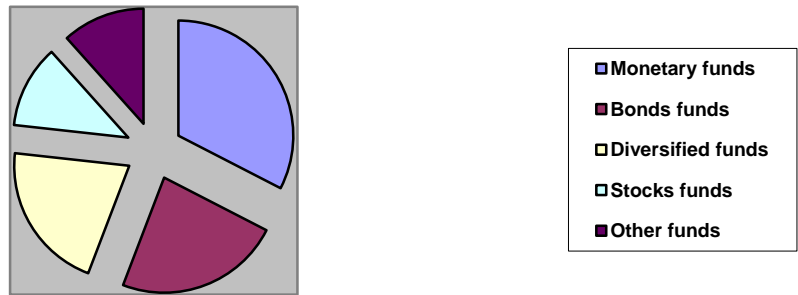
After a recession period caused by the serious frauds on the mutual investment funds the years 2000 – 2001 are known for the decrease of the investors in this area ; the next years consolidate the field and new important players appear on the market RDB, RCB; and the enactment of the 297/2004 act creates the legal frame for the accurate functionality of the investment funds.

It stands out from figure 1 that the year 2009 has brought a substantial growth to the monetary and bonds funds ( low risk funds), these holding a share of 70 % in comparison with 30 % in 2007; in the mean time the high risk funds hold a share of 30 % , as to 70 % in 2007. These evolution could be explained by the negative evolution of BSE in 2008-2009; the losses in the stock exchange area determine the investors to reorient to some low risk funds. Over the analysed period one can state that the year 2008 brings on an important growth to the monetary and bonds funds and at the same time a decline for the stocks funds.

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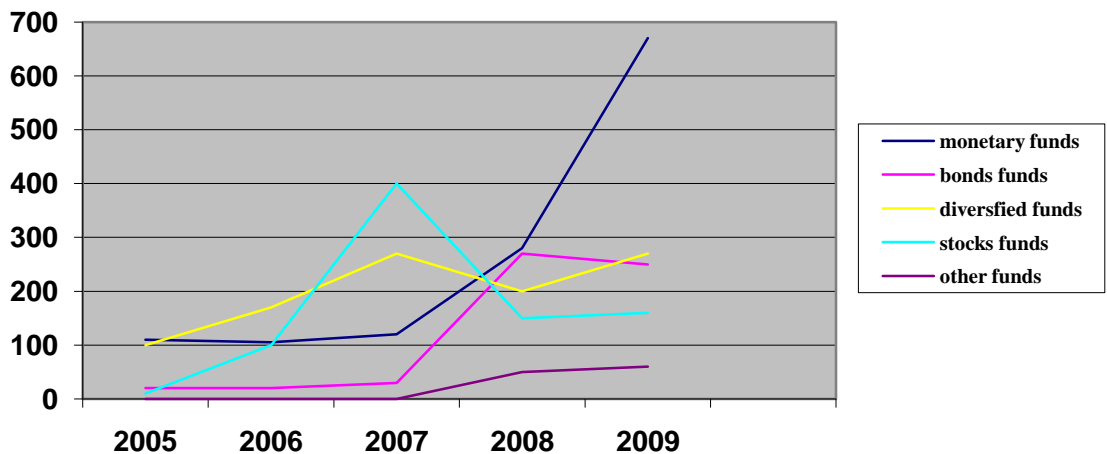
380 After Angela Maria Filip – The Evaluation of the Performance of Mutual Funds in Romania, Printing House House of Science Book, 2008, pg. 130

*Fig 1. The investment funds market share in April 2009<sup>381</sup>*



At the same time, if we follow the 2004-2009 period, it is noticeable that the year 2005 is the year in which the investment funds with medium to high risk ( stocks funds and diversified funds ) surpass from the net assets point of view the investment funds with low to medium risk ( monetary and bonds funds ).

*Fig 2. The evolution of the net assets of the investment funds between 2004-2009<sup>382</sup>*



In order to follow the performance of the investment funds, the Mutual Funds Index <sup>383</sup> (M. F.I.) was launched; a similar index to once used on the B S E. The MFI is calculated based on the evolution of the net unit value of the net assets of each fund included in the index basket; the method is that of a weighted average<sup>384</sup> :

381 Datasource [www.aaf.ro](http://www.aaf.ro), own diagram.

382 Datasource [www.aaf.ro](http://www.aaf.ro), own diagram.

383 Launched by [www.kmarket.ro](http://www.kmarket.ro) and assumed by The Managers of Funds Association in Romania

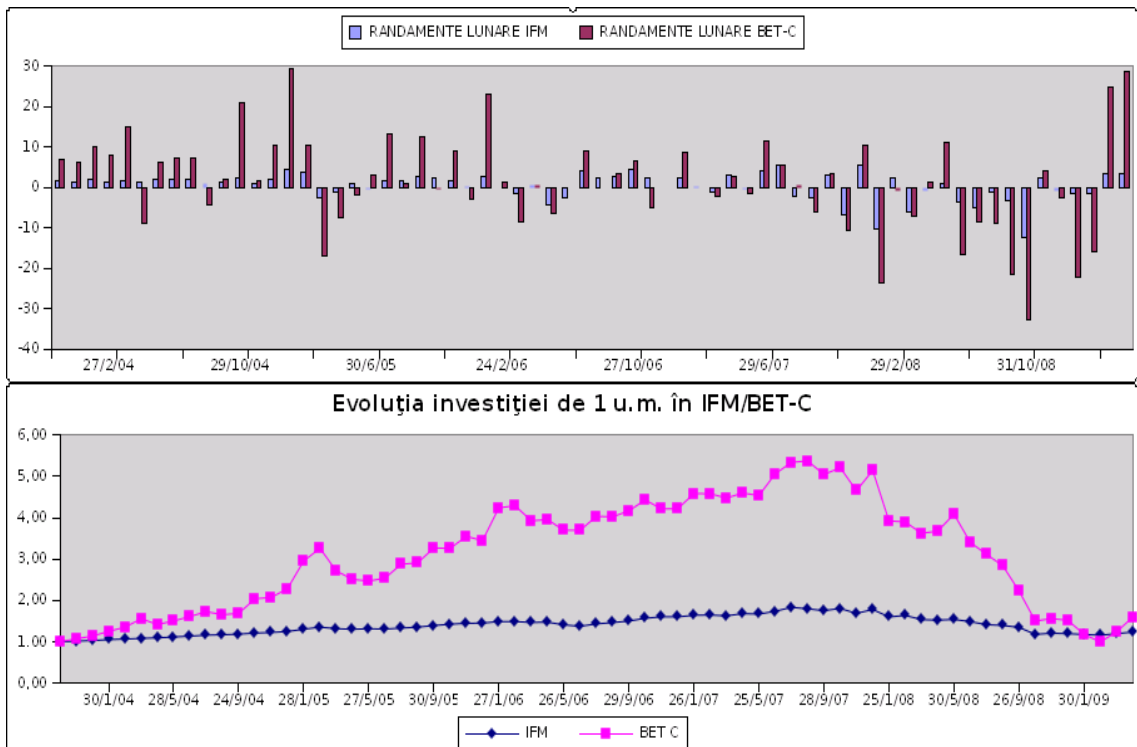
384 <http://ifr.kmarket.ro/documentare/arhiva/ifm.html>

$$IFM_k = \sum_{i=1}^N \left( \frac{C_k^i}{C_0^i} \times \frac{A_0^i}{A_0^T} \right) \times 1000$$

Where:

- $IFM_k$  - the indexes value in the k day ( M F I )
- $C_k^i$  is the unit value of the funds' net asset in the k day
- $C_0^i$  is the unit value of the i funds' net asset in the reference day
- $A_0^i$  is the funds' net asset in the referece day
- $A_0^T$  is he total assets in the reference day
- N is the number of funds included in the index basket
- 1000 is the indexes multiplier

We will compare th eevolution of the monthly performances of the MFI with the that of the synthetic index of BSE. The 2004 -2006 period shows that the performances of the stock exchange area were superior to that of the funds; is the year 2005 that brings the first major decrease on BSE, the stock exchanges index bringing bigger losses thn the investment in MFI.



**Fig 3 The analysis of the monthly evolution of MFI and BET- C<sup>385</sup>**

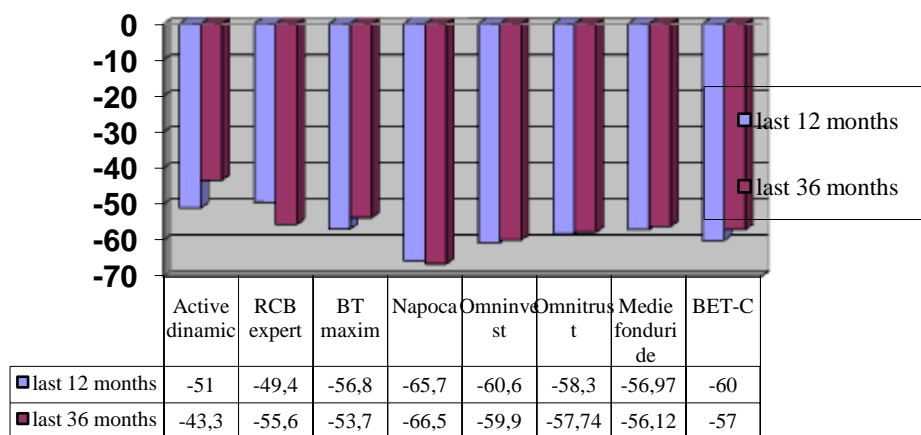
385 Primary datasource [www.kmarket.ro](http://www.kmarket.ro) , calculation and own diagram.



For a normal investor that doesn't want to be an active player on the stock exchange market a question is raised: which investment would bring him a larger profit and on which conditions? By investing 1 m.u. ( monetary unit ) on the 30-th of Oct 2003 in a portfolio that copied the BET-C index, our investor would have had 1.56 m. u. In comparison to 1.24 m.u. invested in MFI; at the same time we should take into consideration that by investing on BSE one could have won over 500% in 2006-2007.

In order to analyse the opportunity of investing in funds in comparison to BSE we will follow the stocks investment funds on a benchmark ( BET-C ). It is noticeable that the performances for the last 3 years, respectively 1 year, were negative for all the stocks funds; comparing to the chosen benchmark it is noticeable that the evolution for the last 12 months are almost identical and reduced ( a difference of 3 % on average, to the last 36 months), even though the exposure levels of the investment funds on BSE are of 85% the maximum for some funds , these weren't able to have a better performance than an usual portfolio.

**Fig.4 The Evolution of Stockfunds Efficiency versus BET-C386**  
**PERFORMANCES**



The weak performance of the investment funds in both the growth periods of the markets and in the decline periods especially , raises the problem of bad administration, of their capacity to foresee the general trend<sup>387</sup>; from this point of view the investment funds don't offer higher performances and an adequate protection against volatility and risks . For the medium and long term investor following an index of the capital market is more productive than investing in a stocks fund in a growth period; in the decrease period the losses are comparable ( if not identical). It stands out that a passive investor that just follows an index gets higher performance than the administrators of the funds that actively invest. The only advantage in investing in a mutual fund is that the sums invested are small, while reproducing a benchmark in a portfolio is more expensive, the disadvantage is the high withdrawal fee that on a short term can go up to 5 % of the securities value. Our recommendation is using the investment funds for accumulating capital, especially by establishing that the main goal should be to preserve the capital ( investing in low to medium risk profile investment funds ); and to the investor who have a larger capital we

386 Primary datasource [www.kmarket.ro](http://www.kmarket.ro) , calculation and own diagram.

387 After Angelei Maria Filip – The Evaluation of the Performance of Mutual Funds in Romania, Printing House House of Science Book, the ability of managers to achieve market timing is without success, pg.166-167

reccomend to invest on a medium to long term by following a synthetic index of the capital markets.

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## THE LIMITS OF BASEL II ACCORD

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*Even though the present Basel II Settlement has many advantages like: more transparent and detailed bank information, the rating systems, the internal models of evaluation for risks, the three pillars which represent a whole, an equitable bank competition, the actual financial crises revealed the limits of Basel II framework. The disadvantages of Basel II Accord revealed by the international crises can be: the internal rating method of risks evaluation is so complex, that is very difficult to be applied by countries in East and Central Europe, the responsibilities for bank supervisors are very high and the capital markets are full of innovations, Basel II is more sensitive to risks than Basel I, but not enough, because reputation risk, systemic risk and strategic risk are not operational risk. This paper analyses these shortcomings, the economic effects of the nowadays financial crisis and also the necessity of a new Basel III, which has to include more risks.*

*Keywords: implementation and limits of Basel II, financial crisis, the economic effects of the crisis*

*JEL classification: G*

In general the banks don't have to engage in transactions, in which the risks can not be identified and controlled in an efficient manner. Each risk an institution of credit deals with must be identified, supervised and limited its' effects.

In the 1980s, because of the critical changes of interest rates, produced by the inflationary process and by the energetic crises, because of the significant changes of the exchange rates after the abolishment of the Bretton Woods system and because of the intensification of competition on the financial services market, the instability becomes a characteristic of the environment in which the banks are operating. In this new situation, the bank's vulnerability and the number of bankruptcy increases. The Basel I Accord in 1988, emerged because of the banks insolvency in the 1980s, has lead to the banking system's recovery on the account of the minimum capital adequacy. The Accord has also concurred to the international banking system's stability due to the harmonization of international banks' practices and because of the elimination of disloyal bank competition. The stipulations of Basel I Settlement didn't have an imperative character, they were just merely given as a guide, but they were adopted by the majority of banks.

The risks on the international market are evolving and they are affecting the banks' activity, in 1996 the Basel I Settlement was amended by the incorporation of market risk next to the credit risk in estimating the adequacy capital.

The Basel II Accord adopted in 2004 has a more flexible character, offering to the credit institutions the freedom to choose their own methods of risk evaluation, but conserves the key elements of Basel I Settlement, respectively the minimum of 8% capital adequacy.

The Basel II Settlement has many advantages like:

- the credit institutions take into consideration the operational risk next to the credit risk and market risk;
- the global risk approach;
- the internal rating systems;
- a market discipline based on the transparency principle and a detailed reporting offering relevant, credible, opportune, comparable and comprehensible information;

- an increased competence for supervision authorities;
- the creation of a solid bank industry;
- contributes to the harmonization of bank practices between East and West Europe;
- an equitable bank competition;
- the three pillars represent a whole unit;
- the internal methods of risk evaluation determine, that the weighting coefficients with which every risk asset is being evaluated, are not the same for the whole banking sector, but they are being established individually, by each institution, so that the risk is evaluated much more accurately, and the situations in which capital requirements are overestimated are being eliminated. So the banks will have more money for giving credits, and they will have to make up fewer reserves.<sup>388</sup>

The Basel II Convention introduces in the standard approach of credit risk *an accessory forfeit* for credits given to the institution with an inferior rating. So, if the Basel I Accord the minimum requirement was 100% from the exposure, in the Basel II for B – ratings the weighting coefficient is 150%. *The exposure classes and the weighting coefficients for credit risk increase from 4 to 8 categories: 0%, 10%, 20%, 35%, 50%, 75%, 100%, 150%*, which allows to detect more accurately the credit risk based on the nature of investment for each bank. The weighting coefficients for each risk do not depend only on the class in which is being placed the exposure, but also on the credit quality, determined by the ratings given by the external evaluation of credit/clients institutions.<sup>389</sup>

The banks, which will make the most of the New Settlement will be the ones that seriously invest in the risk management and the ones that know to choose the right risk management method based on the result of analyses made. In other words, the promotion of the internal risk management models will represent the banks' success key in developing the credit activity and managing the risks.

The implementation of Basel II Agreement has revealed its' limits, like<sup>390</sup>:

- the implementation implies high costs regarding the training of staff, IT, especially for countries in Central and East Europe;
- the discrimination between bank (small and large banks);
- fewer loans for countries in the transitional period, especially for banks and companies with low rating;
- the increase of the bank concentration degree through fusions and acquisitions between banks in the system;
- the variation of interest based on the quality of the credit applicant.

Due to its' complexity, the IRB method becomes very difficult to implement for banks, which don't have a superior level of "culture" in credit risk management, so the standard approach appears to be the only credible option for banks in Central and East Europe. "In Romania this process is easier because the whole banking system is owned by West Europe Banks, which passed this test, so they will be able to facilitate the transition of the subsidiary to the new capital requirements. In some cases the mother banks will provide their own internal risk evaluation models."<sup>391</sup>

"The main shortcoming of Basel Committee Settlements, known as Basel II Accord is to suggest solution for bank capital adequacy, based on the risk profile of bank's assets starting from a given situation of credits, which a banks has in its portfolio. Another approach which can help banks to protect themselves against credit risks is based on a thoroughness company's analysis and not on

388 [http://www.sfin.ro/articol/bancile\\_ezita\\_sa\\_treaca\\_la\\_basel\\_ii.html?](http://www.sfin.ro/articol/bancile_ezita_sa_treaca_la_basel_ii.html?)

389 Economic Tribune number 28 of 16th July 2008, pag. 81-82

390 Ana Popa, Laura Giurcă Vasilescu, The Possible Implications of Introducing Basel II in Romania, The Annals of University of Oradea – Economic Science, 2005, Section Finances-Accountancy-Banks, pag. 280

391 [http://www.sfin.ro/articol/bancile\\_ezita\\_sa\\_treaca\\_la\\_basel\\_ii.html?](http://www.sfin.ro/articol/bancile_ezita_sa_treaca_la_basel_ii.html?)

adequacy of capital to the risk profile of bank assets considering the necessary cash-flow, the necessary of liquidity established by mutual agreement for the repayment of credit and interest, taking into account two components: **depreciation and net profit**. The relation between self-financing and the necessary cash-flow constitute a necessary premise for the protection consolidation against credit risk, for the bank and also for the company, their main concern being the repayment of credit and interest and the owners to achieve the expected gain.”<sup>392</sup>

The second Pillar of Basel II Agreement called supervisory review increases very much the responsibility for the financial supervisor. The supervisors must examine the methods used by bank to record, process and monitor the relevant information. As the banks have the freedom to choose their own strategies, also the supervisors have the power to refuse them, based on their own judgment. This may lead to a conflict between supervisors and banks. Beside that, the second Pillar implies a huge qualification for supervisors, in the condition in which the capital markets are full of innovations. “In fact, given the present ability of banks to generate and introduce financial innovations constantly, supervisors will have to be permanently updating and upgrading their skills”<sup>393</sup>. Implementing Basel II in developing countries will encounter many obstacles, maybe the most important will be granting the supervisors enough freedom, resources and competence.

The rating agencies were born in The United States of America at the end of 19th century and the beginning of 20th century, and the most famous are Standard and Poor’s, Moody’s and Fitch IBCA. Another deficiency of Basel II is the placement of rating agencies in the center of the new regulation of risk management, which doesn’t represent the optimal solution, even though it seems the most viable at this moment. I say this because the presence of rating agencies in Europe has developed in the 1990s, recently compared to USA. In countries in Central and East Europe the presence of rating agencies was felt after the fall of the communist regime, but they are few compared with countries in West Europe.

Mugur Isarescu the governor of National Bank of Romania in the presentation *Nine Lessons from the Nowadays Financial Crisis* presented on 14th of April 2009 asserts the following: “The global crisis has its origins in The United States of America on the mortgage market, being triggered by the sub-prime loans crisis. The exuberant liquidity together with the financial disintermediary, excessive deregulation have led to the present financial crisis. The consequences of this excessive liquidity have been the low interest rates and their low volatility, so the appetite for assets with high benefits has increased. Therewith appears a weaker lookout of the market investors. The degree each economy is affected by this crisis depends on its vulnerability. The nine lessons to be learned are:

1. *The low level of inflation does not represent an enough condition for the assurance of financial stability on long term.* Usually the crisis is triggered by a high inflation, the main source of financial instability. The exception consists in that the present crisis appeared after two decades of low and stable inflation, which coexisted with excessive liquidity. So the financial intermediary model has changed from *originate and hold to originate and distribute*. The monetary policy, regulation and financial supervision must pull together efficiently, which hasn’t happened in the last years.
2. *At certain periods regulation and supervision fall behind the markets.* The markets always find a way to innovate because the economic agents are always competing with each other for satisfying a real need. The innovation process is so dynamic and sophisticated, that the ones who regulate and supervise the markets can fall behind.

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392 Marcel Ioan Boloş, The Consolidation of Credit Risk Protection in Banks – The Necessary Ratio of Cash-Flow Banks – Companies Self-Financing, pag. 1-25

393 [http://www.ie.ufrj.br/eventos/seminarios/pesquisa/basel\\_ii\\_a\\_critical\\_assessment.pdf](http://www.ie.ufrj.br/eventos/seminarios/pesquisa/basel_ii_a_critical_assessment.pdf)

3. *In the European Union are missing some institutions.* The EU should create a new institution The European Risk Systemic Council, which purpose should be to collect information regarding risks and macro prudential vulnerabilities from each financial sector of EU. The Council will issue warnings about risks and will adopt recommendations of economic policy. Another institution is The European System of Financial Supervision with three authorities: The European Bank Authority, The European Securities Authority and The European Insurance Authority.
4. *The financial incentives in private companies are not correlated with risk management.* The financial incentives should be better correlated with shareholders' interest and the whole company's profitability on the long term.
5. *People forget about crisis in the heyday and neglect the creation of crisis management mechanisms.*
6. *International Monetary Fund has given a huge role, after being criticized for not foresee the Asian Crisis.* The nowadays financial crisis reveals that in difficult moments we need an institution, which has an imagine of each economy on the globe. The IMF has an experience for at least five decades in investigating the members' economies, today 185 countries, and this experience is not easy to accomplish.
7. *The expansion measures must be accompanied from the beginning by exit strategies.* The launching of anti crisis measures must be accompanied by the creation of credible exit strategies, which are necessary now for assisting the financial sector and launching again the global demand.
8. *It is important avoiding macroeconomic disequilibrium and following a sustainable economic growth based on a substantial degree of structural reforms.*
9. *The Euro Adoption can not be substituted by adjusting policies.*

The last two lessons are for emerging economies.”

The present financial crisis demonstrated that the banking system has not been well capitalized, there has not been enough banks to absorb the capital losses of bankruptcy institutions. The response of USA and Great Britain Government demonstrated the existence of capital deficit.<sup>394</sup>

“The effects of international crisis have expanded over the Romanian economy. However, considering the direct impact, the banking system was less affected because is has not been exposed to toxic assets, also due to the administrative and prudential measures implemented by The National Bank of Romania. Indirectly the international financial crisis, and especially its consequence – the recession in developed countries – has expanded over the economy in Romania through many channels. Through the commercial channel, the export slows down. Through the financial channel, the access to external financing is limited, so the credit load is restricted and appear difficulties in external private debt service. Through the exchange rate channel, the cutting down of external finance is being reflected in devaluation of national currency. Through the trust channel one can see the withdrawal of investors from East Europe countries. The effect was the panic moments and the speculative attacks on the monetary-currency market, like the ones in October 2008 in Romania, which needed the NBR's intervention.”<sup>395</sup>

The Basel II Agreement in the context of the global financial crisis is better than Basel I Agreement, being more sensitive to risk, but not enough. The Basel II Accord takes into consideration a new risk, the operational risk. Basel II defines operational risk as the risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events, including legislation risk. The shortcoming is that reputation risk, systemic risk and

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394 <http://www.asil.org/files/atik.pdf>

395 Mugur Isarescu, International Financial Crisis and Challenges for The Monetary Policy in Romania presented on 26th of February 2009, pag. 1-11

strategic risk are not operational risk, so they are not taken into consideration, even though they are striking on the capital markets.

Another critique regarding the Basel II Accord refers to the large banks and financial aggregations, which adopt advanced capital adequacy approach will have greater benefits than small banks, constrained to apply the standard approach for capital adequacy. The foreign banks in developing countries by applying Basel II Agreement will give loans to the most solvent debtors, and the other debtors with a less attractive situation can borrow money from local banks. This aspect can create problems for SME in accessing loans.<sup>396</sup>

In the article *International Financial Crisis and Challenges for The Monetary Policy in Romania* presented on 26th of February 2009 Mugur Isarescu affirms that: “On the short term the main challenge is finding the solutions to reestablish the trust of investors and consumers. On the long term, the main challenge is to adjust the principles which guide the international financial system reform, regarding transparency, improving the regulations for security accountancy, the assurance of adequate market, companies and financial products settlements, the assurance of financial markets integration (regarding market handling and fraud) and intensification of cooperation between world’s financial institution (the modernization of management structures of IMF and World Bank)...In Romania, the answer to the contrary effects of crisis can not be similar to the one on the other European countries or to USA. There are a few differences between the Romanian economy and these economies, which not allow the copy of measures implemented there. The Romanian economy has a deficit of current account, which indicates the dependence on external finance.”

To pass well over the international financial crisis, a leverage ratio should be added to Basel II Accord. “This leverage ratio should be applied as a complement to the risk-weighted capital requirements. It ensures a minimum capital buffer that protects banks against unexpected losses and underestimation of risk. As we have learned from the current crisis, the failure of risk models may quickly turn banks that seem comfortably capitalised into poorly capitalised banks. Adding a leverage ratio to Basel II will reinforce banks’ capital and strengthen capital regulation.”<sup>397</sup>

The current global crisis has proved the limits of Basel II Accord. In my opinion in the nearest future the talks will be about a new agreement, maybe a Basel III, which has to take into consideration more risks that affect the banking system. Other risks can be: liquidity risk, as we know this risk can easily cause insolvency and the interest rate risk. Why these two risks, can we ask ourselves?

The answer is simple: thanks to the international financial crisis we face a lack of liquidity. The banks have problems in the repayment of loans, they are being forced to make many echelons and modifications for the date of payment for loans. The initial plans for banks, when the credits were given have changed. As a precaution measure in October 2008 the credit rhythm in Romania was significantly reduced. Many banks were forced to increase their operation commissions or to introduce new ones in order to compensate the lack of liquidity.

The financial crisis has contributed to the creation of a vicious circus: the banks haven’t given credits so easily, and the companies confronted themselves with problems in collection of receivables. The firms couldn’t borrow loans in a short time, they couldn’t pay their providers on time, and also the liabilities to the budget, many seizures were introduced, and many providers faced insolvency. In Bihor county can one notice the slow rhythm of development for real estate projects, and the bankruptcy of societies.

Nowadays we face unemployment. One can also notice the efforts of National Bank of Romania, which tries to maintain the financial stability, the inflation, the exchange rate. In the spring of

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396 <http://www.ibase.br/userimages/FLGG%20-%20Mario%20Tonveronachi.pdf>

397 [http://fmg.lse.ac.uk/upload\\_file/1147\\_Hildebrand.pdf](http://fmg.lse.ac.uk/upload_file/1147_Hildebrand.pdf)

2009 the loans were launched, but the credit conditions are pretty tough (high commissions and interest rates, a closer client monitoring, a very good financial situation).

Another risk which Basel III has to take into consideration is the interest rate risk. In general in the credit contract the interest rate is variable. Nowadays there are few banks, which accept a fix interest rate in the credit contract. Why I say this? The situation on the global market determined an increase in the cost of resources, so the interest rate risk has increased. The interest is formed from the cost of resource and the risk margin. No bank will accept an interest lower or equal with the cost of resource.

The fame of a bank once gained does not represent a risk, but losing that fame can turn into a risk any time.

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8. \*\*\*, website: <http://www.ibase.br/userimages/FLGG%20Mario%20Tonveronachi.pdf>
9. \*\*\*, website:  
<http://www.sorinchirita.ro/files/TENDINTE%20IN%20EVOLUTIA%20SITEMULUI%20BANCAR%20SI%20GESTIUNEA%20RISculUI.pdf>
10. \*\*\*, website: [http://fmg.lse.ac.uk/upload\\_file/1147\\_Hildebrand.pdf](http://fmg.lse.ac.uk/upload_file/1147_Hildebrand.pdf)
11. \*\*\*, website: <http://www.asil.org/files/atik.pdf>
12. \*\*\*, website: <http://www.basel-iii-accord.com/>



# **ACCOUNTANCY**

# IMPLICATIONS OF GOING CONCERN PRINCIPLE ON COMPANY BANKRUPTCY

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*In an attempt to select and comprise what has been said so far on the subject of accounting principles, we have chosen to address the going concern principle, explaining its reflection in a particular situation that a company could find itself into – bankruptcy. Therefore, we have reviewed the existing literature on the going concern principle for the purpose of linking it to the bankruptcy of companies. What we are showing here is that there is a pulsing relationship between bankruptcy and the going concern assumption. In other words, both the going concern principle and the state of being bankrupt send signals back and forth, helping managers to plan, predict, and foresee the course of life for their company.*

*Keywords: going concern assumption, bankruptcy, insolvency, accounting principles*

*JEL: G33, M41*

## 1. Introduction

Some very recent research combining accounting and neurology shows that there is a connection between the way in which the human brain is designed and accounting principles such as going concern, consistency, conservatism, periodicity.<sup>398</sup> Perhaps future research in this direction will clarify why it is that accounting principles are somehow taken for granted and insufficiently tackled.<sup>399</sup> In an attempt to select and comprise what has been said so far on the subject of accounting principles, we have chosen to address the going concern principle, explaining its reflection in a particular situation that a company could find itself into - bankruptcy.

In order to do this, the remainder of our paper is organized as follows. Part one is a literature review on the going concern principle. We try to go beyond the definition given in the legal norms by reviewing what various authors wrote on the matter. Further on, we explain how bankruptcy manifests and some of the changes that the Romanian insolvency law brought in 2006. Even though there has been much written and talked about Law no 85/2006 – the new insolvency law in Romania -, we consider that the subject is not exhausted for at least two reasons. First is that the issuance date of this law is still quite recent and its full effects are just beginning to show. And second, since every researcher approaches it from a different angle, the outcomes are bound to offer different views on the matter. Finally, the third part is meant to tackle the relationship between bankruptcy and the going concern principle and the accounting consequences that arise.

## 2. Going concern principle

Stemming from true and fair view principle, which governs financial reporting throughout the world (Achim, 2009) be it based on US GAAP, IAS/IFRS or any other national general accepted accounting principles, the going concern principle is the one that has the greatest influence on most of the other general accounting principles - like consistency principle, substance over form principle, conservatism principle, cut off principle (Imbrescu, 2005).

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398 For a detailed view on this see “NeuroAccounting – Consilience Between Accounting Principles and the Primate Brain”, Dikhaut, J., Basu, S., McCabe, K., Waymire, G., 2009, available online at <http://ssrn.com/abstract=1336517>.

399 For example, up until recently, the US GAAP did not contain a definition of the going concern assumption – one of the four major assumptions (or principles) of US GAAP (Venuti, 2004; Afterman, 2008; Wendell, 2008).

In the revised literature, the going concern principle is defined as the assumption that in the foreseeable future the company will continue operating its business naturally (Matis, 2003) without finding itself in impossibility of continuing the activity or having to reduce it dramatically. IAS 1 "Presentation of financial statements" provisions require that management assess the entity's ability to continue as a going concern upon each preparation of financial statements. As emphasized in the accounting literature, IAS 1 defines the going concern principle *per a contrario*: "unless management either intends to liquidate the entity or to cease trading, or has no realistic alternative but to do so" which actually means that management assesses events and uncertainties looking for hints of discontinuing operations, rather than specifically testing or verifying the going concern assumption.

According to the same accounting standard, the going concern is the default basis when preparing financial statements, and any event or uncertainty identified by the management that comes in contradiction with the default assumption must be presented in the notes to financial statements. This is, in fact, an aspect on which there is total agreement since worldwide this view is a common one. To prove this, we will add to the provisions of IAS 1 the EU's Fourth Council Directive article no 31 which states that "items shown in annual accounts are valued [...] presuming the company to be carrying on its business as a going concern", and mention that one of the four assumptions on which US GAAP is based on is the going concern assumption (Venuti, 2004).

Basically, the going concern principle expresses the belief that the company remains in existence for and beyond the foreseeable future, having the balance sheet to reflect its value considering this assumption. Because the financial statements are prepared once a year, the common time horizon considered is twelve months. (Afterman, 2008) The opposite is to say that the company will fold within one year from the date of the financial statement. IAS 1 specifically states that "the foreseeable future [...] should be at least, but not limited to, twelve months from the balance sheet date". A timeline is required because, as the International Standards of Audit (ISA 570) underline, the further into the future a judgment is made, the more the degree of uncertainty increases. And continuity is a concept of the future, that is continuity is impossible in the absence of future. (Salvary, 1996)

In essence, the going concern principle is meant to offer a resolution to the problem that financial statements pose: offering information periodically about continuing operations. The company is perceived as a continuous process of transforming factors of production into value. The audit standard ISA 570 effectively explains this by saying that "the entity will be able to realize its assets and discharge its liabilities in the normal course of business". By expecting to perform continuously, that is contracts under execution will proceed normally (Achim, 2009), assets will be used adequately and so on, using historic costs and utility values are the only pertinent options. Fair value considered from a liquidating point of view is dismissed.

The financial statements are scrutinized through the magnifying glass that the general accounting principles provide, thus leading to certain expectations and interpretations. With regard to the going concern assumption, for most businesses it is considered implicit and the "uncertainty related to it is at low enough levels not to warrant abnormal consideration by preparers, auditors or users of financial statements. Only as the level of uncertainty rises well above normal levels is it an issue relevant to a company's financial statements". (Martin, 2000)

Let us now point out shortly what this principle exactly means in accounting terms. First of all, it makes sense for companies that have no intention to liquidate to mark the distinction between long-term and current assets and liabilities in their financial statements. (Achim, 2009) Asset amortization is another consequence of applying going concern principle. It assumes that the company will outlive its assets (Malciu & Feleaga, 2005). Valuation of the assets according to their utility value presumes that the extent of the company's activities will not be reduced dramatically in the near future. Based on the same principle, historical costs are seen as a

pertinent valuation basis (Notiuni, 2006; Malciu & Feleaga, 2005). Historical costs are considered pertinent because they are easily retrieved, easy to use and verifiable since they can be proven through the transactions that took place. (Wallace, 2008) Income and expenses that regard the future financial periods are presented in the balance sheet, and do not affect the net income of the current period. (Achim, 2009)

### **3. Bankruptcy as component of the insolvency procedure**

Throughout Europe – in both developed and developing countries –, the last years were marked by debates regarding the most suitable model for insolvency that should be adopted, probably triggered, as Franks (1996) points out, by the large number of insolvencies during the recession in Western Europe in the early 1990's. As a result, a wave of judicial reforms set out to determine “if particular provisions provide the correct incentives to liquidate or maintain an insolvent company as a going concern” (Franks, 1996) started in this field and Romania was part of it (Munteanu & Mihai, 2006 and Brower, 2006).

Law no 85/2006 regarding the insolvency procedure replaces Law no 64/1995 regarding judicial reorganization and bankruptcy in offering the legal setting for companies having financial difficulties. In short, the insolvency procedure set up by the new law consists of two components: a simplified procedure which sends the company directly into bankruptcy and a general procedure which allows the company to go either through reorganization or bankruptcy or both. Just like most of the other European insolvency models, the current Romanian one is obviously inspired by the US insolvency regulations. These became a model for the European jurisdictions because the requirements of the World Bank and the European Union asked for companies in financial distress to be reorganized and protected by the legislation (Munteanu & Mihai, 2006) that is they asked for a debtor oriented law like the one the US has. However, as recent studies have shown (LoPucki, 2005 and Jacoby, 2005), the American system is far from being perfect, but for the purpose of this paper, it is enough to say that the US insolvency regulations – good or bad –, are a model for many others.

The insolvency procedure is triggered when a company defaults on its debt. This may lead either to the firm entering bankruptcy or reorganization. Upon entering bankruptcy, the company will be liquidated and it will exit the market. The bankruptcy procedures specify the manner in which the company will be liquidated – sold as a going concern or piece by piece –, in order to repay the claimants in accordance with the absolute priority rule. Alternatively, reorganization or restructuring is aimed at finding a method of rescuing the company from financial distress and salvaging all or parts of it for the benefit of all claimants. (Hashi, 1997)

The Romanian insolvency law: Law no 85/2006 replaced law no 65/1994. While some authors consider the new law as being likely to suffer further improvements (Bufan, 2006), for others it brings a true revolution in administering bankruptcy (Sarcane, 2006). It is also seen as favourable for the Romanian business environment because it helps purify it (Achim, Pop, Achim, 2008). Unlike the old law, Law no 85/2006 has provisions regarding two forms of insolvency procedure: the general procedure and the simplified procedure. The general procedure means that, after an observation period, the debtor may enter reorganization and then bankruptcy, or separately, only reorganization or only bankruptcy. The new law increases considerably the number of cases in which the debtor cannot reorganize (Tandareanu, 2006). The simplified procedure supposes that the debtor goes straight into bankruptcy. By comparing these aspects with the US Bankruptcy Code, we are not wrong to say that the general procedure matches Chapter 11 Reorganization and that the simplified procedure is the equivalent of Chapter 7 Bankruptcy.

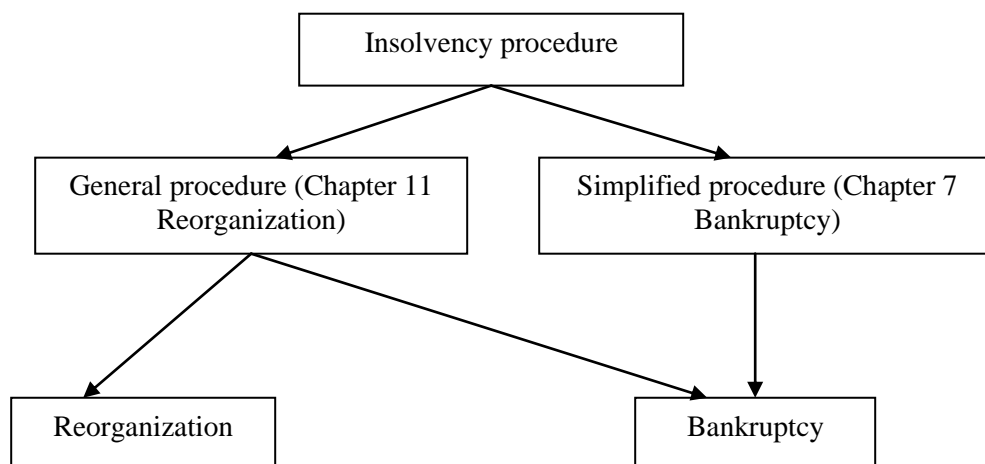


Fig. 1: Options in the Romanian insolvency procedure (created by authors)

In practice, applying the going concern principle does not differ significantly from one referential to another. What differ are the practices concerning the cases in which going concern assumption is no longer applicable (Achim).

#### 4. The going concern principle reflected in bankruptcy

The destiny of a company entering the bankruptcy procedure is quite clear. It will be liquidated, regardless of the method used (sold piece by piece or as a whole). It will no longer serve the purpose it was set up for because it exits the market. It exists until the assets have been sold and the liabilities covered. During this period, the sole reason of the activity of that company is to complete its own liquidation that is to realize its assets and pay its creditors so as to split the remaining equity (if any) between the owners (Imbrescu, 2005).

The legal personality of the company is valid only for those activities that are aimed at this purpose, the normal economic activities that it used to conduct cease. All those connected in any way with the bankrupt company no longer have future expectations from it. The company will not continue for the foreseeable future. Under these circumstances, the going concern assumption is no longer valid. A bankrupt company meets the criteria established *per a contrario* by IAS 1. Its management has no other alternative but to cease trading and liquidate the entity. Therefore, the financial statements of the company being liquidated will be prepared bearing in mind that going concern assumption no longer applies and a different basis for valuation is necessary.

Going concern assumption justifies the use of the estimated recoverable cost approach as opposed to the liquidation or exit value approach to measurement for a liquidating concern. The going concern principle is based upon inductive and deductive reasoning about the behaviour of companies. A company will be able to execute its business plans if a set of conditions are met. The ability to execute its plan makes the company a going concern. Therefore, a going concern is observed as being a firm which has committed finances to its operations, has implemented investment plans and, as a necessary condition for investment, those plans provide for recovering the money invested. There is an unbroken connection between the investment plan and the recovery plan. A liquidating concern is characterized by a disruption of the investment and recovery plan; the recovery plan is no longer operational and the investment plan is no longer valid. (Salvary, 1996)

Upon entering bankruptcy, the normal, current activity of a company is ceased, even though its legal person still exists. The main purpose for the company is no longer to obtain profit, maximize its share value and so on, but to finish liquidating. (Notiuni, 2006; Achim, 2009) In short, in accounting terms this means that all elements will be valued at liquidating values,

long-term assets such as research and development expenses or constituting expenses will be recognized in the income statement, as well as revenues or expenses concerning other financial periods.

## 5. Conclusion

In this paper, we have reviewed the existing literature on the going concern principle for the purpose of linking it to the bankruptcy of companies. What we are showing here is that there is a pulsing relationship between bankruptcy and the going concern assumption. In other words, both the going concern principle and the state of being bankrupt send signals back and forth, helping managers to plan, predict, and foresee the course of life for their company.

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# A STRATEGIC APPROACH OF MANAGEMENT ACCOUNTING

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*For a long time, management accounting has been used based on a predominantly technical approach which strictly aimed at computing the costs. Gradually, to the management accounting it has been added a decisional approach aimed at influencing the behaviour of those responsible for resource management. But modern management requires new objectives of management accounting to help managers in the strategic analysis of the firm; therefore we consider that it is necessary the reconsideration of the objectives and tools of management accounting, using a strategic approach (external and prospective view) that facilitates long-term decisions and to ensure a sustainable competitive advantage.*

*Keywords: management accounting, strategy, decision making process, long-term*

*JEL code: M41, M10*

## **1. Introduction**

In the first place, accounting is a communication tool that favours communication and dialogue between the internal and external “actors”, which imposes a permanent education and training. This proves to be the more necessary in nowadays, when economic and social environment is in full transformation process and a rational and efficient management of the organization involves more and more controlling the information.

Some of the information provided by the accounting concerns particularly the relations with third parties, being “transparent”, published. The other part regards the company’s management, the results generated by the different sectors or products, the strategy and tactics adopted by the company, being confidential. This separation of the information generates the distinction between the two accounting circuits, namely financial accounting and management accounting.

To ensure the usefulness of the management accounting in the managerial process of the organization, a closeness of its objectives and tools with the entity’s objectives and long-term strategy must be achieved. Traditionally, the strategy is oriented towards the future, making long term decisions and involves an overview of the entity, while accounting is past oriented, for achieving short term objectives and aims at presenting the situation of the organization “cut up” in some controllable components.

## **2. Management accounting – concept and objectives**

Regarding the definition of management accounting, most specialized papers refer to the Institute of Management Accountants definition when approaching the concept of management accounting. This refers to management accounting as “the process of identification, measurement, accumulation, analysis, preparation, interpretation, and communication of financial information used by management to plan, evaluate, and control within an organization and to assure appropriate use of and accountability for its resources” (Statement on Objectives of Management Accounting A no.1, 1981).

But the latest definitions emphasize the necessity of extending the analysis to the strategic elements. In this context, Jan Bell et al (2004) defined management accounting as “a system of measuring and providing operational and financial information that guides managerial action, motivates behaviours, and supports and creates the cultural values necessary to achieve an



organization's strategic objectives". This definition reflects the authors' concerns regarding the correlation of management accounting practices and tools with the entity's strategy. Without contradicting the definition of the Institute of Management Accounting (generally accepted), Bell's definition emphasizes not only the management accountants actions, but also their purpose - achieving strategic objectives.

Lately, the management accounting system focuses increasingly more to activities to be undertaken at all organizational levels. Assessment, management and continuous improvement of these activities are critical to the success of a company. Management accounting is able to "add value" to a business, through the following five major goals (Hilton, 2005: p.6):

- providing information for decision making and planning, and proactively participating as part of the management team in the decision-making and planning processes;
- assisting managers in directing and controlling operational activities;
- motivating managers and other employees toward the organization's goal;
- measuring the performance of activities, subunits, managers, and other employees within the organization;
- assessing the organization's competitive position, and working with other managers to ensure the organization's long-run competitiveness in its industry.

It can be noticed from this panel of the management accounting objectives a clear orientation towards the management activity and to ongoing collaboration with it, in order to achieve the company's strategic objectives, coordinating and controlling permanently the current (daily) activities.

Along with the increasing of products variety, reduction of lifecycle, the emergence of new production technologies and economic globalization, we are witnessing to the growing number of competitors in all markets, which makes that "any economic advantage to be ephemeral and any bet on future extremely risky"(Tabără & Mihail, 2004).

Far from playing a passive role in providing information, management accounting is involved both in strategic decisions, and current decisions faced by an entity. In fact, the role of management accounting is to make the link between strategy of the organization and current actions taken to achieve its objectives.

Management accounting is the one that provides financial and operational information needed by managers in order to achieve the strategic objectives of the organization (Bell et al., 2004)

- by *nature* management accounting is a measurement process;
- the *scope* of management accounting includes financial information, such as cost, and operational information, such as percentage of defective units produced;
- the *purpose* of management accounting is to help an organization reach its key strategic objectives. It is not meant for mandated financial and tax reporting purposes.

-good management accounting information has three *attributes*:

- technical - it enhances the understanding of the phenomena measured and provides relevant information for strategic decisions;
- behavioural - it encourages actions that are consistent with an organization's strategic objectives;
- cultural - it supports and/or creates a set of shared cultural values, beliefs, and mindsets in an organization and society.

Although the costs computation remains an important objective of management accounting, it must be emphasized the importance of designing and developing a management accounting system oriented to achieving the strategic objectives of the organization. If until recent, the managers' decisions aimed at achieving increased short term results, by maximizing profits, in detriment of the actions that generate long-term effects, in our opinion is essential to reconsider

the objectives of management accounting, so that information generated by it to be useful for an organization in its efforts of creating value and ensuring long-term success.

### **3. Management accounting orientation toward the achieving strategic objectives**

The decisions that have to be made in order to ensure effective resources allocation requires a variety of information that only management accounting can make available to managers. The role of management accounting changed over time, depending on the economic context. Of course, in a complex, turbulent and uncertain environment, the managers information needs are diversifying and growing, and management accounting - as a privileged source of information for the management system - can meet these requirements, provided that permanently adapt its tools and practices to the requests of decision-makers.

A costing system is used, on the one hand, for financial reporting needs (to the evaluation of balance sheet items) and, on the other hand, for the internal information needs regarding the processes improvement, in order to facilitate strategic decisions-making, and operational too.

Currently, the business environment became more "applicant" for entities, which are forced to compete in a much more aggressive in terms regarding prices, quality and services. Information that managers need regards issues such as quality, delivery time, effectiveness of running activities as well as products / services and customers profitability.

Strategic cost management is a consequence of changes that currently take place and requires a permanent adaptation of the tools and techniques so as to improve the strategic position of the organizations. For information provided by management accounting to be useful to managers, in order to achieve the strategic objectives of the organization, the management accounting should be designed and used so as to follow the mission and the competitive strategies of the organizations, by conducting an analysis correlated with the economic environment, costs associated with customers, competitors, etc.

In the 80's the concept of **strategic management accounting** had generated debate in the specialized literature. Generally, strategic management accounting is identified with a generic approach of accounting for strategic positioning. The strategic nature of management accounting aims at its external and prospective orientation.

Strategic management accounting can be defined as "a process of identifying, gathering, choosing and analyzing accounting data for helping the management team to make strategic decisions and to assess organizational effectiveness" (Hoque, 2001: p.2).

Normally, the development and use of strategic management accounting techniques is related to strategic issues regarding the external information needs in order to face the uncertainties of economic environment and to support strategic decisions. This external orientation may relate to competition (information regarding the competition plays a key role in achieving competitive advantage), business partners (from the value chain perspective, the external information usefulness exploits the link with the suppliers and customers) and / or market (assumes the orientation toward offer of services in order to meet customer needs) (Cinquini & Tenucci, 2007). Cravens and Guilding (2001) identified 14 techniques of strategic management accounting:

- activity based costing/management (ABC/M)* - the strategic focus of this technique consists in the management of the activities through which it is possible to define actions aiming at achieving a competitive advantage;

- attribute Costing* - consider products / services as a bundle of features that differentiate the products which costs are determined, this technique can be interpreted as an externally oriented because the attributes of services are determined according to customer requirements;

- benchmarking* - involves identifying the best practices and comparing the organization's performance to those practices with the goal of improvement; this technique underline the external strategic orientation toward competitors;

-*competitive position monitoring* - aims at gathering the information on competitors regarding sales, market share, volume and unit costs; Basing on the information provided, the company is able to assess its own position relative to main competitors and, consequently, control or formulate its strategy;

-*competitor cost assessment* - in contrast to the previous technique, competitor cost assessment concentrates uniquely on cost structures of competitors; the main criticism of this technique regards the information sources;

-*competitor performance appraisal based on public financial statements* - a relevant source of competitors' evaluation is constituted by public financial statements; today's international accounting harmonization permits a simpler comparison between companies of different countries;

-*customer accounting* - this technique considers customers or group of customers as unit of accounting analysis and aims at appraising profit, sales or costs deriving from customers or customer segments;

-*integrated performance measurement* - implies a definition of an integrated performance measurement system, which contains both financial and non-financial measures (balanced scorecard);

-*life cycle costing* - aims at calculating the total cost of a product throughout its life cycle, from the design to the decline, through introduction, growth and maturity; it is a clear long term accounting perspective and market orientation;

-*quality costing* - product quality has become a precondition to its market success; this technique classifies and monitors costs as deriving from quality prevention, appraisal, internal and external failures;

-*strategic costing* - costing systems are progressively getting into the strategic management process, which means that costing systems must explicitly consider strategy and the pursuit of long - term competitive advantage;

-*strategic pricing* - focuses on the use of competitor information, like competitors' reactions to price changes, price elasticity, economies of scale and experience, in the pricing process;

-*target costing* – within this technique many external factors intervene;

-*value chain costing* - propose an approach to accounting that considers all the activities performed from the design to the distribution of the product; the strategic implications regard the exploiting of the economies and efficiencies deriving from the external linkages between the company and both suppliers and customers.

This panel of the strategic management accounting techniques reveals, on the one hand, that *an approach based on analysis and monitoring processes represents a solid base for achieving strategic objectives* and on the other hand, the fact that non-financial measures are equally important, as financial indicators, for measuring performance.

Strategic management accounting provides useful information for making strategic decisions and provides necessary information for the organizational performance measurement. Activity-based approach treats the goods or services as a result of activities, each of them consuming resources and thus generating costs. This methodology, based on cost drivers, allocates costs to undertaken activities and establishes much more clearly a causal relationship between activities, costs and results of activities (products / services).

Johnson (1992: p.131) said that "the belief that activity-based cost management tools will improve business competitiveness is a dangerous delusion" adding that "as a tool to improve cost accounting information it is impeccable" but is not a tool for improving business competitiveness. The reason why the author makes this affirmation is that competitive excellence

is achieved only through an impeccable management of the relations of the organization with its clients.

Activity-based management, through a process-oriented thinking, facilitates long term decision making. Initially, this tool was seen as appropriate for cost strategies, alongside with improving internal processes and innovation, but its usefulness was demonstrated in the case of firms following a differentiation strategy (Chenhall & Langerfield-Smith, 1998). Activity-based management allows, on the one hand, a better cost control and on the other hand, a better behaviour by facilitating internal communication within the organization. Moreover, in order to be of real use for supporting decision-making process, the activity-based management must be accompanied by an organizational culture oriented toward client, communication and dialogue.

#### **4. Conclusions**

From the presented issues, results the necessity of linking the information provided by management accounting with entity's goals, only this way management accounting being a useful tool in decision making. In this respect, it is necessary that both management accounting and management of an organization to develop a real "business partnership".

Given the new requirements related to restructuring the entire enterprise's activity, its managers raise the question of whether the information provided by the traditional accounting system can successfully meet these requirements. For management accounting is born a new challenge, to optimize the entity's offer, adapting products or services costs to the value it represent for the client. Information provided to managers should assist them in determining the optimal products / services mix that will be manufactured and sold as well as the profit generated by each product or service.

Diversity of products or services, but also of customers, generates the increase of the complexity of the undertaking activities. In this context, it is necessary the "rethinking" of whole production process and the abandon of traditional processes. It must renounce to the vertical "guiding" and move to a transversal approach, through value chain.

Each firm must be seen in the context of a general chain of value creation. Value chain analysis is essential in determining exactly what factors can lead to the improvement of value and / or to reduce costs. For this reason, one must be understood the entire chain, not only that part at which the company takes part.

As illustrated by the assertion of strategic management accounting techniques, the adoption of an activity-based costing system can be at hand and solid approach, while supporting the strategic decision-making process of an entity. ABC system, besides the fact that provides a more accurate cost, also provides useful information to managers not only regarding the cost of products / services or the profit generated, but also for decisions making regarding the issues that the enterprise face outside its boundaries, a particularly important fact in a competitive economy. Effective implementation of activity-based costing often depends on behavioural factors rather than technical ones, because the involvement of the entire staff is essential for the success of this process.

Loosing the relevance of the information provided by management accounting was not necessarily caused by improper use of the information in managing the business, as especially by inappropriate use in operational control. The activity-based costing eliminated many problems that have made that cost information irrelevant for planning and decision making.

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# STUDY REGARDING THE IMPORTANCE OF ACCOUNTANCY INSIDE ORGANISATIONS

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*The diversity of the accounting informational needs has determined the establishment of two representations of the same reality: an „internal” representation – the managerial accounting – and an “external” one – the financial accounting. From this perspective, the paper captures a number of aspects regarding the accountancy’s usefulness, from the point of view of the information it provides, to the organisations. Moreover, with an investigation type research on a 110 organisations sample in Sibiu, the managers’ attitude regarding the organisation of financial and managerial accounting has been targeted.*

*Keywords: accounting, financial, management*

*JEL classification: M41, M10*

## 1. Introduction

“Accountancy represents a nation’s most important economic source of information” (Oskar Morgenstern)<sup>400</sup>. It can be stated that, nowadays, the accounting activity is for an enterprise what air and water is for life<sup>401</sup>, a representation model of the enterprise’s life. Formally speaking, we can talk about a symbiosis in the management of the accounting activity between two elements of the company’s accounting system: the financial or general accounting (in French “comptabilité générale”, in English “financial accounting”) – considered the “external side” of the enterprise – and the managerial accounting (in French “comptabilité analytique” and in English “managerial accounting”) – considered the organisation’s “external side”<sup>402</sup>, each with its specific functions<sup>403, 404</sup>.

## 2. Aspects regarding the usefulness of the accounting activity

We can only state that we found the financial accounting issue presented from the point of view of its managerial usefulness but very briefly. In fact, we consider that the study of the reputable specialists Nicolae Feleagă and Ion Ionașcu<sup>405</sup> is a reference point regarding the financial accounting approach from the managerial perspective. The functions<sup>406</sup> of the financial accounting can be synthesized as it follows: *the booking function; the function of displaying a faithful image; the synthesizing function; the communication function; the function of probative instrument for justice, the function of internal managerial instrument; the function of supporting the financial and general management.*

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400 Horomnea, Emil; Tabără, Neculai – Locul contabilității în sistemul general al clasificării științelor, „Finanțe publice, contabilitate”, nr. 5/2002, p. 13.

401 Munteanu, Victor – Teoria și bazele contabilității, Ed. Lumina Lex, București, 2000, p. 10.

402 Minu, Mihaela – Pledoarie pentru acordul dintre fond și formă în contabilitatea românească, part I, „Contabilitatea, expertiza și auditul afacerilor”, nr. 2/2003, p. 9.

403 Gheorghe, Dumitru – Bazele contabilității, Ed. Menora, Constanța, 2003, p. 15.

404 Oprea, Călin; Cârstea, Gheorghe – Contabilitatea de gestiune și calculația costurilor, Ed. Genicod, București, 2002, pp.7-12.

405 Feleagă, Nicolae; Ionașcu, Ion – Tratat de contabilitate financiară, vol. I, Ed. Economică, București, 1998.

406 Ciuhureanu, Alina-Teodora – Activitatea contabilă a firmei: suportul cunoașterii teoretice și practice, vol. “Cercetare, învățământ, calitate din perspectiva integrării în Uniunea Europeană” – Analele Universității Româno-Germane din Sibiu, nr. 2/2003, Ed. BURG, Sibiu, pp. 274-281.

We shall no longer insist upon the aspects regarding the organisation of the financial accounting because we believe that it presently benefits from a strong legislative frame. We would however like to underline that the Romanian legislative frame should find stability, because the permanent changes in our country, although they are due to the accounting adjustment and normalisation process, are constantly overturning the professionals involved in the accounting activity and more especially the ones in the financial accounting. Why can't we ever settle things up? Why do we have to fear to open the Official Gazettes? Why can't the legislative texts be coherent? We are hoping that in the near future the financial accounting will find the peace it needs and the above questions will disappear in the mist of the past.

Often regarded as "*the late child of the Romanian accountancy*"<sup>407</sup>, the managerial accounting provides confidential information to managers, for the businesses' future evaluation, control and management. As compared to the financial accounting, which can no longer fight the "international war of businesses" on a continuously changing Romanian market, the managerial accounting has created new information channels to solve and/or to compensate the limits of the above one<sup>408</sup>.

In Romania, the notion of management accountancy was kept (an influence of the French accounting system) but we consider however that the notion of managerial accounting mostly reflects its importance for the company's management, for taking the adequate decisions in order to overcome certain obstacles related to the present competitive environment.

**The functions** fulfilled through the organisation of the managerial accounting can be synthesized as it follows: establishing the costs on products, activities and organisational units; *collaborating in calculating the selling prices; establishing the company's situation towards competition; it allows a dialogue* between the "technical" staff and the one involved in the general management; *it creates information* necessary for evaluating performances at the management, profit and performance or products centres' level; *it provides a relevant evaluation basis* for certain balance sheet elements; *it explains some results* based on selling costs or prices; *it contributes to the predictions' accomplishment* of incomes and expenses, simultaneously with their systematic surveillance and control and with the exceptions' study; it provides information to foreshadow the enterprise's future development; *it determines hidden costs*, unnoticeable with the traditional book-keeping systems. Among the **obstacles** that stand in the way of a real managerial accounting organisation inside the Romanian companies, we mention<sup>409</sup>: *the prolonged transition process to the market economy; the financial obstructions; the lack of competition, of real competition; the proliferation of the underground economy; the lack of organisational experience; the lack of aggressiveness; unskilled personnel* etc.

### 3. The methodology of the research

With this study we wanted to capture the managers' attitude regarding the importance of financial and managerial accounting. Our investigation has been made up of two consecutive researches: *a qualitative research of an exploratory nature and a quantitative research of a descriptive nature.*

By using the qualitative research of an exploratory nature one had as aim *determining the set of hypotheses which were the object of the quantitative descriptive research that was to follow and setting up the following priorities for the research.* The methods used in this preliminary research are the following: *the analysis of secondary data*, which requires the usage of the available data coming from different sources with focus on discovering shortcomings, ideas, solutions regarding

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407 Feleagă, Niculae – Contabilitatea managerială, Paul Diaconu, Ed. Economică, București, 2002.

408 Sucală, Lucia – în Contabilitatea de gestiune – între reglementare și necesitate, în condițiile procesului de convergență contabilă în România, vol. "Congresul profesiei contabile din România. Armonizare sau Convergență în Standardele Internaționale de Contabilitate?"; București, 3-4 septembrie 2004", Ed. CECCAR, București, 2004, p. 820.

409 Cernușca, Lucian – Organizarea și conducerea contabilității de gestiune în spiritul noilor reglementări contabile, "Contabilitatea, expertiza și auditul afacerilor", nr. 9/2004, p. 55.

the accounting activity; *interviews with specialists* with the aim of obtaining further pieces of information from those relevant in the fields of finance-accounting; *group reunions* or *focus groups* that allowed the debates regarding this subject.

The descriptive quantitative research, the results of which are presented in the present paper, had as purpose to describe and evaluate the coordinates regarding the importance of organising the financial and managerial accounting to the Romanian companies' managers.

Taking into consideration the location of development, the research has been made *in the field*, and in what concerns the frequency of development, the research has been made *on occasion*.

In order to set the sample we used the method of *random sampling*, which was based on a *fixed sample with restrictions* (taking into consideration the organisational restrictions, we decided upon a sample of 110 respondents). We can state that the sampling method consists of a combination between the *multi – stages sampling method* and that of the *non-proportional stratified random sampling*. The basis for sampling has been defined and constituted using the data obtained from the National Office of the Registry of Commerce, having included all the firms and autonomous authorities in Sibiu County. We observed that the main criteria which need to be taken into consideration in selecting the components of the sample are the ones related to the category of the firm. From the sampling basis we have eliminated all the firms that are no longer active, which have had an interruption in their activity and those which had registered losses in exploitations more than two years consecutively. The remaining firms have been stratified according to the category of the firm. The remaining firms for each stratum have been randomly selected until the size of the sample has been reached. In completing the size of the sample we chose the non-proportional option, starting from the hypothesis that certain strata, especially those of the small, medium and large firms present a higher importance for the financial-accounting activity.

#### 4. Conclusions obtained from the research

A first objective of the research was to discover **the managers' attitude regarding the financial accounting organisation**. The obtained information is presented in table 1.

|       |   | Frequency | Percentage | Valid percentage |
|-------|---|-----------|------------|------------------|
| Valid | 110   |           |            |                  |
|       | the purpose is to inform the authorities                      | 47        | 42,7       | 42,7             |
|       | it contributes to sustaining the company's general management | 63        | 57,3       | 57,3             |
|       | Total   | 110       | 100,0      | 100,0            |

From the sampled information it results that 42,7% of the managers of the investigated companies consider that the financial accounting organisation represents an obligation of the company derived from the legal provisions, its soul purpose being to inform the state's structures and 57,3% believe that the financial accounting organisation is an obligation of the company derived from the legal provisions and it contributes, through its characteristic functions, to the support of the company's general management. As a conclusion, the hypothesis formulated before the research (*The financial accounting is an obligation of the company derived from the legal provisions, its soul purpose being to inform the state's structures*) is being annulled.

Although the difference between the two attitudes is not very big, the higher percentage of the ones who are aware of the importance of the financial accounting organisation, of its functions is gratifying. Thus, we may however state that, at least in Sibiu county, a great number of managers who share our opinion according to which *the financial accounting has the role of recording all the events and transactions which affect the company in its relations to the external and internal*



environment, in accordance with the established legal principles and requirements, briefly and periodically elaborating financial statements which would offer an accurate image over the company's financial situation and performance, and which would be useful to a wide range of users when they take decisions which affect their interests and the company.

To detail, we have tried to capture the managers' attitude regarding the financial accounting organisation, according to the company's category. The obtained information is shown in table 2.

| Influence on performances                 | Category         |               |                      |              | Total %       |
|---|------------------|---------------|----------------------|--------------|---------------|
|   | micro enterprise | small company | medium-sized company | big company  |               |
| the purpose is to inform authorities / %  | 10<br>58,8%      | 22<br>42,3%   | 11<br>37,9%          | 4<br>33,3%   | 47<br>42,7%   |
| Contributes to the general management / % | 7<br>41,2%       | 30<br>57,7%   | 18<br>62,1%          | 8<br>66,7%   | 63<br>57,3%   |
| Total / %                                 | 17<br>100,0%     | 52<br>100,0%  | 29<br>100,0%         | 12<br>100,0% | 110<br>100,0% |

From the presented association, we can conclude that there is a direct relation between the company's size and the managers' attitude regarding the financial accounting organisation. Thus, as the company's size increases, the managers' percentage who find the financial accounting organisation as something of an obligatory character which contributes with its specific functions to the support of the general management is higher (micro enterprises – 41,2%, small companies – 57,7%, medium-sized companies – 62,1%, big companies – 66,7%).

The second purpose of the research was to discover the managers' attitude regarding the managerial accounting organisation, the obtained information being shown in table 3.

|       |  | Frequency | Percentage | Valid percentage |
|-------|--|-----------|------------|------------------|
| Valid | 110  |           |            |                  |
|       | obligation stipulated by law                               | 43        | 39,1       | 39,1             |
|       | contributes to supporting the company's general management | 67        | 60,9       | 60,9             |
|       | Total  | 110       | 100,0      | 100,0            |

It can be noticed that 60,9% of the companies' managers included in the sample estimate that the managerial accounting organisation contributes with its characteristic functions to the maintenance of the company's general management and 39,1% of the companies' managers included in the sample believe that the managerial accounting organisation represents only an obligation of the company, derived from the legal provisions.

The high percentage of the ones who are aware of the importance of the managerial accounting organisation, of its functions, leads us to the conclusion that the hypothesis formulated before the research (*The managerial accounting contributes to the maintenance of the general management*) is being confirmed.

*With a thorough analysis we have captured the managers' attitude regarding the managerial accounting organisation according to the company's size.* The obtained information is presented in table 4.

| The accountancy's organisation            | Category |               |                      |             | Total % |
|---|----------|---------------|----------------------|-------------|---------|
|   | micro    | Small company | Medium-sized company | Big company |         |
| Obligation stipulated by law %            | 10       | 24            | 7                    | 2           | 43      |
|   | 58,8%    | 46,2%         | 24,1%                | 16,7%       | 39,1%   |
| Contributes to the general management / % | 7        | 28            | 22                   | 10          | 67      |
|   | 41,2%    | 53,8%         | 75,9%                | 83,3%       | 60,9%   |
| Total / %                                 | 17       | 52            | 29                   | 12          | 110     |
|   | 100,0%   | 100,0%        | 100,0%               | 100,0%      | 100,0%  |

The analysis of this association leads us to the conclusion that, as the company's size increases, and the managers' percentage who find the financial accounting organisation as a contribution to support the general management grows (micro enterprises – 41,2%, small companies - 53,8%, medium-sized companies – 75,9, big companies – 83,3%).

Still for detailing, *we have tried to discover the attitude towards the managerial accounting organisation according to the company's field of activity* (table 5).

| The accountancy's organisation            | Field of activity |          |          | Total % |
|---|-------------------|----------|----------|---------|
|   | commerce          | industry | services |         |
| Obligation stipulated by law %            | 28                | 8        | 7        | 43      |
|   | 62,2%             | 21,6%    | 25,0%    | 39,1%   |
| Contributes to the general management / % | 17                | 29       | 21       | 67      |
|   | 37,8%             | 78,4%    | 75,0%    | 60,9%   |
| Total %                                   | 45                | 37       | 28       | 110     |
|   | 100,0%            | 100,0%   | 100,0%   | 100,0%  |

It can be noticed that most of the companies in commerce (62,2%) find the managerial accounting organisation as a legal obligation, while the majority of the companies operating in industry and services (78,4% - industry, 75,0% - services) are aware of the managerial accounting importance as a support of the general management.

*However, couldn't the company exist without an accounting activity?* Here is a question that comes from the ones who often consider the accounting professionals uncomfortable, or even unpleasant. Let's try to imagine, at least theoretically, a single hour when the accounting activity and implicitly the idea of order and prediction totally abandoned, economically speaking. The chaos, failure and bankruptcy would be the punishment that the "natural" laws of economy would apply in the very moment of such a dangerous adventure. An uninspired decision in the enterprise's strategy, a single transaction made hastily during this period might send the enterprise from the profitable area into the one of losses or of an imminent risk. The accounting activity does not entirely eliminate risk, but it can obviously diminish or anticipate it.

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## AUDIT SAMPLING AND OTHER SELECTIVE TESTING PROCEDURES

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*The audit evidence can be obtained by applying specific techniques to all the items within an account balance or to a class of transactions (100% examination) or to a representative sample based on which conclusions that could be drawn concerning the whole set of information (sampling audit). The article analyses the manner in which the auditor applies the sampling techniques and other selective testing procedures in order to obtain audit evidence with the help of which he/she could substantiate the opinion expressed in the auditor's report related to the true and fair view reflected in the financial statements.*

*Key words: audit, samples, audit evidence, selective testing procedures*

*JEL Classification: M41, M42.*

In the process of collecting the audit evidence, the auditor should act in an effective and professional manner. These requirements can be achieved with the provision of reasonable assurance and with low costs afferent to the collection and analysis of the evidence supporting the substantiation of the opinion.

The audit evidence can be obtained by the application of specific techniques to all the items of an account balance or to a class of transactions ((100% examination) or to a representative sample based on which conclusions could be drawn concerning the whole set of information (sampling audit).

International Standard on Auditing ISA 530 “Audit Sampling and Other Means of Testing” sets rules and recommends audit sampling procedures and other means of selecting the testing items, for the collection of the audit evidence. This audit evidence is obtained from an appropriate mix of tests of controls and substantive procedures.

- The **audit sampling for the tests of controls** is generally appropriate when the application of the control generates audit evidence of performance (for example, initials of the warehouse keeper on the delivery note accompanying the finished products to the warehouse or the samples concerning the authorization of data input to a computer-based data processing system).
- **The substantive procedures** are associated with values and can be **analytical procedures and tests of details transactions and accounting balances and** their purpose is to detect material misstatements in financial statements. When such procedures are performed, audit sampling and other means of selecting items may be used to verify one or more **assertions** about **a certain amount in the financial statements** (for example: the existence of **inventories**) or to make **an independent estimate of certain amounts** (for example: the evaluation of hard-to-sell **inventories**).

Besides audit sampling, the audit standard ( ISA 530 “Audit Sampling and Other Means of Testing”, paragraphs 22 ÷ 27) also mentions the following means of selecting items for audit testing:

- **Selecting all items** (100% examination), more frequent in the case of the substantive procedures, it may be appropriate when the population constitutes a small number of large value items, when both the inherent and control risks are high, and other means do not provide sufficient appropriate audit evidence, or when the repetitive nature of a calculation or other process performed using a computer-based information system makes a 100% examination cost effective, for example, through the use of computer-assisted audit techniques (CAATs).

- **The selection of specific items** is based on professional judgement and is subject to non-sampling risk. Specific selected items may include **high value or key items** (those that raise suspicions, or are unusual, particularly risk-prone or that have errors in their history). The auditor may also decide to examine items the **values of which exceed a certain amount** so that he/she may verify a large proportion of the total amount of an account balance or that of a class of transactions. **Other items of information** can be selected so that the auditor may obtain information about the client's business, nature of the transactions, accounting or internal control system, as well as to check whether a certain procedure was performed.

In what the sampling is concerned, it can be **statistical** (if the sample selection is made at random, and probability theory is used for the evaluation of the results of sampling, including the measurement of the sampling risk) or **non-statistical** (if it does not have the characteristics of the statistical one). **Probability (random) sampling** is a method by which the sample is designed so that each unit of the total population has a known probability of being included into the sample, and the sample is designed through a random process. **The non-statistical (rational) sampling** is a method of designing the sample through which the auditor uses his/her professional judgement rather than the probability methods in order to select the items that should be included in the sample.

*Comment: In practice, as well as in the specialized literature, there are supporters of both sampling methods. Consequently, although the **selection through statistic means** is deemed to be more expensive (due to the fact that it is necessary to use the quantification of the risk associated to each area and the usage of this information for the statistical establishment of the size of the audit samples), its supporters argue that, as it is based on mathematical principles, it increases the certitude that the size of the used samples was correctly decided and that more objective conclusions will be drawn. However, **the selection based on judgement** is more often used in practice, and the auditor decides the size of the sample and the sampling method based on experience, judgements and general knowledge concerning the client's activity. The fact that the audit process implies many interconnected judgements also leads to the selection of samples in the same manner, which is why the supporters of this method argue that the selection through the statistical method may result in samples with inadequate size. Other arguments can be: the fact that the selection based on judgement is simpler, therefore allowing for more flexibility and being less expensive.*

*The auditor is therefore free to choose the sampling method that is going to be used **for obtaining** appropriate and sufficient **audit evidence**, in the respective circumstances. The principles on which the selection is based should be recorded.*

The minimal audit norms recommend that, if the auditor decides the size of the samples using his/her own judgements, he/she should also take into account the extent to which he/she will use analytical examination and control. The auditor should also present the reasons of choosing the size of the samples very clearly.

### **What should the auditor take into account in sampling?**

- **The decided audit objective for example testing the inventory evaluation;**
- The adequate and complete **population** from which the sample is selected, **for example the inventory account balance;**

According to the standards, the audit efficiency can be improved if the auditor **stratifies** a population by dividing it into discrete sub-populations which have an identifying characteristic. The objective of stratification is to reduce the variability of items within each stratum and therefore allow sample size to be reduced without a proportional increase in sampling risk. Sub-populations should be carefully defined in such manner that any sampling unit can only belong to one stratum. The results of the audit procedures applied to a sample of items within a stratum can

only be projected to the items that make up that stratum. In order to draw a conclusion on the entire population, the auditor will need to consider the risk and significance threshold in relation to any other strata making up the entire population.

### Sample size

Irrespective of the chosen method, the auditor takes into account the level of sampling risk and the maximum error. The lower the level of accepted risk, the larger the size of the necessary sample in order to provide for the required credibility. Similarly, the lower the maximum admitted error, the larger the number of more detailed tests will be necessary. The annexes of the above-mentioned standard exemplify the factors that influence the size of the testing samples in controls and in the case of the substantive procedures.

**Selecting the sample.** The sampling units can be physical items (such as invoices) or monetary units. As mentioned before, the items of the sample can be selected at random (in statistical sampling) or based on professional judgement (in non-statistical sampling). Due to the fact that the purpose of sampling is to draw conclusions about the entire population, the auditor tries to select a representative sample by choosing the sampling units with characteristics typical of the respective population, and the sample should be selected in such a way as to avoid bias.

The main **methods used for the selection of samples** are reflected in the table below.

Table no. 1. Sample selection methods

|   |
|---|
| <p><b>a)</b> The use of a computerized <b>random number</b> generator or of <b>random number tables</b></p>   |
| <p><b>b)</b> The systematic selection, in which the number of sampling units in the population is divided by the sample size to give a sampling interval, for example, 40, and having determined a starting point within the first 40, each 40<sup>th</sup> sampling unit thereafter is selected. Although the starting point may be determined haphazardly, the sample is more likely to be truly random if it is determined by use of a computerized random number generator or random number tables. When using systematic selection, the auditor would need to determine that sampling units within the population are not structured in such a way that the sampling interval corresponds with a particular pattern in the population.</p> |
| <p><b>c) Haphazard selection,</b> in which the auditor selects the sample without following a structured technique. Although no structured technique is used, the auditor would nonetheless avoid any conscious bias or predictability (for example, avoiding difficult to locate items, or always choosing/avoiding the first or last entries on a page) and thus attempt to ensure that all items in the population have a chance of selection. Haphazard selection is not appropriate when using statistical sampling.</p>   |
| <p><b>d) Block selection</b> involves selecting a block (or several blocks) of contiguous items from within the population. It is believed that block selection cannot ordinarily be used in audit sampling because most populations are structured such that items in a sequence can be expected to have similar characteristics to each other, but different characteristics from items elsewhere in the population. When the auditor intends to draw correct inferences about the entire population based on the sample, this selection technique is not viewed as adequate.</p>   |

- **Performing the audit procedure** – the auditor should apply the adequate audit procedures for each objective of the test on each selected item. If a selected item is not appropriate for the application of the audit procedure, the audit procedure is normally performed on a replacement item. If the auditor is not able to apply the designed audit procedures to a selected item, viable alternative procedures will be applied, and if these alternative procedures cannot be applied either, the respective item will be considered to be an error.
- **Nature and causes of errors** – the sample results, the nature and cause of any identified error, as well as their possible effect on the objective of the test or on other areas of the audit should be taken into account by the auditor.

The auditor can observe that many errors have a common feature, for example, type of transaction, product line or period of time, (in this situation the auditor may decide to identify all items in the population that possess the common feature, and extend audit procedures in that stratum). Such errors may be intentional, and may indicate the possibility of fraud.

In some cases, the auditor may be able to establish whether an error arises from an isolated event that has recurred only on specifically identifiable occasions and is therefore not representative of similar errors in the population (**anomalous error**). In order to have the certainty that it is not representative for the respective population, the auditor performs additional controls (for example, an error caused by the incorrect calculation formula for the **exit value of raw material stocks** in a certain affiliate; (to establish that this is an anomalous error, the auditor should check whether the correct formula has been used at other affiliates).

- **Projecting errors** - for the substantive procedures, the auditor should project monetary errors found in the sample on the population and should evaluate the effect of the projected error on a particular objective, i.e. the testing, and on other areas of the audit.

The auditor projects the total error for the population to obtain a global view of the scale of errors and to compare it with the tolerable error. In the case of the substantive procedures, the tolerable error is represented by a tolerable misstatement and will be an amount less than, or equal to the preliminary estimate of the significance threshold, used for individually audited account balances.

In the case of anomalous errors that have not been corrected, the effect should be taken into account in addition to the projection of non-anomalous errors.

If the stratification of the population was used, the projected errors, in addition to those that have not been corrected for each stratum are combined, when the possible effect of the errors on total account or on the class of transactions as a whole is taken into account.

- **Evaluating the sampling results** - the auditor should evaluate the sampling results to assess whether the assessment of the relevant characteristic of the population is confirmed or needs to be revised.

In the case of **the tests of controls**, an unexpectedly high sample error rate may lead to an increase in the assessed level of control risk, unless evidence is obtained in support of the initial evaluation.

In the case of **the substantive procedures**, an unexpectedly high error in a sample may determine the auditor to believe that an account balance or a class of transactions contains material misstatements, in the absence of further audit evidence that no such material misstatement exist.

We must take into account that the sampling results are affected by the sampling risk<sup>410</sup>. Taking into account the results of other audit procedures helps the auditor appreciate this risk, although the risk can be reduced, if further audit evidence is obtained.

If the evaluation of sample results indicates that the preliminary assessment of the relevant characteristic of the population needs to be revised, the auditor may: Request management to investigate identified errors and the potential for further errors, and to make any necessary adjustments; and/or modify the planned audit procedures; and / or analyse the effect on the auditor's report.

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410 Sampling Risk (ISA 530, paragraph 7) appears as a result of the fact that there is a chance that the auditor may draw a conclusion, based on a sample, which differs from the conclusion the auditor would have drawn if an identical audit procedure had been applied to the whole population.

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## CONTRATS DE VENTE COMPORTANT UNE CLAUSE DE RESERVE DE PROPRIETE

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*The present paper starts from the classic rule of the Fiscal Code, according to which the delivery operation is the transferring of the right to dispose as a real proprietor. In fact, the transmission of the goods from the seller to the buyer has as a direct consequence the transfer of the property right upon the goods. Through its lawful power, the Fiscal Code provides the exception through which the property transfer from the seller to the buyer takes place when the beneficiary pays the total amount of the price. The commercial operations considered as deliveries do have a special treatment in what concerns the fiscal consequences of the seller's obligations. The paper also debates upon these consequences in close relation to a case inspired by the activity of Romanian economic entities.*

*Key words: delivery, contract, property, accounting, fiscality.*

*Cod JEL: M41 – Accounting*

### **Considérations générales**

Les contrats de vente-achat qui comportent une clause de réserve de propriété posent des problèmes complexes, ce qui a conduit à des confusions et des interprétations diverses, tout en impliquant les agents économiques dans des arbitrages délicats. La pratique a démontré que la solution des aspects de nature juridique, fiscale et comptable, nécessite une analyse d'ensemble et concomitante des textes législatifs qui convergent vers ce type de contrats.

### **La transmission de la propriété sur le bien vendu**

Le code fiscal prévoit, par l'article 128 (1), que la livraison constitue le transfert du droit de disposer de biens tout comme un propriétaire.

Cette définition est similaire à la règle, mentionnée dans le contenu de l'article **1295 du Code civil**, conformément à laquelle la vente est parfaite entre les parties et la propriété est de droit transférée à l'acheteur, à partir du moment de la conclusion du contrat de vente-achat, même si le travail n'a pas été remis et le prix n'a pas été payé. Mais, conformément à l'article **1326 du Code civil**, le vendeur est tenu de fournir à l'acheteur le bien vendu dans la mesure déterminée dans le contrat. Selon les dispositions citées ci-dessus, il en résulte qu'il peut apparaître des décalages entre la date à laquelle la vente a eu lieu et la date à laquelle s'est effectuée la remise du bien vendu.

C'est la raison pour laquelle le législatif a prévu dans l'**Ordre du Ministre des Finances Publiques 1752/2005**, point 126 (2), lettre c) que: « *dans le cas des décalages entre la vente et la livraison des biens, ceux-ci s'enregistrent comme des sorties d'entité, n'étant plus considérés sa propriété; ainsi: les biens vendus et qui ne sont pas livrés s'enregistrent distinctement dans la gestion et dans la comptabilité dans des comptes en dehors du bilan* ».

### **La vente qui n'implique pas de transmission du droit de propriété**

Dans le commerce moderne il est apparu la règle selon laquelle les parties contractantes peuvent établir, dans le contrat, le fait que la transmission de la propriété sera effectuée seulement après le paiement intégral du prix du bien vendu. Cette pratique se fonde sur les dispositions de l'article

969 du Code civil, conformément auxquelles « Les conventions légalement établies ont du pouvoir législatif entre les parties contractantes ».

Se rapportant à cette situation, l'Ordre du Ministre de Finances 1752/2005 prévoit que :- les biens approvisionnés ou vendus qui comportent des clauses concernant le droit de propriété s'enregistrent dans la catégorie des sorties et, respectivement, dans celle des entrées, autant dans la gestion que dans la comptabilité, conformément aux contrats conclus;- dans le cas des comptes de fournisseurs et de clients, on regroupe distinctement les dettes et les créances résultées des transactions qui comportent des clauses de réserve de propriété.

Les contrats qui comportent une clause de réserve de propriété se trouvent sous l'incidence du Code fiscal. Ainsi, l'article 128 (3) lettre a) du Code fiscal assimile à la livraison de biens «*la livraison effective des biens vers une autre personne, suite à un contrat qui prévoit que le paiement s'effectue à tempérament ou suite à tout autre contrat qui prévoit que la propriété est attribuée le plus tard au moment du paiement de la dernière somme échéante, à l'exception des contrats de leasing*».

En complément, l'article 134<sup>1</sup> montre que le fait générateur intervient à la date de la livraison des biens ou à la date de la réalisation des services, à quelques exceptions. Le paiement à tempérament ne fait pas partie des exceptions. Par conséquent, le fait générateur de la TVA entière est la livraison du bien et non pas le transfert du droit de propriété, qui se réalise à une date antérieure à la livraison, c'est-à-dire au moment du paiement du dernier tempérament.

Le contrat de vente-achat doit prévoir un terme précis pour le paiement du prix du bien vendu. Si ce terme est respecté, la situation est bien claire, l'acheteur devient propriétaire. Dans la situation inverse, le vendeur peut récupérer le bien vendu, il doit restituer le paiement partiel du prix, mais il a le droit de recevoir une indemnité, suite à l'utilisation que l'acheteur a faite de son bien et, le cas échéant, pour l'usure du bien. En principe, les ventes à convention de réserve de la propriété (pactum reservati domini) sont les ventes à paiement à tempérament. La pratique a démontré que, toute vente à tempérament n'est pas forcément une vente à réserve de propriété. L'effet concernant la transmission de la propriété ne se produit que par une stipulation spéciale.

### **Cas atypiques concernant les livraisons de biens**

Dans certaines situations, réglementées par l'article 134<sup>1</sup>. du Code fiscal, la livraison des biens est antérieure à la livraison.

Ainsi, pour les livraisons de biens ayant à la base un contrat de consignation ou dans le cas des opérations similaires, tout comme les stocks à la disposition du client, les livraisons de biens en vue de tester ou de vérifier la conformité, *on considère que les biens sont livrés à la date à laquelle le consignataire ou, selon le cas, le bénéficiaire, devient propriétaire des biens.*

Cette séparation, de l'acte de livraison des biens de la notion de livraison, a des effets de nature fiscale, dans le sens que le fait générateur de TVA intervient au moment où celui qui reçoit le bien devient le propriétaire des biens respectifs.

### **Les normes méthodologiques d'application de l'article 134<sup>1</sup>. du Code fiscal**

*Pour les biens livrés ayant à la base un contrat de consignation, on considère que la livraison des biens du consignataire au consignataire a lieu à la date à laquelle les biens sont livrés par le consignataire à ses clients. Concrètement, la livraison a lieu au moment où le consignataire trouve un acheteur pour ses biens.*

*Pour les biens transmis en vue de tester ou de vérifier la conformité, on considère que le transfert de la propriété des biens a eu lieu à la date de l'acceptation des biens par le bénéficiaire. Les biens transmis en vue de vérifier la conformité sont les biens offerts par le fournisseur aux clients, ceux-ci ayant le droit soit de les acquérir, soit de les retourner au fournisseur.*

En relation avec cet aspect, il apparaît la notion de *contrat provisoire*, notion sur laquelle nous voudrions attirer l'attention. Conformément au texte législatif, le contrat provisoire est un contrat

par lequel la vente effective des biens est conditionnée par l'obtention de résultats satisfaisants suite à l'essai fait par le client potentiel, essai qui a pour but d'établir si les biens ont les caractéristiques sollicitées par le client respectif.

*Pour les stocks à la disposition du client*, on considère que le transfert de la propriété des biens a lieu à la date à laquelle le client entre en possession des biens. Les stocks à la disposition du client représentent une opération selon laquelle le fournisseur transfère régulièrement des biens dans un dépôt personnel ou dans un dépôt du client, par lequel le transfert de la propriété des biens intervient, conformément au contrat, à la date à laquelle le client sort les biens du dépôt, en principal pour les utiliser dans le processus de la production. Pour les cas atypiques, décrits dans ce paragraphe, tout en corroborant les dispositions 134<sup>1</sup> avec 155<sup>1</sup> du Code fiscal, on a besoin de contrats spéciaux, des documents de livraison, en particulier de l'avis d'accompagnement.

### **Etude de cas**

L'entreprise « X » est un fournisseur de tradition dans la commercialisation des équipements technologiques. Au mois de novembre, l'année 2007, « X » a conclu un contrat de vente-achat avec une autre entreprise, appelée, dans cet exemple, « Y ». Selon les clauses du contrat de vente-achat il résulte les deux aspects suivants: (1) le prix des biens livrés sera payé par 10 paiements successifs, pendant la période décembre 2007-septembre 2008; (2) la transmission du droit de propriété sur les biens livrés sera réalisée à l'occasion de l'effectuation du dernier paiement.

En fait, l'entreprise X procède de la manière suivante:- elle livre les équipements technologiques à la base de l'avis d'accompagnement de la marchandise;- ultérieurement à la livraison « X » elle émet une facture pour chaque somme encaissée et signale, dans chaque facture, la mention « Avance »;- à l'occasion du dernier encaissement, elle émet la facture de vente qui contient des éléments qui se rapportent au prix de vente de chaque équipement vendu, les factures émises antérieurement et ce qui reste à être payé.

Nous mentionnons que ce cas a comme source une transaction réelle, effectuée entre deux entreprises de Roumanie. Au moment de la livraison le bénéficiaire des équipements connaît la valeur totale du contrat, des données concernant la quantité et le type des biens, mais il n'avait pas la possibilité d'individualiser le prix de chaque outillage.

Les objectifs de cette étude consistent en la présentation de la manière d'application du traitement comptable et fiscal.

### **Conséquences**

Parce qu'il s'agit d'avoir conclu un contrat de vente, et non pas *un contrat provisoire pour des biens transmis en vue de tester ou de vérifier la conformité*, dans la situation analysée, la convention de la clause de réserve de propriété **n'exonère pas** le fournisseur des obligations fiscales spécifiques au contrat de vente à paiement à tempérament.

Afin de soutenir cette affirmation, il est nécessaire de citer les dispositions de l'article 128 (3) lettre a) du Code fiscal, d'où il résulte le fait que sont considérées des livraisons de biens: « *la livraison effective des biens vers une autre personne, suite à un contrat qui prévoit que le paiement s'effectue à tempérament ou suite à tout autre contrat qui prévoit que la propriété est attribuée le plus tard au moment du paiement de la dernière somme échéante, à l'exception des contrats de leasing* ».

Par conséquent, le fournisseur traite la transaction comme il s'agissait d'une vente à avances successives, même si les paiements s'effectuent ultérieurement à la livraison, donc les sommes payées ne sont pas d'avances mais des paiements partiels ou des paiements à tempérament.

Il n'est pas difficile à comprendre que, dans cette situation, le fournisseur a éludé les règles qui concernent:

- le terme d'émission de la facture, prévu dans l'article 155 (1) du Code fiscal, conformément auquel la facture vers le bénéficiaire des outillages devait être émise jusqu'à plus tard le 15<sup>e</sup> jour ouvrable du mois suivant à celui où la livraison s'est produite;

- tout en considérant que les sommes facturées sont des avances, le fournisseur a collecté la TVA à mesure de la facture, donc non pas au moment de la livraison, en transgressant ainsi les dispositions de l'article 134<sup>A</sup>1 du Code fiscal, qui mentionne que *le fait générateur pour les livraisons de biens intervient à la date de la livraison des biens*;

- au cas où les sommes facturées à titre d'avance ont été comptabilisées comme des dettes envers les « Clients créditeurs » et non pas dans la catégorie des revenus, alors le fournisseur a transgressé les règles concernant l'imposition du profit afférent à l'année 2007.

Afin de résoudre cette situation, le bénéficiaire des outillages a procédé à la réception des outillages et à leur enregistrement dans les comptes en dehors du bilan, parce qu'il ne détenait pas d'informations précises en ce qui concerne la valeur de chaque outillage. Nous rappelons le fait que la livraison a eu lieu à base de l'avis d'accompagnement, que l'avis ne comportait pas d'éléments concernant la valeur de chaque bien, mais le prix total résultait du contrat de vente. Les factures reçues étaient comptabilisées comme « Avances accordées pour des immobilisations corporelles ». Au moment où il a reçu la facture finale, qui comportait les données concernant le prix de chaque bien acheté, le bénéficiaire a procédé à: a) la rédaction d'une réception définitive; b) l'enregistrement des biens reçus dans les comptes de bilan, simultanément avec leur sortie de l'évidence des comptes spéciaux; c) la régularisation des avances accordées pour les immobilisations corporelles; d) il a payé la différence résultée après la régularisation des avances; e) il a rédigé les comptes-rendus de mise en fonctionnement; f) il a inclus les outillages reçus dans la gestion des immobilisations corporelles soumises à l'amortissement.

## **Conclusions**

La règle classique, mentionnée dans le Code fiscal, est que la livraison suppose le transfert du droit de disposer de biens tout comme un propriétaire. Cette définition nous conduit à la conclusion que la livraison des biens du vendeur à l'acheteur, a comme conséquence le transfert du droit de propriété sur les biens vendus.

Par son pouvoir, le Code fiscal instaure l'exception selon laquelle on assimile aux livraisons de biens les opérations commerciales, cas où les parties contractantes peuvent établir, dans le contrat, que la transmission de la propriété s'effectue seulement après le paiement intégral du prix du bien vendu. Alors, l'exception se rapporte au fait que le transfert de la propriété du vendeur à l'acheteur a lieu au moment où le bénéficiaire effectue le paiement intégral du bien acheté.

Les opérations commerciales encadrées à la catégorie des livraisons comportent un certain traitement comptable et fiscal, impliquant des conséquences importantes sur les obligations fiscales du vendeur, en particulier l'exigibilité de la TVA au moment de la livraison et l'imposition du profit suite à la reconnaissance des revenus au moment de la livraison.

Les cas atypiques, considérés comme refuge pour les commerçants sont ceux qui se rapportent à la livraison des biens à base d'un contrat de consignation ou au cas des opérations similaires, comme les stocks à la disposition du client, les livraisons de biens en vue de tester ou de vérifier la conformité. La séparation de l'acte de livraison des biens de la notion de livraison a des conséquences de nature fiscale, dans le sens que le fait générateur de la TVA intervient au moment où celui qui reçoit le bien devient propriétaire des biens respectifs.

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## GARANTIES DE BONNE EXECUTION

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*In this article we will analyze the relation between the nature of the contract and the economical entity management, taking as example the case of the contracts that provide the constitution of performance bonds. A number of three manners in which performance bonds can be constituted have been analyzed. In order to argument the solution given to the depicted scenario, significant elements of fiscal and accounting legislation have been inserted in the article's body.*

*Key words: construction works, performance bonds, bank bonds, provisions for client liability.*

*Cod JEL: M41 - Accounting*

### **Considérations générales**

Dans les contrats d'exécution de certains travaux de construction et d'assemblage, ainsi que dans le cas des travaux de livraison et d'installation des lignes technologiques, la pratique habituelle suppose que le bénéficiaire sollicite la constitution d'une garantie de bonne exécution. Les modalités de constitution des garanties de bonne exécution, analysées dans cette étude, sont présentées schématiquement dans le tableau n° 1.

**Tableau n° 1 Modalités de constitution des garanties de bonne exécution**

| N° | La garantie peut être constituée par   |
|----|--|
| 1. | Rétention d'une partie de la valeur des travaux  |
| 2. | Lettre de garantie bancaire qui doit être exécutoire sur demande au cas où les vices de qualité n'ont pas été remédiés |
| 3. | Dépôt du montant à la caisse ou dans le compte courant (du bénéficiaire des travaux de construction)                   |

La garantie reste à la disposition du bénéficiaire pendant la période de garantie d'une bonne exécution, c'est-à-dire dans l'intervalle durant lequel le constructeur ou le vendeur des outillages a l'obligation de remédier, à ses dépens, tous les défauts cachés qui puissent survenir après la réception des travaux. Le montant en question sera retourné au fournisseur au moment de l'expiration de la période de garantie, à condition que les éventuels défauts apparus soient remédiés conformément aux demandes imposées par le bénéficiaire.

### **Rétention d'une partie de la valeur des travaux**

Pour les garanties de bonne exécution retenues de la valeur des travaux de construction-assamblage, mises en évidence comme tel dans les factures jusqu'à la date de *31 décembre 2006 inclus*, on applique les dispositions légales en vigueur à la date de la réalisation des garanties en question, en ce qui concerne l'exigibilité de la taxe sur la valeur ajoutée. *Source: Article 161 (21) du Code fiscal.* Conformément à la législation fiscale applicable pour les garanties de bonne exécution constituées avant la date de l'adhésion, *la TVA devient exigible à la date de l'encaissement de la garantie ou à la date du compte-rendu de réception définitive, au cas où la garantie n'est pas encaissée.* *Source: O.M.F.P. n° 1.561/2004.* Par conséquent, nous pouvons

remarquer l'existence des quatre particularités: les garanties sont retenues d'une partie de la valeur des travaux de construction-assemblage; les garanties sont constituées avant la date de l'adhésion; les garanties sont mises en évidence de manière distincte dans la facture; la TVA afférente aux garanties devient exigible à la date de l'encaissement de la garantie ou à la date du compte-rendu de réception définitive au cas où la garantie n'est pas encaissée. La loi 343/2006 modifie les dispositions de l'article 135 du Code fiscal, en supprimant de son contenu les dispositions concernant le délai de l'exigibilité de la taxe sur la valeur ajoutée, dans le cas des garanties de bonne exécution. Dans ce contexte, la TVA est exigible à la date de l'émission des situations de travaux ou à la date où ces situations sont acceptées par le bénéficiaire.

### **Lettre de garantie bancaire de bonne exécution**

Dans le cas où le bénéficiaire des travaux de construction s'engage à payer intégralement le prix du contrat, de manière traditionnelle, sous le terme de garanties de bonne exécution, le constructeur doit faire preuve d'une lettre de garantie bancaire de bonne exécution. La lettre de garantie bancaire de bonne exécution est expresse, irrévocable et inconditionnée. Elle est délivrée par la banque sous la forme d'un document écrit.

Ce document atteste que la banque s'engage à payer en faveur du bénéficiaire des travaux des construction, sur sa première demande, toute somme, jusqu'à la concurrence de celle pour laquelle on a délivré la lettre de garantie bancaire. La demande doit être accompagnée d'une déclaration concernant l'inaccomplissement des obligations contractuelles qui reviennent au constructeur. Malgré sa confiance, il n'est pas étonnant que pour délivrer la lettre de garantie, la banque demande des garanties à son débiteur. Nous avons présenté synthétiquement les modalités de garantie dans le tableau no 2.

**Tableau n° 2 Modalités pour assurer les garanties de bonne exécution**

|                        |                                  |
|------------------------|----------------------------------|
| Modalités de garantie: |                                  |
| Par des dépôts à terme | Par d'autres actifs patrimoniaux |

**Tableau n° 3 Lettre de garantie bancaire et montants maintenus à la disposition du bénéficiaire, mis en évidence dans la comptabilité du constructeur**

| Explications                                      | Lettre de garantie bancaire                  |       |  |         | Le dépôt des montants dans les comptes du bénéficiaire des travaux de construction<br>-Lei - |       |
|---|--|-------|--|---------|--|-------|
|   | Garantie par des dépôts bancaires<br>- Lei - |       | Garantie par d'autres actifs patrimoniaux<br>- Lei - |         |  |       |
| 0)  | 1)   |       | 2)   |         | 3)   |       |
| Facturation des travaux                           |  |       | 411 = %  | 47.600  |  |       |
|   |  |       | 704  | 40.000  |  |       |
|   |  |       | 4427   | 7.600   |  |       |
| Constitution de la garantie                       | Débit  | 2678  | Débit  | 8011    | Débit  | 2678  |
|   | Crédit                                       | 5121  | Crédit   | -       | Crédit   | 512   |
|   | Montant                                      | 2.380 | Montant  | 2.380   | Montant  | 2.380 |
| Encaissement de la facture:                       |  | Débit | Crédit   | Montant |  |       |
|   | 5121=4111 47.600                             |       |  |         |  |       |
| Encaissement de la garantie / Expiration du délai | Débit  | 5121  | Débit  | -       | Débit  | 5121  |
|   | Crédit                                       | 2678  | Crédit   | 8011    | Crédit   | 2678  |
|   | Montant                                      | 2.380 | Montant  | 2.380   | Montant  | 2.380 |

Note: Le dépôt bancaire, comme source de garantie, implique une immobilisation des actifs pécuniaires de la part du débiteur. Pour ces sommes, la banque délivre un extrait de compte distinct. Les sommes immobilisées sont enregistrées dans le compte 2678 « Autres créances immobilisées ». Les enregistrements comptables sont présentés dans les colonnes 1)-2) dans les tableaux n° 3 et n° 4.

**Tableau n°4 Lettre de garantie bancaire et montants maintenus à la disposition du bénéficiaire, mis en évidence dans la comptabilité du bénéficiaire des travaux de construction-  
assemblage**

| Explications   | Lettre de garantie bancaire                     |  |  |       | Encaissement /<br>restitution des<br>montants à la<br>caisse/dans le compte<br>courant<br>- Lei - |
|--|---|--|--|-------|---|
|  | Garantie par des<br>dépôts bancaires<br>- Lei - |  | Garantie par<br>d'autres actifs<br>patrimoniaux<br>- Lei - |       |   |
| 0)   | 1)  |  | 2)   |       | 3)  |
| Facturation des<br>travaux                           |   |  | %  | = 404 | 47.600  |
|  |   |  | 231  |       | 40.000  |
|  |   |  | 4426   |       | 7.600   |
| Garanties reçues                                     | Débit   |  | 8021   |       | Débit   |
|  | Crédit  |  | -  |       | Crédit  |
|  | Montant   |  | 2.380  |       | Montant   |
| Paiement de la<br>facture                            | 404 = 5121 47.600                               |  |  |       |   |
| Garanties dont la<br>période de validité<br>a expiré | Débit   |  | -  |       | Débit   |
|  | Crédit  |  | 8021   |       | Crédit  |
|  | Montant   |  | 2.380  |       | Montant   |

### Montants maintenus à la disposition du bénéficiaire des travaux de constructions- assemblage

Dans le cas où les parties conviennent par contrat, la garantie de bonne exécution peut être constituée aussi par le dépôt du montant à la caisse ou dans le compte courant du bénéficiaire des travaux de constructions, étant à sa disposition jusqu'à l'expiration de la période de garantie. Les enregistrements comptables sont présentés dans la colonne 3) dans les tableaux n° 3 et n° 4.

### Provisions pour des garanties accordées aux clients

Conformément aux normes méthodologiques d'application de l'article 22 lettre b) du Code fiscal, les provisions pour des garanties de bonne exécution accordées aux clients se constituent trimestriellement seulement pour les biens livrés, les travaux exécutés et les services fournis pendant le trimestre en question pour lesquels on accorde une garantie dans les périodes suivantes, *au niveau des cotes prévues dans les contrats conclus ou au niveau des pourcentages de garantie prévu dans le tarif des travaux exécutés ou des services fournis*. Pour les travaux de construction qui nécessitent des garanties de bonne exécution, conformément aux dispositions des contrats conclus, de telles provisions se constituent trimestriellement, *dans la limite des cotes prévues dans les contrats, à condition que la valeur des travaux exécutés soit reflétée intégralement dans les revenus et confirmée par le bénéficiaire suivant les situations de travaux*. L'enregistrement des provisions dans les revenus réalisés pour les garanties de bonne exécution s'effectue à mesure de l'accomplissement des dépenses avec les remèdes ou à l'expiration de la période de garantie stipulée dans le contrat.



Dans la pratique, des difficultés sont apparues en ce qui concerne l'interprétation de la manière d'application des normes qui visent le quantum des provisions en question. Les praticiens se demandent si les cotes incluent la TVA ou non. Évidemment, la provision n'inclut pas de TVA, au cas où dans le contrat on a prévu la réalisation des garanties au niveau de la cote appliquée au prix du contrat sans TVA. Ce n'est pas négligeable le fait qu'il existe une situation où les garanties se constituent au niveau de la cote applicable au prix du contrat avec TVA. Dans ce cas, nous pouvons remarquer deux tendances: la première soutient que la réalisation des provisions au niveau de la cote n'inclut pas de TVA et la deuxième tend vers la réalisation des provisions au niveau de la cote qui inclut la TVA.

La première tendance vise la constitution de la provision au niveau de la cote qui n'inclut pas de TVA et peut être soutenue dans le contexte de l'estimation des dépenses effectuées pendant la période de garantie. Conformément au Code fiscal, du point de vue de la taxe, sont des opérations imposables les opérations qui constituent ou qui sont assimilées à une livraison de biens ou une fourniture de services, dans la sphère de la taxe, effectuées avec paiement. Source: Article 126 du Code fiscal.

On ne considère pas comme fourniture de services avec paiement les services fournis gratuitement dans le cadre de la période de garantie par la personne qui a effectué initialement la livraison de biens ou la fourniture de services. Source: Article 129 (5) lettre c) du Code fiscal.

Conclusion: Quelle que soit la manière de réalisation de la garantie de bonne exécution (rétentions successives d'une partie de la valeur des travaux, lettre de garantie bancaire, dépôts de montants dans les comptes de disponibilités du bénéficiaire) et quelle que soit la modalité de négocier le quantum de la garantie, avec ou sans TVA, dans des conditions normales de déploiement de l'activité, on part de l'hypothèse que les défauts doivent être remédiés; ainsi, la provision se constitue sans prendre en compte la TVA.

La deuxième tendance, lorsque la garantie se constitue par lettre de garantie bancaire assurée par dépôt et lorsque son quantum s'établit en prenant en compte la TVA, si nous partons d'une hypothèse pessimiste que, par des raisons justifiées, les défauts ne peuvent pas être remédiés, selon notre opinion personnelle, le risque de ne pas récupérer la garantie doit être couvert en prenant en compte la TVA. Nous considérons comme faisant partie de la catégorie des raisons justifiées: la restriction ou la réorganisation de l'activité, les situations objectives qui ne permettent pas au constructeur de remédier les défauts. Les enregistrements comptables sont présentés dans le tableau n° 5.

**Tableau n° 5 Provisions pour des garanties accordées aux clients**

| Explication  | Garanties de bonne exécution   |   |
|--|--|---|
|  | Indifféremment de la modalité de constitution, les cotes prévues dans le contrat incluent ou non TVA<br>-Lei - | Constituées par lettre de garantie bancaire ou par montant déposé dans le compte du bénéficiaire, elles incluent TVA<br>- Lei - |
| Constitution de la provision                         | 6812=1512 2.000  | 6812=1512 2.380   |
| Dépenses effectuées pendant la période de garantie   | 6024=3024 180<br>1512=7812 180   | □   |
| Exécution de la garantie                             | □  | 654 = 2678 2.380<br>1512=7812 2.380   |
| Expiration de la période de viabilité de la garantie | 1512= 7812 1.820   | □   |

## **Particularités concernant les contrats d'acquisitions publiques**

Dans le cas des contrats d'acquisitions publiques, le quant de la garantie de bonne exécution ne doit pas dépasser 10% de la valeur du contrat, sans TVA. Dans la situation où les parties établissent par contrat la constitution de la garantie de bonne exécution par des rétentions successives à partir des montants à payer pour des factures partielles, le contractant a l'obligation d'ouvrir un compte à la disposition de l'autorité contractante, auprès d'une banque agréée par les deux parties. La somme initiale déposée par le contractant dans le compte ouvert ne doit pas être inférieure à 0,5% du prix du contrat. Pendant la période de l'accomplissement du contrat, l'autorité contractante va alimenter ce compte par des rétentions successives provenant des sommes dues et convenues au contractant jusqu'à la concurrence du montant établi comme garantie de bonne exécution dans la documentation d'attribution. L'autorité contractante va prescrire que la banque doit informer le contractant en ce qui concerne le versement effectué, tout comme en ce qui concerne sa destination. Le compte ouvert ainsi est porteur d'intérêt en faveur du contractant. *Source: Article 90 de la Disposition Gouvernementale 925/19.07.2006.* Conformément à la définition légale, le contractant est l'offrant, qui est devenu, dans les conditions de la loi, partie dans un contrat d'acquisition publique. Dans l'exemple analysé, le contractant est le constructeur et l'autorité contractante est le bénéficiaire des travaux de constructions-assemblage. *Source: Article 3 de l'Ordonnance d'Urgence Gouvernementale 34/19.04.2006.*

### **Conclusions:**

1. En ce qui concerne la manière de se refléter en comptabilité, il est nécessaire de faire les mentions suivantes: a) lorsque les garanties sont constituées par rétention de la valeur des travaux, les comptes utilisés sont: **2678** « Autres créances immobilisées » - dans la comptabilité du constructeur et **167** « Autres emprunts et dettes assimilés » - dans la comptabilité du bénéficiaire; b) lorsque les garanties sont constituées par lettre de garantie bancaire, assurée par d'autres actifs patrimoniaux, on utilise les comptes qui se trouvent en dehors du bilan.
2. Du point de vue fiscal: a) pour les garanties constituées jusqu'à la date de l'adhésion, la TVA est exigible à la date de l'encaissement de la garantie ou à la date du compte-rendu de réception, au cas où la garantie n'est pas encaissée; b) pour les garanties constituées après la date de l'adhésion, la TVA est exigible à la date de l'émission des situations de travaux ou à la date à laquelle ces situations sont acceptées par le bénéficiaire.
3. En ce qui concerne les provisions pour les garanties accordées aux clients, dans des conditions normales de déploiement de l'activité, on part de l'hypothèse que les défauts doivent être remédiés aux dépens du constructeur, de manière que la provision se constitue sans prendre en compte la TVA.

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## APPROACHES CONCERNING ENVIRONMENT-RELATED INFORMATION INCLUDED IN THE ANNUAL STATEMENTS

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*The constant deterioration of the environment and a series of ecological disasters increased the importance of environmental issues. The information shown in the annual financial statements enables the users to make informed decisions. Since the „environment” variable is highly important in the business of any entity, the annual reports should also include information thereof. This paper tackles the environmental information published by entities and gives a few examples of environmental information published by some groups in their environmental report.*

*Keywords: environmental report, financial information, development durable*

*JEL Classification: Q56, M41*

The current globalization trend involving all the economic and social aspects determines an identical approach of the crises that contemporary society is facing. Negative phenomena such as pollution or resource depletion brought about new economic growth and development approaches. The information included in the annual financial statements enable users to make decisions being fully aware of the consequences. Since the “environment” variable is highly important for a company’s business, its annual statements should also comprise information related to this aspect. There is currently no set of standards regulating environmental information assessment and presentation; however there have been increasingly numerous preoccupations in this direction. This paper includes some of the environmental information, which some entities willingly make available, as well as several examples of environmental information made public by some corporations.

### **ENVIRONMENTAL INFORMATION PROVIDED BY ACCOUNTANCY**

Traditional financial accounting and financial statements made public insist on the importance of financial results. Thus, this type of annual financial statements provide the company’s assets and liabilities, share value, profit and financial state evolution over the period concerned, etc., usually ignoring environmental issues that do not have a sufficiently strong financial impact able to trigger the application of accounting criteria and minimizing the role of the nonfinancial data. Environment undoubtedly plays an important role in a business’ strategy; however the annual statements fail to reveal the true importance of the environmental issues since business entities do not always satisfactorily describe their efforts of environmental strategy integration into their overall business policy. The information supplied is useful to the extent to which it allows (Labouze, 1995:29): environmental risk evaluation; risk-oriented project determination; the determination of the environmental performance incidence on the company’s financial results, etc.

#### ***Reporting regulation trends***

This preoccupation for the interests of the external users rather than the stakeholders’ interests occurred in the 70’s and is generally related to the publication, in 1975, of the *Corporate Report*, later called the *Corporate Social Responsibility Report – CSR Report*. Corporate social responsibility is a new accounting policy concept; however its importance has been increasing rapidly. CSR has been lately perceived as a tool enabling entities “to reconcile economic, social and environmental expectations”. Therefore, accounting specialists began to question profit, which was previously considered the only business performance measuring tool, and suggested a more extended corporate responsibility. Thus, nowadays, given more strict environmental

regulations, users often request environmental information. Financing entities for instance request detailed environmental information designed to lower their loan- or credit-related risks, to measure the management's ability to assess environment-related problems and to include them in the company's overall long-term strategic approaches, to determine their progress, etc.(Bețianu, 2008:361).

Christophe detects three stages of evolution in environmental information publication in the annual financial statements (Christophe, 2000:61-67). In the early 70's, theoreticians and law-makers proposed an environmental accounting model with no noteworthy applicability or consequences. It is at this time that the first ideas on the usefulness of an accounting approach including also the environmental variable were made public. Throughout the 80's, practitioners identified and used different environmental accounting means, but the quality and objectivity of the information made available were sometimes doubtful; however, beginning with the second half of the 90's, this information has been regulated by competent bodies. Environmental statement regulation is necessary for investors, who are thus able to have a broad picture of the environmental responsibility of the companies they are interested in, for investment purposes (Lafontaine, 2002:12-14).

An efficient management actually depends on having access to the most relevant and high quality information, enabling performance monitoring and opening new stakeholder opportunities for interested partners. Financial statements should meet, according to the General Framework, several qualitative requirements: *intelligibility, relevance, credibility, and comparableness*. This means that financial statements are a faithful representation of the entity's actual state, that they reveal the economic (rather than the legal) implications of the transaction, that they are neutral and complete in all their significant aspects. The observance of these qualitative criteria means that no information was dissimulated or omitted on purpose and that consideration of the risks and losses that may occur in a company's business was encouraged. And environment is an element generating this kind of risks (costs generated by natural or technological risks, by new environmental regulations, etc.). Actually, the failure to consider environmental costs may bring about civil (faulty management) or criminal (presentation of willfully distorted information) liability. That is why the inclusion of environmental information in the annual statements is highly important for the users, as they are thus informed of the possible environmental risks or costs that the entity may have to incur (Christophe, 2000:62).

Therefore, *full reporting* should include all the economic, social and environmental efforts of a company (Arnaud, 2003:32). Such reports contribute to the improvement of the company management's ability to assess the entity's contribution to the natural, human and social capital and broaden the image provided by traditional financial accounts, providing a more complete picture of the long-term perspectives. Therefore, sustainable reporting may reduce the instability and uncertainty of the price of the shares of the stock exchange entities, and may lower capital costs as well. Periodic complete information reporting may provide stability to an entity by preventing major fluctuations in the investors' behavior, fluctuations triggered by unreasonably and unexpectedly revealed information (de Beer, 2006:548). Such a report should provide environmental, social and economic information and data, as well as a clear sustainable development strategy (de la Bachelerie, 1993:79).

Environmental information provision is either imposed by authorities, either willingly performed by some companies (Caraiani, 2007:21). The willingly provided environmental information take the form of an *environment report* or of a *sustainable development report*, where environment is one of the three development pillars in addition to the economic and social ones (Antheaume, 2003:28). UNEP defines the environment report in 1994 as a *key means enabling entities to make public their environmental progress, being at the same time an efficient means to prove the effectiveness of the environment management system, of the social responsibility, etc.* FEE

*emphasizes that environment reports are part of a company's external communication and are designed to provide useful information to the users (FEE, 1999:6).*

One of the main reporting goals is to contribute to the continuous dialog between the interested partners. The actual reports have little value if they fail to inform the users or to support a dialog able to influence the decisions and behavior of both the entities publishing the report and the users. These reports are generally published by the companies that wish to give a certain image of themselves on the market or that wish to strengthen their position by providing information on their efforts to include environmental issues into their current business (Labrousse, 2004:41).

If an entity wishes to ensure the durability of its operation, it should prove respectful to the ones affected by its business (Campbell, 2007:437-438). Therefore, environmental information publication may be seen as the managers' attempt to account for the company's business before the public.

### ***Types of environmental information made available to the public***

In 1993 KPMG carried out a survey on the use of environment reports worldwide, called *International Survey of Environmental Reporting*, where they analyzed the environmental information provided by the annual statements (KPMG, 1993:15-20). This survey perfectly summarizes the environmental data publication practice in the annual financial statements and in distinct reports on the company's environment-related efforts. The survey was carried out on 690 companies in 10 developed countries (Belgium, Canada, Denmark, France, Germany, Ireland, Holland, Portugal, USA, and Great Britain) and reveals that 58% of the companies under survey mention environment in their annual statements, and 15% draw a separate report devoted to their environment-related efforts. KPMG has been performing such studies since 1993, every 3 years. 6 such surveys have been published so far (1993, 1996, 1999, 2002, 2005, and 2008). The results of the 1999 survey published in September reveal that more information is made available, and in some European countries rules have been passed stating that their publication was compulsory. In Denmark, 29% of the companies published environmental information in 1999, as compared to only 8% in 1996, and the passing of the EMAS regulation in Germany determined 36% of the companies to make public environmental information in 1999, as compared to 28% in 1996. Unlike some European states where the trend was positive, the USA were confronted with a decrease of this percentage, from 44% in 1996, to 30% in 1999. The results vary between states and industrial branches; however the trend is clear, as more and more entities publish environment reports (KPMG, 1999:12-18).

In 2005, the KPMG survey on corporate responsibility was carried out on the first 250 companies in the Fortune 500 (Global 250) top, as well as on the first 100 companies of 16 states (National 100). 52% of the Global 250 companies published individual environment reports, against 45% in 2002. A significant change, as compared to the 1999 report, was the type of reporting, which switched from reports based exclusively on environment protection indices, to more complex reports, which also considered sustainability, as well as social, economic and environment protection aspects. Japan (80%) and Great Britain (71%) rank first as concerns corporate reporting. Reporting has considerably increased over the last three years in most of the countries included in the survey, especially in Italy, Spain, France and Canada, and the companies' whose business has a rather significant environmental impact make public the highest amount of environmental information. World wide, over 80% of the companies publishing reports on corporate responsibility belong to the oil and gas, vehicle, utilities and IT industries, while nationally, over 50% of the companies operate in the utilities, mining, chemical industry, oil and gas, paper and celluloses, and forestry industries (KPMG, 2005:20-30).

In October 2008 the latest KPMG corporate responsibility report was published, which was carried out again on the Global 250 and National 100 companies (2170 companies in 22 states). 79% of the Global 250 companies published environment reports, as compared to 52% in 2005.

At national level, Japan (86%) still ranks first in the corporate responsibility top, followed by UK (65%) and France (79%). This report also includes information on the companies in Romania (28%). (KPMG, 2008:20-30)

Interestingly enough, some companies publish financial environmental statements where they provide information on the environmental costs and the profit made further to these expenses (Emery, 2005:13), for instance Baxter - USA, Carillion, Bulmers, Wessex Water – Great Britain, Helsingin Energia, Sonera – Finland, etc.

The **Baxter** Group (USA) has included in the environment report a *financial environmental statement* ever since 1995, which provides information on the environmental costs and the benefits of the environment protection activities. The type of presentation and the information published have changed over the years. When the determination method of a certain index changed, corrections were performed on the data of the previous financial years, so as to make the information provided comparable. The 2006 annual statement also comprised information on *environmental fees of electronics*, and sometimes corrections of the data in the previous report are needed. Thus, the 2007 (table 1) report updated some information on: in the 2006 report, *waste reduction* had the following values 0.4 for 2006, -0.1 for 2005, *non-hazardous waste disposal* (0.3 in 2006, 0.4 in 2005 and 0.6 in 2004), *waste disposal* (0.6 in 2006, 6.8 in 2005, 3.9 in 2004), *income from recycling* (5.2 in 2006, 4.2 in 2005, 3.3 in 2004), *power preservation costs* (6 in 2006, 9.3 in 2005, 8.9 in 2004), *water preservation cost savings* (0.8 in 2006, 0.1 in 2005 and 1 in 2004). Table 1 shows environmental costs, income and savings estimates for 2007 made by the Baxter group (Baxter, 2007:19, 2006:19).

**Table 1- Baxter Estimated Environmental Costs, Income, Savings and Cost Avoidance Worldwide (dollars in millions)**

|  | 2007        | 2006        | 2005        | 2004        | 2003        |
|--|-------------|-------------|-------------|-------------|-------------|
| <b>Environmental Costs</b>   |             |             |             |             |             |
| <b>Basic Program</b>   |             |             |             |             |             |
| Corporate Environmental – General and Shared Business Unit Costs   | 1.6         | 1.4         | 1.5         | 1.3         | 1.2         |
| Auditor and Attorney Fees  | 0.4         | 0.4         | 0.4         | 0.4         | 0.3         |
| Energy Professionals and Energy Reduction Programs   | 1.0         | 1.0         | 1.0         | 1.0         | 0.9         |
| Corporate Environmental – Information Technology   | 0.3         | 0.3         | 0.3         | 0.3         | 0.5         |
| Business Unit/Regional/Facility Environmental Professionals and Programs   | 7.4         | 7.2         | 6.8         | 6.5         | 5.4         |
| Packaging Professionals and Packaging Reduction Programs   | -           | 1.3         | 1.2         | 1.0         | 1.0         |
| Pollution Controls – Operation and Maintenance   | 3.1         | 3.2         | 2.9         | 3.2         | 2.8         |
| Pollution Controls – Depreciation  | 0.9         | 0.8         | 0.7         | 0.8         | 0.8         |
| <b>Basic Program Total</b>   | <b>14.7</b> | <b>14.3</b> | <b>13.6</b> | <b>13.5</b> | <b>12.9</b> |
| <b>Remediation. Waste and Other Response</b><br>(proactive environmental action will minimize these costs)                             |             |             |             |             |             |
| Attorney Fees for Cleanup Claims and Notices of Violation  | 0.1         | 0.1         | 0.1         | 0.1         | 0.7         |
| Settlements of Government Claims   | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| Waste Disposal   | 10.0        | 7.1         | 6.1         | 5.9         | 6.9         |
| Environmental Fees for Packaging   | 0.9         | 0.9         | 1.1         | 1.0         | 1.0         |
| Environmental Fees for Electronic Goods and Batteries  | 0.1         | 0.1         | 0.0         | 0.0         | 0.0         |
| Remediation/Cleanup – On-site  | 0.5         | 0.1         | 0.1         | 0.1         | 0.4         |
| Remediation/Cleanup – Off-site   | 0.0         | 0.3         | 0.0         | 0.2         | 0.1         |
| <b>Remediation. Waste and Other Response Total</b>   | <b>11.7</b> | <b>8.6</b>  | <b>7.4</b>  | <b>7.3</b>  | <b>9.1</b>  |
| <b>Total Environmental Costs</b>   | <b>26.4</b> | <b>22.9</b> | <b>21.0</b> | <b>20.8</b> | <b>22.0</b> |
| <b>Environmental Income, Savings and Cost Avoidance</b> (see Detail on Income, Savings and Cost Avoidance from 2007 Activities online) |             |             |             |             |             |
| <b>From Initiatives in Stated Year</b>   |             |             |             |             |             |
| Regulated Waste Disposal   | -0.7        | 0.3         | -0.1        | 0.7         | 0.4         |
| Regulated Materials  | -2.7        | 0.8         | -0.3        | 2.1         | 1.6         |
| Non-hazardous Waste Disposal   | -0.8        | 0.0         | 0.3         | 7.0         | 0.4         |

|  |             |             |             |             |             |
|--|-------------|-------------|-------------|-------------|-------------|
| Non-hazardous Materials <sup>5</sup>   | -0.8        | -2.5        | 5.7         | 4.8         | 6.7         |
| Recycling (income)   | 4.8         | 4.7         | 4.3         | 3.0         | 2.9         |
| Energy Conservation  | 4.1         | 3.3         | 6.8         | 12.0        | 4.2         |
| Packaging  | -           | 0.0         | 3.5         | 2.9         | 1.7         |
| Water Conservation   | 0.6         | 0.6         | 0.0         | 1.1         | 0.5         |
| From Initiatives in Stated Year Total  | 4.4         | 7.2         | 16.7        | 30.7        | 18.4        |
| As a Percentage of Basic Program Costs   | 30%         | 51%         | 123%        | 227%        | 143%        |
| <b>Cost Avoidance from Initiatives Started in the Six Years Prior to and Realized in Stated Year</b> | <b>78.2</b> | <b>83.8</b> | <b>78.7</b> | <b>62.2</b> | <b>32.7</b> |
| <b>Total Environmental Income. Savings and Cost Avoidance in Stated Year</b>                         | <b>82.6</b> | <b>91.0</b> | <b>95.4</b> | <b>92.9</b> | <b>51.1</b> |

Source: Sustainability Report Baxter 2006, 2007, p.19, sustainability.baxter.com/EHS

The information analyzed reveals that the group provides data on the *avoided costs* due to their efforts, which are rather high (82.6 mil. dollars in 2007). It is also noticeable that over the 5 years under survey, the overall environment costs are higher in 2007 (26 mil. dollars), while for the other 4 years these are almost constant (22 mil. dollars). The avoided costs and savings made increased from 51.1 mil. dollars in 2004 to 95 mil. dollars in 2005, then decreased, amounting to 82 mil dollars in 2007. Thanks to its environment protection activity, the group has significant advantages; therefore in 2007 it spent 26.4 mil. dollars and achieved savings and income of 82.6 mil. dollars, that is 3 times higher.

The Finish group *Helsingin Energia* (www.helsinginenergia.fi) states in its environment report that in 2007 it had 11 mil. euro of environmental costs (11.7 mil. euro in 2006 and 9 mil. euro in 2005). These costs amount to 2.7% of the total costs (2.6 in 2006 and 2.2% in 2005) and to 1.8% of the turnover (1.7 in 2006 and 1.6% in 2005). The environment investments amounted in 2007 to 0.7 mil. euro, that is 1.6% of the whole investments, the environmental fees to 18.8 mil. euro, and the environmental benefits to 0.821 mil. euro (table 2).

Table 2 - Helsingin Energia 2006 – Environmental Financial Statement (1000 €)

| <b>Environment-based operating costs</b>                | <b>2007</b> | <b>2006</b> | <b>2005</b> |
|---|-------------|-------------|-------------|
| <b>Protection of climate, soil and watercourses</b>     |             |             |             |
| Desulphurisation  | 4.074       | 4.439       | 2.952       |
| Denitrification   | 375         | 760         | 343         |
| Removal of particles                                    | 391         | 452         | 171         |
| Waste management and utilisation of combustion products | 1.291       | 1.550       | 1.185       |
| Other waste management                                  | 897         | 684         | 761         |
| Observation of emissions and environmental impacts      | 293         | 321         | 417         |
| <b>Landscaping</b>                                      | 0           | 51          | 82          |
| <b>Communication</b>                                    |             |             |             |
| Information on energy saving                            | 455         | 477         | 474         |
| Environmental communication and marketing               | 223         | 256         | 219         |
| <b>Environmental management and training</b>            | 1.442       | 1.233       | 1.040       |
| <b>Environmental research and development</b>           | 83          | 95          | 141         |
| <b>Depreciation of environmental investments</b>        | 1.447       | 1.435       | 1.366       |
| <b>Total environmental costs</b>                        | 10.971      | 11.753      | 9.152       |
| ___ % of turnover                                       | 1.8%        | 1.7%        | 1.6%        |
| ___ % of all costs                                      | 2.7%        | 2.6%        | 2.2%        |
| <b>Environmental investments</b>                        | 775         | 1.706       | 2.347       |
| % of investment total                                   | 1.6%        | 2.4%        | 2.5%        |
| <b>Environmental obligations</b>                        | 18.800      | 19.000      |             |
| % of balance sheet total                                | 1.2%        | 1.3%        |             |
| <b>Environmental yields</b>                             | 821         | 238         | 258         |

Source: Corporate Social Responsibility Report *Helsingin Energia*, 2007 and 2006, <http://www.helsinginenergia.fi>,

The data above reveal that the group incurred higher environmental costs than the environmental income gained; however one should note that there is also information on the environmental cost percentage in the turnover (1.7% in 2006) and in the total costs 2.6% in 2006), as well as on the environmental debt percentage in the balance sheet (1.3% in 2006). This information helps the users in making their decisions.

Providing information on the environment performance both in precise figures and in relative magnitudes (for instance, resources used per product unit) is extremely important. Both data types reveal important aspects, thus, precise figures provide an accurate image of the actual impact, which enables the user to analyze performance within wider backgrounds, while percentages clarify entity's effectiveness and allow comparisons between entities

## CONCLUSION

Please note that there is an entity practice related to environmental information communication in an environment or sustainable development report, which may lead to confusion between willingly provided and compulsory information. After the 90's, one notices a certain enthusiasm towards the corporate environment reporting rules. During the first years, most of the entities used to assess and report environmental impact according to traditional criteria applied in financial reporting, namely the property and direct control rights. Lately, companies have begun to experiment on extended reporting, in order to ensure a more accurate presentation of a company's "mark". Environmental information publication is a key company accountability process, and environment accounting helps entities substantially improve their trustworthiness among the people and enjoy a fair evaluation.

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# VOLUNTARY INTERNET FINANCIAL REPORTING AND DISCLOSURE – A NEW CHALLENGE FOR ROMANIAN COMPANIES

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*The majority of IFR and disclosure studies are focused on USA and European developed countries. Only a few studies have been carried on CEE countries. This paper examines the extent of voluntary internet financial reporting and disclosure of the Romanian listed companies for the financial years 2005, 2006 and 2007. After presenting the explanatory grounds regarding the main motivations of voluntary disclosure our study investigates the IFR and voluntary practices of the sampled companies. It is worth mentioning that in order to conduct our exploratory research we have established the criteria for sampling. We have also measured the voluntary disclosure of financial and non-financial information of sampled Romanian listed companies and found that there is a small interest in such a practice and also there is still much conservatism, confidentiality and a lack of modern knowledge in web-based financial reporting.*

*Key words: financial reporting, Internet, voluntary disclosure, listed companies*

*JEL codes: M41, G10, G14*

## **1. Introduction**

In a modern framework the main objective of financial reporting is to supply useful information to stakeholders. The American FASB in its conceptual framework states that financial reporting should provide information useful to investors, creditors and other users. Also, the IASB has a similar framework. To promote confidence and encourage investors Romanian companies should meet stakeholders' demands for greater speed and volume of transparent and timely financial information. Certainly, the Internet can provide better and more effective ways of communicating financial and non-financial information. Therefore, there is a need to analyze the role played by the Internet in disclosure financial and non-financial information in Romania in order to find out how that role may be enhanced.

This paper focuses on finding and briefly describing the explanatory grounds for voluntary Internet financial reporting and disclosure and also measure the voluntary disclosure of Romanian sampled listed companies. For measuring the level of voluntary disclosure we have analyzed the content of annual reports of sample companies. 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 and 2007 fiscal years.

As a main aspect concerning mandatory and voluntary disclosure throughout Internet we have to point out that for Romanian listed companies unfortunately there is no legal requirement to post

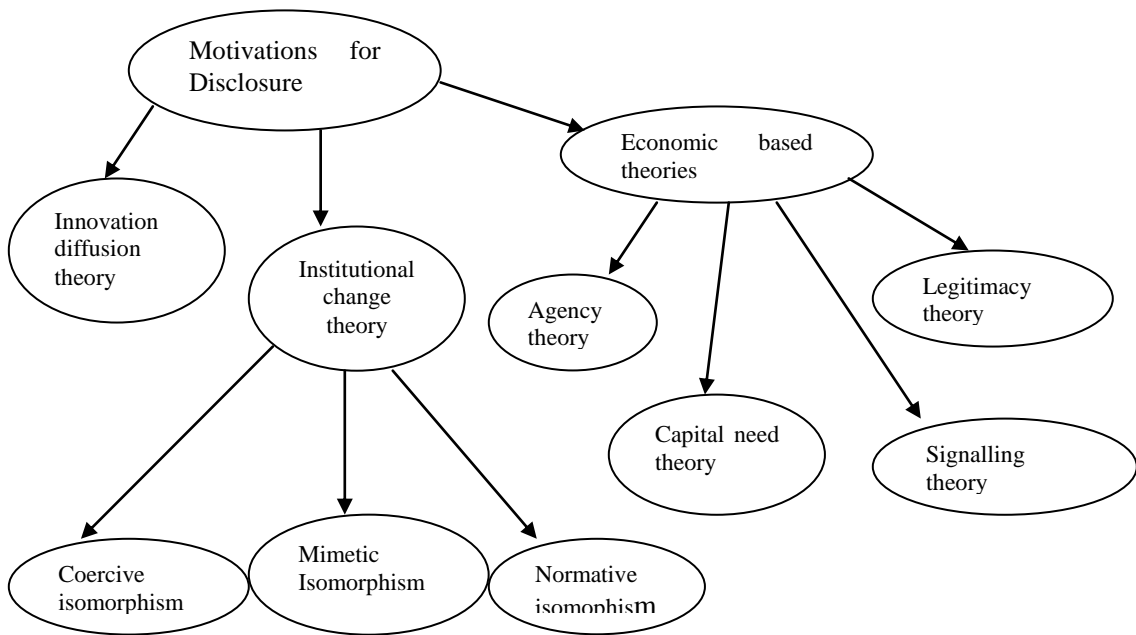
the financial and non-financial information on the Web. Only the BSE Code of Corporate Governance contains a special provision related to publishing financial and non-financial information on the Web. Regarding the extent and quality of the Annual Reports we have found that only 7 companies from the selected sample disclose various information like: company background, company evolution, marketing strategies, management issues and also much financial information, trends and evolutions of the most relevant ratios. Companies like Antibiotice Iasi, Compa Sibiu, Santierul Naval Orsova or Petrom SA disclose much more data outdistanced from other companies. For instance, Antibiotice SA disclose throughout the own website in English information about company background like: mission and values, history, board chairman's statement, domestic market, international market, management team and board of directors. We have found also data about shareholders, product portfolio, export brochure, quality policy, and drug safety. The company voluntarily discloses financial information about stock quotes presenting the evolution of shares during 2000-2008, specifically: number of issued shares, share quota, market capitalization at the end of the year, dividend per share, PER at the end of the year.

## **2. Theoretical framework – explanatory grounds for voluntary Internet financial reporting and disclosure**

Disclosures in excess of those required by laws, accounting standards or stock exchange listing requirements regulations, namely voluntary disclosures, have been an area of interest to researchers for many years. Companies continue to disclose voluntary information despite ever increasing mandatory requirements and so the motivation for such behaviour has been the focus of much attention (Watson *et al.*, 2002). It is often argued that companies might find it advantageous to provide additional pieces of information to investors and analysts through the annual report. This statement is based on the fact that information asymmetry between companies and potential investors, due to a low level of disclosure, increases cost of capital by introducing adverse selection between buyers and sellers of the company's shares. Focusing on attraction of investors, companies with limited liquidity must issue shares with a discount that reduces funds companies receive from the issue and thus, increases the cost of capital. As Diamond and Verrecchia (1991) showed, by disclosing more information companies are likely to reduce information asymmetry and hence attract liquidity in the company's shares, which lead to lower cost of capital. So, we have to underline that voluntary disclosures can take several forms: press releases, conversations with financial analysts, letters to shareholders and the provision of additional information in annual reports. We are interested not only in the presence of disclosure but also in its form.

The main purpose of this section is to discuss the theories that provide explanatory grounds for voluntary IFR and disclosure.

**Figure 1.** Theories explaining motivations for disclosure



Source: Aly and Simon (2007)

As we can see in Figure 1, three set of theories are influencing the motivations for disclosure. The first set is related to innovation diffusion theory, the second set is related to institutional change theories which refers to coercive, mimetic and normative isomorphism while the other set of theories is economic based theories.

### **Innovation Diffusion Theory**

Mahajan and Peterson (1985) defined diffusion of innovation as “*the process by which innovation is communicated through certain channels over time among members of a social system*”. As Clarke (1999) showed, diffusion of innovation theory tries to explain and describe the mechanism of how a new invention, in this case IFR is adopted and becomes successful. Also Sevcik (2004) observed that it might take a long time for an innovation to be adopted and even then not all innovations are adopted and resistance to change may be an obstacle to diffusion of innovation. Clarke (1999) identified five stages through which an innovation passes: knowledge, persuasion, decision, implementation and confirmation.

### **Institutional Change Theories**

Hatch (1997) noted that an American sociologist, Philip Selznick, observed that organizations adapt not only to the strivings of their internal group but also to the values of external society. Also Richard Scott defined institutionalization as “*the process by which actions are repeated and given similar meaning by self and others*”. Hatch (1997) explained that some actions are repeated because explicit rules or laws exist to ensure their repetition, such as the legal and political influences, while other actions are supported by standards, values, expectations and cultural influences. Sometimes, actions are repeated because of a desire to be look like another institution. Generally, these actions are governed by social influences.

According to Carpenter and Feroz (1992) coercive isomorphism results from political influence and problems of legitimacy. Formal and informal pressures will be exerted on the organization by other organizations or by cultural expectations in the society in which the organization is a

member. Therefore, coercive isomorphism is a form of forced selection where a company is forced by powerful organizations such as the government or providers of capital to adopt an innovation, such as IFR, regardless of its benefit to the organization.

The same above mentioned authors considered that mimetic isomorphism occurs “*when organizations model themselves after others*”. In such case, companies follow earlier adopters from the same sector as a result of uncertainty about organizational technology. As Xiao *et al.* (2004) pointed out very shortly, it is a form of fashion when companies imitate others.

Normative isomorphism results from actions of professionals who create standards and homogenous organizational practices to be followed (Xiao *et al.*, 2004). DiMaggio and Powel (1983) explained that there are two features of professionalization which are considered important sources of isomorphism: the first is related to the formal education produced by university specialists and the second is related to the growth and expansion of professional networks across which new models might diffuse rapidly. As we know, universities and professional training institutions are important centres for the adoption of innovation.

### **Economic Based Theories**

As many authors revealed (Cooke 1989, Hossain *et al.* 1994, Bogdan *et al.* 2009) agency theory may explain why managers voluntarily disclose information. So, managers in the knowledge that shareholders will seek to control their behaviour through bonding and monitoring activities, may have an incentive to try and convince shareholders they are acting optimally and disclosure may be a means of achieving this. Previous researchers like Verrecchia (2001) have demonstrated that through grater disclosure companies attempt to reduce the cost of capital by reducing investor uncertainty. Therefore, one way of reducing agency costs is to increase the amount of information included in the annual reports.

The constant need for capital is another reason why management has a prime argument for disclosure and needs to do an effective job in explaining the company to investors. Watson *et al.* (2002) underlined that highly leveraged companies are likely to increase their disclosure also to satisfy the needs of debenture holders and trustees. Also, the FASB Working Group (the organizational structure of the Business Reporting Research Project consisted of a Steering Committee and seven Working Groups) states that....*“after one company provides a particular disclosure requested by investors, competitive pressure causes other companies to follow suit. A company’s cost of capital is believed to include a premium for investors’ uncertainty about the adequacy and accuracy of the information available about the company”*.

Signalling is a reaction to informational asymmetry in markets. In such a case, companies have information that investors do not have. Asymmetries can be reduced if the part with more information signals to others. Signalling theory was mainly developed by Spencer (1973) to explain behaviour in the labor markets but can also help explain voluntary disclosures. Companies will try to adopt the same level of disclosure as other companies within the same industry because if a company does not keep up with the same level of disclosure as others, it may be perceived by stakeholders that is hiding bad news. Therefore, companies may use Internet disclosure to keep up with other companies in the same industry. Craven and Marston (1999) stated that....*“the very use of the Internet might itself be a signal of high quality. It implies that the company is modern and up to date with the latest technology rather than old fashioned and conservative”*.

Legitimacy theory is based on the premise that companies signal their legitimacy by disclosing certain information in the annual report. This theory is centred on the notion of a contract or agreement between an enterprise and its constituents. Several authors (Guthrie and Parker, 1989; Deegan and Gordon, 1996) have used legitimacy theory to explain disclosures in environmental and social reporting. By voluntarily revealing certain information, directors can communicate with stakeholders, who as a result will feel more assured about the performance of the company.

Skinner (1994) stated that managers of companies with bad earnings news have an incentive to pre-disclose that information to reduce the cost of litigation. But, litigation can potentially decrease managers' incentives to provide disclosure, particularly of forward-looking information. Up to here we may conclude that early adoption of IFR could be due to organizational characteristics suggested by economic based theories (Xiao et al., 2004) while later stages of adoption may be due to innovation diffusion theory.

### **3. Factors influencing the extent of web-based disclosure information**

A lot of scholars analyzed voluntary disclosure practices using variables derived from the two main economics-based theories mentioned and described briefly by us in the previous section of this paper (agency and signaling theory). Most studies analyzed the disclosure in the annual report and not in other communication vehicles (Ettredge et. al, 2002; Ahmed and Courtis, 1999; Hossain et. al, 1995; Cooke, 1989). Frequently are used factors like firm size, company history, leverage, profitability, industry type and intangibles to explain the extent of voluntary disclosure. For instance, Debreceny et al. (2002), concerning the positive association between company size and level of disclosure reported that larger companies have higher information asymmetry between managers and shareholders and, therefore, higher agency costs arising from such asymmetry. In order to reduce these agency costs, larger companies disclose more information than smaller companies. These companies have a greater need for capital and can be expected to disclose at a higher level. They are also likely to have lower proprietary costs associated with disclosure as their activities are exposed by other sources of information (Hossain *et al.*, 1995).

Hossain *et al.* (1995) and Malone *et al.* (1993) noted a positive correlation between voluntary disclosure and a company's leverage. Singhvi and Desai (1971) reported a positive correlation between the extent of disclosure and profitability on the US market. Cooke (1991) and Raffournier (1995) reported that manufacturing companies disclose more information than other industry groups. Marston and Shrivies (1991) in a review study of disclosure index studies found out that company size, leverage, profitability, listing status and audit firm size were the most frequent explanatory factors to examine. Company size and listing status were positively related to extent of disclosure, whereas leverage, audit firm size and profitability showed inconsistent results. Oyelere *et al.* (2003) extensively enlist previous articles investigating factors affecting the extent of voluntary disclosure practices. They find that there are six most frequently determining variables of voluntary disclosures: company size, audit size/quality, listing status, profitability, leverage and industry type. Starting from these findings, Prabowo and Angkoso (2006) demonstrated that ownership structure is also a frequently determinant of the extent of voluntary disclosure. Gelb (2002) reported a positive association between intangibles and disclosure. The author noted that companies with intangible assets tend to provide additional disclosures. Also Arvidsson (2003), who examined disclosure of intangibles in the annual report, found that disclosure of intangibles was associated with several factors, such as company size. Moreover, the author observed differences between the Nordic countries, with Sweden disclosing the most information of the Nordic countries. He reported no difference in disclosure between internationally listed companies and domestically listed companies.

Prior studies of voluntary disclosure conducted by Meek and Gray (1989) showed a positive relationship between cross listings and disclosure. Foreign listing status was represented by a binary variable that took the value of 1 for a foreign listing and 0 for only domestic listings. Foreign listing is sought by companies to have a more competitive cost of capital structure as they can issue securities in markets with higher liquidity and lower cost of capital. Other benefits of multiple listings are wider marketing of products, boosting corporate image and gaining political acceptance by projecting the company as being „local” in the foreign market (Biddle and Saudagaran, 1991).

Another determinant of IFR and voluntary financial and non-financial voluntary disclosure is technology, discussed recently by Debreceeny et. al (2002). High technology companies, for example, drugs, computers, electronics, communications, with soft assets, such as research and intellectual capital, human resources, R&D programs will disclose more information as their earnings numbers are not sufficiently value-relevant. These companies are subject to rapid change in the technological and business environment. For such companies, the earnings number may not be indicative of their future prospects as such information not only fails to convey the future growth potential of the company but are also not timely enough for decision making due to their periodic nature. The Internet can allow for multifaceted and frequent disclosures on the development of new technologies and the interaction of the company with the environment. Level of technology of the company was represented by a ternary variable that took the value of 0 for low technology corporations, 1 for medium technology corporations and 2 for high technology corporations.

Operating history (company age) has been observed to affect the information disclosure level in prospectuses. Mak (1996), in a study on the relation between earnings forecast disclosure and company-specific risk, concluded that operating history, as a proxy for information asymmetry and company-specific risk, was positively related to forecast disclosure. Ding *et al.* (2005) showed that the literature has often hypothesized that larger auditors should require more extensive disclosure from their clients, namely because they have more incentives to maintain their independence. Some research provides evidence of a positive relationship between the type of auditor (big eight, big six, or big five, depending on the period) and the extent of disclosure (Craswell and Taylor, 1992; Patton and Zelenka, 1997, Prabowo and Angkoso, 2006). Raffournier (1995) states that companies are induced to comply with the usual practices of countries in which they operate. He stated that the more international the operations of a firm are, the larger is the inducement. The same way like Cooke did (1989), Raffournier finds a significant relationship between internationality and disclosure, providing evidence that companies' with foreign sales will disclose more information because they are likely to require the necessary resources. The above mentioned aimed to demonstrate that several factors affects financial or non-financial information disclosure.

#### **4. Methodology, research design and findings for Romanian listed companies**

In the present paper we have used content analysis for investigating annual reports of the eighteen companies listed on Bucharest Stock Exchange (BSE), selected after we have established the main criteria for sampling. The methodology we have used is *Standard & Poor's Transparency and Disclosure Survey Questions*. The purpose of this survey is to provide investors with an objective ranking of the corporate reporting practices of large companies and to help them understand the differences in reporting levels across markets and business sectors.

This study covers the companies listed on Bucharest Stock Exchange within 2005 and 2007. The authors have taken all the companies of I<sup>st</sup> and II<sup>nd</sup> categories listed on BSE as the population of this study due to the fact that the number of companies is small and it is convenient to collect data related to it. The population consists of 60 companies divided into 10 sectors of activity according to BSE classification. Financial Investments Companies (S.I.F.) were excluded from the study due to the fact that they are particular Romanian closed-end investment company and their value is formed from other listed companies.

For measuring the level of voluntary disclosure we have analyzed the content of annual reports of sample companies. 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 and 2007 financial years. The scores are developed by searching company annual report for the inclusion of the 98 items. The company receives one point when it provides information on an

item. The results from the 98 questions are converted into a coefficient by dividing the score by 98. According to Standard & Poor's the scores are designed so as to be unaffected by non-disclosure of items that are not applicable. The scores themselves are not released to the public. Companies were surveyed between May 2005 and May 2008 to find out whether they have websites or not, searching also for data regarding the voluntary disclosure of financial and non-financial information. All the data was gathered from the following sources: www.bvb.ro, www.cnvmr.ro, www.ktd.ro and www.kmarket.ro, sites providing stock exchange information and sites of companies listed on Ist and IInd BSE categories; we have collected the data in order to establish 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 and 2007; the database provided by the Reuters Press Agency regarding the market prices of the companies from the sample to determine the market capitalizations; the accounting and financial information obtained from the site of the Romanian Ministry of Economy and Finance.

Sample companies were selected purposively. Authors used the following criteria to select the sample companies:

- own websites;
- continuity in transactions between 2005 and 2008;
- disclosure of financial information (in annual reports, financial statements and financial highlights –ratios);
- audit reports.

The mentioned criteria leave only 18 companies in the research sample. The selection process of the sample can be seen from Table 1 below.

**Table no. 1**

| <i>Sample Selection Process</i>  |               |
|--|---------------|
| <b>Explanation</b>   | <b>Amount</b> |
| Population (companies listed on Ist and IInd BSE categories except Financial Investments Companies - S.I.F.) | 61            |
| Less companies with no websites or websites under construction (or unable to open)                           | -4            |
| Companies left   | 57            |
| Less companies listed between 2005 and 2008  | -3            |
| Companies left   | 54            |
| Less companies that do not present annual reports (2005, 2006, 2007)   | -33           |
| Companies left   | 21            |
| Less companies that do not have an audit report (2005, 2006, 2007)   | -3            |
| <b>Final sample</b>  | <b>18</b>     |

Table no. 2 presents the descriptive statistics for voluntary disclosure index of the companies through the annual reports. A slightly increase in information disclosed year by year by the 18 companies studied can be observed. The average VD score of sample companies for the entire period is 0.5546, with the maximal and minimal score of 0.7347 and 0.3469 respectively. It



seems that in Romania's securities market, most companies disclose regular information, the voluntary disclosure level of Romania being relatively low.

**Table no. 2**

*Voluntary disclosure (VD) statistics*

| Year                      | 2005      | 2006    | 2007    |
|---------------------------|-----------|---------|---------|
| <b>Score VD</b>           | 0,5317    | 0,5550  | 0,5771  |
| VD Standard deviation     | 0,1008872 | 0,09751 | 0,09783 |
| VD Minimum Score          | 0,3469    | 0,3980  | 0,3980  |
| VD Maximum Obtained Score | 0,7143    | 0,7245  | 0,7347  |
| VD Maximum Possible Score | 1         | 1       | 1       |

**5. Concluding remarks**

Our study aims to investigate the way financial and other non-financial information are communicated throughout the websites by Romanian listed companies and to analyze the criteria in order to select properly the sample companies. A pilot study was conducted searching for the websites of all listed companies registered as category Ist and IInd at BSE. The search revealed that companies which had websites were included among the most actively traded companies. This was expected as only active companies are likely to have websites and disclose financial information on the websites. Therefore it was decided to focus upon the most active companies traded on the Bucharest Stock Exchange. Financial Investments Companies were excluded from the study.

As a major conclusion to our study, it can be revealed that at half of the year 2008, a large number of Romanian listed companies only made mandatory or advisory disclosure available on their own websites. Moreover, these companies still show a preference for traditional means of communication. It can be confirmed that among the companies analyzed, there is still an attachment to traditional paper-based ways of communication. This is shown both in contents, form or tools used for communication on websites. The results above mentioned by us speak for themselves. From our point of view these companies seem to consider the web as an "information deposit" rather than a dynamic means of communication. We consider that this situation could be caused by a lack of external stimuli, due to the lack of regulation on website disclosure.

Due to the above mentioned facts we have also found a poor voluntary disclosure practice of financial and non-financial information, among BSE listed companies explained mainly by conservatism, extreme confidentiality and a lack of modern knowledge in the Romanian financial reporting system.

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# THE POLICY OF PRICES AN IMPORTANT ELEMENT IN SUBSTANTIATION OF PENETRATION STRATEGY IN NEW MARKET SEGMENTS

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*Pricing policy aims to determine the price of goods and services sold by the organization. These figures have an impact over the turnover that must be higher to the total expenses for the enterprise to make profits. Therefore, it is important to know the cost when are decided the selling prices. However, there is only one way to calculate the costs to be adapted to all decisions relating to prices. Why? Because these decisions are different among themselves as regards the consequences more or less distant, and their context. For example, McDonald's restaurants may decide on a price of € 0.99 for a hamburger. It is a fixed price. An estate agent may ask for a € 495,000 property, knowing that potential buyers will negotiate the price decrease. It is important to know the laws of variation and training costs to decide, wittingly, the price to be asked (and agreed to be paid).*

*Keywords: corporate strategy, accounting information, the need of information, users of accountancy's products.*

*JEL CLASSIFICATION: M41*

## **Introduction**

Economic theory demonstrates that the optimal behaviour of an enterprise is to sell quality for which the marginal charging (the price received for the last unit sold) is equal to marginal cost (the cost that it is the last unit sold). The market price is the price for which it is a solvent request for this optimal quantity. This chapter explains the way the managers make profit by assessing the request according to the price level and using costs to act on the offer. Analysis of customer profitability pursues the profits generated by the different categories of customers in place to analyze the profits according to the category of products.

The three main parameters of the prices policy are<sup>411</sup>:

- customers,
- competitors and
- costs.

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411 Călin O. &al., Managerial accounting, Editura Didactică și Pedagogică, București, 2008.

**Customers.** The issue of prices must always be approached from the viewpoint of the client. An increase of prices may push the customers to deny the products of the enterprise and to choose the products of competitors or other replacement products.

**Competitors.** Reactions of the competitors affect the price policy. Prices and products of a competitor may constrain an enterprise to decrease prices in order to remain competitive. A well-informed enterprise about the competition (technology, production capacity, management policy) is able to estimate costs, which is valuable information to determine its own prices. Competition analysis is made in several respects. Many companies worldwide have created services responsible with gathering information about the competition (financial results, deposits of patents, techniques used, turnover and cost structure, and strategic alliances). Even competitors, their customers, their suppliers and former employees make important sources of information. Another means of informing is the study of competition products with the purpose to integrate what they have best in creating our own products. Competition has no limits. When its production capacity cannot be absorbed on the national market, the policy of prices of an enterprise often becomes aggressive on the export markets. Today, business' leadership pursues these issues globally and takes account, in determining process of the pricing policy, of both their competitors from foreign countries, and competition in the country.

**Costs.** Typically, the companies set higher prices than the cost of production. Analysis of expenses variation law allows an evaluation of the results that arise from different combinations of price and volume of sales of a certain product.

Economic theory and case studies regarding decision making in terms of prices shows that enterprises assigns a different weigh of the three parameters: customers, competitors and costs. Take the case of the insurance group *Royal and Sun Alliance* in which "prices are set according to profitability and not the maintenance of market share"<sup>412</sup>. In effect, the *Diversia.com*, a Spanish sales online enterprise provides a ticket for shopping of € 18 to each person who registers on the site. In five weeks, registered 60 000 people<sup>413</sup>. The strategy of the two companies is clearly different. Enterprises that sell basic products (wheat, rice, soya, etc.) on very competitive markets must accept the price dictated by the market forces. However, ultimately, they are the ones who decide on the quantities they sell out to, depending on costs.

On the less competitive markets, the price of a product results from the combination of *request* and *offer*. Customers exercise some action on the price through the request effect. The costs exercise an action on prices because they have influence over the offer. Competitors offer similar products or replacement products, which affects the request and pricing. To satisfy the customer, is important for prices to fall, but to improve quality, which involves also a reduction of costs. The continuous progress from the enterprise is the key of keeping prices under control.

## 1. Prices Policies And Time Factor

When he wants to reduce the cost, an enterprise studies the expenses in all aspects of its scale of values, starting by conducting studies and researches and ending with the provided service. When are calculated the significant expenses for pricing establishment, it is essential to establish also the period in which the decision will take effect. Decisions regarding prices are taken on long or short term. Among short-term decisions, we remind:

- pricing for an exceptional command which will not have an impact on long term, and
- adaptation of components and the volume of sales in a reactive market.

For expenses that depend on the options considered through the decisions made are made predictions on six months or even a year. Decisions on long-term aim in particular establishment

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412 Royal and Sun Alliance, Raport anual, 1999.

413 The Industry Standard Europe, 11 ianuarie 2001.

of the price for a product in a market where there is a large freedom of prices. In this case, is required significant expenditure for a year or even more.

Let us imagine that an enterprise receives an exceptional order to provide certain products for four months. Acceptance or refusal of such orders should not affect the turnover (quantity and price) from the usual sales.

Enterprise TESANO has a factory with a monthly production capacity of 1 million boxes of solutions for windows cleaning (each box contains 200 doses). Currently, it produces and sells 600,000 boxes per month. The price of a box is € 90. Expenditure with research and development are negligible. Very low cost of service is included in trade taxes. All variable expenses depend on the quantity and the quantity produced is equal to the sold quality. Unit variable cost and unit fixed cost (based on 600,000 boxes per month) are detailed as follows<sup>414</sup>:

|                                  | <b>Variable cost of a<br/>box</b> | <b>Fixed cost of a<br/>box</b> | <b>Total cost of a<br/>box</b> |
|----------------------------------|-----------------------------------|--------------------------------|--------------------------------|
| Production expenses              |                                   |                                |                                |
| Raw material                     | € 7                               | -                              | € 7                            |
| Conditioning                     | € 18                              | -                              | € 18                           |
| Direct labour                    | € 4                               | -                              | € 4                            |
| Indirect expenses                | <u>€ 6</u>                        | <u>€ 13</u>                    | <u>€ 19</u>                    |
| <b>Total production expenses</b> | <b>€ 35</b>                       | <b>€ 13</b>                    | <b>€ 48</b>                    |
| Trade taxes                      | € 5                               | € 16                           | € 21                           |
| Sales logistic                   | <u>€ 9</u>                        | <u>€ 8</u>                     | <u>€ 17</u>                    |
| <b>Total cost</b>                | <b><u>€ 49</u></b>                | <b><u>€ 37</u></b>             | <b><u>€ 86</u></b>             |

Indirect variable production expenses of € 6per box include heating, cooling and lighting. The detailing of fixed production expenses and their reduction to a unit (based on 600,000 boxes per month) is presented below:

|   | <b>Total fixed<br/>expenses</b> | <b>Unit fixed<br/>expenses</b> |
|---|---------------------------------|--------------------------------|
| Depreciation and support                  | € 3,000,000                     | € 5                            |
| Expenses with goods supply                | € 600,000                       | € 1                            |
| Salary expenses of operation modification | € 1,800,000                     | € 3                            |
| Mentioning of products and processes      | € 2,400,000                     | € 4                            |
| Total of fixed production expenses        | € 7,800,000                     | € 13                           |

Company INTER BRAND is building a new factory in Ukraine. This factory will start to produce just over four months. However, the leadership of INTER BRAND wants to start selling in Ukraine of 250,000 boxes per month in the following four months. INTER BRAND launched a tender for this exceptional command to which have responded both TESANO, and other companies. Characteristics of the windows cleaning solution required for the one from INTER BRAND are identical to those produced now by TESANO.

If TESANO would produce 250,000 boxes in addition, current fixed production costs (€ 7,800,000 per month) would not change. In addition, TESANO would support the new fixed costs, amounting to € 300,000 (supply of materials, € 100,000, operations modification, € 200,000). Expenditure with research and development, trade costs, logistics of sales and service do not change. The 250,000 boxes would be marketed in Ukraine through INTER BRAND. Currently, TESANO not sells in this country.

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414 Horngren Charles &al., Comptabilité de gestion, Education Pearson, Paris, 2006.

INTER BRAND notifies the intermediaries that, probably, a higher offer of € 45 per box will not be taken into account. TESANO knows that one of the competitors, with a very performing factory, has an unused production capacity and that, certainly, will agree. What price should mention TESANO in the tender? To determine the significant expenditure in the supply response, TESANO analyzes the spending in all departments of the enterprise making the value chain. In her case, only the costs of production are significant, the other ones not presenting any variation. The following table shows the analysis of significant expenditures. Within appear all the costs of production that would be altered if TESANO would sign the contract with the *new* fixed costs under the contract. On the other hand, the existing fixed costs are excluded from the analysis, since it would remain unchanged.

**Table no 1. Significant monthly expenses as TESANO response to the offer**

|   |           |             |
|---|-----------|-------------|
| Raw materials (€ 7 x 250,000 boxes)                         |           | € 1,750,000 |
| Conditioning (€ 18 x 250,000 boxes)                         |           | € 4,500,000 |
| Direct labour (€ 4 x 250,000 boxes)                         |           | € 1,000,000 |
| Variable indirect production expenses (€ 6 x 250,000 boxes) |           | € 1,500,000 |
| New fixed expenses  | € 100,000 |             |
| Supply with goods   | € 200,000 |             |
| Modification of operations                                  |           | € 300,000   |
| Total of new fixed expenses                                 |           | € 9,050,000 |
| Total of significant expenses                               |           |             |
| Unit significant cost: € 9,050,000/ 250,000 boxes = € 36.20 |           |             |

This table shows that any higher price of € 36.20 would lead to an increase of profits for TESANO. It would be wrong to determine the offer price depending on the production cost of € 48 which was calculated before. In fact, the cost of € 48 includes expenditures that are not significant in this case.

Although the significant cost putted in evidence is essential information, TESANO must take into account also the possible offers of its competitors. If they knew that competition would propose a price of € 39, TESANO would agree to accept a price of € 38.

Decisions regarding pricing are often long-term effects. Buyers, regardless of who they would be, prefer a long term stability of prices. Prices being fixed, there is no need to constantly monitor the prices of suppliers. Stability supplies the forecasts and allows establishment of long-term relationships between buyers and sellers.

## **2. Discriminatory fixation of price**

*Discriminatory price fixing* consists in making certain customers to pay a higher price than the required one by other customers. In the case of an airline company there are two categories of customers: business people and tourists. Business people travel for business purposes: go to the established place of meeting and then return home immediately, after they have finished the job. These features make relatively insignificant the price paid for the flight of business people. Their demand is *not flexible*. Therefore, the airlines companies may apply higher rates for business trips without reducing in any way the demand also.

Tourists are not so hurry to return home during the week. In fact, they often prefer to spend the weekend on holiday. Because they pay their own travel, are more sensitive to price than business people (their demand is elastic to price). For airline companies is profitable to stimulate demand for tourist travel by practicing moderate rates. Request from the Saturday night allows a distinction between the two segments of customers. Discriminatory fixing of price for air travel

brings profit to companies from the difference of sensitivity to price of the two segments, although it is not any difference between them as regards costs.

### 3. Differential fixation of prices in time

In addition to discriminatory fixing, pricing policy takes account also of other factors, such as the capacity constraints. Differential fixing of the price in time consists in practicing a higher price for the same product during periods in which demand is approaching the capacity limits. Prices are higher during peak periods than in more quiet periods. This policy is seen on the railways, in telecommunications, in hotel industry, in parking of cars and supply of electricity.

### Conclusions

Activities management of an organization of any kind involves a decision-making process whose complexity is determined by the hierarchical level which is the human factor responsible also for the need of documentation and substantiation of that decision. Prices are a key element in economic systems management. Determination and analysis in order to improve the decision performances constituted continue concerns also in scientific research domain, and in economic practice<sup>415</sup>.

Information is a product of human mind, is the fundamental capital, the central cost and essential resource of the economy<sup>416</sup>. That is why for the development of management control is necessary to study the relationship between information and decision. The relationship between these two elements can take two forms, depending on the decision-making universe in which is situated:

*We express the view according to which **the ability of managers, located on different hierarchical levels of the entity, to assert as active "actors" of economic process, depends on the insurance of a fund and an appropriate and evaluated information infrastructure, because the quality information creates, for manager, conditions of use at any time performance mechanisms. In this context, information, particularly accounting one, converted in managerial skills is manifested as major source of authority and legitimacy decision-making. Furthermore, it is easy to see the fact that, increase of complexity of the economic environment involves continuous improvement of the information system and its organization in a unitary form, efficient and modern, information is trigger of decision making, they are not their replacement, but only their support, providing at disposal of decedents the necessary data for adoption of decisions that are required. In their quality of deciders, managers appreciate, more often, information as a true resource that can really give to the holder a real competitive advantage, and not only as a subordinate element of the decision adoption.***

*Although the management accounting produces information that has to be diversified for many categories of managers, they are used in different ways. Therefore, they are considered in their diversity, more complement than competing.*

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# MEASURING AND ASSESSMENT OF INTERNAL AUDIT'S EFFECTIVENESS

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*The evolution of internal auditing in the last period was a very dynamic one, being affected by the increasing attention for its role in corporate governance, especially because of its links with internal control and risk management systems. Internal auditors had to extend their area of actions, becoming more involved in risk management, control and governance processes. In the light of these changes, new concepts begins to be more and more in the center of attention, the added value by internal audit to organizations and its effectiveness. In order to determine the efficiency and effectiveness of internal audit, it becomes more and more important to find relevant methods for measuring and assessment the performances obtained in assuring a plus of value. Our main purpose in this paper is to identify the most significant types of methods used in determining the performance of internal audit by using the fundamental type of research.*

*Keywords: value added, internal audit's effectiveness, qualitative methods, quantitative methods, balanced scorecard*

*JEL Classifications: M21, M40, M42*

## **1. Introduction**

Even if the internal audit function is an integral part of the control framework of an organization, it is obviously that this function also must have its own control, to track whether its performance is consistent with its role and objectives. International Standards for the Professional Practice of Internal Audit<sup>417</sup> states that *“The chief audit executive must develop and maintain a quality assurance and improvement program that covers all aspects of the internal audit activity”* (1300-Quality Assurance and Improvement Program). According to the interpretation offered by the new version of internal audit standards issued by The Institute of Internal Auditors in 2008 and applicable with 2009 *“this program also assesses the efficiency and effectiveness of the internal audit activity and identifies opportunities for improvement”*.

In this context, the problematic of measuring the effectiveness of internal audit function receive increasingly significant valences so that internal audit has to face a significant challenge consisting in finding the best and relevant method for measuring the efficiency and effectiveness of internal audit and quantifying the progress made in achieving its goals and objectives<sup>418</sup>. Internal audit must find answers to difficult question like: *Which method of assessing and measuring internal audit's performance is more effective and relevant?*

Added value delivered by internal audit become more and more relevant, which makes quite necessary to identify the determinant factors in creating this added value. We appreciate that in the next future one of the most important criterions for the existence of internal audit will be creating value that will determine the existing reason for internal audit profession. Internal audit must become a *“value creator”* trying to eliminate the unpleasant label of *“resources consumer”*.

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417 Institute of Internal Auditors – IIA, "International Standards for the Professional Practice of Internal Auditing", Octombrie 2008, available on-line at <http://www.theiia.org/guidance/standards-and-guidance/ippf/standards/>

418 Prawitt, D.F., (2003), "Managing the internal audit function" The Institute of Internal Auditors Research Foundation, accesibil on-line la [www.theiia.org](http://www.theiia.org)



We consider there are few general rules that internal auditors must respect in order to give their contribution at the organization's progress:

***-Internal auditor must be aware over his responsibility regarding the creating of value added for the organizations;***

***-It is internal auditor's responsibility to show the management and the audit committee how internal audit works;***

***-Internal auditors must have the chance to train the management by organizing sessions regarding the self evaluations over the controls within the organizations<sup>419</sup>.***

## **2. Research methodology**

Our research methodology is based on fundamental research, trying to gather the main important findings from literature regarding the researched area. This paper is focused on analyzing the information provided by specialty literature by documentation and observation methods, in order to be able to offer some certain guidelines for the measuring and assessment of internal audit effectiveness. Of course, beside inductive research method, it was also used deductive research method, which has a significant role in determination process of the research's results. In the first phase, our intention was to offer a general overview of the most important techniques used for the evaluating of the performance of internal audit function, by investigating significant studies in the research domain. Next, we try to synthesize the most relevant methods trying to build a framework with the important guidelines that could be used in assessment of internal audit's effectiveness.

## **3. Literature review in the researched area**

Starting from the premise that it is quite relevant to identify which are the most used methods in measuring and assessment of internal audit's effectiveness in international internal audit practices, we found very interesting the results obtained by one of Big Four audit firms, exactly Ernst&Young, from 2007 and 2008, so called "Global Internal Audit Survey". The report "*Global Internal Audit Survey 2007*"<sup>420</sup> highlights the findings of survey made through internal audit executives representing 138 predominately public companies representing membership in the Global Business Week 1000, and the Standard&Poor's Global 1200 from 24 countries, most of the participants' companies being large multinational functions with revenues over US\$ 4 billion. Surprisingly this survey shows that half of the respondents do not track the value their internal audit function provide to the organization, while only 13% measure value based upon actual cost savings. The importance of value tracking is given by the fact that reinforces internal audit's relevance as well as help to justify the investment in necessary resources for internal audit. Testing the methods and techniques used to measure and assess the performance of internal audit, the findings of this survey showed that:

-the top metrics used in measuring internal audit effectiveness are: completed internal audits in comparison to the internal audit plan (89%); and the length of time for issuing internal audit reports (72%);

-only 32% of respondents use length of time for resolve internal audit findings as a key metric, while 23% use support of key business initiatives.

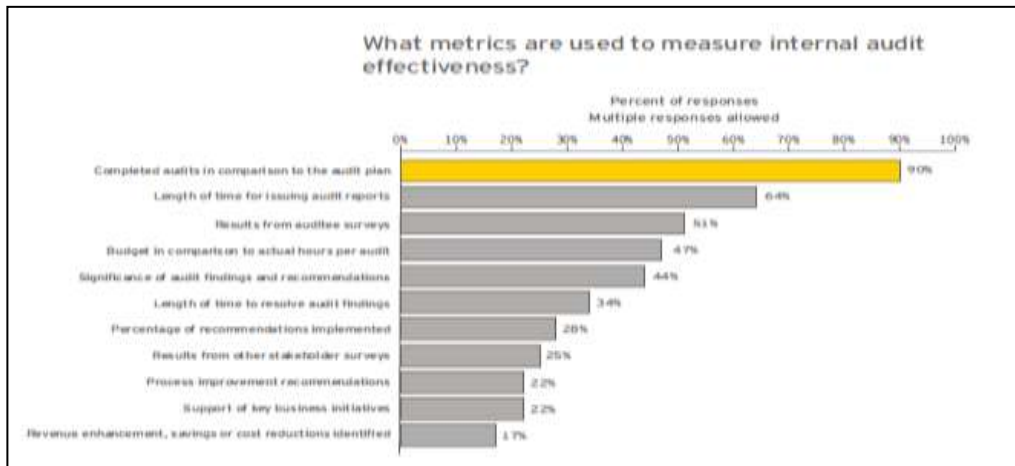
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419 Gross, J.A., (2006), "Control consciousness: internal auditors need to use their knowledge and experience to provide innovative methods of adding value", *The Internal Auditor*, April, accesibil on-line la [http://findarticles.com/p/articles/mi\\_m4153/is\\_2\\_63/ai\\_n16134043](http://findarticles.com/p/articles/mi_m4153/is_2_63/ai_n16134043)

420 Ernst&Young, (2007), „Global Internal Audit Survey, A current state analysis with insights into future trends and leading practices”, accesibil on-line at [www.theiaa.org/download.cfm?file=31923](http://www.theiaa.org/download.cfm?file=31923)

The survey “*Global Internal Audit Survey 2008*”<sup>421</sup> highlights that beside top metrics (identified in 2007 survey) used in measuring internal audit effectiveness: completed internal audits in comparison to the internal audit plan and the length of time for issuing internal audit reports, there is one more frequently used namely the results from shareholders surveys. The survey from 2008 found that only 34% of respondents use length of time to resolve internal audit findings and only 22% use support of key business initiatives as a key metric. According to Ernst&Young Survey from 2008, the most used methods to measure internal audit effectiveness are presented in Figure no.1

**Figure no.1** Methods used in measuring internal audit effectiveness



Source: Ernst&Young, 2008

The study realized by PROTIVITI (one of the largest providers of internal audit services and consultancy from United States and Canada) in cooperation with The Institute of Internal Auditors<sup>422</sup>, that was focused on testing the best internal audit practices from some big multinational companies from entire world shows that **the measuring and the enhancing of the internal audit’ performances are some of the main preoccupations of the internal audit managers from analyzed companies**, and the main modalities to assure the quality are:

- instituting of assurance quality departments under the coordination of assurance manager responsible for the obtaining of a reasonable degree of assurance that internal audit from whole company applies politics and procedures according to the internal audit standards;
- realizing of internal audit quality audits according to the settlements of internal audit standards issued by IIA and initiating of some programs of assurance quality in cooperation with IIA headquarters within the countries companies are from;
- evaluations of internal audit quality realized by external teams in order to verify the compliance with internal audit standards, and also there used some instruments for the measuring of internal audit performances like Balanced Scorecard;
- measuring the performances through qualitative methods by realizing of some satisfaction studies for the clients of internal audit, one main objective being the identifying of the potential causes for the unhappiness of the client;

421 Ernst&Young, (2008), “Escalating the role of internal audit”, Ernst&Young Global Internal Audit Survey, 2008, accessible on-line at [http://www.ey.com/global/content.nsf/International/AABS\\_-\\_Advisory\\_-\\_Escalating\\_the\\_role\\_of\\_internal\\_audit](http://www.ey.com/global/content.nsf/International/AABS_-_Advisory_-_Escalating_the_role_of_internal_audit)

422 Protivi Knowledgeleader, (2005), „Internal auditing around the world, Profiles of Internal Audit Functions at Leading International Companies”, Protivi Knowledgeleader, accessible on-line la [www.knowledgeleader.com](http://www.knowledgeleader.com) June, Vol. I

-implementation of some assurance quality programs and the accountability to realize annual assessments of internal audit quality;

-other instruments used for the measuring of the internal audit's effectiveness are: informal reports for the management, different monitoring systems of a necessary time for fulfilling the audit missions and the quality of internal audit reports, the contribution of the chief internal audit executive at the developing of the new internal audit procedures and the compliance of the specific objectives for each internal auditor.

#### **4. Guidelines in measuring and assessment of internal audit's effectiveness**

Trying to identify the relevant guidelines in measuring and assessment of the internal audit's effectiveness, we appreciated that the classification of methods used should be made from two perspectives: quantitative and qualitative.

##### **A. Quantitative methods for the measuring of the internal audit's effectiveness**

**1. Determination of fulfilling degree of internal audit plan** that consist in establishing the proportion that internal audit activities are realized according to internal audit plan in a certain period of time. This can be measured by determining the number of realized activities reported at certain planning period time for each type of activity.

**2. Identification of necessary period of time for the issuing of the final internal audit report** that consists in determination of the passed time from ending internal audit work to the issuing of final internal audit report, including the plan of actions for the management;

**3. Monitoring the necessary period of time for the solving of audit findings** that supposes to look for the period of time necessary for the solving of internal audit findings. From this point of view we consider very pertinent *to realize a statistical data base through to be followed different elements like the number of deficiencies solved in established time, the number of deficiencies solved with delay and the number of deficiencies unsolved;*

**4. The assessment of personal's certification:** from quantitative point of view, that can be determined through the number of staff employees from internal audit department with professional certification diplomas or the professional experience quantified in years of internal audit work;

**5. Determination of the report between time dedicated for certain internal audit activities and the time dedicated for administrative activities** that can be determined through daily monitoring of each internal auditor's time by clearly specifying of types of activities realized during a day of work.

##### **B. Qualitative methods for the assessment of internal audit's performance**

Analyzed from qualitative point of view, the most frequent methods for the assessment of the internal audit's performance are:

-*Fulfilling of some studies (questionnaires or interviews)* next to the ending of the internal audit missions and the respondents to be the organization managers.

-*Fulfilling of some studies (questionnaires or interviews)* next to the ending of the internal audit missions and the respondents to be the auditees.

The elements of these questionnaires could be different from one organization to another, being influenced by the vision of each manager, but also by the opinion of the auditees regarding the ways that internal audit could deliver more added value. Next, we try to build a model of questionnaire regarding the assessment of internal audit's performance from the perspective of the auditees, without having the pretention of being exhaustive, in the same time, being convinced that it could be enhanced by taking in consideration the specific of each organization. Of course, starting from the same principles, it could be developed another questionnaire from the perspective of managers, by taking in consideration their criterions in evaluation the added value, these criterions could be different from the one followed by the auditees.

**Table no.1** A model for the assessment of internal audit’s effectiveness from the perspectives of audittees

*Because of internal audit preoccupation for the continuing improving of the quality of offered services, please fill next questionnaire taking in consideration the last internal audit mission that you participate as an audittee.*

*Internal audit missions that had been participated..... Name.....*  
*Internal auditors participants at referring mission:..... Date.....*  
*Function within the organization.....*

*Please tick off only one answer, using 1 to 5 scale, where 1 – total disagreement and 5- total agreement.*

| <b>General expectations from internal audit</b>  | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> |
|--|----------|----------|----------|----------|
| 1. Do you consider that internal audit deliver added value to your department?                                   |          |          |          |          |
| 2. Do you consider that internal audit improve the activity from your department?                                |          |          |          |          |
| 3. Do you consider that internal audit help you in assuring the premises for next projects?                      |          |          |          |          |
| 4. Which is your general opinion regarding the internal audit’s effectiveness for the whole organization?        |          |          |          |          |
| <b>Assessment of internal audit work</b>   | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> |
| 5. Do you consider that established objectives at the beginning of audit mission were accomplished?              |          |          |          |          |
| 6. Do you consider that communication between internal audit and external audit was efficient?                   |          |          |          |          |
| 7. Do you appreciate that audit work was efficiently performed according to planning period?                     |          |          |          |          |
| 8. Do you consider that internal audit work was realized with responsibility?                                    |          |          |          |          |
| 9. Do you appreciate that findings are correctly argued and justified?   |          |          |          |          |
| 10. Do you appreciate that internal audit recommendations are significant?                                       |          |          |          |          |
| 11. Do you consider that internal audit report was issued in a useful time?                                      |          |          |          |          |
| 12. Do you consider that internal audit report is clear and logical?   |          |          |          |          |
| <b>Assessment of internal audit teamwork</b>   | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> |
| 13. Do you appreciate that internal audit teamwork had been proven that has necessary knowledge in audited area? |          |          |          |          |
| 14. Do you consider that internal auditors were professionals?   |          |          |          |          |
| 15. Do you appreciate that internal audit team was proactive?  |          |          |          |          |
| 16. Do you appreciate that internal audit team had been focused on essential elements?                           |          |          |          |          |
| 17. Do you consider that internal audit had been developed a good cooperation between auditors and audittees?    |          |          |          |          |

18. Which were the most positive aspects that you appreciate as a result of internal audit work? .....

19. Which were the most negative aspects that you dislike as a result of internal audit mission? .....

20. Please, other comments.....

Thank you for your time and the honesty of your answers

Source: projection made by authors

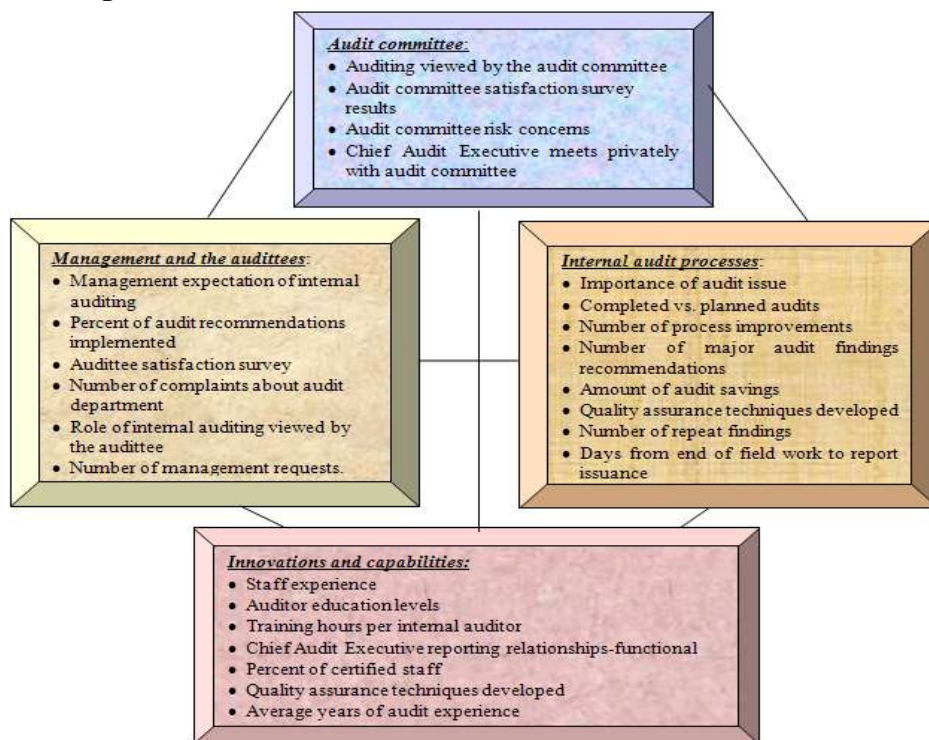
**C. Methods of measuring and assessment of the internal audit performances that combine quantitative with qualitative elements**

One of the most interesting methods that combine quantitative with qualitative elements is the one that uses the “**Balanced Scorecard**” instrument. Lately, the importance and frequency of using this instrument become more and more obviously, a fact confirmed also by the

international specialists from international literature<sup>423</sup>, but also a fact confirmed by the practice of many multinational companies.

Frigo M.L. had a significant contribution at the researching of the results obtained by using of Balanced Scorecard instrument in the evaluating of the performances of an internal audit department through his paper totally dedicated to this problematic - „A Balance Scorecard Framework for Internal Auditing Departments (Paperback)” – a paper realized in cooperation with *The Institute of Internal Auditors Research Foundation*. The author of this study wanted to develop a model of Balanced Scorecard for internal audit departments, following to emphasize the ways that internal audit departments could improve their activities regarding the measuring of internal audit performances. The Balanced Scorecard model presented by Frigo M.L. is approached from few key elements perspectives like: (1) internal audit customers (audit committee, management and the auditees); (2) internal audit process; (3) innovations and capabilities. For the construction of this model, the author starts from the premise that there are some key concept of this model that could be applied for the internal audit departments: *measuring the performance from customer’s point of view; determination of some certain indicators for the quantifying of the internal audit performance; the connection between internal audit and customer’ expectation; focusing on general strategies of the department; innovation and capabilities of internal audit.*

**Figure no.2.** Balanced Scorecard model for internal audit function



## 5. Conclusions

In today’s turbulent economy it is clear that internal auditors have to face with difficult challenges, one of them being the one of proving its relevance and necessity within the organization. In this context, the added value delivered by internal audit becomes more and more

423 Frigo, M.L., (2002), „A Balance Scorecard Framework for Internal Auditing Departments (Paperback)”, The Institute of Internal Auditors Research Foundation, Altamonte Springs, Florida

important, internal auditors being more and more interested to find the most relevant methods for measuring and assessment of internal audit's effectiveness and efficiency. There are many methods and instruments that could combine qualitative with quantitative elements. In our opinion, the choice of used method depends on the settlement of the main objective of trying to obtain the best reflection of internal audit's relevancy and efficiency, offering arguments for investment for necessary resources in order to obtain a good developing of internal audit department.

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# STUDY CONCERNING THE DIFFERENCES BETWEEN THE FOURTH DIRECTIVE AND ACCOUNTING STANDARDS FROM ROMANIA

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*The normative reference for accounting is, in Europe, the 4th Directive on the annual accounts of certain type of companies (78/660/EEC), issued in 1978 and revised in 2003 and 2006 (2006/46/EC). For Romania, integration to the European Union implies the assimilation and the consent of the European lines with respect to different areas. Therefore, the Romanian accounting standards that have been applied since 2006 can be considered to be very close to the spirit of the directive. Yet, we find some differences. The purpose of our study is to find the differences between the Romanian accounting standards and the 4th Directive, in other words, to investigate if the Romanian accounting standards have entirely assimilated the latter or not.*

*Keywords : the 4th Directive (78/660/EEC), Romanian accounting standards, harmonization, European Union*

*Cod JEL : M41*

## **INTRODUCTION**

In the four decades of existence, European Union undertook considerable steps in realizing the Treaty from Rome stipulations, that set the basis of the partnership, and inscribed as essential aims states' economic policies' harmonization, realization of common commercial policies, of agrarian policies and the creation of economic and monetary unity. During its operation, the common market conceived at Rome in 1957 supported cooperation between member states, contributed to a certain work market's stability and to realization of some notable progress in agrarian, social and security domains.

A special moment in European Union's development is constituted by creation, at the 1<sup>st</sup> of January 1993, of The Unique Market, foreseen in The Unique European Act from 1987. After this act's putting into practice, European Union becomes the most unified market in the world, with favourable effects upon integrated markets' performances and upon the decision making system.

Once with the settling of The Treaty from Maastricht (November 1993), European Community becomes European Union, the new name being motivated by its orientation towards public and social domains' integration.

The Treaty has on its view the creation of one space without interior frontiers, by highlighting the economical and social cohesion and the creation of a strong economic and monetary union that should use a unique currency.

On realization chapters the actions promoted on the line of Economic and Monetary Union by settling the Central European Bank and the states' engagement of answering to adhesion criteria to unique currency may be inscribed.

Fourth Directive of Europe Council coordinates the assembly of member states and in course of adhesion imposed requirements concerning the presentation and content of yearly financial situations and of their rapports, the general principles concerning position and financial performances of an entity, specific evaluation rules of actives and passives and of publication of financial situations.

Therewith, the directive foresees the requirements concerning the statutory audit of yearly financial situations by persons authorised to audit with this purpose, according to European requirements.

## **DIFFERENCES BETWEEN THE FOURTH DIRECTIVE AND ROMANIAN ACCOUNTING STANDARDS**

The 4<sup>th</sup> Directive is based on the 53<sup>rd</sup> article of The Treaty from Rome, being a compromise of this type of financial reporting legislation and the approach is based on the trusty image concept. This accounting document offers the possibility of choice between more accountant alternatives of solving different problems and offers options to member states in what its application is concerned.

The Directive covers public and private companies in all EU countries. Its articles include those referring to valuation rules, format of published financial statements and disclosure requirements. The fourth Directive's first draft was published in 1971, before the United Kingdom, Ireland and Denmark had entered the EU in 1973. This initial draft was heavily influenced by German company law. Consequently, valuation rules were conservative, formats were prescribed in rigid detail, and disclosure by notes was very limited.

The influence of the United Kingdom and the Ireland on the Commission, Parliament and Group d'Etudes was such that a much amended draft was issued in 1974. This introduced the concept of the "true and fair view". Another change by 1974 was that some flexibility of presentation had been introduced. This process continued and, by the promulgation on the final Directive, the "true and fair view" was established as a predominant principle in the preparation of financial statements. In addition, the four principles of the UK's SAAP 2 (accruals, prudence, consistency and going concern) were made clearer than they had been in the 1974 draft (Nobes, Parker, 2006).

The introduction in national legislations of the 4<sup>th</sup> Directive content should have been realized by July 1980, but none of the member states succeeded. As example we can mention that Spain and Portugal scarcely had succeeded its adoption in 1989, Italy in 1991 and Sweden in 1995, while Austria and Finland still have to introduce few amendments in order to declare the adoption completed. It can be, even though, asserted that in present this document's content is included in all member states' legislations, as well as in other states' legislations, sates that are not members. European Union's relations enforcement in adhesion process imposed continuous development of accounting Romanian system, pursuing a better harmonization with European directives settlements.

The adhesion presumed, from an accountant point of view, the introduction in scene of accountant standards formulated and approved by Public Finances Minister Order's no. 1752/2005, that are considered as being the closest to 4<sup>th</sup> Directive's spirit and letter. Although, a series of differences can be observed, some of it dictated only by different expressions of the same basis, others remained from anterior Romanian accounting standards, when the opening towards the international accountant standards left marks.

In what follows, we shall highlight some differences that constitute the punt of the present study.

1. One of the first differences consists in financial information set name that were published yearly by companies. The directive maintains the recognized term of "annual accounts" (comptes annuelle), collocation that crosses the whole history. The English version of directive translates the collocation directly, annual accounts, and not financial statements as the term has been used in international accountancy language. This situation is an expression of conservatory attitude from Continental Europe accounting pole facing the accelerated Anglo-Saxon accountancy vocabulary.

Romania's accounting standards maintained the old expression "accounting balance" in the harmonization period to European directives of the 90's, and passed straight to that of "financial



statements”. This new expression used was the expression of accounting standards harmonized to International Standards of Accounting, published in 1999.

2. Another difference refers to settlements concerning the annual financial statements set constitution. The directive foresees as compulsory elements the balance sheet, profit and loss account and explanatory notes, with the mention that the member states may allow or require other components. Romanian accounting standards oblige certain categories of entities to introduce the financial situations set also the changes in equity statement and the cash-flow statement. It is a consequence of IAS/IFRS application, with the mention that only the entities considered big, that fulfil the conditions of two of the three criteria foreseen by accounting standards have the obligation to prepare it. However, the other categories of entities are encouraged to introduce, them too, these components.

3. A difference may be identified in defining and using the basis concepts of accountant vocabulary. Thus, the directive uses concepts of assets, liabilities, financial position, but it does not define it. Romanian standards use the concepts of assets, liabilities and owners` equity according to IASB preparing and presenting financial statements` general framework. It may seem as a simple difference, but the appeal of Romanian accountancy to definitions from the General Framework, by reason of the fact that it took part of the accounting standards starting with 1999, produced for some of them, a real professional opening, an open door towards international conceptual framework`s valences.

4. A form difference, but one that contains background aspects, is the one referring to the manner of presenting the elements in balance sheet. Both forms of balance, foreseen by the directive, on the 9<sup>th</sup> and 10<sup>th</sup> articles, present the claims concerning unpaired subscribed capital as main element, and its inclusion in claims` structure, as exception, as alternative presenting form. Romanian accounting standards retained the exception as presenting rule, respectively the presenting of the claims connected to capital at “claim” position.

5. A direct expression of the accepted degree of compromise in the “battle” between conservatism (prudence) and accrual accounting (Nobes, Parker, 2006) is the accountant treatment of developing expenses. The directive frames in the balance pattern the research and developing expenses in the structure of intangible fixed assets, under the reserve of their recognition as actives by national legislation, without defining it. Romanian standards are stricter and use the vocabulary used by IAS 38. Thus, in the structure of intangible fixed assets only the developing expenses can be capitalized, these being generated by research`s results applications or other knowledge, in order to realize new products. Without defining it, it is understand that those research expenses named by research, meaning those that come out, according to IAS 38, from original and planned investigation undertaken with the purpose of knowledge or scientific meanings and new techniques, are deducted on the period cost.

6. Commercial, industrial and intellectual property rights` treatment are the basis of a new difference. The directive foresees the possibility of registration it as intangible fixed assets, as well as the commercial, industrial and intellectual property rights purchased with onerous title as well as those created by the entity, under the conditions that national legislation allows their presenting as assets. Romanian standards foresee that may be registered in intangible fixed assets` structure the leasing, patent acts, licences, commercial labels, rights and similar assets that represent contribution, acquisition purchased on other ways, excluding the possibility of registering those created by the entity.

7. Each country`s companies legislation may allow the purchase of own titles, under certain conditions. This situation leads to the need of establishing a corresponding accounting treatment. The directive foresees that if the legislation of a member state allows a society to purchase its own actions, either directly, by means of a person that takes action for herself, but under the society account, the holding of those actions is submitted in any moment to at least the following conditions: a) among the rights associated to the respective actions, the vote right conferred by

the actions detained by society are suspended for all situations; b) if the actions are included in balance actives, in passive balance a reserve with equal value is included, that cannot be distributed. In Romania, Commercial society law allows entities to purchase their own actions in a maximum proportion of 10%, with the mention that if these are inscribed in the active, in the passive should be inscribed a reserve with the same value. From this point of view, the commercial society's law is in agreement with the directive's settlements. Romanian accounting standards do not allow the presentation of own actions as balance assets. Thus, nor the owners' equity elements "Reserves for own actions" was not foreseen. The position "Own actions" figures as subtractive element in owners' equity structure.

8. A difference that supposes a conceptual approach refers to the explicit set of drafted principles, which should be taken into account when drafting financial statements. Thus, our discussion has on its view two principles of Anglo-Saxon origin, which are not foreseen by the directive: economic substance (substance over form) and the significance threshold principle (materiality). These two principles are explicit drafted in Romanian accounting standards and compulsory for some categories of entities (those who cross the value of two of three criteria foreseen). In this case the inherence of IAS application is also felt, the prevalence principle making itself felt significantly in accountant treatments applicable to leasing operations.

9. The existence of an alternative evaluation treatment concerning the fixed assets value at the end of the exercise is a necessity dictated by accrual accounting concept's incidence. The directive foresees that the reserve from the re-evaluation may be capitalized in any moment, integral or partial, with the mentioning of member states' possibilities of foreseeing rules that should settle the re-evaluation reserve use, under the condition that transfers from re-evaluation reserve to profit and loss account should be done only if the transferred amounts have been registered in profit and loss account as expenses or reflect realised value rises. In Romania there exist standards referring to value difference observed with the re-evaluation, in the societies commercial laws as well. Therefore, this difference is included in reserves, without increasing social capital. Romanian accounting standards foresee an accounting treatment closer to the one mentioned in IAS 16. The surplus from re-evaluation included in reserve may be capitalized by direct transfer to reserves, when this surplus represents a realized gain. By exception, this surplus may be capitalized by the measure of using the respective active, but only at the level of the difference between the calculated amortization calculated on the basis of re-evaluated value and the one calculated on the basis of initial cost.

10. A seemingly harmonization aspect, that is maintained for a long time in Romanian accounting standards, is the one referring to intangible opening balance principle. It is easy to observe that this principle is one of those explicitly drafted as well in the directive's settlements as in Romanian accounting standards. Even though, the accounting treatment foreseen for errors correction supposes direct violation of this principle, because error correction is made according to reported result. In this case the remnant of international accountant standards applications is felt.

## **CONCLUSIONS**

Without claiming that the subject is overwrought, we presented few of the form and background differences among the 4<sup>th</sup> directives settlements and the Romanian accounting standards. We consider some of the differences having as cause the anterior application in Romania of some accountant standards harmonized with International Accountancy Standards, their remnant effect being found in present standards. On the other side, we notice the Romanian standards amplitude of using and impose a European accountant language, opened towards value axes of international accounting.

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## COMPARATIVE ANALYSIS REGARDING THE AMORTISATION OF NON CURRENT ASSETS IN A NATIONAL AND INTERNATIONAL CONTEXT

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*In Romania, starting from the Regulation's requests (CE) no. 1606/2002 and the national regulations are obliged to apply the IFRS starting with 1st of January 2007 the entities whose immovable values, at the balance date, are admitted to the transaction over a settled market, with the purpose of drawing up consolidated financial situations. This measure supposes a series of processing and accounting options specific to the international referential that points out, at the same time, the existent differences between the national and international norms in matter of amortizations.*

*Keywords: amortization, non current assets, accounting information, IAS-IFRS.*

*JEL code: M41*

The accounting system of a country is influenced by a series of factors such as the juridical system, the dominant manner of financing of the economic agents, the fiscal system, the inflation level, the economical system, the political system etc., this is the reason for which there are significant differences from one accounting system to another.

As a result of the mentioned factors may be identified to all levels of an accounting system, among which we remember: to the level of organizations of accounting normalization, to the level of used terminology, to the level of accounting principles and to the level of drawing up practice of financial statements and financial communication.

The differences between the accounting systems generate acceptance difficulties of the financial situations drew up by companies for the users in environments sensitive towards the original country ones of the issuing company.

The accentuation of national economies globalization and of integration of financial markets and informational systems claims the using of a common accounting language. That is why the attracting of the international patrimony must be based upon an offer of relevant information, intelligible, and mostly, comparably elaborated in an accounting language, generally accepted.

The investors and financial analysts need to understand the financial statements of foreign companies whose shares would like to purchase, will be able to compare financial statements of companies located in different countries and ensure that the information is relevant and reliable.

In the national accounting system, the financial communication is made in accordance with the Accounting Regulations and with the European directives. This way, for operators, was transposed into the national law the Directive IV and VII resulting the accounting Regulations in accordance with the European directives. Also other institutions with regulatory powers such as NBR, Supervisory Commission and the National Insurance Securities regulations developed in accordance with the European directives specific areas of activity appropriate entities regulated and supervised by them.

The Romanian accounting law foresees the applying of accounting regulations in accordance with the European directives, and the International Financial Reporting Standards (IFRS). European Union Member States have proceeded with the implementation of IFRS in accordance with the Regulation (EC) no 1606/2002 of the European Parliament dated on 19 July 2002 on the

application of international accounting standards. This way, according to this Regulation, member states shall apply the IFRS in the consolidated financial statements.

In Romania, starting from the requirements of Regulation (EC) no 1606/2002 and the national regulations are required to apply IFRS from 1<sup>st</sup> of January 2007 the entities whose securities at the balance sheet date, are admitted to trading on a regulated market, for the purpose of preparing consolidated financial statements. Other public entities may apply IFRS in preparing the consolidated or individual financial needs for their information.

At the same time, there must be mentioned also an important aspect, which concerns the fact that in the business relationship with the state institutions the reporting base will be represented by rules in accordance with accounting guidelines, including the collection of information underlying the determination of taxes. Therefore the financial statements obtained by the application of IFRS are intended for users of information, other than the state institutions. Also, bear in mind that all entities are required to apply or have opted to apply IFRS must ensure the continuity of their application.

Differences between the law governing issues relating to amortization and certain provisions of IAS/IFRS are essential in many ways only if we refer to the terms of amortization, amortization election methods, review of terms and methods of amortization etc. What essentially distinguishes the current Romanian law, the amortization of the recommendations contained in the international norms, to which I referred, relates primarily to the exercise of professional specialists of reasoning at that moment, and finds not only equivalent a very small extent in the national rules. This is, in our opinion, a very important aspect with numerous implications on the quality of information provided by accounting.

In this context we believe that several issues must be accepted that, in our view, are very important and should be taken into account as working hypotheses when addressing the issue of amortization in the transition from the specific accounting processes at the national rules in accordance with IAS/IFRS.

According to IAS 16, and IAS 38 after initial recognition of a tangible or intangible assets will be valued at its cost less any accumulated amortization and any accumulated impairment loss. International standards define amortization as the systematic allocation of the amount of amortization on an asset throughout its useful lifetime.

Useful life duration is defined by:

- the period during which an asset is set to be available for use by an entity (in years);
- the number of units produced or some similar units expected to be obtained through the use of enterprise assets respectively.

The spirit of international rules is different from what national law requires in terms of amortization. This way, in the international referent's vision the entity is the one that decides which method of amortization and estimates the useful life duration. In other words, in this context, professional reasoning becomes very important, whereas specialists should call him not only at the beginning of life of an asset, but later, when it can become necessary to review the life or use other methods of amortization.

If in the case of tangible assets the life duration can be expressed in number of years of use or number of products or similar units expected to be obtained from using the asset, in the case of intangible assets determining the life duration is slightly more complex, since the entities must assess whether the life of a intangible assets is determined or not, and if it is determined which one is that (expressed in years or units of products).

Another specific aspect of the international referent refers to the periodic review of the terms of useful life for corporal and non-corporal immobilizations (at least the end of each financial year), and if the new estimates differ significantly from those earlier, the amortization costs associated with current period and future periods should be adjusted. It is possible that the useful life of an asset could be extended by carrying out upgrades to get more performance, or may diminish as a

result of technological advances or changes in market structure. In these cases, similar machines, but which are used by different companies with activity in different areas may have different durations of life.

An element, also specific to the international accounting rules is referred to determine the value of amortization. In this context, a new concept, namely the residual value, defined as the estimated amount that an entity could obtain by ceasing an asset, after deducting the estimated costs for disposal, if the assets have already provided the age and condition at the end of life useful life.

Often, in practice, the residual value is insignificant and not taken into consideration in calculating the amortization, but when the entity intends to replace the asset before the end of life duration of this economic value should be estimated. Specifically, the residual value is realized by comparison with similar assets, at end of life or on the basis of the contract (for leasing).

Therefore, the amortization is determined by subtracting the cost of the asset (or other value substitutable cost) of the estimated residual value. However, it should be recalled that the residual value of an asset may increase to a value equal to or greater than the book value of assets. If this happens, the asset amortization costs are equal to zero unless and until no residual value subsequently decreases to a value below the asset value accounting.

As regards the methods of amortization should be noted that international standards do not prescribe specific methods, but states that for the systematic allocation of the amortization of an asset during its use can be used several methods, by reference to straight-line method digressive or method of production units. Entities must select the method that most reliably reflects the expected pattern of consumption of future economic benefits embedded in an active and consistently applied from one period to another, unless there is a change in the expected rate of consumption of those future economic benefits.

The method of amortization applied to assets should be reviewed at least at each end of the year when there is a change in pattern of consumption of future economic benefits brought by the active method will be changed to reflect this change.

Regarding the accounting amortization, the international rules stipulate the recognition in the profit and loss expenses for amortization, if not included in the value of another asset.

In terms of amortization on property issues, the national regulations are distinguished by a number of elements of international accounting standards. In this context, we refer the more rigid rules of accounting in accordance with European directives on the one hand, and tax rules, on the other hand, compared with the accounting policies promoted by international accounting standards in terms of amortization.

In the vision of national redemption value is an expression which corresponds to irreversible impairment of tangible and intangible assets as a result of their use, the natural factors and moral wear.

Results that from this point of view the amortization takes on the one hand, an economic aspect, by the inclusion in operating expenses amortization of the value of products, and on the other hand, a financial aspect, by the formation of the source necessary to replace immobilizations depreciate totally or to finance of some new ones.

Entities who apply the accounting rules in accordance with the European directives determine the amortization by applying the amortization rates on the value of tangible entry or values remained updated, according to case.

We consider for starting that it must be clarified the input value concept as it is defined by the national standards, specifying that the tax rules aim at strictly the entry value of the fixed assets amortization. So, by the entry value of the fixed assets is understood:

- cost for fixed assets purchased with for good and valuable consideration;
- cost of production for fixed assets constructed or produced by the taxpayer;
- the market value for fixed assets acquired free of charge.

For tangible assets that are used in lots, sets, or as a single body, lot or set, to determine the amortization is taken into account the value of the whole body, lot or set. For components included in the structure of an active body, which during normal usage differs from the result of the asset, amortization is calculated for each component separately. In this case it is found close to the national law of international norms.

As regards the amortization periods should be made some distinction between the tangible and intangible assets.

In the case of intangible assets, national regulations set the following rules:

- expenses of constitution must be redeemed within a period not exceeding five years;
- expenses related to acquisition of patents, copyrights, licenses, trade marks and other factory or similar values and development costs in accounting intangible assets is recovered through amortization deductions during the contract period or use as appropriate;
- expenses related to acquisition or production of software are recovered through amortization deductions over a period of 3 years.

Some features show goodwill, which under tax legislation is not considered active redeemable. However, accounting rules in accordance with European directives that specify where goodwill is treated as an asset, as a result of the acquisition by an entity of the actions of another entity, should be considered the following issues:

- goodwill is amortized, usually within a period not exceeding five years;
- however, entities may recover the goodwill systematically over a period exceeding five years, provided that this period does not exceed the duration of use of economic assets.

Regarding the tangible assets, in our country the normal using durations of fix assets are set by the central government decision, being periodically reviewed. As required by the normative act referred to, the normal operating period is to use the recovered in terms of tax, the input of fixed assets by amortization. Consequently, the normal functioning duration is more reduced than the physical life time of the respective fix asset. Even if by the new Catalogue regarding the classification and normal functioning durations of the fix assets are foreseen intervals of time within which operators can choose the length that are considered optimal with respect to their economic needs, however, view that the very many cases, especially minimum required by the normative act does not coincide with the views of experts/technicians in production.

In Romania, companies are required to amortize the intangible and tangible assets in accordance with the legislation in force, using linear amortization regimes, digressive or accelerated. Moreover, tax legislation requires to a large extent even the type of method to be applied to one category or the other non current assets.

So, trying to make a quick comparative analysis between the two referential accounts, the conclusions can be drawn as shown in the table below:

| <b>Explanations</b>           | <b>International standards</b>   | <b>National regulations</b>   |
|-------------------------------|--|---|
| <i>Defining amortization</i>  | Systematic allocation of the amortizable value of an asset upon its entire useful life duration. | The value expression that corresponds to the irreversible depreciation of the tangible and intangible assets as a result of their using, of the natural factors action and moral usage. |
| <i>Professional reasoning</i> | Has a very important role in applying the accounting politics.                                   | The national regulations are enough rigid and do not allow the manifest of the professional reasoning but only in a small measure.  |
| <i>Amortization durations</i> | Are estimated by the economical entities by applying the professional                            | Established in a centralized manner by normative acts, without the  |

|                            |  |   |
|----------------------------|--|---|
|                            | reasoning and periodical reviewed.   | revision possibility.   |
| <i>Amortization value</i>  | Cost of the asset diminished with the residual value.  | Entrance value.   |
| <i>Residual value</i>      | Is an element estimated by applying the professional reasoning and taken into account to establish the amortizable value.  | This concept is not used.   |
| <i>Amortization method</i> | Are not imposed certain methods, the entity having the possibility to establish the method type to apply. By the professional reasoning the methods are periodical reviewed. | Are imposed three methods of amortization (linear, digressive and accelerated), the entities, in many situations, not having the possibility of choosing for the amortization method. |

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# THE MANAGEMENT ON BASES OF CENTER'S BENEFIT - CONDITION PROFITABLE AN ACTIVITY'S FORESTRY ENTITIES IN ROMANIA

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*The management on the basis of center's benefit represents a form of organization of management limited in time, to solve the complex, but clearly specified matters.*

*The implication of accounting in administration of such problems is necessary in any decision process, adequate to specific conditions for these management methods.*

*The accounting objects in financial administration mainly aim: the substantiation and elaboration process of the project budget, as well as the financial foreseeing on a certain period; the elaboration of the financial report related to justification funds.*

*Upon our approach, we intended to present in detail the specific aspects which the management on the basis of centers benefit implies in the forestry entities.*

## **KEYWORDS**

*Forestry entity, center of cost, center of benefit, expenses, earnings, budget*

*Cod JEL: M41*

The forestry entity was, is and will be of found nucleus forestry's domain, so below structure, as soon specially, as for as concerned the course and foundation process's of production with implications financial (expenses-earnings) due this process's.

In the course of time concomitant with the system's perfection public management, all in all, and which bound at forestry management the number forestry entities, which had continue remaining basic entities domain's, had progressive, in stability, becoming at 157, in 1906 year, because after establishment Autonomous Houses Forestry's State, in 1930 about Law four forestry administration the number forestry entities had increased at 197 with approximate 2 millions hectares woods.

To day, at level forestry entity it is the most complex and moreover the most concrete specific activity forestry's domain and generally management's modern should descend and development, at this "floor" on the organization structure organized a forestry domain.

Even if the road to "centers benefit" will present a number of challenges in resource planning, training and communication, the specialists suggest that the short-term pain and inconvenient will be worth the long-term strategic benefits. So, we are on the right way and all we have to do is to continue – this the essence of the present paper.

## **One new approach – The management on the basis middle's benefit**

To day, the management on the basis middle's benefit signify, in accordance with authority's in domain, one the most complex and the most rife and management Word-System level.

In this context, the management on bases of center's benefit is to define such as management instrument centre by determine and identification rigorous objective's and their derivate, by economy decentralization and managerial at the administration centre and recompenses correlation, with the rank these objectives realize.

Tackling promotion and management used on bases of centers benefit in Romanian entities specialists in domain identified next coordinates:

- a strategy existence and global realist politics, because objectives establish;
- one study market which furnished pertinent information about surrounding national and international entity's distinctive;
- a positive attitude of management witness change;
- a climate labor, a organization of cultured man;
- a management ability for those who leader;
- a economy an managerial culture adequate entity's staff.

Therefore, is define such as managerial instrument, centre on causes and identification rigid objectives and on their leeway's up post level and performers direct concerned in their establishment on the economy and management's decentralization at centre of management and on recognition's/sanction's with of objective's realization grade.

The particulars distinctive management's of the basis centre benefit are<sup>[1]</sup>:

- a complexity different – which to refer alls structural and processes organization the constituent's;
- managerial size – managerial decentralization within entity under the circumstances emergences managements centre characterize about mission, responsibility and abilities superiors situation simples entities subdivision;
- the economy size – which offer usage budget's such as managerial instrument significant;
- the share size, which presume implication manager's as and leader's centre management;
- motivation size, assert one self of correlation/ sanctions, with the rank individual objective's achieved centre management.

### **The constituents built-in basic management's of the basis centre benefit**

Such signify the dimensions managerial practically particulars set in spotlight under chapter, respectively:

- The system by objectives compound by: the fundamentals objectives, derivatives objectives (grade I and II) the specifics objectives and individual's;
- The programs of action, which contain decisions and actions fundamentals how chase will been adopt for the objectives realization;
- The calendars with terms (intermediaries and finals) concerning the realization objectives;
- Directives (general or specifics) definitely in methodologies indication referring to way of the objectives workable;
- The budgets elaborates so much for entity and for the centers management;
- The systems and technical managerial (diagnosis, mission, meeting, dash board, budgets, etc.) used in context these standard management.

### **The identification and proportions of management centers**

The management centre represent a constituent evolution (activity, group of activities) or a structural (functional compartments or efficient), define about autonomy action and resolution, high and which order by one budget clear-cut, whose realization depend direct, recompenses/sanctions.

Just as resultant by definition, criterions after which a entity should structure in management centers are:

- The evolution criterion, after which the management centers are identification and proportions by significant activities or by the groups activities (production, provisions, market, means human, etc.);
- The structural-organizer criterion which afford the management centers constitution one or two organizer subdivision (departments, work-rooms, etc.).

The specialists in field suggest to trim in the second criterion in view of because, identify objectives, earnings and issues is much easier and more rigorous.

This criterion to be adapted the more right for forestry entity as management center.

The second criterion lend oneself best for forestry entities about identification forestry's entity such as management center.

The management centers will be:

-**Centers of costs**, which are only generators expenses without from which can not will be obtain the products or services stabilities an entity.

-**Centers benefit**, characterize about premises and potential carrying one profitable activity, such as result products and services marketing deliver.

In the context of management on bases of center's benefit of budgets draw up to be achieved about "budget" compartment together with managers administration's center the actions characterize by trough a proportion pronounce in participate.

**The elaborate and release budgets**

The elaborates budgets to materialize by towards the compartment "Budget" between with administration center manager's and will be make-up by four chapter:

1. **Objectives** ( output physics, wares, costs, number by staff, etc.)
2. **Expenses** (groups by articles or by expenses elements)
3. **Earnings** (turnover, production deduct, production unfinished, etc.)
4. **Issues** ( benefit, loss)

***Individualities management's on base benefit centers in forestry entities***

The identification these centers can be the most level distinct, respectively:

-In situation wherein Administration is identify with the statute by forestry entity department can will be identically such as management centers;

-In situation when the localization statute by entity to make by forestry department then forestry entities will be can management centers;

-In our opinion, to take account of specifically organizer, technical and financial economy

National Administration of Forestry, the third situation resultant by combination and harmonization situation describe by point a) and b), represent the optimal method by approach management on base benefit centers by administration level.

In the context existences those two categories management centers for point a) situation doing clear delimited an fact that in their capacity Departments Forestry can not be approach than benefit centers.

As matters from point b) wherein forestry entities are approach such as management centers, because of activity's specifically will had meet with different percentages: forestry entities benefit - centers how and forestry entities – expenses centers, but this matter is the most many-sided and teaser.

For this second case, issue the identify and delimited without doubt of benefit center's and expenses is more complex and difficult.

**The budget – management center's environment**

| Specification                    | Unit of measure | Budget level | Update level | Implement level | ± | % | Causes |
|----------------------------------|-----------------|--------------|--------------|-----------------|---|---|--------|
| <b>I OBJECTIVES</b>              |                 |              |              |                 |   |   |        |
| 1. Production physics            |                 |              |              |                 |   |   |        |
| 2. Turnover                      |                 |              |              |                 |   |   |        |
| 3. Gross benefit (minimum level) |                 |              |              |                 |   |   |        |

| Specification   | Unit of measure | Budget level | Update level | Implement level | ± | % | Causes |
|---|-----------------|--------------|--------------|-----------------|---|---|--------|
| 4. Minimum level<br>Production labors   |                 |              |              |                 |   |   |        |
| 5.Observances correlation of<br>dynamics labor production<br>an dynamics earnings<br>medium |                 |              |              |                 |   |   |        |
| <b>II. EXPENSES</b>   |                 |              |              |                 |   |   |        |
| Straight out-goings<br>raw materials<br>b. low straight                                     |                 |              |              |                 |   |   |        |
| 2. Overheads<br>a. Upkeeps<br>b. Out goings administrative                                  |                 |              |              |                 |   |   |        |
| <b>III. EARNINGS</b>  |                 |              |              |                 |   |   |        |
| 1.Settlement of accounts<br>produc-tion other<br>management centers                         |                 |              |              |                 |   |   |        |
| 2. In progress production by<br>year month  |                 |              |              |                 |   |   |        |
| 3. Turnover   |                 |              |              |                 |   |   |        |
| <b>IV. Financials results</b>   |                 |              |              |                 |   |   |        |
| 1. Benefit  |                 |              |              |                 |   |   |        |
| 2. Loss   |                 |              |              |                 |   |   |        |
| <b>V. Investments</b>   |                 |              |              |                 |   |   |        |
| 1. Means personals  |                 |              |              |                 |   |   |        |
| 2. Means personals<br>destination   |                 |              |              |                 |   |   |        |
| 3. The investments expenses   |                 |              |              |                 |   |   |        |
| 4. Surplus  |                 |              |              |                 |   |   |        |

The existence forestry's entities from forestry plain area, where the woods development permanently the first primacy which presume the budget significant an these approach such as expenses centers will been very matter-of-fact.

As well, forestry entities identification expenses centers should will been made such so that a Administration Forestry in ensemble to remain benefit centre.

As well, is requisite to identified one list by technical criterions, economics, socials for to analyses the potential each forestry entity after which to make integration, such as entity – benefit centre or expenses centre.

In the context general theoretical process's by elaborate and release budget's, specifically management on base center's benefit we recommend a structure environment an budget's one management center's.

Towards of the content ones four chapter budget-center's, the forestry domain, especially forestry entities such management centre, to present some individualities, which we punctuate, further.

A chapter one – objectives, at forestry entities to find again al; objectives tips stated in management-centre.

At present a segment on objectives (benefit, production physics) are not assert one-self as such, in budget structure, but to find again such performance pointers, in organization compartment s.

With reference to chapter two – Expenses, a particulars distinct to make up, overheads and working, management, which assert one-self not separate these find again in “exploitation expenses” according to Ordinance no. 616/2000 concerning draw up earnings and expenses budget s.

Chapter three – Earnings, is structure, in up and running to carry one activities by forestry entities, following:

- exploitation earnings;
- financial earnings;
- extraordinary earnings

At a attentively analysis inside particular, will can remark that some for individualities states will can be to key with overall details by structure budget management (for example: separate assert one-self overheads or take over from organization compartment objectives , physic production and benefit) while other individualities pertaining by privacy and operation meat specify form forestry, will can competing the management-centre structure with new position, such so that, about real their content management – center’s budgets from administration structure been managerial instruments as more completes, of dash board managerial.

The most important target for any kind of entity is to achieve performance. Without performance, it is impossible to lead and autonomous entity in a instable economical, social and financial environment. Performance is a necessary condition for survival in the integrated European countries.

The process of globalization gives businesses and individuals from different countries the opportunity to invest internationally and to interact with each other more easily than in the past.

Managerial accounting is an integral part of management which provides information that is used by management to formulate strategies, plan, coordinate and control the activity, make decisions, optimize the use of resources and safeguard assets<sup>[3]</sup>.

The primary objective of managerial accounting and financial accounting is to provide useful information for making decisions, such as assessing opportunities, products, investments, social is related to stewardship, that is, accounting reports how managers have used the resources entrusted to them by owners.

Accounting provides information only about transaction and events that can be expressed in monetary terms. Is important the consequence because information like the capabilities of the management team or the imminence of a strike, although essential, cannot be translated into accounting language<sup>[4]</sup>.

## CONCLUSIONS

Approach in next period immediately of the management on base center benefit at National Administration of Forestry “Romsilva” and of the enterprises territorial is not only oportune, but also very needful.

The success application’s of the management on base of the center’s benefit for National Administration of Forestry “Romsilva” will be secure of mode wherein will be identify and neatly criterions on base forestry entities and earnings centers. For such, should engage the best managers of sylviculturists engineers and economists which works in administration, together on experts in new management.

For the moment, if Romania obtained the statute of member European’s Union, National Administration of Forestry “Romsilva” can approaching with courage, usage of the management on base of center’s benefit.

For carry out grievances is absolutely needful as level with National Administration of Forestry “Romsilva” been approach issue the management on bases of center’s benefit then been distinguished in more short time strategy to improve a forestry entity by short-term and medium, trough of objectives identify essential of entities and personal objectives for either worker.

In this context, was identify stage following:

1. To draw up of scientific rigorous study, elaborate, over real objectives which distinguish the National Administration of Forestry and her entities, by have prospect at the management on bases of center's benefit pass;

2. Put some order, on covered 2007 year, in the context under set up of compartment for professional farming at level administration of post-university courses by of "Business Management" for all managers from administration structure.

To adopt oneself of budgets structure framework, accordingly of management bases of center's benefit, at the particular activities specifically carry by administration an forestry entity's and programs informatics unitary be elaborated at level of center's benefit and of administration.

In a functionary market economy, we must develop the forming up and the development of the forestry consciousness in all social and intellectual structures of the nation, because "a true forestry can be built only the belief of the forest, that all leaders, political people, and all citizen of a country must develop".

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## THE ROLE OF EUROPEAN DIRECTIVES IN THE CONSISTENCY OF ACCOUNTING SYSTEMS

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*The European accounting harmonization was one of the ways of European economic integration, provided by the Treaty of Rome, its results being mirrored in the comparability of the accounting practices and financial reporting of European companies and in the improvement of the annual reports' quality. The European Accounting Directives are not qualified as a conceptual accounting framework in the meaning that the Anglo-Saxon accounting fields give to this "document". While the IASB is focused on the needs of listed companies, the European Accounting Directives have a broader purpose, focusing on the needs of many different users. Given the existence of a single market, a single currency, we are entitled to believe that there will be a single accounting in Europe without call on the IASB reference.*

*Keywords: european directives, accounting systems, accounting harmonization, European Union*

*JEL codes: M40, M41, M48*

The European Union felt quite early the need to harmonize the accounting rules of the Member States. Since the beginning of the 70's several projects have been implemented and in 1978 Directive IV was enacted, which mainly endorsed the yearly accounts of limited liability companies and joint stock companies.

Subsequently, in 1983, Directive VII was developed, which aimed at harmonizing the preparation of consolidated accounts. Even if the national laws of member countries were made in accordance with these texts, the procedure required several years. For example, Directive IV was implemented in Denmark in 1980 and in Italy in 1991.

The main elements of the accounting harmonization in the EU are:

- the Anglo-Saxon doctrine on accounting, based on customary law and;
- the continental accounting doctrine, based on written Roman-German law.

The European accounting harmonization was one of the ways of European economic integration, provided by the Treaty of Rome, its results being mirrored in the comparability of the accounting practices and financial reporting of European companies and in the improvement of the annual reports' quality.

The efforts undertaken by the European Union on the consistency of accounting at the international level were conducted in several stages:

- the period 1978 - 1983 matches the search of solutions for harmonization of basic principles, rules and assessment models for the presentation of the annual individual and consolidated accounts to meet the needs of information of third parties and investors. During this Directive IV and VII-a period were written;
- the period 1983 - 1995 is dominated by discussions to resolve the dilemma: a European harmonization deeper and "more directed or mutual recognition "of financial statements prepared on the basis of national accounting legislation of Member States;
- from 1995 to 1999, the efforts of the IASB are encouraged to supplement to its conceptual framework and to decide on the accounting treatment of reference. At domestic level comparative studies are developed with regard to Directives and the International Accounting Standards issued by IASB so as to reach a maximum comparability;
- in May 2000, IOSCO decided to accept IASC standards, allowing however, the national normalization authorities to pursue some additional treatments;

- 13 June 2000, the European Commission gives a communication by means of which listed European companies have to prepare consolidated financial statements in accordance with IASC standards starting with 2005. This communication was followed by a regulatory proposal from the European Commission, published in February 2001 and approved by the EU Council on 6th June 2002, regarding the application of IAS in the European Union. To achieve this objective, the European Union provided for the creation of an Accounting Regulatory Committee, responsible for validation of IAS within the EU. The European Union established an expert group (European Financial Reporting Advisory Group - EFRAG) to provide technical expertise on subjectivity. The companies listed on the capital market, including banks and insurance companies, draw from the year 2005, consolidated accounts in accordance with IAS;

- in 2001, the European Commission adopted a proposal for regulation on the application of International Accounting Standards, which concerns the mechanism of recognition of the International Accounting Standards in the European Union, specific criteria and compatibility regarding the enforcement in the European Union;

- in 2002, the European Commission "welcomed" the announcement made by the IASB and FASB on the achievement of real convergence between accounting standards developed by the two councils. This objective has the term in 2005, when the listed trading companies from the European Union are required to apply the International Accounting Standards;

- 2003 was the year of adoption of Regulation on the approval of International Accounting Standards, including interpretation of International Accounting Standards and thus, there was confirmed the requirement for their compulsory use starting with 2005, under the conditions set by the IAS Regulation.

The origin of Directive IV is represented by the idea that the share capital of financial companies whose activity obviously exceeds a country's territory, is the only guarantee that these entities provide to third party interested in the assessment methods used to measure such patrimony, the financial situation and the principles for preparation and publication of annual accounts.

Sundgaard considers Directive IV of the EU as an "accounting constitution" of the European Communities.

The differences between the assessment methods used by the Member States to the merger of national markets, have led the EU to start the search procedure to establish the convergence in the accounting field, where accounting traditions are different.

The first draft of Directive IV, published by the European Commission in 1971 was dominated by "many concepts that seem to have been borrowed from the German law on companies."

The German influence is materialized in the inclusion of conservative evaluation rules and formats of documents described in detail.

The enlargement of the European Union (by the accession of the United Kingdom of Great Britain and Northern Ireland, the Republic of Ireland and Denmark) led to a new variant of the Directive's text, with significant Anglo-Saxon influence, according to which "the yearly accounts should provide an accurate picture on the assets, liabilities, financial position and profit or loss". The Anglo-Saxon inspiration is also reflected in the qualitative purpose granted to the annual accounts, based on the rules for submission and evaluation. The historical cost becomes the main basis of assessment, and the others become alternative bases of evaluation.

The implementation of Directive IV started in Denmark (1980) and was concluded in Italy in 1991. The long period of implementation of Directive IV in the law of member countries highlights the obstacles faced by the European Union in this field. However, the provisions of Directive IV are applied by all Member States of the European Union.

However, the implementation of the Directive VI in the Member States' legislation hasn't led to a profound revision of the legislation on accounting. Many of the European Union member states limited to the implementation of new Government provisions in the existing regulations.



By achieving the established goals, the European Commission starts an update process hoping of eliminating the difficulties regarding the implementation of Fourth Directive VI and the adaptation of a directive by means of a committee; the procedure was not applied on the accounting rules and law on companies, the European Commission focusing its attention on the consolidated accounts.

The converging role of Directive IV endorsed the format and presentation of annual accounts, the rules for evaluation and publication of annual accounts. Directive IV starts with a mention (in Article 1) of the companies subject to the application of this document: all joint stock companies, limited liability companies and their equivalences.

The Directive allows Member States under special circumstances, to exempt companies from certain obligations on the accounts' presentation, publication and control, the only acceptable criterion for such exceptions being the size of the company. The scope of derogations also comprises medium and small companies. The classification of entities in one of those groups is based on the performance of two criteria relating to the total balance sheet, net turnover and number of employees, related to the current financial year. In this regard, companies that do not meet the above criteria over at least two consecutive financial years, fall within the scope of exemptions from the presentation, publication and control of the accounts referred to in the Directive. In accordance with Article 2, the yearly accounts include the balance sheet, the profit and loss account and annex. These documents constitute a whole and have as an objective the true reflection of assets, financial position and profit or loss of the company.

If the application of Directive are insufficient to provide a true picture, new "information needs to be added", or in exceptional circumstances, derogation from certain provisions of the Directive. All such cases should be listed in the Annex, reasoned, and stating the effects they have on assets, financial position and results.

Extraordinary situations and those requiring additional information fall in the charge of the Member States. This provision "cannot constitute an invitation to Member States or for the accounting normalization authorities, to develop rules or norms which depart from the rules stipulated in the Directive, as general measures to be applied to all entities".

Regarding the format and form of annual accounts, the Directive provides two forms of presentation for the balance sheet, horizontal (art.9) and vertical (art.10), the last giving the possibility of determining the floating capital. As a special feature of the balance sheet referred to herein, the following may be noticed:

- registration of unpaid subscribed capital in the first post of the asset (art.9 Scheme 1 / A) or a component of the position - circulating assets (art.9 scheme 1 / A);
- presentation of the costs of incorporation as separate position before fixed assets (art.9 scheme 1 / B) or as a component of intangible assets;
- presentation of the "financial year's result" in balance sheet liabilities, if it is profit or in the balance-sheet assets, if it is a loss (art.9 scheme LF);
- regarding the profit and loss account, the Directive recommends 4 schemes of presentation, two horizontal, two vertical, the criterion for classifying the expenses considering their nature or function. The profit and loss account presented by nature of expenditure (Article 23, 24) allows the calculation of the indicator "production of the financial year" and the one submitted based on the expenditure's function (Article 25, 26) makes possible to determine the outcome of gross result. Another feature of the profit and loss account recommended by Directive VI is that the "tax on exceptional result" appears as separate position in all four models; "the result of the financial year" may appear in expenditure or income; absence of the "exceptional results" position in the list format.

Article 46 of the Directive is focused on the Management report. It must include a fair presentation of the business development, a situation of the company, and important events since

the closure of the financial year, the trend in the company, activities on research and development.

To achieve the target of annual accounts, Directive IV stipulates the following general principles to be observed at the annual position evaluation: the principle of continuity of work; principle of consistent methods, the precautionary principle, the principle of independence of the financial year; the principle of non-compensation, the principle of intangibility. In exceptional circumstances, there may be admitted "removals" of these principles, mentioning in the Annex, along with the reasons and effects on assets, financial position and results.

The historical cost is preferred and recommended by the regulation, as the main basis of assessment in accounting.

Article 51 provides that the annual accounts of companies must be controlled by one or more persons authorized by the national law on control of accounts. The control of accounts should concern the consistency of the management report with the information from the annual accounts. Member States may choose to exclude small companies from the control area, in which case they will enact in their national legislation appropriate sanctions for cases in which the annual accounts and management report do not comply with the Directive.

The external increase is the way that leads to the emergence of groups of companies. The company groups hold a significant share in the global economy. Multinational enterprises have branches in many countries and have economic and financial supremacy. The financial power of such groups can have significant influence over the balance of payments of countries in which they operate. Where the group does not resort to a financial market to finance a subsidiary, it improves the balance of payments of the country where such subsidiary is located to the detriment of the country where the funding source comes from.

On the opposite side, the allocation to the parent company of local profits adversely affects the balance of payments of the country where the branch is located. The assessment of financial position and performance of groups of companies is made by the consolidated accounts. The need for consolidated accounts arises from the inability of individual accounts of the parent company to provide an overview of the financial position and performance of such group.

The first consolidated accounts were written in the United States in 1892 by the "National Led" Company. The financial crisis from 1929 led the American accounting regulators to introduce the compulsory preparation of consolidated accounts. Thus, in 1934 Securities Commission (SEC) was formed, which required listed companies to submit, along with individual accounts, consolidated accounts as well. At EU level, the need for consistent national provisions of Member States in respect of consolidated accounts appeared on 13 June 1983, by means of the publication of Directive VII. Dominated by the Anglo-Saxon tradition, Directive VII includes 51 articles, divided into 6 sections.

Directive VII had been included in the legislation of Member States during the 7 years from The Netherlands (1985) to Ireland (1992). Article 1 of the document mentions the preparation of consolidated accounts. "Member States shall require any company which, according to the national legislation is compelled to establish consolidated accounts and the consolidated management report, if that company (parent company) meets a number of conditions.

Also, Member States may require any company, under their national law, to prepare consolidated accounts and a consolidated annual report if that company (parent company) holds a participation as per Article 17 of Directive IV, in another company (subsidiary company) and if it actually exercises a dominant influence over it, or, if itself and the subsidiary have a single leadership. Articles 16 and 34 are intended to explain the structure of the consolidated accounts.

Released on 10 April 1984, Directive VIII refers to the auditors. The document contains 31 articles and applies to natural or legal persons or other types of companies or associations of the Member States which have the obligation to perform:

- a) audits of annual accounts of companies and verification of the consistency of the management reports with yearly accounts to the extent that such control and such verification are required by community law;
- b) audits of the consolidated accounts of the assemblies of businesses and verification of consolidated management reports to the extent that such control and such verification are required by community law.

The Directive states that Member States have the duty to approve only honorable persons and who do not pursue any activity incompatible with the legal control of annual and consolidated accounts and also to establish the conditions and steps to be followed for obtaining the auditor capacity.

Although European Directives have helped to some extent to achieve consistency of accounting systems in the European Union, a series of shortcomings cannot be passed unnoticed. The large number of options they include with respect to the publication and control of accounts, rules of evaluation, slow process of developing goals that become obsolete when applying, are just some discontinuities of European accounting rules.

Consequently, accounting rules do not meet the European economic environment changes rapidly, given that the speed of response is the main feature of the process of normalization.

There are views according to which the partial success of European Directives to create a "Europe accounts" has had as obstacles:

- language barriers arising from the absence of an official language in relation to others. Thus, the Directives can be interpreted differently in the specific Member States;
- national traditions, outlined by the legal concept;
- management and information techniques which are different from one country to another and from one profession to another;
- options' game, present in all texts of directives and which relates to the principles of preparation, evaluation, presentation of annual accounts, concerning the publication and control of accounts.

The aforementioned impediments point out that at the EU level, the accounting correlation is far from having conciliated cultures. This is not to legislate from nothing, but to negotiate, to achieve an understanding of well defined national positions.

Even if the European Union is the only example of consistency on legal basis, "the real success of directives lies in that they cannot be ignored by the community and in addition, they constitute a reference for other countries than member states".

In these circumstances, developing a conceptual framework at European level is becoming a necessity. This may be the solution for an accounting Europe. The conference organized by the European Commission in 1990 decided that the issue of consistency across Europe must take account of developments which were foreshadowed in the world. On this occasion, the European Commission accepted the invitation of IASB to participate as an observer during its works.

The orientation of the European Commission to the IASB is a new strategy for the implementation of International Accounting Standards, along with the compliance with the European directives.

Given the existence of a single market, a single currency, we are entitled to believe that there will be a single accounting in Europe without call on the IASB reference.

The European Accounting Directives are not qualified as a conceptual accounting framework in the meaning that the Anglo-Saxon accounting fields give to this "document". While the IASB is focused on the needs of listed companies, the European Accounting Directives have a broader purpose, focusing on the needs of many different users.

The possibility of conflict between IFRS and EU Directives has created some tension, which, together with experimental difficulties regarding the acceptance and implementation of Directives, has led to the finding that "the European Union needs not to publish other Directives,

but should support efforts of the international accounting normalization IASB". This conflict regards only global players of financial markets and consolidated accounts.

This happens because the EU Directives are "more international" than anticipated, or because a large part of IFRS are developed before the publication of the IASB's conceptual accounting framework and thus they are the result of programmatic rationale and compromises, not of normative thinking.

Does it have any sense to talk of a European conceptual accounting framework as long as it is known that EU Directives have been differently implemented in Member States? A question that we should reflect on!

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## FORECASTING IN ACCOUNTING – IN THE CONTEXT OF A EUROPEAN AND INTERNATIONAL APPROACH

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*A program (plan) is necessary for any activity, which program (plan) is a milestone, a reporting base. In these conditions, accounting through its instruments should cover the company's future, without being affected its essential function defined by its object. The main goal of forecast is to eliminate the situation that, by means of present action, to cause in a closer or more distant future, the inability to act quickly, operative and effectively. The forecast does not eliminate the unforeseen, but can eliminate or reduce the negative consequences of the unforeseen. Therefore, in theory and practice of accounting in some countries, there has been designed the alternative of provisional accounts and by default, the provisional balance sheet.*

*Keywords: accounting, forecasting, European Union, economy*

*JEL codes: M40, M41, M48*

Often it is said that *the present has its source in the past and the future in the present*. In general the practice for any human activity confirms the abovementioned.

Starting from the recognition of the role of education as the main pillar in the construction of a European area of knowledge, we appreciate that the current context requires a broader vision of the educational process conducted in a world more dynamic than ever, which may be able to meet all the present and future requirements. In the future society, education will have the essential role in creating a new way of life specific to a society based on knowledge and learning. The society based on knowledge is a term defined rather on economic considerations than sociological ones. Knowledge based economy is defined as that within it, knowledge and education (which produces human capital) are treated as activities that represent productive assets of a company and based on which "products" can be obtained (not necessarily or even materials) which can then be sold at high prices and profits. Furthermore, knowledge is considered as the main form of capital, replacing actual work and fixed capital (until recently considered the only form of productive capital).

At the beginning of the 21<sup>st</sup> century, the knowledge society tends to head global proportions. Also, being aware of the rapid moral wear of knowledge and skills, the contemporary society is preparing to adopt a new behavior towards education to become a society of lifelong learning.

At present, we can talk about a global market, encouraged by the removal of customs barriers, the virtually instantaneous movement of information, establishment of transnational companies everywhere.

Changing the way of thinking modifies not only the emotional-conceptual framework, but also highlights of actions in the context of economic process, with implications on the strategic directions of economic policy. If pre-industrial and industrial societies put the emphasis on the classic factors of production, the knowledge economy has to rediscover the qualitative valences of the human factor, which, not a few times, has been quantified residual factor, according to some authors.

In fact, the future workers of knowledge and service providers should have the opportunity to go to work based on knowledge, to be able in every stage of their life to continue their training, to focus on or shift careers, according to the requirements of the labor market.

The extraordinary growth of the information's importance, speed and very low cost which help it move, has changed the whole structure of contemporary society. We live now in a world of services, customized products that are continuously renewed in a global competitive battle.

The accounting information is the raw material and finished product for any trading company to exercise the functions and performance management. The interest of human community regarding the research of future is increasing rapidly. Concerns about further development of economic and social systems at micro and macro levels, is today's *priority objectives of the management*. That is why present concerns are concerted towards standardization of accounting methods for integrated data processing and use of new technologies, including in the field of artificial intelligence. From the accounting treatment of data and accounting information the shift is made quickly to the knowledge-based accounting and accounting to the accounting to knowledge society.

Exploring the future today differs radically from traditional forecast and predictions. The new element in the contemporary study of future is that the investigation is done with the methodology of scientific knowledge.

With business development and economic and financial developments in the company of exchange, accounting has developed principles, methodologies, methods, processes and means of documented record of the phenomena and processes of companies in the benchmark, value preponderant, reflecting meanwhile, the progress of activities and the legal and economic relations between economic agents. Simultaneously the database-based accounting has standardized and normalized specific documents, regulation of information flows and work rules. These rules are adapted to the economic integration of information-economic systems to the requirements of the European Union, particularly as regards economic and financial situations involving new elements of information.

A program (plan) is necessary for any activity, which program (plan) is a milestone, a reporting base. In these conditions, accounting through its instruments should cover the company's future, without being affected its essential function defined by its object. The main goal of forecast is to eliminate the situation that, by means of present action, to cause in a closer or more distant future, the inability to act quickly, operative and effectively. The forecast does not eliminate the unforeseen, but can eliminate or reduce the negative consequences of the unforeseen. Therefore, in theory and practice of accounting in some countries, there has been designed the alternative of provisional accounts and by default, the provisional balance sheet. It is true also that in practice different tools are used for forecasting under certain names such as "the budget system" that outlines non-monetary and monetary flows, but without being summarized in a provisional balance sheet.

However, the use of evaluation methods based on yield implies the existence of a provisional balance sheet in its entirety or elements thereof. The detailed preparation and presentation methods of provisional accounting documents are different, given the lack of a uniform methodology in the field. In this context it is proposed the possibility of developing a provisional balance sheet and its capitalization in the economic practice.

The main characteristics of accounting based on data can be distinguished by:

- *strictness* of processing and content of specific documents, subject to stricter accounting rules, even in the use of accounting software;
- *inflexibility* and at some extent its strictness, being it is more difficult to adapt it to changing organizational structures;
- *autonomy of accounting* or its insufficient integration with the other functional sub-systems of the company. The statement is based on the fact that the same operation comprises successive records in different registers, and in the software exploitation, the data are collected from other compartments manually, often without automatically taking over from other programs;

- *diversity of ways* to enforce the accounting resulted from the particularities of each type or trading company;

- *difficulties in the performance of control and economic-financial audit* starting exactly from the organizational diversity and size of companies. The internal and external control bodies are often confused in front of a large amount of data which should be verified; frequent legal modifications increase the amount of work necessary to draw useful conclusions for administrators and managers. Also, software does not help the accurate and complete assessment of results' achievement method.

- *highlighting of the ascertaining function of accounting and neglecting of its provisional function*; the mere ascertainment of irregularities, after their occurrence, does not help improving the situation by eliminating adverse factors; also, positive factors do not have an echo because they propagate as a result of the use of accounting information; in other words, the economic-financial assessments regarding past or future actions have a low weight in the management and administration activities;

Assumptions that substantiate the forecasts of the company's activity must be presented clearly and concisely. Without them, the figures projected in the financial statements have no value, they actually demonstrating how to achieve the anticipated results.

One aspect of forecasts is their internal consistency. Balance projections, resulted account and the cash-flow should be linked to the same assumptions. Noted that financial projections cannot be better than the assumptions on which they are based.

The development perspective of the economic system (enterprise) on the basis of accounting forecast is obtained using the accounting model, which quantifies the existing and foreseeable economic factors, but within limitations determined by existing and potential resources.

Accounting forecasts drafted on the basis of calculations and accounting models is done in practice by decisions. They include and depend on these decisions. The richer, wider and deeper is that the estimate, the decision may be more relevant, effective and operational, and also, more adapted to the demands of the modern companies' management.

The analysis of decisions is an approach that relies on a number of methods, techniques and instruments specific to such activities such as: influence diagrams and decision trees, multi-attribute and multi-objective assistance for decisions, risk analysis etc., in addition to these methods, techniques and instruments, a number of methods and techniques from other disciplines are used (statistics, operational research) that have a wider applicability, not limited to assisting the decision-making activities.

The accounting forecast finds the widest application in tracking and calculation of costs. Here, the accounting model, modern mathematical methods, the use of computer calculation give consistency of the accounting forecast in the completion of the provisional function of accounting.

Inter-, intra- or extra- net have become usual terms; the process of information and knowledge through networks of computers is a current practice, widely spread not only to those working in the treatment and use of information, but also for all those interested to broaden their horizon of knowledge. Today, business success of trading companies is becoming more conditioned by the integration of electronic processes, not only for information and communication but also management, marketing and electronic commerce.

In any trading company, of any size, activating the role of accounting and the effective exercise of its functions through automation becomes an imperative requirement to connect companies to the new requirements of the environment. Any decision factor should be made aware that information on the assets and items belonging to the dynamics can be obtained at any time during a financial year, the knowledge process being continually and in real time.

In his/her work, the accountant should not depend on the IT expert, but the work of a computer professional should not be compromised by the "non-compliance" of the accountant with the

requirements or due to their superficiality. From an activity of static nature and passive information, accounting must become an active knowledge and adaptation element of firms to the competitive market environment.

Methods and techniques of forecasting, far from presenting a danger to accounting exercise a positive influence on it, helping to boost the its forecast nature. Due to their use, accounting extends its concerns to a wider field of economic problems, thus addressing the requirements of the modern management, i.e. reflecting the strictly financial data and all the economic factors.

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# OPINIONS ON ALLOCATION OF PROFIT CARRIED FORWARD TO DIVIDENDS

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*In our opinion, the allocation of profits carried forward to dividends complies with the legal requirements in this field, as long as these results arise from current profits of previous financial years. However, an adverse aspect for companies is related to taxation of this subsequent distribution, due to the risk that tax authorities might reclassify this operation and, implicitly, apply penalties for late payment of dividends, starting with the 1st of January of the financial year following the one in which the carry forward of the profits of the previous financial year has been approved, and until the payment of related tax.*

*Key Words: result carried forward, dividends, general meeting of shareholders, dividend tax*

*Code JEL: 41*

## **Introduction**

In 2009, companies' administrators have raised a series of questions on how to counteract the effects of the American financial crisis on economic activities in Europe, in general, and in Romania, in particular. Among these questions are the following:

- 1) can companies reconsider the decision to distribute dividends from the profits of the previous financial year, in general, and 2008, in particular?
- 2) can companies reconsider the decisions to allocate net profits to results carried forward from previous financial years (net profit carried forward)?

Although the two questions are closely related, we will refer below to the second question.

## **1. Background**

In previous financial years, companies have recorded substantial profits due to general economic growth in Romania. In this respect, the support of investment programmes required a series of funds that shareholders agreed to temporarily make available to companies, but not as net uncollected dividends converted into interest-bearing loans, but through net retained results, so that the company benefits from a higher volume of funds to support investment programmes, equal to the size of dividend tax which the company would have paid for a dividend distribution. Furthermore, working capital was insufficient to finance current operations, and retained profits (carried forward) represented the handiest financing source for management. Another solution would have been to resort to bank loans, but, in the present circumstances it is difficult to anticipate the financial impact of costs involved by such an approach (fees, interest expenses, commissions, etc.).

Also, if profits would have been allocated to dividends, in many cases the amounts required for their payment would have been generated from collections of the financial year following the one for which they were distributed, subject to the general meeting's approval.

The situation described meets quite frequently in limited liability companies (sometimes micro-companies), where the administrator - shareholder postpones payment of dividends by carrying forward the profits of the financial years, due to lack of liquidities combined with the "convenience" of not paying dividend tax, withheld at source at the rate of 16%.

Administrators raised the question if a decision of the general meeting of shareholders for carrying forward the company's net profit from previous financial years could be reconsidered in order to allocate these results carried forward to dividends?

## 2. Current legal situation

Art. 111 paragraph 2 point a) of Company Law provides that the general meeting of shareholders (for joint stock companies) is required “to discuss, approve or amend the annual financial statements based on reports prepared by the board of directors, respectively the management and the oversight board, internal auditors, or as appropriate, financial auditors, and to determine the dividend”. Also, article 194 paragraph 1 letter a), provides that, among other main obligations, the general meeting has to approve the annual financial statements and to decide the distribution of net profits (for companies with limited liability).

The size of dividend in the process of distributing net profits fluctuates within a limited interval between zero and the level of distributable profits.

In other words, the publication of the decision of the general meeting by means of Trade Register and Official Gazette has the effect that the decision becomes opposable to the associates/shareholders who were absent from the meeting (those who were present and voted against or abstained are presumed to be aware of the decision taken), as well as to third parties.

Even if Company Law no. 31/1990 does not expressly provide that the general meeting of shareholders could reconsider the decision (decisions) of previous years, in general, it is appreciated<sup>424</sup> that “revoking the previous decision is possible if it is done in compliance with the principle of symmetry of legal acts and if this does not prejudice the rights of third parties. Thus, if the symmetry principle is applied, the ordinary general meeting, which is competent to decide on company’s profit distribution, might also decide to revoke the previous decision, subject to the same legal or statutory quorum and majority conditions.”

According to article 132 paragraph 1 of Company Law no. 31/1990, the decision that complies with the law and the company’s by-laws is binding (*pacta sunt servanta*) and, therefore it is opposable as such to all associates, including those who were absent or voted against. On the other hand, general meeting’s decisions that are violating the law or the company’s by-laws can be disputed in court by means of nullity / annulment actions introduced by those associates who voted against and asked for their vote to be recorded in the meeting’s minute, as well as by those who were absent. Also, based on article 61 of Law no. 31/1990, the decisions may be contested by any prejudiced creditors (including the state, through its institutions).

## 3. Is it legal to reconsider a decision regarding carry forward of profits?

In the case discussed, respectively reconsideration of a decision establishing:

- either a zero dividend and full carry forward of profits,
- or partial allocation of net profits to dividends,

due to lack of liquidities, at a later stage, when the company has available liquidities (situation determined by investment efforts, financial problems, etc.), meaning that the new decision decides to fully or partially allocate profits carried forward to dividends, leads us to a solution for the conflict between social interests and personal interests of shareholders or associates.

Article 136<sup>1</sup> of Company Law no. 31 provides that “shareholders must exert their rights in good faith, by considering the legitimate rights and interests of the company and of the other shareholders.” Based on this law, we appreciate that the importance of company interests and the role of *affectio societatis* have decreased. *Affectio societatis* involves subordination of shareholders’ individual interests to the company’s general interest. This principle applies not only to share capital companies (joint-stock companies), but also to joint ventures (*intuitu personae* and *intuitu pecuniae*), limited liability companies. Our assertion is based on the fact that the law uses conjunction “and”, what makes us believe that shareholders’ interests benefit of the same protection as company’s interests.

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424 Lavinia Tec – “Distributed Dividends - Financing Source in Times of Crisis”, Romanian Tax Magazine no. 3/2009, page 4.

The provision of article 131<sup>1</sup> was introduced in our commercial law in the context of implementing corporate governance, following the example of other Member States based on the Anglo-Saxon model concerning corporations. According to the French doctrine, the main principle of corporate governance is the following: share capital companies must be managed in the interests of shareholders. In this context, *affectio societatis*, which both Romanian and French doctrines have qualified as behavioural norm, seems to be incompatible with *corporate governance*<sup>425</sup>.

The set up of a company aims firstly to fulfil an activity for the financial benefit of the investor – shareholder or associate, and the company’s by-laws represent an investment agreement. Investors, individuals or companies, associate themselves not for altruistic ideas and charity or generosity, but for gaining from investments and implicitly, for disposing of these gains at anytime.

The procedural regime for profit distribution is covered by article 117<sup>2</sup> paragraph 1 and article 153<sup>5</sup> paragraph 2 of Company Law no. 31, according to the management system of joint-stock companies (unitary or dualist): “The annual financial statements, the annual report of the board of directors, respectively the report of management and the one of the oversight board, as well as the proposal on dividends distribution, shall be made available to the shareholders at the company’s headquarters, at the date of calling in the general meeting”, for the unitary system, respectively “The management submits to the oversight board its detailed proposal regarding the distribution of profits resulted from the balance sheet of the financial year, which it intends to present to the general meeting”, for the dualist system.

If the proposal for allocation to dividends was approved by the ordinary general meeting of shareholders/associates, according to article 67, dividends shall be paid “within the time limit set by the general meeting of shareholders or, as the case may be, the deadline set by special laws, but no later than 6 months from the date when the financial statements for the closed financial year were approved.”

Based on the legal provisions mentioned above, we can assert that the proposal for dividends distribution must be approved in the same general meeting that reviews and approves the financial statements for the financial year ended. However, this interpretation does not restrain the general meeting of shareholders/associates to decide distribution of zero dividends (no dividends will be distributed), although there is a distributable net profit, or to allocate the profit partially to dividends, partially to other reserves, and partially to results carried forward (retained profit), by taking into account the company’s actual situation (e.g. lack of liquidities) and other circumstances (e.g. economic crisis) or legal restrictions (economic prudence), such as:

- “Dividends will be distributed only from profits derived according to the law.”<sup>426</sup>;
- “If there is a loss in net assets, subscribed share capital will be completed or reduced before any profit distribution or allocation.”<sup>427</sup>;
- “If set-up costs were not fully depreciated, there will be no profit distribution, unless reserves available for distribution and profits carried forward are at least equal with the outstanding costs.”<sup>428</sup>
- “If development costs were not fully depreciated, there will be no profit distribution, unless reserves available for distribution and profits carried forward are at least equal with the outstanding costs.”<sup>429</sup>

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425 Ibidem, page 5.

426 Article 67 paragraph 3 of Company Law no. 31/1990.

427 Article 69 Ibidem.

428 Point 72, paragraph 2 of Accounting Regulations in Accordance with the 4th Directive of the European Economic Communities Approved by Order of the Ministry of Finance no. 1752/2005.

429 Point 75, paragraph 3 Ibidem.

#### 4. Accounting and tax treatment

According to article 67 paragraph 3 of Company Law no. 31/1990, the source for setting-up dividends consists of “profits derived according to the law”, without distinction between current net profits (of the previous year) or net profits carried forward. “In the lack of financial statements or contrary to their results, the founder, administrator or legal representative of a company, who receives or pays dividends, in any form, from fictive profits or profits which could not be distributed, shall be punished with imprisonment from 2 to 8 years.”<sup>430</sup>

Also, according to article 19 paragraphs 1 and 2 of Accounting Law no. 82/1991, accounting profit or loss is determined cumulatively, from the beginning of the financial year, and the final result of the financial year is set at the end of the financial year (in Romania, the financial year usually is the calendar year, and consequently, closing date is 31 December).

“Profit distribution shall be recorded in accounting according to its destinations, after the approval of the financial statements.”<sup>431</sup> Therefore, allocation of net profits is left to the general meeting of shareholders, and it is not necessary profits to be distributed in full to associates/shareholders. The decision of shareholders/associates to give up, at least temporarily, to one of their rights, does not restrain them to reconsider their initial decision, subject to the conditions required by law in respect to jurisdiction of general meetings (*qui potest plus potest minus*).

Legal distributions that may be approved by the ordinary general meeting / meeting of shareholders / associates are:

- amounts allocated to reserves (legal reserves and other reserves);
- amounts allocated for covering losses from previous years;
- dividends;
- other allocations.

The difference between total net profits of the year and total distributions performed represents retained profits (which, obviously, may include also profits not distributed as dividends), on which the general meeting did not decide in terms of destination. Therefore, there is a distinction between profits distributed to shareholders (dividends), profits representing final allocations (covering losses from previous years, reserves and other allocations) and profits on which there is no final decision yet (result carried forward # 117 Result carried forward).

In terms of tax treatment, the document by which the ordinary general meeting / meeting of shareholders / associates decides not to distribute the full net profit, followed by a subsequent distribution, in another financial year, might be considered an act made for tax purposes. In our opinion, this act might be reclassified under article 11 paragraph 1 of the Fiscal Code: “In determining any tax amount within the meaning of this code, the tax authorities may disregard transaction which does not have an economic purpose or they may reclassify the form of a transaction to reflect its economic substance.” The carry forward of the net results of a financial year, followed by its distribution as dividends in another financial year, may be reclassified by tax authorities as a distribution already from its postponement (e.g. if the company operated normally, had liquidities, etc.) and tax authorities are entitled to calculate penalties for late payment of dividends (currently, 0,1% per day) starting with the 1<sup>st</sup> of January of the financial year following the one in which the general meeting of shareholders took place, which has approved the carry forward of profits (e.g. 01.01.2009 for net profits carried forward related to the financial year ended as at 31.12.2007), and until the payment of the related tax (thus, considering another fiscal situation). Of course, there will be a different situation if it can be proved that such behaviour of shareholders/associates has/had an economic substance, respectively maintaining the company’s activity, and that ongoing concern prevailed over the

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430 Article 2721 paragraph 2 of Company Law no. 31/1990.

431 Article 19 paragraph 3 of Accounting Law no. 82/1991.

shareholders'/associates' interests, who have acted "in good faith", within the meaning stated at article 131<sup>1</sup> of Company Law no. 31/1990 (e.g. in economic crisis periods, limited access to bank loans, etc.).

### **Conclusions**

Subject to the quorum conditions required to be legal, a new ordinary general meeting / meeting of shareholders / associates may reconsider in terms of distributing dividends from results carried forward from previous financial years, with proper recognition of the operation in the financial year in which the distribution took place.

However, depending on the actual situation in which profits have been carried forward (not being distributed in the financial year following the one for which the distribution is made), it is likely that tax authorities will treat the operation as a form of avoiding payment of dividend tax, and they may want to calculate late payment penalties (*accessorium sequitur principalem*). The company which was required to withhold and to pay the dividend tax to the state budget has the obligation to prove the contrary, respectively the actual tax status<sup>432</sup>.

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5. \*\*\* Law no. 82/1991, Accounting Law

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# LEGAL AND ACCOUNTING APPROACHES OF FRANCHISING OPERATIONS

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*Franchise, as a form of marketing goods and services, meets an emphasized extension due to the multiple advantages for the parts involved in the transaction, but also for the economies in their economical, social and fiscal plans. In specialty literature franchise meets different definitions depending on the issues considered most important in this transaction, by various authors. Franchise in our country is defined as "a system of marketing based on a continuing collaboration between natural or legal person, independent in financial terms, by which a person called franchisor, granting to another person called beneficiary, the right to exploit or develop a business, a product, or a service.*

*Keywords: franchisor, beneficiary, franchise network, royalty, price of the franchise*

*JEL code: M41*

## **A. Legal regulation of the franchise.**

Legal basis of operations of a franchise is represented by the **franchise contract** whose main elements are the ones in the following content:

### **1. The contracting parties**

These are named franchisor and franchise. Legally and financially, they are independent entities. The **Franchisor** is a merchant who: is a holder of rights over trademarks; has the right to exploit or develop a business, a product, technology or service; ensures the beneficiary the initial training for exploiting registered trademark. He personally uses financial means to promote his brand, his research and innovation, ensuring the development and viability of the product. The **beneficiary** is a merchant, individual or legal, selected by the franchiser, who adheres to the principle of uniformity of franchise network. **Franchise network** includes all contractual relationships between a franchisor and more beneficiaries in order to promote a technology, a product or a service and to develop production and distribution of a product or service.

### **2. The contract work object**

It is represented by the good and contract services according to which three categories of franchise are distinguished:

- Franchise of **products**, in two forms:
  - **Manufacturer franchise**, in which the franchiser has as objective product selling but also related services;
  - **Distribution franchise**, in which the franchiser selects the products manufactured by various suppliers, buys the products, they pay for them, then resell them to the beneficiary (pilot units are created);
- **Service franchise**, in which products are not sold but services, various dues: hotel franchise, consultancy franchise etc;
- **Industrial franchise**, in which the franchiser builds a factory in order to be franchised, he gives the license, the patterns, the trademark, he forwards the technology, assures constant technical assistance, and the beneficiary produces and sells the products under the name of the franchiser.

**Franchisors** may be:

- Manufacturers of goods, who signed franchise contracts in the country or abroad for the sale of manufactured products;
- Wholesalers merchants, who perform a selection of goods that we buy in large quantities, establish exclusive supply catalogs which are sold through the franchise;

- Service suppliers, whose activity consists in the original discovery of ideas and practical methods of profitability: hotel chains, car rental locations, construction of houses etc;
- Industrial people, who form the industrial franchise, the most modern form of the franchise and the most usual in international relations.

**Beneficiaries** may be:

- merchants, companies that are organized in various ways;
- non-professional people (those who either have never worked in industry either did not have any trade).

### **3. Price of the franchise**

As any other economic activity, the franchise has a price which for the franchisor is the income, and for the beneficiary is the cost. The price of the franchise must cover its costs so that the franchise activity to be profitable. Usually the price of the franchise consists of two elements: entrance fee for the franchise network and royalty.

**The entrance fee** represents the franchisor's remuneration for granting the right to use the trademark and its way of work, whose development required a variety of expenditures, for example: prior studies to implantation, costs for searching and arranging a certain location, supplying stocks and specific equipment to the franchise; elaborating professional experience (know-how), franchise marketing (participation in fairs and exhibitions) etc. So, the entrance fee is considered as the price of business admission, its size varying on the importance of the business and its prospects. Depending on size, it is provided a certain selectivity of beneficiaries. The entrance fee can be calculated using different methods based on franchise profitability calculation and it is established so that it doesn't have the effect of possible beneficiaries shift to other competing networks. Usually, the entrance fee has values between 5-10% of the total cost of the franchise. If the franchisor proposes signing an exclusive contract and if it is cashed an entrance fee, then on signing the contract, the exclusive rights (exclusive fee) that were calculated proportionally with the entrance fee will be added next to the entrance fee.

The exclusive tax may be dedicated to cover a part of the expenses needed to implement the franchise and/or to delimit the area and/or for the transmitted know-how.

**Royalty** represents remuneration of the services which the franchisor provides permanently to franchise during the contract, as the following: improving personal experience (know-how), assistance during the period of contract, expenditure on training the staff permanently, expenditure on advertising etc. Usually, royalty rate is calculated in percentage to the turnover, but in some cases it may be established a lump royalty. Sometimes forms of fee assessment can be used, determined by the object of the franchise contract. For example, in hotels royalty may be set according to the number of rooms. It is important that the size of the fee, determined through negotiation, to motivate both sides: a great fee determines the franchisor to be less interested in increasing the sales, and a small fee determines that the majority of the profit to belong to the franchisor, leading to a loss of development sources of the franchisor.

### **4. The rights and obligations of parties**

They represent the important elements of the franchise contract, one of them being directly or indirectly at the base of organizing franchise accounting. Among these we mention:

**For the franchisor:**

- To provide the beneficiary a process of manufacturing, distribution and marketing of a product or service or to put such a process that would ensure a high turnover and a high yield;
- To sell the beneficiary his experience, components of intangible assets (franchisor's trademark and the know-how);

- To ensure technical assistance to the beneficiary, material assistance and sometimes financial assistance both before making the transaction but during the transaction;
- To provide the beneficiary goods (merchandise) directly, or by selecting some good providers;
- The right to control over the way business is developing, these respecting the conditions imposed by the franchisor.

**For the beneficiary:**

- To obtain authorization for the functioning of the unit of provision or services under the franchisor's brand. The license accorded in this context specifies both the location of sales and the precise location of the sales unit which refers at: the use of the franchisor's name and distinctive signs, of work techniques and operation methods;
- To purchase goods (merchandise) from the franchisor, or from the agreed suppliers;
- To sale the good (merchandise) and the services forwarded by de franchisor by respecting strictly the contractual conditions;
- To pay the cost of the franchise to the franchisor (entrance fee and royalty) and other elements as: initial inventory (equipment, accessories), the initial stock of merchandise (necessary for opening the franchise), rent premises, public services etc.

**B. The accounting operations of the franchise.**

**In the accounting of the franchisor:**

**1. The assets** available for the beneficiary refer to intangible assets in constant mark of the franchisor (the manufacturing, commerce, services) and know-how. They remain the property of the franchisor because he does not sell them, but "gives" them for temporary use in order to be exploited.

The purchase of the assets specified by the franchisor can be done through purchasing or owning. If the trademark and the know-how are purchased from a third party, these are evaluated at the cost of acquisition and recorded in the account 205 "Concessions, patents, licenses, commercial trademarks and similar rights".

If the trademark and know-how are created by the franchisor, these are counted as any investment in its own meaning: the expenses made in this purpose are collected as they are performed in their accounts of expenditure in class 6, and at the reception, the obtained immobilization is recorded in the cost of production in account 205 "Concessions, patents, licenses, commercial trademarks and other similar rights" according with 721 account "Income from production of intangible assets"

The use of 721 account "Income from production of intangible assets" for the recording of the intangible assets realized in its own is made to avoid the distortion of the exercise by which these are obtained.

**2. The expenditure of the franchisor** are grouped in the periods in which the sequence is done, in the following categories:

- costs of establishing the franchised companies;
- expenses for the launching of the franchised companies (cost for advertising models, costs for presenting on different showrooms, etc);
- expenses on the beneficiary's technical assistance;
- expenses for administrating the franchise network.

As a rule, the expenses are recorded in the expenses accounts from class 6 according to the exercise these were engaged. In the case where some expenses regard the next exercises to which they were engaged, they are recorded in account 471 "Expenses recorded in advance", so at the end of each exercise the related expenses to be organized in the expenses accounts from class 6.



**3. The income specific to the franchisor** are grouped in 2 categories:

- direct revenue from the franchise operation which includes revenue from the entrance fee and royalty income;
- income from selling goods to the beneficiary, or the provision of services or execution of papers.

**Revenue from entrance fee** is considered an accessory-income that is recorded in the account 708 "Revenue from various activities". The right for claiming for the franchisor arises in the moment of signing the franchise contract. Payment may be made in full at the time of signing the franchise contract or staggered through negotiation. In this second case the income from entrance fee is initially booked as income in advance in the account 472 "Income recorded in advance", and that after each staggered collection to be emphasized the current income in the account 708 "Income from various activities".

**The income from fees.** It is the main income of the franchise which is registered in 706 account "Income from fees, locations and rent management". Calculation, collection and accounting of fees is done periodically, usually monthly, the basis of calculus being the turnover. If at the closing the exact fee income for December is not known, it can be proceeded to estimate the fee income and recording the claims in the account 418 "Clients – bills to be drawn". Later, after the calculation of the turnover based on the drawn bill, the certain claim will be recorded and the difference between income tax and the VAT will be solved in one of the next :

- either by canceling the initial operation (with estimated data) and simultaneous recording of the actual size of dept and VAT.
- or by recording the actual size of claims and by adjusting the differences between income and tax, by amounts in black for the differences in addition to the estimations and amounts in red for the differences in minus.

**Income from selling own goods** to the beneficiary are ordinary operating income of the franchisor which are registered in the corresponding revenue accounts: 701 "Revenue from finished products", if the franchisor is the manufacturer, 707 "Revenue from selling the goods" if the franchisor is the merchant, 704 "Revenue from performed work and rendered services, if the franchisor is a service provider.

#### **In the accounting of the beneficiary**

The franchise operations generate to the beneficiary both expenses specific to the franchise and ordinary expenses and income for any company. Specific expenditure refers to the entrance fee and the royalty that are to be paid to the franchisor, and the ordinary income and expenses relates to the cost of sold goods, general expenses, income from selling goods and so on.

**1. The entrance fee expenses** are registered at signing the franchise contract in account 628 "Other expenses with the services performed by third parties" if their value is not considerable. Either the entrance fee value can be included in the current expenses, being accounted initially as an advance expense in account 471 "Expenses registered in advance"

When the franchisor makes tangible investment on the beneficiary using the entrance fee (for example the endowment of a business) or offers the beneficiary the right to use the elements of intangible assets (the trademark and the know-how), the entrance fee is accounted partially or totally as a component of the acquisition cost of tangible assets (for example account 213 "Technical installations, vehicles, animals and plantations") or intangible (account 205 "Concessions, patents, licenses, trademarks and other rights and similar values").

**2. The royalty costs** are accounted as exploiting expenses in account 612 "Expenses regarding royalty, management locations and rentals".

**3. The rest of expenses and income** are accounted as usual in the expenses and income accounts from classes 6 and 7.

To conclude, being a form of marketing goods and services, franchise meets an emphasized extension because of its multiple advantages for the parts that are involved in the transaction, but also for the economies in their economical, social and fiscal plans.

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# THE ACCOUNTING RESULT BETWEEN THE PROFITABILITY INFORMATION AND THE LIQUIDITY INFORMATION OF THE ENTERPRISE

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*An enterprise can have economic performance, but may end as a result of the financial deficit of liquidity. Between the beneficiary capacity and liquidity there is no mechanical relationship. In the practice of enterprises it is not sufficient to follow only the economic indicators but it is necessary to ensure the liquidity of the enterprise in its quality of particular dimension of financial management. Liquidity and treasury must be well defined and bounded as they represent the object of several accounting measurements.*

*Keywords: accounting result, liquidity, treasury, self financing capacity, overall surplus of treasury.*

*JEL code: M40*

The financial position of an enterprise is influenced by the economic resources that it controls, its financial structure, its solvency and liquidity and also its ability to adapt to changing the environment in which they operate. The information about economic resources controlled by the enterprise and its past capacity to modify these resources are useful to predict the ability of the enterprise to generate cash or cash equivalents in the future. The information about the financial structure- are useful to anticipate the future lending needs and how the profits and future flows of treasury will be divided between those who have an interest in business; these are useful to anticipate the opportunity to receive funding in the future. The information about liquidity and solvency are useful to anticipate the capacity of the enterprise to honor its financial commitments due.

**Liquidity** refers to the availability of cash in the near future, after taking into account the financial obligations related to this period.

**Solvency** concerns the availability of cash for more than they should honor the financial commitments due.

An enterprise that spends more on consumption and investment than it receives from the sale of products begins to deplete the different ways of credit. The cost of the credit is possible to cover temporary cash-flow needs, but it may become prohibitive when it comes to financing development.

The inability to regulate trade after the enterprise made use of all credit resources and improvement of liquidity, it may lead to cessation of payments and placing it in the recovery or wound up.

The **state of incapacity** may have three origins: the failure of economic profitability, errors of management structure and financial fragility.

A weak **economic profitability** limits the ability to renew its equipment, promote new products, to recruit qualified employees, etc. Progressively the business is deteriorating; the financial needs can not be covered only by excessive indebtedness, which cost is added to the excessive expenditure and the falling spiral continues. In this case, the low performance of the enterprise is the cause of liquidity crisis.

The decreased profitability may be the consequence of economic and management errors. In this case, for example, the enterprise which supports important fixed costs, incurred in periods of favorable juncture and have not provided the opportunity for recovery in case of activity reduction when it occurs, it will be preserved a higher cost of business opportunities. The

professional competence of the company has not been valued and it is the victim of some management errors by over dimension.

Also, a dependency of a very high customer places the supplier company at his attitude regarding the payment. This is commonly found in small companies. Diversification of customers allows the reduction of illiquid risk.

But lack of payment is not only a consequence of a crisis of operating conditions. An enterprise may be destabilized in terms of financial structure without being simultaneously economically destabilized, but rapid growth can cause fragility in financial terms, if it was not provided the necessary increase in working capital, or was confronted with a variation of the waist of the enterprise under the growth in the capital.

Such businesses, economically strong but financially fragile may seek to recover the treasury, but this must be done before the financial difficulties are passed over the economic performance.

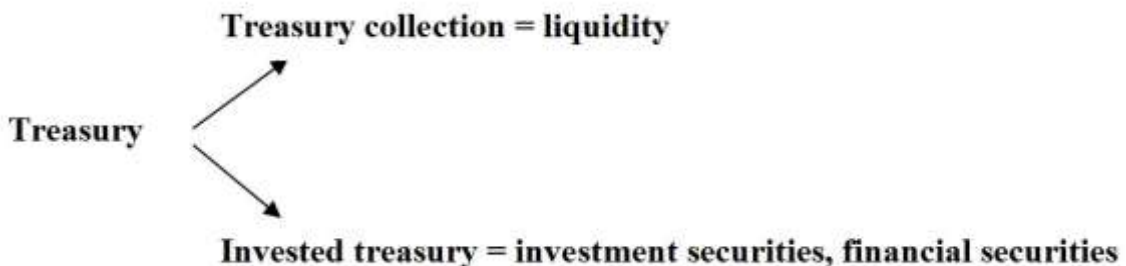
Therefore, **an enterprise may have economic performance, but it may end financially as result of the deficit of liquidity.**

The conclusion is that there **is no mechanical relationship between the beneficiary capacity and liquidity.** It is not enough to follow only the profitability of economic indicators, it is necessary to ensure the liquidity of the company in its quality of particular dimension if financial management.

**Notions of liquidity and treasury** must be well defined because they are the subject of many accounting measurements. On the one hand, certain liquid investments are not immediately available, but quickly mobilized, such as investment securities, shares and bonds. The questions that are raised are: can such values be included in the Treasury or should they be maintained in debt? Starting from what level of liquidity can a claim be treated as a fixed availability? On the other hand, there is a passive Treasury amended by the appropriations necessary to cover the bank's treasury agreed in various forms. These refundable credits have generated a treasury entry, and at the moment of refunding it changes to a potential levy on a short-term. If the bank renews the loans with a certain frequency, then it can be treated as a stable resource. Thus, the strict accounting of net cash is the subject to differences, bringing into discussion the borders of the treasury both in passive and active.

Seen in active, treasury is an investment. A slow collection of payment or placed shortly after a certain period offers a profit that is lower than the productive investment of the company. This brings into question two restrictions: first, the enterprise must provide the liquidity necessary for its transactions, on the other hand, it must also capitalize its assets.

From those presented it results the treasury scheme:



Often, there is a confusion between **treasury** and **liquidity**.

**Treasury** is calculated from the balance sheet between items that indicate the instantaneous value at the date of cost closure.

**Liquidity** is the result of the flow of entry and exit of money, delayed in time.

So, the treasury from day "d + 1" can vary greatly from the treasury from day "d". For example, a seasonal activity is committed to spending money over a calendar year, but receives revenue,

especially between November and January next year. The collection of amounts actually takes place next year, and it appears the activity resulted in a profit situation, but the company shows at the end of the year a liquidity risk.

In other vein, treasury calculated from the balance sheet items does not reveal its origins. We can not make the same diagnosis if the treasury is linked to a high degree of indebtedness, the external input of capital of self financing. The liquidity risk of an enterprise is evaluated differently by how the treasury is provided by recurring operating streams or external resources. From this point of view, the diagnosis takes into consideration, particularly, the treasury surplus resulted from the operation.

So, the notion of treasury varies, depending on the circumstances and the point of view from which is addressed. The account measures of the treasury correspond to particular definitions, seen as receipts, liquidity stable amounts and almost cash preserved to ensure transactions.

If we have the picture of funding, the **net treasury** represents the amount of deposits, less the current bank loans (credit balance of the current account), which means that securities investments are included in the claims of outside exploitation.

If we consider that securities investments, in terms of financial markets and capital, can be easily converted into currency and this conversion rate depending on the evolution of market liquidity, it means that the liquidity of securities investments may be greater than its registration, which gives a return. On the other hand the transfer of securities investments generates expenditure.

All these issues lead us to the idea that the definition of net cash must strive to overcome the concept and availability to take the form:

$$\text{Net availability} = \text{Treasury} + \text{Securities investment} - \text{Current bank loans}$$

Seen through the liabilities prism, we have that extensive concept of the treasury that requires a very careful analysis of the liquidities of the corporation, where:

$$\text{Treasury} = \text{Availability} + \text{Securities investment} - \text{Current bank loans} - \text{Effects expected and not achieved date of payment} - \text{Other financial liabilities of less than one year}$$

One can object that these loans are a permanent resource only if they are permanently renewed. Moreover, financial debts less than a year cover a part of short-term loans during the year, which is no longer a treasury debt. Finally, if all the financial debts of less than one year are treasury debts, why wouldn't we say so about other debts that are less than one year?

The different interpretations of cash can lead to the formulation of different diagnosis, and the analysis of firm liquidity should never lose sight of the substantive definition of the treasury.

The financial result of the company includes revenues and expenses, regardless their financial settlement. Besides the income there are also included the provisions and some transfers of expenditures, while alongside the costs there are included the amortisement and provisions setup, and also the value of ceased assets. If this result is an accountant economic result, it is interesting to calculate the result of the treasury or a **collected result**. This ability is the meaning of **Self Financing Capacity (SFC)**.

But the ability of self financing, as defined, is an expression of partial collected results. In essence, it does not include income from the disposal of assets which, although they are related to a financial flow, is extraordinary.

The ability of self financing is therefore calculated from the usual business of the company, such as:

$$\text{SFC} = \text{proceeds} - \text{expenses that are to be paid}$$

The ability of self financing can be calculated by two methods: either from intermediate management balances, or from the net accounting result.

The calculation of self financing capacity is based on the following:

$$\begin{aligned}
 & \text{SFC} = \text{GEE (Gross Excess of Exploiting)} \\
 & (+) \text{ other unbreakable operating income} \\
 & (-) \text{ other payable operating expenses} \\
 & (+) \text{ unbreakable financial income} \\
 & (-) \text{ paid financial expenses} \\
 & (+) \text{ extraordinary unbreakable income} \\
 & (-) \text{ payable extraordinary charges} \\
 & (-) \text{ income tax} \\
 & (-) \text{ participation in profit}
 \end{aligned}$$

The calculation of the ability of self financing starting from the result of net accounting is based on the following relationship:

$$\text{SFC} = \text{The net accounting result} + \frac{\text{Expenses that were not paid}}{\text{paid}} - \text{Unearnable income} - \text{Income from transfers}$$

Which leads to the identification of calculation, namely:

$$\begin{aligned}
 & \text{SFC} = \text{net accounting result} \\
 & (+) \text{ Expenses on almost cash and amortisement (exploiting, financial)} \\
 & (-) \text{ Income from re-provisioning (exploiting, financial)} \\
 & (+) \text{ Extraordinary expenses} \\
 & (-) \text{ Extraordinary income}
 \end{aligned}$$

Regardless the method of calculation, its size is the same and represents a result partly cashingly because it includes stock changes (which is seen very well by the second method, since the net result is influenced more or less by the income of stored production), which is not a cash flow budget. In other words, measuring the flow of treasury shall differentiate revenue and expenditure from the receipts and payments, in addition to the variation of inventories, and when the self financing calculus is made starting from the net result which includes stock variation, this being corrected, where from:

$$\text{Unbreakable operating flux} = \text{SFC} - \text{stock variation}$$

The reasoning used for the stock variation can be applied even in the case of restrained production because the expenditure has already been registered during the year, their counterparty being found in the fixed assets account. It can be concluded that:

$$\text{Treasury flux} = \text{SFC} - \text{stock variation} - \text{restrained production}$$

In other vein, if for the same volume of sales, earnings are at a frequency less rapidly, we will see a simultaneous reduction of job availability and an equivalent increase of the post of claims. Conversely, all the increases in operating debt correspond to an increase in treasury.

To obtain a collectable flux, meaning the treasury variation called equally and global treasury over-balance by the **Overall Surplus of Treasury (OST)**, it is sufficient to determine the balance

variation (claims - liabilities). Taking into account all the variation (stocks debts and current debt) affecting the collectable operating flow, we have:

$$OST = SFC - \text{stock variations} - \text{balance variation (claims - liabilities)}$$

or

$$OST = SFC - \text{variations (stock + exploiting debts - exploiting liability)}$$

But in the expression (stocks+ claims of exploitation- debt of exploitation), the definition for the need for working capital (NFR) is recognized, where the final expression of global treasury is:

$$OST = SFC - \text{variation of the necessary working capital}$$

Therefore, the ability of self financing takes into account all the operations that are converged with the result: exploiting operations, financial and extraordinary, while global treasury surplus variation is related to treasury operations essential to continuing the operation.

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# RESEARCH CONCERNING TANATOGENESIS IN THE ROMANIAN ACCOUNTANCY: THE CASE OF PUBLIC SECTOR<sup>433</sup>

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*Tanatogenesis represents the “study of signs, conditions, causes and nature of death”. We borrow this concept from biology and try to test it for the Romanian public entities. We chose to search this area because a major change in the accounting system was implemented in 2006 at the recommendations of EU, the International Monetary System, the World Bank, the European Bank and OECD (Tiron Tudor, 2008). The research methodology consists in analyzing the results of an empirical survey.*

*Key words: tanatogenesis, accounting regulation, accounting history, changes of accounting concepts, changes of accounting practices*

*JEL classification: M41*

## **INTRODUCTION**

Tanatogenesis represents the “study of signs, conditions, causes and nature of death”. We borrow this concept from biology and apply it in connection with the disappearance of an accounting concept or an accounting practice. Applied to accounting, tanatogenesis is the study of the causes and processes that lead to the disappearance of an accounting concept or practice. We posit that the process of the disappearance of an accounting concept/practice also involves signs, causes and nature of “death”.

The signs of the disappearance become apparent when the accounting concept/treatment begins to be rejected by accountants. “Modernist” accountants manifesting opposition to a certain concept or practice will disseminate their view in the accounting press, while “traditionalist” accountants will continue to use accounting concepts, even after their disappearance from the accounting rules.

The causes of the disappearance could be changes in the underlying economic environment, influences of other accounting cultures or international pressure. Whereas the death of an accounting concept is a lasting one, an accounting treatment can disappear suddenly following a regulatory measure.

After testing this concept on the financial accounting structures, we decided to also test it on the public sector accounting because the last moment of change in Romania was very recent: the last public accounting regulations appeared in 2005. Before this moment in Romania the public entities accounting was kept according to specific rules, proper to the cash accounting, the law being issued in 1970.

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## 1. Research Methodology

Our paper aims at identifying the following:

- i) Notions/concepts that might disappear from the official accounting terminology;
- ii) Notions/concepts that are at odds with existing accounting practices.

We used a methodology combining literature research with empirical research. A questionnaire was sent to a sample of academics and practitioners from Bucharest. 24 results were gathered in September – October 2008. Only the academics teaching Public Accounting answered the questionnaire (2 persons). Correlation between the answers to questions and dependent variables were tested with the Chi-square test ( $\chi^2$ ).

We formulated the following hypotheses:

H1. The physical disappearance of an accounting concept/notion is preceded by its disappearance as a desired item by the modernist accountants.

H2. The existence of a divergence between accounting principles (concepts) and accounting practices is a sign of a death of accounting concepts or practices.

## 2. Literature research results

- i) Notions/concepts that might disappear from the official accounting terminology

We investigated accountants' opinions with respect to a selected number of accounting concepts that we assume to be in course of disappearance.

### -*Pasiv*

The concept of „pasiv” in Romanian accounting was historically taken to mean liabilities or external pasiv (Iarcu, 1844 quoted by Calu, 2005). This is similar to the current definition of a “passif” in the French PCG, that is, “a patrimonial element with a negative value for the enterprise”. The sum of all individual items of passif is the external passif, that is, a company's total debt (PCG, 212-1).

The proponents of the economic-legal theory extended the concept of pasiv to encompass capital and liabilities (Iacobescu & Sorescu, 1921). The pasiv is thus formed of “pecuniary rights and obligations belonging to a person”, as opposed to „activ” which consists of assets. Evian (1940) disagreed with this approach and underlined the common meaning of the word „pasiv” - the attribute of a person or a thing of being inactive or of maintaining the status quo. He then concluded that the equation Wealth = Capital is equivalent to Activ = Pasiv.

Ristea (1989) defines the pasiv as the counterparty of the funds shown as activ, but looked at from the vantage point of their origin or source. As British accounting and IFRS influence became prevalent at the end of the nineties, academics and regulators started to replace pasiv with liabilities and capital. IPSAS 1 – Presentation of financial statements is drawn primarily from International Accounting Standard (IAS) 1 (revised December 2003). The balance sheet layout presented in the Order 1917/2005 had been changed from a list of active and pasiv elements, to a British vertical format ending with capital and reserves.

Other legal regulations continue to make use of the notion of pasiv. In practice, accounting education and even in Order 1917/2005 the notion is widely used when it comes to explaining the function of a particular account.

### -“*Circulante*” assets

In the Romanian regulations the classification as fixed/ “circulante” assets appeared in Accounting Law 82/1991. Thus, the *fixed assets* were represented by the goods and values with a long use period (more than one year) in the activity of a company and that were not consumed in the first use. In contrast, the “*circulante*” assets were the goods and values that were used on a

short period in the activity of a company and, in general, are part of only one economic circuit, changing the form continuously.

At international level, another distinction is used, namely current/non current. Thus, the current assets are defined within IPSAS 1 (par. 79) as those assets that are either realized, consumed or sold, as part of the normal operating cycle even when they are not expected to be realized within twelve months after the reporting date. Current assets also include assets held primarily for the purpose of being traded (guidance on classification of financial assets can be found in the relevant international or national accounting standard dealing with the recognition and measurement of financial instruments) and the current portion of non-current financial assets. Starting from this main separation, an asset is considered current if it observes certain conditions prescribed by IPSAS 1 (2009, par. 76), summarized as follows:

- a) It is expected to be realized in, or is held for sale or consumption in, the entity's normal operating cycle;
- b) It is held primarily for the purpose of being traded;
- c) It is expected to be realized within twelve months after the reporting date;
- d) It is cash or a cash equivalent (as defined in IPSAS 2, unless it is restricted from being exchanged or used to settle a liability for at least twelve months after the reporting

date

All other assets shall be classified as non-current.

In Order 1917/2005 the term "current" is accepted, but when referring to the assets the notion "circulante" appears in brackets.

ii) Notions/concepts that are at odds with existing accounting practices

#### *-The concept of the opening balance sheet*

The concept of the intangibility of the opening balance sheet was put forth by the 1993 Accounting Regulations, via the French Plan Comptable General. According to the Order 1917/2005 (page 24) "the opening balance sheet for each financial year must correspond to the closing balance sheet for the preceding financial year." This accounting principle, still present in the current Romanian regulations, influences the treatment applied in correcting the fundamental errors discovered after the preparation and approval of the financial statements. It does not allow the correction of errors in the balance sheet of the previous year, but only in the balance sheet of the current year (as also stated in Order 1917/2005, page 26).

Current Romanian accounting regulations are in contradiction with the requirements of IPSAS 3 – Accounting policies, changes in accounting estimates and errors. However, we consider that the existence of this principle is no longer adequate.

#### *-Conservatism (prudence) concept*

Conservatism (prudence) concept was mentioned for the first time in the 1993 Accounting Regulations and was maintained in all subsequent accounting regulations. According to this concept (Order 1917/2005, pag. 24), the assessment has to be made on a prudent base and especially:

- all the arrangements appeared during the current or previous year have to be taken into account, even if they only become obvious between the balance sheet date and the date of its approval;
- all the depreciations have to be taken into account.

In conclusion, the prudence involves a pessimistic approach of the assessment so that it takes into account the impact of the uncertainty. From a practical point of view, this involves the

registration of a depreciation adjustment, or provision, which impacts on the presentation of an un-overestimated accounting result.

#### *-Statement of patrimonial result*

The existence of the patrimony in the accounting in Romania is tightly connected to the theory of the patrimonial exchange (economic-legal). According to it, the balance sheet equation is established between the economic patrimony that includes all “the goods (subject to rights and obligations)” and the legal patrimony, representing “the rights and obligations of a pecuniary nature belonging to one person” (Iacobescu & Sorescu, 1928). The patrimony disappeared from the financial accounting, but is still present in the public accounting.

In practice, there are big controversies regarding the statement of patrimonial result. This financial statement was not prepared before 2006 and most of the accountants cannot understand its utility as their entities are financed by the government, so that they cannot obtain a profit.

#### *-Substance over form concept*

This accounting concept is mentioned in Order 1917/2006. We consider that it is a contradiction of the ruler that in the same regulation appear both the concept of patrimony and the substance over form concept. There are many opinions about the presence of the substance over form concept in the accounting regulations of a country with a patrimonial tradition, with an accounting dominated initially by juridical aspects. Thus, R. Teller quoted by Ionașcu, I. (1999), considers that “the presence of the substance over form concept doesn’t bring to discussion the patrimonial basis of accounting, but it strengthens it”. This means that, in case the form and juridical substance are not the same, the substance has to prevail leading to a juridical requalification of the transaction. In other words, you have to reach a new juridical classification for a transaction, according to its nature. This is the case of the accounting for the leasing transactions in the German accounting or of the goods sold under the reserve of the property clause in the French accounting – Ionașcu, I. (1999). On the other hand Roberts (2001) considers that “incorporating this principle [substance over form – n.a.] in the Romanian accounting rules introduces a potential contradiction with other components of this regulations”.

### **3. Results of the empirical survey**

#### **a. In your opinion which of the following notions/concepts should disappear from the official accounting terminology?**

##### **-Correlation between the disappearance of the notion of pasiv and the respondents age**

The value of probability was  $p=0.01197$  and degree of freedom was equal to 1, for Pearson Chi-square. The probability for Fisher exact, one-tailed was  $p=0.01863$ . Respondents older than 45 years don’t wish unanimously to give up on the use of the notion of pasiv, while the respondent younger then 45 don’t have the same opinion (7 say no, while 5 say yes). 58.33% of the respondents don’t wish to give up on this concept, while the rest do.

##### **-Correlation between the disappearance of the notion of pasiv and the type of the entity hiring the respondents**

The value of probability was  $p=0.00348$  and degree of freedom was equal to 1, for Pearson Chi-square. The probability for Fisher exact, one-tailed was  $p=0.01835$ . The employees of other

entities then education are in favour of keeping the notion of pasiv (18 to 2): 90% compared to 10% of the respondents. The employees of the education entities (probably accounting professors) are in favour of giving up on this notion (75%), compared to 25% in favour of keeping this notion (3 to 1 answers).

**-Correlation between the disappearance of the active circulante notion and the type of the professional experience of the respondents**

The value of probability was  $p=0.02846$  and degree of freedom was equal to 1, for Pearson Chi-square. The probability for Fisher exact, one-tailed was  $p=0.05929$ . The respondents with an exclusively practical professional experience were all for keeping the notion of active circulante, while for the respondents with a mainly practical experience we registered a dispersion of the answers (only 70% were for keeping it – 7 answers to 3).

**-Correlation between the disappearance of the notion of active circulante and the accounting experience of the respondents**

The value of probability was  $p=0.04412$  and degree of freedom was equal to 1, for Pearson Chi-square. The probability for Fisher exact, one-tailed was  $p=0.08152$ . The employees with accounting experience longer than 15 years were all in favor of giving up on the notion, while the others had more nuanced answers, as only 72.72% had this option (8 to 3).

**b. In your opinion which of the following notions/concepts and accounting principles are divergent with the accounting treatments used in practice?**

**-Correlation regarding the divergence between the opening balance sheet principle and accounting practice and sex of respondents**

The value of probability was  $p=0.00009$  and degree of freedom was equal to 1, for Pearson Chi-square. The probability for Fisher exact, one-tailed was  $p=0.01087$ . All women respondents consider that there is not divergence between the opening balance sheet principle and accounting practice (21 to 0). Men respondents argue that in proportion of 66.67% (2 to 1).

**-Correlation between the opinion concerning the conservatism (prudence) concept and the professional experience of the respondents**

The value of probability was  $p=0.02846$  and degree of freedom was equal to 1, for Pearson Chi-square. The probability for Fisher exact, one-tailed was  $p=0.05929$ . All the respondents with exclusively practical experience consider that the conservatism (prudence) concept is not divergent with the accounting treatments in force (14 to 0). The respondents with a mainly practical experience consider the same way, but in proportion of 70% (7 answers out of 10).

**-Correlation between the opinion concerning the statement of patrimonial result and the experience in accounting of the respondents**

The value of probability was  $p=0.08852$  and degree of freedom was equal to 1, for Pearson Chi-square. The probability for Fisher exact, one-tailed was  $p=0.14130$ . All the respondents with an accounting experience of less than 15 years consider that the existence of the statement of patrimonial result contradicts the accounting practice (11 respondents), while the respondents with an accounting experience longer than 15 years presented more nuanced answers: 76,92% of the respondents consider there is a contradiction (10 answers out of 13).

## **-Correlation between the opinion concerning the substance over form concept and the age of the respondents**

The value of probability was  $p=0.08327$  and degree of freedom was equal to 1, for Pearson Chi-square. The probability for Fisher exact, one-tailed was  $p=0.09651$ . The respondents younger than 45 are polarized as follows: 50% consider that there is a contradiction, while 50% think the opposite. However, the 83.33% of the respondents older than 45 consider there is no contradiction between the requests of this concept and the practice.

### **Conclusions**

The first step towards the accruals accounting system was made in Romania by creating a legal framework. Budget and accounting categories at the national level have a common set of classifications conform to international standards that facilitate policy analysis and promote accountability. Making further progress in this area will require substantial investment in staff development and training, supported in many cases by EU twinning projects and other technical assistance programs. We also consider that a part of the problems encountered in Order 1917/2005 will be eliminated in its next versions, because the public sector accounting in Romania has to converge with the international regulations in the area.

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## TRIPLE BOTTOM LINE (TBL) REPORTING – NEW PERFORMANCE REPORTING TOOLS IN A KNOWLEDGE BASED MANAGEMENT APPROACH

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*The human society is starting to react, in an attempt to reduce the negative consequences of the ecological crisis. The most comprehensive view on corporate reporting is based on the sustainable development concept and combines three performance-reporting dimensions: economic, social and environmental. In the first part of our research we propose a literature review of the fundamental concepts in the social and environmental reporting practice, ensuring a uniform terminology, as an entity – stakeholders communication bridge, and promoting the best reporting practices used in social and environmental decision-making. These are related to the concept of Triple Bottom Line (TBL) Reporting, demanding an entity's responsibility to stakeholders rather than shareholders.*

*Keywords: Triple Bottom Line Reporting, Sustainable Performance Reporting, Knowledge-based Management*

*JEL Classification: M 40, M 48, Q 51, Q 56, Q 57*

### **Introduction**

Within knowledge-based economics, the need for new approaches to decision-making to support sustainable development initiatives is acknowledged. The limitations of cost–benefit analysis approaches as a measure of the (un)sustainability of organizational activities are widely recognized. These are viewed as particularly inappropriate within the participatory settings that sustainable development proponents seek to foster (**Bebbington et. al., 2007**).

The environmental crisis is not a local problem, in a particular country, but it is a global one, having the environmental protection as a high priority target. The conclusions that have been drawn from the Conference of Stockholm (1972) and the Conference of Rio (1992) for the Environmental Protection underpinned the necessity of a global scale program for the protection of the environment, as a common goal. Kyoto Protocol (Environment Conference Kyoto, 1997) has created policies of gas emission diminishing for reducing the explosive increasing of global warming. As a first policy of Environmental Protection, the Unique European Document states that the inner activity of a country must not deteriorate or affect the environment of the neighbour country. The states of the European Union must act as a whole and develop a certain kind of coherent dynamic at a global scale with respect to the environmental protection. Besides the establish actions must be appropriate to the polluting type and geographic zone.

As economic and ecological support systems become more interdependent, new disciplines are needed to bridge the gap between human and nature. *Energy Model* created by H.T. Odum (1994) is a new method for evaluating natural capital and ecosystem services (*Zhao, Li and Li, 2005*).

*The ecological footprint concept* created by Wackernagel and Rees (1996) has been promoted as a policy and planning tool for sustainability.

## **1. Research Methodology**

The background of this scientific approach consists of information/data that arise from specialized national, European and international literature and practice. The research team is undertaking a dialectical research, having as guiding point the entropy laws applied to social and environmental processes, from an evolutionary and historical, often contradictory perspective. New concepts, interpretations and judgements emerge, that ensure the borderline research ideas, through mathematical modelling.

The quality of the underlying social interactions in terms of challenges, pitfalls and good practices is critically reflected against normative guidelines derived from the literature. Promoting the concept of transdisciplinary research as *a third epistemic way* - demarcated from involving laypersons in scientific research - *the primacy of science* - as well as from classical decision support - *the primacy of practice* - four challenges of joint knowledge generation are discussed: confounded agendas, separate data philosophies, reluctance to face exposure, and co-existing values.

Transdisciplinary research creates a specific site of negotiation in which both scientific and extra-scientific forms of knowledge are debated. There are already a variety of contributions focusing on the aspect of knowledge generation in transdisciplinary research.

The debate on transdisciplinary research has so far rarely addressed the epistemological and methodological issues of this new form of scientific practice. With our article we offer a contribution that attempts to fill this gap. From previous research we found that the term transdisciplinary research is used for quite heterogeneous project goals and epistemic ends. Also, the methods of knowledge integration are used only on a small scale and participation often does not primarily serve epistemic ends. Thus, the notion of transdisciplinary research covers projects only in the sense of a family-resemblance, and does not represent a fertile methodological point of reference. Therefore, we propose to relate further methodological considerations with types of knowledge desiderata.

## **2. TBL reporting from managerial perspective**

The managers who made decisions on selling strategies must have as target to maximise returns that assures a good entity's image. But, in today's business world, the financial bottom line is not the only or even the most important measure of success. Executives must consider the social, economic and environmental impacts on anyone with a stake in the outcome.

Evaluation models for sustainability are based on an interdisciplinary approach that recognizes the necessity of a new accounting model leading toward advanced forms of decision and responsibility. The most comprehensive view on corporate reporting is based on the sustainable development concept.

The TBL concept focuses not only on an entity's Economic Value Added, but also, and more importantly on the social and environmental values it creates or, on the contrary, it destroys (Elkington, 1980). In the strictest sense, TBL is used as a framework for an entity's performance measurement and reporting over three dimensions: social, economic, and environmental.

TBL Reporting continuously grows more popular (however it is not yet a common practice). According to the survey released by KPMG 45% of the Fortune global top 250 companies were issuing environmental, social or sustainability reports in addition to their financial reports at the beginning of this decade (35% in 1999) (KPMG, 2002). Globally, more companies than ever are publishing reports on their environmental, social and sustainability performance. According to the Deloitte & Touche survey 90% of responders believed that corporate sustainable reporting was an important element of reputation and brand value. The survey shows that 42% of funds

managers agree that companies exhibiting good environmental and social performance would outperform their peers; important to stress that over half of the managers believed that consideration of social, environmental and ethical performance would become a significantly important aspect of investment decision-making within next period. (Deloitte & Touche, 2002). The TBL model currently exists as a kind of balanced scorecard (*figure 1*) that captures in numbers and words the degree to which any company is or is not creating value for its shareholders and for society.

|                  |                     |                      |                        |
|------------------|---------------------|----------------------|------------------------|
| Typical measures | <i>Economic</i>     | <i>Environmental</i> | <i>Social</i>          |
|                  | Sales, profits, ROI | Air quality          | Labour practices       |
|                  | Taxes paid          | Water quality        | Community impacts      |
|                  | Monetary flows      | Energy usage         | Human rights           |
|                  | Jobs created        | Waste produced       | Product responsibility |
|                  | TOTAL               | TOTAL                | TOTAL                  |

*Figure 1. The Triple Bottom Line Balanced Scorecard (source: Savitz and Weber, 2006)*

Elkington's formulation is central to understanding sustainability. Whereas the practice of sustainability is still an art, the measurement of sustainability is becoming a science, including specific goals and parameters by which business can measure and judge their own progress (Savitz and Weber, 2006).

Industries are becoming progressively more aware of the environmental and social liabilities pertaining to their operations and products, with associated financial effects. Uncertainties in measuring these financial effects can be addressed by using environmental evaluation and accounting techniques (Beer and Friend, 2006). Environmental accounting assists in expressing environmental and social liabilities as environmental costs.

Several studies are referring to a multitude of motivations regarding the socio-economic and environmental reporting (O'Dwyer et al., 2005, Cormier et al., 2005, Solomon and Lewis, 2002). Cormier et al. (2005) propose that the environmental reporting of the potential costs to be understood in perspective of humanity's benefits. Hassel et al. (2005) show that the investors do not really appreciate the performance increasing as a result of environment protection activities. This could be partly explained by the cost-benefit relation. Studies show that the investors tend to grant a growing importance to the green reports, if we were to rely on results regarding sustainable investments funds and sustainable investing methods (Koellner et al., 2005), on sustainable investing indicators or on increasing interest of accounting regulation institutions.

The information analysis reported by the entities (Clarkson et al., 2004) indicates growing benefits for those who have invested in equipments adapted for environmental protection. We think that the future tendencies should be harmonized with the evaluation of formal or informal environment protection requirements, which, for now, are not quantified and reported through financial statements. M. Patten (2004) identifies two possible aspects that criticize the diminished importance attached in time to green reporting: (1) the previous studies were limited to a global approach of green information which means to lose sight of important aspects and (2) such information, even if it would not recognize a part of the past activity eco-performance, for certain will help the entity in its future activity. Some researchers have tried to put in relation the practice of green information reporting with variables such as entity's size, profits or the particularities of the activity range (Gray et al., 2001).

### **3. Alternative Sustainable Reporting Models from a Knowledge-based Management Perspective**



Business leaders with a superficial understanding of sustainability think of it as a distraction from their main purpose, a chore they hope can be discharged quickly and easily. This approach reveals a fundamental misunderstanding. Sustainability is not about philanthropy. There is nothing wrong with corporate charity, but sustainable companies conduct their business so that benefits flow naturally to all stakeholders, including employees, customers, business partners, the communities in which it operates, and, of course, shareholders.

Sustainability requires us all to look at the world differently, to think in a *cyclic* rather than *linear* way. Sustainability in practice can be seen as *the art of doing business in an interdependent world*, operating a business in a way that causes minimal harm to living creatures and that does not deplete but rather restores and enriches the environment. The concept of sustainability is sometimes confused with other terms that are used in business today. For example, the term *corporate social responsibility (CSR)* is often used to refer to a company’s obligations to society at large. In our opinion, CSR can be perceived as a first-stage sustainable reporting initiative, focusing on the social and environmental benefits of a more responsible corporate approach.

The new TBL paradigm turns that lens around, examining how companies can become more profitable by *doing the right thing*. It requires focus not only on the *financial* returns to shareholders, but also on the *non-financial* returns to stakeholders. TBL reporting also changes the perspective from a short-term shareholder value to a long-term stakeholder value, stressing that a sustainable business can only be achieved in the new *Age of Accountability* if a company is responding to the challenge of *doing the right thing* by the environment and society. The TBL captures the essence of sustainability by measuring the impact of an organization’s activities on the world. A positive TBL reflects an increase in the company’s value, including both its profitability and shareholder value, and its social, human, and environmental capital.

Companies are not turning to sustainability for altruistic reasons. Profitability and growth are at the heart of their reasons for building sustainability tools into their business strategy (Lungu et al., 2007).

Sustainable companies find areas of mutual interest and ways to make doing good and doing well synonymous, thus avoiding the implied conflict between society and shareholders. We propose to think about sustainability as a common ground shared by business interests (financial stakeholders) and the interests of nonfinancial stakeholders (the public). This common ground is that we call the sustainability sweet spot: the place where the pursuit of profit blends with the pursuit of the common good (figure 2).

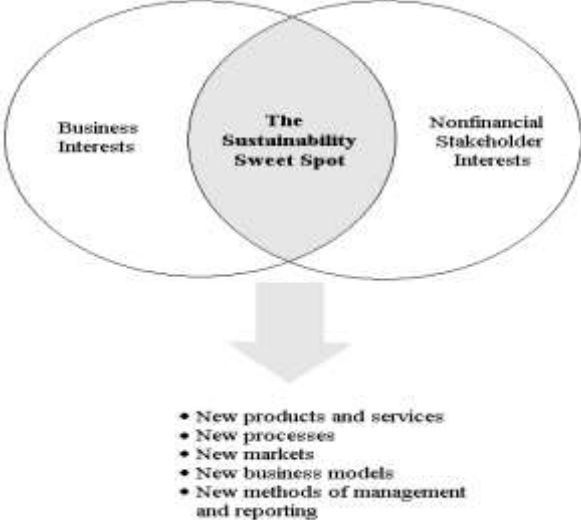


Figure 2. The sustainability sweet spot (Savitz and Weber, 2006)

The most important companies around the world are trying to indentify and move into their sweet spots, by developing new ways of doing business in order to get there and stay there. The sweet spot embodies the literal meaning of sustainability: making your company viable for the long term by managing according to principle that will strengthen rather than undermine the company's roots in the environmental and social area and in the economy. A business that occupies the sweet-spot or that strives to fit as much of its activities into that zone should have real long term advantages over its competitors.

## **Conclusions**

Trajectories for transdisciplinary strategies combine economic, social, and environmental aspects, leading to sustainable development, main objective of the seventh Framework Programme (FP 7). The increasing emphasis on the reporting of non-financial information and new measurement tools herald the prospect of clearer and more direct connections between an economic entity's worth and its social and environmental strategies. The business-integrity issues raised by recent corporate scandals and stressed by the present global economic crisis have, in turn, heightened the focus on transparent and relevant reporting.

Every action you take in business has two components: an impact on profits and an impact on the world (social benefits). Companies' goal should be to develop strategies and change operations to move toward a spot where they may bled a high profit and an elevated social benefit.

A transition process is occurring which eventually will subject environmental and social disclosure to the same professional importance that financial reports receive today. The companies that stand to gain the most are those that carefully examine these trends and devise strategies that offer competitive advantage.

In our opinion, more and more companies are using sustainability reporting, encompassing the social, environmental and economic impact, not just as an accounting tool but to drive strategy, unlocking new sources of revenue and growth. TBL reporting aims both to measure the direct or marginal benefits and to assess the structural pattern of institutional development and the related qualitative social and environmental services network.

The criticism about triple bottom line reporting argues about an increase of corporate social responsibility and the limited amount of disclosures. It is also criticized that organizations often have good intentions in sustainability matters, but they cannot transform those intentions into actions and results. Therefore we consider that for giving the right answer to these needs a model that helps the understanding of relationships emerging from the three levels of reporting (economic, social, and environmental) by combining them with the human being factor is necessary and will be developed in our future research.

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# STUDY REGARDING THE ETHICS AND CREATIVITY IN THE FINANCIAL-ACCOUNTING ACTIVITY

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*The study was based on a scientific research, investigation type, applied on a 110 organisations' sample. The essential objectives consist of knowing the level in which financial-accounting professionals apply the professional ethics' standards; outlining the managers' opinion regarding the estimation and usage of creativity and innovation in the financial-accounting activity. Based on the things presented in the paper, it can be noticed that the financial-accounting creativity practice and its effects depends on what managers wish to offer with the information they provide and implicitly what they want to get from the decisions adopted by using this information.*

*Key words: creativity, ethics, financial-accounting activity, fraud*

*JEL Classification: M41, L84*

## **1. Introduction**

One of the ethics' issues in the financial-accounting activity is related to creativity and innovation. Most of us consider the financial-accounting activity rigid, which does not leave the possibility of using imagination. This was however fought against through a series of situations where it has been noticed that imagination in the management of the financial-accounting activity may play a very important part when reality's distortion becomes an essential necessity.

Therefore, the question “Is the financial-accounting innovation and creativity a fraud?” outlines. With this study we have tried to answer to the following questions: “Do the financial-accounting professionals comply with the professional ethics' standards?”, “Is the financial-accounting innovation and creativity a fraud?”, “How do you appreciate the financial-accounting personnel's performance of being creative and innovating?”, “Does the organisation employ financial-accounting creativity and innovation practices? If yes, for what purposes? If not, why?” We believe that the undertaken research is of present interest, since the economic crisis affects the companies' activity and the temptation of being creative in a negative sense is inherent.

## **2. The methodology of the research**

The present study wants to underline the understanding of the economic entities' managers regarding the financial-accounting fraud and creativity. Our investigation included two successive researches: *a qualitative research, exploratory type, and a quantitative research, descriptive type.*

The qualitative research – exploratory type, aimed to *elaborate some hypotheses which were the object of the following quantitative research – descriptive type, to establish the following research priorities.* The methods used in this preliminary research were the following: *the analysis of secondary data*, which requires the usage of the available information from various sources, with focus on discovering shortcomings, ideas, solutions regarding the costs and the price policy; *the interviews with the specialists*, which had as objective getting additional information from specialists in the financial-accounting field; *the workgroups or the focus groups* which allowed the development of certain debates regarding this subject.

With the quantitative research – descriptive type, whose results are presented in this paper, we have tried to find out the understanding of the economic entities' managers understanding of the

financial-accounting fraud and creativity. We consider that the obtained information from this study is of great importance, especially under the circumstances of the present economy's conditions, the "financial crisis".

According to the place of development, the undertaken research was *in the field*, the information being gathered at the company's included in the sample office. According to the frequency of development, the undertaken research has been made *on occasion*.

In order to establish the sample, the *random sampling method* was used, which was based on a *fixed sample* (taking into account the organisational restrictions, a sample of 110 respondents was established – companies from the county of Sibiu, 9,4% margin of error for a 95% level of trust) *with reservations*. We can state that the sampling method consists of combining the *multi-stage sampling method* with the *non-proportional random stratified sampling method*. To process the information, the SPSS for Windows program was used. We would like to underline that this research could be extended, (a possible extending has already been considered of interest), the obtained information and results being a real starting point for this purpose.

### 3. Depicted conclusions after the research

A first objective of the study consists of **knowing the level in which financial-accounting professionals comply with the professional ethics' standards**. After processing the obtained information, we have calculated the score for each standard of the professional ethics in part, as well as the total score, the information being presented in table 1.

| Table 1.<br>The standards of the professional ethics |                         |                    |         |                    |                         |       |
|--|-------------------------|--------------------|---------|--------------------|-------------------------|-------|
| The standards of the professional ethics             | in a very small measure | in a small measure | neither | in a large measure | in a very large measure | Total |
| Integrity  | -                       | 4                  | 4       | 50                 | 52                      | 110   |
| Average (score) = 4,26                               |                         |                    |         |                    |                         |       |
| Competence   | -                       | 3                  | 6       | 54                 | 47                      | 110   |
| Average (score) = 4,32                               |                         |                    |         |                    |                         |       |
| Objectivity  | -                       | 2                  | 9       | 57                 | 42                      | 110   |
| Average (score) = 4,26                               |                         |                    |         |                    |                         |       |
| Behaviour  | -                       | 5                  | 13      | 42                 | 50                      | 110   |
| Average (score) = 4,25                               |                         |                    |         |                    |                         |       |
| Confidentiality                                      | -                       | 3                  | 10      | 40                 | 57                      | 110   |
| Average (score) = 4,37                               |                         |                    |         |                    |                         |       |
| Responsibility                                       | -                       | 1                  | 10      | 44                 | 55                      | 110   |
| Average (score) = 4,39                               |                         |                    |         |                    |                         |       |
| General average (general score) = 4,31               |                         |                    |         |                    |                         |       |

The information's analysis leads us to estimate that in most of the companies it is considered that the standards of professional ethics are being respected, either in a large measure by the professionals operating in the financial-accounting field, or in a very large measure. It can be noticed that none of the investigated companies consider that there is not one standard of the professional ethics that is complied with in a very small measure.

The accomplished analysis underlines the fact that the score for each standard of the professional ethics is approximately equal (4,26 – integrity, 4,32 – competence, 4,26 – objectivity, 4,25 – behaviour, 4,37 – confidentiality, 4,39 – responsibility) therefore all characteristics being mostly respected (from 1 – in a very small measure, to 5 – in a very large measure).

Therefore, the obtained general score (4,39) confirms the hypothesis mentioned before the research (*The standards of the professional ethics are complied with in a large measure*).

As we have mentioned in the study's theoretical aspects, an ethics' issue in the financial-accounting activity is related to creativity and innovation. Most of us consider the financial-accounting activity rigid, which does not leave the possibility of using imagination. This was however fought against through a series of situations where it has been noticed that imagination in the management of the financial-accounting activity may play a very important part when reality's distortion becomes an essential necessity. Under these circumstances, another general objective of the research consists of **outlining the managers' opinion regarding the creativity's and innovation's understanding and usage in the financial-accounting activity.** To reach our set objective, we resorted to the introduction in the questionnaire of three questions, namely: "Is the financial-accounting innovation and creativity a fraud?"; "How do you appreciate the financial-accounting personnel's performance of being creative and innovating?"; "Does your organisation employ financial-accounting creativity and innovation practices? If yes, for what purposes? If not, why?"

The obtained information after processing the data for the question "Is the financial-accounting innovation and creativity a fraud?" are shown in table 2.

|         |                                    | Frequency | Percentage | Valid percentage |
|---------|------------------------------------|-----------|------------|------------------|
| Valid   | 110                                |           |            |                  |
|         | total disagreement                 | 42        | 38,1       | 38,1             |
|         | disagreement                       | 39        | 35,4       | 35,4             |
|         | neither agreement-nor disagreement | 17        | 15,5       | 15,5             |
|         | agreement                          | 6         | 5,5        | 5,5              |
|         | total agreement                    | 6         | 5,5        | 5,5              |
|         | Total                              | 110       | 100,0      | 100,0            |
| Average | 2,05                               |           |            |                  |

It is obvious that most of the managers believe that the financial-accounting innovation and creativity is not a fraud, these ones expressing either their disagreement, or their total disagreement in this matter, and 15,5% of the managers have a neutral opinion regarding creativity and innovation. Only approximately 10% of the respondents believe that the financial-accounting innovation and creativity create fraud. As a whole, based on the score calculated for this question is 2,05 (from 1 – total disagreement, to 5 – total agreement) we can estimate that managers do not agree with the statement, the hypothesis formulated at the beginning of the research (*Managers do not agree with the statement "financial-accounting innovation and creativity is a fraud"*) is being confirmed. As a matter of fact, this was our conclusion as well.

Taking into consideration the permanent change in the financial-accounting and fiscal environment, the financial-accounting professionals often have to, or are forced to resort to various techniques or professional reasoning, but, it mostly depends on each of them to decide which the limit for breaking the law is. From this perspective, we have tried to capture, with the second question, **the way in which managers appreciate the performance of the financial-accounting professionals to be creative and inventive.** The obtained information is presented in table 3.

|       |            | Frequency | Percentage | Valid percentage |
|-------|------------|-----------|------------|------------------|
| Valid | 110        |           |            |                  |
|       | very badly | 4         | 3,6        | 3,6              |
|       | badly      | 12        | 10,9       | 10,9             |

|         |                         |     |       |       |
|---------|-------------------------|-----|-------|-------|
|         | neither badly, nor good | 23  | 20,9  | 20,9  |
|         | good                    | 44  | 40,1  | 40,1  |
|         | very good               | 27  | 24,5  | 24,5  |
|         | Total                   | 110 | 100,0 | 100,0 |
| Average | 3,71                    |     |       |       |

It can be noticed that 14% of the managers believe that the performance of the financial-accounting personnel of being creative and inventive is very badly or badly, and 20,9% have a neutral position regarding this matter. Most of the ones interviewed (over 40,1%) prefer a financial-accounting personnel which is creative and inventive, and 24,5% of them are absolutely thrilled about having this kind of people. Generally, the majority of the managers agree with the performance of the financial-accounting personnel of being creative and inventive, especially as far as the interpretation of law is concerned.

The score obtained for this question is 3,71 (from 1 – very badly, to 5 – very good) and therefore the hypothesis we have launched at the beginning of the research (*The financial-accounting creativity and innovation is a well-appreciated performance*) is being confirmed, the score being close to the value of 4.

In the financial-accounting activity, there are a series of situations which make the ones involved decide upon the behaviour they adopt. In order to capture the perception regarding the usage of the financial-accounting creativity and innovation and knowing the reasons why the financial-accounting creative techniques are employed, the third question of the questionnaire has been formulated. The obtained information is presented in table 4.

| Table 4<br>The financial-accounting “creativity and innovation” usage |       |           |            |                  |
|---|-------|-----------|------------|------------------|
|   |       | Frequency | Percentage | Valid percentage |
| Valid   | yes   | 72        | 65,5       | 65,5             |
|   | no    | 38        | 34,5       | 34,5             |
|   | Total | 110       | 100,0      | 100,0            |

We notice that 65,5% of the questioned organisations resort to creativity and innovation in the financial-accounting activity and only 34,5% do not resort to such techniques. Very important are however the reasons why companies use creativity and innovation in the financial-accounting activity, reasons which reflect the two sides of creativity (table 5).

| Table 5<br>Reasons                                       |             |           |            |                  |
|--|-------------|-----------|------------|------------------|
| a. The company wants to avoid fiscality                  |             |           |            |                  |
|  |             | Frequency | Percentage | Valid percentage |
|  | unmentioned | 49        | 44,6       | 68,0             |
|  | mentioned   | 23        | 20,9       | 32,0             |
| Valid  | Total       | 72        | 65,5       | 100,0            |
| Missing  | System      | 38        | 34,5       |                  |
| Total  |             | 110       | 100,0      |                  |
| b. The company wants to get additional financing sources |             |           |            |                  |
|  |             | Frequency | Percentage | Valid percentage |
|  | unmentioned | 41        | 37,3       | 56,9             |
|  | mentioned   | 31        | 28,2       | 43,1             |
| Valid  | Total       | 72        | 65,5       | 100,0            |
| Missing  | System      | 38        | 34,5       |                  |
| Total  |             | 110       | 100,0      |                  |

| c. The company wants to mislead the stockholders/associates                         |             |           |            |                  |
|---|-------------|-----------|------------|------------------|
|   |             | Frequency | Percentage | Valid percentage |
|   | unmentioned | 72        | 65,5       | 100,0            |
|   | mentioned   | 0         | 0          | 0                |
| Valid   | Total       | 72        | 65,5       | 100,0            |
| Missing   | System      | 38        | 34,5       |                  |
| Total   |             | 110       | 100,0      |                  |
| d. The company is forced to give financial-accounting information to external users |             |           |            |                  |
|   |             | Frequency | Percentage | Valid percentage |
|   | unmentioned | 46        | 41,8       | 63,9             |
|   | mentioned   | 26        | 23,7       | 46,1             |
| Valid   | Total       | 72        | 65,5       | 100,0            |
| Missing   | System      | 38        | 34,5       |                  |
| Total   |             | 110       | 100,0      |                  |
| e. Other reasons  |             |           |            |                  |
|   |             | Frequency | Percentage | Valid percentage |
|   | unmentioned | 35        | 31,8       | 48,6             |
|   | mentioned   | 37        | 33,7       | 51,4             |
| Valid   | Total       | 72        | 65,5       | 100,0            |
| Missing   | System      | 38        | 34,5       |                  |
| Total   |             | 110       | 100,0      |                  |

It can be noticed that the reasons why companies use the creative practices of the financial-accounting activity are divided as it follows: for 32% of the companies there is the desire to avoid fiscality; 43,1% of the questioned companies are interested in getting additional financing sources; 36,1% use creativity and innovation when they are forced to give financial-accounting information to some external users and 51,4% of the interviewed companies which use the financial-accounting creativity and innovation mention other reasons as well<sup>434</sup>.

In the *other reasons* category, there have been mentioned: the legislative contradictions; legislative interpretations; personal professional reasoning; diminishing the working volume; manipulating the financial result for not paying dividends out of the stockholders' wish.

By analysing the reasons why companies resort to financial-accounting creativity and innovation, most often it appears the desire to get additional financing sources, the desire to avoid fiscality and the legislative ambiguities.

From the research, *the main reasons why companies do not resort to financial-accounting creativity and innovation* can also be depicted: correctness; fear; the existence of major risks; the existence of certain internal and financial auditors; foreign stockholders; etc.

As a conclusion, the hypothesis launched before the research (*Most of the companies resort to creativity and innovation in the financial-accounting activity*) is being confirmed. We can also notice that most of the organisations resort to such techniques for negative purposes. Therefore, we can only rest wondering how the accounting principles are being complied with, whether we can still talk about a faithful image or "users, watch out!" These questions have their answers within another research.

As a result of the conclusions depicted from the undertaken study, we believe that the financial-accounting creativity practice and its effects depends on what managers want to offer through the information they provide and, implicitly, on what they want to get from the decisions users adopt by employing this information.

<sup>434</sup> We mention that the total is higher than 100% because the formulated question had multiple answers.



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## IN-HOUSE VS. OUTSOURCING IN ACCOUNTING

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*To keep all out from the strangers' view was „the appanage” of the communist system that spread over the entire society. But, once it was eliminated, the society started to reveal its „secrets” and that was extended over the companies too. So they have begun to outsource different services from cleaning to even accounting function. Still, a question arises up: is it outsourcing a way that will satisfy the enterprises' needs or they will return to in-house practice?*

*Keywords: in-house accounting, outsourcing accounting, outsourcing companies*

*JEL codes: M41*

M: *Business Administration and Business Economics; Marketing; Accounting*

Sophisticated terms, came out certainly from American culture, in-house (known as retrosourcing<sup>435</sup>) and outsourcing are two different ways for an entity to accomplish its functions but not only.

### **1. What is the meaning of in-house and outsourcing?**

An entity can work out with own resources (human, material, financial) activities like some operational process (products delivery, carriage, repairs, cleaning) but also essential functions like IT, financial-accounting, marketing, human resources, legal etc. (own departments). This means in-house. Or, put them, totally or in part, on the shoulders of some experts hired for their quality services, more exactly outsourcing them. This last practice was initiated in USA mostly because of staff shortage but also thanks to the small prices of different services offered by foreign experts in many areas, from Asia (India, China, Philippines etc.) and also from Central and East Europe (Hungary, Romania, Bulgaria, Slovakia, Czech etc.). This turns out to be quite profitable in the financial way.

Outsourcing's beginnings are in IT area in that, even nowadays, it is still the leader. From IT startup, outsourcing became useful in any problems with an entity must face it. Experts in almost any domain are waiting for solving companies' difficulties.

Different services can be outsourced even outside of original country. For example Commerzbank from Germany outsource the processing services in Prague, while, electronics giant, Siemens, accounting, research and development services, also here. The Philips company, electronics Dutchman group, owns a service center outside Warsaw<sup>436</sup>.

Outsourcing companies are filled in our country too and that is why many entities well-try their services. Hence, having a supply and even a demand, means a market specialized in outsourcing. Within the communist regime all was accomplished inside of enterprise, in other words, in-house. Onwards 1989 entities have begun to outsource different services so today almost everything is able for outsourcing.

Thus, while some organizations outsource only major services, others prefer to outsource complete operations, including all important information technology and business process.

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435 Jerry E. Durant, The New Economics of Global Outsourcing, January 2009, The International Institute for Outsource Management - [www.outsourcing.com](http://www.outsourcing.com).

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## 2. In-house or Outsource the accounting function?

Romania's European Union „aligned” the accounting too at the European and even international practices, outsourcing it being one of them. At the beginnings the accounting outsourcing was considered a luxury but today it is a necessity and more.

It known that accounting is one of the indispensable functions of any business organization, regardless of size and purpose of any company. Therefore, it is essential for all entities to manage every aspect of accounting very carefully. Thus, it became a habit outsource the accounting, being allowed even by law.

As it is known from literature, within an entity, usually, accounting tasks together with the financial ones (but not necessarily) are joined in an entity's function materialized in a financial-accounting department. But the presence of it is not a rule. According with the Accounting Law, no. 82/1991<sup>437</sup>, the entities shall organize and keep inside them their books in separate departments, headed by the financial-accounting director, the accounting chief or any other person empowered to fill this position or may also be organized and carried out by authorized legal persons or by natural persons having the status of expert and licensed accountants, who are responsible under the law. Therefore, by law, the organization and the management of accounting function can be fulfilled in-house or outsourcing. Even the accounting firms can tried outsourcing companies' services mostly in accounting's deadlines period.

Mostly, size of a business is an essential factor for deciding over an in-house or outsourcing accounting, but also the advantages and the risks that a manager can afford them.

Usually, in Romania all well-established companies have, inevitably, huge accounting department to maintain its daily accounting tasks from elementary operations to complex analysis and studies based on which the managers take their decisions. Therefore is an in-house accounting.

But the small and mid-sized businesses either accomplish some accounting tasks by their own employees handing over the accounting firms other tasks like preparing of financial statements, either decide for outsourcing all accounting tasks.

Still is not a general rule. A small firm can get the accounting software installed and small staff would suffice the requirement. But, for an industry running over a large scale, it would be real difficult and expensive to hire large manpower just for the purpose of accounting howsoever essential this function is<sup>438</sup>.

Steven M. Bragg considers that the accounting function is among the most commonly outsourced, though this is usually limited to only a few tasks within the function, like: payroll, accounts receivable collections, internal auditing, taxation, financial statement reporting, pension administration, transaction processing, cash management, accounts payable and even financial statement disclosures<sup>439</sup>. Some other important areas of accounting covered by an outsourcing firm for any business' purpose includes: budget, accounting charts, data entry, inventory, finance management, bookkeeping, data security and archiving, journal records etc.

A type of outsourcing, practiced in our country too, is factoring. Widely term, factoring has gained immense popularity over the years and in this process a company is able to eliminate the waiting period having it money earlier.

„Accounting business finance outsourcing with the help of factoring procedure can prove to be a useful tool allowing a company to focus it attention to core functions of business development”<sup>440</sup>.

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437 Accounting Law no. 82/1991, art. 10, republished in [Official Gazette, I Part, no. 454 from 18/06/2008](#).

438 Alvis Brazma, [Accounting Help](#) - Outsource Accounting Task Of Your Company, <http://www.articlesnatch.com>.

439 Steven M. Bragg, *Outsourcing, a guide to...selecting the correct business unit...negotiating the contract...maintaining control of the process*, Second edition, 2006, John Wiley & Sons, INC, <http://books.google.ro>.

440 Michelle Barkley, *Accounting Business Finance Outsourcing: Ensure A Professional Approach*, <http://www.articlesnatch.com>.

### 3. Why the enterprises should outsourcing the accounting function?

Steven M. Bragg states for outsourcing arguing that „many of these accounting areas are subject to automation - such as transaction processing, pension administration and payroll - and are therefore nonstrategic. Since they are not of importance to the company's strategic direction, they should be outsourced so that the company can concentrate on more important tasks that will impact its profitability or position in the marketplace”<sup>441</sup>. In deed this is a quite well reason, but is also for the major advantages that are within it.

But outsourcing each accounting topics has own advantages and disadvantages. Therefore, we describe below, generally, the advantages and disadvantages of using outsourcing for a variety of accounting services, being aware that they include also the advantages and disadvantages of outsourcing each accounting tasks in part.

Outsourcing's upholders (from accounting firms to enterprise's managers) bring forward outsource the accounting services it major advantages like:

- outsourcing companies are using well-trained and experienced staff as well as the most current procedure and technological advances availing complete assistance in handling, managing, and recording daily accounting tasks on regular basis ensuring that the accounting legislations are correctly applied to fulfill the contract's agreements for a reasonable fee;
- accounting outsourcing allows entities to focus all of its energies on core functions and diverts the resources like manpower and financial reserves towards other important sectors;
- by outsourcing the accounting, the companies can avoid the major investments in human resources, equipments, software, infrastructure, employees' payment, which are involved by an in-house department;
- outsourcing eliminates the startup time required to recruit, interview, hire and train accounting personnel and also the additional time devoted to sick, vacation days and other job description's rules;
- outsourcing firms' accountants can be mentors and also advisers on how to further make the strategies;
- by outsourcing the accounting activities firms gain decreasing costs, especially fixed cost (in this period of financial crisis is wisely to save money) and transfer of responsibility over the outsourcing company according with Accounting Law no. 82/1991;
- outsource the accounting is a way to face the competitors by managing better other strategies etc.

Yet, outsourcing the accounting function means not only the advantages but disadvantages too, which must be compared and weighted so the decision of the manager be justified one. Accounting outsourcing' risks can be:

- accounting outsourcing can bring with it „lost jobs, wholesale relocation of operations, and even a sense of disloyalty to our native country”<sup>442</sup>;
- hand over such a confidential task in the hands of an outsourcing company is quite risky, mostly because of the possibility of leaking information to the competitors;
- a hasty decision concerning the outsourcing company's reputation or wrong company for outsourcing entities' works may ruin a business' prospects completely;
- outsource the accounting involves a sustainable relationship between the entity and professional supplier which is not certainly especially in a time of recession;
- an outsourcing firm can't always raise to the expectations of the clients so the tendency is to return to in-house practice<sup>443</sup> etc.

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441 Steven M. Bragg, *Outsourcing, a guide to...selecting the correct business unit...negotiating the contract...maintaining control of the process*, Second edition, 2006, John Wiley & Sons, INC, <http://books.google.ro>.

442 Jerry E. Durant, *The New Economics of Global Outsourcing*, January 2009, The International Institute for Outsource Management - [www.outsourcing.com](http://www.outsourcing.com).

#### **4. Why the enterprises should remain at in-house accounting function?**

- for unfeeling trapped by relationships that seem to provide little or no suitable way out;
- for maintain the control over the accounting tasks, over the accounting department' employees, over the accounting information etc.
- because the presence of accounting departments within entity can assure at once the actions and the answers desired, hence, a better communication;
- for keeping the business secrets far from the competitors;
- for support the unity of entity etc.

Even the in-house practice of accounting function can have „black points” too, like below:

- spending additional time hiring and training replacement personnel due to employee turnover, managing internal conflicts and running the risk of employee fraud and embezzlement;
- maintaining the day-to-day accounting and financial transactions and bearing extra responsibilities can become a monotonous task; therefore the employees can ceiling and become bored and disinterested; thus affecting their efficiency and accuracy, which increases the possibility of errors;
- hiring in-house accounting professionals will increase the total cost of an entity with their handsome salaries, bonuses and other such things, and overhead cost of the accounting department;
- increasing the office spaces demand will suffocate real estate market.

#### **5. Conclusions**

Whatever the size of company, accounting is an essential part of all the business functions and it requires a special attention about the way it is carried out in a company. Since even a minor error can pave way towards a perfect disaster, it is imperative on the part of company's managers to be quite carefully while choosing an in-house or outsourced accounting. The decision made can turn a small business into a large organization

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## THE QUALITY OF ACCOUNTING DATA – AN ABSOLUTE REQUIREMENT FOR CREDIBLE BOOK-KEEPING

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*The large variety of uses that accounting products take, as well as their wide range of informational needs require that certain criteria be established, with regards to the quality of accounting data, and these criteria must be fully met. The concept of quality of the accounting data differs within various norms issued by accounting regulation organizations, and such differences are visible particularly in that which concerns the selection and hierarchical organization of qualitative characteristics.*

*Keywords: qualitative characteristics, financial statements, IASB, FASB.*

*JEL Codes: M41*

*The wide range of users for financial statements and the diversity of their informational needs imply a certain degree of subjectivism in interpreting the quality of the data provided by financial statements. That is why there were established certain quality standards that these data must meet.*

An analysis of the definitions provided for the concept of quality of accounting data, as presented in specialized literature, reveals that there are differences with regards to the qualitative characteristics between various conceptual frameworks and texts of accounting regulation.

So that, according to the American regulation body (FASB) the main qualitative characteristics related to accounting data are: comprehensibility, relevance, dependability, and comparability, which are subject to two major constraints:

- the advantages gained by utilizing the information must be higher than the costs incurred by obtaining them;
- there is a limit of significance or relative importance.

Accountants must compare the utility of data with the cost for obtaining and distributing it. Information should only be produced if the cost level for obtaining it is lower than the utility or advantage gained by using it. Also, as per the FASB concept, the users of financial data want this information to be useful in making decisions; that is why the information must be significant, meaning that its users have sufficient knowledge of the economic field, in general, and of the accounting field, in particular.

The criteria based on which we can assess the relevance and dependability, which are considered to be the main characteristics, are expressed in the following:

- the predictive value, the retrospective value, and the opportunity value, which express pertinence (relevance);
- the verifiable character, the neutrality and accurateness, to express dependability.

In that which concerns the conceptual framework proposed by the IASB (The general framework for compiling and presenting financial statements, 2006), it's easy to see that it supports the same four qualitative characteristics, as well as it imposes the same general constraints as with the FASB, which refer to obtaining higher benefits from the use of this information, relative to the cost incurred for obtaining it. This general constraint is completed with another two limitations that need to be met in order for the information to be relevant and credible:

- its opportunity;
- the balance between the qualitative characteristics.

Also, one must note the explicit presentation of the criteria that contribute to obtaining the main characteristics, which are, as proposed by the ISAB, as follows:

- a margin of significance, to ensure relevance;
- an accurate representation, the prevalence of the economic character over the judicial one, the neutrality, the prudence and integrity, to ensure credibility;
- the continuity of methods, to ensure comparability.

In April 2007 the Council of the IASB, aiming to improve the Conceptual framework, made the following decisions with regards to the qualitative characteristics of financial data (Preliminary Views on an Improved Conceptual Framework for Financial Reporting: The Objective of Financial Reporting and Qualitative Characteristics of Decision-useful Financial Reporting Information):

- maintaining accurate representation as a necessary qualitative characteristic;
- separating the criteria of verifiable character from that of accurate representation and considering it as an improvement of the qualitative characteristics rather than a necessary qualitative characteristic;
- clarifying the difference between necessary qualitative characteristics and those characteristics that only improve the quality of financial information;
- conservatism is not compatible with neutrality and therefore it can't be deemed a component of accurate representation.

In January 2009 the IASB Council brought back to attention the issue of classifying the qualitative characteristics of financial information, and proposed differentiating them as essential characteristics (such as relevance and accurate representations) and characteristics that improve the quality of the financial information (the verifiable character, the comparability, the opportunity, and the comprehensibility) (Conceptual Framework Phase A: Qualitative Characteristics and Constraints of Financial Reporting). Also, the document submitted for discussion mentions that the ability to keep with the essential qualitative characteristics ensures that useful financial data is compiled, while the other characteristics only improve the quality of financial reports, given that these characteristics, either separately or together, cannot ensure the utility of information in the process of decision-making, if the reported information is either irrelevant or is not an accurate representation of the actual facts.

In a view opposed to Anglo-Saxon countries, French accountancy brings forward a concept of quality of the accounting information that is not defined through an explicit presentation of certain characteristic features, but by interposing certain principles. According to the PCG (Chart of Accounts) of 1982, „accounting information must provide its users with an appropriate, accurate, clear and complete representation of all operations, events and situations”, without any reference or hierarchy of the quality criteria that such information should meet. Also, taking into account that the PCG does not state who the users of financial statements are, the accounting information aims at creating an accurate image of the facts it represents. Obtaining such an accurate image is only possible, according to the French regulators, if two main principles are complied with: regularity and honesty.

We must also note the major differences existing between the conceptual framework of the IASB and the French accounting system, as the latter does not refer to the users and their needs. Also, the objectives of book-keeping, within the French accounting system, do not refer to inherent characteristics of this system (honesty, correctness, accurate image), while the IASB explicitly relates the quality of the information to the needs and expectations of its users.

On the other hand, we must also take into account the complex process of updating the European accounting directives, which resulted in adopting the European Commission Regulation no. 1606/2002, also known as the „IFRS 2005 regulation” and of the Directive 2003/51/EEC of June-13-2003, of the European Parliament and European Union Council, on improving and updating accounting norms, which comes as an addition to the regulation of the European Commission.

It was necessary to improve the European regulations due to the incompatibility between certain provisions of these directives and provisions of the IFRS. This updating process aimed to create a



common accounting framework for all the companies listed, and in the case of unlisted companies it still ensures the possibility of gaining access to the accounting options provided by the IFRS, as long as the directives are maintained as the basic accounting legislation.

The Regulation no. 1606/2002 aimed mostly to achieve two important targets (L. Malciu, N. Feleaga, 2005):

- adopting and applying the IFRS standards within the European Union, in order to level financial information reports compiled by means of the consolidated financial statements submitted by listed companies, beginning with the 1st of January 2005, in order to ensure a high level of transparency and comparability of this process and, implicitly, an effective functioning of the EU's capital market;
- providing member states with the option to extend this process of leveling both to the consolidated accounts of unlisted companies and to individual accounts.

The amendments brought forth by the directive 2003/51/EEC, adopted on June-13-2003, refer mainly to the following:

- adopting the format for presenting the balance sheet and the profit and loss account as per the IFRS provisions;
- the possibility of re-valuating all fixed assets, including intangible ones;
- the possibility of valuating the assets too at their just value, not only the financial instruments;
- adapting the IFRS to the rules for setting commissions for risks and expenses;
- the possibility of submitting additional financial statements (annual and consolidated);
- the obligation of consolidating subsidiaries that have very different activities;
- canceling the requirement of having a certain participation in a company's capital in order to consolidate it as a subsidiary.

It is our belief that, although this process of orienting the European directives towards the IFRS does not explicitly bring forth anything new with regards to establishing the qualitative characteristics of accounting information, the influence of IFRS-specific provisions will also affect the continental accounting systems, especially when it gets to adopting the format for reporting financial statements as per the IFRS provisions.

In that which concerns the issue of the quality of accounting information in our country, such a problem must be analyzed starting from the stages of the accounting reform in Romania.

Over the period 1990 –1999, the issue of defining and establishing qualitative characteristics of the accounting information was not in the focus of Romanian regulators, as the accurate image was to be obtained by honestly complying with „*the rules on the valuation of the patrimony and all the other accounting norms and principles*” (G.D. no. 704/1993 on approving the Regulation for applying the Accounting law no. 82/1991).

The second stage of the accounting reform was marked by the adoption of the OMPF no. 403/1999, which was, subsequently, replaced by the OMPF no. 94/2001 on approving Accounting regulations leveled with the IV<sup>th</sup> Directive of the European Economic Communities and with the International Accounting Standards. We may say that during this stage remarkable progress was made in defining the concept of quality of the accounting information and establishing some of its qualitative characteristics.

Thus, once the Romanian regulators adopted the General framework for compiling and presenting financial statements, as proposed by the IASB, the quality of the accounting information began being assessed in accordance with the four qualitative characteristics provided by the IASB: comprehensibility, relevance (pertinence), credibility (dependability) and comparability, all of which are presented explicitly in the OMPF no. 94/2001. We must also note how the accounting system began opening towards external users, following these regulations, by acknowledging the role of accountancy as a tool for obtaining information and supporting decisions.

The third stage in the reform of the Romanian accounting system began in the year 2006 with the adoption of new regulations in accordance with European directives. One must note that the new accounting regulations do not deal explicitly with the issue of the concept of quality, making only a reference to the fact that „*accounting policies must be thus conceived as to ensure that, through the annual financial statements, they provide information that meets the following requirements*”:

- they are relevant for the needs of their users in the process of decision-making;
- they are credible, meaning that they provide an accurate representation of the assets, debts, financial status and profit or loss of that entity; they are neutral; they are complete in all significant aspects.”

Even though the accounting regulations currently under effect don't provide a detailed presentation of the qualitative characteristics of financial statements, we must not forget that these are, in fact, the essential features based on which we establish the utility of the accounting information. But, on the other hand, we must also take into account the fact that annual financial statements represent the main objective within the current regulations, and the accurate image that financial statements provide refers to the financial status and performances of the company, which entails a whole new meaning to this concept.

Theoretically, for the accounting information to be useful, it would have to meet all the qualitative characteristics at the same time. In practice, though, this would be impossible, because there are often cases when some of these characteristics are incompatible. According to some authors (L.Malciu, 1998), one way to solve this would be for the regulating body to provide a hierarchy of the qualitative characteristics of the financial information. But not even such a solution would completely solve the problems, since it cannot act as a universally valid solution, given that the relative importance of these characteristics varies according to the informational requirements of all types of users.

Specialized literature (M. Minu, 2002) brings forth the results of certain empiric studies conducted by researchers, which verify the way that the quality criteria proposed within the conceptual framework are well understood in practice, and whether they ensure an effective process of decision-making. The conclusions drawn following these studies refer mainly to the following:

- the qualitative criteria or characteristics are subjective in spite of the framework proposed by the regulators;
- there is a certain degree of dependency between relevance and comprehensibility, the later being ensured through the knowledge held by the users;
- the favourable information concerning the company is also deemed as more comprehensive and influences the process of decision-making.

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## HISTORICAL COST VERSUS FAIR VALUE

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*The current process of accounting globalization is based mainly on the concept of just value. This concept has been the source of vivid debates with regards to its meaning in contemporary accountancy, both in theory and in practice. The increased importance of the concept of “just value”, as well as the constantly increasing importance of financial assets have created the framework for developing a new value-based accounting model. The reshaping of the value-based accounting model consists of reconsidering the basic principles of valuation, allowing accountancy to progress from the system of historical cost to that of just value.*

*Keywords: historical cost, fair value, valuation, accounting system.*

*JEL codes: M41*

In order to understand fair value, the concept must be presented relative to or as opposed to historical cost, as both are, essentially, systems used for valuating the components of financial statements.

One must note that the “historical cost valuation system” is based both on the accounting principle that bears its name and on the principle of prudence. This means we are dealing with an amended historical cost. Firstly, it’s a matter of amortization, which is inherently artificial and rigid, and secondly it’s a matter of depreciation adjustments, which have limited applicability (Tournier J.C., 2000).

According to some authors (Deaconu A., 2004) the fair value and the historical cost are not mutually exclusive. Quite on the contrary, the two concepts are complementary, as each has both strengths and weaknesses.

Amongst all the values that are submitted to accounting valuation, the most utilized one is historical cost. This component can be verified, as it is recorded in the document that proves the property right over a certain asset, such as a promissory note or a debt. The accounting system based on historical cost is widely accepted by accountants due to its objective nature, as it is supported by transactions that have already been completed, and it’s generally easily understandable to its users. (Ristea M., 2003).

Unlike historical cost, the other components are inherently subjective. They are based on estimates made by a qualified person who uses only the objective data made available to him or her, and utilizes well established valuation methods, but still applies his or her personal interpretation, processing and methodological application of such data. So that the people who make valuations-estimates have a certain qualification and training in the microeconomic and macroeconomic fields, they have certain mind abilities and a certain professional skill. That is why it may be said that no valuation conducted by several people for the same item submitted to valuation will be identical.

In fact, when an asset has a current value that differs from the accounting value, accounting principles place that asset under doubt (Damodaran A., 2002) The market value, for instance, is often considered as too unstable and that it is too easy to manipulate, which makes it unsuitable to be used as an estimate for the value of an asset. It follows from this that it would be even less certain to make an estimate based on the flows expected in the future from the use of that asset. To be more specific, the method of estimating the just value based on future receipts (or, at the most, current receipts) rather than past ones is likely to influence the annual result.

Historical cost reflects the real value of items at the date of their entering the company. But any significant subsequent change tends to make the historical cost inaccurate and thus inappropriate for making decisions and ensuring the financing capacity or the purchasing power of the own capital. So that, notwithstanding all the advantages of historical cost, this also leads to a regular under-valuation of the assets, given that it doesn't take into account the effects of price increases on the market. Under these circumstances the accounts don't always reflect the most relevant information for the users to make decisions with. In fact, the conflict between relevance and credibility is the central accounting issue in most professional debates.

Historical cost valuation was first questioned during the periods marked by inflation, when it was noted that an accounting system based on historical costs is an inaccurate reflection of the actual situation. The assets are under-valued and the performance of the company cannot be correctly assessed because profit is over-valued; the company is subjected to an inflation tax and distributes false dividends, which leads to its decapitalization.

These effects have forced the discovery of alternatives that would allow recording the price variations and the re-discussion of financial statements in inflationist economies. So that the countries that had to deal with inflation opted for an inflation accounting system, that allowed them to update the financial statements either directly or by presenting an annex to the financial statements. This accounting system is still in use in some countries that have unstable currencies.

But, as some authors have noted (Deaconu A., 2004) inflation accounting systems fail to reveal the actual value created by the company. This system only re-assesses past transactions based on the observed price raise. So that it still uses historical cost, although it is an updated one.

Beside the irrelevance of historical cost during periods of inflation, some authors (Dumontier P. & Teller R., 2001) also believe that the traditional accounting model is no longer pertinent, and they most often bring the following arguments in support of that:

- *an increase of immaterial investments, in research and development*

Thus, for all the companies that invest a significant part of their resources in immaterial assets, the traditional accounting model fails to reflect the actual capacity of generating future profits, which expresses the actual value of the company (particularly in the case of companies in the field of services and of state-of-the-art technology, for which the main assets reside in the intellectual capital they hold);

- *the "itemized", non-recurring elements that affect a company's results;*

- *the accounting losses accumulated by companies that apply the principle of prudence.* Thus, by recording probable expenses and by not recognizing latent surplus values, companies accumulate accounting losses that don't genuinely reflect their potential.

So that, by not taking into account the company's prospective performance, as described above, and by failing to reflect accurately, in the accounting system, the non-tangible assets, the traditional accounting model falls under doubt of unreliability.

There is another view on the reasons for replacing traditional accounting indicators of performance with other indicators that would provide an image of how value is created for the shareholders, and this view holds the following advantages for the latter system (Casta J. F., Colasse B., 2001):

- they ensure a connection between the value created by the company and its stock market evolution;

- the system allows all executive managers to become aware of the costs incurred by all the capitals used;

- they outline the performances broken down in profit-generating units;

- they establish a relation between the salaries of managers or even other employees and the processes that create value for the shareholders.

Given this change of views with regards to accounting models, one may argue that we are facing a genuine accounting revolution or we are seeing the dawns of a "new accountancy". This change

is imposed by the market and the need to find a value that is closer to economic realities, a value that would allow the system to reflect more visibly the processes that create value for the shareholders.

The determining factors of the accounting revolution are derived from the ones that led to an increase in the importance of creating value for the shareholders; among them, the following have a direct impact on the accounting system:

- *The development of capital markets*

The pressure exerted by capital markets on creating value for the shareholders has had strong effects on accounting models. So that the concept was transposed to accountancy also, particularly with regards to asset valuation, a process that was initiated by companies listed on the American capital market.

- *The need for a uniform accounting system throughout the world*

In present days there is a visible increase in the number of companies that are purchased at often high prices. The purchase price is based on the future of the purchased company, which is to say it is based on its future flows. Under these circumstances, the past accounting values related to the assets are no longer significant in front of a high purchase price used for purchasing the whole of these assets.

- *The increased importance of institutional investors*

The behaviour of institutional investors, that has also been imitated by national companies listed on that country's capital market, has rendered obsolete the strictly accounting indicators, such as the period's output or the distributed dividends. As explained above, these investors are interested in the value created by the company issuing the securities.

The fact that the valuation based on historical cost has lost its relevance, and the need to adapt the accounting model to the investors' requirements, has imposed new solutions, one of which was to utilize other valuation bases than historical cost. During recent years, accounting regulation organizations have established the practice of valuating assets based on the fair value, and that to such a wide extent as to include almost all the elements of the balance sheet.

Currently, the need for valuating assets based on the fair values is mainly a requirement of the investors, who are interested in administrating their share of the capital, while other users of the accounting information (banks, suppliers, customers, employees or public institutions) have different informational needs with regards to the company's accounting system. Company management is currently focused on maximizing the value for the shareholder. Creating value for the shareholder is much more than just a way of managing a company, as it has been known for over twenty years, along with the development of capital markets. Beginning with the 1980's, it became an essential element of management culture, a genuine ideology that is applied in practice in the management of an ever increasing number of companies.

The main principle of the system that creates value for the shareholder is the cost of invested capital, relative to which it becomes possible to assess the company's performance. And that is because any result obtained is not valuable by itself but only by comparing it to the resources or capitals invested in the company by shareholders and creditors, as well as to the cost of such resources. The very concept of creating value is a prospective one, as it refers to the expected, comparative result to be obtained. The performance achieved on the market of goods and services (in the company) can be constantly compared to the performance offered by the capital market.

So that, during recent years, under the pressure of investors and with the contribution of accounting regulation organizations (FASB, IASB, etc.) we are witnessing a change of the traditional accounting model based on historical cost, which has turned into an *accounting model based on the fair value* (the market value of assets and liabilities if there existed efficient markets), which would meet the requirements for „*maximizing share value*” A company creates value only to the extent to which the income brought by its activity is higher than the cost of

means utilized to carry out its activity. That is to say that value is created if the payment for an activity is higher than the payment for the means utilized for that activity (Tournier J.C., 2000). The main principle of the system that creates value for the shareholder is the cost of invested capital, relative to which it becomes possible to assess the company's performance. And that is because any result obtained is not valuable by itself but only by comparing it to the resources or capitals invested in the company by shareholders and creditors, as well as to the cost of such resources. The very concept of creating value is a prospective one, as it refers to the expected, comparative result to be obtained. The performance achieved on the market of goods and services (in the company) can be constantly compared to the performance offered by the capital market. Traditional indicators, such as economic profitability or other performance indicators that, however, did not fit the market comparison, can no longer meet the requirements for making administrative decisions.

There are more and more companies interested in establishing and analysing the profitability of invested capitals relative to the cost of such capitals. The cost of capitals is assessed relative to the expectations of investors from other placements, which, in their eyes, have minimum profitability. The privileged reference for estimating the costs of capitals is the capital market. It is this market that shapes the behaviour of managers and validates their decisions. At the same time, the capital market forms an accessible data base that constantly provides information on performance standards.

The controversy that exists between supporters of the two valuation methods did not start from doubting the relevance of the information based on market values. The debate was, and still is, rather around the issue of the period (the moment) for which it is relevant to use the prices chosen for the accounting valuation. While historical cost makes use of market prices at the time when the assets were acquired or the debts were contracted, fair value opts for current ones.

The advantages of fair value as compared to the restraints of historical cost are presented briefly in the table below (Hague I. & Willis W.D., 1999):

**The characteristics of fair value and historical cost**

| <b>Fair value</b>  | <b>Historical cost</b>  |
|--|---|
| It improves the comparability by valuating similar elements in a similar way   | It fails to ensure the comparability of information, as similar elements are valuated for inhomogeneous values (according to the date of their registration)  |
| It provides information about the benefits expected from the assets or about the "burdens" taken by contracting debts, under current economic circumstances.                 | It provides information about the benefits expected from the assets or about the "burdens" taken by contracting debts, according to the economic situation existing at the date of their purchase or contracting. |
| It reflects the management's decisions whether to keep the assets/debts or to take up new ones, and their effects on the financial performances and position of the company. | It reflects the effects of the decisions whether to purchase assets or contract debts, but ignores the effects of the decisions whether to keep or not contract them.   |
| It reports the gains or losses resulting from price changes, when such changes occur.  | It reports the gains or losses resulting from price changes, when they are obtained by selling or cancelling them, even if their selling or cancelling have not been the cause of such gains or losses.           |
| It requires that accounting reports be compiled according to the current market price, which might imply making accounting estimates and                                     | Accounting reports are drafted based on prices resulting from past transactions, with no reference to market prices.  |

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| would create problems as to the credibility of the information. |  |
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According to some authors (Shortridge R. P., Schroeder A., Wagoner E., 2006) the controversies around fair value valuation are rooted in the debate over the relevance and dependability of accounting information. Thus, the supporters of fair value argue that financial statements made based on historical cost are not relevant because they don't provide information about the current value of elements. The critics of fair value argue that the information provided by financial statements made based on just value are not dependable because they are not based on verifiable transactions and, therefore, they cannot constitute grounds for making decisions.

In comparing the accounting system that is based on historical costs to the one based on fair values, some authors (Shortridge, Rebecca Toppe, 2006) note that the accounting system based on historical cost puts more stress on conservatism in valuation, and that is why its worst-case scenario is reported in the financial statements, while the accounting system based on fair value allows managers to come forward with "better" values for the investors, ignoring the concept of conservatism.

Some of the advantages of fair value valuations, as mentioned in specialized literature, (Penman S. H., 2007) are as follows:

- investors are interested in value, rather than costs, so that's why information must be reported using fair value;
- in time, historical cost becomes irrelevant for establishing the company's financial situation. Prices provide an updating of the information regarding the value of the assets;
- the accounting system based on fair values reports an economic result;
- the fair value determined based on market prices is not affected by factors that are specific to certain companies.

On the other hand, some authors (Wallace W. A., 2008) believe that replacing the historical cost with the market value and cancelling most of the differences between the gains and the losses, both made and hypothetical, would be a major mistake. In support of these statements, the author of the current paper expressed the following concerns: If we paid US\$ 40,000 for a house, and since that moment the value of that house has varied between US\$ 35,000 and US\$ 300,000, and its current value is of US\$ 200,000, how do we assess our investment? Is it right to say that we have lost US\$ 100,000 or that we have won US\$ 160,000? Isn't the actual assessment of the investment related to the moment when the investment was purchased, respectively sold, rather than to the market value existing between the two moments?

The relation between historical cost and fair value may allow us to define, and in some cases apply, some of the following accounting systems:

- the accounting system based on historical cost, which involves using historical cost both for the current registration of transactions and for drafting financial statements;
- the accounting system based on fair value, which involves using the fair value both for the current registration of transactions and for drafting financial statements;
- the mixed accounting system based on historical cost and just value, which involves using historical cost and, in some cases, the just value, for the current registration of transactions and for drafting financial statements.

In that which concerns drafting financial statements, fair value may be utilized as follows:

- within a single financial statement, along with the historical cost for which some elements were valued;
- within distinct financial statements, in which all the elements are reflected at their just value, and they come as an addition to the ones expressed in terms of historical cost.

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## THE FINANCIAL SITUATION WITHIN HYPERINFLATIONARY ECONOMIES

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*The present paper contains not only a general view on the inflation phenomenon, but also a presentation of its influence on the currency and non-currency elements present in the financial references. Reassessment is proposed as being the necessary operation to partly correct the incidence of inflation over these elements.*

*Key-words: reassessment, purchasing power, fair value, value, reality*

*JEL Classification: M41: Accounting*

The inflation has been defined as being the increase process of the general level of consumer prices, seen as a durable split in the normal rapport between the currency and the transactions volume. Despite the cause that triggered the inflation, its existence, perpetuation and aggravation lead to imbalances within the economy of a country and from the point of view of the currency depreciation, it has multiple consequences: it has a negative influence upon the economic agents, their savings decrease, they have fewer resources, the production decreases, the creditors are disadvantaged, the long-term productive investments lose their support while the depreciation of the national currency increases.

The causes of inflation are connected to the currency aspect and they can be determined only by linking them with the history of money and of its various aspects. Certain economists claim that the inflation is connected especially to the currency offer, its supplementation being determined by the decisions taken by the specialized economic agents with the view of increasing their assets- their credit money (M. Friedman); however, others believe that the main cause is the production insufficiency which leads either to inflation through offer or to the employees' salary increase which is not backed up by a productivity increase- a phenomenon which according to some specialists in the domain, represents the real inflation.

The inflation manifests itself under the following aspects: the growing tendency to keep the savings under the form of non-currency assets or in a stable currency, the appreciation of values and prices by relating them to a stable currency, more expensive credits, etc.

If we take into consideration the intensity criterion, then the inflation can be divided in several categories: moderate, open, rapid, hyperinflation, stagflation and last but not least slumflation within which coexist rapid inflation and economic recession, which ultimately leads to the economic decline. Hyperinflation is a very dangerous type of inflation in which prices increase in short periods of time, creating general imbalances within the national economy.

The financial situations have to offer information about the financial position, performances and the changes in the financial position of a company. However, under the circumstances of a hyperinflationary economy, it is necessary to make a reference, in which the exploitation results and the financial position are reassessed, because the purchasing power is decreasing and therefore the conveyance in the national currency of the transactions or other events which took place in different moments of the same accountancy period, will deform the rapport leading to inconclusive results.

Furthermore, in order to offer the users qualitative information with the help of the financial situations, it is necessary to classify the structural elements of the situations presented under

currency and non-currency form, by taking into consideration the fact that during inflation periods, in spite of their intensity, there is the hypothesis that the creditors might lose while those who borrow money might win due to the fact that the payment of debts is done using an inflation devalued currency and thus the creditors no longer recover the entire value even though the circumstances are similar. This classification is based on the idea that the expression of value under the form of a currency unit without keeping any connection with the material form, assures protection against price changes, because the currency unit remains constant while its purchasing power changes.

The currency elements are those assets or debts whose value is fixed to a certain amount of currency units and which are not affected by the changes occurring in the currency purchasing power (for example: cash and bank deposits, debentures, commercial effects, short-term investments, commercial and fiscal debts, a part of the in advanced expenses).

The non-currency elements are those assets or debts whose value increases or decreases according to the market value and which will be used in the future production activities or for the sale of goods and services (assets, stocks, delayed taxes, owners' equity, in advance payments which were given for certain transactions, general guarantee bonds for the non-currency assets). The advances are of a non-currency type only if they are adherent to the selling/purchasing transactions, if not they belong to the class of currency elements. The delayed taxes are non-currency elements because they do not determine a cash flow.

The inclusion of the in advanced expenses within this category raises controversies. Some economists (for e.g. L. Johnson), include them in the class of the non-currency assets because they are connected to a transaction that involves the transfer of goods towards an enterprise, which has already taken place or it is unfolding or will take place in the future; others (take the American organization named AICPA, for example) argue that this advance expenses have to be considered claim elements belonging to the present period created for a future period, when they materialize under the form of in advanced payments of the debts that will appear because of the products or services. Johnson proposes a classification in currency and non-currency elements, based on their connection with real goods and services and not on the expression based on constant units or on those affected by the price changes. According to him, the currency assets are available resources which are not engaged in the production of goods and services while the real non-currency assets are already engaged in the production of goods and services and whose assessment is directly affected by the price changes. Therefore, the currency debts represent bonds which are expressed through constant measuring units, reflecting a present value; on the other hand, the non-currency debts are about to be reimbursed through the exit from the group of non-currency assets, whose values is directly affected by the prices level.

This classification can prove its usefulness in the assessment of these elements under the circumstances of the financial situations determined by the hyperinflationary economies within which the rapport is influenced by the belonging to the currency and non-currency class, thus changing the concept of assessment through constant currency units into the concept of drawing up financial situations through a constant purchasing power.

The currency and non-currency units behave differently under inflation circumstances and therefore the rapports must take into consideration the reality of the transactions that have been done by the enterprise; but they must not contain the gains or losses exclusively owed to the variations of the purchasing power, this being achieved by the readjustment of the historic cost. It is necessary for these situations to make the distinction between the expression through constant purchasing units and the expression through constant purchasing power. According to this theory, the last variant is the correct one. It is also necessary to add a supplementary information if the result has been influenced by the owning of currency elements since they are subjected to numerous changes within hyperinflationary economies.

The international agent that settles the rapport within the hyperinflationary economies is the IAS 29 (redefined in 1994) which is used in “primary financial situations, including the consolidated financial situations belonging to any enterprise which makes the rapport in the currency of a hyperinflationary economy”. Therefore, the financial situations will be adjusted to inflation, because otherwise they would contain values which are not comparable from one accounting period to another and which would not respect the information homogeneity and continuity and thus leading to an incorrect reflection of the financial position.

We shall follow the structure of the financial situations on their constituent parts, by taking into account their grouping into currency and non-currency elements, the way in which they are influenced by the inflationary economy and the way in which assessment is done under these circumstances.

The non-currency patrimonial assets are: the intangible assets (the set-up expenses, development expenses, concessions, patents, commercial brands and other assimilated rights and values, the commercial fund and other intangible assets), the tangible assets (terrains, buildings, technical installations, means of transport, animals, plantations, furniture, office devices, protection equipment for the human and material values, and other corporation assets), the present tangible and intangible assets, a part of the financial assets, participation titles, financial assets under the form of participation interests, equivalent equities, asset equities, stocks, in advance registered expenses, the debts and the treasury elements expressed in foreign currency.

The first four enumerated categories are assessed at the registration price of the date they entered the patrimony. If they are not reassessed, there is the possibility that they might be underestimated in the future, by comparing them to the market values, excepting those which deteriorate morally with the passage of time (for example, the office devices). If by any chance they are sold, a difference might occur because the price obtained is superior; this being the situation for the selling of terrains as well. The profit is not real because it represents a price increase based on powerful currency depreciation. Its reflection in the profit and losses account leads to the taxation of the transaction and thus the enterprise will have to pay a tax on inflation, the state being the only winner. The inflation impact upon the value of capital assets is greater if the assets are expected to resist for a long period of time- this being owed to their regaining through amortization.

The stocks represent materials, works and services destined to be consumed at their first usage and to be sold when they have the position of merchandise or products, resulted from processing as well as from the unfolding production.

Under inflation circumstances, because of the prices increase, the enterprise wins out of stocks but does not usually register this profit in the account. There are several ways for stock assessing, such as: WAC, FIFO, LIFO and NIFO.

The WAC method (weighted average cost) is efficient as long as the economy is a stable one, but when the prices increase, the method is used to determine the consumption average value. On the other hand the FIFO method is used to determine the minimal consumption value. Nevertheless, under inflation conditions the LIFO method is preferred because it assesses the consumption at its maximum value, while the accounting result is presented at a minimal value. Thus the desynchronization effect is corrected, because the consumption value approaches the value of the stock replacement costs. The NIFO is a method, through which the outs assessment is done at the anticipated or the present cost. The last method deserved to be mentioned is the one of the pre-established price, calculated on the basis of medium prices and corrected with the help of the price variation index. (This method refers only to the consumed stocks).

Considering the fact that at a balance sheet level, the inflation impact is reflected through an increase in value of stocks, which will significantly influence the final result, their assessment requires utmost attention. Therefore, the patrimony stocks and assets in general, as they appear in the financial situations do not reflect reality when they are put into practice. This happens for

various reasons, such as: their accountancy value is underestimated, because it is registered on the basis of the historic costs, the value plus, resulted from the comparison of the utility value with the entrance value, is not accounted; in the balance sheet the elements, appeared in different moments, generate inhomogeneity; most of times the reassessments are have a partial character.

The patrimony liabilities are: the capital and the stocks formed of social capital, capital connected bonuses, reserves resulted from reassessment, the present and the reported reserves and results, incomes registered in advance, debts expressed through a foreign currency. Under inflation circumstances, the capital is measured with the help of an instable currency, while the elements that compose it totalize values that have a different purchasing value, and thus not assuring the homogeneity appreciation.

The in advance incomes are also affected by inflation, because at the registration moment the power of the currency unit is greater than when it is registered in the income category of the profit and losses account. The further in time this moments are, the more powerful their effect is. Therefore, the liable patrimony elements are underestimated at the date of the accounting period ending, thus forming an inhomogeneous and irrelevant adding.

The currency elements are the following: a part of the owners' equity representing the investment subventions, a part of the financial assets representing the asset claims and the deposit slips which will be done for financial assets, claims, liquidities, or equivalent liquidities expressed in the national currency, operations that are about to be clarified, bonuses referring to bond reimbursement, provisions for risks and expenses, debts resulted from borrowings and assimilated debts, assimilated suppliers and counts, creditor clients, other debts, all of them expressed in the national currency.

Out of these, the claims form a special category. The inflation effect upon these is a negative one, because they generate loses which increase according to the enchasing duration. Thus, if the enchasing is done according to the contract, then loses occur due to the difference in the purchasing power extant between the moment in which the enchasing was done and the moment in which the sale (the service) was performed. If the enchasing is done after the deadline, then the loss cannot be foreseen and if the enchasing no longer takes place then the company is has to ask for legal action to be taken.

The inflation has a greater impact in the case of claims connected to participants and of long-term receivables, because the borrowed sums do not have interest rates or if they have, then they have an insignificant value and therefore the enterprise that granted them can bare the losses concerning the purchasing power. Financial claims, representing sums of money that the state owes to the enterprises, are also affected by the inflation because there are no legal stipulations concerning the updating of their values.

In the case of debts (commercial, financial, and others), the inflation effect is totally reversed from the one manifested in the case of claims, especially in the case of commercial debts. The enterprise gains, if it has unpaid debts, but only if in the contract on which they are bases, does not explicitly stipulate, that the respective debts have to be updated at the exchange rate of the payment date. In the case of financial debts that are paid in the due time, the effect of the inflation is null. If the payment date is over passed then penalties that are superior to the inflation rate, will have to be paid.

The inflation has a negative effect upon securities, sums extant in the bank accounts, money extant in the payment counters and letter of credits. Thus, short term investments determine inhomogeneous values, while their accountancy values at the inventory moment is different from the market value, emphasizing the inflationary effect on enterprises that owe equities (if there is a minus in the accountancy value, then it is registered as provision for the equity depreciation and if it is a plus, then the increase is no longer registered).

The sums extant in bank accounts are affected by inflation thorough a decrease in their purchasing power and therefore, it is advisable to invest them, even for a short period of time, so

as to make the investment productivity equal to the inflation rate throughout the investment period or even to obtain a gain.

The letters of credit are also affected by the inflation because they do not have interest rates. Countermanding determines losses because of the depreciation of the purchasing power. If they are used, an advantage is obtained only if the sum stipulated in the contract is not brought to the inflation rate; however, such a situation cannot occur in an inflationary economy. Considering the fact that the currency elements are expressed at their nominal values, it is advisable for the company to have a negative currency situation.

The accounting of the inflation effects upon currency elements (debts and claims) will be complete, if the contract that is at the basis of the emergence of these elements has updating stipulations and if the enclashing date is over passed and the stipulated rate is at least equal to the inflation rate. If the interest rate is inferior to the inflation rate, then the only thing that is accounted is the gaining part or the loss which results from the contract stipulations.

When assessing the performances of an enterprise within an inflationary economy, the accountancy has to measure the results on three grounds: patrimonial, economical and financial. The span of time ranging from the beginning and the end of the accounting period is characterized by uncontrollable variations; the accountancy that will base its analysis on historic costs will mirror a deformed situation which can lead to unrealistic decisions. Therefore, reassessment represents the solution to combat the inflation negative influence.

### **1. REASSESSMENT SEEN AS AN ACCOUNTANCY REMEDY**

Due to the situation created by the inflation, which produces distortions in the accountancy based on historic costs, a partial solution for limiting the negative effects would be the reassessment through which the constituent parts of the financial situations are updated while the information credibility and quality is increased.

At an international level, the reassessment process is regulated by the IAS 16 and the IAS 38, which impose the replacement of the asset net book value with its fair value, defined by IAS 16 as the market value. This is established on the basis of an assessment and if the asset is sold then it is assessed at the replacement cost (without an allowance for depreciation). If the fair value differs a lot from the accountancy value, then a reassessment is done. According to IAS 16, annual reassessments can be done.

In the case of inflationary economies, the assessments rhythm will be established by accountancy on the basis of the economic frame evolution. The reassessment must assure homogeneity in the remedy: "If a tangible asset is assessed, then the whole class of the respective element has to be reassessed as well" (IAS 16, art.34). If the asset value is increased through reassessment this is registered in the credit for owners' equity under the name of "reassessment differences"; if thorough assessment the accountancy value of an asset is diminished, then this is considered as an expense; however, these operations must not lead to the profit ascertaining.

The IAS 38 stipulates that in the case of intangible assets their fair value must be established by a rapport to an active market; if there is a market absence for this kind of asset, then it is maintained within accountancy as a cost, with the exception of any accumulated depreciation and any losses cumulated from the depreciation. In the case of the reassessment of an intangible asset, the depreciation cumulated at the reassessment date is either re-expressed proportionally with the change in the fair value of the asset so as to make its accountancy value after reassessment equal to its reassessed value or it is eliminated from the fair accountancy value of the asset and from the net value re-expressed at the level of the asset reassessed value.

The application of IAS 16 in Romania, has encounter numerous problems because, on one hand it involves huge amounts of money owed to assessors, while on the other, the bringing to the their fair value of fixed means and terrains would increase the allowance for depreciation expenses and the construction taxes.

The reassessment activity in our country is regulated especially by the Order no. 2374/2007. This order ratifies the following: “The economic entities can reassess the tangible assets extant at the end of the financial accounting periods, by reflecting the results within the accountancy documents.” It can be observed the usage of the modal verb “can”, which does not demonstrate the imperative character of the regulation and thus the reassessment is just an allowed operation. The document also stipulates the necessity of having explicative documents, the fact that the reassessment is done at the fair value and the reassessment frequency. If the reassessment result is increased in comparison with the fair accountancy value, then the order suggests methods for fixing this situation.

In conclusion, under the circumstances of a hyperinflationary economy, the reassessment is necessary for reflecting the accountancy reality with the purpose of drawing up a correct financial situation.

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# TAX OPTIMIZATION THROUGH TRANSFER PRICING, COMMON AND MANIPULATIVE PRACTICE

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*This paper is about how multinational enterprises choose transfer prices in the presence of differential corporate income tax rates. A transfer price is a value placed on the goods which are traded between divisions of an organization. We review and extend the core literature transfer price manipulation to avoid taxes. Manipulations are often used by multinational enterprises causing substantial long term detriment to a country's revenue raising process. This paper attempts to make the subject of transfer pricing accessible to researchers and others interested.*

*Keywords: transfer pricing, tax optimization, tax reduction*

*Cod JEL: H21, M41*

**Research methodology:** The object of the present investigation is transfer pricing and tax optimization through transfer pricing.

The investigation technique: research literature, laws, logical analysis, generalization. While evaluating transfer pricing the English, French and Romanian literature was used. As a research component, we approached the deductive method (extracting conclusions based on available data), and the research type is the fundamental one; the utility of such research, although it does not identify a problem with the purpose of solving it, is reflected in its contribution to the future developments of this research, by ensuring premises for forthcoming studies.

## **1. Introduction**

Multinational enterprises have the ability to use transfer pricing policies to maximize their global profits in a world characterized by different international tax rates, governmental regulations, foreign exchanges rates, currency manipulation and other economic, cultural and social factors.

Over the years, transfer pricing of goods has undeniably become an important international business issue of multinational enterprises and a nightmare problem for tax authorities, relating to the fact that multinational enterprises could use these transfer prices to shift profits between related parties through cost of goods sold, having at their disposal several alternative methods of structuring and financing their foreign investments to achieve tax reduction primarily. These alternative methods have important tax implications and there is considerable evidence that tax considerations strongly influence the choice that companies make.

## **2. The gist and means of transfer pricing according to literature review**

Transfer prices are the prices at which an enterprise transfer goods and intangible property or provides services to associated enterprises.

This is defined as the price paid in a business transaction, whether for tangible property, intellectual property or the provision of services – between companies under related party control (Abdallah, 2004) and is often a significant component used in assessing performance within large segmented firms (Langfield-Smith, Smith, 2005).

According to literature review, the studies regarding transfer pricing deals with: tax accounting studies investigating the degree to which national tax rate differentials lead to transfer pricing manipulation and income shifting (Klassen, Lang, Wolfson, 1993; Harris, 1993; Iacob, 1996; Swenson, 2001; Gupta, Mills, 2002); tax regulations as one of the environmental factors



(Emmanuel, Mehafdi, 1994; Cravens, Shearon, 1996; Cravens, 1997); optimal transfer pricing method from a fiscal point of view (Swenson, 2001; Van Mens, Porquet, 2001; Douvier, 2005); maximize the value of the corporation (Michaels, 2005).

Previous studies have also provided evidence regarding what types of multinational enterprises are more likely to manipulate transfer prices. Conover and Nichols (2000) investigated the effect of firm size on the use of transfer pricing to shift income and found that larger companies are more likely to shift income through transfer pricing. Jacob (1996) confirmed that multinationals with the greatest level of intracompany transfers had the most opportunities and the greatest incentive to shift income through transfer prices.

### **3. Tax optimization through transfer pricing. Illustrations**

Transfer pricing strategies are now commonly employed among multinational enterprises in today's global marketplace. This practice is largely due in part to the tax and other benefits that can be obtained.

The income tax policies and of course, regulations of different foreign countries are not the same and the so called international taxation has a significant effect on multinational enterprises in making their long term management decisions. Taxation affects where an multinational enterprises invests, how it markets its products, how to finance and the choice of a transfer price (Muller, Gernon, Meek, 1997) and of course, tax considerations strongly influence the choice that multinational enterprises make (Hines, 1999).

The goals of transfer pricing within multinational enterprises can be: internal goals and external; including here performance evaluation of subsidiaries and their managers, motivating managers as internal reasons and to reduce taxes, reduce the foreign and domestic tax bill and strengthen the foreign subsidiary as external reasons. The multinational enterprises also use transfer pricing to reduce foreign exchange risk and to put themselves in a better position to relative to its competitors, to hide fiscal success, for profit maximization and tax burden minimization (Dawson, 2000; Mehafdi, 2000).

It is important to note that following criteria must be met for establishing an efficient international transfer pricing system for foreign operations:

- It should increase the global profit of the multinational enterprise by minimizing total income tax liability, reducing the foreign exchange losses, minimizing the international transaction costs and paying fewer tariffs on both imports and exports.
- It should motivate foreign subsidiary managers to increase their efficiency and maximize their profit according with the objectives of top management and in the same time helping the foreign subsidiary to compete with other firms.

In an attempt to minimize taxes, the use of transfer pricing among multinational enterprises is often abusive, consider the statistics from Baker (2005) and the study undertaken by Dawson (2000), Hansen (1992), Mehafdi (2000) and the primarily scope is to reduce taxation. A more recently study, undertaken by Ernst and Young (2008) in our country suggest that companies use transfer pricing as tax optimization and that tax considerations strongly influence the choice that companies make (over half (55%) of all respondents point this answer).

Many of these methods are legal and we refer to them as creative accounting practices mostly, transfer pricing manipulation being the practice of obscuring the actual value of transactions so as to generate the most profit for the businesses involved.

Multinational enterprises have been commonly associated with transfer pricing manipulations because of their dominant position in the market place for particular products and services, and because they have more opportunities, through their world-wide networks of related companies, to carry out transactions at different prices from those between businesses independent of each other.

But how can tax reduction be achieved using transfer pricing?

The answer is very simple: by transferring goods to countries with low income tax rates at the lowest possible transfer price and by transferring goods out of these countries at the highest possible transfer price. In countries with high income tax rates, goods transfer into the country should be at highest prices so that the cost to the buying subsidiary will be high, to minimize its eventual tax liability.

These practices have an important effect on reallocating taxable income from countries with high tax rates to countries with low tax rates which influences the revenue of the countries and also changes the timing of income recognition for tax purposes.

To illustrate the income tax effects using the transfer prices for cross-border activities we can use the following example. Supposing that the Cyprus subsidiary of a German multinational enterprise produces 15.000 units and sells 12.500 units to the Sweden subsidiary, also owned by the German multinational company, at 20€ a unit. The Sweden subsidiary sells these units for 40€ per unit to an unrelated customer.

Considering that the income tax rate of Cyprus is 10 percent and that of Sweden is 28 percent, is obvious that using a higher transfer pricing between the two subsidiaries there is a tax reduction effect.

As can be seen from Table 1.a, with the low, original, transfer price, the Cyprus subsidiary sells at 20€ per unit and pays income taxes of 13.000€, the Sweden subsidiary pays income taxes of 28.000€ and the multinational company pays a total income taxes of 41.000€.

Table 1.a The Tax Effect of Transfer Pricing Strategies

| Transfer Price<br>(20€)                     | Cyprus<br>Subsidiary | Sweden<br>Subsidiary | The multinational<br>company |
|---|----------------------|----------------------|------------------------------|
| <b>Sales (12.500 units at 20€ per unit)</b> | 250.000 €            | 500.000 €            | 500.000 €                    |
| <b>Less Cost of Goods Sold</b>              | 75.000 €             | 250.000 €            | 75.000 €                     |
| <b>Gross profit</b>                         | 175.000 €            | 250.000 €            | 425.000 €                    |
| <b>Less operating expenses</b>              | 45.000 €             | 150.000 €            | 195.000 €                    |
| <b>Net income before tax</b>                | 130.000 €            | 100.000 €            | 230.000 €                    |
| <b>Income taxes (10% &amp; 28%)</b>         | 13.000 €             | 28.000 €             | 41.000 €                     |
| <b>Net income after tax</b>                 | 117.000 €            | 72.000 €             | 189.000 €                    |

If the transfer price between the Cyprus subsidiary and the Sweden subsidiary grows up at 25€ per unit, as can be seen from Table 1.b, the Cyprus' income taxes go up by 6.250€ to 19.250€, but the Sweden's taxes go down by 17.500€ to 10.500€. Therefore, the total income taxes go down by 11.250€, from 41.000€ to 29.750€. The consequences of charging a higher transfer price are a decrease of total income taxes by 11.250€ and an increase of consolidated net income by the same amount.

Table 1.b The Tax Effect of Transfer Pricing Strategies

| Transfer Price<br>(25€)              | Cyprus<br>Subsidiary | Sweden<br>Subsidiary | The multinational<br>company |
|--------------------------------------|----------------------|----------------------|------------------------------|
| Sales (12.500 units at 25€ per unit) | 312.500 €            | 500.000 €            | 500.000 €                    |
| Less Cost of Goods Sold              | 75.000 €             | 312.500 €            | 75.000 €                     |
| Gross profit                         | 237.500 €            | 187.500 €            | 425.000 €                    |
| Less operating expenses              | 45.000 €             | 150.000 €            | 195.000 €                    |
| Net income before tax                | 192.500 €            | 37.500 €             | 230.000 €                    |
| Income taxes (10% & 28%)             | 19.250 €             | 10.500 €             | 29.750 €                     |
| Net income after tax                 | 173.250 €            | 27.000 €             | 200.250 €                    |

To eliminate the income taxes in the foreign subsidiary with the highest taxation rate, in our case the Sweden subsidiary, is very important to determine the optimum transfer price that can be used in cross-border intracompany transactions. As can be seen from Table 1.c, at the transfer price of 28€ the net income of the Sweden subsidiary reaches the zero level, therefore this subsidiary, even it is located in a country with a high taxation, pays no income taxes. At this transfer price, the total income taxes of the multinational company reduces by 18.000€, from 41.000€ (at the transfer price of 20€) to 23.000€, the total net income growing up by the same amount.

Table 1.c The Tax Effect of Transfer Pricing Strategies

| Transfer Price<br>(28€)              | Cyprus<br>Subsidiary | Sweden<br>Subsidiary | The multinational<br>company |
|--------------------------------------|----------------------|----------------------|------------------------------|
| Sales (12.500 units at 28€ per unit) | 350.000 €            | 500.000 €            | 500.000 €                    |
| Less Cost of Goods Sold              | 75.000 €             | 350.000 €            | 75.000 €                     |
| Gross profit                         | 275.000 €            | 150.000 €            | 425.000 €                    |
| Less operating expenses              | 45.000 €             | 150.000 €            | 195.000 €                    |
| Net income before tax                | 230.000 €            | 0 €                  | 230.000 €                    |
| Income taxes (10% & 28%)             | 23.000 €             | 0 €                  | 23.000 €                     |
| Net income after tax                 | 207.000 €            | 0 €                  | 207.000 €                    |

### 3. Conclusions

Multinational enterprises may use their own strategies or manipulation of transfer pricing to take advantages of differences in tax rates and other factors in different countries to reduce their tax liability and achieve their corporate goals.

Very substantial adjustments have frequently been made by the use of transfer pricing legislation. Tax authorities should be conscious of the existence of this powerful although not all embracing weapon in relation to international tax problems.

Minimization of taxes through the use of transfer pricing is and will continue to be a common and pervasive practice among multinational enterprises. It is clear that although regulations are in place by OECD to make the practices we refer to, more uniform, the practices aimed at minimizing taxes can be circumvented and may sometimes be used to avoid taxation.

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# CONSIDERATIONS ON THE FAIR VALUE OF REVENUES RECOGNIZED IN FINANCIAL STATEMENTS

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*This paper approaches a frequently discussed subject in the context of the current global economic crisis, namely the fair value. The accounting concept, which implies that entities – in a different degree from one accounting system to another – should recognize assets and liabilities at market values and often in the profit and loss account, has been accused of exacerbating the dramatic decrease in value of tangible and financial assets. The transparency ensured by fair value and its credibility are subject to polemics. In our opinion fair value increases the quality of accounting information, if it is correctly determined, disclosed and controlled. After a theoretical and normative presentation of the concept, we herein supply a solution for establishing fair value according to the international accounting regulations. The paper focuses on the issue of revenues and explains the fact that their corresponding fair value is determined through the discounted value. Using demonstrative case studies, it develops punctual methods for establishing discount rates and present values specific to revenues.*

*Keywords: fair value, revenues, discounted value*

*JEL classification: M40, M41*

## **1.Introduction**

The study analyzes from the point of view of value, including fair value, one of the outcome elements of an economic entity i.e. revenues. Generally, the recognition and measurement of balance sheet elements (assets, liabilities and equity) influence the related expenses and revenues, which will receive the same value. However, there are circumstances in which some expenses or revenues imply a distinct valuation from the corresponding balance sheet element, circumstances which will be outlined hereinafter in the case of revenues. The particularity of their valuation is outlined when their fair value is determined.

Fair value is an accounting concept, mainly used in the Anglo-Saxon accounting systems, but undertaken in the last years by the European accounting, starting with the Fourth Directive of the European Union. In the Romanian regulations applicable to all enterprises, according to OMFP no. 1752/2005, the concept has a limited utility, as it is explicitly mentioned only in few cases and assumed in others. The historical cost remains predominant as a valuation basis for financial statements elements. However, the situation is different for listed companies which apply international financial reporting standards, IFRS, for their consolidated accounts, and optionally for their individual accounts. These standards require the application of fair value in several more cases, including the case of revenues.

## **2. What does the concept of fair value imply?**

Internationally there have been, and still exist, active debates concerning this subject on a conceptual and practical level.

In Romanian the term is translated from the Anglo-Saxon expression “fair value” but, from a literary point of view, it would rather have the significance of honest or loyal value (Obert, 2004: 61).

In what regards the content of the concept, there are opinions according to which its main quality would be valuation basis, other consider it to be an implementation of market value, some view it as an accounting convention or principle, and lastly, there are arguments that fair value is an estimation and not an estimation as in the case of market value. Following the facts mentioned above, or coming as a conclusion, FASB shows in its norms issued in 1999 that fair value is not a method of valuation for assets but an objective of valuation, an attribute of value (Casta, Colasse *et al.*, 2001: 97).

Other authors refer to the exchange value which represents the price for an item that could be exchanged in a bargained transaction (Tournier, 2001: 39). Another variant for the previous definition is: the amount resulted from the sale of an asset in a bargained transaction between knowledgeable, willing parties, different from a sale forced by bankruptcy (Holmes *et al.*, 2000: 49). A similar definition is offered by the International Accounting Standards Committee (IASB, 2006). Other authors that could be cited for the definition of the concept are Obert (2004), Holmes and Sugden (2002), Feleagă and Malciu (2004), Mătiș *et al.* (2005). Also, fair value is defined in the International Valuation Standards issued by the International Valuation Standards Committee (IVSC, 2005)

Thus, one can notice that the concept of fair value is assimilated with the meaning of market value. This assimilation has its origins in the type of asset reflected in accounting, assessed at another value than the one it had when entering the patrimony (entity). This is the case for financial instruments, which, as they are listed on the capital market, can offer at any time a market value in the shape of their quotation. Thenceforth however, there was the need to extend over other or all financial statements elements of an enterprise the measurement of their current value. As their nature, way of usage within the economic entity and the conditions on their specific markets were different, their proper market value could not be established anymore and thus, there was the need to resort to other valuation models (Champness, 1998: 23, IVSC, 2005). These models apply the cost and income approach when valuating assets (Deaconu, 2002; Stan, 2003; IVSC, 2005).

We consider that the above arguments highlight the fact that fair value has multiple interpretations. It is a much larger concept than market value. The different established values become the different implementations of fair value. The literature shows many forms of fair value, for example, market value, actual cost or replacement value, net realizable value, value in use, value of discounted cash-flows and others. Out of these, we consider that the market value, value in use and replacement cost can be set out (Deaconu, 2002). Each of these correspond to the globally accepted accounting valuation bases, with the following corrections between the valuation basis and its actual application: the realizable value – market value, present value – value in use or discounted value, actual cost – net replacement cost.

In the case of revenues, their corresponding fair value is the discounted value, as it will be shown hereunder.

## **3. Applying fair value to revenues**

Sales valuation starts with the final price (disregarding any price cuts) established between the seller and the buyer.

Although this valuation method is generally valid, there are circumstances which require the estimation of certain fair values. IAS 18 *Revenue* presents these circumstances.

According to the accounting norm, the revenues from current activities are: incomes resulted from the entity's internal investments (from performing in its business domain or from its operating activity), and incomes resulted from the entity's external investments (acquisition of financial instruments, leasing of goods).

Directly, the corresponding value of these incomes is the present value established on a discounted basis, but also the other valuation bases which represent the fair value of assets that generate the respective income.

Thus, in the case of incomes, fair value corresponds either to:

a) the fair value of assets/services object of the transaction, if the entry of the transaction's counterpart is not deferred.

Historical cost represents the valuation basis of the transaction from the buyer's point of view. From the seller's point of view, the valuation basis is realizable value or, rarely, actual cost (Deaconu, 2002). These two bases correspond to the situation in which the asset is sold.

b) the fair value of the amounts (cash or cash equivalents) which will be received, if the entry of the transaction's counterpart is deferred.

In this situation, the present value is the valuation basis.

Out of the two cases, the standard specifies on case b), which leads to establishing the discounted value.

The discounted value of incomes is obtained by applying a discount rate to the initial or invoice value. This will decrease the initial value according to the dalliance in its cashing in.

In what regards the discount rate that should be used for establishing the fair value of revenues with deferred counterpart, IAS 18 indicates the interest rate as a reference for the neutral rate. This is because the dalliance in cashing in the commercial transaction's counterpart is considered a financial transaction. Naturally, the standard implies that the rate of interest includes a risk premium. The following are mentioned as references for the discount rate (interest rate):

- The predominant rate of a similar instrument for an issuer, having credits with the same risk level;

This method of calculating the interest rate is based on comparison with alternative investments. We consider this to be the average profitability of the financial market i.e. the average interests for the loans granted for similar activities to the discounted transaction (for operating activities or for investments), with the same risk level (estimated for the client of the respective transaction), for a period equivalent to the one until the settlement of the transaction and for the same type of interest rate (variable or fixed) (IASB, 2006).

*Example no. 1:* The Alfa enterprise sells commodities initially considered hardly marketable. It offers a sale on a 90 days credit compared to the one of 30 days applied in normal circumstances. The selling price for the commodities is 200,000 MU (monetary units) plus VAT.

Taking into consideration the fact that the entity has offered a sale for a three times longer credit than the normal one and the fact that the value of the transaction is considerably high, in accordance with IAS 18, in the profit and loss account the entity will recognize an operating income in the amount of the discounted values which will be cashed in after 3 months (fair value), and a financial income representing the difference between the recognized amount and the nominal value of the amount (Deaconu and Pântea, 2004).

In order to estimate the fair value of the income with the deferred inflow of cash or cash equivalents, the Alfa enterprise looks into the present references of the financial market. The average interest rate on the market for commercial loans granted by banks for a period of 3 months is 8%.

The fair value of the income (Fv) will be estimated by discounting the nominal value of the income (Nv) with the discount rate (interest rate) of 8% ( $d$ ), according to the period of 3 months until the cashing in of the income.

$$Fv = \frac{Nv}{1+d} = \frac{200,000}{1.08} = 185,185 \text{ MU}$$

-The interest rate which updates the nominal value of the instrument to the current cash selling price of goods and services.

The second method for determining the interest rate is based on the comparison of present transactions with identical goods and services, transactions that were cashed immediately and thus reflect the fair value of incomes. As both the nominal value and fair value of the income are known, the interest rate is implicit.

*Example no. 2:* We consider the situation presented in example no. 1.

In order to determine the fair value of the income, the Alfa enterprise uses the information about the amount that another buyer has offered to pay for the same commodities. His offer is 180.000 MU and represents the fair value of the income (Fv).

Knowing the nominal and fair value of the income, the interest rate can be calculated. But for this example, as the interest income is recognized only once (there is only one return, there are no installments), determining the interest rate is unnecessary.

Thus, in order to demonstrate the second method mentioned in the standard for determining the interest rate ( $d$ ), it will be calculated as an implicit or internal profitability rate (Deaconu and Pântea, 2004). According to the investment theory this is the rate for which the fair value (the present amount of income) is equal to the nominal value of income to be returned after 3 months. The interest rate is obtained by solving the following equation, where  $d$  is the unknown factor:

$$Fv = \frac{Nv}{1+d}$$

$$180,000 = \frac{200,000}{1+d} \text{ thus } d = 11\%$$

Another situation regarding recognition of financial incomes generated by deferred returns of commercial transactions, whose understanding we find useful in regards to the methods of determining the fair value of incomes is the sale at a higher price than the market price using commercial loan.

*Example no. 3:* At the 1<sup>st</sup> of January N, the Alfa enterprise sales commodities worth 40,000 MU, with the following installment plan: 40% in the moment the contract is signed, 35% after a year, 25% after two years. On the financial market the average annual interest rate (disregarding inflation) is 10%. VAT is 19%.

This is a sale involving a commercial loan with a longer period of settlement than the one on the market, thus the fair value of the generated income will be different from the nominal value. The amount of generated income is 40,000 MU, but only a part of this, equal to the fair value, is operating income. The difference in amount until the nominal value (initial value) represents a financial income (interest income).

Interest income (Ii) = Nominal value (Nv) – Fair value (discounted value of future returns) (Fv)

$$Fv = 16,000 + \frac{14,000}{(1+0.1)^1} + \frac{10,000}{(1+0.1)^2} = 16,000 + 12,727 + 8,264 = 36,991 \text{ MU}$$



$$I_i = 40,000 - 36,991 = 3,009 \text{ MU}$$

For this example the recognition stages are the following:

Table no. 1

| <i>Explanation</i>   | <i>Amounts</i>                             |
|--|--|
| Recognizing the sales income at the 1 <sup>st</sup> of January N:<br>- operating income for the fair value<br>- deferred financial income<br>- VAT of the sale<br>(the discharge of duty for commodities is not accounted for) | 47,600<br>36,991<br>3,009<br>7,600         |
| Cashing in the first installment   | 19,040                                     |
| Recognizing an annual interest income at the 31 <sup>st</sup> of December N  | 2,099<br>[(36,991 – 16,000) x 10 %]        |
| Cashing in the second installment  | 16,660                                     |
| Recognizing an annual interest income at the 31 <sup>st</sup> of December N+1  | 910<br>[(36,991+2,099–16,000–14,000) x10%] |
| Cashing in the third installment   | 11,900                                     |

The operating income was immediately recognized at the fair value of 36.911 *MU*.

The interest incomes, which were recognized as the installments, were cashed in the over the two financial years, are in the amounts of 3,009 *MU* (2,099 + 910), as the interest cashed in periodically would have been recognized for a loan initially granted to the client of this transaction. The credit would have been of 36,991 *MU* and its return of 3,009 *MU*. The nominal value of the income, of 40,000 *MU*, is cashed in gradually.

We broadly presented the method for calculating the discounted value in the case of revenue recognition as in our view this is the main type of value directly established for incomes. As we mentioned, there are circumstances in which (e.g. the counterpart of the transaction is not deferred) incomes are measured using the fair value of the delivered assets/services. However, we do not find it necessary to elaborate them in this study as the fair value of assets/services is established through their selling price, with no need to resort to other estimations.

## Conclusions

Fair value is a concept lesser used in today's Romanian accounting practice. One of the causes is the poor urge of the accounting regulations in accordance with European Directives. However, taking into consideration the accounting convergence which stresses on IFRS and which in our view is an irreversible process, the implementation of fair value will have larger proportions in Europe and in Romania. The economic global crisis also highlights the importance of supplying transparent and unbiased information, no matter the accusations brought to the concept of fair value according to which it amplified the fall in the price of assets.

We believe that understanding and controlling economic phenomena, and developing a better prevention system for financial instability, is linked to disclosed accounting information and its quality. In this context, fair value and its applications, which we believe outline the role of accounting information, should be properly known. This paper shows the method of establishing fair value in the case of revenues, through the means of a conceptual/normative presentation and case studies.

Connecting balance sheet elements and outcomes to the market is benefic for the information which is valued, recognized and disclosed in the financial statements and which enables users to make informed decision, whilst managing the implied risk.

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# SOLUTIONS FOR MEASURING THE FAIR VALUE OF THE WORKFORCE

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*For the past decades International Accounting Standards and other Anglo-Saxon standards, for example the American ones, had promoted fair value as a valuation basis for the elements of the financial statements. Thus, the quality of the financial information has improved and users can make more pertinent decisions. In making decisions regarding the operating activity the workforce or staff is also very important, with the corresponding remunerations, both the classic ones and other financial incentives. This study focuses on compensations in the form of equity shares, resorting to the content analysis of the standards on the subject and the specific literature. It offers solutions regarding the correct estimation of the fair value of the entailed goods, services, financial instruments and expenses.*

*Keywords: fair value, workforce, employee benefits, share options*

*JEL classification: M40, M41*

## **1.Introduction**

The workforce is essential in the production and commercialization process of a company. From a legal point of view, the term staff refers to all people connected to the enterprise through the means of a working agreement, which is characterized by three elements: the existence of actual work; the remuneration generally referred to as salary; the existence of a subordination relationship between the employee and the employer. The staff category does not include intermediaries and consultants (commissioners, accounting experts, attorneys) who are independent agents that receive commissions and fees (Barker, 2001).

Staff generates a cost (wage bill) for the enterprise recognized as a liability in the financial statements. Separately from the monthly salaries, the company recognizes other social benefits granted to employees, leaves of absence and profit share payable to employees.

The issues above mentioned refer to the usual forms in which advantages or benefits granted to employees are reflected. Other rewarding schemes differ from country to country, from one accounting norm to another, depending on factors that are rather economic and social than accounting related.

On the accounting level specific norms have been issued by different national, regional (European) and international organizations, especially in the last period of time when social security, pensions and staff incentives became more in more imperative and sophisticated. It is our opinion that IASB has the most complex approach to staff benefits presented in its norms: IAS 19 *Employee benefits*, IAS 26 *Accounting and Reporting by Retirement Benefit Plan*, and IFRS 2 *Share-based payment*.

The international accounting norms classify staff benefits as:

- Short-term employee benefits (allowances, wages, social securities);
- Post-employment benefits (pensions, other pension benefits like life insurance, post-employment medical insurance);
- Other long-term benefits (for example, long-service or sabbatical leave, compensated absences, profit sharing plans, bonuses, deferred compensation programmes, if they are payable in more than one year);
- Benefits for signing the working agreement;
- Compensations in the form of equity shares (for example, share options).

Out of these 5 types of benefits only some are subject to fair value. This is the case of those benefits that either call for a discounted value as they reach maturity after the financial year has ended, either call for the valuation of the assets contained by the plan enforcing the benefit distribution. In conclusion, post-employment benefits, other long term benefits and compensations in the form of equity shares are subject to fair value. The following focuses on compensation in the form of equity shares.

## **2.Compensations in the form of equity shares**

Such compensations are materialized in shares, share options and other financial instruments issued for staff at a lower price than the one used in relation to third parties. It is a method of remunerating the entity's managers but also other employees (Mirza *et al.*, 2006).

On a larger scale regarding the recognition of certain equity elements, IFRS 2 *Share-based payment* mentions aspects related to payments made to employees on share basis i.e. payments based on the value of the entity's shares.

This type of transactions is part of the three categories mentioned in IFRS 2 as specific to share-based payments, namely (Obert, 2004):

- a) Equity-settled share-based payment transactions;
- b) Cash-settled share-based payment transaction;

The entity acquires goods or services by incurring liabilities to the supplier of those goods or services for amounts that are based on the price or value of the entity's shares or other equity instruments of the entity (IASB, 2005).

- c) Transactions settled by issuing equity instruments or in cash, according to the decision made by the beneficiary or the entity.

The most recent type of share-based payments to employees are specific to the first type of transactions i.e. share options for employees as a form of remuneration.

In the following part we will describe in detail this type of transaction.

Share options can be issues as part of a plan regarding the employees' equity share. Their owner receives the right to a number of shares at a certain price.

The basic principles of recognizing share-based payments stipulated by IFRS 2, including employee payments, are:

- Fair value will be estimated for goods and services received by the entity, and when it can not be easily determined fair value will be estimated for issued equity instruments; Fair value is estimated at the date of agreement between the entity and third parties, agreement that enforces the third party's right to receive shares or share options at a future date as long as the vesting conditions within the contract are satisfied (Obert, 2004).

- Recognition of certain expenses when the goods are received or services are rendered (employees' work).

In the case of transactions with employees (share options) fair value can not be reliably estimated for employee services received. Thus, the entity will measure the fair value of the equity instruments granted.

The fair value is measured at grant date, when the employee accepts the engagement.

In respect to the methods of measuring fair value for share options, IFRS 2 specifies the need to use a market value. In case a market value is not available the entity should use an adequate valuation model. In Annex B of the standard the Black-Scholes-Merton model, the binomial valuation model and other similar models are mentioned but no other details are provided. Other accounting norms which focus on the same issues, like the American ones (Raffournier, 2000), indicate the same two models (Black-Scholes and the binomial model), allowing entities to make use of other models (Epstein and Mirza, 2005). Likewise, the international valuation standards for assets and business supply guidance regarding the way of estimating fair value when the conditions for it measurement are not met (IVSC, 2005).

Shares and share options granted to employees are recognized as expenses for the period the employee was granted the option, in other words, for the period in which the option is guaranteed (it becomes unconditioned). In order to recognize a reliable, correct expense the way of estimating fair value is crucial. This is the subject of our study's next chapter.

### **3. Estimating the fair value of shares and share options**

As a general rule, in the case of share options granted to employees, there are no available market prices, having in mind the fact that these options are not tradable. IFRS 2 shows that in the absence of market prices the entity should resort to a valuation technique to estimate what the price of those equity instruments would have been on the measurement date in an arm's length transaction between knowledgeable, willing parties (IASB, 2005). It is noticeable that the intention is to reach a market value, using alternative models like the model based on costs, and the model based on income (benefits).

Finally, if the entity cannot reliably estimate the fair value of its equity instruments, it will estimate the intrinsic value. As regards to the moment of valuation, the intrinsic value is initially measured at the date the entity obtains the goods or services, and subsequent at each reporting date and at the settlement date, any eventual changes in the intrinsic value being recognized in the profit and loss account (Van Greuning and Koen, 2003).

The present market price of a share is influenced by: the discounted exercise price, the dividends that were not received in the guarantee period, adjusted according to the estimated volatility.

The strike price is actually paid at the date of the exercise, time in which the owner can invest the respective amounts in other parts. This is the reason why the profitability of risk-free securities (bonds) available on the market is taken into consideration. The expression of this neutral efficiency of the market does not totally belong to the owner of the option taking into consideration the fact that shares produce dividends while the option exists. Thus, the value of the deferred strike price payment is the difference between the market efficiency and the efficiency available by exercising the option today and owning the shares. More exactly, the entity calculates the difference between the discounted interest of securities from which benefits could be obtained by investing on the market and the discounted value of the dividends estimated to be received for the envisioned duration of the option.

The volatility of the share price refers to the security's capacity to gain out of the basic shares distribution, while it is exposed only to the loss of the option premium, not the discounted total share value (Epstein and Mirza, 2005). In other words, the volatility represents the sum of the amounts in which a share price fluctuates during a financial year. It is shown as a percentage and it is estimated base on the share price's history. If the shares are not quoted, the entity can resort to the share price of listed companies within the same business domain, or to an estimation based on the established valuation models. IFRS took into consideration the case in which shares are not quoted and thus there is no possibility of transfer to the option's value. It has been noticed that this leads to an early exercise of the option. Therefore, the lack of transfer possibility should rather be reflected within the estimated period of the option than through an explicit adjustment for this lack.

There is another aspect mentioned in IFRS 2 that influences the fair value of share options namely the guarantee of options. The guarantee conditions should not be influenced by the value of the option and they should be taken into account when establishing the number of options to be recognized as expenses.

Annex B of IFRS 2 represents an implementation guide for the requirements regarding the fair value estimation for issued equity instruments. It is focused on shares and share options granted to employees and the fair value measurement concerns the grant date.

In respect to shares, the guide refers to the market value of the entity's shares, adjusted according to the terms and conditions under which the shares were granted. If this market value is not

available because the respective shares are not tradable on the market, an estimation of a market value is required but no methods are mentioned.

In respect to share options, there is much focus on them within the guide, the information presented is synthesized below.

Usually there are no market values available, even if there are tradable comparable options. However, it is difficult to find similarities because of the terms and conditions specific to each option.

In this case it is necessary to resort to valuation models. Again, difficulties could rise, as the premises of all models are not in accordance to the specific conditions of the valued options. In order to choose a certain valuation model, it is important to analyze the factors which participants on the market would take into account. They are willing and knowledgeable and analyze the following: the lifespan of the instruments; the duration and date of the exercise; the possibility of exercising the option before its maturity.

In accordance to the expectations of the participants on the market, the valuation models take into account at least the following factors: the option's strike price, the duration, the current market price of the share, the estimated volatility of the share price, the dividends expected to be cashed from the shares, and the no-risk interest rate related to the option's duration.

Out of these elements, the ones that require estimations are: the exercise behavior that sets the duration of the option, the volatility of support shares and their estimated dividends.

The estimations consist of approximating the expectations that could be formulated by an external partner with access to detailed information regarding the exercise behavior of the employees, based on the available information at the grant date (IASB, 2005).

Expectations are usually based on history with adequate changes if there is a reasonable estimation that the future will be different from the past.

#### **4. Recognition of share options**

The option's fair value, measured at the grant date, will be accounted for as an expense thus recognized in the profit and loss account, through allocation according to the financial years related to the duration until maturity.

When the services rendered by employees are settled by equity share-based payments, the counterpart of the recognized expenses is an increase of equity.

IFRS 2 also presents the case of subsequent changes to the option's conditions. This can imply the following:

a) the changes can be recovered from the initially recognized fair value, at the grant date. Thus, the changes in fair value will have to affect the profit and loss account. An eventual increase in fair value implies that the additional amount will be accounted for as an expense for the period that elapses from the date of the change until the new duration.

b) if the subsequent change increases the guarantee's profitability, the consequences will not be found as changes in fair value but in the number of options estimated to be guaranteed.

c) if the exercise period is directly influenced (by the cancellation of shares and settlement before the end of the guarantee duration), the fair value will have to be accounted for as an expense for a shorter time period. In this case, the consequences would be:

- if payment is made to the employee for the cancellation of the shares, this is considered redemption of share equity and will decrease the value of equity. Furthermore, in case payment exceeds the recognized equity value, the difference will be accounted for as an expense;

- if the entity settles the share cancellation by granting new options, the accounting entries are specific to the initial scheme.

## **Conclusions**

Nowadays, from the point of view of an economic entity, the workforce and the effect of its remuneration is a significant operating element, which must be correctly reflected in the financial statements in order for it to be useful in the decision making process.

This paper presents the treatment indicated by the international accounting norms for one of the staff remuneration forms, namely compensations in the form of equity shares. This is materialized in shares, share options and other financial instruments granted for the entity's employees. The basic principals for recognizing the respective elements are fair value measurement for assets (goods/services received by the entity as a counterpart and likewise granted equity instruments), and expense recognition when the goods and services are received.

In order to estimate the fair value it is recommended to establish the market value and, if the conditions necessary to obtain a market value are not satisfied, the entity should resort to valuation models. These models result from the implementation of the other two approaches based on direct comparison, which lead to market value, namely the income approach and the cost approach. Knowing these approaches or valuation methods is crucial in order to reflect the value of the workforce in an argumentatively and transparent manner.

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# CONSIDERATIONS ON THE EXTENT TO FISCAL POLICY INTRODUCED BY GEO 34/2009

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*Recently there was published an emergency order to introduce new measures in fiscal policy. Chapter V of this ordinance provides for a series of amendments to the Fiscal Code and Fiscal Procedural Code, as follows: Changes on tax on profit; Tax Changes on micro enterprises; Changes on expenses deductibility; Changes concerning differences from revaluation of fixed assets; Changes on the VAT deductibility and fiscal period; New contraventions regarding the final situations. In this paper we propose a presentation and an analysis of the tax policy, introduced by GEO 34/2009.*

*Keywords: flat-rate tax, flat rate, taxpayers, fiscal period.*

*Jel codes: M41*

In the Official Journal, Part I, no. 249 of 14 April 2009 was published GEO no. 34/2009 regarding the budgetary rectification of 2009 and regulations of financial and fiscal measures. Chapter V of this ordinance provides for a series of amendments to the Fiscal Code and Fiscal Procedural Code, as follows:

- Changes on tax on profit;
- Tax Changes on micro enterprises;
- Changes on expenses deductibility;
- Changes concerning differences from revaluation of fixed assets;
- Changes on VAT deductibility and fiscal period;

New rules on tax set a minimum lump sum tax, even if the tax outcome achieved by the operators of paying such a tax is negative.

Flat-rate tax introduced in this Ordinance shall be determined on the basis of total income reported on 31 December of the previous year, as follows:

Taxpayers engaged in activities as night bars, night clubs, discos, casino or sports betting, including legal entities carrying out such income under a contract of association, and where the tax payable for specified activities is less than 5% of income, are required to pay a tax of 5% applied to this income.

Taxpayers who are not in the activities mentioned above and where the tax is lower than the minimum amount of tax revenue for the portion of the corresponding total are required to pay tax at that amount.

Amounts corresponding to minimum tax, determined according to the total income registered on December 31 of last year, are:

| TOTAL ANNUAL REVENUE | ANNUAL MINIMUM TAX |
|----------------------|--------------------|
| (lei)                | (lei)              |
| 0 - 52.000           | 2.200              |
| 52.001 - 215.000     | 4.300              |
| 215.001 - 430.000    | 6.500              |



|                          |        |
|--------------------------|--------|
| 430.000 - 4.300.000      | 8.600  |
| 4.300.000 - 21.500.000   | 11.000 |
| 21.500.001 - 129.000.000 | 22.000 |
| Peste 129.000.001        | 43.000 |

Flat rate tax will take effect from 01 May 2009. Basically, starting this time, all taxpayers should pay at least minimum tax, even if they record a loss or no activity.

For allocation to the portion of total income are taken into account the total income derived from any source, recorded on December 31 of last year, less:

- income from stock variations;
- income from production of tangible and intangible assets;
- operating income, representing the share of government subsidies and other resources to finance investments;
- income reduction or cancellation of provisions for which no deduction was granted, according to legal regulations;
- income from debt cancellation and increases due to state budget, which were not deductible expenses when calculating taxable profits, according to legal regulations;
- income from compensation from insurance companies.

And the micro enterprises are affected by micro flat rate tax. It is true that micro-tax income is 3% in 2009, and no changes are foreseen to increase tax rates for years to come, but in the case of micro tax due is less than the minimum annual flat rate tax (same as that provided for tax profit taxpayers), they will be obliged to pay tax at that amount.

Taking into account that now we pass through an economic recession, and overall profit firms are affected by this measure and applying a minimum tax will result in the disappearance of many small IMM-s, the drawing and the decrease of the indirect taxes which are collected in the budget. When the economy is in recession, it should not be increased taxes whereas this rule affects small businesses.

Another measure to increase indirect taxation and to increase the revenue budget is to restrict the expense deductibility. Thus, expenditures on fuel used for cars to employees managing positions are not considered deductible expenses when calculating profit tax.

And the costs of maintenance and repair of these cars will be deductible limited to no more than one car each person associated with such tasks.

Also, during the 1 May 2009-31 December 2010 payment of corporate tax and individual self is no longer allowed to deduct expenses on fuel for road motor vehicles which are intended exclusively for road transport of people with a maximum authorized weight not exceeding 3500 kilograms and not more than 9 passenger seats, including driver's seat, are owned or used by the taxpayer, unless the vehicles are part in any of the following categories: -vehicles used exclusively for intervention, repair, security and protection, shipping, transport personnel to and from the place of business, and vehicles specifically adapted for use as a story which, vehicles used by sales agents and agents of employment;

- vehicles used to transport people, including the taxi;
  - vehicles for rental to others, including the activities of training in driving schools.
- Another measure provided by GEO 34/2009 is tax revaluation reserves. Reserves from revaluation of fixed assets, including land, after 1 January 2004, which are deducted in calculating taxable profits through depreciation tax or expenditure on leased assets and / or scrapped, the tax deduction with tax depreciation and at the time of fall management of these assets. Where a building, land or a fixed asset that have been reviewed after 1 January 2004 are sold, the revaluation reserve will be taxed at the time of removal from the asset management sold, not

when changing destinations such as was previously stipulated. In this case, taxpayers can not benefit from tax postpone of the revaluation surplus.

In the Ordinance there are set out significant changes in respect of VAT. No longer deduct the VAT for purchase of road vehicles and motor fuel used by vehicles which are used exclusively for road transport of persons, with a maximum authorized weight not exceeding 3500 kilograms and not more than 9 passenger seats, including the driver's seat, except for vehicles which are part in any of the following categories:

- vehicles used exclusively for intervention, repair, security and protection, shipping, transport personnel to and from the place of business, and vehicles specifically adapted for use as a store which, vehicles used by sales agents and employment;
- vehicles used to transport people, including the taxi;
- vehicles are used for providing- payment services, including rental to others, driving training schools, the transmission in the use of a financial or operational leasing;
- vehicles used for commercial purposes, or for the purpose of resale.

Through the acquisition of vehicles for the purposes of this Ordinance shall mean the purchase of a vehicle in Romania, intra-Community acquisition or importation of the vehicle. Provision for limiting the right to deduct the VAT for vehicles purchase does not apply to advances that have been paid before 1 May 2009 for the total or partial road motorized vehicles, if delivery occurs after 1 May 2009 inclusive.

Provisions limiting the right to deduct the VAT for cars will apply until 31 December 2010 inclusive. Taxable persons who pay VAT will move to quarterly VAT per month with the month following the quarter in which acquisitions are intra community indifferent to the turnover achieved in the previous year.

These taxpayers must submit a statement of mentions in the tax jurisdiction, within a maximum of 5 working days from the end of that took place intra-Community acquisition. It constitutes contravention not fulfill the declaration in term, the summary of purchases and deliveries intra community (Statement 390) and the submission of incorrect or incomplete statements. These infringements are sanctioned with a fine of 2% of the total amount of purchases / deliveries of goods intra community undeclared or declared differences in addition, as a result of the submission of incorrect or incomplete statements. Basically, the fine can reach 10.5% of the VAT related to intra community acquisition.

Extract the following conclusions:

With the introduction of flat-rate tax, the investment value will be suspended. Therefore, the state will earn a flat rate tax, but will lose tax revenue from VAT. However, although many private enterprises have registered losses, with no connection with any investment, it does not fall within the Ministry of Finance has the burden of these tax losses. Market sanctioned it by self. Those who suffer loss are shareholders, directors and employees of a company, not the rule. Also, the minimum tax discourages large investments - acquisition of expensive technological equipment, depreciation through accelerated depreciation (guaranteed method of the tax) may generate tax losses, the companies that make such investments still pay the minimum tax on Real Estate Transactions made loss in this period of depreciation of assets are penalized with an additional cost.

The trade of motor vehicles and motorcycles - as in other EU Member States introduce measures to relaunch the activities of automotive industry and revive the market of vehicles which is affected by the financial crisis, the Government would introduce by this minimum additional tax supplementary costs to cars dealers, which further affect the competitiveness

Minimum tax encourages tax evasion - non-revenue; use of schemes to avoid the application of the provisions of this Ordinance by reclassification of revenues in some categories taxed more favorably. Applying a flat rate tax will lead to the closure of enterprises in conditions in which

they argue a weak middle class, formed in recent years. Do not say that the entire Romanian middle class is in small enterprises which are subject to a flat rate tax, but capitalism strengthening is not hitting in the middle class representatives, considering that are negligible share and not performing economic part.

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## THE JURIDICAL SYSTEM OF THE PAWN HOUSES

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*The present paper called the judicial system and the accountancy of the pawn houses was drawn up as a wish of clearing up some things connected to the judicial, the accountancy and the taxation system of the pawn houses. The activity developed by these entities. Went through a period of multiple changes lately as far as the organizational framework is concerned, and the amount of transactions of this nature is confronted with spectacular rises within the periods of economical crisis.*

*Key words: pawn, security contract, loan, interest commission.*

*JEL codes: M41*

**From the juridical point of view the pawn (the pledge) represents an accessory, unilateral, real contract through which the debtor gives to the creditor a corporeal or non-corporeal personal thing in order to guarantee his obligation (article 1685 from the Civil Code). It is a real guarantee which accomplishes the same function as the mortgage, the only difference being that it always has as an object personal goods which are entrusted to the creditor or to a third.**

The pawn may be thus used as a guarantee when we grant credits under the shape of civil or commercial pledge with or without dispossession. The general rule is the one according to which the pledged good must be factually handed in to the creditor. The factual hand in is made through tradition (delivery) in what concerns the corporeal goods and through the rendering of the promissory note in what concerns the non-corporeal goods.

The creditor is forbidden to use the pledged good, he has the obligation to preserve it and it is returned after the payment in full of the guaranteed book debt. If till due the debtor doesn't pay off, the creditor may proceed to the accomplishment of the pledge and may ask the law court to give a writ and to authorize the pledge through:

- the sale of the pledged good through public auction;
- the assignation of the pledged good to the creditor, as payment for the debt.

The law forbids that there should be stipulations in the pledge contract through which the creditor would be authorized to appropriate the pledged good in a direct way without appealing to the law court. The percentage (partial) payment of the debt doesn't lead to the partial quittance of the pledge. The pledge is indivisible and it is extinguished only through the payment in full of the debt, including the interest and expenses generated by the preservation of the good.

Since the enforcement of the Decree no. 28/2006 concerning some financial and fiscal measures, with further changes and completions, the pawn houses must be registered in the evidence book opened at the National Bank of Romania. However, the pawn houses don't draw up and don't hand in the financial situations according to the accountancy regulations emitted by the National Bank of Romania and applicable to all the credit institutions.

The object of activity of the pawn houses may be enunciated as it follows:

The activity of pledge takes place between two people – a corporate body and a natural person (more rarely a corporate body). Through the pledge rapports based on an agreement appear between the two people, each of them being creditor and debtor at the same time.

The pawn house is:

-creditor for the sum it borrowed in exchange of the pledged good and, therefore, it will enter the book debt in its accounts;

-debtor for the good which was left as a pledge and, therefore, it will enter the good which was received in its custody.

The customer (the owner of the good) is:

-creditor for the good which he left as a pledge;

-debtor for the sum of money he took from the pawn house.

The contractual relationship between the creditor (the pawn house) and the debtor is recorded in a pawn contract. In the contract they have to mention the identification data of the parts, the sum which was borrowed, the time limit of the payment, the commission and the description of the good (denomination, weight or measure, quality and other necessary remarks).

The creditor (the pawn house) is not compelled to give the pledged good back before the debtor pays in full the debt, including the commission for the sum which was borrowed.

If the owner of the pledged good doesn't come to pay the debt and the commission when the time limit expires, the pawn house will become the owner of the good. Having this quality, the pawn house can have as an option to sell the good or to keep for its own needs. Therefore, the pawn house can have as an object of activity both lending activity specific to the credit institutions and specific activity for consignment because they receive goods as a pledge and specific activity for retail.

We have to mention the fact that, in what concerns the pledged goods which represent cultural goods remained in the ownership of the pawn house and which will be sold, the pawn house has to obey to the provisions stipulated in the Order number 1284//1996, emitted by the Ministry of Culture, for the approval of the methodological norms regarding the unique criteria of classification of cultural goods which are part of the national cultural patrimony and the pawn house must also obey to the regulation regarding the development of the commercial activities with cultural goods.

If the owner of the pledged good comes before the time limit and asks for an extension of the term for which the borrow has been granted, the contract initially concluded will be changed and will specify the new time limit and the supplementary commission calculated for the extended period of the contract.

The interests or the commissions perceived by the pawn houses in order to give loans represent incomes obtained from providing financial services which, according to stipulations from the Fiscal Code, are operations exempted of the tax on the added value. These incomes are exempted of the tax on the added value regardless if the personal goods which are left as a pledge by the debtor are returned or not.

In exchange, if the loan is not given back by the debtor, the pawn houses owe the tax on the added value for the sum it obtained from selling the goods which are owned by it. If, according to the contract concluded with the debtor, the goods are sold in a consignment system, the pawn houses owe the tax on the added value only for the margin realized as a result of the sale of the goods. In this situation, special stipulations established in the methodological norms of the Fiscal Code will be applied. According to these rules, in the case of second-hand goods sold in a consignment, the taxing base is formed from the sum representing the margin obtained (the difference between the price at which the good was commercialized and the sum owed to the owner of the good) from the sale of second-hand goods which belong to people who don't pay taxes on the added value or of goods which are exempted of the tax on the added value.

In this case, the tax on the added value which must be paid is determined through the application of the procedure of inflating one hundred on the margin representing the taxing base, the level of the tax on the added value being the standard level or the reduced level and the demandability of the tax on the added value interferes when the goods are sold.

The tax on the added value which is thus established may not be inscribed distinctively in the invoices or in other legal documents which are handed in to the buyer because the buyer can not deduct it so, in this case, the document should contain the mention "VAT included".

In order to determine the sum of the VAT for these operations in a fiscal period sale books or registers must be kept. They must be separated from the operations for which a normal VAT system applies where only the total amount of the sale document is written, including VAT. There are also purchase books in which only the second-hand goods meant to be sold in consignment are written.

The taxing base and the VAT sum which are collected for these operations in a fiscal period are determined according to an estimation elaborated for all the operations submitted to the special rules from that time and they are written in the VAT expense account.

The activity developed by the pawn houses generates the following categories of incomes and expenses:

Incomes:

- from the commissions collected as a result of the loans granted;
- from the sale of the pledged goods which became the property of the pawn house;
- from the value of the pledged goods which were retained in the patrimony of the pawn house for its own use;
- from interests at the treasury kept in the bank;
- from other sources.

Expenses:

- with wages and other debts related to them;
- with the rent (if the space is rented);
- with taxes;
- with the value of the goods which were retained and sold;
- with interests for the credits which were received;
- with the taxes on the profit.

The management of the pawn house is delimited in the following way:

- the pledged goods which are received temporarily in the management will enter into the book accounts with the help of the account 8033 "Material values received in custody";
- the goods which are entered determinately in the patrimony of the pawn house as a result of non-payment of the loan will enter into the book accounts with the help of reserve accounts taking into consideration the way of the good and its destination, for the own needs or for sale.

The incomes derived from commissions achieved by the pawn houses will enter into the book account with the help of 704 account "Incomes from performed services" – according to some experts or, according to other experts, they will enter in the 708 account "Incomes from different activities". The incomes achieved as a result of the sale of the pledged goods will enter the 707 account "Incomes from the sale of the merchandise". We consider as correct the first variant – 704 account "Incomes from performed services" – taking into consideration the fact that we are dealing with financial services.

In the literature of speciality there are two ways for the achievement of accountancy in book debts accounts in what concerns the operations performed by pawn houses:

- the first variant recommends the use of the 461 account "Different debtors";
- the second variant recommends the use of 2678 account "Other bound book debts".

The accountancy regulations regarding the functioning of the accounts mentions at the 2678 account: "with the help of this account one can keep evidence of book debts related to shares, to loans granted on long term and to other bound book debts, such as deposits and paid guarantees". Or the loan granted by the pawn house is a short term loan and its recording in the bound category is not justified. Consequently, the 461 account "Different Debtors" seems to be the best solution in order to account for this operation. From our point of view, we consider useful to

adjust the general plan of accounts through the use of a book debt account specially created in class 4 whose denomination may be “Pawn – granted loans”.

The development of the analytic accounts which will be used can be done according to necessities. For example, the 461 account “Different Debtors” can be analytically developed so that every natural person can take advantage of a loan. The 704 account “Incomes from performed services” or 708 account “Incomes from different activities” can be analytical developed, too, for the incomes derived from the commissions perceived when the loan is granted and for incomes derived from the commercial margin obtained if the sale of the pledged goods is done in the consignment.

#### Application

On 01.08.X, the pawn house S.C. “Alfa” SRL concludes a contract with a natural person “Popescu Ion”, the owner of a set of golden jewels Based on the contract the natural person is granted 1000 lei for 12 months. The natural person will pay to the pawn house 20% commission.

Commission = 1000 x 20% = 200

Book keeping recordings

To grant the loan:

|                                  |                        |       |
|----------------------------------|------------------------|-------|
| 2678<br>“Other bound book debts” | 5311<br>„House in lei” | 1.000 |
|----------------------------------|------------------------|-------|

and, at the same time, out of accountancy the pledged goods received are registered

|  |  |       |
|--|--|-------|
| 8033<br>„Material values received in<br>custody” |  | 1.000 |
|--|--|-------|

At the time limit there can be several situations:

a) the natural person refunds the value of the loan without asking to prolong the refunding term of the loan

The interests or the commissions performed by the pawn houses in order to grant loans are considered incomes derived from performing financial services which, according to stipulations from the Fiscal Code are operations exempted of VAT, regardless if the personal goods left as a pledge by the debtor are returned or not.

|                        |  |                       |
|------------------------|--|-----------------------|
| 5311<br>„House in lei” | %<br>2678<br>“Other bound book debts”<br>704<br>„Incomes from performed<br>services” | 1.200<br>1.000<br>200 |
|------------------------|--|-----------------------|

*At the same time, the pawn house will return the goods from its custody to the owner*

|  |  |       |
|--|--|-------|
|  | 8033<br>„Material values received in<br>custody” | 1.000 |
|--|--|-------|

B) The pawn house decides to retain the good in the patrimony of the society, as an object of inventory

The characteristics of the goods received as pledge:

-1 chain 5 grammes = 250 lei

-1 set of earrings 10 grammes = 500 lei

-1 bracelet 5 grammes = 250 lei

Total: 20 grammes = 1000 lei

The goods retained as inventory objects are recorded through compensation with the loan granted:

|  |                                  |       |
|--|----------------------------------|-------|
| 303<br>„Materials related to inventory objects ” | 2678<br>“Other bound book debts” | 1.000 |
|--|----------------------------------|-------|

The market value of the price of one gramme of gold is 55 lei per gramme, so the evaluation of the set is done in the following way:

-1 chain 5 grammes = 275 lei

-1 set of earrings 10 grammes = 550 lei

-1 bracelet 5 grammes = 275 lei

Total: 20 grammes = 1100 lei

The inventory objects are recorded at their market value (the difference until the market value is considered an income):

|  |  |     |
|--|--|-----|
| 303<br>„Materials related to inventory objects ” | 758<br>„Other incomes from exploitation” | 100 |
|--|--|-----|

C) The natural person doesn't refund the loan at the time limit and the pawn house decides to sell the jewels

If the debtor doesn't refund the loan to the pawn house, the pawn house will owe VAT for the value obtained from the sale of the goods which have become its property.

Evaluated price: 1000

Trading accession: 50 % 500

VAT 19% 285

The entry in the management of the retained jewels sold as merchandise to the thirds:

|                      |  |                              |
|----------------------|--|------------------------------|
| 371<br>„Marchandise” | %<br>2678<br>“Other bound book debts”<br>378<br>„Differencies in price at the marchandise”<br>4428<br>„Non liable VAT” | 1.785<br>1.000<br>500<br>285 |
|----------------------|--|------------------------------|

At the same time, in order to get the pledged goods out of the management

|  |   |       |
|--|---|-------|
|  | 8033<br>„Material values received in custody” | 1.000 |
|--|---|-------|

The sale of the jewels to a third:

|                        |   |                       |
|------------------------|---|-----------------------|
| 5311<br>„House in lei” | %<br>707<br>„Incomes from the sale of the marchandise”<br>4427<br>„Collected VAT” | 1.785<br>1.500<br>285 |
|------------------------|---|-----------------------|

In order to get the sold merchandise out of the management:

|   |                      |                       |
|---|----------------------|-----------------------|
| %<br>607<br>„Expenses concerning the marchandise” | 371<br>„Marchandise” | 1.785<br>1.000<br>500 |
|---|----------------------|-----------------------|



|  |  |     |
|--|--|-----|
| 378<br>„Differencies in price at the<br>merchandise”<br>4428<br>„Non liable VAT” |  | 285 |
|--|--|-----|

The VAT liability:

|                         |                      |     |
|-------------------------|----------------------|-----|
| 4427<br>„Collected VAT” | 4423<br>„VAT to pay” | 285 |
|-------------------------|----------------------|-----|

VAT payment in the month following the one to the sale of the jewels:

|                      |                        |     |
|----------------------|------------------------|-----|
| 4423<br>„VAT to pay” | 5311<br>„House in lei” | 285 |
|----------------------|------------------------|-----|

D) The natural person asks to prolong the refunding term of the loan with 2 months:

Date of the limit time: 01.10.N.

For this operation, we suppose that an extra commission of 15% is perceived

Commission perceived:  $1.000 * 15\% = 150$

In the 8033 account the following sums are added.

· supplementary commission = 150 lei

Total amount to pay (01.10.N)  $200 + 150 = 350$  lei to be paid

· Loan granted = 1.000 lei

GENERAL TOTAL = 1.350 LEI

NOTE

If the natural person comes at the limit time and refunds the loan it will be proceeded according to the situation A). If not, it will be proceeded according to the situations B) and C).

E) The pawn house in agreement with the owner retains the commission perceived from the granted loan

Commission  $1.000 * 20\% = 200$

Granting of the loan, payment of 800 lei and retaining of the jewels which are worth 1.000 lei:

|                                  |                        |     |
|----------------------------------|------------------------|-----|
| 2678<br>“Other bound book debts” | 5311<br>„House in lei” | 800 |
|----------------------------------|------------------------|-----|

At the same time, out of accountancy, the pledged goods are recorded with all the value of the granted loan of 1.000 lei:

|  |  |       |
|--|--|-------|
| 8033<br>„Material values received in<br>custody” |  | 1.000 |
|--|--|-------|

At the time limit, the owner of the jewels refunds the loan granted and the commission:

|                        |  |                            |
|------------------------|--|----------------------------|
| 5311<br>„House in lei” | %<br>2678<br>“Other bound book debts”<br>462<br>„Different creditors”<br>704<br>„Incomes from performed<br>services” | 1.200<br>800<br>200<br>200 |
|------------------------|--|----------------------------|

At the same time, the pawn house will return the goods from its custody to the owner:

|  |  |       |
|--|--|-------|
|  | 8033<br>„Valori materiale primite in<br>pastrare sau custodie” | 1.000 |
|--|--|-------|

If, at the time limit, the owner doesn't refund the sum representing the value of the loan, the pawn house becomes the owner of the jewels and gives him back the difference until the initially evaluated value

|                    |                        |     |
|--------------------|------------------------|-----|
| 462<br>„Creditors” | 5311<br>„House in lei” | 200 |
|--------------------|------------------------|-----|

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# A COMPARATIVE STUDY ON CORPORATE GOVERNANCE FRAMEWORKS IN US, UK AND ROMANIA

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*The corporate governance continues to be a challenging topic in international debates agenda, particularly in the current context of financial global crises. Even though companies in financial distress operate globally, corporate governance regulations are not uniform across the world. Considering these circumstances, our paper examines the major provisions of the codes on corporate governance from some of the EU member states and US. Based on an extensive relevant literature review, our research seeks to identify the common and different key features between the countries considered. The outcomes of this study are to be used further as prerequisites of a more comprehensive research<sup>444</sup>.*

*Keywords: corporate governance, governance structures, governance models, governance codes*

*JEL classification: M19*

## **Introduction**

Corporate failures occurred during the last decade, followed by current financial crises which spread out globally have brought to the public attention the corporate governance framework and practices. The failures' causes were perceived to rest with a lack of management's integrity where individuals were involved in aggressive accounting, earnings management or fraudulent financial reporting to manipulate share prices, borrowings and bonus plans (Saleh *et al*, 2007). As a global response, the relevant international and regional organizations such as EU, IFAC, FEE, OECD etc. became conscious that their efforts aimed at regaining public confidence in companies' financial reporting must be extended beyond the convergence of auditing and accounting standards. In such circumstances, there was a stringent need to restore confidence in capital markets by enhancing corporate governance in order to support the convergence efforts and, ultimately, to provide financial information of the highest quality (FEE, 2003). In September 2001, the European Commission (EC) set up a Group of High Level Company Law Experts (HLCLE) with the objective of initiating a discussion on the need for the modernization of company law in Europe. To form de basis for its recommendations, the research conducted by HLCLE covered, among other issues, corporate governance practices across the EU. Subsequently, based on this report, in May 2003, the EC released an action plan that represents a benchmark in terms of corporate governance in the EU (EU, 2003). Basically, as one could notice, the major actions undertaken envisage the efforts toward identification of the key factors that underpinned corporate governance failures and the promotion of global convergence of corporate governance principles and practices. The latter was imposed by the major differences found between countries and consequently, between companies operating globally.

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444 A CNCSIS financed research project – „Rolul guvernăței corporative în securizarea încrederii investitorilor: performanța autohtona versus performanțele europene și internaționale”, project manager, Camelia Liliana Dobroțeanu, 2009.

Lots of recently published papers reveal a boom in the corporate governance literature relevant to our research. Dewing & Russell (2004) published an article providing an overview of EU policy developments in accounting, auditing and corporate governance before and after the collapse of Enron. For EU policy-makers the article identifies areas for both encouragement and concern. It concludes that considerable progress has been made towards the harmonization of accounting, auditing and corporate governance within the context of the Financial Services Action Plan. However, the authors argue that, to achieve this, the EU has given too much ground to US hegemony, whether by embracing US practice as international “best practice”, or being forced to accept US practice where the US chooses to act unilaterally. Yeoh (2007) discusses the influences of the corporate governance models (German and UK) on the corporate governance regulations adopted in central and Eastern European countries, particularly in Poland. His findings indicate a stronger impact of Anglo-Saxon model in the detriment of the German one. Based on a set of corporate governance indexes, Khanchel (2007) examined the determinants of good governance in the US firms. His empirical results indicated that, except for the board index, there are statistically significant and positive associations between each governance index (board committees, audit committee, overall CG index) and firm size, investment opportunities, intangible assets, directors, and officers’ ownership. Also, institutional ownership and external financing needs are positively related to each governance index considered. However, his results show that growth opportunities and performance have no significant effect on governance quality. More recently, Aluchna (2009) develops a case study on Poland that questions about the utility of compliance with corporate governance rules in assessing corporate performances. Her results reveal the stronger the compliance, the weaker are corporations performances (measured by return on investment). Although the corporate governance – a complex concept strongly connected with economic, social and cultural aspects of corporations’ life – is extensively covered by an impressive number of research papers, our study focuses on certain specific issues related to corporate governance framework formally adopted in the countries selected for our comparative research. These issues are: current regulations relevant to corporate governance, the governance models and board structures, major responsibilities and composition of audit committees, considerations of internal and external auditing, and specific public disclosures on corporate governance required to companies. Similar comparative studies have been conducted by Hermes et. al (2006), Payne (2006), Rossouw (2009) and Li & Harrison (2007) providing valuable insights on corporate governance principles, practices and codes in various countries across the world.

### **1. Corporate governance framework in United States of America (US)**

The Sarbanes-Oxley Act of 2002 (SOX), introduced in the United States of America in the aftermath of Enron, has fundamental governance implications for listed American companies, their foreign subsidiaries and foreign companies that have US listings. It applies to all Securities and Exchange Commission (SEC) registered organizations, irrespective of where their trading activities are geographically based<sup>445</sup>. The act is structured into eleven titles, each of them comprising a number of sections prescribing very tight rules on auditor independence, corporate responsibility, financial disclosure, corporate fraud etc. and accountability and setting up the public company accounting oversight body. In general, it appears to address almost exclusively the weaknesses of corporate governance revealed by failing companies. To some extent, as the Act is written, it is difficult to notice the difference between principles and provisions provided. While SOX lays down detailed requirements for the governance of organizations, the three highest profile and most critical sections – which were implemented in phases – are 302 (dealing with quarterly certification of financial reports, disclosure of all known control deficiencies, and

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<sup>445</sup> <http://faculty.chicagobooth.edu/steven.kaplan/research/govern.pdf>

disclosure of fraud acts), 404 (related to management certification of internal controls, attesting reports by independent accountant, and quarterly change reviews), and 409 (regarding the monitoring of operational risks and reporting material events). The board committees<sup>446</sup> should be at minimum of three comprising only independent directors: nominating/corporate governance committee, compensation committee, and audit committee. The primary responsibility of the audit committee is to assist the oversight board on issues related to (i) the integrity of the financial reports; (ii) the company's compliance with legal and regulatory requirements; (iii) the independence of external auditors; (iv) the performance of internal audit function; and (v) the preparation of reports required by the SEC to be attached to company's annual reports. In addition, the audit committee is the sole authority to hire or fire external auditors and to approve significant non-audit relationships with independent auditors. The purposes, duties and responsibilities of the audit committee should be written in a charter. In terms of internal audit, the SOX stipulate that each listed company must have an internal audit function. As regards the external auditing, SOX prohibits providing audit and non-audit services simultaneously to a client. External auditors are required to provide the audit committee with a report on the auditor's independence quality control on annual basis. Listed companies must adopt and disclose publicly corporate governance guidelines and a code of business conduct, including waivers of the code for directors or executive officers. Other significant reports on corporate governance include: (i) an annual statement given by the chief executive officers (CEOs) in listed companies about his/her awareness of any violations of NYSE governance listing rules; (ii) management's report on the company's internal controls over financial reporting.

## **2. Corporate governance framework in United Kingdom (UK)**

In UK there had been a sequence of revisions of the corporate governance provisions. The Combined Code published for the first time in 1992 was the result of a combination between the Cadbury and Greenbury codes. Subsequently, the revisions made in 1998 brought in additional reports – The Smith Guidance on audit committee, The Higgs Report on board' composition, role and remuneration, The Turnbull Guidance on internal control (Chambers, 2003). Following the Enron failure, the Financial Reporting Council (FRC) undertook a more regular approach to code revisions – on annual basis. In its current version, the Combined Code on Corporate Governance 2008 (CC-2008) sets out standards of good practice in relation to issues such as board composition and development, remuneration, accountability and audit and relations with shareholders. It contains broad principles, supporting principles and more specific provisions. Although its applicability was meant to be voluntary, the listed companies have the obligation of reporting their compliance or explaining the reasons of their failure to comply with the code's provisions. The Listing Rules require listed companies to make a disclosure statement in two parts in relation to the Code. In the first part of the statement, the company has to report on how it applies the principles in the CC-2008. This should cover both the main and supporting principles. The form and content of this part of the statement are not prescribed, the intention being that companies should have a free hand to explain their governance policies in the light of the principles, including any special circumstances applying to them which have led to a particular approach. In the second part of the statement the company has either to confirm that it complies with the Code's provisions or – where it does not – to provide an explanation. This 'comply or explain' approach has been in operation for over ten years and the flexibility it offers has been widely welcomed both by company boards and by investors. It is for shareholders and others to evaluate the company's statement. Smaller listed companies, in particular those new to listing, may judge that some of the provisions are disproportionate or less relevant in their case. Some of

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<sup>446</sup> The SOX provisions pay a particular attention to the criteria considered for assessment of director's independence, making a clear distinction between independent and non-executive.

the provisions do not apply to companies below the FTSE 350. Such companies may nonetheless consider that it would be appropriate to adopt the approach in the Code and they are encouraged to consider this (FRC, 2006). The board structure has to include at least three board committees. The first one – the nomination committee – should have a composition that allows for a majority of non-executive directors, chaired by either the chairman of the board or a non-executive director. The next –which is the remuneration committee – is required to be staffed entirely with independent directors, while the audit committee should expose a fully non-executive composition, being allowed to accommodate a majority of independent members. Assessing the independence of committees' members is left to the board responsibility, based on a limited number of criteria. The main role and responsibilities of the audit committee should be set out in written terms of reference and should include: (i) monitoring the integrity of the financial statements of the company; (ii) reviewing the company's internal financial controls and risk management<sup>447</sup>; (iii) reviewing the company's internal control and risk management systems; (iv) monitoring and reviewing the effectiveness of the company's internal audit function; (v) making recommendations to the board and shareholders in relation to the appointment, re-appointment and removal of the external auditor; (vi) approving the remuneration and terms of engagement of the external auditor; and (vii) reviewing and monitoring the external auditor's independence and objectivity and the effectiveness of the audit process. Providing non-audit services by external auditors is allowed subject to a disclosure about the measures taken to secure the auditor's independence and objectivity, and audit committee's approval. Companies which do not have an internal audit function are required to review the need for one from time to time. Although, corporate guidelines or codes of business conduct are not required to be disclosed by companies, other Code's requirements, supplemented by the listing rules, cover an extensive disclosure on corporate governance issues, such as: information about the audit committee's functions and composition, a brief presentation of the activities conducted by the board's committees, a statement on internal controls that include a description of the company's internal control and risk management systems etc.

### **3. Corporate governance framework in Romania**

In 2001, the OECD with the support of USAID, developed a specific program to improve corporate governance in Romania. The OECD/USAID views envisaged by the program were pointing out the following objectives: (i) evaluate corporate governance in Romania; (ii) offer a set of key recommendations for improving corporate governance in Romania and bring it closer to the international standard of the OECD Principles; (iii) identify needed technical assistance in the area of corporate governance; (iv) improve the understanding of present corporate governance practices in Romania, informing the international community about progressive national reform initiatives; and (v) facilitate full Romanian access to the ongoing international dialogue on corporate governance. In conducting the assessment and program formulation, the *OECD Principles of Corporate Governance* was considered the benchmark (OECD, 2001). The key recommendations constituted a comprehensive agenda for reform, including legislative changes, enforcement, institution building and private behavior/capacity building (Dobroteanu, L. et. al, 2008). Later, in 2002 and 2004, some re-assessments of the corporate governance practice in Romania were conducted by the World Bank (WB) as part of the joint WB-IMF Reports on the Observance of Standards and Codes (ROSC). The major improvements were driven by Romania's effort to join the EU and the continuing transformation of the Romanian capital markets. The WB report noticed that legislative changes have improved the corporate governance framework. The 2002 and 2004 revisions to the securities laws in particular have increased

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<sup>447</sup> unless expressly addressed by a separate board risk committee composed of independent directors, or by the board itself.

protections for minority shareholders of publicly held companies (examples include the introduction of cumulative voting, rules to ensure the payment of dividends, and rules governing related party transactions). However, the report indicated several areas for further improvement. It recommended that policymakers consider (i) giving a clear mandate to the CNVM to protect shareholder rights, and providing additional resources to allow it to carry out this mandate; (ii) protecting shareholder rights for all publicly held companies; (iii) moving forward on the creation of a Corporate Governance Institute, to both provide training to board members, and develop a new Corporate Governance Code, refocused on role of the board of directors; and (iv) revising the company law, with emphasis on shareholder rights and the board of directors (WB, 2004).

In Romania, the obligation to comply with the EC recommendations on corporate governance materialized in the revision from 2004, 2006 and 2007 of company legislation (Law 31/1990). The last two revisions introduced in the Romanian regulations provisions regarding the corporate governance models applicable to all companies, and especially to the listed companies. These provisions enlarge upon the following aspects: (i) the one-tier governance model; (ii) the two-tier governance model; (iii) the oversight role exerted by the board and supervisory committees on the executive management; and (iv) the structure and the compositions of the board committees etc. The legislation prescribes the obligation of listed companies to comply with the two-tier corporate governance model. Although the recent revisions of the company law brought in significant improvements in terms of audit committee and internal audit, the requirements are still incomplete and difficult to implement (Dobroțeanu, C. & Dobroțeanu, L., 2007). The law merely describes the composition, role and responsibilities of audit committees, and leaves important issues uncovered, particularly regarding the protection of auditors' independence, appointment, renewal and removal of internal and external auditors. Moreover, the company law currently includes some puzzling provisions according to which, the companies should have a censors<sup>448</sup> committee, whose role overlaps with the audit committees'. However, following the WB recommendations, the Bucharest Stock Exchange (BVB) has recently issued a revised version of the code on corporate governance (initially released in 2007), and a Corporate Governance Institute was established. The Code provisions are voluntary except for the listed companies which are bounded to observe it and to report on a "comply or explain" in a special statement attached to the annual reports. The Code is structured into articles, principles and recommendations covering a significant area of corporate governance issues: board committees and their composition, role and responsibilities, rights of shareholders, external and internal audit, transparency and disclosure etc. The minimum requirements indicate the board should set up three supervisory committees: the nomination, remuneration and audit committees. While only the audit and remuneration committees should be staffed entirely with non-executives, all three committees have to accommodate a majority of independent members. Independence is assessed based on a list of specific criteria. The major responsibilities of audit committees described by the Code include: "(i) to assist the board in the discharge of its responsibilities in the areas of financial reporting, internal control and risk management, (ii) to make recommendations to the board regarding the selection, appointment, reappointment and removal of the external auditor and, in addition, the terms and conditions of their remuneration; and (iii) to monitor the independence and objectivity of the external auditor, in particular by monitoring the rotation of the partners of the audit firm" (BVB, 2008). In addition to the comply or explain statement, companies should disclose information about their governance and ethics codes adopted, the structure and composition of the board, activities conducted by the board committees etc. However, the enforcement of the Code provisions is to be monitored, since its first version

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448 Censors are described by the law as independent experts in the area of accounting or auditing playing a supervisory role on the financial reporting activities of the company. This corresponds to a French-inherited model of board supervision over the executives.

application hasn't yet yielded the expected observance outcomes<sup>449</sup>. In the audit field, the revised legislation forbids the external auditors to provide simultaneously audit and non-audit services to a client, and it also underlines the obligation of the companies in question to organize the internal audit function as well as the latter's role in consolidating corporate governance.

#### **4. Concluding comments**

The above comparative analyses reveal certain common features of, and major differences between the national governance frameworks considered. Firstly, SOX is different from the UK's Combined Code, and from BVB's Code, in that observance is mandatory, rather than 'comply or explain'. Such a difference indicates a rule based approach (US) as opposed to a principle based approach to corporate governance (UK and Romania). If this is not a surprise for the UK case, Romania's adherence to a flexible system governed by principle deserves to be praised, particularly because it comes after a long tradition on rule-based national regulations. In terms of code structures and requirements, even though there are similarities such as provisions for board structures, models and composition of audit committees etc., UK' and Romania' Codes seem to be much closer to each other, while US provides for a more extensive and tighter coverage of governance issues (i.e. those related to assessing the independence status of the board members). Such a strict approach might create adverse effects in the sense that US companies' officials would be tempted to identify ways to avoid complying, due to high costs implied by observance of the SOX provisions. The proportion of independent and non-executive members of the board committees vary between the national frameworks considered, although all of them provides for a majority of independent members. The audit committee's role and responsibilities and internal audit function are, by far, best described by the UK Code. The Romanian provisions in this regard fall short behind, given that there are still issues to be developed, such as eliminating the actual errors from the legislation, and releasing supporting guidelines similar to the UK Smith' ones. The US is very different in this regard, by giving absolute authority to audit committees in relations with external auditors, although such an approach gives raise to further doubts on auditor's independence: to whom is he responsible for audit opinions issued? Is he serving the public', shareholders' or audit committee's interests? Moreover, the US and Romania's position regarding the prohibition of providing non-audit services to an audit client is, as we believe, not going to produce in long run the expected outcomes in terms of safeguarding the auditor's independence. Real life has already shown that more pervasive means of avoiding these requirements are identified. UK has a more balanced approached in this regard. One final remark on auditing points the excessive pressure placed external auditors under the US systems: auditors obligation to report, as part of audit engagement, on client's internal control systems and management's assessment of it. Apart from some legal problems raised by such a requirement, this has led to an increase of audit fees and, implicitly, of audit costs to audit clients. Considering the governance reporting and transparency, one could notice that US is very demanding and strict in this regard, attitude that, again, triggers higher costs to reporting companies in exchange for no returns (Aluchna, 2009). On the opposite, both UK and Romania have a more balanced view on this, particularly through "comply or explain" statement. As an overall conclusion of our research, the BVB corporate governance code was formulated by drawing up characteristics from both systems, with a strong preference for UK best practice. It is to be seen in the future whether such an option proves to be a viable one for Romanian companies and national particular circumstances.

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449 A survey conducted on the BVB listed companies websites revealed that very few of them (statistically insignificant) have observed the disclosure requirements of the 2007 Code.



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## A SEMIOLOGIC APPROACH TO AUDIT EXPECTATIONS GAP

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*Audit expectations gap (AEG) is one of the most debated phenomena animating the international scientific research scene. The volume of papers focused on defining the AEG concept, examining its determinants, implications, and mechanisms to minimize the gap almost exceeds those dedicated to the exploration of creative accounting. Our paper, as an integral part of a wider research<sup>450</sup>, seeks to review the conceptualization of AEG on international arena along with its identified determinants and behavioral path, and the research methodologies employed by researchers in their studies on AEG. Our approach relies heavily on an extensive international literature review, based on which we conclude with taxonomy on AEG.*

*Keywords: audit expectation gap, audit research, auditors, perceptions*

*JEL classification: M42*

### **Introduction**

Under the circumstances of current international developments, dominated by financial crises, the traditional role played by the external audit in rendering confidence in companies' financial reporting on their financial position and performances is increasingly becoming questioned. Limperg (1932 cited in Porter et al 2005 p.119) points out that the "audit function is rooted in the confidence that society places in the effectiveness of the audit and in the opinion of the accountant...if the confidence is betrayed, the function, too, is destroyed, since it becomes useless". Confused by economic crises, the public turn its eyes on auditors: Why auditors do not report the frauds committed by his clients? To what extent should an auditor be invested with confidence since it gets paid by its client? How reliable and useful could be an audit report if ambiguous wording is extensively used in it? If auditors are not able to explain intelligibly their work, how could one expect that non-auditors would understand it? (Humphrey, 1997). Why auditors do not disclose creative accounting techniques used by their clients? Why financial failures are invariably showing up auditors' tolerance to manipulations of financial information by their clients? Concluding on such questions, and many others not captured above, perhaps, the most serious perception widely shared by the public that undermines the external audit – drawn from the audit' inability to early signal and disclose the corporate failures – is: why is external auditing compulsory to companies? (Manuzi, 2008).

Looking in the past, one could notice that this is a cyclical phenomenon: whenever the economic world is shaken by financial scandals or is going through financial crises, external auditing is exposed to wide public criticisms which do not save any effort to question on its role (Humphrey, 1997). Accumulated in time, such noisy voices have placed a strong pressure on the international professional community to react in various ways: either by adjusting some professional

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450 The research was conducted as part of a CNCSIS financed research project – „Studii bipolar privind controversele de percepție asupra auditului (audit expectation gap): profesie versus utilizatori performanta autohtona versus performantele europene si internationale”, project manager, Laurentiu Dobroțeanu, 2009.

standards, by issuing new ones, by promoting higher publicity about the external audit mission, or by internationally emphasizing the auditing role. While until recently such actions were taken individually, anticipating the threats faced by the profession, the international regulation community joined their efforts to support each other in passing through the economic crises and in promoting the utility of external auditing (Manuzi, 2008). Whether such an approach would trigger the desired effects or not is another controversial issue. However, looking at the past developments of public perceptions toward auditing, irrespective of arguments brought by each side, the picture gets clearer: the gap has never narrowed, but deepened and got versatile.

Noticing the perception gap and pragmatic actions undertaken the international scientific community has initiated an extensive research on AEG resulting in an explosion of papers written and published by famous researchers. Being confident that one cannot treat effectively the effects until the causes are known, a large number of papers approach the determinants of AEG attempting to explain it. For instance, issues such as principles and concepts of auditing, audit role and functions, techniques and procedures, communication and auditor's responsibility, and professional ethics – virtually, all of them – have been considered as generating and explanatory determinants of AEG. At the same time, a limited amount of research was dedicated to exploring the social and cultural foundations of AEG emphasizing the auditor's professional conduct and the limited public efforts – as users of audit reports – to obtain a good understanding about the audit mission and role. From this perspective, the gap can not be covered as long as human imperfections and behaviors of both sides are considered. Apart from theoretical debates, it is a separate issue whether the researchers' findings serve to narrow the gap, or are employed in this process by the profession, that could be addressed by further research. However, the scientific community is to be highly praised for its research efforts resulting in the formulation of the AEG paradigm and for the exposure of virtually unlimited scientific approaches to auditing issues.

## **1. Conceptualization of AEG in international literature**

### ***1.1. AEG definitions***

In line with the various approaches briefly indicated above, there are a number of attempts to define the AEG. Within this paragraph we have selected some of the most relevant definitions. Liggio (1974) defined the audit expectations gap as the difference between the levels of expected performance as interpreted by the independent accountant and the user of financial statements. Mautz and Sharaf (1961), Flint (1988), Wallace (1980) – to name only few researchers – have their merits for describing the AEG in terms of audit's role and usefulness employing the agency, assurance, information, and market utility theories. But, beyond of the scientific and pragmatic value of their arguments, it was obvious that they were pleading for the profession; somehow they implied that the public – as improper educated users of audited financial reports – is to be blamed for its misperceptions on audit role and importance.

Toward the end of the last century, more balanced views showed up: the auditors and their responsibilities began to be considered within the definition of the AEG. Thus, a couple of decades later, Porter noticed that the concept of *auditor's expected performance* from Liggio's definition was too vague which ignores that auditors, as human beings, do not always behave as prescribed by the professional standards. Consequently, she pointed out that AEG reflects the society's expectations of auditors against the *perceived performance of auditors* (Porter, 1993). In line with Porter's arguments, Humphrey, Moizer and Turley (1993) suggest that the common element in the various definitions of the gap is that auditors are performing in a manner that is at variance with the beliefs and desires of others who are party to or interested in the audit. Chandler and Edwards (1996) define AEG as the differences between what the public expects from an audit and what the auditing profession prefers the audit objectives to be. According to Pierce and Kilcommins (1996), the audit expectations gap is when external auditors' understanding of their role and duties is compared against the expectations of user groups and the

general public. Koh (1998) suggests that AEG gives rise when auditors and the public hold different beliefs about the auditors' duties and responsibilities and the messages conveyed by audit reports. Marianne Ojo (2006) defines AEG as *"the difference between what users of financial statements, the general public perceive an audit to be and what the audit profession claim is expected of them in conducting an audit. In this respect, it is important to distinguish between the audit profession's expectations of an audit on one hand, and the auditor's perception of the audit on the other hand"*. One of the most popular internet definitions of AEG marks the discrepancy between expectations of the end-of-year procedure addressees and the actual legal order and contents of the annual audit. The more strongly expectations of the public of the actual task of the final examination deviate, the less the work of the accountants reliable are considered<sup>451</sup>.

### ***1.2. AEG determinants and its behavioral path***

The diversity of AEG definitions is directly linked to the wide range of its determinants considered by researchers (Dobroțeanu et al, 2007). There is an impressive amount of papers discussing the attitudes and users behavior as regards the auditors' responsibilities with respect to frauds – by far, this is the most controversial and vivid subject of the past and current debates. It is true that, originally, auditing played a primary role in controlling the businesses while such a role implied detection of frauds. However, as businesses have developed globally, at a rapid pace, the audit's role has evolved consequently, leaving the business control and fraud detection in the hands of some other organizational functions (Dobroțeanu L, Dobroțeanu C, 2002). Unfortunately, the public way of thinking and its level of education have not kept the pace with such developments but rather they remained anchored in the traditional role of auditing, expecting the auditors to continue to be responsible for fraud detection and disclosure (Shaked, Sutton, 1982). Often, under the pressures of public criticisms – as the accordion movements – the profession's regulators tried to accommodate the auditing practice to public desires, although such attempts have repeatedly failed. Among the arguments brought by the profession were the lack of professional expertise required by fraud detection and the obligation of auditors to comply with ethical provisions, namely to observe the confidentiality principle during their audit engagements. The proverbial hot potato changing hands frequently has been quickly discarded by auditors, even though in parallel, some audit and consultancy companies were advertising their consulting services for fraud prevention and detection! (Humphrey, 1997). The current international standard of auditing – ISA 240 – introduces certain subtle provisions in presenting the auditors responsibilities in relation to fraud: when planning and conducting the audit engagement, the auditor has to consider the risk of fraud. According to Lee and Azham, 2008 often, the public loses sight of such subtle wording.

Perhaps, as much debated as fraud-auditor relationship, if not even more in quantitative terms, the auditors' independence give rise to a wide range of suspicions of financial statements users. Generally speaking, their concerns related to auditor's lack of independence – based on which the reliability of financial reports is hindered – are driven by the equivoque procedure of engaging and rendering accountability to auditors. If, as indicated within the IFAC's conceptual framework, the auditor serves the public interest, why are they employed and paid by the client? Why then the target user of audit reports is the shareholder instead of the public?

Another way of looking at the lack of auditor independence in public's perception is to consider the conflict of interests triggered by providing non-audit services to the audit client. In spite of the efforts made by the international professional community to disseminate widely the actions taken to strengthen the auditor's independence, public's perceptions seem to remain unchanged. Such an attitude is fueled by the fact that auditors themselves, though an insignificant minority,

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451 <http://www.economy-point.org/e/expectation-gap-during-the-annual-audit.html>, consulted on April, 2009.

seem to not value too much the professional ethics, particularly the *independence in appearance* (Leung et al, 2007).

Some papers examine the users' perceptions in relation with the utility of the audit report (e.g. Monroe, Woodliff, 2009). There are different views on and preferences for long- and short-form of the audit report. However, irrespective of users' preferences, such papers point out the ambiguous wording used by auditors in audit reports as a major cause for AEG. Several studies envisaged users' propensity to perceive the audit opinion as a 100% guarantee of the accuracy of financial reports issued by companies (Epstein, Geiger, 1994). The reasonable assurance is not perceived by the public as expected to be. The heavy use of equivocal and subjective concepts such as true and fair, materiality, professional judgment, etc. is one of the major impediments in rendering audit report with intelligibility, and in setting up an efficient communication channel between the auditor and the users of financial reports. In consistence with its tradition, the profession repeatedly has declined to accommodate its practices to the users' perceptions which trigger further public criticisms. According to Hopwood (1990, cited by Humphrey, 1997), to describe in detail audit techniques sufficiently enough to be understandable to the wide public, would blow up the whole mystery surrounding auditors' activities and disclose the mystical qualities of professional expertise and judgment. In such circumstances, it is straightforward that none of the disputing groups is making any efforts to alleviate the gap, but rather this leads to a further gap widening.

To some extent in line with the determinants described above, several papers approach the AEG by discussing the audit function from a more pragmatic perspective. Such studies have tried to find explanations for AEG by approaching the public misperceptions, often exaggerated, as regards the utility of auditing and the manner of conducting an audit engagement (Lee, Azham, 2008). First of all, the excessive publicity of corporate failures associated with auditors' name, rarely completely justified – see, for example, Enron-Arthur Andersen case – has triggered a serious credibility and image problems for the profession (Hourguebie (2004) cited by Lee, Azham, 2008). In spite of considerable efforts made by the profession to regain the public confidence, the public perceptions remained anchored in these pseudo-realities. The public seem to prefer to act following the rule: it is easier to blame and criticize than to learn and understand. What seems to be unfair is that there is no publicity surrounding corporate successes labeled with auditors' name! The major public accusations underline the audit inability to act like an early warning system against corporate failure prospective. Such perceptions are often based on the assumption that auditors do not comply with professional standards in conducting their audit engagements due to their lack of expertise or deficient auditing standards allowing auditors to supersede their provisions or due to ambiguous concepts that trace auditors' activities leaving enough room for maneuver to manipulate the audit results. In line with the above described public perceptions, there are some papers that discuss the negative implications on the auditors' professional conduct triggered by the compulsory auditing imposed to companies through legal requirements (Boon et. al, 2008). According to these views (Manuzi, 2008), the auditors are protected by the legal provisions and seem to not be motivated to secure their market: their clients can not give up to auditing: they only have the option to change an auditor for another one. Such circumstances render the auditors with a very comfortable position in considering the accommodation of public expectations related to their performances. Finally, a number of criticisms envisaged the superficial controls conducted over the auditors activities (. The attempts to solve these problems by strengthening the quality control mechanisms together with setting up the so-called independent supervisory bodies raise also a lot of questions.

## **2. The taxonomy and research methods for exploring AEG**

The detailed review of relevant literature circumscribed to AEG controversy give the grounds for classifying the scientific approaches into several major groups taking into consideration the

determinants of AEG tracing its behavioral path (CICA, 1988; Porter, 1991). A first group of approaches – known as performance gap – consist of research papers that examine AEG determinants focusing on cases when the society's reasonable expectations of auditors' accomplishments fall short of their perception of auditors' achievement. This group can be further broken down into two representative subgroups (Al-Duneibat, 2003): *deficient standards* (gap between duties reasonably expected of auditors and auditors' existing duties as defined by the law and professional promulgations), and *deficient performance* (gap between the expected standard of performance of auditors' existing duties and auditors' perceived performance). Complementary, one could distinguish studies that investigate AEG from the perspective when the society's expectations of auditors exceed the duties reasonably expected of auditors. This group is known as *ignorance/feasibility/reasonableness gap*.

The articles written on AEG reveal a continuous diversification of research in this field: from a simple literature review, to empirical studies with valuable scientific outcomes. In addition, there are papers<sup>452</sup> that seek to test various theories and hypothesis on AEG at national/regional levels. In spite of the impressive volume of published research, one could notice that there are a limited number of studies exploring the psychological, cultural or political factors that could explain certain attitudes, behaviors or perceptions toward auditing (Sikka, 1998; Al-Duneibat, 2003).

The research methodologies employed by these studies are basically those belonging to social sciences. Thus, there is a heavy use of empirical research based on structured or semi-structured interviews and questionnaires, particularly in cases of examining the performance gap. The subjects of empirical studies continue to be diversified: from students to auditors, investors, brokers, regulatory bodies officials or representatives of corporate governance structures from companies. Although in a limited number, there are several studies that employ positive research methods, particularly to anticipate the forthcoming developments of AEG, based on statistical observations captured within econometrical models. An illustrative example in this regard, would indicate those papers that explore the AEG from the investors' perception perspective, while the benchmark most often considered is the relation between the stock performances and auditors' opinion (Antle et al, 1997, 2002; Teoh and Wong, 1993).

### **Concluding remarks**

A comprehensive literature review on AEG offers an amount of unexpected valuable information and precludes the researcher from the risk to get trapped into reinventing the wheel. Pros and cons that are brought in debating AEG are also useful in tracing our objective judgment in conducting this study. The major outcomes reveal that AEG is an endless topic for scientific research that might be further explored through multiple research methods. Narrowing AEG through more or less sophisticated mechanisms could be viewed as a utopia, since, as accounting creativity, AEG is a natural phenomenon, an engine – though with a slow start up – which moves forward the audit theories and practice. The best that one might expect by using such mechanisms is to control and alleviate the negative or ... *undesired* implications over the profession.

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<sup>452</sup> See for example Porter (1993) in New Zealand; Porter and Gowthorpe (2004) in the UK and Lee et al. (2007) in Malaysia.

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# CONSIDERATIONS CONCERNING THE IMPROVEMENT OF COSTS CALCULATION THROUGH TARGET COSTING METHOD

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*Target costing represents a cost accountancy concept, developed and used even from the 70's by Japanese enterprises, having on its basis another manner of regarding the relationship between costs and prices than the traditional one. As against the traditional methods, this method uses the information provided by cost and focuses on the determining of the best level of the sell price, involving specialists from different departments: production, accountancy etc. It appeared from the need of producing smaller series, in order to give a better respond to market's needs and due to the introduction of new methods of production organization and of new technologies based on automation. The method is regarded as a cost reducing management instrument during the product's entire life cycle duration. Managers look that through the market's level both the consumers' requires and the reaching of the expected profit to be satisfied.*

*Keywords: target costing, standard cost, control*

*JEL Classification: M41: Accounting*

### **1. The context of apparition of the new cost calculation method - Target costing**

The long term financial success of any business depends on the fact whether the prices are higher than the costs in order to allow the financing development, reinvestments and the acquiring of incomes satisfying for the stockholders. At one time with the competition growth, the offer surpasses the demand, and as consequence, the prices are more and more influenced by market's forces. The target costing method appeared in the context when the companies, willing to obtain a certain level of the profit, had to revise the rapport production costs/prices fixed on the market or, setting own sell prices, to occupy a certain clear established segment on the market. After the Second World War, numerous North-American companies developed significantly due to the high demand started by Europe reconstruction and population growth. The big demand as well as the lack of competition, allowed companies to remain profitable and to develop through covering the costs increase with prices increase. Nowadays, many of these companies, used to the favorable past market circumstances, experiment a different and hostile market.<sup>453</sup>

The powerful agglomerations and groupings, economies' globalization, both as offer and demand, the new economic and technologies restrictions and opportunities of global environment lead to a redefining of enterprises objectives. From the well-known "quantity and productivity", the enterprise faced a new system of objectives: quality increase, the diminishing of costs and terms; productivity; flexibility. Under these type of circumstances the need of "defining new methods", adapting the fundamental calculation methods, their improving – respective the apparition of modern calculation costs appeared.

Traditional methods of costs calculation start from costs to which, in order to obtain the sell price on market, the willing profit margin is added. Under present circumstances, when prices on market are already fixed, as a consequence of demand/offer rapport, the use of an inverse calculation is imposed: starting from the sell price, we determine the costs to which the respective products should be produced. These costs cannot be surpassed under the condition when the

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453 AICPA – "Implementing Target costing" on [www.aicpa.org](http://www.aicpa.org)

enterprise wishes to obtain the planned profit. The target costing method, a calculation cost method oriented towards market, answers the best to this requires.

Therefore, the target costing method is founded on another manner of looking into the relationship between the costs and prices than the traditional one. The fundamental equation “price – profit margin = cost” highlights the fact that prices are conducted and established either by market or by firms, that will reduce the prices from the desire of increasing the market penetration. The profit margin is established at a level that will assure firms the reaching of the established objective, and the costs will be determined, according to prices and profit margin. For those who are leaders in method’s use, this idea is more than a change in mechanics; this change includes the entire company and integrates the market with the projection and production. The idea according to which the prices determine the costs has a behavioral impact upon the business. This is the key to survive a long term, in order to increase and flourish in a competitive and always changing environment.<sup>454</sup>

## **2. The Target costing versus the Standard costing**

The total costs types were used, until now, by the most of firms. The standards and technique of standard costs were used in order to determine the production cost, formed of the expenses with the manual labor and with the necessary materials. To this a part of the costs with sale and administration for obtaining total or full-costing were added. In order to establish the sell price on the market, a margin of profit is added to the complete cost. This method of cost calculation functioned well under the conditions of a market economy less dynamic than the one existing today.

Target costing is seen as a cost reducing management instrument during the product’s entire life cycle duration. Managers try that by means of the price level to satisfy both consumers’ requires and the reaching of the desired profit. As against the traditional standard-cost method, which leaves from the estimation of cost production, of the sell and administration one, target costing method has as departure point the establishing of the sell price, from where the profit margin is deducted in order to establish the cost.

According to traditional method, the cost is firstly determined and implemented. In the case when its size and structure is not corresponding, the managerial team and the one that dealt with calculation will have to reanalyze the entire production cost calculation process, with the purpose of reduction, in most cases.

In exchange, *the target/costing method uses the information provided by cost* and focuses on the determining the best level of sell price, in order to prevent the subsequent discussions concerning the product’s re-analyzing. The whole process of decisions making involves a team formed of the specialists from different departments, production, marketing, accountancy etc., which have the responsibility of determining a sell price acceptable by the firm. In what the identification of cost reduction possibilities is concerned, the members of the involved team start by elimination of all costs that do not produce value, by improving the product’s design and modifying production methods.

The target costing operates even from the product’s conception phase and can be revised during the different phases of product’s life cycle. According to this method, the majority of a product’s costs are engaged even from its conception, the margins realized on product, during its life duration, being mainly connected to costs control even from the study phase, the one of project. After this phase, it is even harder to perform any influence on costs.

The main differences between the target costing method and costs classical calculation methods are presented briefly in Table nr. 1.

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454 AICPA – “Implementing Target costing” on [www.aicpa.org](http://www.aicpa.org)

**Table 1. The main differences between the Target costing method and the classical costs calculation methods**

| Characteristics  | Target costing   | Classical methods   |
|--|--|---|
| The market's requirements or restrictions              | <ul style="list-style-type: none"> <li>■ orientates the costs planning</li> </ul>  | <ul style="list-style-type: none"> <li>■ there are not taken into consideration</li> </ul>  |
| Costs reduction  | <ul style="list-style-type: none"> <li>■ it is made from the project phase (approximately 80% from costs are engaged from the projection phase, from which only 10-20% is consumed in this phase)</li> </ul> | <ul style="list-style-type: none"> <li>■ it is made during the production process by elimination of dissipation and inefficiency</li> </ul>               |
| The competitive sell price                             | <ul style="list-style-type: none"> <li>■ determines the product's cost</li> </ul>  | <ul style="list-style-type: none"> <li>■ is determined by cost (the cost determines the offer price of producer's)</li> </ul>                             |
| The informational-decisional flux "Clients →Producers" | <ul style="list-style-type: none"> <li>■ guides the prices reduction and then of costs</li> </ul>  | <ul style="list-style-type: none"> <li>■ does not influence but in small measure the costs reduction process</li> </ul>                                   |
| The involvement of the suppliers/distributors          | <ul style="list-style-type: none"> <li>■ it is made from the project phase</li> </ul>  | <ul style="list-style-type: none"> <li>■ it is made after the projection phase, respective in the supply for production one</li> </ul>                    |
| Costs administration                                   | <ul style="list-style-type: none"> <li>■ it is made by a pluri-disciplinary team (substantiation, pursuit and control-adjustment)</li> </ul>   | <ul style="list-style-type: none"> <li>■ it is made by costs accountants, emphasizing the digressions</li> </ul>  |
| Costs minimization                                     | <ul style="list-style-type: none"> <li>■ it is followed both for the enterprise and for the client</li> </ul>  | <ul style="list-style-type: none"> <li>■ minimizes the costs and offer price (accepted and paid by clients)</li> </ul>                                    |
| The integration of value creation chain                | <ul style="list-style-type: none"> <li>■ integrates the chain of value creation in costs planning</li> </ul>   | <ul style="list-style-type: none"> <li>■ integrates only phases of the value creation cycle in planning the costs (supply-production-delivery)</li> </ul> |

(Source: Processing after Ansari S., Bell J. and the CAM-I Target Cost Core Group – „Target Costing, The Next Frontier in Strategic Cost Management”, Irwin, Chicago, 1997)

### 3. Target costing method identification for Caterpillar Inc. enterprise <sup>455</sup>

**Caterpillar Inc.** is a United States-based corporation headquartered in Peoria, Illinois. Caterpillar (commonly referred to simply as CAT) is, according to their corporate website, "the world's largest manufacturer of construction and mining equipment, diesel and natural gas engines, and industrial gas turbines." Famous for their products featuring caterpillar tracks and a distinctive yellow paint scheme, Caterpillar produces a wide range of engineering vehicles, including the range of Caterpillar bulldozers. Caterpillar is one of the thirty companies whose stock is tracked in the Dow Jones Industrial Average. <sup>456</sup>

Owning the instruments and necessary system for method's implementation, **Caterpillar Inc.** applied the target costing method <sup>457</sup> for one of the new type of vehicles that wishes to produce,

455 Swenson D. Ph.D., CMA, CPA; Ansari S., Ph.D.; Bell J., Ph.D., CPA; Kim I.W., Ph.D. - „Best practices in Target Costing” in „Management Accounting Quarterly”, vol. 4, nr. 2, winter 2003, pp. 15-17.

456 [http://en.wikipedia.org/wiki/Caterpillar\\_Inc](http://en.wikipedia.org/wiki/Caterpillar_Inc).

457 The Consortium for Advanced Manufacturing – International (CAM-I), the American Institute of CPAs and the University of Akron sponsored an identification study of the best practices in Target costing. This study, presented by specialists Dan Swenson, Shahid Ansari, Jan Bell and Il-Woon Kim in „Best practices in Target costing” paper,

elaborating for this purpose target objectives. Therefore, management established for this type of vehicle a target cost of 94,6% as against the cost for a similar product. The cost of the similar product is determined on the basis of current production expenses. It results, therefore, that for reaching the target cost, the expenses must be reduced with 5,4%. For costs reduction a multifunctional team is named, formed of specialists from different departments, respective: designer engineers, production engineers, representatives from the sell, supply, marketing and accountancy departments. This starts by evaluating the costs of the product's components, with smaller costs, but that will assure the same qualities that the clients wish. Altogether, the team takes into consideration the possibilities of the product's quality improvement. In table 2 the reduction of 4, 6% identified by the team are presented.

**Table 2. Modification of Current Product: Known Adjustments**

|             | Current Costs | Projected Savings | Adjusted Costs | Explanation of Known Adjustments  |
|-------------|---------------|-------------------|----------------|---|
| Assembly    | 5,4%          | 1,5%              | 3,9%           | Efficiency improvements due to redesigning sheet metal, as documented on current production models. |
| Cab         | 7,9           | 0.8               | 7,1            | Replace current cab with the "Classy Cab." PF quote already received.                               |
| Engine      | 8,6           | 0.7               | 7,9            | Cost estimate from Engineering for switching to different configuration.                            |
| Hydraulics  | 19,1          | 1,6               | 17,5           | New pump design.  |
| Power Train | 12,0          | 0                 | 12,0           |   |
| Structures  | 20,0          | 0                 | 20,0           |   |
| Linkage     | 18,0          | 0                 | 18,0           |   |
| Other       | 9,0           | 0                 | 9,0            |   |
| Total       | 100,0%        | 4,6%              | 95,4%          |   |

In order to reach the target cost, the team will still have to reduce from costs 0,8%. In order to identify other potential opportunities of cost reduction, operational staff (production one) can be handed in questionnaires with questions to which they have to answer with "yes" or "no", the "yes" answer indicating a cost reduction opportunity. A pattern for this questionnaire is presented in Table 3.

More "yes" answers indicate a bigger potential for saving money, and by total calculation and determining the proportions will establish to which of the product's components may action with the meaning of costs reduction. In the example presented in Table 3, the hydraulic component will have to reduce the most from the initial costs – with 50%, meaning to assure a reduction of the total cost of 0,4% from the total of 0,8% for reaching the target costing.

\* Yes=1; No=0

|   | Assembly | Cab | Engine | Hydraulics | Power Train | Structures | Linkage | Other | TOTAL |
|---|----------|-----|--------|------------|-------------|------------|---------|-------|-------|
| 1. Are there more than five suppliers from whom you can purchase materials? | 0        | 0   | 0      | 1          | 1           | 1          | 1       | 0     |       |
| 2. Are you more costly than best-in-class supplier (either                  | 0        | 0   | 0      | 1          | 0           | 0          | 0       | 0     |       |

consisted in the examination of method's application manners in certain enterprises from the United States, the level of success and the realized improvements, as well as the factors that influenced the target-costing's success.

|   |          |          |          |           |          |          |          |          |           |
|---|----------|----------|----------|-----------|----------|----------|----------|----------|-----------|
| <i>Caterpillar or non-Caterpillar)?</i>   |          |          |          |           |          |          |          |          |           |
| 3. Do you plan to survey your supplier cost breakdown?  | 0        | 0        | 0        | 1         | 0        | 0        | 1        | 0        |           |
| 4. Is the current manufacturing process younger than two years?   | 0        | 0        | 0        | 1         | 0        | 0        | 0        | 0        |           |
| 5. Does labour represent more than 40% of your total cost?  | 0        | 0        | 1        | 1         | 0        | 0        | 1        | 0        |           |
| 6. Is your "unit setup cost/total unit cost" ratio greater than 5%?                                     | 0        | 0        | 1        | 1         | 0        | 0        | 0        | 0        |           |
| 7. Do you see potential for material specification changes?   | 0        | 0        | 0        | 1         | 0        | 0        | 0        | 0        |           |
| 8. Do you see potential for tolerance loosening?  | 0        | 0        | 0        | 1         | 0        | 0        | 1        | 0        |           |
| 9. Does the current family of parts contain nonapproved parts?  | 0        | 0        | 0        | 1         | 0        | 1        | 1        | 0        |           |
| 10. Can the current design or manufacturing processes be subjected to emerging innovative technologies? | 0        | 0        | 0        | 1         | 0        | 0        | 0        | 0        |           |
| <b>TOTAL</b>  | <b>0</b> | <b>0</b> | <b>2</b> | <b>10</b> | <b>1</b> | <b>2</b> | <b>5</b> | <b>0</b> | <b>20</b> |
| <i>Relative Proportions</i>   | 0%       | 0%       | 10%      | 50%       | 5%       | 10%      | 25%      | 0%       | 100%      |
| <i>Distribution of 0,8% in Cost Reduction</i>   | 0%       | 0%       | 0,08%    | 0,40%     | 0,04%    | 0,08%    | 0,20%    | 0%       | 0,80%     |

Table 4 illustrates the last phase from the costs reduction process. Starting from the "Adjusted costs" column from Table 2 and adding the supplementary deductions determined on the last row from Table 3 the target costing proposed for the new type of vehicle is obtained, the one that Caterpillar enterprise wants to produce.

**Table 4. Modification of Current Product: Final Cost Assignments**

|                    | <i>Adjusted Costs</i> | <i>Distribution of 0,8% in Cost Reduction</i> | <i>Target Cost for New Product</i> |
|--------------------|-----------------------|---|------------------------------------|
| <i>Assembly</i>    | 3,90%                 | 0,00%   | 3,90%                              |
| <i>Cab</i>         | 7,10                  | 0,00  | 7,10                               |
| <i>Engine</i>      | 7,90                  | 0,08  | 7,82                               |
| <i>Hydraulics</i>  | 17,50                 | 0,40  | 17,10                              |
| <i>Power Train</i> | 12,00                 | 0,04  | 11,96                              |
| <i>Structures</i>  | 20,00                 | 0,08  | 19,92                              |
| <i>Linkage</i>     | 18,00                 | 0,20  | 17,80                              |
| <i>Other</i>       | 9,00                  | 0,00  | 9,00                               |
| <i>Total</i>       | 95,40%                | 0,80%   | 94,60%                             |

Summarizing, the Caterpillar enterprise started from the current cost of a similar product (100%), identified the costs reducing possibilities (Tables 2 and 3), establishing in final the target costing for each component of the new type of vehicle that the enterprise wishes to produce (Table 4).

#### 4. Conclusions

The „Target costing” concept seems quite simple on a first view: an enterprise will only produce the products for which it can assure an effective cost at the level of the predicted one (target). The questions that is asked would be: “what would happen in the case of products for which there exist demand and that is already produced, but for which the effective costs cannot be reduced?”.

The answer for this question was also found by Japanese economists through Kaizen method. The difference between *Target costing* and *Kaizen costing* consists of the fact that the former is applied, in principal, in the product's projection and fabrication phase, while the latter is in the producing phase.

The target costing method is a part from a global intercession that regards the costs reduction along the technologies continuous improvement process and the fabrication process, aspect that supposes a new management style of human resources and increased competences.

The continuous costs reduction should regard the whole enterprise. Concretely, there are followed: product's life different phases control; costs analysis starting from the product's conception phase according to their characteristics and possible sell prices; the permanent insuring that the new products will be profitable during the life cycle duration, the predicted prices being compared with the realized ones, and, respectively, their reporting to the selling price; the reducing of product's conception terms; the diminishing of the development prices and the insurance of a fast amortization; a better organization of the relationships with the suppliers and distributors; the mobilization and motivation of all competences from inside the enterprise by a transversal approach in favor of a bigger competition<sup>458</sup>. From this perspective, in order to be integrated in an enterprise's management four dimensions are appointed: markets and concurrence (taking into consideration of the economic environment); the integration of competences to enterprise's different functions; products' conception (the prediction of the future decisions' effects); the creation of tighter connections between current activities planning and control<sup>459</sup>.

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# THE STATE OF PRINCIPAL MATTERS CONCERNING THE COMMITMENTS' ACCOUNTING SYSTEM WITHIN THE PUBLIC INSTITUTIONS IN ROMANIA

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*Throughout this work, the improvements brought by OMPF (Order of the Ministry of Public Finance) 1792/2002 for the approval of the methodological Norms are presented, with regards to the employment, liquidation, enactment and payment of public institutions' expenditures but also organization, evidence and account of budgetary and legal commitments through Order of the Ministry of Public Finance 547/2009 regarding its modification and addition..*

*The attempt is to bring clarifications with respect to delicate aspects, individual/global commitment, manner of processing the annexes to the financial situations, proper determination of the available resources before making the payments, calculation of the available resources in case of payments made in currency, the need of a budget for commitment credits.*

*Key concepts*

*Commitment credits, multiannual actions, commitment creits, budget, the commitments', reflection within the financial states' annexes .*

The range of commitments' accounting organization

All public institutions, irrespective of their organizational form and the manner of financing the expenditures, have the obligation to:

- organize the accountancy of the legal and budgetary commitments;
- observe the procedures for going through all the 4 stages of the expenditures' budgetary execution, respectively the commitment, clearance, authorization and expenditures' payment.
- organize, run the accountancy and the report of budgetary and legal commitments starting with the budgetary year 2003, based on the normative act of the Order of the Ministry of Public Finance no. 1792/2002 for approving the Methodology norms on the commitment, clearance, authorization and expenditures' payment of public institutions, as well as the organization, clearance and report of budgetary and legal commitments.

Sensitive matters-deriving from the general framework

*at organizational level*

The managerial circuit regarding the commitments activity is based on the principle of **separating the attributions** of the people that have the capacity of credit release authority from the attributions of the people that have the capacity of accountants.

Credit release authorities for the budgets mentioned in art.1 para.(22) in Law no.500/2002 are authorized to commit, clear and authorize expenditures throughout the budgetary exercise, within the limit of the approved budgetary credit, while the payment of the expenditures is carried out by the people that, according to the law, bear the general title of accountant.

There was a need to re-approach the following concepts: commitment credit, budgetary credit, multiannual actions defined like this:

“The commitment credit represents the maximum limit of the expenditures to be made during the budgetary exercise and within the aptoved limits.

The budgetary credit is the budget approved sum, representing the maximum limit for the enactment and payment during the budgetary year of the commitments contracted during the budgetary exercise and/or from previous exercises for multiannual actions, respectively budget payments for other actions can be engaged, enacted and executed.

Multiannual actions represent programmes, projects and other similar actions occurring on periods longer than one year and which generates credit commitments and budgetary credits”.

Among the multiannual actions according to budget financed actions (with the greatest impact due to the sums and number of implementing beneficiaries) the following can be listed:

- programmes of public investment which are presented in the budget annexment of main credit regulators;
- programmes financed through irredeemable pre-adherence external funds, as well as projects and programmes financed through irredeemable post-adherence external funds afferent to European Union Cohesion politics, common agricultural and fishing politics but also other post-adherence facilities and instruments.

Funds afferent to multiannual actions will consist in commitment and budgetary credits, in budget annexments of main credit regulators.

*-at activity fusion level*

The budget annexes become the basis of sums extraction representing the commitment credits afferent to multiannual actions and are an integrant of these.

The specific operations of commitment, clearance and authorization of the expenditures fall in the competence of the credit release authority and are carried out based on the specialty compartments’ permits of the public institution according to art. 53 para.(3) in Law no. 500/2002 regarding public finances.

According to the legal frame, the unit leaders/managers may delegate competencies to the people with whom they collaborate, may designate people within the respective unit to carry out certain tasks, with the observance of the legislation in force, of the organization and functioning regulations.

*The need to have a clearer definition of certain aspects can be noticed, especially regarding: delimitation direction within the leadership department*

*Definition of competence (from competence delegation):*

It represents the transfer of competence to people in the organizational structure that may, based on the delegation act, commit the institution by legal acts with patrimonial consequences or may order the elimination of the obligations undertaken by the respective public institution by means of these legal acts.

*delimitation direction within the execution department*

*The manner in which authorized persons are chosen, incompatibility situations among them:*

the manager of the “economic directorate” **cannot** enter the category of “other empowered persons” because it is the leader of an operational organizational structure which in the process of the budgetary execution fulfills the attributions and competencies of a “specialty compartment” leader; the structure involved in certifying reality, regularity and legality of the created or asserted patrimonial operations, depending on the pertaining tasks from the Organization and Functioning Regulation

*defining the specialty compartment:*

it represents the organizational structure of the public institution where payment obligations based on public funds are created (in case of administrative acts or contracts) or are asserted (in case of laws, Government decisions, agreements, court orders).

In case of salary, benefits or corresponding contributions expenditures, the specialty compartment is the one that has attributions in calculating the salary rights and the corresponding contributions that draft the clearance documents (collective or individual payrolls), as well as Payment credit release.



### *Collaboration oriented (among different departments)*

It is necessary to have the involvement of the legal specialty compartment in controlling, in a preventive manner, the legal aspect of the administrative acts, by the prior consulting notice, both exclusively for certain administrative documents and before exercising the preventive financial control visa. The consulting notice is part of the category of documents prior to adopting the legal deed, whose request is obligatory, but it does not involve the obligation to comply.

Practically, questions emerge due to article number 2 of the Order of the Ministry of Public Finance no. 547/2009 for the modifications and additions made upon the Order of the Ministry of Public Finance no. 1792/2002 for the approval of the methodological norms regarding the engaging, clearance, authorizing and payment of public institutions' expenditures, as well as regarding the organization, evidence and report of legal and budgetary commitments which stipulates that "The legal commitment's project is being presented for the proper preventive financial control visa alongside with the form <Proposal of engaging an expenditure within the limit of commitment credits> or alongside with the form <Proposal of engaging an expenditure within the limits of budgetary credits>, depending on the case, according to the models presented in annex no. 1a) and annex no.1b) in the present methodological norms", without specifying the role of juridical notification..

With respect to the specification on the preventive financial control part, it is necessary within the Omfp.1792/2002 to replace the phrase "person empowered to perform the preventive financial control" with "the person designated to perform the proper preventive financial control", replace the phrase "preventive financial control visa" with "proper preventive financial control visa" and specify what happens within forms (where the collocation is mentioned) and with the designated regulator.

The budgetary authorization is not global. This requires a *specialty* of the credit based on expenditures' categories.

Credit specialty is regulated by art.12 and art.2 in Law no,500/2002, according to which: "...budgetary expenditures are registered and approved in the budget by expenditures' categories, grouped according to their economic nature and their end use, according to the budgetary classification". provision harmonized with the Financial Regulation no.1605/2002 of the Council "the credits are specialized on titles and chapters, the chapters are subdivided in articles and positions.

### **Committing expenditures**

Commitment represents the stage in which the institution creates legal obligations to third persons (legal commitment) and reserves the necessary budgetary credits for covering these obligations (budgetary commitments). Committing any expenditure has two aspects: legal commitment and budgetary commitment.

a). The legal commitment represents, according to the definition included in Law no.500/2002 at art.2 para.(3), "...any legal deed resulting into or that could result into an obligation based on public funds"

b) The budgetary commitment represents the deed by means of which necessary amounts for covering certain expenditures are reserved from the budgetary credits. Consequently, the approved budgetary commitments cannot exceed the approved levels of budgetary credits.

The budgetary commitments may be:

- individual budgetary commitments;
- global budgetary commitments.

For compliance with the approved annual credit limit, it is mandatory to reserve the committed budgetary credits for the payments that will be carried out in that budgetary year. The budgetary commitment by means of which the public funds were reserved for a certain use, within the limit

of the approved budgetary credits, precedes the legal commitment. Thus, the value of the legal commitments **cannot** exceed the value of the budgetary commitments and that of the approved budgetary credits by the incomes and expenditures budget.

The consequence of the introduction of accounts 8071 „Approved commitment credits” and 8072 „Employed commitment credits” is that budgetary and legal commitment accounts will work through different analytical programs for annual / multiannual actions so that the budgetary credits approved for each category of actions do not exceed the limit.

Depending on the nature of expenditures, their frequency, knowing the sum and supplier, a global or individual budgetary commitment is enacted.

***The budgetary credit represents a payment authorization, and the commitment credit represents a commitment authorization which, in part, may generate payments in the future exercises as well.***

It is necessary that the whole budget (not just the budget for multiannual actions – so far limited to investments, loans, irredeemable external funds) ceases to be a planning act strictly limited to a budgetary exercise, and to allow it to become of the commitment credits due to the existence of specific activity sectors, so as not to be in contradiction with the principles of commitments' accounting.

*Similarly, in December, salary commitments and the corresponding contributions can only be highlighted within the limit of the budgetary credits. These are registered in the corresponding expenditures accounts in view of observing the basic principles of the commitments' accounting, which leads to differences.*

Order 547/2009 does not solve the problem for these cases because they do not fall into the category of multiannual credits for this sort of activities.

#### **Clearing expenditures**

Clearing expenditures is the phase in the process of the budgetary execution where the existence of the commitments is checked, the reality of the due amount is determined or checked, the contingent liabilities of the legal commitment is checked based on justifiable documents attesting the respective operations. The operations of clearing expenditures are carried out by the credit release authority within the limit of the approved commitment / budgetary credits.

*A special aspect that occurs in case of clearing the global service provision contracts is that the invoice is issued for a global service without detailing it on types of activities, case in which there can no longer be an exact assertion of the strict observance of the contract, complying per budgetary articles.*

*During this phase some sensitive matters remain:*

*- the global contracts, the need to justify through factures the delivered services through these contracts these contracts in order to provide the necessary information demanded by article 155, Law 571/2003 regarding the fiscal code;*

*- the requirement of a correlation with the evolution of the general framework regarding the vouchers, the expenditures' limits (for example: the elimination of the fiscal facture as a voucher)*

#### **Authorizing payment expenditures**

Authorizing expenditures represents the phase within the process of the budgetary execution when there is a confirmation that the delivery of goods existed or that other accounts receivable were checked and payment can be carried out.

Authorizing payment is the internal documents by means of which the credit release authority orders the manager of the Financial-Accounting Compartment to draft the expenditures' payment instruments. This operation does not reflect in accounting, being strictly a managerial action.

On filling out the available resources in column 1 at the moment Annex no.3 "Payment Authorization" is drafted, it is recommended for the specificity of the data to take into account the budgetary commitments highlighted in account 8066 "Banking commitments" (former 950) but also the payment made in account 770 "Budget financing" (former 700) or in other available resources' accounts as the case may be; but also the expenditures that were committed, cleared and authorized before that did not appear as deducted in the bank statement at the moment of the draft, the amounts erroneously entering the account, the amounts undergoing clarification as well as the amounts reserved and employed for multiannual actions but which are due to payment that year.

If the Payment authorization is drafted for buying currency necessary to make external payments, the amount in ron or the equivalent in ron of the currency payment obligation is calculated at the exchange rate set by the National Bank of Romania valid on the date of the transfer of the amount for buying currency, with an additional insurance margin covering possible exchange rate differences for the period starting from the day of the transfer and the date of the external payment to the suppliers and to the other creditors, as well as possible commissions and other due costs.

### **Expenditures' payment**

**Expenditures' payment is the final phase of the budgetary execution by means of which the public institution is free of its obligations to third parties-creditors.**

No payments regarding several subdivisions of the budget approved in one payment can be included, even if it is made for a sole supplier.

Until last year – sums representing advance payments unjustified by delivered commodities, executed works and provided services by the end of the year and recovered during the subsequent year by the public institution that authorized the advance payments, were being reimbursed to the budget granting them, levying afferant taxes and sanctions, according to the law.

For the time being, they are specified within the chapter or subchapter payments were made from the previous years and at title 85 „Payments made in previous years and recovered in the current year” and article 85.01 „Payments made in previous and recovered in the current year”.

In case the payments in RON represent the equivalent of sums in foreign currency, it is necessary that the paid RON sum be correlated with the engaged sum, because this one was made as a RON equivalent of a foreign currency sum.

### **Reporting commitments**

Moreover, because of the commitment credits' need of reflection, a new column was introduced within the „Execution accounts – Expenditures”.

With regard to eliminate the confusions emerging in filling the „Execution accounts - Expenditures” (i.e. annex no. 7) the terms „Initial budgetary credits” were changed into „Updated budgetary credits” for the trimestrial reports, for the purpose of a correct filling with the last *approved* budget at the end of each trimester.

A special aspect to be considered in the annual report is the fact that the initial credits will be completed by the initial budget.

### **Recommendations:**

It is recommended that a continuous analysis and necessary rectifications of the disposable employed for payment are made.

Particularly, it is important that the steps followed in multiannual actions are accounted for so that during the employment phase „Annex no.2 Individual / Global Commitment” is framed.

Having these reserved budgetary credits (in case they are due the current year) it is necessary to influence the available credits in column 1 „The disposable before payment” of the form „Payment authorization”.

Special attention must be paid to evidence according to analyzers of budgetary, legal commitments with the purpose of

- correctly report the available budgetary credits for employment
- correctly complete the mature balance account within the current exercise

Justificate at legislative level the aspects pertaining to the possibility of inclusion in the budget of the debts with December’s salaries and their attachments, of other similar situations, of the way credits were employed for current activities when an institution’s budget is made of integrate programmes.

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# ISSUES CONCERNING ACCOUNTING AND THE IMPLEMENTATION OF INTERNATIONAL TOURISM ACTIVITIES

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*This work was this way designed so that there were raised peculiarities of the tourism and the influence over accounting organization, starting from the premise that the specific features tourist has significant implications on the production of accounting nature information.*

*It was also granted, an attention for the documents presentation specific to the international business travel, which recalls those relating to: voucher, the specific foreign tours and the appropriate cash benefits tourism.*

*However, it is considered significant to be recorded in the accounting operations for significant shares of foreign tourism in the order in which they perform, and complete it in financial profits made by the determination.*

*Keywords: tourism, features, international tourism, accounting information.*

*JEL classification: M 41*

## **1. Particularities of the tourism and their influence on the organization of accounting**

As a service business activity, tourism presents a number of distinctive features arising from the particular place of business in this area. Some of them are common to all components of the tertiary - which stresses ownership tourism sector - with only a distinct character, others are specific only tourist and characteristics are determined by supply and tourism demand.

Of the many common features to all services continue to retain those considered by experts as being most important, namely:

- **the immaterial and intangible character of performing** - the tourist potential in there, concretizing only in contact with the application. Moreover, unlike products that exist by themselves, the service in general and the tourist also is intangible, can not be known and evaluated before purchase, for that reason are called in the specialty and invisible literature, and trade services is called, "Invisible Trade";
- **non stockable**- because of the immaterial, tourist services may not be stored and kept for a later consumption. Some authors in this domain name this feature perishable. It can generate a number of shortcomings, especially in ensuring the balance of demand - supply and implementation of effective tourism. This way, once the services offered on the market, but unused, cause loss of human and material means (e.g., accommodation places offer), they can not be stored;
- **simultaneity of production and consumption** - the imposing presence of tourism in the same place of the provider and recipient, while consuming and their implementation;
- **inseparability of the provider** - tourist services cease to exist at in the moment of closing the provider's action;
- **the large share of expenses for work life** - it requires the worker to travel through specific activities and the psychology of the consumer - tourism;
- **lack of ownership** is also the opinion of specialists, a feature of tourism services. This way, it gives the pleasure, not a result of any transfer of ownership of work. In this context, the tourism

service providers must work to award their customers, offering various incentives to the consumers.

At their turn, the specific features of touristic services refer mainly to the following:

- **personalization of services** - due to differential behavior of tourists from every part of the benefit must be customized travel services to both the group and the individual;
- **seasonal fluctuation** - a result of oscillations tourism demand, its concentration in certain periods of the calendar year;
- **complexity** - the result of different combinations of elements derived from natural and anthropogenic specific tourist destinations and services provided by the organizers;
- **heterogeneity** - the result of dependence of tourist facilities and personnel providing materials;
- **substitution** - resulting from the many possibilities of combining and replacing the constituents of the tourism offer and lead to greater choice, allowing the realization of a wide range of tourism products;
- **participation of a large number of providers** to the final product-this feature is due to the large number of economic activities in the tourist service (accommodation - meals, transport, entertainment, production and sale of goods own tourism services related to tourism organization).

In the context of those presented we can appreciate that all these features affect to a greater or lesser degree the organization and management of the accounting units which engaged in tourism.

The implications of these features upon accounting are multiple, but keep only a few of them considered by experts as being most important.

-The diversity of services that ensures the tourist during his trip (accommodation, meals, transportation, visits, etc.) determines **the complexity of business tourism**, and draws up their entire tourist product.

If these services may include part of a program limited in time and space, on a tourist profile, they form the touristic action (program holiday, trip, etc.).

To determine the effectiveness of activities, globally and partially, is imposed the delineation of expenditure and revenues of activities, types and kinds of tourism activities, types and kinds of tourist services.

- Each action is entrusted **to a specialist tourist agent** who receives special mandate to carry out expenditure required to achieve it. Using different values (money, tickets, etc.) the travel agent becomes a debtor until the justification received at closing.

Much attention should be paid to guarantee materials formed on behalf of travel agent, whereas the values are assigned, are often significant.

Record spending in accounting takes place after the conclusion of the tourist action; because the agent holds on to spend during the trip.

- **Short duration of touristic actions**, which makes a touristic action launched during a month to close the respective month, with an immediate link between income and expenditure during the same period of management. If actions are running, they are spending on documents being placed on staff travel, and if it made some payments, they are treated early, using the 471 account, "Expenses recorded in advance".

- **Touristic services are charged, usually in advance**, in order to use the full capacity of technical materials.

Since the actual amount of benefits differs from the expected or received for various reasons the tourist can cancel, reflecting the charges as incomes is made after closing the touristic action. In this case, the cashing coincides with evidence of incomes from the account 472, "Incomes registered in advance".

Different conditions of employing the benefits of touristic actions cause differentiation in the services and the way of discounting the incomes and expenses. This way, discount in organized

tourism is made between contracting units through banks, and in unorganized tourism takes place the advanced cashing from the tourists, following to regularize the amounts received or to be reimbursed the afferent unrealized actions.

In organized tourism, expenses and incomes are accentuated only by the contracting unit even if to its realization take part also acting units. In unorganized tourism, expenses and incomes are reflected in the accounting unit which receives and organizes the touristic services.

In the case where when realizing a touristic action takes part many units, one of them shall act as the organizing unit and other units as providing units. This situation causes the highlighting of incomes and expenses of the touristic activity only in the accounting of the organizing unit and recovery price of the touristic services by the providing units from the organizing unit (usually touristic agencies).

The providing units receive for some performing a commission to cover the own expenses and assure their profit.

Content and peculiarities of the tourism activity determines under accounting issue, the use of a particular system of accounts and proper technique of counting the economic and financial operations. Both in literature and in practice specialists adopt different ways of accounting for tourist activities, using the more accounts from which remember:

- 472, "Registered incomes in advance"- reflects the price of treatment and rest collected in advance. These receipts are then transferred to current period revenue at the beginning of periods of stay, places actually used properly;
- 704, "Incomes from works performed and services rendered"- reflects the incomes constituted at the beginning of stay;
- spending accounts - used to collect the expenses of the unit organizer;
- treasury accounts - for making discounts;
- the 121, "Profit or loss" - the result obtained for the reflection of work.

Depending on the employment benefits of touristic activities, establishment of direct relations of tourism companies and foreign tourists may be reflected by using account 419, "Customer-creditors", or of, "Various creditors"

-462<sup>460</sup>.

We believe that the specialist's opinion is indicated for use in the field of 419, "Customer-creditors", who can detail the types of actions or tourist types and kinds of tourist services.

## **2. Specific documents for the activity of international tourism**

International tourism is practiced outside the country of residence and where the movement tourist purposes, is off to:

- *tourism export or touristic reception*, referring to the arrivals of foreign tourists in a country (in order of goods or services);
- *tourism for reference or import tourism and tourist activities in another country*, that the departures of tourists in another country (where they make available goods or services are).

**Specific documents** used for reflecting the international tourism activity is presented in the summary below.

*The voucher* is used in external relations by the tour - operators.

This attests the kind, quantity and quality of services to tourists who have the right and also constitutes the basic settlement operations of tourism firms partner in contracts or arrangements concluded. It can be used as types that are remembered as it follows:

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460 Dumbrava, P., Pop, A. – Contabilitate de gestiune în comerț și turism, Intelcredo Publishing House, Deva, 1995, p.84.

- voucher for locations in which services are included for a single settlement. Tourists can get more vouchers in relation to the number of locations included in the tour organized by the system;
- voucher global services when, although mentioned, are not broken down by municipalities in the tourist route, tourists seeking to establish the route and other details of the trip with travel agency that provides initial services;
- voucher value, if the services and locations are not shown, it will be determined upon arrival of tourists, together with the organizer of the action, the limit value for which it is issued.

*The voucher "GIFT"* has a similar function to the value, meaning that the company issuing foreign travel requires specialized unit to send to certain private individuals in the country a certain amount of money - the gift - from some relatives, friends, and acquaintances from abroad. If the voucher contains travel in several cities, is taking issue Proof of voucher (DPV) for each. The provided services for tourists is confirmed on the reverse of the voucher with the formula "Given services to the voucher value", which bear the signature or official tourist guide accompanying a tourist times, when individual tourists. Such certificate or voucher DPV is submitted the company issuing the guide or travel agent, with up action.

### ***Specific documents for foreign trips with foreign tourists***

For trips of this nature, travel agent deals with preparing the forms out - entry to tourists. Actions to which we refer throughout a travel agent or attendant group (group leader), the guide was provided by foreign tourism company, which operates the trip. Attendant receives the group tour that includes: the accompanying delegation, the action; lists for border Aviation Company, suppliers, etc.; Other documents (tickets, checkbook, etc.). After completing the action, the group attendant completes the trip up discount, which is recorded on the elements: high to justify the advance trip by leaving the documents and related expenses incurred by the difference received or returned by it.

### ***Specific documents to cash the touristic providing***

Paying the bills can be done using means and instruments of payment options: the national currency, freely convertible foreign currencies, bank checks and postal checks, ticket table and holiday cards sites.

Payment in cash in national currency, the method of payment is accepted everywhere. However, cash behaving, in our opinion, several major drawbacks, such as risk of loss and theft of money, loss of interest etc. In addition, for operations abroad, usually, any payment must be preceded by an exchange rate, which determines the expenditures from the differences in course and fees incurred.

The document which the tourism agent completes for cashing the providing is "**The receipt – note for touristic providing**" (N.P.T.) and for total or partial refunds of amounts paid" "**Refund currency note**" (NRV)

The international hotel regulation states that "the hotelier is not obliged to accept checks, coupons, credit cards or various other means of payment". Obviously, the acceptance will be looking for customers who use these means of payment.

### **3. Accounting information on international tourism**

For coverage of business accounting and international tourism in the case of the import tourism accounts using the same as for domestic tourism, established by regulations<sup>461</sup>, specifying that

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461 Order MFP no.1752/2005 for the approval of the accountant Regulations complying to the European directives, M.Of. nr. 1080 bis/2005.



should consider the exchange rate, and differences that recorded between the time cash advance and making the trip.

Accounting operations relating to the work we refer to examples based on a hypothetical situation of the contract made with a foreign company, on which the following data are known: the value of tourism - 5000 euro 3500 euro advance, charged at the rate of 3,9 lei/euro, billing and collection of travel benefits at the rate of 3.8 lei / euro, direct expenditure justified travel agent in the amount of 16,000 lei, general administration expenses of 2425 lei, of which: 1425 lei and utility rights 1000 lei wage.

According to the presented data, in the accounting entity, are reflected the operations presented below.

Cashing the advance, according to the account extract (3.500 euro x 3,9 lei/euro=13.650 lei).

|      |   |     |            |
|------|---|-----|------------|
| 5124 | = | 419 | 13.650 lei |
|------|---|-----|------------|

The invoice aferent to the realized services in the account of the beneficiary company, that contains:

- right to debt: 5.000 euro x 3,8lei/euro.....19.000 lei
- the difference of currency favorable afferent to the advance.....350 lei
- foreign currency for cashing: (5.000 euro – 3.500 euro) x 3,8 lei/euro.....5.700 lei

|      |   |     |            |
|------|---|-----|------------|
| 4111 | = | 704 | 19.000 lei |
|------|---|-----|------------|

The discount of the services value with the external company generates two different accounting registers, one for extinguish the debt right and the other for registering the difference of exchange rates, as follows:

- extinguish of the debt right:

|      |   |      |                   |
|------|---|------|-------------------|
| %    | = | 4111 | <u>19.000 lei</u> |
| 419  |   |      | 13.650 lei        |
| 5124 |   |      | 5.350 lei         |

- registering the difference of currency:

|     |   |     |         |
|-----|---|-----|---------|
| 419 | = | 765 | 350 lei |
|-----|---|-----|---------|

The direct expenses, justified by the tourism agent, in base of justificant documents, with a value of 16.000 lei:

|     |   |     |            |
|-----|---|-----|------------|
| 628 | = | 542 | 16.000 lei |
|-----|---|-----|------------|

Expenses regarding the utilities (energy and water), of 1.425 lei, billed by the suppliers:

|     |   |     |           |
|-----|---|-----|-----------|
| 605 | = | 401 | 1.425 lei |
|-----|---|-----|-----------|

Expenses generated by administration regarding the salary rights, of 1.000 lei, according to the payrolls:

|     |   |     |           |
|-----|---|-----|-----------|
| 641 | = | 421 | 1.000 lei |
|-----|---|-----|-----------|

**Specification:**

The salary rights train also expenses regarding the social obligations, which were not presented in the accomplished because result common registrations common to all economic entities.

The operation of closing the accounts of expenses and incomes recorded in the financial accounts of the entity at the end of the month by taking in account balances resulting 121 “Profit or loss”, spending on debit and credit incomes, as follows:

- closing the accounts of expenses:

|     |   |     |            |
|-----|---|-----|------------|
| 121 | = | %   | 18.425 lei |
|     |   | 605 | 1.425 lei  |
|     |   | 628 | 16.000 lei |
|     |   | 641 | 1.000 lei  |

-closing the accounts of expenses:

|     |   |     |            |
|-----|---|-----|------------|
| %   | = | 121 | 19.350 lei |
| 704 |   |     | 19.000 lei |
| 765 |   |     | 350 lei    |

From the economic operations of the previously reported finding that may result to the tourist contracted resulted in profit in the amount of 925 lei.

#### 4. Conclusions

The study conducted by this paper expresses that tourism presents a number of specific features that influence the organization of the economic entity's accounting and bookkeeping and analytical intelligence of it. This has significant implications on the production of such accounts which are used in the management, along with other information available, according to its own policies adopted by the entity.

Also, is mentioned that in the appropriate management of the operations of international travel is required to be given greater specific documents, including the issue of settlements in foreign currency.

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## IFRS 8 – OPERATING SEGMENTS

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*Segment reporting in accordance with IFRS 8 will be mandatory for annual financial statements covering periods beginning on or after 1 January 2009. The standards replaces IAS 14, Segment Reporting, from that date.*

*The objective of IFRS 8 is to require public companies to disclose information about their business activities and the economic environments in which they operate on the same basis as it is used by management to make decisions about the allocation of the company’s resources and to assess the performance of the business.*

*The standard has been endorsed for use in the European Union; other jurisdictions may have similar legal constraints on the use of new IASB standards (these are not discussed here).*

*Keywords: operating segments, reporting of financial information, reportable segments, chief operating decision maker (CODM)*

*Cod JEL: M41*

### **Summary of main differences between IFRS 8 and IAS 14**

The table below analyses the main differences between IFRS 8 Operating Segments and IAS 14 Segement Reposting, in terms of the identification of segments, the measurement of segment information, and disclosures

| IFRS 8  | IAS 14  |
|---|---|
| <i>Identification of segments</i>   | <i>Identification of segments</i>   |
| Operating segments are identified based on the internal reporting of financial information to the chief operating decision maker. Operating segments can include those that sell exclusively to internal customers. | Primary and secondary segments are identified based on the dominant source and nature of an entity’s risk and return, which are either products/services, or geographical areas. Repostable segments are only those that generate a majority of revenues from external sales. |
| <i>Measurement of segment information</i>   | <i>Measurement of segment information</i>   |
| Operating segments are measured as reported to management. Requires explanations on how disclosure items were measured.   | Segmental information is disclosed in accordance with the group’s accounting policies. Defines how to measure disclosure items, such as segment revenue and expenses, segment asset and liabilities.  |
| <i>Disclosures</i>  | <i>Disclosures</i>  |
| Requires disclosure about factors used to   | No similar requirement.   |

|  |   |
|--|---|
| <p>identify the operating segments and explanations on the types of products or services from which the reportable segment derives its revenues.</p> <p>Disclosure of much of the segmental information is reviewed by the chief operating decision maker.</p> <p>Disclosure of interest income and expense is required, unless net interest is used by management as basis for decision making.</p> <p>All entities have to provide some geographical information and certain major customer details.</p> | <p>Disclosure of certain segmental information is mandatory.</p> <p>No similar requirement</p> <p>No entity-wide disclosure requirements, although some secondary reporting segment disclosures are mandated.</p> |
|--|---|

### Scope

Not all entities are required to disclose segment information in accordance with IFRS 8. IFRS 8 applies to entities that are public or are in the process of going public. If the listed parent company financial statements are presented together with a group's financial statements, no separate segmental information is required for the parent.

The questions and answers below clarify which entities are required to present segment information, and the requirements for companies who choose to present segment information even when not required to do so by the standard.

*Are segment disclosures only required in the consolidated financial statements of a group?*

Paragraph 2 of IFRS 8, no, an entity whose debt or equity instruments are traded in a public market is required to present segment disclosures in its individual financial statements. Segment information is also required in the consolidated financial statements of a group, when the parent's debt or equity instruments are traded in a public market. If the parent's individual financial statements are presented together with the group's consolidated financial statements, separate segmental disclosures for the parent are not required.

*Is an entity whose securities are not yet listed, but which contemplates a public offering of its debt or equity securities in the future, required to provide disclosures under IFRS 8?*

Only entities or groups which file or are in the process of filing their individual or the group's financial statements with a regulatory body for the purpose of issuing to the public debt or equity instruments would need to comply with IFRS 8.

*Can an entity that is not under the scope of IFRS 8 report segmental information?*

Entities outside the scope will not need to comply with IFRS 8 – but may choose to do so. Information about segments that is produced on a voluntary basis but that is not compliant with IFRS 8 cannot be described as segment information.

### Operating segments

Operating segments are basis of the reportable segments disclosed in the financial statements. This section also highlights the importance of the concept of the chief operating decision maker (CODM) for the identification of operating segments. An operating segment is defined in IFRS 8 as a component of an entity:

- that engages in business activities from which it may earn revenues and incur expenses (including revenues and expenses relating to transactions with other components of the same entity);

- whose operating results are regularly reviewed by the entity's CODM to make decision about resources to be allocated to the segment and assess its performance, and, for which discrete financial information is available.

IFRS 8 indicates that a component should have its own revenue streams as well as incur expenses. Corporate division which earn no or only incidental revenues would not be operating segments, such as head office cost centres.

The CODM is not meant to be title, but identifies a function. The CODM allocates the resources to and assesses the performance of the operating segments of the entity or the group. The CODM would generally be the most senior level of management in the entity, such as the chief executive officer, chief operating officer or a group of executive officers, such as the board.

In the UK, the CODM will often be the board of directors collectively, but could be a sub-set of the board or an individual.

If multiple sets of segment data are reviewed by the CODM, factors such as the nature of the business activities of the components, the existence of managers allocated to the components or the basis of the presentation of the information to the board should be considered to determine what the operating segments are. If none of these provides a conclusive answer, the analysis of segments that provides the most useful information in respect of the nature and financial effects of the business activities should be the basis for identification of the operating segments.

Under IAS 14 the primary reporting segment format is identified based on an entity's internal organisational and management structure and its system of internal financial reporting to key management personnel. The primary reporting segment is either based on product/services or geographical areas. Under IFRS 8 the operating segments are identified based on the reporting of divisional results to the CODM. The principles of identification under IAS 14 and IFRS 8 are thus similar, but an analysis to determine the operating segments under IFRS 8 is still required, and these may well be different from the IAS 14 segments.

### **Reportable segments**

Operating segments are identified based on the internal reporting of financial information to the CODM. Reportable segments are those actually disclosed in the financial statements. Operating and reportable segments are not always identical. The following questions and answers look at when operating segments can be aggregated or combined for reporting in the financial statements. The question is, when may operating segments be aggregated?

Two or more operating segments may be aggregated if certain conditions are met:

- The segment have similar economic characteristics, such as similar long-term average gross margins;
- Aggregation allows the users of financial statements to evaluate the nature and financial effects of the business activities;
- and segments are similar in each of the following respects: the nature of the products and services, the nature of the production processes, the type or class of customer for their products and services, the methods used to distribute their products or provide their services, and if applicable, the nature of the regulatory environment, for example, banking, insurance or public utilities. The fact that operating segments have been aggregated should be disclosed. Operating segment information needs to be disclosed separately for each operating segment, including each aggregated operating segment, if they exceed certain quantitative thresholds.

However an entity should ensure that all operating segments have been appropriately identified and the aggregation criteria have been met. The entity-wide disclosures, in accordance with paragraphs 32 to 34 of IFRS 8, are still required. It is important to ensure that the segments selected for reporting purposes are consistent with other reported information included in the annual report such as KIPs. Differences between narrative reporting and segmental financial reporting may confuse users of the financial statements. IFRS 8 does not prescribe a minimum or

maximum number of segments an entity should report as this is dependent on the individual entity's circumstances. Reporting too many segments may however not be practical or helpful to users. Reportable segments may change as a result of: an entity changing its internal organization or reporting structure, an operating segment increasing in importance and meeting the significance test, or an operating segment no longer meeting the significance test. When reporting segments change because of a change in the internal organization or reporting structure, the comparative information for prior periods has to be restated to reflect the new reporting segments, unless the necessary information is not available and the cost to develop it would be excessive. If prior periods cannot be restated, then in the year of change the current period needs to be disclosed based on the new and old reportable segment bases, unless the information is not available and the cost to develop it would be excessive.

### **Measurement and disclosure**

Under IFRS 8, reportable segments are measured as they are reported to the CODM, and they therefore do not necessarily comply with IFRS generally. Similarly, disclosures required by IFRS 8 are generally based on the information reported to de CODM. One of the main differences between IAS 14 and IFRS 8 is that under IFRS 8 the segment results are disclosed in the financial statements as they are used by the CODM for the purposes of making decisions about allocating resources to the segment and assessing performance. Similarly only those assets and liabilities that are included in the measures of the segment's assets and segment's liabilities that are used by the CODM shall be reported for that segment. Reconciliations from the segment results and segments assets and liabilities to the entity's results and entity's assets and liabilities respectively need to be presented. The reported measures to be disclosed should be those that management believes are determined in accordance with the measurement principles most consistent with those used in measuring the corresponding amounts in the entity's financial statements.

If the CODM does not review a measure of liabilities no such measure needs to be disclosed. A measure of assets is required, however this would only reflect the amounts that are used by the CODM. If no asset information is reviewed by the CODM, the measure would be nil, and hence non-disclosure is deemed to be compliant with IFRS 8.

The amount of each segment item reported should be the measure reported to the CODM for the purpose of making decision about the allocation of resources and the assessment of performance. When reported to the CODM allocations of costs, revenues, assets and liabilities should be included in these measures. Allocations should be made on a reasonable basis. An entity should report its measure of profit or loss for each reportable segment. The following items should also be disclosed, if reviewed by or regularly provided to the CODM, whether or not they are included in the measure of the segments results: external revenues, intra-segment revenues, gross interest revenue and expense, depreciation and amortization, material items of income and expense as disclosed under paragraph 97 of IAS 1, the entity's interest in associates and joint ventures accounted for by the equity method, income tax expense or income, and other material non-cash items.

IFRS 8 also contains disclosure requirements applicable to all entities, regardless of whether, or in what format, the information is reported to the CODM. The information needs to be presented in accordance with the entity's accounting policies.

### **Interaction of IFRS 8 with other standards**

There are important interactions between IFRS 8 and IFRS 5 Discontinued Operations and Assets Held for Sale and IAS 36 Impairment of Assets. Segmental reporting is also a requirement under IAS 34 Interim Financial Reporting, although less detail is required.

The components identified as discontinued operations in accordance with IFRS 5 may either qualify as a segment under IFRS 8 or may be included within an operating segment also containing continuing operations. The information to be disclosed under IFRS 8 will mainly depend on whether the information for discontinued operations is separately reported to and

reviewed by the CODM, within its own operating segment. An entity has to present a reconciliation from the segments results to the entity's profit or loss before discontinued operations, unless the results of discontinued operations were allocated to the segment. In accordance with IFRS 5, the reporting segment which included the discontinued operation should be identified and disclosed.

Although to a lesser degree of detail and only by entities which are under the scope of IFRS 8 for their annual reporting. The following disclosures are required: amounts of revenues from external customers and intra-segment revenues, if included in the measure of segment profit or loss reviewed by the chief operating decision maker or otherwise regularly provided to the chief operating decision maker, amount of the measure of segment profit or loss, amount of total assets for which there has been a material change from the amount disclosed in the last annual financial statements in the basis of segmentation or in the basis of measurement of segment profit or loss.

On publication of IFRS 8, IAS 36 was amended to state that the cash generating unit, or group of such units, to which goodwill is allocated for the purpose of the goodwill impairment test cannot be larger than an operating segment identified under IFRS 8. Prior to the issuance of IFRS 8, the equivalent requirement in IAS 36 stated that the cash generating unit or group of such units, to which goodwill is allocated, cannot be larger than a segment based on the entity's primary or secondary reporting format determined under IAS 14 and the operating segments identified under IFRS 8 pre-aggregation may therefore require the reallocations of goodwill for impairment test purposes on adoption of IFRS 8. IAS 36 provides guidance on the reallocation of goodwill resulting from a change in the composition of cash generating units.

IAS 36 also contains additional disclosure requirements for entities within the scope of IFRS 8: The amount of impairment losses or reversed impairment losses recognized in profit or loss and in other comprehensive income by segment; for each material impairment loss or reversal of impairment loss, the segment to which the relevant asset or cash generating unit belongs.

### **Transition**

IFRS 8 is effective for annual financial statements for periods beginning on or after 1 January 2009. Early application is permitted and since IFRS 8 has been endorsed for use in the European Union, UK based entities can adopt this standard early for their financial reporting. If an entity provides segmental disclosures under IFRS 8, the fact should be disclosed.

If an entity applies IFRS 8 from its effective date, that is to annual periods beginning on or after 1 January 2009, the entity's first IFRS 8 compliant segmental data is provided in its interim financial report in accordance with IAS 34 Interim Financial Reporting.

The proposed improvement by the IASB, Issue 3, in the exposure draft, Proposed Improvements to IFRS, published by the IASB in October 2008, is a clarification regarding the disclosure of a measure of segments assets, if such a measure is not reviewed by the CODM. The proposal is that if the measure is not reviewed by the CODM, non-disclosure is compliant with IFRS 8. The proposed amendment would not change the IFRS, but only the basis of conclusion. The proposed improvement would become effective from 1 January 2010, although earlier application would be permitted.

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# DOCTRINAL AND FINANCIAL ACCOUNTING ASPECTS REGARDING INSOLVENT ECONOMIC ENTITIES

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### *Abstract:*

*The restructuring of economic entities is a phenomenon specific to market economy but highly evidenced in the context of the economic-financial crisis, particularly when the effects of the crisis manifest at a global scale. Thus, the phenomenon became significant throughout the World and it did not elude the Romanian economy. In this context we bring to your attention some general aspects of the economic entities' insolvency process. Irrespectively to the positive and negative effects of the economic-financial crisis, the insolvency phenomenon is still a major concern for economy specialists and not only.*

*Keywords: restructuring, dissolution, liquidation, principles, accounts*

*Journal of Economic Literature (JEL) codes: Business Administration and Business Economics; Marketing; Accounting*

## **1. Framework for insolvency**

Nowadays there is a consensus among the majority of specialists in the economic field regarding the definition for insolvency according to which an economic entity is insolvent when it does not have enough available liquidity to pay off debts as they fall due.

From a juridical point of view, in Romania this situation is regulated through the means of Law no 31/1990 republished, Law no 85/2006 regarding the insolvency, GEO no 86/2006 regarding the organization of the activity of insolvency practitioners. Financial accounting and fiscal aspects can be found in the provisions of Law 82/1991 republished, OMPF no 1752/2005 for approval of accounting regulations in accordance with the European Economic Directives, OMEF no 2374/2007 for modifying and completing OMPF no 1752/2005 and explicitly OMPF no 1376/2004, along with the International Standards for Financial Reporting.

## **2. National and international statistics on insolvent economic entities**

A study conducted by Coface Romania underlines the evolution of *Romanian insolvent economic entities* according to their activity sector as follows:

| Activity sector                                | Year  |       |               |
|--|-------|-------|---------------|
|  | 2006  | 2007  | June 30, 2008 |
| Wholesale and distribution                     | 1.935 | 3.431 | 1.770         |
| Retail   | 1.909 | 2.371 | 1.501         |
| Agriculture, silviculture and fishing          | 1.382 | 1.093 | 341           |
| Construction                                   | 588   | 1.066 | 822           |
| Food and beverages                             | 1.133 | 1.064 | 391           |
| Manufacture of wood and products of wood       | 575   | 810   | 412           |
| Manufacture of textiles, clothing and footwear | 570   | 731   | 355           |
| Transporting                                   | 383   | 723   | 411           |



|   |               |               |              |
|---|---------------|---------------|--------------|
| Other services rendered to legal entities                                 | 354           | 625           | 377          |
| Hotels and restaurants  | 322           | 520           | 387          |
| Metallurgical industry  | 355           | 338           | 17           |
| Manufacture of chemicals and chemical products                            | 129           | 302           | 77           |
| Waste collection, treatment and other disposal activities                 | 122           | 185           | 79           |
| Machinery and equipment   | 118           | 136           | 71           |
| Real estate activities  | 59            | 121           | 88           |
| Sports, recreation and cultural activities                                | 82            | 115           | 86           |
| Informatics and connex activities   | 59            | 96            | 56           |
| Mail and telecommunications   | 46            | 92            | 50           |
| Other personal services activities  | 155           | 86            | 50           |
| Financial intermediation services   | 54            | 83            | 50           |
| Extraction industry   | 62            | 45            | 72           |
| Manufacture and distribution of electric and thermal power, gas and water | 12            | 45            | 13           |
| Health care and social assistance   | 27            | 26            | 17           |
| <b>Total insolvent economic entities</b>                                  | <b>10.431</b> | <b>14.104</b> | <b>7.493</b> |

#### *Commercial sector*

In 2006 retail surpassed wholesale which held the first position in 2005. 36.85% of the total bankruptcies from 2006 were filed in the commercial sector, an increase against 2005 when this sector had 34.9%. By the end of 2007 the commercial sector, including retail, wholesale and distribution, held 41.4% of the total bankruptcies filed, an increase against 2006. This proves the fact that small retailers find it harder and harder to compete with large retailers which yearly spread their network to smaller and smaller cities. The commercial sector holds the first position even in the first half of 2008. The bursting number of economic entities within the commercial sector from 10-15 years ago is now found in the shape of numerous bankruptcies.

#### *Agricultural sector and food industry*

Considering the insolvencies faced in 2006, agriculture is the third sector, on decline against 2005 when it held the second position and the food and beverages industry maintained its fourth position. In 2007 the third and fifth place in the hierarchy of bankruptcies were held by the two closely connected agricultural and food industry. Insolvent agriculture triggers insolvent food industry as the latter suffers from lack of raw material. Lack of inland raw material or its high cost as a result of poor efficiency, along with the highly competitive import products, lead to the increase in the number of bankruptcies filed within the food industry.

#### *Construction sector*

The construction sector, which in 2005 was placed in the tenth position, comes fifth in 2006 considering its percentage in the total amount of insolvencies filed in 2006. This is a risky sector, with a high number of small and medium insolvent enterprises. In 2007 the construction sector came forth in the hierarchy of bankruptcies. In Romania this sector had the fastest growth rate compared to all European countries and in 2007 constructions were the economy's growth engine. In order to undertake wide scope projects the majority of small enterprises resort to loans, and the lack of experience in what regards execution, limited technical endowment and labor shortages leads to the dalliance of projects' execution, thus creating financial blockages. The accumulated debts to suppliers and banks triggered the bankruptcy of many construction enterprises. In 2008 the third place in the bankruptcy hierarchy, the second if we take commerce as a whole, is held by the construction sector.

Internationally, a synthesis of the statistics on the evolution of insolvent enterprises in Western European countries goes as follows (Insolvency report 2007/2008, www.uc.se at the 1<sup>st</sup> of December 2008):

|               | 2003           | 2004           | 2005           | 2006           | 2007           | Insolvency rate per 10.000 companies |
|---------------|----------------|----------------|----------------|----------------|----------------|--------------------------------------|
| Austria       | 5.643          | 6.328          | 7.136          | 6.854          | 6.362          | 240                                  |
| Belgium       | 7.593          | 7.836          | 7.878          | 7.617          | 7.690          | 110                                  |
| Denmark       | 2.506          | 2.620          | 2.497          | 1.987          | 2.400          | 131                                  |
| Finland       | 2.769          | 2.385          | 2.278          | 2.285          | 2.300          | 95                                   |
| France        | 38.296         | 40.776         | 41.930         | 40.360         | 42.670         | 166                                  |
| Germany       | 39.470         | 39.270         | 36.850         | 30.680         | 27.490         | 90                                   |
| Great Britain | 14.815         | 14.813         | 13.462         | 13.686         | 12.950         | 82                                   |
| Greece        | 480            | 577            | 580            | 520            | 510            | 7                                    |
| Ireland       | 346            | 321            | 327            | 304            | 310            | 31                                   |
| Italy         | 16.000         | 17.500         | 17.150         | 8.827          | 5.410          | 13                                   |
| Luxembourg    | 655            | 665            | 682            | 634            | 680            | 256                                  |
| Holland       | 6.386          | 6.648          | 6.780          | 5.941          | 4.710          | 87                                   |
| Norway        | 5.223          | 4.297          | 3.540          | 3.032          | 2.870          | 90                                   |
| Portugal      | 2.980          | 3.123          | 3.300          | 3.400          | 3.350          | 27                                   |
| Spain         | 646            | 561            | 869            | 853            | 830            | 3                                    |
| Sweden        | 7.099          | 6.588          | 5.865          | 5.243          | 4.890          | 92                                   |
| Switzerland   | 4.539          | 4.955          | 4.751          | 4.528          | 4.400          | 93                                   |
| <b>Total</b>  | <b>155.446</b> | <b>157.263</b> | <b>155.875</b> | <b>136.751</b> | <b>129.822</b> | <b>x</b>                             |

On a general level, one can notice a slight decline in absolute values of insolvent economic entities from 155,446 to 129,822 as we come closer to 2007. This reduction tendency is specific to countries with a large number of insolvency cases and a relative high insolvency rate as: Denmark, Great Britain, Italy, Holland, Norway, Switzerland, and Sweden. This is not necessarily the case for countries included in the database of this period, in which there is an increase of the insolvency cases. Among the countries in this situation in what regards the absolute number of insolvent enterprises and a significant insolvency rate there are: Austria, France, Luxembourg, Portugal.

### 3. Discussions on doctrinal and financial-accounting aspects

#### 3.1. Subjects of the insolvency procedure

Firstly, the actors involved in this process are the *shareholders* or *partners*, natural persons or legal entities, in their capacity as owners, which may willingly or under legal compulsion file for bankruptcy. Rationally, their positive attitude oriented towards profit should come first but, as this does not depend solely on their will, their partners' intentions have to be taken into account. Thus, *creditors* of different shape come forward and, if their interests are affected by imminent risks, they take actions in order to recover as much as possible of their receivables and therefore they play major roles in the opening of the insolvency procedure. In what regards voluntary liquidation, the main actor is the *liquidator*, insolvency practitioner, who becomes responsible along with managers and the members of the Board of Directors. The satisfaction of creditors and the content or discontent of shareholders or partners depends upon the liquidator's professionalism. The scope of involuntary liquidation is to pay off all the debts this being the reason why more actors are involved in the insolvency process. Thus there are: *court laws*, *syndic judge*, *juridical manager*, *liquidator*, *credit union*, *credit committee* and *special administrator*

with attributes and competences detailed in the provisions of Law 85/2006 regarding the insolvency.

### ***3.2. The opening of the insolvency procedure and the accounting principles***

Through the opening of the insolvency procedure the procurator of the syndic judge is responsible for the management of the operations implied by the liquidation of the economic entity along with the organization and monitoring of accounting. Accounting data is considered to be the main source of information within the economic entity, thus being used as the basis of the juridical manager's or liquidator's decisions along the whole liquidation process. Practically, in what regards the liquidation of an economic entity, the juridical manager or liquidator plays a double part, on the one hand he is *a user of information* and on the other hand he *makes decisions*. If the economic entity is being subject to reorganization, its activity continues without any modifications in what regards the implementation of accounting principles. In our opinion there are certain modifications of the accounting principles when the economic entity is subject to liquidation.

*Going concern principle* – the dissolution of an economic entity and its entering into insolvency have as a result the discontinuance of its normal economic activities, although in these processes the economic entity is still a legal entity. This implies that the going concern principle is given up. The activities are limited to winding down the current commercial operations at the moment of dissolution, selling the assets and paying off the debts. In the case of reorganization the going concern principle still applies. The consequences of not applying this principle affect the other accounting principles, the valuation of assets and liabilities and the disclosure of accounting information.

*Conservation principle* – this continues to be applied to a certain degree, but, if it is necessary to estimate liabilities and expenses in order to establish potential increases of value, these increases have to be recognized in the financial statements. Capitalizing the results of the stocktaking done at the opening of the liquidation triggers the need to reevaluate in order to establish negotiation bases when the goods are sold, in accordance with inflation, utility of the good, market situation and market price.

*Consistency principle* – this principle is not applied as the liquidation value of assets is different from their historical cost. The extraordinary situation of liquidation can lead to deflection from historical cost and necessity to reevaluate, as it is stipulated under IAS 8 “Accounting policies, changes in accounting estimates and errors”. The inversion of method does not imply the inversion of implementation.

*Accrual basis principle* – this principle is not applicable as the liquidation process does not take place within a calendar year but it starts at the date of opening liquidation balance sheet and ends at the date of closing liquidation balance sheet. The liquidation period is considered to be a single financial year regardless of its extension (Buglea, A., Butan R. and collaborators, 2006).

*Opening balance sheet intangibility principle* – the opening liquidation balance sheet is atypical, induced by the going concern principle. It is the first balance sheet of the final stage in the economic entity's lifespan.

*No offset principle* – according to the provisions of the insolvency law the opening of the insolvency procedure does not affect the right of a creditor to claim the offset of his receivables with the debtor's receivables held against the former, if the legal requirements in what regards the offset are complied with at the opening date of the procedure (Article 52 of Law no 85/2006 regarding the insolvency). A third party could be both a creditor and a debtor, before the draw up of the opening balance sheet and accounts receivable chart, thus being possible to offset individual receivables with individual liabilities of the same third party.

*Separation principle* – this principle maintains its applicability as the debtor’s patrimony is distinctively disclosed in the balance sheet. Assets are disclosed separately from liabilities which are reflected in the accounts receivable chart, thus separately valued.

*Substance over form principle* – this principle is desolated as the liquidator, under the supervision of the syndic judge, may give up certain contracts that vest.

*Materiality principle* – this could become complementary to other accounting principles while maintaining its applicability.

*Economic entity principle* – economic activity is conducted within enterprises (economic entities) with a distinction being made between the owners’ patrimony and the entity’s patrimony. In what regards the insolvency procedure, the implementation of this principle refers to the fact that the legislation requires the debtor, juridical manager and liquidator to mandatorily write on any correspondence, using discernible characters, in Romanian, English and French the term „în insolvență” („in insolvency”, „en procedure collective”), when the economic entity is under observation, and „în faliment” („bankruptcy”, „en faillite”), when the economic entity is bankrupt (Article 45 of Law no 85/2006 regarding the insolvency). The enterprise (economic entity) in liquidation is practically an entity with new objectives i.e. the transformation of assets into liquidity and payment of liabilities, an extension of the entity’s existence under a different shape, in insolvency, reorganization or bankruptcy.

*Monetary unit principle* – this implies the disclosure of incomes and expenses using a monetary unit. In the case of receivables determined at nominal value, in the accounts receivable chart they will be recognized at the nominal value from the opening process date, while receivables in foreign currencies will be converted into lei at the N.B.R. exchange rate from the opening process date.

### ***3.3. The insolvency procedure, financial and accounting aspects***

The recognition of economic-financial operations regarding insolvency makes use of the accounts system stipulated in the general chart of accounts. In this respect we bring to your attention the introduction of some synthetic accounts according to the order of classes and groups in the current chart of accounts.

Account 128 “Result of the liquidation” (Feleagă, N., 1998) is the result of the economic entities’ liquidation, insolvent economic entities, a bifunctional account, with the scope to reflect the result between the assets’ selling price and the net value of these assets, along with the expenses incurred by the liquidation and the ones triggered by the discharge of the unrealizable assets. Implementing this point of view would result in distinguishing between the financial results of the commercial activity and the financial results of the insolvency process of any economic entity.

Account 463 “Reimbursement with the liquidator” is a synthetic operational account, functioning as a liability account, which would reflect the relation between the liquidator and the economic entity during the insolvency procedure. The debts towards the liquidator for the liquidation activity of the insolvent economic entity would be recorded on the credit side of the account 463 “Reimbursement with the liquidator”, and on the debit side the cash or giro payment of these debts. Information available through the introduction of this account would empower a pertinent analysis of the liquidator’s activity, avoiding some uncertainty regarding his activity’s debit.

Account 6589 “Expenses of insolvency operations”, a synthetic operational account of level II, would account for expenses incurred by derecognizing assets either because they have been sold or because unrealizable assets have been discharged. The account would be closed through the debit of account 128 “Result of the liquidation”. Account 7589 “Incomes from insolvency operations”, a synthetic operational account of level II, that would reflect the incomes generated by the sales of the insolvent economic entity’s assets along with the incomes from provisions for risks and expenses or from impairment of the debtor’s patrimonial elements. The account would

be closed through the credit of account 128 “Result of the liquidation”. The fiscal approach of these amounts depends on the nature of 128 “Result of the liquidation” balance account and on the deductibility of expenses with provisions and impairment.

If patrimonial elements are measured at carrying value the accounts 891 “Opening balance sheet” and 892 “Closing balance sheet” become inapplicable as their role and function are undertaken by the accounts 456 “Capital reimbursement with shareholders” and 461 “Sundry debtors”.

#### **4. Conclusions**

Regardless of the insolvency’s nature, voluntary or juridical liquidation, the correct development of the insolvency procedure depends upon the liquidator’s professionalism, the accordance with the professional code of ethics. The implementation of accounting principles when the economic entity is the subject of an insolvency procedure must be correlated with professional judgment, going through doctrinal practice, and their integration with the economic entity and monetary unit principles proves the harmonization between Romanian regulations and European regulatory acquis. The harshness of these principles’ implementation in the case of an insolvent economic entity depends upon the juridical manager and liquidator’s professionalism and ethics.

There are no accounts specific to the liquidation operations within the chart of account. From our point of view new or analytical accounts could be developed within the current synthetic accounts in order to address this issue. We believe it is rational to develop new accounts in order to solve a significant problem of insolvent entities even if this implies the opening of legal demarche. The solution to reflect the insolvency operations does not involve legal demarche as this is up to the juridical manager or liquidator but, in our view, this alternative does not address the issue of an informational flow specific to this type of information.

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# THE TARIFF WITHIN SURGERY MEDICAL SERVICES. WHICH HOSPITAL COSTS?

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*Nowadays, as well as in the commercial sector, a sanitary unit must know its costs in order to be competitive, no matter her status. Although these ones can be approached in many perspectives, three classifications are possible from the point of view of the sanitary institutions: accounting, medical and economic, the regrouping of the expenses being operated depending on the finality of the study: the perspective of the decision, the perspective of the management through budgetary deviations or the perspective of the financing of the hospital structures. Starting with a constructive research (literature review) concerning the definition and the classification of the costs, the paper proposes to offer a practical pattern regarding the methodology of establishment of the cost per patient and per hospitalization day within a surgery section.*

*Keywords: hospital costs, tangible costs, intangible costs, decease costs, future costs*

*JEL classification: M41*

## **1. The definition and the clarification of the costs**

The costs can be approached from a various number of perspectives: thus, they appear in book-keeping as money which reflects what it is paid in reality, but, in an economic evaluation we talk about the *opportunity's cost*. **The cost of a resource opportunity** represents the benefits that could be generated by the usage of the resource in the best alternative possible. Concerning the health services, the cost of a health service is established depending on the burden imposed to the other health services (which cannot be supplied) and to society. For example: *the time a doctor needs to consult a patient is the time in which he cannot consult another patient, or the medicine he uses represents resources that cannot be received by another patient*. This approach regarding the costs is preferred by economists and it represents *the cost of the failed opportunity by using the resources in a certain direction and not in another one*.

## **A main classification of the costs is that of direct and indirect costs.**

**The direct costs** are the costs determined by the supply of a health service. The organizational costs are a part of the direct costs. They represent the totality of costs (those in the sanitary sector) involved to realize the activity meant to be economically evaluated. Another part of the direct costs is represented by direct payments made by patients, as well as other resources used by the patient and family for the treatment. When calculating the costs for a patient in a hospital, the direct costs are represented by the totality of the expenses made by the hospital for that patient, expenses that can be identified and demonstrated as being used directly for that patient. For example, the expenses for the patient's medicine or food (it can be determined what medicine he received and what he ate in particularly).

**The indirect costs** are the costs which are not given by the effective supply of the respective service but it is associated to it. In the category of indirect costs we add the costs due to missing from labour and psychical costs. When calculating the costs for a patient in a hospital, indirect

costs are represented by the totality of the expenses made by the hospital for that patient, expenses that cannot be directly identified as being used for the respective patient. For example, the expenses made by the hospital for the hygiene of the respective patient (the water used by the patient during his hospitalization, etc.) or for the administration of his hospitalization. This classification in direct and indirect costs is useful for the manager of the hospital because this way he can notice better the places where he can interfere in the control of the afferent costs of a patient as well as in the decentralization of the management towards the clinic sections (a section chief can be responsible for direct expenses on the medication of the patients in his section but he cannot be responsible for indirect expenses - for example, the number of employed personnel in the administrative compartments of the hospital). In their turn, the indirect costs are divided in:

**a) Tangible costs** - for example, the production losses produced by stopping the professional activity of the patient and which, from the point of view of the society is presented in lost physical units without value.

**b) Intangible costs** - refer to the loss of the quality of the patient's life (human cost) – for example the psychological consequences caused by a handicap.

**Total cost - TC** -of an entity represents the cost necessary for the realization of the production (at a given level). It consists in many other costs: fixed cost, semivariable costs and variable costs.

**Fixed costs - FC** - are those costs which remain independent to the level of production. They can vary in time, but they are not dependent on the production (for example, the closure of a space necessary for the development of the activity). For a hospital, the best example is the cost of renting the space where the respective supplier functions or the personnel costs, etc.

**Variable costs - VC** - are those costs dependent on the level of production, varying together with each new product (for example the cost of the primary product). For a hospital, these costs are those which depend on the number and the type of ill people treated in the hospital (for example, the costs of medicine and sanitary materials).

**Semivariable costs - SVC** - are those costs which vary only when they realize certain levels of production (for example, the cost necessary for hiring new wage-earners). It is noticed that in fact, semivariable costs are a particular case of variable costs.

The definitions of another two types of costs are very important, that is the average cost and the marginal cost.

**The average cost** represents the cost for the production of a good or service unit and it is obtained by dividing total costs to the number of produced units.

**The marginal cost** is the supplementary cost necessary to produce a new unit from a product (how much do total costs grow if the level of the production grows with one unit). For a hospital, the marginal cost would be for example the effective cost of treating a patient supplementary, despite the number of cases contracted with the Health Insurance).

## **2. The general pattern of calculation of the cost per patient**

**I. Defining the final product.** The expenses per hospitalized patient as account which are given to the patient when he leaves the hospital together with the ticket of discharge.

### **II. Defining the cost centres:**

1. The cost centres are established after the administrative chart for hospitals approved by OMS
2. Cost centres
3. Structures of receiving urgencies
4. Sections, compartments with beds
5. Para-clinic laboratories
6. Specialty ambulatory
7. Pharmacy
8. Other functional structures – sterilization, operatory bloc, transfusion place, etc.
9. Supplies, transport and public acquisitions

10. Technical and administrative

11. Book-keeping

12. Financial

13. RUNOS, medical statistics and informatics, contentious, nosocomial infections, public relations, audit

14. Management – general director, deputy general director, chief medical assistant, administrative director, chief book-keeping

**III. Identifying the total cost for each patient:** The cost consists in: direct, indirect and general expenses.

**The direct expenses** belong to the following **cost centres:** *Structures of receiving urgencies; Sections; compartments with beds; Specialty ambulatory.* **The direct expenses consist in:** *the expenses of the cost centre's personnel, material expenses of the centre: unidentifiable for each patient (light, heat, water, laundry, inventory objects, etc.) and identifiable for each patient (medicine, food; analysis and investigations depending on the case).* **The direct expenses** are introduced for each patient at the section where he is hospitalized.

**The indirect expenses** belong to the following **cost centres:** *Para-clinic laboratories, Pharmacy, Sterilization, Transfusion Place, Operatory bloc.* **The indirect expenses** are introduced for each patient depending on the documents given by the mentioned cost centres and **consist in:** *personnel expenses, material expenses afferent to the realized medical services.*

**The general expenses** belong to the following **cost centres:** *Supplies, Transport and Acquisitions, Technical and administrative, Book-keeping, Financial, RUNOS, Medical statistics and informatics, contentious, nosocomial infections, public relations, audit; the management - general director, deputy general director, chief medical assistant, administrative director, chief accountant.* **The general expenses** are realized depending on distribution keys approved by the management of the hospital and **consist in:** *personnel expenses, material expenses.*

**IV. Organizing the patients in cost centres:** *Structures of receiving urgencies, Sections, Compartments with beds, Specialty ambulatory.*

**V. The allocation of all costs to final cost centres:** *Direct expenses, Indirect expenses, General expenses.*

**VI. The calculation of the total of expenses and of the unitary cost per patient at each final cost centre.** As a following to those presented previously, **The methodology of establishing the cost of hospitalisation per day** is rendered in the table below:

| <b>The structure of the cost centres</b>  | <b>Expenses types (**)</b>  | <b>Method (***)</b>   | <b>Result</b>   |
|---|---|---|---|
| <b>Direct expenses: (*)</b><br>a) Structures of receiving urgencies<br>b) Sections, compartments with beds<br>c) Specialty ambulatory | 1. Personnel expenses<br>2. Expenses on materials and service:<br>a) Afferent to the structures that do not identify with the patient's level<br>b) Medicine per patient<br>c) Sanitary materials per patient | 1. Sums afferent to the personnel according to the state of functions<br>2. Mixte:<br>a) Distribution keys per UPU/Section/Ambulatory<br>b) The sums regarding the input of medicine and materials per patient. | a) Tariff/day hospitalization per section<br>b) The cost of medicine and sanitary materials per section |



| <b>The structure of the cost centres</b>  | <b>Expenses types (**)</b>  | <b>Method (***)</b>   | <b>Result</b>   |
|---|---|---|---|
| <b>Indirect expenses: (*)</b><br>a) Para-clinic laboratories<br>b) Pharmacy<br>c) Sterilization<br>d) Transfusion place<br>e) Operatory bloc  | 1. Personnel expenses<br>2. Expenses on materials and service:<br>a) Afferent to the structures that do not identify with the patient's level<br>b) Tariffs/ medical service /patient | 1. Sums afferent to the personnel according to the state of functions<br>2. Mixte:<br>a) Distribution keys<br>b) Tariffs of the service per patient | Tariff/ service / para-clinic laboratory, pharmacy, sterilization, transfusion place, bloc  |
| <b>General expenses: (*)</b><br>a) Supplies, transport and public acquisitions<br>b) Technical and administrative<br>c) Book-keeping<br>d) Financial<br>e) RUNOS, medical statistics and informatics, contentious, nosocomial infections, public relations, audit<br>f) Management – general director, deputy general director, chief medical assistant, administrative director, chief accountant. | 1. Personnel expenses<br>2. Expenses on materials and service:<br>a) Afferent to the structures that do not identify with the patient's level<br>b) Medicine per patient              | 1. Sums afferent to the personnel according to the state of functions<br>2. Distribution keys   | Tariff/hospitalization day/ supplies, transport and public acquisitions, technical and administrative, book-keeping, financial, RUNOS, medical statistics and informatics, contentious, nosocomial infections, public relations, audit, management – general director, deputy general director, chief medical assistant, administrative director, chief accountant. |
| <b>TOTAL</b>  |   |   |   |

(\*) It is registered at the level of the structure which makes the expense.

(\*\*) According to the approved budgetary classification, excepting the capital expenses.

(\*\*\*) The distribution keys are established according to the type of expense, surface, number of patients, etc.

### **3. Example regarding the determination of the cost per patient in the surgery section**

Patient: Tarteia Nicolae sex: masculine age: 55 years

Ensured: OPSNAJDOLJ wage-earner certificate nr. 248 from 15.11.2009

**Diagnosis: relapsed neogastric**

**The calculation of the costs (EXCERPT):**

**GENERAL SURGERY COMPARTMENT**

**CONSUMPTIOND MATERIALS**

| Date     | Medical service name | M.U.        | Quantity | Value | To encash |
|----------|----------------------|-------------|----------|-------|-----------|
| 18.11.09 | Sanitary alcohol     | Millilitre  | 5        | 0,015 | 0,015     |
|          | Adhesive bandage     | Centimetres | 10       | 0,000 | 0,000     |
|          | Syringes 20 LM       | Pieces      | 1        | 0,170 | 0,170     |

**ADMINISTRATED MEDICATION**

| Date     | Medical service name             | M.U.  | Quantity | Value  | To encash |
|----------|----------------------------------|-------|----------|--------|-----------|
| 18.11.09 | Glucose 10 % 500 ml              | Sack  | 2        | 3,554  | 3,554     |
|          | Physiological serum 0,9 % 500 ml | Sack  | 1        | 1,461  | 1,461     |
|          | Arginine sorbitol                | Phial | 1        | 7,140  | 7,140     |
|          | Aminoven 10 % 500 ml             | Phial | 1        | 21,473 | 21,473    |

**LUNCH SERVICE**

| Date     | Medical service name | M.U. | Quantity | Value  | To encash |
|----------|----------------------|------|----------|--------|-----------|
| 18.11.09 | COLON                | Days | 1        | 5,500  | 5,500     |
|          | FLUID                | Days | 1        | 5,500  | 5,500     |
|          | DIGESTIVE 2          | Days | 4        | 22,000 | 22,000    |

**HOSPITALIZATION TARIFF**

| Date                             | Medical service name   | M.U. | Quantity | Value          | To encash      |
|----------------------------------|------------------------|------|----------|----------------|----------------|
| 18.11.09                         | Hospitalisation tariff | Days | 4        | 636,720        | 636,720        |
|                                  | Hospitalisation tariff | Days | 8        | 1.273,440      | 1.273,440      |
| <b>TOTAL SURGERY COMPARTMENT</b> |                        |      |          | <b>704.806</b> | <b>704,806</b> |

**ATI COMPARTMENT****ADMINISTRATED MEDICATION**

| Date     | Medical service name             | M.U.  | Quantity | Value   | To encash |
|----------|----------------------------------|-------|----------|---------|-----------|
| 18.11.09 | Sulperazone 2 g                  | Phial | 6        | 162,714 | 162,714   |
|          | Physiological serum 0,9 % 500 ml | Sack  | 6        | 8,766   | 8,766     |
|          | Glucose 5 % 500 ml               | Sack  | 6        | 9,744   | 9,744     |

**LUNCH SERVICE**

| Date     | Medical service name | M.U. | Quantity | Value  | To encash |
|----------|----------------------|------|----------|--------|-----------|
| 18.11.09 | Fluid                | Days | 2        | 11,000 | 11,000    |
|          | Hidrolactat          | Days | 4        | 22,000 | 22,000    |

**HOSPITALIZATION TARIFF**

| Date                         | Medical service name   | M.U. | Quantity | Value           | To encash       |
|------------------------------|------------------------|------|----------|-----------------|-----------------|
| 18.11.09                     | Hospitalisation tariff | Days | 5        | 795,900         | 795,900         |
|                              | Hospitalisation tariff | Days | 1        | 159,180         | 159,180         |
| <b>TOTAL ATI COMPARTMENT</b> |                        |      |          | <b>2874,295</b> | <b>2874,295</b> |

**ANALYSIS LABORATORY COMPARTMENT**

| Date     | Medical service name | M.U.   | Quantity | Value | To encash |
|----------|----------------------|--------|----------|-------|-----------|
| 18.11.09 | TGO                  | Pieces | 1        | 3,780 | 3,780     |
|          | Serum creatinine     | Pieces | 1        | 3,790 | 3,790     |
|          | Direct bilirubine    | Pieces | 1        | 3,790 | 3,790     |
|          | Serum Glucose        | Pieces | 1        | 3,790 | 3,790     |

| Specification   | Value            | To encash        |
|---|------------------|------------------|
| <b>Total analysis compartment</b>                       | <b>162,974</b>   | <b>162,974</b>   |
| <b>Total of the total cost presentation per patient</b> | <b>5.037,632</b> | <b>5.037,632</b> |
| <b>Number of days of hospitalization</b>                | <b>18</b>        |                  |
| <b>Unitary cost per patient per hospitalisation day</b> | <b>279,8684</b>  |                  |

#### 4. Conclusion

In the **medico-economic literature** the following categories of costs are used:

- a) **Direct costs** - they are the costs associated to goods, resources and services consumption directly within the health or disease programme. They include **direct medical costs** equivalent to the consumption of medicine and medical resources (hospitalization equipment) and **direct non-medical costs** (expenses on the patient's transportation).
- b) **Indirect costs** - they are costs associated to losses of productivity for the patient and its company in report with the health and disease program (example, medical leave).
- c) **Intangible costs** - represented by human and psychological costs concerning the disease. Difficult to evaluate, they are usually quantified by measuring the utility for the patient (in terms of health unit), or by the disposition of paying in monetary terms (WTP method).
- d) **Total cost** = direct costs plus indirect costs.
- e) **Average cost** - it is the cost per unit of the produced efficiency (example m.u. per avoided deceases).
- f) **Marginal cost** - it is the cost associated to obtaining a supplementary unit of efficiency.
- g) **Incremental cost (differential)** - it is the cost associated to obtaining the supplementary unit of efficiency within an ALFA intervention in report with a BETA intervention different from ALFA.
- h) **Fixed costs** - they are constants no matter the level of activity (example, medical equipment).
- i) **Variable costs** - they evolve depending on the level of activity (example, medicine consumption).

In the **analysis cost-benefit**, besides direct and indirect costs several categories are used: **decease costs**, specific to the analysis cost-benefit and **future costs** - are taken into consideration if they are medical costs and neglected if they are non-medical costs. In conclusion, from the point of view of the sanitary institution, **three types of classifications of the hospitalisation expenses** are possible: **the accountant classification** which corresponds to the *distinction direct-indirect expenses*, **the medical classification** which distinguishes *medical expenses, logistic expenses and structure expenses* and the **economic classification** which underlines the antithesis between *variable-fixed costs*. **The regrouping of the expenses must be managed depending on the finality of the study: the perspective of taking the decision, the perspective of management through budgetary deviation or the perspective of the financing of the hospital structures.**

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# LA NORME INTERNATIONALE D'INFORMATION FINANCIERE POUR LES PETITES ET MOYENNES ENTITÉS : QUELLES OPPORTUNITES POUR UN PAYS EN TRANSITION ?

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*In 2002, the European Parliament decided that, starting January 1, 2005, EU public companies should report on their consolidated accounts based on a unique body of financial reporting standards. The decision was bound to affect also the new EU members. Allegedly aiming at public companies, IFRS seem to get a wider scope, reaching as far as the "small and middle-sized entities " (SME). The aim of our study is to put forward the main technical controversies related to the project of international financial reporting standard for "private entities " and to put the spotlight on the major divergences that may arise between this project and the national regulations, while having as setting the case of Romania.*

*Mots clés: IFRS; petites et moyennes entités; Européanisation de la comptabilité; pays en transition*

*Cod JEL: M41*

## **1. Introduction**

En 2002, le Parlement Européen a décidé qu'à partir du 1<sup>er</sup> janvier 2005 les sociétés communautaires qui font appel public à l'épargne soient tenues de préparer leurs états financiers consolidés sur la base d'un jeu unique de normes comptables (les normes internationales d'information financière - IFRS). Visant a priori les états financiers des grandes entreprises, les normes IFRS pourront affecter dans le futur proche, de manière directe ou indirecte, les petites et moyennes entreprises, ou *entités*, selon la terminologie de l'IASB (les PME). Le besoin d'un référentiel comptable adapté et dédié spécialement aux PME est sujet aux polémiques assez récurrentes. Les consultations lancées par l'organisme international de normalisation comptable en sont la preuve et les lettres reçues à plusieurs reprises sont l'illustration de ce dialogue de principe. La réponse de l'organisme de normalisation fut l'élaboration et la publication en février 2007 d'un projet de norme IFRS pour les PME (IFRS pour les Petites et Moyennes Entités).

Nous sommes intéressés, dans ce contexte, d'étudier le cas des pays en transition récemment intégrés dans l'Union Européenne, en s'appuyant sur le cas de Roumanie. Leur situation est exemplaire – tenues à respecter les réglementations européens, ces pays sont en pleine réforme de leurs systèmes comptables, dans le cadre de la transition souvent abrupte vers l'économie de marché. La Roumanie, par exemple, a parcouru plusieurs étapes de la réforme du système comptable, en passant par l'eupéanisation du système, dans le contexte de sa récente

intégration, vers la convergence internationale. Le projet de norme internationale pour les PME est d'autant plus important, que les PME représentent la majorité des entreprises, indispensables à l'avenir économique notamment dans les pays en voie de développement et en transition (des Robert et al., 2004). Notre étude représente donc une analyse du projet de norme, dans le contexte spécifique de la Roumanie. On étudie ainsi les controverses techniques principales liées au projet. Après cela, on en tire les opportunités principales et les risques majeurs liés à son application.

L'intérêt de notre étude est surtout pragmatique et tient de l'analyse d'un phénomène présent important pour la normalisation comptable internationale et surtout pour le paysage européen. A la lecture rapide des lettres de commentaire reçus par le normalisateur international, on aurait dit que les pays en transition ne s'impliquent pas de manière active dans ce processus. N'oublions pas, cependant, que les versions de projet de norme IFRS pour les PME présentes depuis 2007 sur le site de l'IASB sont l'original anglais, accompagné de ses versions en Espagnol, Français, Allemand, Polonais et Roumain. Ainsi, notre étude joue également le rôle d'une prise de parole pour exposer, dans le cadre du dialogue de la normalisation internationale, le cas d'un pays en transition récemment intégré dans l'Union Européenne, marqué par ses réformes et en quête de stabilité.

## **2. IFRS pour les PME: un projet controversé**

La publication du projet de norme IFRS pour les PME a éveillé des vagues de réactions critiques. Certains d'entre eux se réfèrent aux aspects techniques et sont justifiés. La question qui se pose est si l'organisme international de normalisation aurait pu éviter ces controverses, dans les conditions où les entités privées ne représentent pas une communauté homogène? Afin de répondre à cette question il est cependant nécessaire de faire une revue des controverses techniques principales relevés par le projet de norme IFRS pour les PME.

Une première question fortement controversée est la définition des petites et moyennes entités. La définition retenue par l'IASB est très générale : « Les PME sont de entités qui n'ont pas de responsabilité publique et qui publient des états financiers à usage général pour les utilisateurs externes. »<sup>462</sup> (IASB, 2007: 16)

L'IASB est critiquée de ne pas avoir défini les entités privées selon des critères quantitatives (le chiffre d'affaires, le total du bilan et le nombre de salariés). Dans ces conditions, la norme peut être appliquée tant aux petites entreprises qu'aux entreprises plus grandes. C'est, par exemple, le cas des entreprises cotées qui appliquent pour les comptes consolidés les IFRS complets et qui pourront appliquer pour leurs comptes individuels les IFRS pour les PME. On précise uniquement que la norme a été construite en se référant aux PME d'un effectif d'environ 50 employés (IASB, 2007). Le champ d'application dépendra de chaque Etat, qui a la liberté de définir des critères propres d'application de la norme. Cette position ouverte est due au fait que, dans les conditions où la situation des petites et moyennes entités est très différente d'un pays à l'autre, l'IASB a voulu que le projet soit applicable dans tous les pays (PricewaterhouseCoopers, 2007).

De même, l'organisme international de normalisation comptable ne précise pas quels sont les états financiers visés par le projet de norme. Chaque Etat pourra décider si la nouvelle norme s'applique aux comptes consolidés et/ou individuels. La liberté laissée aux différents Etats d'établir à quelles entreprises et pour quels états financiers appliquer la norme, bien que critiquée, présente néanmoins un grand avantage. Elle offre la possibilité d'adapter le projet au contexte

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462 Une entité a une responsabilité publique si elle dépose ses états financiers auprès d'une autorité de réglementation des valeurs mobilières ou d'un autre organisme de régulation, ou est sur le point de le faire, aux fins d'émettre une catégorie d'instruments sur un marché public ; ou si elle détient des actifs à titre fiduciaire pour un large groupe de tiers extérieurs (...)" (IASB, 2007 : 16)

économique national et au degré d'évolution du système comptable. De cette manière, chaque Etat pourrait retrouver dans le projet, en fonction de ses choix, le référentiel adapté à ces besoins. L'annexe du projet de norme présente une liste contenant les utilisateurs d'informations financières des entités privées. Il s'agit de banques, fournisseurs, agences de notation de crédit, clients et des actionnaires qui ne sont pas en même temps managers. Les salariés, qui apparaissent en tant qu'utilisateurs dans le cadre conceptuel, sont omis de ce projet. On ne définit ni qui pourraient être les utilisateurs privilégiés, ni quels seraient leurs besoins spécifiques. On n'a pas inclut dans cette liste les managers, même propriétaires, en considérant que les états financiers doivent fournir des informations aux utilisateurs externes. Les managers disposent d'autres instruments pour gérer leurs affaires, quoi que les états financiers pourraient également leur en servir, en fournissant des informations sur la position financière, les performances et les flux de numéraire. Ainsi, une des critiques apportées au projet est qu'il n'a pas tenu compte des besoins d'information des managers. Cela aurait représenté une voie pour les managers de ne plus développer d'autres instruments de gestion, ce qui aurait réduit les coûts des entités privées. De plus, le normalisateur aurait obtenu une plus grande adhésion au projet de la part des managers, qui ont généralement un rôle majeur dans le choix du référentiel comptable.

L'IASB précise avoir élaboré le projet pour les PME en bon respect des notions fondamentales du cadre conceptuel et des principes qui en découlent, qu'il a essayé d'adapter en fonction des besoins des utilisateurs, en accordant une attention spéciale au rapport coût - bénéfice. On est ainsi arrivé à un projet de norme considéré autonome, dans lequel: (i) certains sujets n'ont pas été abordés, en considérant qu'ils concernent très rarement les PME ; pour de tels cas, le texte fait référence à une norme IFRS qui en correspond; (ii) on propose des simplifications en matière d'écriture comptable, évaluation, et informations à fournir; (iii) on retient toutes les options offertes par l'IFRS, mais on précise que les différents Etats peuvent supprimer de manière partielle ou totale ces options.

La question qui apparaît le plus fréquemment est: *Y a-t-il des différences fondamentales entre l'IFRS pour les entités privées et les IFRS complets?* La réponse est, certes, négative. Le nombre de pages a été réduit à moins de 10%, mais, en même temps, ceux qui ne connaissent pas les IFRS totales auront des difficultés à comprendre ce projet, car la réduction du nombre de pages s'explique surtout par l'élimination des exemples, et les simplifications restent limitées en ce qui concerne l'évaluation et les écritures comptables.

En ce qui concerne l'évaluation, on observe que le projet fait appel, maintes fois, à la juste valeur. La juste valeur est cependant une notion difficilement à appliquer dans le cas des PME. Ainsi: la juste valeur suppose des évaluations périodiques, qui demandent d'habitude des efforts financiers importants de la part des entités privées; la juste valeur déterminée à partir des modèles mathématiques demande des connaissances professionnelles que peu d'entités privées peuvent s'en permettre; les entités privées ne disposent pas d'un système de gouvernance très développé, le pouvoir étant le plus souvent concentré dans les mains du manager propriétaire et, dans ces conditions, le recours à la juste valeur peut entraîner certaines dérives.

En plus de l'évaluation à la juste valeur, le projet de norme pour les entités privées a maintenu, avec peu de simplifications, beaucoup des aspects complexes des IFRS complets. Dans le cas des PME, le recours aux méthodes complexes implique de gros efforts financiers ou de formation des employés. De même, le projet prévoit un nombre important d'informations à fournir. Or on sait que les utilisateurs principaux d'informations provenant des entités privées (banques et partenaires commerciaux) sont intéressés spécialement par des informations concernant la trésorerie, les risques et la pérennité de l'entreprise. Fournir une quantité importante d'informations, pas nécessairement utiles, peut conduire, au contraire, à la désinformation.

Avant le 30 novembre 2007, le Conseil avait déjà reçu 162 lettres de commentaires concernant le projet IFRS pour les entités privées. De plus, 116 PME provenant de 20 pays ont participé au processus de „field testing” du projet. Ce processus consiste dans la conversion des états

financiers les plus récents de ces entreprises en fonctions des propositions du projet et la communication au Conseil des problèmes rencontrés. En mai 2008, le Conseil a commencé le processus de re-délibération (redeliberating), par la discussion des questions clé concernant l'objectif, la reconnaissance, la mesure et la présentation, des questions mises en évidence dans les lettres de commentaire et les rapports rédigés par les entités testées.

### **3. L'opportunité d'application du référentiel IFRS pour les PME de Roumanie**

En Roumanie, le correspondant pour les petites et moyennes entités est représenté par les petites et moyennes entreprises (PME). Les PME, ce sont les entreprises ayant moins de 250 salariés et un chiffre d'affaires annuel de moins de 8 millions euros. Elles se divisent en trois catégories : les micro entreprises, qui ont moins de 10 salariés; les petites entreprises, qui ont entre 10 et 49 salariés ; et les entreprises moyennes, qui ont entre 50 et 249 salariés. En 2004, il y avait en Roumanie approximativement 402.000 PME, dont 89% micro entreprises, 9% petites entreprises et 2% entreprises moyennes. Il y a plusieurs questions qu'on pose maintenant, concernant ces entreprises. Est-il opportun qu'elles appliquent la future norme IFRS pour les PME ? Ne serait-il pas plus convenable à ces entreprises d'utiliser, comme avant, la IVe Directive Européenne? Si la réponse sera en faveur de la norme internationale, quels seuils fixer pour sélectionner les PME à utiliser cette norme? Quelles sont les attentes des PME concernant le référentiel international? Est-ce que les pratiques comptables actuelles créent les prémisses pour le passage aux IFRS? Doit-on garder le lien actuel entre le résultat comptable et celui fiscal? Eliminer cette liaison, ce qui a été suggéré par la norme comptable internationale, est-ce censé de majorer les coûts pour les PME? Etc.

Bien que la traduction officielle en Roumain du projet de norme IFRS pour les PME soit disponible depuis plusieurs mois (cette traduction, d'ailleurs, se trouve depuis septembre 2007 sur le site de l'IASB), il n'y a pas eu de débats officiels à son propos. Il ne faut pas non plus négliger le fait que, depuis plusieurs années déjà, l'organisme de normalisation de ce pays du Sud-est de l'Europe a entrepris la rénovation profonde des règles comptables, dans la direction de la convergence avec les normes IFRS, par l'adoption progressive des principes comptables et de certaines méthodes d'évaluation du référentiel international. L'application obligatoire de ces règles au niveau des comptes individuels fait que les normes IFRS soient un sujet de grande actualité pour les PME de Roumanie. Même en dehors du processus de convergence, qui semble irréversible, il y a des raisons objectives qui justifient l'intérêt des PME roumaines pour les IFRS. On peut en rappeler, prioritairement (PricewaterhouseCoopers, 2006):

- le désir d'être coté sur le marché financier: si on espère la cotation à la bourse dans l'avenir, l'application du référentiel IFRS pour l'entité petite ou moyenne entreprise pourrait permettre d'anticiper les difficultés que celle-ci aurait au moment de l'application des IFRS totales.
- l'intention de vendre dans le futur l'entreprise à une société étrangère, à un fonds international d'investissements ou à une société cotée: l'acheteur potentiel désire avoir à sa disposition des états financiers conformes aux IFRS pour formuler une offre de prix, en fonction de la rentabilité actuelle et future, mesurée à base des informations obtenues en appliquant les mêmes normes que ceux utilisés pour établir les états financiers propres. Au présent, toutes ces opérations nécessitent des retraitements complexes, qui pourraient être évités si on adoptait la norme IFRS pour les entités privées.
- l'intention de répondre aux demandes des bailleurs de fonds: La présentation des états financiers selon le référentiel IFRS adapté aux PME est censée de faciliter la communication et d'installer un climat de confiance pour les investisseurs qui ont déjà commencé se familiariser avec les IFRS dans le cas des sociétés cotées, en permettant ainsi un accès plus facile aux financements complémentaires.
- le désir d'assurer la comparabilité par rapport aux sociétés concurrentes: une partie des principaux concurrents des entités privées de Roumanie établissent déjà leurs états financiers conformément au référentiel international. Dans ces conditions, la présentation des états

financiers conformes aux IFRS pour les entités privées est censée de faciliter la comparaison entre ce type d'entités.

- la réduction des coûts : le projet IFRS pour les entités privées propose un référentiel complet, qui traite tous les aspects de la vie de l'entreprise, dans les conditions où certains sujets (la reconnaissance des produits, l'actualisation, les instruments financiers) sont plutôt ou totalement ignorés par les réglementations roumaines. L'utilisation des IFRS tant pour les comptes individuels que pour ceux consolidés est censée permettre la simplification du processus de production comptable, ce qui réduirait les coûts et les délais d'établissement des états financiers. De plus, le caractère international de la norme IFRS pour les PME devrait inciter les éditeurs de logiciels à présenter le même produit, n'importe quel soit le pays de provenance de l'utilisateur. Les conséquences pourraient en être : la croissance de l'offre de logiciels dans chaque pays, l'augmentation de la concurrence et la diminution des coûts pour les entreprises. Pour les entités privées, l'existence des logiciels uniques, utilisables quel que soit le pays faciliterait la mise en place des systèmes de gestion pour toutes les sociétés du groupe et leur maintenance à des coûts accessibles. Le projet IFRS pour les entités privées pourrait bénéficier, de même, de la démocratisation et le développement du langage XBRL (eXtensible Business Reporting Language). Ce langage vise à simplifier la communication, l'analyse et la comparaison des états financiers et des échanges d'informations financières. La mise en place des instruments identiques dans toutes les sociétés du groupe représenterait pour le groupe une source d'économies et de sécurité dans le processus de production des informations financières.

A ces raisons majeurs présentées antérieurement nous pouvons en ajouter : la tentative de mesurer l'impact des décisions stratégiques, de financement et opérationnelles, l'optimisation de la relation comptabilité - fiscalité, etc.

Il ne faut pas non plus ignorer que les risques attachés à l'application des IFRS au niveau des entités privées sont extrêmement importants. Nous pouvons en rappeler: les risques concernant la qualité des états financiers: la qualité des états financiers est dépendante de la stabilité du référentiel (les entités privées ne disposent pas d'une infrastructure à leur permettre le suivi continu des révisions), la disponibilité de l'expertise (la majorité des entités privés de Roumanie ne dispose pas d'équipes suffisamment préparées pour l'application du référentiel international, ni des moyens nécessaires pour s'assurer qu'elles appliquent de manière correcte la norme IFRS), l'établissement des hypothèses: (les entreprises qui évoluent dans un environnement économique comparable vont retenir des hypothèses différentes, ce qui pourrait rendre plus difficile la construction des référentiels sectoriels et la réalisation de comparaison entre entreprises) et l'évaluation à la juste valeur (la reconnaissance des différences générées par l'évaluation à la juste valeur rend difficile le suivi de la trajectoire de l'entreprise).

Ces questions d'arbitrage entre les avantages et les risques de l'application de la norme IFRS pour les PME vont toujours susciter des réflexions différentes, en fonction du contexte d'origine. Pour les Etats Unis, par exemple, se pose le problème de la concurrence entre les normalisateurs FASB et IASB, censée de mener, selon les principes du marché, à des normes plus performantes (American Accounting Association's Financial Accounting Standards Committee, 2006; Dye et Sunder, 2001). En Europe, on craint l'ingérence trop puisée du normalisateur international dans le système comptable européen, en dépit du cadre initial plus équilibré convenu (lettres de commentaires). Le contexte spécifique des pays en transition marque aussi le débat, surtout par la question de la quête de stabilité et du besoin d'expertise.

#### **4. Conclusions**

Notre étude met en évidence les controverses techniques principales du projet de norme IFRS pour les entités privées et les divergences principales entre ce projet et les réglementations roumaines. Plus que le processus de convergence, qui semble désormais irréversible, il y a des raisons objectives qui justifient l'intérêt des petites et moyennes entités pour les IFRS. Il ne faut



pas ignorer non plus que les risques attachés à l'application des IFRS au niveau de ces entreprises soient extrêmement importants. L'existence de ces risques rend obligatoire l'établissement d'une démarche pour les gérer et les transformer en opportunités. Les débats autour de cette démarche se concentrent principalement sur le rapport coût bénéfice. Néanmoins, l'impact du référentiel IFRS pour les PME ne peut être anticipé aujourd'hui que d'une manière très partielle, compte tenant de la phase de projet de la norme et du caractère temporel de la transition. L'impact à long et moyen terme de la norme IFRS pour les PME sur la stabilité financière fera l'objet de futures réflexions.

Par notre analyse, nous avons fixé quelques repères initiaux, surtout afin d'ouvrir le débat aux pays récemment intégrés dans l'Union Européenne. C'est une étude essentiellement descriptive, que nous avons l'intention de développer à travers des analyses régionales comparatives, rattachées aux questions de choix de référentiel comptable, dans le contexte de l'Européanisation des systèmes comptables et de la convergence internationale.

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## QUELQUES PROPOS SUR LA REFORME COMPTABLE. LE CAS DE LA ROUMANIE

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*Accounting appears to develop in different ways, depending on the context and its specific needs, based essentially on the Darwinian principle : the useful accounting survived (Alexander, Nobes, 2001). Our research is basically a discussion of this position, put in a challenging context – the context of transition economies and the reform of the accounting system. In the case of Romania, the stake is not the usefulness of the changing accounting systems, but the lack of complexity, which might eventually weaken the noblest goals of our academic discipline.*

*Mots clés : l'eupéanisation de la comptabilité, réforme d'ordre quantitatif, convergences comptables internationales.*

*Cod JEL: M41*

### **1. Introduction**

La globalisation des marchés de capital, l'intensification de la coopération régionale et internationale et le développement du commerce international créent de nouvelles opportunités d'affaires dans le monde. Les entreprises et les investisseurs peuvent se confronter, dans ce contexte, à des problèmes importants. Ainsi, les différences entre les normes comptables internationales peuvent être la cause de nombreux problèmes pour les entreprises multinationales cotées sur des marchés différents. Dans l'absence d'un set de normes qui soit universellement acceptées, ces entreprises supportent des coûts élevés pour la production et la conversion des informations comptables conformes à d'autres juridictions. De plus, les différences entre les normes peuvent représenter une source d'incertitude pour les investisseurs et les analystes financiers, qui sont intéressés à comparer la performance financière des entreprises évoluant dans des pays différents (Ali, 2005). Dans ce contexte est apparu l'intérêt croissant de l'harmonisation internationale des pratiques comptables.

En juin 2002, l'Union Européenne décide de l'application des normes internationales d'information financière à partir de 2005 pour les états financiers consolidés des entreprises communautaires cotées. En octobre 2002, l'organisme international de normalisation comptable (IASB) et son homologue américain (FASB) ont conclu un mémorandum visant la convergence entre les deux référentiels comptables internationaux reconnus, IAS/IFRS et US GAAP (Sellhorn, Gornik-Tomaszewski, 2006). Toutefois, l'évolution des différents pays sur le chemin de la convergence ne se produit pas au même rythme dans tous les pays (Ding, Jeanjean, Stolowy, 2005). Le but de notre travail est d'identifier quelles sont les coordonnées pour

positionner la comptabilité et les professionnels comptables de Roumanie, dans le contexte présent.

Le contenu du travail est structuré sur plusieurs sections. La section qui suit présente les étapes de la réforme comptable en Roumanie. La troisième section présente les différences principales entre les IFRS et les réglementations comptables roumaines.

## **2. La comptabilité de Roumanie, face à ses multiples systèmes de réglementation**

Avant 1990, les leçons de l'enseignement comptable de Roumanie s'étaient centrées, pour plusieurs décennies, sur l'unicité du message. Ce message traduisait les idées et les pratiques de la comptabilité spécifique à la société communiste, dans le contexte d'une économie planifiée et centralisée. Le système comptable était intégré, sans individualisation des éléments de la comptabilité financière et de la comptabilité de gestion et sans trop impliquer l'interprétation des informations, étant fortement orientée vers les intérêts de l'Etat.

En Roumanie, la réforme comptable s'est déclenchée au début des années 1990, avec la Loi de la comptabilité no. 82 de 1991 et son Règlement d'application (1993). La première „vague” fut accomplie sous le conseil français, et les artisans principaux ont été Eric Delesalle, Gilbert Gélard et Louis Klee. L'architecture initiale, bien intéressante, n'a pas bénéficié d'un matériel approprié : en résulte une utilisation inadéquate des états financiers. Le „quasi organisme” de normalisation, représenté par le pouvoir public, a été préoccupé surtout par les composantes du plan de comptes. L'analyse financière et fonctionnelle à partir du bilan et l'analyse dégagée par le calcul des soldes intermédiaires de gestion sur la base du compte de résultat sont restées dans le stade des leçons enseignées dans les amphithéâtres universitaires. Les règles d'évaluation se sont cantonnées à quelques considérations à propos des coûts historiques. Bien que l'économie Roumaine soit atteinte, à l'époque, par l'hyperinflation, les états financiers des années 1990 ne furent pas retraités comme il fallait, ce qui a favorisé le phénomène de décapitalisation, surtout dans le cas des grandes entreprises. Et quand on a fait finalement appel au retraitement, celui-ci a été réalisé sur des bases fiscales, et abandonné après pas plus d'une année par les grands contribuables. La comptabilité de gestion s'est limitée au calcul des coûts et les méthodes utilisées étaient souvent obsolètes. Le recours à une comptabilité de gestion au sens propre appartient au début des années 2000, se limitant le plus souvent aux entreprises à capital étranger. A ce fond plutôt critique il faut ajouter cependant certaines nuances : dans le contexte de la mondialisation des économies sont apparues, dans les années 1990, les premiers groupes d'entreprises, qui ont demandé le recours aux méthodes de consolidation. Il ne faut pas négliger non plus le fait que les normes concernant la clôture de l'exercice financier étaient un mixe de fiscalité et comptabilité, tandis que ceux impliqués par la liquidation et la fusion des sociétés commerciales conduisaient à des solutions implicites.

La deuxième vague de réformes coïncide avec l'élaboration et la publication, par l'Arrêté du Ministre des Finances Publiques no. 94 de 2001, d'un paquet de réglementations harmonisées avec la IV<sup>ème</sup> Directive Européenne (bien que les premiers éléments d'eupéanisation de la comptabilité de Roumanie soient déjà présents dans le contexte de la première vague de réformes) et surtout l'application des normes internationales IAS. Cette étape fut entamée sous conseil écossais et a démarré, elle aussi, selon une bonne architecture. De nouveau, un tribut significatif fut payé à la formation douteuse des professionnels comptables, tout cela dans le contexte de l'absence d'un véritable organisme de normalisation comptable.

La deuxième étape de la réforme comptable reste une réforme plutôt quantitative: 1.500-1.700 grandes entreprises font appel au référentiel international. Cela est dit pour ne plus quantifier les erreurs provoquées par la mauvaise compréhension, en réalité, de la lettre et de l'esprit des normes internationales de comptabilité. On opère difficilement, dans cette période, avec les systèmes d'évaluation basés sur la juste valeur et la valeur d'utilité. Les difficultés majeures apparaissent quand il y a des questions d'estimation. Même si l'organisme professionnel de

Roumanie (le Corps des Experts Comptables et des Comptables Autorisés) est composé par plus de 30.000 experts comptables, le recours au jugement professionnel dans l'application des politiques de reconnaissance et de mesure s'effectue difficilement et avec des résultats douteux. En même temps que l'Arrêté 94 on a commencé à appliquer, à partir de 2002, les réglementations de l'Arrêté du Ministère des Finances Publiques no 306, destiné aux petites et moyennes entreprises. Dans ce cas, on procède uniquement à l'harmonisation avec les directives comptables européennes. Si dans l'Arrêté no. 94 les réglementations assuraient une certaine déconnexion entre comptabilité et fiscalité, il y a une pollution fiscale importante des comptes induite par l'Arrêté 306 et ses réglementations.

Le 1er janvier 2007, la Roumanie devient membre de l'Union Européenne. Une année avant cette date, on avait déjà commencé l'aventure de la troisième „vague” – la troisième étape de la réforme comptable du pays. Le système comptable fut orienté en deux directions, pour ce qui est la comptabilité financière. Une grande majorité de sociétés a commencé à appliquer les réglementations de l'Arrêté du Ministre des Finances publiques no. 1752, par lequel on sollicite la conformité intégrale aux directives européennes en matière de comptabilité. En fait, les réglementations conservent des éléments provenant de toutes les réformes précédentes (certains axes du plan comptable général français, les modèles d'états financiers et les règles d'évaluation de l'étape d'eupéanisation, la présence des méthodes comptables dérivés des normes internationales).

La deuxième direction de l'évolution de la comptabilité après le 1er janvier 2007 est l'orientation vers le référentiel comptable international. Cela, dans les conditions où peu de spécialistes roumains avaient été capables à suivre la révolution comptable suivant l'année 2001 (le contenu de la nouvelle stratégie de l'organisme international de normalisation IASB, l'apparition des normes internationales d'information financière, la révision des normes IAS, apariția standardelor internaționale de raportare financiară, revizuirea masivă a standardelor IAS, la convergence entre le référentiel comptable international et celui américain, etc ). Le bilan du processus d'internationalisation de la comptabilité de Roumanie inclut les efforts du système bancaire pour assimiler et appliquer les normes internationales d'information financière, tout comme les avancements des sociétés et des groupes cotés à la bourse de valeurs vers l'utilisation d'un référentiel international, sans oublier non plus l'intention des entreprises d'assurances de suivre les tendances internationales. On peut ainsi conclure que la plupart des entreprises roumaines à capital étranger ont suivi la direction de l'internationalisation de la comptabilité (Feleagă, Feleagă, Vasile, 2008).

### **3. L'analyse des différences entre les IFRS et les réglementations comptables roumaines**

Le but de cette étude est de mettre en évidence les différences qui apparaissent entre les IFRS et les réglementations comptables roumaines (RCR) et de vérifier si ces différences produisent des effets significatifs au niveau des états financiers publiés. Notre étude est basée sur les sociétés cotées à la Bourse de Valeurs de Bucarest, dans la première catégorie, qui établissent leurs états financiers en conformité avec les réglementations roumaines et également en conformité avec les normes comptables d'information financière. Au présent la première catégorie de cotation comprend 21 entreprises. Pour assurer l'homogénéité des données nous avons exclu de l'analyse trois entreprises déroulant des activités dans le secteur bancaire et financier.

Nous avons utilisé pour l'analyse les états financiers publiés à la clôture de l'exercice 2007. Toutes les 18 entreprises incluses dans l'échantillon ont publié des informations en conformité avec le RCR, mais seulement 5 ont publié sur leur site Internet des informations financières conformes aux normes internationales d'information financière. Cela fait que notre analyse se rapporte finalement au niveau de 5 entreprises ayant publié un set double d'états financiers. Les informations fournies par ces entreprises concernant les ajustements demandés par l'application des normes internationales d'information financière ne permettent pas d'effectuer des analyses

statistiques. Mais la simple comparaison des deux sets d'états financiers indique le fait que l'image des sociétés roumaines cotées à la bourse peut être totalement différente si on utilise le référentiel IFRS. Il y a des différences significatives surtout au niveau du résultat et des capitaux propres, que nous avons synthétisés dans le tableau suivant.

Tableau no. 1 – Résultats de l'étude

| <i>Informations</i>                           | <i>Entreprise 1</i> | <i>Entreprise 2</i> | <i>Entreprise 3</i> | <i>Entreprise 4</i> | <i>Entreprise 5</i> |
|---|---------------------|---------------------|---------------------|---------------------|---------------------|
| Résultat RCR                                  | 436.261             | 50.346              | -95.893             | 224.006             | 74.010              |
| Résultat IFRS                                 | 378.454             | 46.952              | -93.159             | 109.023             | 69.223              |
| Différence générée par l'application des IFRS | -13,25%             | +6,74%              | +2,8%               | -51%                | -6,46%              |
| Capitaux propres RCR                          | 1.614.591           | 2.329.303           | -17.292             | 1.566.931           | 3.267.024           |
| Capitaux propres IFRS                         | 1.263.835           | 1.910.595           | 484.931             | 1.054.619           | 3.085.245           |
| Différence générée par l'application des IFRS | -21,72%             | -17,97%             | +290%               | -32,69%             | -5,56%              |

On peut constater, pour une partie des entreprises analysées, qu'il y a des différences significatives provenant de l'évaluation des actifs financiers et des dettes à long terme, qui représentent des éléments importants pour l'évaluation de la structure financière de ces entreprises. Les différences de valeur entre les deux sets d'états financiers s'expliquent par les différences principales qui existent entre les RCR et les IFRS. Ces différences sont synthétisées dans le tableau ci-dessous.

Tableau no. 2 – Différences principales entre les RCR et les IFRS et les *effets au niveau des états financiers analysés*

*L'amortissement des immobilisations incorporelles.* IAS 38 classe les immobilisations incorporelles en deux catégories : à durée d'utilisation déterminée et à durée d'utilisation non déterminée. Les immobilisations à durée d'utilisation non déterminée ne sont pas amorties mais seront testées chaque année. Dans le RCR, on ne prévoit pas la possibilité d'une durée d'utilisation non déterminée. Toutes les immobilisations incorporelles sont amorties. *Effets:* Dans les états financiers conformes aux IFRS on constate l'existence des dépréciations pour les immobilisations incorporelles à durée d'utilisation non déterminée, ces dépréciations étant d'une valeur significativement supérieure à l'amortissement reconnu pour les immobilisations respectives, conformément aux RCR.

*La dépréciation des actifs.* IAS 36 précise qu'on constate une dépréciation quand la valeur comptable d'un actif devient plus grande que sa valeur récupérable. Dans le RCR, on ne parle d'aucun test de dépréciation des actifs. *Effets:* Dans les états financiers conformes aux IFRS, on a constaté des dépréciations significatives pour les actifs individuels et pour les unités générateurs de trésorerie

*Evaluation des stocks.* Conformément à l'IAS 2, l'évaluation à la sortie pour les stocks non identifiables est faite par la méthode PEPS ou par la méthode du coût moyen pondéré. Conformément aux RCR, on peut utiliser également la méthode DEPS. *Effets :* On n'a pas constaté des différences, car aucune des entreprises étudiées n'a utilisé la méthode DEPS, quoique permis par les RCR.

*Goodwill.* Conformément à l'IFRS 3, le goodwill n'est pas amorti, mais il sera testé chaque année. Conformément aux RCR, le goodwill est amorti sur une période d'au maximum 5 ans. *Effets:* Dans les états financiers conformes aux IFRS, deux des entreprises étudiées ont reconnu des dépréciations du goodwill significativement supérieures à l'amortissement reconnu en conformité avec les RCR.

*Impôt différé.* IAS 12 demande de comptabiliser les actifs et les dettes d'impôt différé. RCR ne reconnaissent pas les actifs d'impôt différé. *Effets:* On a constaté des créances d'impôt différé jusqu'à la „limite dans laquelle il est probable qu'un bénéfice imposable, sur lequel on pourra imputer les différences temporaires déductibles, soit disponible”.

*Frais d'établissement.* IAS 38 impose l'enregistrement en charges au moment de leur apparition. RCR permettent la capitalisation des frais d'établissement et leur amortissement sur 5 ans au maximum. *Effets:* On a éliminé du bilan les frais d'établissement

*Le coût des emprunts.* IAS 23 exige de capitaliser les emprunts dans le cas des actifs éligibles. RCR permettent la capitalisation des coûts des emprunts. *Effets:* Toutes les sociétés analysées ont appliqué en anticipation IAS 23 révisé. Tous les coûts des emprunts ont affecté ainsi le résultat de l'exercice courant.

*Charges et produits extraordinaires.* IFRS: N'existent pas. *Conformément aux RCR:* Existents en tant qu'éléments distincts dans le compte de résultat. *Effets:* Les éléments extraordinaires ont été reclassés en produits et charges ordinaires.

*Monnaies étrangères.* Conformément à l'IAS 21, les transactions en monnaies étrangères sont converties initialement en monnaie fonctionnelle et les différences de cours affectent le compte de résultat. Conformément aux RCR, on considère que la monnaie fonctionnelle est le RON. *Effets:* Pour établir des états financiers conformes aux IFRS, il a été nécessaire dans certains cas d'utiliser une monnaie fonctionnelle autre que le RON.

*Les changements de méthode.* IAS 8 exige que les changements de méthode soient réalisés de manière rétroactive. L'entreprise doit ajuster le solde d'ouverture de chaque composante de capital affectée et assurer la comparabilité des données. Conformément aux RCR, un changement de méthode comptable ne se réalise pas de manière rétroactive, on affecte le compte de résultat et il faut assurer la comparabilité des données. *Effets:* On a procédé à l'application rétroactive des changements de méthode

*Instruments financiers dérivés.* Conformément à l'IAS 32, l'émetteur d'un instrument financier dérivé qui contient des éléments de dette et des éléments de capitaux propres, doit classifier séparément les différentes composantes de l'instrument. RCR ne demande pas la décomposition par composantes. *Effets:* Dans le cas de l'entreprise 3, pour l'établissement des états financiers conformes aux IFRS on a viré aux capitaux propres la composante de capital de certains instruments financiers dérivés émis, ce qui a eu un effet majeur sur le total des capitaux propres.

Les éléments présentés mettent en évidence le fait que la position financière et les performances des sociétés roumaines sont différentes selon si on utilise les IFRS ou les RCR.

Les résultats de notre étude ont un intérêt pragmatique prépondérant. Ces conclusions pourraient être utiles à l'organisme national de normalisation dans le processus de réforme des réglementations comptables roumaines, en vue d'assurer la convergence avec les IFRS. De plus, elles peuvent intéresser également les utilisateurs d'informations financières et comptables, en leur illustrant certaines différences qui peuvent être générées par l'utilisation d'un autre référentiel. Il faut néanmoins préciser que notre étude présente des limites importantes. Premièrement, elle ne permet pas la quantification de l'effet directe de chaque norme internationale sur les valeurs des états financiers, car les informations publiées par les sociétés ne sont pas suffisamment détaillées. Deuxièmement, l'échantillon d'entreprises est petit. Ainsi, il y a d'autres sociétés cotées dans d'autres catégories et qui appliquent les IFRS, mais on n'a pas voulu les inclure dans l'échantillon, afin de le garder homogène du point de vue de la taille des entreprises. Enfin, nous avons choisi pour notre étude la première année dans laquelle on a publié en Roumanie des états financiers conformes aux IFRS, et il est probable que certaines entreprises ont été tentées de choisir parmi les recommandations des IFRS les traitements qui soient également conformes aux RCR. On peut cependant spéculer que, à long et moyen terme, il y aura des évolutions en ce qui concerne l'application des normes internationales d'information financière.

#### **4. En guise de conclusion : pour aller plus loin**

Il est facile à comprendre que le passage d'un système basé sur l'économie planifiée et centralisée à un autre fondamentalement différent, basé sur l'économie de marché, ne pouvait pas générer, dans le plan comptable, une réforme linéaire. Le syntagme « réforme après réforme », illustrant les évolutions de nature politique, juridique, sociale, économique et culturelle, s'applique aussi au reporting financier. Le passage aurait été plus facile si en Roumanie il y avait une école de comptabilité authentique, mettant les bases pour la création relativement rapide d'un organisme de normalisation. Sur un autre plan, la réforme implique s'accorder aux phénomènes de mondialisation des économies et de globalisation des marchés financiers. Il n'est pas trop tard pour assimiler les leçons de comptabilité en orientant la discipline vers la conceptualisation du système, vers l'interprétation des informations, vers la prise des décisions par les acteurs du jeu social, vers la séparation entre comptabilité et fiscalité, vers l'intégration et l'application des normes internationales d'information financière. De telles évolutions devraient se réaliser à condition de conserver les spécificités des deux grandes écoles qui marquent notre discipline : celle patrimoniale continentale et celle anglo-saxonne.

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# ECONOMIC ENTITIES FINANCIAL AND ACCOUNTING DIAGNOSIS

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*The diagnosis of the functions of the company consists in the accumulation of the assessments of the quality of each function on which the respective company is structured. The most often diagnosis technique is the SWOT analysis (Strengths, Weaknesses, Opportunities, Threats; Strengths, weaknesses, opportunities and risks). This allows for the identification of the key features of the environment that influences the activity of the company and its intrinsic performance. While the accounting and financial diagnoses coexist within the same function due to the fact that they are synthetic in nature and common information sources, their evaluation should be approached separately. This paper aims at determine the financial and accounting diagnosis at S.C. Recon SA Craiova, taking into account that this company does not employ specialized staff for the financial analysis of the performed construction activity.*

*Key words: financial diagnosis, indicators, assessment*

*Jel classification: M41*

## **1. The accounting diagnosis of the company SC RECON SA Craiova**

The specific nature of the accounting function influences the approach and accounting diagnosis method, i.e. the reliability of the accounting values is assessed based on two key elements:

- sufficient knowledge concerning the company and the conclusions of the other diagnoses;
- knowing the accounting principles and methods specific to the business segment.

From the accounting point of view, at the analyzed company, we deem that the strengths are: the fulfillment of all the requirements related to the reliability of the information included in the financial statements, the compliant submission in point of form and content.

## **2. The financial diagnosis of the company SC RECON SA Craiova**

The financial diagnosis is focused on the same information related to the activity of the company during a certain period of time, but analyses the aspect of the financial management and the method used for the allocation of the financial resources to the financing requirements.

For the studied company, the purpose of financial analysis is to find the significant financial characteristics, to discover the strengths and weaknesses, to establish a hierarchy using several criteria and finally to provide a pertinent assessment of its status.

### **2.1. Balance-based analysis**

The financial analysis of the balance sheet aims at assessing the method used for the achievement of the short-term and long-term financial equilibrium as well as its consequences for the solvency, liquidity and non-payment risk (bankruptcy) of the company.

**Table no.1**

Balance sheet for the financial exercises ended on 31.12.2007, 31.12.2008 (Lei)

| Designation of the indicator | Sold       |            | Variation         |                   |
|------------------------------|------------|------------|-------------------|-------------------|
|                              | 31.12.2007 | 31.12.2008 | Absolute increase | Relative increase |
| A. FIXED ASSETS              | 6,036,587  | 6,266,030  | 229,443           | 4%                |



|   |                  |                  |                  |              |
|---|------------------|------------------|------------------|--------------|
| I. Intangible assets                            | 6,600            | 13,736           | 7,136            | 108%         |
| II. Tangible assets                             | 5,327,508        | 5,875,336        | 547,828          | 10%          |
| III. Financial assets                           | 702,479          | 376,958          | (325,521)        | (46%)        |
| <b>B. CURRENT ASSETS</b>                        | <b>4,975,742</b> | <b>6,656,447</b> | <b>1,680,705</b> | <b>34%</b>   |
| I. Inventories                                  | 1,135,557        | 2,871,208        | 1,735,651        | 153%         |
| II. Accounts receivable                         | 3,371,214        | 3,285,249        | (85,965)         | (3%)         |
| III. Cash and cash equivalents in lei           | 468,971          | 499,990          | 31,019           | 6%           |
| <b>C. PREPAYMENTS</b>                           | <b>41,057</b>    | <b>47,897</b>    | <b>6,840</b>     | <b>17%</b>   |
| <b>D. CURRENT LIABILITIES</b>                   | <b>4,267,067</b> | <b>5,223,512</b> | <b>956,445</b>   | <b>22%</b>   |
| <b>E. NET CURRENT ASSETS</b>                    | <b>749,732</b>   | <b>1,480,832</b> | <b>731,100</b>   | <b>98%</b>   |
| <b>F. TOTAL ASSETS LESS CURRENT LIABILITIES</b> | <b>6,786,319</b> | <b>7,746,862</b> | <b>960,543</b>   | <b>14%</b>   |
| <b>G. LONG-TERM DEBTS</b>                       | <b>2,126,213</b> | <b>3,195,976</b> | <b>1,069,763</b> | <b>50%</b>   |
| <b>I. INCOMES IN ADVANCE</b>                    | <b>23,637</b>    | <b>14,422</b>    | <b>(9215)</b>    | <b>(39%)</b> |
| -Subsidies for investments                      | 23,637           | 14,422           | (9215)           | (39%)        |
| <b>J. OWN EQUITY</b>                            | <b>4,636,469</b> | <b>4,536,464</b> | <b>(100,005)</b> | <b>(2%)</b>  |
| I Registered capital                            | 1,100,000        | 1,100,000        |                  |              |
| II. Re-evaluation reserves (105)                | 1,273,168        | 1,273,168        |                  |              |
| II. Reserves (account106)                       | 1,176,483        | 1,176,483        |                  |              |
| III. Result of the financial year               | 1,086,557        | 917,108          | (169,449)        | (16%)        |
| IV Cumulated result                             | 261              | 69,705           | 69,444           | 167%         |
| V Distribution of profit                        | 0                |                  |                  |              |

### 2.1.1. Analysis of the balance sheet structure with the help of rates

★**Structure rates** are indicators used in the assessment activity because the position of the company within the sector in which it is active can be assessed with the help of these indicators.

**Table no.2**

Structure rates: assets

| Rata  | Designation of the indicator | Calculation formula (%) | Financial exercise 2008 | Interpretation  |
|-------|------------------------------|-------------------------|-------------------------|---|
| A 1   | Rate of fixed assets         | $A_i/A_t * 100$         | 48%                     | The capital investment ratio in the company exceeds the average technologization degree in the specific business segment (constructions). |
| A 1.3 | Rate of intangible assets    | $I_n/A_t * 100$         | 0.1%                    | The importance attached to research is significantly lower than the business segment average.   |
| A 1.2 | Rate of tangible assets      | $I_c/A_t * 100$         | 45%                     | The fixed capital weight is represented by tangible fixed assets.   |
| A 1.4 | Rate of financial assets     | $I_f/A_t * 100$         | 2.9 %                   | Poor financial connections, without prospects of external growth.   |
| A 2   | Rate of current assets       | $A_c/A_t * 100$         | 51 %                    | Indicates a financial flexibility, stressing the relative of assets easily converted into cash.   |
| A 2.1 | Rate of inventories          | $S/A_t * 100$           | 22%                     | Operational cycle time  |
| A 2.2 | Rate of claims               | $C/A_t * 100$           | 25%                     | Incidence of the credit granted to the clients  |
| A 2.3 | Rate of cash                 | $D/A_t * 100$           | 4%                      | The liquid assets percentage in the case of this company is lower than the average of the business segment                                |

In what the liabilities items are concerned, the structure rates are useful for the calculation of the indicators that reflect the composition of financing. They allow for the assessment of self-financing, on one hand, and they are helpful in the estimation of the financial stability, on the other hand.

**Table no.3**

**Structure rates: liability elements**

| Rate | Designation of the indicator      | Calculation formula (%) | Financial ex. 2008 | Interpretation   |
|------|-----------------------------------|-------------------------|--------------------|--|
| P 1  | Global financial autonomy ratio   | $C_{pr}/P_t * 100$      | 34.9 %             | Good financial independence of the company in its relationship with third parties.           |
| P 2  | Long term financial autonomy rate | $C_p/C_{perm} * 100$    | 58.67 %            | Very good financial independence in its relationship with fund lenders                       |
| P 3  | Financial stability rate          | $C_{perm}/P_t * 100$    | 59.62 %            | The stability of long-term financing. It exceeds the average in the business sector          |
| P 4  | Total debts rate                  | $D_t/P_t * 100$         | 65.1 %             | The weight of total debts (a rate that complements P1, because $P_4 = 1 - P_1$ )             |
| P 5  | Short-term debts rate             | $D_{ts}/P_t * 100$      | 40.38 %            | The stability of short-term financing (a rate that complements P3, because $P_3 = 1 - P_5$ ) |
| P 6  | Leverage rate                     | $D_{fin}/C_p * 100$     |                    | There are no financial debts   |

★ **The synthesis rates** provide information concerning the financing conditions of certain asset and liability elements

**Table no.4**

**Synthesis rates**

| Designation of the indicator                 | Formula              | Fin.ex. 2008 | Notes concerning the normal value  |
|--|----------------------|--------------|--|
| The rate of stable financing of fixed assets | $C_{perm}/I_c * 100$ | 132 %        | The investments in capital goods are covered from permanent resources                                |
| The rate of own financing of fixed assets    | $C_{pr}/I_t * 100$   | 72%          | There is a good return on investments from resources   |
| Current ratio (1.8 - 2)                      | $A_c/D_c$            | 1.27         | It is good, because it is >1 and the company can pay its debts <1an with the help of current assets. |
| Limited liquidity(0.8 - 1)                   | $(A_c - S)/D_c$      | 0.72         | It is poor, because it is <1   |
| Quick test rate(0 – 1)                       | $(D + T_p)/D_c$      | 0.09         |  |

★ **The turnover rates (management rates)** point out the terms and the speed of rotation of certain asset and liability elements (inventories, claims, debts), thus clarifying the operational conditions (credit-client, credit-supplier, storage times) and their effect on the solvency of the company.

From a synthetic point of view, the global movements of the patrimony are expressed by means of management or turnover rates that measure the speed of converting assets into cash, as well as the speed of renewing debts, according to the table below.

## The turnover rates

| Designation   | Calculation formula               | Financial exercise |       |
|---|-----------------------------------|--------------------|-------|
|   |                                   | 2007               | 2008  |
| 1. Assets turnover rate                                     | Sales/Total assets                | 1.85               | 1.47  |
| 2. Capital turnover rate                                    | Sales/fixed assets                | 3.38               | 3.03  |
| 3. Current assets turnover rate                             | Sales / current assets            | 4.10               | 2.86  |
| 4. Current assets turnover – no. of days                    | Current assets/Sales * 360        | 87                 | 126   |
| 5. The ratio of financing of “supplier loan” current assets | Current assets/Debts to suppliers | 1.75               | 0.02  |
| 6. Social capital rate                                      | Total assets/Social capital       | 10.05              | 11.79 |
| 7. Equity capital turnover                                  | Sales /equity capital             | 4.40               | 4.20  |

**2.1.2. Analysis of solvency and liquidity****★ The appreciation of solvency**

Solvency is appreciated with the help of the “net situation of net asset” indicator calculated as the difference between total assets and total debts. The net situation also constitutes a guarantee for creditors in the event of an unfavourable evolution of the company’s business.

Table no.6

**Appreciation of solvency**

| It. No. | Designation of the indicator | Calculation formula                     | Financial exercise value 2008 | Notes concerning the normal value                       |
|---------|------------------------------|---|-------------------------------|---|
| 1       | Patrimonial solvency         | Equity capital/ Total liabilities * 100 | 35%                           | It has an average value because it is between 30% - 50% |
| 2       | Debt to equity ratio         | Total debts / Equity                    | 1.86                          | It is inadequate, because it is > 1                     |

**★Appreciation of liquidity**

FR reflects not only the liquidity but also the solvability and therefore the financial equilibrium threshold of the company.

Table no.7

### The evolution of floating capital

| Elements                   | Financial exercise 2007 (lei) | Financial exercise 2008 (lei) |
|----------------------------|-------------------------------|-------------------------------|
| +Long-term capital         | 6,762,682                     | 7,732,440                     |
| -Fixed assets              | 6,036,587                     | 6,266,030                     |
| <b>Floating Capital FR</b> | <b>726,095</b>                | <b>1,466,410</b>              |

The financial floating capital is an indicator of the company's solvability that is appreciated by creditors, because its presence proves that there is no risk of insolvency.

Table no.8

### Estimation of the need for floating capital

| Indicators  | Financial exercise 2007 (lei) | Financial exercise 2008 (lei) |
|---|-------------------------------|-------------------------------|
| +Stock and production in course of being manufactured | 1,135,557                     | 2,871,208                     |
| +Claims, including financial ones                     | 3,371,214                     | 3,285,249                     |
| -Debts on TS including liabilities                    | 4,267,067                     | 5,223,512                     |
| <b>Need for floating capital NFR</b>                  | <b>239,704</b>                | <b>932,945</b>                |

The need for floating capital is increasing in 2007 as a result of the decrease in the stock turnover rate. The analysis of the liquidity reflects a double capacity of the company:

- **the liquidity**, i.e. the cash maturity coverage;
- **the solvency**, i.e. certain maturity coverage of the liabilities with a certain maturity (such as current debts) with assets with a corresponding maturity (current assets).

The liquidity remains a condition for the appreciation of the company management quality.

## 2.2 Analysis of the company performance

★ **The profitability rates** allow for the study of the performance and provide information related to:

- the rates resulted from the commercial activity;
- fixed asset turnovers;
- the return on equity.

Table no.9

### The profitability rates

| Indicator  | Method of estimation                      | Financial exercise 2008 | Interpretation   |
|--|---|-------------------------|--|
| Net margin ratio   | $(\text{Net Res} / \text{CA}) \times 100$ | 4.6 %                   | The efficiency of the company in turning products into account                     |
| Gross margin ratio<br>( <i>commercial profitability rate</i> ) | $(\text{EBE} / \text{CA}) \times 100$     | 10.8 %                  | The efficiency of the company (in monetary terms) in turning products into account |
| After-tax economic rate of return                              | $(\text{Net Res} / \text{AT}) \times 100$ | 7 %                     | The efficiency of turning invested capital into account                            |
| Before-tax economic rate of return                             | $(\text{CAF} / \text{AT}) \times 100$     | 12.84 %                 | The efficacy of turning invested capital into account                              |
| Financial rate of  | $(\text{Net Res} / \text{Equity}) \times$ | 20%                     | It is good, because it is >than  |

|        |     |  |                        |
|--------|-----|--|------------------------|
| return | 100 |  | the bank interest rate |
|--------|-----|--|------------------------|

### Conclusions of the financial and accounting diagnosis

The conclusions of the financial and accounting diagnosis made at the studied company can be synthesized as follows:

- The technologization degree corresponds to the business sector of the company;
- The floating capital is positive and covers the need for floating capital, generating positive cash flow;
- The need for floating capital is generally at an acceptable level and the equilibrium is ensured;
- The financial independence is close to the specific norms of the business segment;
- The value of current assets exceeds the average of the business sector, an aspect that is also pointed out by turnover rate of the composing elements;
- The cash flow indicates difficulties concerning the payments as per the due days;
- A slight risk of non-payment is suggested by the quick test rate;
- The values of the solvency and liquidity indicators are good and appreciate the quality of the company management;
- The profitability rates exceed the bank interest rate, which is a positive aspect.

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# STUDY REGARDING THE ORGANIZATION OF MANAGEMENT ACCOUNTING IN THE CONTEXT OF RESPONSIBILITY CENTERS

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## *Abstract*

*The organization on responsibility centers has lately become a generalized practice inside small and medium economic enterprises. Thus it made necessary the adaptation of management accounting to the new requirements. Introducing effective management by organizing the activity in responsibility centers represents a directing method which has as a main objective the optimization of using the organization's resources by motivating and stimulating the creativity of all employees, though their involvement in accomplishing the established mission and objectives.*

*Creating a functional management accounting system represents a useful tool for the management of each economic entity, which aims at driving it towards performance, by promoting efficiency and effectiveness. In order to optimize the activity of economic entities, the economic literature and practice debates more and more on the idea of sectioning them into responsibility centers, as more efficient control instruments.*

*Key words: management accounting, responsibility centers, transfer prices, statistical results, survey*

*Journal of Economic Literature (JEL) codes: Business Administration and Business Economics; Marketing; Accounting*

## **1. Introduction**

Knowing the costs and expenses is a permanent requirement when the objective is economic performance especially in the context of the present economy, when economic resources are more and more scarce and, implicitly, more and more expensive. In a market economy the control of internal operating conditions represents the most important variable available to management in order to reach the desired efficiency in resource consumption.

Dividing an economic entity into responsibility centers allows the development of management control as responsibility centers, which are considered to be the foundation of management control, are situated between the management of the entity, which deals with the strategy, and the operational personnel, which carries out current tasks. The management control based on structuring the entity on responsibility centers allows for the measurement of their contribution to the entity's general performance. One idea is promoted more and more in the specialty literature according to which management accounting would be included in the area of management control, view explained by the fact that there are both elements of classical analytical accounting (the calculation and control of costs) and budget management, in management accounting.

The organization model, which allowed in the best way the development of management control, structures the enterprise on three levels, the three pillars being (Ionașcu I., Filip A.T., Stere M., 2007):

- at the top of the hierarchy there are the managers in charge of the strategy;
- at the base, the entities regroup operational staff that reiteratively fulfill current tasks.

The two external levels are linked by an intermediary area i.e. the responsibility centers, considered to be the basic fundament of management control. Classical instruments of management control are extremely numerous, starting from costs, standards, budgets and reports, transfer prices and ending with responsibility centers.

**The responsibility center** (Caraiani C., Dumitrana M., 2005) represents an organizational segment which can be defined through an aggregate of tasks to be done, and executive, clearly identified management procedures. The difference between a responsibility center and an execution center is the fact that performers apply standard procedures and do not have a maneuver space at their disposal, while, in a responsibility center the responsible decision makers engage themselves in obtaining certain results having a certain decisional autonomy.

Organizing an entity based on responsibility centers is that traditional approach which implies respecting certain principles, like:

- the principle of responsibility or delegation, which implies that the delegation of responsibilities comes from a superior and therefore delegation implies control, and responsibility implies justification;
- the principle of each structure's performance controllability;
- the principle of exhaustiveness, which implies that each post of the balance sheet and of the profit and loss account has to be affected by a responsibility center, in this way reducing the risk of decreasing estimated performances.

Organizing an entity based on responsibility centers implies defining certain rules linked to the transfer of goods and services between responsibility centers. The bigger, more diverse the entity, the larger the tendency to define the most profit or investment centers, which will be themselves responsible for the profitableness of their own field of activity. The existence of a large number of responsibility centers raises problems regarding following their results starting from the idea that each profit center has its own profitableness objective.

Cutting up the entity on responsibility centers has to correspond both to a sharing of responsibilities, and to the industrial logic of the entity in cause, based on the **performance control** of those centers. The performance of the centers depends on the **internal transfer price**, which thus can be defined as being the price at which transactions are made between centers inside the same economic aggregate that is inside the entity.

## **2.The accounting of responsibility centers, a premise for identifying the elements of a functional accounting system**

Administrative accounting, also known as management accounting or functional accounting, (Needles E. Belverd Jr., Anderson R. Henry, Caldwell C. James, 2001) is an information reporting system which:

- classifies financial data according to the responsibility areas of an organization and;
- reports upon the managers' activities, more specifically, only the income and expense categories that a certain manager controls.

Such a managerial accounting system, which focuses on responsibility centers and supplies financial reports of personal nature, is also known as profitability accounting. Both in practice and in the literature it has been proven that profit responsibility decentralization offers advantages such as (Caraiani C., Dumitrana M., 2005):

- allowing managers to choose the perfect balance between incomes and expenses without having to justify their decision;
- responsibility delegation leads to the increase of managers' motivation and contributes to the extension of performance measurement means;
- it grants the measurement of each section's/division's contribution to the whole entity's performance.

An entity's hierarchy or the organizational structure represents the ranking system of responsibility levels within the entity; thus, coordinating the entity's efforts implies delegating a certain responsibility to each manager who becomes directly responsible for the planning and controlling activity and becomes in charge of administrating the responsibility center.

**Responsibility accounting** (Horngren T. Charles, Datar M. Srikant, Foster George, 2006) is a

system for quantifying the plans (through budgets) and actions (through actual results) of each responsibility center whose manager is responsible for a pre-established set of activities. This responsibility accounting, as a functional accounting system, classifies all information regarding the reported expenses and incomes according to the responsibility areas allocated to managers and the managers' functions.

Starting from an entity's functional organization through its segmentation on responsibility centers, the entity is also seen from the technical point of view, resulting „accounting parts”, which, included in the administrative accounting area, become calculation objects with the scope of measuring performance and underlining optimization means. The functional accounting system is the network within an entity created based on information supplied by the established responsibility centers, and the created network represents the framework for the whole entity's budget elaboration.

### **3.The results and conclusions of the study regarding the statistics on organizing management accounting in the context of responsibility centers**

Taking into account the theoretical aspects exposed in the paper, as well as the specialty work in the field, we wanted to conduct a study in order to analyze the way in which this organization of management accounting is viewed from the economic entities' point of view. We will try to answer the following questions by means of the present analysis:

-Do you believe that management accounting and cost calculation are useful for you in substantiating the economic decisions?

-Do you believe that dividing the entity's activity into responsibility centers ensures an increase of the general economic efficiency?

-Is the system of responsibility centers implemented in your entity?

-In case a management accounting system based on responsibility centers is not implemented in your company, would you be willing to implement such a system, even experimentally?

-If you would organize the activity based on profit centers, the transfer prices used to convey products would be: the complete cost, a negotiated price or another value?

We want the answers to these questions to help us understand the way in which the organization of management accounting is perceived by the decisional factors of the economic entities in the context of responsibility centers. While elaborating the study we followed the survey steps, as they are described in the literature (Buiga, 2001). The following aspects were taken into account in the realization of the statistical observation: choosing and defining variables that must be studied, elaborating and testing the questionnaire, choosing the data collection technique and establishing the time and place of the observation.

The data included in the analysis were collected from 226 economic entities, we received answers from 293 economic entities, but we eliminated from the study 67 questionnaires. The data introduction was made with the help of the SPSS 16.0 software, thus creating a database, and as we received the completed questionnaires, we proceeded to introducing them in the database. The final report consists of presenting the conclusions which were deduced from the research.

According to OMFP no. 1826/2003 for the approval of The Specifications regarding some measures referring to the organization and direction of management accounting, management accounting is organized by the administrator of the legal entity, either by using specific accounts, either by developing the accounts from the financial accounting, either through its own technical-operative evidence. As we opt for organizing management accounting using specific accounts, we wanted to analyze the preferences of the economic entities. The answers regarding the problem under analysis are presented in the table below:



**The way of organizing management accounting is:**

|       |  | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|--|-----------|---------|---------------|--------------------|
| Valid | With the help of the accounts system of the 9 <sup>th</sup> class. | 91        | 40.3    | 40.3          | 40.3               |
|       | Through the development of accounts from financial accounting      | 72        | 31.8    | 31.8          | 72.1               |
|       | With the help of own operative technique                           | 63        | 27.9    | 27.9          | 100.0              |
|       | Total  | 226       | 100.0   | 100.0         |                    |

It can be observed that 40.3% of the entities which were analyzed, meaning 91 entities use accounts of the 9<sup>th</sup> class Management accounts, to organize management accounting, and 31.8% of the entities develop the accounts of financial accounting to obtain information specific to management accounting. There is a relatively big number of entities – 27.9% – that resort to other methods for obtaining the information needed in order to substantiate economic decisions. We believe that using a system of developed accounts specific to management accounting, allows the acquiring of information which cannot be done by the simple development account specific to financial accounting. For example, through the development accounts specific to financial accounting one cannot obtain information regarding the value of administrative expenses relating to unsold production, at the value of the complete cost, more useful according to the opinion of managers than the production cost, at the deviation system, even in the conditions of using price differences accounts.

In what concerns the organization of management accounting through the operational techniques characteristic to the economic entity, these can give the desired results only if an integrated system of resource planning (ERP System), which allows economic entities to respond in the most flexible, adaptable and efficient way to the requirements of the market, is implemented. In order to see if the economic entities consider management accounting and cost calculation as being useful, further from the duty of organizing it according to the normative act previously presented, we raised the following question for which we obtained the answers herein:

**Do you consider management accounting and cost calculation useful for substantiating economic decisions?**

|       |              | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|--------------|-----------|---------|---------------|--------------------|
| Valid | No           | 16        | 7.1     | 7.1           | 7.1                |
|       | Yes          | 206       | 91.2    | 91.2          | 98.3               |
|       | I don't know | 4         | 1.7     | 1.7           | 100.0              |
|       | Total        | 226       | 100.0   | 100.0         |                    |

It can be observed that, the overwhelming majority of the respondents – 91.2% – consider that management accounting and the calculation of costs are useful for substantiating economic decisions and a negligible number of respondents have answered negatively or do not know. From the first two questions of the survey we concluded that management accounting is organized in economic entities and, moreover, it is also considered useful. We did not aim at obtaining information regarding the qualitative side, meaning the way in which management

accounting is organized and conducted and the way in which it responds to the informational requirements of the entity.

As national and international accounting norms specify that general administration expenses and sales expenses are not included in the production cost we wanted to identify which is more important for the respondents, the production cost or the complete cost? The answers to the questions that treat this problem are the following and we can conclude that 60.6% of the respondents believe that the complete cost of the products is more important than the production cost and only 32.7% are of the contrary opinion.

**Do you believe that the complete cost of products is more important than the production cost?**

|              | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------------|-----------|---------|---------------|--------------------|
| Valid No     | 74        | 32.7    | 32.7          | 32.7               |
| Yes          | 137       | 60.6    | 60.6          | 93.3               |
| I don't know | 15        | 6.7     | 6.7           | 100.0              |
| Total        | 226       | 100.0   | 100.0         |                    |

Responsibility centers have the role of increasing the economic efficiency in an economic entity, to make a better use of the existent limited resources. Because organizing entities by dividing them into responsibility centers is relatively new to our country, we researched the way in which this is regarded among the examined entities.

**Do you believe that dividing the activity of the entity into responsibility centers ensures an increase of the overall economic efficiency?**

|              | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------------|-----------|---------|---------------|--------------------|
| Valid No     | 32        | 14.2    | 14.2          | 14.2               |
| Yes          | 170       | 75.2    | 75.2          | 89.4               |
| I don't know | 24        | 10.6    | 10.6          | 100.0              |
| Total        | 226       | 100.0   | 100.0         |                    |

The representatives of 170 economic entities, meaning over 75% of the total analyzed entities, believe that dividing the activity in responsibility centers is a factor of increasing the economic efficiency, fact that implies awarding a larger importance, also from a theoretical point of view, to organizing management accounting in responsibility centers. However, the system of responsibility centers is implemented only in 39% of the analyzed entities, as it can be observed below.

**Is the system of responsibility centers implemented in your entity?**

|          | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| Valid No | 138       | 61.1    | 61.1          | 61.1               |
| Yes      | 88        | 38.9    | 38.9          | 100.0              |
| Total    | 226       | 100.0   | 100.0         |                    |

Nevertheless, the following correlation exists: if the system of responsibility centers is implemented in that entity, then it is generally considered that these responsibility centers represent a factor for increasing economic efficiency. More exactly, 85% of the entities in which the system of responsibility centers is implemented in one form or another, believe that they are contributing to increasing the overall economic efficiency, and 50% of the representative of the entities in which responsibility centers are not implemented believe that these would be a factor of increasing economic efficiency.

**Do you believe that dividing the entity’s activity into responsibility centers ensures an increase of the overall economic efficiency? \* Is the system of responsibility centers implemented in your entity? Cross tabulation**

|  |              |          | Is the system of responsibility centers implemented in your entity? |       |        |
|--|--------------|----------|---|-------|--------|
|  |              |          | No  | Yes   | Total  |
| Do you believe that dividing the entity’s activity into responsibility centers ensures an increase of the overall economic efficiency? | No           | Count    | 29  | 3     | 32     |
|  |              | % within | 90.6%   | 9.4%  | 100.0% |
|  | Yes          | Count    | 85  | 85    | 170    |
|  |              | % within | 50.0%   | 50.0% | 100.0% |
|  | I don’t know | Count    | 24  | 0     | 24     |
|  |              | % within | 100.0%  | .0%   | 100.0% |
|  | Total        | Count    | 138   | 88    | 226    |
|  |              | % within | 61.1%   | 38.9% | 100.0% |

In what concerns the availability of implementing the system of responsibility centers in entities that do not have their activity organized in this manner, we observed that the majority of entities would agree at least to experiment the system. This is because over 75% of the entities believe that dividing the activity into responsibility centers is useful. Out of the 138 entities that have not implemented the system of responsibility centers, 92 would be ready to do it, which represents a percentage of 69.2% of the valid responses (5 entities have not answered this question).

**In case a management accounting system based on responsibility centers is not implemented in your company, would you be willing to implement such a system, even experimentally?**

|         |        | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|--------|-----------|---------|---------------|--------------------|
| Valid   | No     | 41        | 29.7    | 30.8          | 30.8               |
|         | Yes    | 92        | 66.7    | 69.2          | 100.0              |
|         | Total  | 133       | 96.4    | 100.0         |                    |
| Missing | System | 5         | 3.6     |               |                    |
| Total   |        | 138       | 100.0   |               |                    |

In the circumstances of dividing the activity into responsibility centers, a very important element is represented by the transfer prices that link the centers. These represent the articulations of the system that determine its flexibility and adaptability to the market conditions. As the complete cost is considered by the respondents to be one of the most important indicators, fact that was

emphasized, the majority of respondents, meaning 66.5% of the valid answers, believe that they would use it as a transfer price, while the negotiated price is preferred by 26.3% of the respondents.

**If you would organize the activity based on responsibility centers, the transfer prices used to convey products from one center to another would be:**

|         |                    | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|--------------------|-----------|---------|---------------|--------------------|
| Valid   | Complete cost      | 149       | 65.9    | 66.5          | 66.5               |
|         | A negotiated price | 59        | 26.1    | 26.3          | 92.8               |
|         | Another value      | 16        | 7.1     | 7.2           | 100.0              |
|         | Total              | 224       | 99.1    | 100.0         |                    |
| Missing | System             | 2         | 0.9     |               |                    |
| Total   |                    | 226       | 100.0   |               |                    |

By approaching management accounting as an interface between current strategy and management, we demonstrate its functions regarding the costs and results analysis, the costs level control and the usage of information obtained for elaborating improvement strategies and orientating the management's actions in the decisional process through the information supplied.

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## BALANCE SHEET EVALUATION OF TANGIBLE ASSETS. GENERAL OR ALTERNATIVE RULES – REEVALUATION?

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*For subsequent to initial recognition evaluation, an entity could choose one of the following models: model of determining cost or model of re-evaluation called by accountancy regulation, OFMP 1752/2005, alternative rules of evaluation.*

*In conformity with re-evaluation model (based upon right value), initial accounting value is substituted by re-evaluated value represented by right value on re-evaluation date from which any prior cumulated amortization and any cumulated loss of depreciation are subtracted. The present paper has as a purpose the analysis and emphasis of principles and rules concerning re-evaluation of tangible assets by reference to accountancy regulation in accordance to European directives. As well as, through study cases, it will be exemplified the reflecting in accountancy of operations concerning re-evaluation.*

*Key words: evaluation, tangible assets, historic cost, re-evaluation, right value.*

*The article's JEL code: M41*

### **Balance sheet evaluation of tangible assets.**

#### **Introduction**

Evaluation of tangible assets is subscribed to general principles of evaluation. Evaluation is the process through which are determined the values upon the structures of financial situation will be recognized in the balance sheet and in the profit and loss account. This implies choosing certain evaluation bases.

The most used evaluation base by enterprises is the historic cost. This is usually combined with other evaluation bases.

Reported to moments of accomplishing evaluation of elements in financial situations we limit the following:

- entering evaluation;
- exit evaluation;
- inventory evaluation;
- balance sheet evaluation.

Rules of subsequent evaluation (at balance sheet) of tangible assets:

Evaluation at exercise completion (at balance sheet) is accomplished in the purpose of preparing yearly financial situations.

Immobilizations are evaluated and reflected upon the yearly financial situations to the value of entering in concordance with inventory results.

The accounting value at balance sheet date is determined on evaluation rules basis of subsequent to initial recognition. It is the case of bodily actives for which accounting values of entering can be modified on life extension of the active.

For evaluation subsequent to initial recognition evaluation, such for evaluation on balance sheet date, an entity can choose one of the following models: the model of determining cost (basic

treatment) or the model of re-evaluation called by accountancy regulation, OMFP 1752/2005, rules of alternative evaluation.

***Model based on cost:***

Initially, a tangible assets is recognized in accountancy at acquisition cost, cost of production, value of contribution or right value in terms of entering manner.

Proper to this model, a tangible assets must be presented in the balance sheet at net accounting value, calculus represented by active cost (entering value) less the cumulated adjustments of value (any cumulated amortization and any cumulated loss of depreciation). Thus it is obtained the accountancy values recognized in balance sheet.

International standards of accountancy do not use the collocation “net value”, the latter being replaced with “accountancy value”.

To the applying of the model based on cost, the cost registered active, less any cumulated amortization, with the necessity of deduction of any adjustment for depreciation, for presenting the active at its recoverable value.

Adjustments may appear when the accounting value of an active could not be recovered economically from future economic activity, as a consequence to limiting production for commercial reasons. For such situations, IAS 16 “Tangible assets” and IAS 36 “Actives depreciation” demand the accounting value reduction registered by recoverable value to be registered as an expense concerning adjustments for depreciation.

Loss by depreciation is calculated as a difference between accounting value and recoverable value.

**Recoverable value** of an active is the biggest value from right value 9from which cost necessary to sales are subtracted) and use value.

**Use value** is the actualized value of cash flux which is foreseen to be obtained by use of respective active and from its sale at the end of useful life period.

Estimating value of use of an active requires covering the following steps:

- estimation of future entering and exit of cash generated by the continuous use of active and yielding the latter;
- applying proper rate of actualization of these future treasury fluxes.

As a consequence of applying **accounting basic treatment** tangible assets will be presented as such:

A) in the balance sheet:

- in the group of immobilized actives, tangible assets will be registered at cost, less any cumulated amortization and any cumulated loss of depreciation;
- in the group of own assets, the result of exercise will be registered with values of cumulated amortization and cumulated depreciation in the course of the financial exercise;

B) in the account of profit and loss:

- in exploitation expenses frame – value adjustments concerning tangible assets – such as exploitation expenses concerning amortization of immobilization with the value of cumulated amortization during the financial exercise, exploitation expenses concerning adjustments for immobilization depreciation with the value of constant depreciation at the end of financial exercise and/or income from adjustments for immobilization depreciation with the value of depreciation reengagement at the end of financial exercise.

C) in the explanation notes:

1. separately, for each group of tangible assets, it is presented:

- a) value at the beginning of financial exercise;
- b) developments during the financial exercise;

- c) decrease during the financial exercise;
  - d) tangible assets value at the end of financial exercise.
2. separately, for each group of tangible assets, the amortization is presented as such:
- a) value at the beginning of exercise;
  - b) development during the exercise;
  - c) decrease during the exercise;
  - d) value of amortization at the end of financial exercise.
3. in the case of interest including in actives value obtained by own production, information concerning are presented.

***Model of re-evaluation (model based upon right value).***

Economic entities can choose model based upon right value proceeding to re-evaluation of tangible assets at the end of financial exercise, thus the re-evaluated value to reflect in financial situations established for that specific exercise. After the re-evaluation the afferent amortization of tangible assets is recalculated and will be registered in accountancy to the beginning of next financial exercise.

According to this model, initial accounting value is substituted by the re-evaluated value represented by:

- right value at due date of re-evaluation
- any prior cumulated amortization
- any cumulated loss of depreciation
- re-evaluated value

Re-evaluated value is a value based upon market price.

Right value represents the sum for which the active could be exchanged between acknowledging parts in the frame of a transaction with objectively determined price.

*Main rules of re-evaluation:*

- Re-evaluation is made at balance sheet due date based upon some evaluation performed by qualified in evaluation professionals, members of a professional body of the domain, internationally and nationally acknowledged.
- When a re-evaluation is proceeded, it must be simultaneously re-evaluated all the elements in a class for avoiding selective re-evaluation and reporting in yearly financial situations of several values which represent a cost combination (same elements reported either to accounting value or to right value).
- If, for an active in a class which has been re-evaluated, there is no active market, it will be presented in the balance sheet to cost less the cumulated adjustments of value (using basic treatment).

An active market is a market where the following conditions are fulfilled cumulative:

- a) commercial elements are homogenous;
- b) interested buyers and sellers can be permanently encountered;
- c) prices are publicly known;

If right value of a re-evaluated tangible assets could not be determined through reference to an active market, the active value presented in the balance sheet must be its re-evaluated value at due date of most recent re-evaluation, from which we subtract the amortization and cumulated depreciation loss.

- re-evaluation must be made with sufficient regularity, thus the accounting value not to substantially differ from the one determined by using right value at balance sheet due date;
- at re-evaluation of an active, the value which results from it will replace the value with which it was registered in accountancy;
- regulation concerning amortization will apply to new value;

- a group of tangible assets is a group of actives of same nature and with similar uses found in exploitation of an entity:

- a) land;
- b) buildings;
- c) machines and equipments;
- d) ships;
- e) airships;
- f) vehicles;
- g) furniture, plumbing, spare and assembly parts;
- h) birotics.

Cumulated amortization to re-evaluation due date will be managed as such:

1. it is proportionally recalculated with the change in raw accounting value of active, thus the accounting value of active (after re-evaluation) to be equal with its re-evaluated value. This method is use if the active is re-evaluated through applying an index to amortization replaced cost;
2. it is removed from the raw value of active. Net vale is recalculated to the re-evaluated value of active.

Differences as a consequence to re-evaluation are managed as such:

A. At first re-evaluation of a tangible assets:

1. favourable difference between right value and accounting value will be directly registered in the account credit "Re-evaluation relay" (own income account);
2. unfavourable difference between right value and accounting value will be registered as an expense of the period of re-evaluation.

B. When re-evaluating tangible assets ulterior to another, two situations may appear:

1. right value is larger than net accounting value: positive difference should be managed as such:

- as a development of relay from presented re-evaluation in the frame of element "Income and reserve", if it did **not** exist a prior decrease acknowledged as an afferent expense to the active; or
- as an income to compensate the expense with prior acknowledged decrease to that active.

2. right value is shorter than net accounting value: decrease should be managed as such:

- as an expense with whole value of depreciation, when for an active there is no relay from re-evaluation prior registered; or
- as a decrease of re-evaluation relay (in the frame of own income), with the minimum of relay value and the value of decrease, and the eventual uncovered difference will be registered as an expense.

#### *Amortization after re-evaluation*

In case the re-evaluation of an active is made, the resulted value of re-evaluation will replace the cost of acquisition/production or any other value attributed before the active, regulation of amortization will apply to the active considering its value determined as a consequence to re-evaluation.

#### *Use of re-evaluation relay*

Re-evaluation relay developed by the surplus of re-evaluation is capitalized through direct transfer to relay, when this surplus represents an accomplished gain, using 1065 account "Relays representing the surplus developed by re-evaluation relay".

No relay part of re-evaluation could be distributed, directly or indirectly; with the exception of the re-evaluated active was turned account, situation in which the surplus of re-evaluation represents an effective accomplished gain.



Gain is considered accomplished at emphasizing the active for which the re-evaluation relay was developed. Part of the gain could be accomplished made to measure that the active is used by the entity, case in which the value of transferred relay is:

- calculated amortization on the basis of re-evaluated accounting value
- calculated amortization on the basis of initial cost of active
- relay value transferred to relay.

For re-evaluated tangible assets, the resulted differences as a consequence to re-evaluation could be encountered:

A) in the balance sheet:

- a tangible assets should be registered at re-evaluation value which represents right value at due time of re-evaluation, less any ulterior cumulated afferent amortization and ulterior cumulated loss of depreciation;
- In the class of own income difference of re-evaluation will be found either as re-evaluation relay, or as a part of exercise result as a consequence to registering sums representing the difference such as income and expenses arisen from re-evaluation also of cumulated amortization during the financial exercise.

B) in the profit and loss account:

- in the frame of exploitation expenses – adjustments of value concerning tangible assets - such as exploitation expenses concerning amortization of immobilization with the value of cumulated amortization during the financial exercise, exploitation expenses concerning adjustment for immobilization depreciation with the value of constant depreciation at the end of financial exercise and income from adjustment for immobilization depreciation with the value of re-engaging of depreciation at the end of financial exercise. As a consequence to registering sums representing differences such as income and expenses resulted from re-evaluation, these should be presented separately.

C) in the explicative notes:

In financial situation detailed information is presented concerning tangible assets in explicative notes to financial situations, aside information presented in the case of basic treatment, the following:

1. in case of effecting tangible assets re-evaluation, such a fact is presented in the explicative notes, along elements submitted to re-evaluation, method by which the presented values were calculated, as well as the affected element from the profit and loss account;
2. treatment in fiscal purpose of re-evaluation relay;
3. no matter the relay value was modified during the financial exercise, in the explicative notes must be presented the following:
  - a) relay value from re-evaluation at the beginning of financial exercise;
  - b) differences from re-evaluation transferred to re-evaluation relay during the financial exercise;
  - c) capitalized or transferred sums in a different manner from the re-evaluation relay during the financial exercise, presenting the nature of each transfer, respecting the present legislation; value of re-evaluation relay at the end of financial exercise.
4. separately, for each re-evaluated tangible assets, it is presented:
  - a) value at historic cost of re-evaluated immobilization and the sum of value cumulated adjustments; or
  - b) value at due date of balance sheet of difference between re-evaluation result value and that representing the historic cost and, when necessary, cumulated value of supplementary adjustments of value.

### ***Conclusions or “why should we choose alternative evaluation regulation?”***

The controversy which often appears in accountancy world, though the fiscal one, lately is: historic cost or right value?

The accounting objectivity is of presenting an loyal image of financial position, performances and modification in financial position of entity.

The existence of the two alternative methods, presented in the present paper, could urge to accounting and fiscal abilities without developing, though, tax evasion.

By the accounting and fiscal interest, the entity could choose one of these methods, thus to serve the purpose of the entity. The difference between using one or another accounting treatment may appear in the financial position of economic entity.

The question is which of the financial position represents the loyal image: the one resulted using historic cost, or the method based upon right value?

Also the result of the exercise could be “manipulated” by the entity interest: as a consequence to re-evaluation of a tangible assets which will modify, up or down, the value of expenses from amortization which has as a result the modification, up or down, of the exercise result.

Here, also, a question arose, such as which of performances represents the loyal image: the one resulted from the use of historic cost, or the method based upon right value?

In my opinion, alternative evaluation regulations, which use the right value to the detriment of historic cost, are those to serve accounting objective.

As a conclusion, I believe conformity accounting regulation with European directives prove to be permissive enough, allowing the entity interest to prime, without crossing any regulation.

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# INNOVATIONS IN SOCIAL AND ENVIRONMENTAL REPORTING BASED ON THE KNOWLEDGE OF STAKEHOLDERS' INFORMATION NEEDS

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*Starting from the accounting status as a social and institutional practice and the economic role of financial reporting, the paper addresses the issue of social and environmental accounting and reporting regulation. We propose an analysis of the main reporting models in the recent academic literature, in order to ascertain the development trends defined by the academic accounting research in conceptualizing a sustainability reporting model. Using the experience drawn from reporting practice in the form of voluntary social and environmental disclosures, correlated with the theory of reflexive modernity, we propose the interactions between regulation, risk, trust, performance and value to mitigate the voluntary disclosure vs. regulation dilemma.*

*Keywords: social and environmental reporting, voluntary disclosure, regulation, shareholder value, stakeholder value, risk*

*JEL Classification: M 40, M 48, Q 51, Q 56, Q 57*

## **Introduction**

The research in the field of financial and non-financial reporting have revealed the ability of accounting practices to create and communicate financial representations for social and organizational phenomena (Hines, 1991; Miller and Napier, 1993), with implications beyond the individual and organizational level, extending to society as a whole (Miller, 1998, Rose, 1991, Porter, 1995, Callon, 1998). For this reasons, accounting is increasingly regarded as a social and institutional practice (Miller, 1994; Hopwood, 1992).

Traditionally, the main source for environmentally responsible behaviour has been governmental regulation; social pressure represents a more recent addition. In the wake of the imminent danger of natural disasters and progressive ecosystems' degradation, environmental issues are becoming significant societal risk factors and society demands an environmentally responsible behaviour on the part of business management (Dillard et. al., 2005).

For complying with the new informational needs created as a result of the newly acquired awareness of stakeholder accountability, new reporting models have emerged, both in financial reporting theory and practice, suggesting the beginning of an accounting procedural revaluation, aimed at stressing its social significance.

The evolutionary process implies that the basic laws of supply and demand apply, endowing accounting with an economic activity status. As such, reporting practices depend on market forces, and also on political and regulatory influences. Market effects depend on both attributes of the demand for financial reporting (e.g., how information is used in financial markets or

governance), and attributes of the supply of financial reporting (e.g., the relative costs of independently verifying forward-looking and backward-looking information) (Ball, 2008).

## 1. Research methodology

The paper draws on the discrepancy between the evolutionary directions defined by accounting research, the current state of accounting regulations and the practice of social and environmental accounting and reporting. While new reporting models are presented in the literature, integrating in a broader perspective all value-generating and value-consuming mechanisms (the economic, social, natural and informational environment), accounting standard-setters are committed in an effort towards convergence and do not visibly approach social and environmental reporting issues. Such matters are only considered in the sense of accepting financial reporting outside financial statements, but the concepts, methods, techniques and, most importantly, the instruments for defining new value drivers have not yet been regulated. Social and environmental accounting and reporting practices are voluntary in nature, based on standards issued by independent organizations with no regulatory power.

The main issues approached in the paper are: (1) the need and (2) the possibility of regulation in the field of social and environmental accounting and reporting. We propose a theoretical approach of a deductive nature aimed at demonstrating the possibility of elaborating a conceptual framework for sustainability accounting; on these bases, we argue the need for regulation and its benefits. The research hypotheses are:

- I<sub>1</sub>. The objectives of social and environmental reporting can be modelled in the form of a conceptual framework for sustainability accounting.
- I<sub>2</sub>. The regulation of social and environmental reporting aimed at protecting the long-term interests of an entity's stakeholders lead to increased shareholder value and performance.

## 2. Social and environmental reporting models

Most of the conceptual development of sustainability accounting has been attributed to R. H. Gray (Lamberton, 2005) and it consists of three different methods of sustainability accounting: sustainable cost, natural capital inventory accounting and input – output analysis.

**Sustainable cost accounting** comprises internal costs and externalities in an integrated concept, defined as: “the (hypothetical) cost of restoring the earth to the state it was in prior to an organization's impact” (Lamberton, 2005), that is “the amount of money an organization would have to spend at an end of an accounting period in order to place the biosphere back into the position it was at the start of the accounting period” (Gray, 1994, p. 33). Drawing on the accounting concept of capital maintenance and applying it to the biosphere, Gray acknowledges the need to maintain the stock of natural capital for future generations. Sustainable cost is deducted from the accounting profit to arrive at the notional level of sustainable profit; where sustainable cost exceeds the accounting profit, the level of unsustainability can be measured in monetary terms. The sustainable cost approach provides an eloquent example of using a conventional accounting principle, such as capital maintenance, and applying it to natural capital instead of financial capital. A comparable but not similar method was proposed by Mathews (1993) as *total impact accounting*, aimed at providing an alternative to market prices, misinforming by omitting social and environmental costs. Another form of capturing social and environmental costs in a total cost concept is *full cost accounting* (Dascălu *et al.*, 2009).

**Natural capital inventory accounting** involves recording and following the stocks of natural capital over time, in order to detect any changes viewed as indicators of the declining quality of the natural environment. The measurement of natural stocks can be achieved by quantitative but non-monetary methods, while some authors suggest exploring the possibility of using financial units for the valuation of natural capital (Jones, 1996). Gray offers a classification of natural capital stocks, in four main categories:

- *Critical natural capital*: the ozone layer, tropical hardwood, biodiversity.
- *Non-renewable/ non-substitutable natural capital*: oil, mineral resources.
- *Non-renewable/ substitutable natural capital*: waste disposal, energy usage.
- *Renewable natural capital*: plantation timber, fisheries.

Natural capital inventory accounting uses conventional accounting concepts, such as capital maintenance, and managerial accounting tools – inventory control. The approach was considered simplistic, because it does not properly reflect the interconnectedness and diversity of the natural and economic environment.

**The input-output analysis** accounts for the physical flows of material and energy inputs and product and waste outputs measured in physical units. Although resource flows can be accounted for in monetary terms, physical units are used. Especially when it is involved in the life-cycle analysis of a product, the input-output method has the potential to indicate alternative energy sources, to facilitate innovations and pollution prevention/ reduction strategies, being a first step in environmental audit activities.

An alternative approach has been proposed by Elkington (1999), describing a three-dimensional form of accounting and reporting– economic, social and environmental. The term used is *Triple Bottom Line Reporting (TBL Reporting)* and it brings together forms of reporting in monetary/financial as well as physical units. The latest version of *Global Reporting Initiative (GRI)* guidelines (2006) includes a series of indicators for voluntary disclosures outside financial statements, ideal for triple bottom line reporting, such as:

- *Economic indicators* for assessing the organizational impact on the economic circumstances specific to an entity’s stakeholders, locally, nationally and globally.
- *Environmental performance indicators*: energy and water resource management, biodiversity, gas emissions, waste.
- *Social performance indicators* concerning consumer and employee rights, decent work practices, bribery and corruption, political contributions, competition and pricing, product responsibility.

Analyzing the forms of integrated reporting, we observe – on all three coordinates: social, economic, and environmental – the development of a multidimensional model, combining non-homogenous indicators that do not always allow measurement in monetary terms and require the use of alternative measurements. Qualitative as well as quantitative valuations are made in the majority of cases. Another easily observable feature in the interdisciplinary character of the indicators, requiring real cooperation between accounting and other social and environmental disciplines, extended beyond the regulatory process, by forming and training interdisciplinary reporting teams. However, the central position of certain concepts and techniques of conventional accounting in defining the structure and substance of the reports is noticeable.

Lamberton (2005) makes an important step forward in formalizing an accounting model for sustainability. Based on various definitions from the literature, five basic components of the financial accounting model have been identified: accounting reports; accounting principles; accounting records; the objectives of the accounting model; qualitative characteristics. The objective of the model is to measure organizational performance in the context of sustainability, towards decision useful objectives or for assessing the efficiency of resource management. Its realization depends on the formulation of principles, resembling those of conventional accounting, such as historical cost, conservatism or prudence, going concern, reporting period or reporting entity. Data management tools used to capture and record sustainability accounting data are analogous to the financial accounting journals, ledgers and trial balances, and environmental assets or liabilities can be defined as the objects of measurement, used for determining performance indicators. Information disclosed to users can have a quantitative as well as a qualitative form, complying with a set of qualitative characteristics and restrictions similar to those we find in conventional accounting: transparency, reliability, etc.

Therefore, through a deductive approach, an accounting model that allows for the measurement of the sustainability objective can be constructed. The opinion that the environment can suffer as a result of any attempt to capture and report its value has been expressed (Maunder, 1996).

### **3. Voluntary social and environmental disclosures – pros and cons**

*Voluntary* financial and non-financial disclosure practices, in the form of social and environmental accounting and reporting (SEAR), corporate social responsibility reports (CSR reports) or triple bottom line reporting (TBL reporting) are becoming increasingly prevalent among multinational corporations (Gray, 2006). In the majority of cases, the decision to report social and environmental issues is justified through economic reasoning: social and environmental reporting deliver benefits to a range of stakeholders while serving to enhance shareholder value (Spence and Gray, 2007), implying an alignment of social and environmental interests of a broad range of stakeholders with the economic interests of a specific group, that of the shareholders.

Thus, the main substantiation behind the voluntary nature of social and environmental accounting is that, regulation is generally bad for business, and by reducing regulatory pressure companies have the freedom to be efficient and productive, which in turn leads to increased shareholder value. This reasoning is based on the hypothesis that shareholder and stakeholder interests converge.

The concept of creating shareholder value, enforced by the mechanisms of financial markets, is not perfectly compatible with the new managerial philosophy that an organization represents a coalition between the suppliers of resources, acting towards serving the interests of all parties involved by maximizing the *joint* societal wealth (Jensen, 2002). The recognition of the moral rights of other stakeholders upon the organization implies pursuing financial and non-financial objectives, reunited under the *stakeholder value* umbrella.

It is the authors' opinion that the process of accounting realignment to the ever-changing requirements of stakeholders must be analysed in the context of the *diversity* and *divergence* in interests. The literature provides numerous examples where long-term social and environmental interests of stakeholders differ from short and medium-term interests of maximizing shareholder value. In addition, where shareholders' and stakeholders' interests do not meet, the voluntary nature of disclosures allows for the adoption of socio-economic and environmental practices only if they are likely to result in improved economic performance by the corporation (Owen, Swift and Hunt, 2001, quoted by Unerman and O'Dwyer, 2007).

The constant increase in the volume and quality of social and environmental reporting is essential in any response to the growing demands of sustainability. Faced with the evidence of *the need* for reporting, the question is: "Are voluntary disclosures *sufficient*?" (Spence and Gray, 2007).

### **4. Regulation of social and environmental disclosures from the reflexive modernity theory perspective**

The main research hypothesis is the existence of compatibility between the social and environmental objectives of an entity's stakeholders and the objectives of its managers and shareholders, in the form of economic performance and shareholder value maximization. In proving this hypothesis, we begin by stating the role of regulation in diminishing the real and perceived risk of economic activities that in turn leads to the improvement of trust and support from stakeholders, essential elements in creating economic shareholder value.

The link between regulation and economic performance has been previously studied by Porter and van der Linde (1995), who endorsed the idea that better regulation leads to economic efficiency, cost reduction and the production of goods and services with "environmental attributes", valued in consumer markets. Unerman and O'Dwyer (2007) focus on the social

relationship between regulation, risk and trust, thus developing theoretical arguments about the role of regulation in potentially enhancing shareholder value.

According to Giddens' (1990) theories, in the modern age, characterized by duality (security – danger, risk - trust), man relies more and more on the trust placed continuously in interactive “expert systems” supporting life (e.g., expert systems for storing, filtering, purifying, distributing, and managing water resources). The trust placed by non-experts in expert systems is based on the perceived risk, and reflexivity plays an important role in the social construction of perceived risk, by correlating individual knowledge and experiences. Beck (1992) has also identified the correlation between risk and reflexivity in modern society, concerned by the production of wealth as well as the production of risk, as an effect of a process of “reflexive modernization”. Beck has isolated the fundamental connection risk – responsibility, risk – trust, and risk – security, emphasizing that at the present, the main issue is to make decisions under conditions of “manufactured uncertainty”, where not only is our knowledge base incomplete, but more and better knowledge generates even more uncertainty.

Following the ideas of Giddens (1990), Beck (1992) and Ball (2008), reporting can be viewed as an expert system, because the economic activities undertaken by any entity have the potential of producing social and environmental effects on a large variety of stakeholders. In addition, a relatively small number of individuals outside the reporting system have the knowledge, the resources and the time to assess, understand and value its possible impact.

In the terms defined by Giddens' theory, in the absence of any reason to think otherwise, the majority of an entity's external stakeholders will place their trust in it. In the case of voluntary disclosures, the experience shows they can be ineffective in preventing actions and decisions with negative social and environmental consequences, and the reflexivity process generates an increased level of socially perceived risk, whenever information arises from other sources besides SEAR regarding the destructive impact of a reporting entity. The problem is twofold: first, the socially constructed level of trust in a specific entity and ultimately an industry is diminished; second, the socially constructed level of trust in the expert system that provided the public with false information is diminished, by the mechanisms of reflexivity.

In the actual context, where the perceived level of risk has significantly increased, the placing of trust is influenced, through reflexivity, by the existence of information regarding regulation. First, regulations can limit the social and environmental impact of an entity in the form of externalities. Also, regulations regarding social and environmental disclosures constitute the proof of an existing expert system for monitoring and control, enhancing the credibility of any disclosed information. Both types of regulations reduce the real and the perceived risk, conveying increased confidence from stakeholders, converted into demand, competitive advantage, and, finally, economic performance and shareholder value.

## **Conclusions**

Adopting the concept of stakeholder value implies looking beyond monetary values and requires reporting on new dimensions of social and environmental issues not necessarily having a monetary form. In our opinion, this is an important conceptual challenge faced by the accounting theory that can potentially enforce or destroy its competitive advantage on the information market. Through social and environmental reporting, companies offer future-oriented information regarding the potential impact of their activities, competing with other types of information and reporting from different expert systems.

The reporting models presented comprise theoretical and practical solutions for integrating all reporting dimensions in a conceptual framework for sustainability accounting, proving the *possibility* of regulation.

The previous accounting research has shown that the business environment advocates voluntary disclosures in a deregulated system, offering a justification for *the need* of regulations in social

and environmental reporting, as a way to protect the interests and rights of stakeholders, especially where there is a contradiction with the interests and rights of shareholders. The theories of reflexive modernity have offered the basis for arguing *the need* of regulations independently of the relation between the interests of stakeholders and shareholders, as well as the potential benefits of regulation from the economic performance and shareholder value perspective.

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## PRESENTATION OF SUBSIDIES IN THE FINANCIAL REPORTS OF ECONOMIC ENTITIES – NECESSITY AND IMPORTANCE

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*This paper approaches theoretical problems regarding the definition and the types of subsidies according to the European Directives and the International Accounting Standards. The paper presents the accounting treatment of subsidies, the accounting policies and their acknowledgement in the components of the financial reports of the economic entities. The purpose of the paper is to underline the differences in accounting treatment of subsidies, as well as the necessity and importance of their correct presentation.*

*Keys words: subsidies, financial reports, accounting, presentation, disclosure.*

*JEL codes: M41*

### **Introduction**

The theme of this paper is of the day since more and more economic entities, from various activity branches request government subsidies, situation which leads to the necessity of establishing accounting policies regarding the subsidies adapted to the specificity of the activity. Government subsidies can be: subsidies related to assets and subsidies related to incomes, or, in other words, subsidies for investments and subsidies for exploitation. The subsidies related to assets regard the acquisition, the construction or the procurement in another way of assets for a long term. The subsidies related to incomes comprise other subsidies, different from the ones for assets, which regard sustaining the exploitation activity.

The acknowledgement of subsidies by a firm takes place when it is certain that the latter respects the conditions for granting them, the subsidies shall be received with certainty, and their size can be determined.

IAS 20 presents two approaches regarding the acknowledgement of government subsidies (in the financial reports), and namely:

- an approach from the point of view of the capital (balance sheet approach), when a subsidy is registered directly at one's own capitals;
- an approach from the point of view of the income (income - based approach), according to which a subsidy is included in the incomes during one or more periods of administration and not directly at one's own capitals.

There are pro and con arguments regarding the two approaches. The arguments for the direct registration of subsidies at one's own capital take into account the fact that since no reimbursement is requested, the subsidies must be credited directly to the shareholders' interest, namely at one's own capitals. Then, it would be inadequate to acknowledge the subsidies received directly in the profit and loss account, since they are not earned, but represent stimulants accorded by the government without afferent costs. The arguments for the registration of

subsidies to incomes in time justify the fact that subsidies represent entries from a source, other than the shareholders, which means that they must not be credited directly to the shareholders' interest, but must be acknowledged as incomes in order to be correlated to the associated costs. Then, subsidies are rarely for free, in the sense that the company obtains them in exchange for the compliance with the required conditions and meeting the obligations to be achieved. Moreover, subsidies can be considered an extension of the fiscal policy, thus they must be registered with the incomes, in the same way in which the taxes and dues are registered under the form of expenses (smaller, in the case of fiscal facilities).

The standard recommends the second approach (result – based), requiring the acknowledgement of the subsidies to the incomes in the periods in which they can be connected with the afferent expenses, in order to compensate them, and not directly in one's own capitals. Regularly, the identification of the costs covered by the subsidies and of the afferent periods can be easily determined. Thus, the assignment of subsidies to incomes must be performed on a systematic basis, since the registration of subsidies directly to the incomes, once they are received, would be a violation of the engagements accounting (when we are not dealing with already registered expenses). Only in the situation in which a government subsidy is received as compensation for expenses or losses already incurred, the subsidy is acknowledged as income in the period in which it becomes a debt.

### **The presentation of subsidies in balance sheet**

As for the accounting of subsidies related to assets, the standard provides two ways, and namely:

- either as subsidy pointed out in group “Subsidies” and gradually transferred to incomes, in which case it appears in the balance sheet in the category of incomes registered in advance;
- or it is deducted from the accounting value of the asset subject to subsidy, and the reduced value will be amortized and the benefit related to the subsidy will be acknowledged directly, by registering an expense reduced with the amortization.

Notwithstanding the modality of accounting, the presentation in the balance sheet leads to the same results. In other words, subsidies are treated as current debts in the financial reports.

In the case in which the first method is applied, at the moment they are received, subsidies for investments are registered in the account “Subsidies for investments” and are going to be acknowledged as incomes on a systematic basis, during the periods needed in order to correlate them with the afferent costs that these subsidies will compensate. More precisely, subsidies connected to amortizable assets are acknowledged as incomes during the periods and in the proportion in which the amortization of these assets is acknowledged. The subsidies related to non – amortizable assets, such as lands, for instance, are acknowledged as incomes at the latest in the moment of ceding them or along the way, if the firm which has received the subsidy is conditioned by the compliance with some quantifiable obligations. It is the case of subsidization of an acquisitioned land, on which the firm is obligated to erect a building. In this situation, the subsidy shall be acknowledged as income for the duration of useful life of the construction. In the case in which the second method is applied, the accounting value of the asset is diminished by the size of the subsidy in order to reflect the net (real) effort of the company. If at some point one considers that the value of the assets does not reflect a real value, then one can decide their reevaluation.

### **The presentation of subsidies in profit and loss statement**

Subsidies related to incomes which are going to be received as compensation for expenses or losses already incurred, without any other afferent future costs, are acknowledged as income when the right to receive the subsidy is registered. There are however, subsidies related to incomes which are acknowledged as incomes in time, being previously registered as incomes in advance. Moreover, IAS 20 specifies that one can also deduct from the expenses the subsidies

related to incomes. As for the presentation in the results account, the subsidies related to incomes can also be presented in the financial reports, more precisely in the results account directly as incomes as well as deduction from the size of the expenses which they cover (all the other subsidies).

### **The presentation of subsidies in cash flow statement**

The acquisition of the assets and the receiving of the subsidies related to them can cause major fluctuations in cash-flow of an entity. For this reason and in order to illustrate the gross investment in assets, that moves are often presented like separated elements in cash-flow statements without relate with the fact that the subsidies is or not deducted from the asset related to that, in the scope of the drawing up the balance sheet.

### **The presentation of the information related to subsidies in the notes to the financial reports and their interpretation**

In relation with government subsidies, an enterprise must present in the financial reports information reflecting:

- the methods of acknowledgement and presentation adopted;
- the nature and size of government subsidies acknowledged in the financial reports, as well as a specification of the other forms of government assistance which have brought direct benefits;
- the unmet conditions related to a government subsidy which has been acknowledged in the financial reports.

From the point of view of the financial analysis and of the interpretation of the information presented in the financial reports regarding government subsidies, the two ways of accounting (regarding subsidies related to assets) generate the same results at the level of synthetic indicators, such as: the permanent capital, one's own capital, total assets. However, at the level of the rate of profitability of immobilized assets, for instance (net profit/ immobilized assets), the results are different according to the accounting treatment of subsidies (deduction from the value of the immobilizations or the gradual passage to incomes; bigger in the first case and smaller in the second). In order to reach the same results, the financial analyst should reprocess the information regarding the value of immobilized assets.

### **Study regarding accounting policy about subsidies**

The right presentation in financial report of the information about subsidies is based on accounting policies applied by economic entities.

The accounting policies are established by the entities who have agriculture as object of activity and request subsidies, according to the type of subsidy and to the legal conditions of awarding them.

Another criterion that is taken into account when establishing accounting policies, is the observance of the accounting principles. The most applied principle is the principle of prevalence of the economic over the legal. This principle is materialized in the fact that one may establish accounting policies which provide the registration of subsidies in accounting at the date of filing the request for award of the subsidy, the entity considering that it fulfils the legal conditions, being a factual situation, and after the approval of the subsidy the lawful situation will intervene, namely receiving the subsidy.

Also, the principle of independence of the exercise must be observed and applied with professional reasoning. We meet difficulties in applying it at subsidies related to the incomes, from which a part is destined to cover some directly identified expenses. It is known that the someone's activities, for example, activity in agriculture has a specific character, due to seasoning, cyclicity, on many occasions a time discrepancy occurs between the period in which the expenses are collected and the period in which the effective incomes are made.

To track whether the presented theory is applied in practice, we surveyed entities in agriculture, which are beneficiaries of the present period of several categories of subsidies.

In this paper we will refer to the enforcement of accounting policies according to European directives, respectively the ones stated by O.M.F. 1752/2005, because the companies that we considered in the study apply these regulations.

Hereon we will present categories of subsidies that are awarded to entities with activities in agriculture and the accounting policies applicable to each category. It is known that the subsidies are classified from accounting point of view in two categories:

- subsidies related to assets (subsidies for investments for awarding of which, an entity must buy or build immobilized assets);
- subsidies related to income (subsidies for exploitation, other than the ones regarding the immobilized assets).

More specifically, subsidies related to depreciable assets are acknowledged as incomes during the periods and in the ratio in which the depreciation of these assets is acknowledged.

We will mainly refer to the subsidies related to incomes which involve more attention.

From studying the existing laws regarding the granting of subsidies under various forms we may classify the subsidies according to destination in three categories:

- subsidies related to the turnover - are recognized as incomes from exploitation subsidies related to the turnover, for example the ones awarded at the sale of cultivated products;
- subsidies related to other incomes - are recognized as incomes from exploitation subsidies related to other incomes, for example: payments in direct payment schemes and complementary direct national payments;
- subsidies for operating expenses – are recognized as incomes from operating expenses for raw materials, consumable materials, for other expenses, such as: coupons for fuels, fertilizers, seeds.

In order to follow the enforcement manner of the accounting policies regarding subsidies we have established as objective making a study on the companies with agricultural orientation from Timiș County. From the performed study we may conclude the following:

- most of the companies with agricultural orientation have correctly applied the accounting policies regarding the subsidies for operating expenses, respectively the ones for diesel fuel, fertilizers, seeds, etc;
- part of the companies have applied the accounting policies regarding payments in the support schemes on surface and schemes for complementary direct national payments by registration of the incomes from those subsidies at the date of filing the requests for awarding, and the other part registered the incomes at the date of approval for the requests for awarding the subsidies;
- the subsidies related to the turnover were registered at incomes on the filing date of the request by most of the requesting companies;
- the accounting policies were the most correctly applied in the case of subsidies regarding the investments, due to the fact that in this situation there is a closer correlation between the expense with depreciation of the assets and passing the quota from subsidies to incomes.

## **Conclusions**

In conclusion, we may say that for the correct application of accounting policies regarding the subsidies first of all is required the existence of a manual of accounting procedures and policies within each entity in the field of agriculture, as well as information of the personnel from the financial-accounting department regarding the procedure for award of the subsidies. Only by means of the close collaboration of all the departments within one entity to apply all the implemented procedures, we may reach a reasonable presentation of the subsidies in accounting and finally in the financial situations of the entities.

Resonabil presentation of subsidies in the financial reports it is order like the necessity for the right information of the users and for the calculate some financial indicators without no distortion, and the importance comes from the accurate image principle.

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## CONSIDERATIONS REGARDING THE ACCOUNTING PROFESSION IN EUROPE - COMPETITIVENESS AND PROFESSIONAL ETHICS

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*The competitiveness is one of the priorities aspects of national economies and the entire EU for the coming years. As is known, the competition, with particular reference to the services area, is a topic of great timeliness, lack of political, trade or economic sector, which does not address this issue. Starting from these issues, we present some necessary principles and personal considerations on accounting profession in Europe, which currently faces many problems, fierce competition from existing market accounting services, as a consequence of the existence of numerous liberal professions, that the governments of states treat them differently, advantaging them some, and others disadvantaging them visible.*

*Keywords: accounting profession, professional ethics, competitiveness, European legislation*

*JEL Classification : M 41*

European Parliament has approved the recognition of qualifications across the EU, through a normative act that fulfills an important "step before" in the development of European professional systems. Finally, one can say that Europe has clarified the difference between a freelancer and a trader, emphasizing that, even if it is structured as comparable economic entity, a free professional reply and other logical answer, primarily those ethics.

The reform which took place in the market professions (especially the liberal such as notary, lawyer, expert, etc.), today uncompetitive, needs an open confrontation with the same kind of professions, businesses, unions and consumers. In a system where certification proliferate (processes, products, protect the environment, respect workers, etc.) can not be understood that the "world of professional services" is so little regarded. By their nature, services are intangible and difficult evaluated from consumers or subscribers, so control system and security, which oversees about those who will operate on the market, it is absolutely necessary, provided that such control to be real. Our country, as specified in many years ago, needs to regain lost credibility and trust, and professional accountants and specialists have a specific responsibility, to ensure that the profession and respect the deontological code protect the public interest. The accounting profession, both in our country and throughout the EU, will be in the centre of information process which agree that dialogue between those savers / consumers and business / company.

The information's asymmetry will resolve and be seen with professional counseling and specific information on the market only if there is ethics, professionalism and accountability before a legislative clear framework and rules of conduct widely shared and respected.

The role of professional associations will become the engine of ideas and the initiatives that will grow this category, but also the sensitivity to the problems which society is today subjected. The economist profession and the accounting, is a major responsibility in the employment of capital. Due to a formalized language of communication, in the business world, has produced an essential mutation likely: the transition from empiricism to arbitrary considerations, at the economic truth and the faithful image.

After the incursion into the business undertaken and they difficulties, see serious concerns on the normalization of accounting behavior. Arbitrator of the dispute held between different users

present on the information market, the economist must express in a formalized language, economic truth. Creating a single body of rules and standards, can only be achieved through the use of knowledge and professionalism of accountants and economists organized in professional associations, whose role may be necessary in the economic and social environment.

The accounting profession should focus more attention to efficiency and monitoring of the risk, not ignoring the formal side in the independence conditions, professional privacy and professional transparency. The role of economists and accountant has evolved with the accounting, at the simple technique for recording transactions and economic events, by means of control, element of proof and social challenge.

Liberal professions should be understood as independent professions, non-commercial, far from any kind of speculative, being formed in order, bodies, companies, with the composition and structure of self-discipline social recognized through promoting by their execution norms of their missions are accountability data, but also of rules of ethics and professional deontology.

The organize of the accounting profession is organically linked by the accounting system that you are right reference, system for the most part, is a national system. The factors and historical approach which that led to the current configuration of national accounting systems are influenced in a decisive manner, training and development of accounting profession.

According to IFAC's international body, the differences in language culture, laws and social that impose the burden of preparing detailed ethical requirements to return the member bodies of each State, who have the responsibility of introducing and improving these requirements.

The IFAC currently comprises over 150 member organisms in over 100 countries, and the number of people who meet the quality of expert accountant exceeds 2 million. According to IFAC, the accounting profession identity is characterized by its struggle to achieve some common goals and respect for fundamental principles of ethics and professional deontology.

So, IFAC recognizes the accounting profession responsibility, considering that its role is to provide guidance principles to foster continued efforts to promote harmonization and, considering also that it is necessary to establish an international code of ethics for professional accountants and experts, to make bases and to base the ethical requirements of each country.

The Code sets the standards and conduct rules for professional accountants, even if that act in different environments in terms of culture and regulations, must comply with the common purpose of this code.

According to IFAC code, the characteristics which distinguish a profession refer to:

- the members' obligation to the profession and society can sometimes be in conflict with their personal interest or duty of loyalty and confidentiality towards their employers;
- adaptation by the members to a common code of values and behavior, determined by the professional body and that includes maintaining an image essentially objective;
- mastery of intellectual skills acquired through training and vocational education;
- the acceptance of duties existence towards society; So, we can say that it is the duty of each member organizations to establish ethical requirements of the profession of an economist to ensure the highest quality in the provision of skills and to maintain public confidence in the profession.

In Romania, the national Code of Ethics establishes the rules of conduct for the accountant profession and makes the fundamental principles to be followed to achieve common objectives and defend the public interest..

An important feature of the profession's acceptance of responsibility to the public, the public accounting profession is composed of clients, donors loans governance, employers, employees, investors, business community, donors and others, which treats the integrity and credibility professional accountants in the development and functioning of the economy.

The confidence in the accounting profession requires a public responsibility, public interest is defined as a collective welfare of the community and institutions in which professionals are



employed accountants. Behavior of accountants and business professionals has a relevant impact on growth in our country in which they operate.

The objectives of this code on the accounting profession relates primarily to: credibility - since all users of accounting information they need their credibility, professionalism - employers, managers, customers, etc., are directly interested in the clear identification of persons professional in this area, quality of service - to be made to the highest standards of professional performance, and confidence - which refers to users of financial statements, which need to be assured of the professionalism that you prepare and present.

## **Conclusions**

In conclusion, we can say that one of the issues facing the accounting profession is market competitive professions. On this we can identify some principles need to confront the competition:

- certainly can say that in Romania, the professions in general, and accounting in particular, is characterized by an excess of regulations;
  - undoubtedly these rules are of different intensities from one profession to another, considering that is not correct to apply a speech unit to include all categories of self-employed;
  - for profession-accounting activities are covered by the exclusivity, if exception to the book review;
  - many of the accounting profession activities are characterized by a high level of information asymmetry between professional and client, which ultimately will influenced on public property;
- A good professional should know what means the accounting reform both nationally and internationally level, to understand and apply the of financial reporting standards, to be aware of the magnitude and importance of applying professional reasoning, be able to advise the appropriate management an entity and to provide viable solutions to obey and respect the code of ethics and professional ethics training required by professional bodies that represent, to work permanently in the defense of public interest.

Today we must focus attention on other fundamental points, such as like to be what will be sustainable development of our profession?

CECCAR as a professional organization that contained 31 December 2008, 11,412 young professional we question there will be space for everyone?, What is the role of our profession in the socio-economic context of our country.

As a professional organization, CECCAR always tried to explore new fields of professional knowledge, often talking even with a careful regard to the future. "In the years have passed, we can say that thousands of accounting professionals have developed specialized advanced studies, standing up to date, have provided jobs and income to thousands of dependents and suppliers, have built a total of contributions and absolute self-confidence.

Today continue to be convinced that a solid preparation, a permanent update a professional knowledge, a rigorous conduct of discipline and an appropriate attitude towards the new requirements that the market imposes its operators, represents the elements that can guarantee a future of our profession, for the future of our profession is not a right but you need to conquer it.

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## OVERVIEW OF THE ENVIRONMENTAL ACCOUNTS IN EUROPE

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*Today, the potential environmental impacts of their decisions and the economic implications of changes is analyze in the academic and business circles. The economic accounts have been established to provide policymakers with key national economic indicator. To promote the principle of sustainable development, several international institutions have recommended that countries develop environmental accounts.*

*So, the European's challenges have been widely analyzed, the challenge of sustaining the European's natural resources and environmental assets for future generations has received far less attention.*

*The aim of this paper is to analyze the potential benefits of constructing environmental accounts for the European region and to determine which types of accounts would be most useful for policymakers in this Region.*

*Keywords: enviromental accounts, crisis, economy.*

*JEL: H21, H32.*

### **Introduction**

The year 1960 is considered the beginning of the environmental crisis when the environmental problems became of high priority as compared to other aspects of any other nature, be it political, economic or cultural. Thus, there has been developed worldwide a series of economic and fiscal key factors for the environment protection, with the purpose of facilitating the economic – environmental conflict solving process. The European Community whose member Romania is today has a very good environmental policy and other EU member can serve as a model as far as the environmental strategies are concerned. Many European countries began to formulate and implement environmental and resource accounting frameworks and as a result, today those countries have a fairly well established system of environmental and resource accounts that quantify the links between the environment and the economy. A growing number of developing European countries are also in the process of establishing environmental accounts. Most, if not all, of the environmental accounting systems are linked to some extent with the national accounts of their respective countries.

In the 1970s the national statistical offices began the formal development of environmental and resource accounts. Norway (Alfsen et al., 1987) and France (Weber, 1983) were the first to initiate the development of their accounts. In the late 1980s, the United Nations Statistics Division, European Union, OECD, World Bank, and country statistical offices initiated a coordinated effort to address a major part of the problem in analyzing natural wealth which was the omission of natural capital accounts from the asset accounts.

The internationally accepted set of guidelines for the preparation of national accounts is The System of National Accounts 1993 (SNA93) which represents the work of five international economic organizations to define the scope of the national accounts and provide guidance on the concepts and methods that should be used in their compilation.

The SNA93 explicitly discusses the incorporation of environmental information into the national accounts and presents two sets of environment-related guidelines. The first set deals with the incorporation of natural resources into balance sheet accounts. The second set, which is more far-reaching, describes the development of a “satellite system for integrated environmental and economic accounting” or System of Integrated Environmental and Economic Accounts (SEEA).

So, this effort resulted in a standardized framework and methodologies for constructing environmental accounts, called the System of Integrated Environmental and Economic Accounts, or SEEA (United Nations et al. 2003).

### **The concept of environmental accounts**

In the stage there are some important problems concerning the environment which has stimulated the initiative of others regarding the necessity of doing something to remediate them. So, the specialists have come to the solution how increasing quality of the people's lives and to find some strategies which offer the possibility to protect the resources of the natural environment in the process of social and economic development (a sustainable development). This concept has signaled people's concerns about the effort to incorporate environmental benefits and costs into economic decision making.

Environmental and resource accounts can be defined as any systematic compilation of stock, flow or state statistics relating to the environment or to natural resources.

The environmental and resource accounts of most European countries comprise three major components:

- The Natural Resource Stock Accounts measure quantities of natural resource stocks and the annual changes in these stocks due to natural and human processes;
- The Material and Energy Flow Accounts record in physical terms only the flows of materials and energy - in the form of natural resources and wastes - between the economy and the environment;
- The Environmental Protection Expenditure Accounts identify current and capital expenditures by business, government and households for the purpose of protecting the environment.

Environment accounting is also a managerial tool, with many goals: the control of environment costs; the realization of investments in less polluting or even in ecological technologies; the promotion of some production process and the promotion of some less polluting products, improving environment-related performance.

The concept of environmental accounting describes the following four components:

1. Natural resource asset accounts, which primarily include information on stocks of natural resources.
2. Pollution and material flow accounts, which provide information at the industry level about the use of energy and materials and the generation of pollutants and solid waste.
3. Environmental protection and resource management expenditure accounts, which identify expenditures made by industry, government, and households to protect the environment or manage resources.
4. Environmentally adjusted macroeconomic aggregates, which include indicators of sustainability, such as an environmentally adjusted net domestic product.

The assurance of the environment accountancy information quality, in the context of accountancy convergence, has on base the followings:

1. in the last period, there was manifested more and more less confidence into the financial measurements;
2. the need of the uniformization of the accountancy information, for the capability of answering to the requests of globalization;
3. the accountancy appears much more as a social game, in which the actors could be interpreted by the theory, norms and state- interests or by the tax liability at a given moment;
4. in most of the times the practice can't hold the rhythm with the accountancy rules.

However, the specialty literature doesn't present the evaluation of patrimonial elements in the real value, as sufficient source- information.

Sufficient, compatible, and reliable data must be available at a unique value to develop and populate environmental accounts.

The importance of deriving indicators from the accounting system and provides policy makers are reflecting from 1) indicators and descriptive statistics to monitor the interaction between the environment and the economy, and progress toward meeting environmental goals, and 2) a database for strategic planning and policy analysis to identify more sustainable development paths and the appropriate policy instruments for achieving these paths.

A number of organizations are working to establish international comparability in environmental and resource accounts through the promotion of standard methods and concepts. One such organization is the so-called London Group on Resource and Environmental Accounting. The London Group is an informal group of approximately 30 statisticians representing 14 countries and 5 international organizations. The London Group meets annually and the papers and proceedings are published by a participating agency on behalf of the group.

According with this group Norway was selected as a sample because it highlights the complexities of maintaining many accounts and provides the rationale for initially limiting the European's environmental accounts to Natural Resource Accounts and Water Accounts. Also Norway has the longest experience with environmental and resource accounting because began to develop its environmental and resource accounts in the mid 1970s in response to increasing conflicts between conservationists and politicians. The primary objective was to provide information that would improve the management of natural resources. During 1978-1986, accounts for energy, fish, land use, forests, and minerals were developed. The approach initially taken by Norway separated natural resources into two broad classes: material and environmental. Material resources were further subdivided into mineral resources (crude, natural gas and other non-renewables), biotic (living) resources (such as forests and fish) and inflowing resources (solar radiation, ocean currents).

The initial Norwegian accounts served decision makers well during the oil price shocks of the 1970s and 1980s. The reduced resource use that accompanied the oil price increases attracted the interest of decision makers and prompted a change in the focus of the Norwegian accounts.

Decision makers thus began to examine more closely the linkages between the physical resource accounts and economic information in the national accounts.

The vast effort needed to develop and maintain a comprehensive accounting system led to a narrowing of the focus of account development in the late 1980s and early 1990s. A few economically and politically important resource issues – energy resource management in particular – and important environmental issues such as air pollution became the focus. Land-use accounting was discontinued but forests, fish, and mineral accounts were maintained.

In recent years, Norway has revised its objectives to focus on consistency between economic analysis and analysis of important environmental and resource issues. For example, the energy account has become an important and necessary foundation for emission inventories. The emission data are used in conjunction with economic data to forecast the consequences of economic development and the associated demand for energy.

Regarding the reflection of environmental accounting is still very difficult to do because that can be used in different context and with different meanings (national, financial and managerial accounting).

In practice, it was observed, that the advantages of using the real value are growing up, because of the positive influence for the quality of the accountancy information, as following:

1. the superior accuracy for the result and for the cash-flow of the company;
2. relevance, transparency and utility of the presented information into the financial measurements.

But the process doesn't stop here. After getting the accountancy information it must be furnished to the interested one and has to be interpreted in the scope to take decisions. Look, there is obtained accountancy information, based on the concept of real value, with the destination of evaluating the interest and solvability of a patrimonial entity. Although many of the authors are

presenting the advantages of the real value, there are voices which contest this concept, because of its volatility and the tendency of subjectivism, of the manipulation of used models for the evaluation.

Among the advantages of the real value there can be named: Utility, relevance, transparency and superior accuracy of the results and cash-flow of the company, it brings more clearance to the financial statements, it does a total accounting of the comparable value and it gives more liability to the manager. The credibility regards a reasonable evaluation, the using of market information in all possible situations for evaluating and justifying the subjective arguments. The neutrality presumes evaluations that were done in an adequate context and without a selective presentation. So, the data must be presentation at the faire value.

On the other hand, the definition of fair value in IFRS has remained unchanged for almost twenty-five years. It is therefore surprising that there is some uncertainty about its meaning and some confusion about what amounts are, and what are not, fair values.

## **Conclusions**

The environment is a present problem of high priority that needs immediate solutions. The preeminence of economics in the social and political life of the last decade, the concentration of activities for an immediate profit, has led to the ignorance of environmental aspects.

According to some specialists environment accounting represents a process of identification, calculation, control, analysis and reporting of the costs generated by the enterprise-environment relation, resulting from the prevention, the limitation and the elimination of the effects of ecological disasters with a favorable impact over the company and the environment.

One of the primary challenges in establishing environmental accounts in Europe is the availability of statistical data necessary to establish the accounts. Sufficient, compatible, and reliable data must be available to develop and populate environmental accounts. Many government agencies and entities in this region collect relevant data and it is unclear at this stage of the research whether the data is sufficiently available to construct the Natural Resource Accounts and Water Accounts. Moreover, environmental accounting is a long-term investment and developing accounts requires a sustained effort over an extended period.

Despite these challenges, however, the benefits of establishing environmental accounts in Europe are significant and can contribute to better policy and resource management at all levels of governance.

In the 21st century environmental accounts must provide the answering the following questions: What units of measure are to be used? ; How often measurement is to be undertaken? How much resource is recovered through taxes and non-tax instruments?

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## RESUMPTION AND DEVELOPMENT ON THE METHODS OF REGRESSIVE OR DEGRESSIVE DEPRECIATION

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*For a systematic allocation of the depreciation of an asset during its useful life can be used several methods of depreciation such as: the linear method, the method of reduction of the balance - regressive, progressive and accelerated and the method of production units.*

*The methods of regressive or degressive depreciation have such as result the inclusion in the operating expenses of some redemption in the decreasing amount and relatively high in the first part of the process of depreciation and some amounts of equal value and lower in the final part of the process of depreciation. These methods, based on time, start on the assumption that most tangible assets are more efficient when they are new, thus offering more and better quality in the early years of the duration of their useful life.*

**Keywords:** *Ageing, depreciation, the amortization method, the depreciation, amortization annuities share / rate depreciation, the value (net) accounts.*

**Jel classification:** *B21; C81; F15; L14; M41*

Recovery of value of tangible assets is made on account depreciation and amortization is recognized the ageing of the fixed assets from the use or the mere possession ("aging" the tangible assets as a result of the passage of time and the technical progress). Currently, the two terms "dispute" the attribute or the initiator of the necessity of recovering the initial value of fixed assets: **ageing and depreciation.**

By appeal to International Financial Reporting Standards<sup>463</sup> - IFRS, and within the International Accounting Standards - IAS 16 *Property, Plant and Equipment*, the harmonization is a systemic allocation of the depreciation value of an asset for the entire duration of its useful life.

According to the same standard, thus the Anglo-Saxon view, the concept of depreciation of capital maintenance through the initial investment recovery and preserving this kind of financial and technical enterprise. The depreciation, according to the same standard, is the difference between the net book value (input value less depreciation) and recoverable amount (the amount that is expected to recover from future use of assets, including its residual value at the time of amortize).

According to the American Institute of Accountants Public Authorities - AICPA, *the accounting of depreciation, is an accounting system which aims to distribute its cost or other values of the tangible capital assets, less their residual value (if any) over the estimated life of the article in systemic and rational way. This is a method of allocation, not evaluation*<sup>464</sup>.

The costs of the production facilities (an asset) take part of the costs of services it offers during its economic operation. The general accepted accounting principles require that this cost should be shared throughout the estimated life of the facility so as to allow its allocation more balanced on the intervals in which to enjoy the services offered by the use of the facility.

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463 The International Financial Reporting Standards from 1 January 2005, CECCAR Publishing, Bucharest, 2005.

464 B. E. Needles, Jr., H. R. Anderson și I. C. Caldwell, *Principiile de bază ale contabilității*, the fifth edition, Arc Publishing, 2001. p. 476

Can be used many methods of depreciation for the systematic allocation of the amount of depreciation on an asset during its use. It must be known that the depreciation method used will reflect the way that the future economic benefits of an asset will be consumed by the entity. These methods include the **linear** method, the method of **reduction of the balance** and method of **production units**.

Method of **reduction of the balance** shown in several variants such as the method of **rates/ the decreasing rates**- *softy* or *adding the numbers of years useful life* (regression), or if it is changed the order of considering of the rates of depreciation to arrive at depreciation method *progressively* or *increasing softy* and the method of **rates / the steady rates** – the *double declining balance* method with variant *balance of reduction* and in Romania are applied the variants of the method of the *degressive depreciation AD<sub>1</sub>* without the influence of the wear moral, *AD<sub>2</sub>* with the moral wear influence and the *accelerated* method.

Schematic, the method of **reduction of the balance** is as follows:

**Method of reduction of the balance:**

**The method of rates / the decreasing rates:**

The softy method or sum of the numbers for years period of useful life (regressive or degressive)

The softy method or sum of the numbers for years period of useful life (progressive)

**The method of rates / the steady rates:**

The method (balance) double declining–BDD with the variant of the balance reduction–BR

The degressive method – AD<sub>1</sub> and AD<sub>2</sub> (Romania)

The accelerate method (Romania)

The linear depreciation has as a result a constant expense over the useful life if the residual value of the asset does not change. The method of reduction of the balance has as a result a decreasing or increasing expense (progressive) along the useful life. The method of production units has as a result in a variable expense based on or planned use of the product.

The entity selects the method that most reliably reflects the expected pattern of consumption of future economic benefits embedded in the asset. That method is applied consistently from one period to another only if there is any change in the expected consumption of those future economic benefits.

Under accounting rules and tax in Romania<sup>465</sup>, the depreciation is calculated according to the following procedures (methods) of depreciation: **the linear depreciation, the degressive depreciation (AD1 and AD2) and accelerated depreciation**. Depreciation related to a period is normally recognized as expense. But then when the economic benefits brought by an asset are consumed in the business of acquiring other assets, the amortization expense is included in the book value of that asset.

In continuation of our scientific we present the methods of depreciation regressive or degressive enforcement both in the accounting system in Romania and in other accounting systems.

**Methods of regressive or degressive depreciation** have as a result the inclusion in the operating costs of the redemption amount and decreasing the relatively high early in the process of depreciation and of amounts of equal value and lower in the final part of the process of liquidation. These methods, based on the passing time, based on the assumption that most fixed assets are more efficient when they are new, thus offering more and better quality in the early years of their working life.

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465 Law No. 15/1994 on depreciation on fixed capital in tangible and intangible assets, Law no. 571/2003 on Fiscal Code.



Also, the regressive methods consider the fact that the change of the technology leads to a rapid loss of the use value of certain equipment and services offered through the new equipment more efficient. It is therefore more realistic allocation of greater depreciation in the first years of exploitation of assets than in the last years. New inventions and products have as a result the moral depreciation of equipment purchased in the past, requiring them to replace faster than if the technology would have progressed more slowly.

Another argument in favour of regressive methods is that, over time, the expenditure on repairs increases and is larger in the recent years. Thus, the expenditure on repairs and depreciation (cumulative) remain relatively constant over the time. It results that the services (benefits) are provided by assets are approximately equal from one year to another.

There are two methods for calculating the depreciation in the decreasing amounts, for the first part of the period of operation:

- applying some rates of decreasing to a constant value;
- applying a constant rate at a decreasing value.

In Romania is approved and practice the second method.

### 1. The method of quotes/decreasing rates

**The method of quotes/decreasing rates** is a regression or degressive depreciation which for calculating the rate of depreciation is cumulated years of useful life or the normal operation of the asset. Their sum becomes the denominator of a series of fractions that are multiplied by the depreciation of assets to determine the annual depreciation value assigned to duration of operation. In fractions numerator is the numbers of each year of the estimated duration of operation, but in reverse order.

In another respect this method of depreciation known as the **softy** (sum of the year's digits) specify to the Anglo-Saxon financial system, and consists in determining the annual rate, or **decreasing (regression or degressive)** or **increasing (progressive)**, which applies to a constant value of cushion, giving annual depreciation. There is not a method approved by the Romanian tax system.

The **decreasing variant (regressive or degressive)** of the rates result from reporting the serial number "N" of the year, from the viewpoint of life remaining, the amount of years digits.

**For example**, for a tangible lasting useful life of 5 years, the sum of the years' digits is  $1 + 2 + 3 + 4 + 5 = 15$ . A relationship for calculating<sup>466</sup> the amount of years may be operating:

$S = \frac{N(N+1)}{2}$  where: **S** – represent the sum of years of operation (use); **N** – represent number of years of useful or normal functioning life.

**Example:** when for a truck to transport goods the useful life is 5 years and the depreciation is 10,000 um. Amount of years' digits of operation is  $1 + 2 + 3 + 4 + 5 = 15$  or,  $S = 5(5+1)/2 = 15$ . Annuities depreciation is then calculated by multiplying the amount of depreciation (10,000 um), with each annual rate (r) decreasing (fractions) following:

$r_1 = 5/15; r_2 = 4/15; r_3 = 3/15; r_4 = 2/15; r_5 = 1/15$ .

#### The depreciation softy plan - the decreasing variant

| Year  | The input value | The annuities depreciation   | Cumulative depreciation | The remaining value for depreciation |
|-------|-----------------|------------------------------|-------------------------|--------------------------------------|
| N - 1 | 10,000          | –                            | –                       | 10,000                               |
| N     | 10,000          | $10,000 \times 5/15 = 3,333$ | 3,333                   | 6,667                                |
| N + 1 | 10,000          | $10,000 \times 4/15 = 2,667$ | 6,000                   | 4,000                                |
| N + 2 | 10,000          | $10,000 \times 3/15 = 2,000$ | 8,000                   | 2,000                                |
| N + 3 | 10,000          | $10,000 \times 2/15 = 1,333$ | 9,333                   | 667                                  |

466 Belverd E. Needles, jr., Henry R. Anderson, James C. Caldwell, Principiile de bază ale contabilității, the fifth edition, translated in Romanian, Arc Publishing, 2001, p. 480.

|       |        |                            |        |   |
|-------|--------|----------------------------|--------|---|
| N + 4 | 10,000 | $10,000 \times 1/15 = 667$ | 10,000 | 0 |
|-------|--------|----------------------------|--------|---|

Based on this method is observed that annuities depreciation is greatest in the first year of operation and then decreases each year. The accumulated depreciation also increases each year by an amount less. The remaining value for depreciation is diminishing each year by the annual depreciation amount equal to the residual value in our case it is zero.

If you change the order of considering the rates of depreciation it gets at the **method of the progressive depreciation** or the **increasing variant softy**.

The **increasing (progressive) rate** used (rate or fractions) increasing, resulting in reporting serial number "N" of the year, in terms of life passed to the sum of years' digit. Annual rates (r) will be increasing:  $r_1 = 1/15$ ,  $r_2 = 2/15$ ,  $r_3 = 3/15$ ,  $r_4 = 4/15$ ;  $r_5 = 5/15$ .

In these circumstances the Plan of softy depreciation from the previous example is as follows:

**The depreciation softy plan - the increasing (progressive)**

| Year  | The input value | The annuities depreciation   | Cumulative depreciation | The remaining value for depreciation |
|-------|-----------------|------------------------------|-------------------------|--------------------------------------|
| N - 1 | 10,000          | –                            | –                       | 10,000                               |
| N     | 10,000          | $10,000 \times 1/15 = 667$   | 667                     | 9,333                                |
| N + 1 | 10,000          | $10,000 \times 2/15 = 1,333$ | 2,000                   | 8,000                                |
| N + 2 | 10,000          | $10,000 \times 3/15 = 2,000$ | 4,000                   | 6,000                                |
| N + 3 | 10,000          | $10,000 \times 4/15 = 2,667$ | 6,667                   | 3,333                                |
| N + 4 | 10,000          | $10,000 \times 5/15 = 3,333$ | 10,000                  | 0                                    |

## 2. The method of quotes/ the steady rates

The method of quotes/the steady rate is a regressive depreciation by annual depreciation which is calculated by applying a fixed rate (single, constant) on the value of remaining for depreciation (decreasing) of a fixed asset.

This method is based on the same theory as the method of the decreasing rates. Both have resulted in higher expenditure on depreciation in the first part of the normal operation of the asset. Although it can be applied to any constant rate, the most commonly used is equal to the average annual rate of depreciation, multiplied by two, so the method is also called the **method of the constant double rates**<sup>467</sup>.

The method is specific to the economy of Anglo-Saxon, and resembles with the **degressive method** approved by the Romanian accounting system, but kept the same quotes (rate) by the end of depreciation. **The method of the constant double rates** is also known as the **method of (balance) double declining**<sup>468</sup> – **BDD (double-declining balance – DDB)** having a **variant** called **the method of the balance reduction– BR**. At the end of the depreciation period will be always a residual value (or remaining value of the register).

Relationship of calculating the depreciation is:

$Aa = Vreg \times 2 \times Ral = Vreg \times 2 \times 100/DNU$ , where: **Aa** = annual depreciation method (balance) double declining; **Vreg** = register value (the value remaining at the beginning of the period / year or book value according to IAS 16 *Property, plant and equipment*);

**Vreg** =  $V_i$  - gained; **V<sub>i</sub>** = input value of tangible; **Ral** = linear rate of depreciation.

In the variant called the method of balance reduction, the relation of the rate calculation is:

467 Belverd E. Needles, jr., Henry R. Anderson, James C. Caldwell, *Principiile de bază ale contabilității*, the fifth edition, translated in Romania, Arc Publishing, 2001, p. 481.

468 Ristea Mihai et. al., *Politici și tratamente contabile privind activele imobilizate*, Publishing, Tribuna Economică, Bucharest, 2007, p. 59.

$$r = 1 - \sqrt[n]{\frac{V_r}{V_i}}, \text{ where: } r = \text{rate or annual rate of depreciation; } V_r = \text{residual value of}$$

tangible;  $V_i$  = the input value of tangible;  $n$  = number of years of useful life.

The rate of depreciation, a constant, is applied to the remaining value (or net book value under IAS 16 *Property, plant and equipment*) of the tangible assets. This circumstance creates similarity between depreciation based on the double declining balance and the degressive depreciation.

**Example 1:** the truck to transport goods had a useful lifetime of 5 years. Accordingly, the linear depreciation method has resulted in an average annual rate of depreciation of 20% (100% / 5 years). For the method constant double rates will cause a rate of 20% x 2 = 40%. This fixed rate of 40% applies to extinguish the remaining value determined at the end of each year. Last year the entire remaining value is passed to expense or the residual value is deducted, and what remains is included in the operating costs of depreciation.

**The depreciation plan - the method of constant double rates**

| Year  | The input value | The annuities depreciation   | Cumulative depreciation | The remaining value for depreciation |
|-------|-----------------|------------------------------|-------------------------|--------------------------------------|
| N - 1 | 10,000          |                              | -                       | 10,000                               |
| N     | 10,000          | $10,000 \times 40\% = 4,000$ | 4,000                   | 6,000                                |
| N + 1 | 10,000          | $6,000 \times 40\% = 2,400$  | 6,400                   | 3,600                                |
| N + 2 | 10,000          | $3,600 \times 40\% = 1,440$  | 7,840                   | 2,160                                |
| N + 3 | 10,000          | $2,160 \times 40\% = 864$    | 8,704                   | 1,296                                |
| N + 4 | 10,000          | 1,296                        | 10,000                  | 0                                    |

*Note:* in the fifth year of useful life (N + 4) the total amount remaining for depreciation (1,296 um) is entered on the operating costs of depreciation, contrary to the end of five years the value remaining to depreciation would be more than zero. If at the beginning of the useful life is estimated the residual value, suppose 1,000 um, when depreciation annuities in the last year of operation will be limited to the amount necessary to reduce the value remaining to depreciation until the residual value: 1,296 um - 1,000 u.m. = 296 u.m.

We must note that the constant percentage rate is always applied over the remaining value for depreciation of the end of last year. It is noted that annuities depreciation is higher in the first year of useful life and then decreases each year. Finally, the remainder of recouping the beginning of the last year of useful life is past, for that financial year, full-on operating costs or it is reduced with the estimated residual value.

**Example 2:** S.C. MIORITA S.A. restraint has a tangible asset having an input value (depreciation, without the influence of residual value) of 5,587 lei, specifying that the residual value is 279.35 lei (5% of input) and duration of 5 years of operation. The annual amortization is determined by the method (balance) double decline - and BDD variant called balance reduction method - BR to determine the rate of annual depreciation.

a) determining the rate or the annual rate of depreciation:

- the annual depreciation rate of the method (balance) double decline – BDD:

$$R_{bdd} = 2 \times R_{al} = 2 \times 100/5 = 40\%$$

- the annual rate of depreciation in the balance reduction method - BR:

$$r = 1 - \sqrt[5]{\frac{279.35}{5,587.00}} = 0.45072 = 45.072\%$$

b) determining the depreciation for the first year - N:

- the method of (balance) double decline:

$$A_{bdd} = V_i \times R_{bdd} = 5,587 \text{ lei} \times 40\% = 2,234.80 \text{ lei}$$

- the method of the balance reduction:

$$Abr = Vi \times r = 5,587 \text{ lei} \times 45.072\% = 2,518.17 \text{ lei}$$

c) determining the depreciation for the second year – N+1:

- the method of (balance) double decline:

$$Abdd = Vreg \times Rbdd = (5,587.00 \text{ lei} - 2,234.80 \text{ lei}) \times 40\% = 1,340.88 \text{ lei}$$

- the method of the balance reduction:

$$Abr = Vreg \times r = (5,587.00 \text{ lei} - 2,518.17 \text{ lei}) \times 45.072\% = 1,383.18 \text{ lei}$$

Note:  $Vreg = Vi - \text{Gained}$

d) determining the depreciation for the third year - N+2:

- the method of (balance) double decline:

$$Abdd = Vreg \times Rbdd = (5,587.00 \text{ lei} - 3,575.68 \text{ lei}) \times 40\% = 804.52 \text{ lei}$$

- the method of the balance reduction:

$$Abr = Vreg \times r = (5,587.00 \text{ lei} - 3,901.35 \text{ lei}) \times 45.072\% = 759.75 \text{ lei}$$

e) determining the depreciation for the fourth year – N+3:

- the method of (balance) double decline:

$$Abdd = Vreg \times Rbdd = (5,587.00 \text{ lei} - 4,380.20 \text{ lei}) \times 40\% = 482.71 \text{ lei}$$

- the method of the balance reduction:

$$Abr = Vreg \times r = (5,587.00 \text{ lei} - 4,661.10 \text{ lei}) \times 45.072\% = 417.31 \text{ lei}$$

f) determining the depreciation for the fifth year – N+4:

- the method of (balance) double decline:

$$Abdd = Vreg \times Rbdd = (5,587.00 \text{ lei} - 4,862.92 \text{ lei}) \times 40\% = 289.63 \text{ lei}$$

- the method of the balance reduction:

$$Abr = Vreg \times r = (5,587.00 \text{ lei} - 5,078.42 \text{ lei}) \times 45.072\% = 229.22 \text{ lei.}$$

The plan (table) of depreciation in method of (balance) double decline is as follows:

**Plan (table) of depreciation – the method of (balance) double decline - BDD**

| Year | The input value | The depreciation value | The depreciation BDD | The cumulative depreciation BDD | The remaining value BDD |
|------|-----------------|------------------------|----------------------|---------------------------------|-------------------------|
| N    | 5.587,00        | 5.587,00               | 2.234,80             | 2.234,80                        | 3.352,20                |
| N+1  | 5.587,00        | 3.352,20               | 1.340,88             | 3.575,68                        | 2.011,32                |
| N+2  | 5.587,00        | 2.011,32               | 804,52               | 4.380,20                        | 1.206,79                |
| N+3  | 5.587,00        | 1.206,79               | 482,71               | 4.862,92                        | 724,07                  |
| N+4  | 5.587,00        | 724,07                 | 289,63               | 5.152,55                        | 434,45                  |

As can be seen when using method (balance) double declining depreciation accumulated at the end of the normal use / function (or useful life) is not equal to the input value of the tangible assets. It will remain an outstanding part of it which will be included in the costs to the corresponding residual value of restraint, in case:  $434.45 \text{ lei} - 279.35 \text{ lei} = 155.10 \text{ lei}$ .

The plan (table) of depreciation in the balance reduction method, while from the outset to consider in determining the annual rate of depreciation, the residual value different from zero, is as follows:

**The plan (table) of depreciation - balance reduction method - BR**

| Year | The input value | The depreciation value | The depreciation BR | The cumulative depreciation BR | The remaining value BR |
|------|-----------------|------------------------|---------------------|--------------------------------|------------------------|
| N    | 5,587.00        | 5,587.00               | 2,518.17            | 2,518.17                       | 3,068.82               |
| N+1  | 5,587.00        | 3,068.82               | 1,383.18            | 3,901.35                       | 1,685.64               |
| N+2  | 5,587.00        | 1,685.64               | 759.75              | 4,661.10                       | 925.89                 |
| N+3  | 5,587.00        | 925.89                 | 417.31              | 5,078.42                       | 508.57                 |
| N+4  | 5,587.00        | 508.57                 | 229.22              | 5,307.65                       | 279.35                 |

It is noted that in both cases the annual depreciation and accumulated present the same trend, with the minor differences. The existence of residual values and the complexity of calculations decrease, however, the comparative advantages over other methods of depreciation. In the presence of calculus, and in the context of legislation pass, the two versions are interesting.

Starting from the regressive or degressive methods with constant rate in Romania, accounting rules require the use of the method degressive in two variants: without **the moral wear influence AD<sub>1</sub>** and **AD<sub>2</sub>** with **the moral influence wear**. The second rule is used to calculate depreciation of tangible assets with a normal operating period of more than 5 years.

#### The calculation of depreciation in a degressive variant AD<sub>1</sub>

The degressive depreciation - AD<sub>1</sub> variant consists in multiplying the average annual linear rate with a **coefficient of fiscal** correction.

The determination of depreciation is made on the basis of such relations:

$$\text{The degressive quotes (rate)} = \text{The average linear quotes (rate)} \times \text{The tax coefficient}$$

or in the other words:

$$Ra_d = Ra_l \times C, \quad \text{where: } Ra_d = \text{rate of the degressive depreciation; } Ra_l = \text{rate of the linear depreciation; } C = \text{coefficient for multiplication regulated by law (the tax coefficient).}$$

The tax coefficient is determined according to the normal operation of the vehicle fixed. Thus in Romania, the accounting rules require the following factors:

- 1.5 for a DNF between [2 – 5 years];
- 2.0 for a DNF between (5 – 10 years);
- 2.5 for a DNF for more than 10 years.

$Va = \text{VNC}$  at the beginning of period, where: **Va** = the depreciation value; **VNC** = net book value.

$$Aa_d = Va \times Ra_d, \quad \text{where: } Aa_d = \text{the annual degressive depreciation.}$$

The calculation of the annuities degressive depreciation is done by applying the rate degressive input value (the value of depreciation) during the first year of normal life of operating - DNF, and in subsequent years to depreciate the remaining value also known as value accounting or reporting. The application is made until the operation resulting annual depreciation is equal to or less / than the annual depreciation determined by the ratio between the remaining value for depreciation and the number of remaining years of operation. From that year to pass linear depreciation calculation for the remaining value to be recovered, so the annual depreciation will be equal to the ratio calculated at the end of the previous year.

**Example** for calculation of depreciation in a degressive variant AD<sub>1</sub>: a means of transportation for people with a normal operating period of 8 years and a value of 300,000 lei entry, begin to be depreciation at 01 January 2007.

Determining the average annual linear rate:

$$\text{The linear rate} = \frac{100\%}{8 \text{ years}} = 12.50\%.$$

Determining the degressive rate:

$$\text{The degressive rate} = 12.5\% \times 2.0 = 25\%.$$

The plan (table) for depreciation in the degressive method, AD<sub>1</sub> variant is as follows:

**The plan (table) for depreciation in the degressive method, AD<sub>1</sub> variant**

| Year | The input value | The annuities depreciation        | Cumulative depreciation | The remaining value for depreciation |
|------|-----------------|-----------------------------------|-------------------------|--------------------------------------|
| 2007 | 300,000         | $300,000 \times 25\% = 75,000.00$ | 75,000.00               | 225,000.00                           |
| 2008 | 300,000         | $225,000 \times 25\% = 56,250.00$ | 131,250.00              | 168,750.00                           |
| 2009 | 300,000         | $168,750 \times 25\% = 42,188.00$ | 173,438.00              | 126,562.00                           |

|      |         |                                   |            |           |
|------|---------|-----------------------------------|------------|-----------|
| 2010 | 300,000 | $126,562 \times 25\% = 31,640.00$ | 205,078.00 | 94,922.00 |
| 2011 | 300,000 | $94,922 \times 25\% = 23,730.50$  | 228,808.50 | 71,191.50 |
| 2012 | 300,000 | $94,922 \times 25\% = 23,730.50$  | 252,539.00 | 47,461.00 |
| 2013 | 300,000 | $94,922 \times 25\% = 23,730.50$  | 276,269.50 | 23,730.50 |
| 2014 | 300,000 | $94,922 \times 25\% = 23,730.50$  | 300,000.00 | 0.00      |

Since 2011 (the fifth year of the normal operation) the annuities of depreciation calculated under the degressive annuities is equal to the calculated linear regime. Since that year it is passed to apply the method of linear depreciation for remaining the value and the period. Test: the remaining value for depreciation at the end of 2010 (the fourth year of DNF) is 94,922 lei.

Year 2011: the degressive depreciation:

$$94,922 \text{ lei} \times 25\% = 23,730.50 \text{ lei}$$

The linear depreciation:

- DNF remaining 4 years:

$$\text{The linear rate} = \frac{100\%}{4 \text{ years}} = 25\%$$

- the linear annuities:

$$94,922 \text{ lei} \times 25\% = 23,730.50 \text{ lei}$$

For the remaining four years (2011, 2012, 2013 and 2014), the depreciation is determined by linear method. In this way it is avoided the situation of not achieving full recovery of the depreciation in the normal operating time for recovery.

When the transition from the degressive depreciation method to the linear depreciation may be determined based on the following mathematical relationship<sup>469</sup>:

$$t_i = (d + 1) - \frac{100}{Cd}, \quad \text{where: } t_i - \text{when the transition from the degressive epreciation}$$

method to the linear depreciation; d – the normal period of operation and useful life; Cd – the degressive rate of depreciation

- in our case we have:

$$t_i = (8 + 1) - \frac{100}{25} = 5 \text{ of DNF which correspond to the 2011 calendar year.}$$

### The calculation of the degressive depreciation in a AD<sub>2</sub> variant:

In this version considering the wear and moral influence which act on fixed assets. The AD<sub>2</sub> allow recovery of the depreciation of fixed assets in a period less than the normal operating period set in the catalog for linear depreciation. The difference in the years that will not calculate depreciation is moral influence wear.

Applying this variation involves the following elements, in order:

a) duration of the use associated to the linear regime, recalculated according to the average annual rate of depreciation degressive:

$$DUR_{ec} = \frac{100}{Ra_d}, \quad \text{where: } DUR_{ec} = \text{the economic life of fixed, according to the wear morale in}$$

the linear duration of use within which the redemption of capital in fixed assets.

i. or using other notes, we have:

- the normal functioning – **D<sub>n</sub>**;

- duration of operation, associated to the linear regime, recalculated according to the rate of degressive depreciation - **C<sub>d</sub>**, which is obtained by reporting the percentage to 100% rate of degressive depreciation - **D<sub>r</sub>**:

469 Ristea Mihai (coordinator), Contabilitatea financiară a întreprinderii, Publishing, Universitară, Bucharest, 2005, p. 157.

$$Dr = \frac{100}{Cd}$$

b) duration of use in which is realised the integral depreciation:

$DUI = DNU - DUR_{ec}$ , where: **DNU** = the normal use period, irrespective of the moral influence of wear; **DUI** = length of time when the fixed cushion will be full depreciation of the wear moral influence

This term is split into two of its components as follows:

- the period of use as the degressive depreciation:

$$DUD = DUI - DUR_{ec} = DNU - DUR_{ec} - DUR_{ec} = DNU - 2 \times DUR_{ec}$$

DUD = the period of use in the moral influence of wear, which will use the degressive depreciation;

- the period of amortization under the linear depreciation:

$$DUL = DUI - DUD = DUI - DUI - DUR_{ec} = DUR_{ec}$$

DUL = the period of use, in conditions of moral wear for which depreciation is calculated linearly.

ii. or using other notes we have:

- the period of use in which is realised the full depreciation -  $D_i$ , which is calculated as the difference between the normal operation -  $D_n$  according to the catalogue and the operating system offer linear recalculated:

$$D_i = D_n - D_r$$

- the period of use in which the procedure applies the depreciation degressive -  $D_d$ , which is calculated:

$$D_d = D_i - D_r$$

- the period of use in which the procedure applies linear depreciation -  $D_1$ , which is calculated:

$$D_1 = D_i - D_d$$

c) the period when not more is practiced the depreciation, as a result of considering the moral wears:

$$DUM = DNU - DUI = DUR_{ec}$$

DUM = the period when is not more calculated the depreciation, as a result of considering the moral wear.

iii. or using other notes, we have:

- the period of use related morale wear, for which no depreciation is calculated -  $D_m$  to determine:

$$D_m = D_n - D_i$$

**Example** of calculating the depreciation in degressive AD2 variant: a purchase and put into service a generator of electricity in the following conditions: the cost of purchasing and putting into service 25,000 lei, the normal operating under Catalog is set at 15 years, date of service December 2006.

For applying the AD2 variant a method of degressive depreciation establish the following elements:

$D_n = 15$  year

$$Cd = \frac{100\%}{15 \text{ years}} \times 2.5 = 16.66\% \approx 16.70\%$$

$$Dr = \frac{100\%}{16.70\%} = 6 \text{ years}$$

$$D_i = 15 \text{ years} - 6 \text{ years} = 9 \text{ years}$$

$$D_d = 9 \text{ years} - 6 \text{ years} = 3 \text{ years}$$

$$D_1 = 9 \text{ years} - 3 \text{ years} = 6 \text{ years}$$

$$D_m = 15 \text{ years} - 9 \text{ years} = 6 \text{ years}$$

Of calculations result that the fixed depreciation in concordance with the method degressive depreciation, AD2 variant, will be for a period of 9 years, of which 3 years -degressive and 6 years - linear. The difference of 6 years (15 years - 9 years) is not calculated the depreciation as

the amount invested in the redeemable asset has been recovered. The plan of the depreciation in the degressive method, AD<sub>2</sub> variant is as follows:

**The plan of the depreciation in the degressive method, AD<sub>2</sub> variant**

| Year | The input value | The annuities depreciation      | Cumulative depreciation | The remaining value for depreciation |
|------|-----------------|---------------------------------|-------------------------|--------------------------------------|
| 2007 | 25,000          | $25,000 \times 16.70\% = 4,175$ | 4,175                   | 20,825                               |
| 2008 | 25,000          | $20,825 \times 16.70\% = 3,478$ | 7,653                   | 17,347                               |
| 2009 | 25,000          | $17,347 \times 16.70\% = 2,897$ | 10,550                  | 14,450                               |
| 2010 | 25,000          | $14,450 \times 16.70\% = 2,410$ | 12,960                  | 12,040                               |
| 2011 | 25,000          | $14,450 \times 16.70\% = 2,408$ | 15,368                  | 9,632                                |
| 2012 | 25,000          | $14,450 \times 16.70\% = 2,408$ | 17,776                  | 7,224                                |
| 2013 | 25,000          | $14,450 \times 16.70\% = 2,408$ | 20,184                  | 4,816                                |
| 2014 | 25,000          | $14,450 \times 16.70\% = 2,408$ | 22,592                  | 2,408                                |
| 2015 | 25,000          | $14,450 \times 16.70\% = 2,408$ | 25,000                  | 0                                    |
| 2016 | 25,000          |                                 |                         |                                      |
| 2017 | 25,000          |                                 |                         |                                      |
| 2018 | 25,000          |                                 |                         |                                      |
| 2019 | 25,000          |                                 |                         |                                      |
| 2020 | 25,000          |                                 |                         |                                      |
| 2021 | 25,000          |                                 |                         |                                      |

The full depreciation of the tangible assets is done in much less time than the normal operation; the decreasing trend of the annual depreciation is faster than the depreciation in AD<sub>1</sub> variant.

**3. The method of accelerated depreciation**

**The method of accelerated depreciation** is specific to the Romanian accounting, it is to calculate and include in the first year of operation in the operating costs of a depreciation of up to 50% of the entry of the redeemable assets. The annual depreciations for the operating years ahead are calculated at the remaining value for depreciation according to the method of linear depreciation.

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# PROCEDURES AND MECHANISMS FOR PREVENTION OF THE RISK OF FINANCIAL INSOLVENCY IN THE BANKING SYSTEM THROUGH THE USE OF RISK PROVISIONS

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*The paper addresses how the central bank put in place procedures and mechanisms for mandatory treatment of the risks the banking activity but also of the classification of loans and investments, the establishment, regulation and use of specific provisions for credit risk.*

*The rules involves in Bank insolvency are designed to warn of the time the financial crisis and potential or current to serve to avoid reaching the bank unable to achieve its contractual commitments.*

*Keywords: loans and investments, provisions for credit risk, insolvency*

*JEL codes: M41*

The insufficiency of the own funds, the excessive need for credits and the over indebtedness are at the origin of all bankruptcies. The financial crisis is as the insolvency a situation difficult to perceive and accept. The accounting information, the valuation or the audit reports and the attention from banks can offer criteria to appreciate the risk degree of the activity, and the moment of the alert situation can be appreciated. A list of warning indicators generally accepted and published by the Chambers of Commerce, the audit organisations, the rating agencies and based on them the enterprisers could analyse their financial situation alone. Generally the financial banking system is an important informational source for the company's difficulties, because it is built in such a way that it ensures itself and it ensures the banks for the insolvency risk of their clients. The warnings collected by the banks from the system are further sent to clients in difficulty for an eventual straightening. The scoring and the rating procedures (valuation of the bonity and of the risk degree) are important sources of an early warning. The country rating is essential for the enterprisers confidence into the state's economy, unfortunately there is no rating procedure for small and medium size companies in Romania yet, but they apply to big companies and to public institutes that either issue obligations or are quoted at the stock exchange and the scoring procedures are still in the intentional phase.

During the last four centuries the financial crisis has repeated themselves being generated by the same factors and going through the same stages and in the end there was a frozen of the bank credits. The 20th century has known a powerful crises when the American economy with a spectacular growth causes an increase of some stock exchange titles 5 times. As a result the investments into the economic growth have as bank result the increase of the bank interest. So the economy has slowed down its rhythm and the stock exchanges have slowed down their activity. The climax was the stock exchange collapse that generated an economic depression that spread through the entire economy.

The actual economic crisis originates into the year 2001 when the American banks granted credits with no warranty and with a high risk of non-reimbursement. The Bank increased their interest, the Americans could no longer pay for their houses, so the selling offer has increased

and the prices have gone down. The banks have begun to credit themselves or they have made loans from different funds, no one could retrieve their debts and the insurance companies had no more funds to pay the debts. According to Nouriel Roubini economy professor at Stern School of Business at New York University „The banking system of USA is in insolvency”. He estimates that the total losses registered by the financial institutions as a result of the reduction of the accounting assets is of US dollars 3,600 billions. The experts continue to point out the importance that the American government has to save the banks, Adam Posen ,senior fellow at Peterson Institute for International Economics, says that at the moment, the bank debts have over passed at lot the their assets. Little by little the crisis spreads over to Europe due to inter-connexion of the economy. The expert Cristian Ionescu estimates a powerful decline of the economic growth, an increase of the unemployment, a significant reduction of the consumption, a reduction of the production and the insolvency of the trade companies. It seems that constructions will suffer most due to frozen bank credits, a diminution of purchase demands, and the disappearance of small and medium investors. An increased number of bankruptcies are foreseen. (Cristian Ionescu, Romania – what to expect for the year 2009, Capital magazine 4th December 2008).

The companies with high risk businesses and especially those from the banking - financial field appeal more and more to business risk insurances and managerial liability insurances but also at payment risk provisions for some compensation following some litigation.

In Romania there are around 15,000 new insolvency cases each year. In October 2008 there were 11,525 registered insolvency fields compared to 6,054 from the same period of the year 2007. The most powerful growth of 2.5 has been registered at the constructing companies due to new crediting norms imposed by BNR that have as effect more expensive credits and implicit the reduce access to mortgage credits. The President of the National Union of Practitioners in Insolvency of Romania, Arin Stănescu has declared „Companies reach a state of insolvency from several reasons. The market’s collapse can be to blame, and there can be no blame of the management. We are in a crisis situation and there is no export to the European Union. There are several reasons, but, unfortunately most times companies reach an insolvency situation due to a faulty management”

More and more we debate about the procedures and mechanisms to prevent insolvency in the financial banking system because this sector too can be attacked by the financial crisis, and supplementary and consolidated supervision became a necessity, but also a major preoccupation of the European Community’s right.

In 1974, at Basel there was the first reunion of the Committee on Banking Supervision ( BCBS – Basel Committee on Banking Supervision ) composed out of the USA central banks’ representatives, and the representatives from, Canada, Japan, UK, Germany, France, Italy, Switzerland, Sweden, Holland, Belgium, Luxemburg. The regulations of this committee have been taken by the member states and the non-member ones and have been materialized into the Basel I Agreement which was brought up to date in 2003 and became Basel II Agreement which aims to establishing the component elements to determine necessary funds for banks, to regulate the capital demand for the risk of credit and market, to ensure the conditions for the internal control procedures and introducing the basic consolidated supervision of the credit institutes. At the same time it obliges banks to transparency being created to allow the banking system to have a better representation of the bank from the point of view of the total risk it is exposed of. Romanian banks must choose for the standard approach of the Basel II Agreement during the year 2007, but up to April 2007 the agreement has been applied just for banks and they have postponed it for the rest until 2008. The credit risk, the market risk and the operational one can be managed based on some internal organisational and functioning mechanisms of each credit institution. The National Bank of Romania separately issued regulations that impose these mechanisms with a purpose of efficient risk management, risk management procedures identified

as internal structure elements and own procedures of the credit institutes due to valuate risk, to notice on time about its existence or to cover it. These mechanisms and procedures are prevention ways of the insolvency of the financial institutions.

Banks can ensure themselves against own insolvency risk by adequating its capital to risk and by consolidated supervision of the regulated entities of the financial markets. The two principles are from the BNR Regulation and the CNVM regulation no 22 / 27 / 2006 published in the Official Monitor no.1035 from 28th December 2006 regarding the adequation of the capital of the credit institutions and the investment companies. This regulation defines the transactional portfolio and the own funds in compliance to which it sets the capital needs and imposes the consolidated supervision and the cooperation between the competent authorities. The financial institutions must have a level of the own funds that is equal or higher to the amount from the capital demand belonging to the transactional portfolio (it consists out of the entire positions of financial instruments and goods owned with a transactional intention of the institution or to cover other elements of the transactional portfolio or those who are free of any restrictive clauses regarding the possibility of their transaction) and the capital demands for the entire activity.

The credit institutes must take efficient administrative measures of the following significant risks:

Credit risk;

The risk resulting from the crediting relation between the credit institution and its debtor called credit risk of the match;

Operational risk;

Liquidation risk;

Risk existing after taking some measures to diminish the risks of an activity called residual risk;

Concentration risk;

Market risk;

Interest rate risk.

Ever since 2002 BNR applied compulsory treatment procedures and mechanisms of the banking activities and the Regulation no.5 / 2002 stipulates the classification method of the credits and placements (last variant being published in the Official Monitor no 189 from 2007) but also the set-up way, regulation and use of the specific credit risk provisions. This regulation applies to the resident credit institutions and the Romanian branches of the credit institutes of third party states and also the non-banking financial institutions. According to this regulation there is the following classification of the credits and placements: standard, sub-standard, under observation, doubtful and in loss. Their classification is done according to the number of days of payment delay, the economic potential and the financial solidarity, the measures taken for retrieving debts, the court decision to open a bankruptcy procedure.

From a financial performance point of view there are 5 categories as following:

-A category if the credited person is a credit institution;

-In different categories from A to E if the credited person is an individual;

-In different categories from A to E if the credited person is an economic entity outside the credit institutions.

The frequencies of determining the performance category coincides with the frequency financial situations are elaborated. The regulation establishes 2 stages in the procedure to determine the necessary provisions specific for the risk of credit. First of all the calculation base is determined for the specific risk provisions by deduction from exposing the credit institution or the non-banking institution towards a debtor of the warranties accepted to be taken into consideration, if there are no judicial procedures or if the credit amounts register a debt service of more than 90 days. The second stage represents the application of the provisioning percentage on the calculation base.

Constituting specific credit risk provisions is done by including into the expenses the amount representing the level needed for specific credit risk provisions. The regulations of these provisions refers to the modification of the existing level of the provisions for establishing the equality between the existing level and the needed one and it is realised by including into the expenses the amount representing the difference between the existing level in stock of the specific risk provisions and the level needed. Using specific risk provisions refers to annulling provisions and it is done by taking as income the amount representing the existing level as off of the specific risk provisions corresponding to the credits that are taken outside the balance sheet.

The loaners will constitute and regulate monthly the specific risk provisions and will take outside the balance sheet the amounts corresponding to a credit if the loaned person register a debt service higher than 360 days. The corresponding amounts will be registered after being taken out from the balance sheet in the category of losses.

A credit is classified according to the number of delay days compared to the due date, the economic potential and the financial solidarity of the economic credited entity and the measures taken to retrieve debts. The financial performance is appreciated after appreciating the liquidity, the solvability, the risk, and the profitability, the administration method of the entity, the warranties received, and the market's conditions.

According to the BNR norm no 12 from 15<sup>th</sup> December 2003 regarding the solvability supervision and the high exposure of the credit institutions, the rules regarding the bank's solvability are designated to warn about the potential financial crisis or about the actual one and it intended to prevent the bank to reach the impossibility fulfil contractual engagements. The solvability indicator is calculated depending on the own funds of the credit institution, as a proportion from the total assets and elements outside the balance sheet, net provisions, adjusted depending on risk factors. Own funds must not be under the minimum level of the initial capital for authorisation. In compliance to this elementary norm outside the balance sheet there are the engagements in favour of another bank, the titles sold with the re-buying option firmly expressed, doubtful engagements, warranties for clients and the titles given as warranty. In art 7 of the norm it is stipulated that the level of the solvability indicator can not be smaller than 12%, and if it goes below this value the credit institutes must take adequate measures.

As a solvability indicator, the monitoring and the control of high exposures (the engagement of a bank towards a sole debtor, no matter if it is effective or potential, registered outside the balance sheet or inside it including: credits, discounting a bill of exchange, investments in shares and other movable values, , analysed a bill of exchange, issued warranties, acidities opened or confirmed ) they are methods of early warning on the potential financial difficulties of the credit institutes, showing their depending degree towards a small number of business partners. BNR has a general supervision through the Supervision Direction to which the credit institution must report the solvability indicator and high exposures in the terms expressly stipulated.

The bank legislation allows BNR to apply special supervision measures when the solvability indicator goes below some limits. The special supervision means drastic limitation of the credit institution manager's attributions and independence, because there is a special committee that will control and supervise the institution's management in stead of the board of administration. The board of administration of BNR appoint a special administrator and the board of administration and the general assembly are being suspended. If the measures prove to be efficient that particular institution comes back to normal, otherwise BNR must ask for that bank's bankruptcy.

The credit institutions, based on Norm no 17 / 2003 must create control compartments and internal audit compartments to prevent the financial crisis risks. In order to have an efficient internal control system the credit institutes must identify and value the significant risks. The credit institutes must ensure the financial, operational and conformance date, adequate and complete. The information must be credible, complete, opportune, and accessible and provided

on a consequent basis. The credit institutions establish the type of risk they are ready to assume and the threshold when such a risk is considered significant. The performance of the internal audit activity follows several planned audit activities stages, examination and valuation of information, communication of the results, recommendation implementation.

In compliance with the “secrete” stipulations of the FMI agreement, BNR will have a higher involvement into initiating liquidation and insolvency procedures of the banks and the special administrator will get increased power in the case of the institutions entering an insolvency situation. The authority of the special administrator will be extended to be able to promptly implement a serial of restructuring measures, including purchasing and mergers, selling of assets, transfer of deposits, capital reduction for covering losses. BNR has the right to establish without waiting for the judges decision regarding the insolvency, when a credit institution can no longer reimburse a deposit and its payment is the competence of the Warranty Fund after modification of the legislation. The payment deadline will be reduced from 3 months with the possibility of prolongation to 9 months as it is for the moment, to 21 days from the BNR decision regarding the impossibility of reimbursing the deposit. The law will establish some provisions stipulated by the general legislation of the insolvency if they do not correspond to prompt implementation of the restructuring measures such as the immediate transfer of a substantial part of assets and capital reduction in order to cover losses. At the same time the law will offer protection to the special administrator of good faith in the activity, for which he has been mandated, and the measures from the special administration period will have a higher legal power and they cannot be suspended or modified based on other legal stipulations. (www.mediafax.ro )

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## MATERIALITY IN FINANCIAL AUDIT

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*One of the decisional factors of the opinion expressed in the report elaborated by the financial auditors is the „materiality”, element depending on the size of which is decided, at the end of the mission, taking into account a number of other aspects associated with the company life, whether or not is provided a true and fair view through the financial statements. It is recognized that the certification of financial statements by accredited accountant professionals provide a high level of credibility of the information contained in these financial reports. In order to assess to what extent the various beneficiaries of information from the financial statements may take correct decisions based on them, we shall clarify the role of materiality in conducting the financial audit.*

*Keywords: materiality, materiality by value, materiality by nature, materiality by context, significant account, significant system, reference base, preliminary value, revised value, audit opinion.*

*M: Business Administration and Business Economics; Marketing; Accounting.*

### **1. The concept of materiality in the audit**

The *materiality* is the measure determined by the auditor, over which every error, inaccuracy or omission affects the regularity and fairness of financial statements, more exactly, true and fair view of them.

The *Framework for the Preparation and Presentation of Financial Statements* of the International Accounting Standards Board define *materiality* in the following terms: „*Information is material if its omission or misstatement could influence the economic decisions of users taken on the basis of the financial statements. Materiality depends on the size of the item or error judged in the particular circumstances of its omission or misstatement*” (Paragraph 30).

As is known, „*the objective of an audit of financial statements is to enable the auditor to express an opinion whether the financial statements are prepared, in all material respects, in accordance with an applicable financial reporting framework*” (ISA 320 *Audit materiality*). In consequence, the auditor finds if the financial statements comply *in material respects* with that reporting framework. The assessment of what is material depends on the professional judgment (the materiality is subjective).

Do the appearance of errors, inaccuracies or omissions in the financial statements means that they are not providing a true and fair view? Depends on whether these omissions or misstatements lie or not below the materiality level. If errors, inaccuracies, omissions are below the materiality level can then say that the financial statements give a true and fair view of financial position, performance and other information relating to the activity of a company, and if the omissions or misstatements are not below the materiality level is not offered a true and fair view through the financial statements.

On how express the opinion, the auditor say that the financial statements „give a true and fair view” or „presents fairly in all material respects” the financial position, performance and changes in financial position of the company. He doesn't say that the financial statements give *true and fair view* which would mean an exact image without omissions or misstatements, but that the financial statements give *a true and fair view*, that is one of several possible. Why more true and fair view possible? There are several possible depending on the level at which the auditor

determines the materiality, namely, according to the level of omissions or misstatements accepted.

Materiality can be defined in three ways: by value, by nature and by context.

*Materiality by value* is assessed according to the value of omissions or misstatements that the auditor can accept in the financial statements. For example, it can be concluded that omissions or misstatements in excess of 1% of turnover are material.

*Materiality by nature* consists in assess the omissions or misstatements by their nature, having regard to specific issues about which it is known that users of financial statements will be interested in a greater extent, which requires a high degree of accuracy on some parts of the financial statements, and financial statements as a whole. Examples of material aspects by nature may be: the cash flows, special payments, financial losses etc.

*Materiality by context* is due to circumstances in which omissions or misstatements occur and, the effect they have on the key points of financial statements. Examples of material aspects by context can be: the transformation of a profit in a loss or vice versa, a changing trend in the financial statements in general or for some structures, artificial increase of the losses beyond the allowed limits, including the presentation of these in the financial statements.

In consequence, the financial statements may contain several types of omissions or misstatements: quantitative or value omissions or misstatements, quality omissions or misstatements (related to the nature of the information) and omissions or misstatements related to the context in which they appear.

## **2. Determining audit materiality**

The materiality is determined:

- *at the beginning of the mission*: establish a global materiality level (setting a preliminary value of materiality) is required to determine the significant accounts (those whose nature or value can contain significant risk of misstatement) and the significant systems (those which contain repetitive data), which means the elements will be given attention;

- *during the mission*: it is determined a materiality level for each section or segment of financial statements (account balances, classes of transactions, disclosures), more specifically, the preliminary value of materiality is allocated on sections or segments; these materiality levels are generally lower than global materiality level, taking account of possible total of misstatements noted; after this allocation, there are estimated the misstatements of each section or segment and then the total misstatements;

- *at the end of the mission*: the global materiality level (the preliminary or revised value of it) allows the auditor to determine whether the observed misstatements must be corrected or to be mentioned in the report where the company refuses to correct; at this stage it is compared the combined value of the misstatements with the preliminary or revised materiality level (significant misstatements, which weren't adjusted are summarized to decide if their total exceeds the materiality level).

In assessing materiality are used quantifiable terms, more exactly, relative values or absolute values, not unquantifiable terms (very low, low, medium, high).

As *basis of reference* in determining materiality, the audit minimal norms recommend total assets (before deduction of debts), turnover and profit before taxation. Other elements of reference that can be used are: equity, exploitation result, net result, the capacity of self-financing etc.

Starting from the values for the three criteria specified by the norms (total assets, turnover, profit before taxation), six factors are calculated by applying two percentage rates on each reference base. The percentages recommended by audit minimal norms to be applied to determine these factors are: 1% and 2% in total assets, 0.5% and 1% in turnover, 5% and 10% in profit before taxation. The auditor may consider, for example, if he only takes into account factors determine on the basis of value of total assets, that an error of less than 1% of total assets is insignificant, an

error greater than 2% of total assets is significant and a error between 1% and 2% is or not significant depending on professional judgment.

The audit minimal norms say that the audit materiality level should normally be in the interval indicated by the six factors. For example, if the current value of the total assets would be 120.000 RON, turnover of 210.000 RON and profit before taxation of 30.000 RON, the six factors determined would take the following values: 1.200, 2.400, 1.050, 2.100, 1.500 and 3.000. Given these information, materiality must place, as mentioned before, among the smallest and the biggest of the six key factors, namely, in the interval 1050 - 3000. But there may be situations where it is appropriate to establish the materiality level above or below the interval indicated, especially when the criteria themselves (the three proposed by normalized) is amended quickly from one year to another. However, the reasons for the choice of materiality level should be documented.

For selecting a suitable value as materiality is indicated that the auditor compare the values held by the three criteria in the current period and the previous financial year or earlier financial years. Generally, when choosing a value for the materiality, it's opting for one of the factors related to the criterion which known a less considerably development in time.

The materiality level settled above represent *the materiality level at the planning stage of the audit* and it may differ from *the materiality level at the reporting stage*. We have a situation like this, for example, when certain circumstances change, or the knowledge accumulated by the auditor as a result of completion of audit procedures change. Moreover, when planning the mission, the auditor can deliberate determine the level of materiality lower than which is intended to be used in evaluating the results of the audit, for example, to reduce the likelihood of existence of significant misstatements and provide a margin of safety when assessing the effect of misstatements found.

The materiality should be determined by reference to the latest available information and should be revised once there are known the figures for the current year (if there aren't known the figures for the current year, the auditor uses some possible estimations for the current year or a budget for the current year, and if estimations (budget) are not available, he use the figures from the previous year and/or previous years, which will then be revised). *In exceptional cases, when a further review has as result a significant reduction of „the level of the materiality at the audit planning stage”, may be necessary to extend audit tests already completed.*

The level of the materiality at the reporting stage is determined once the current financial statements are available and is most likely based on the potential adjustment of the results. Materiality at the reporting stage should be used to see if areas of disagreement or uncertainty in the financial statements are sufficiently significant so as to impose a qualified opinion where uncertainty or disagreement can not be resolved.

The materiality at the planning stage of the audit is used primarily to determine the sample size and the materiality at the reporting stage to determine whether necessary final adjustments of the financial statements.

There is an *inverse relationship* between materiality and the level of audit risk, namely: if the auditor considers that the audit risk is low, he establishes a higher materiality level; if the auditor considers that the audit risk is high, he establishes a lower materiality level.

The reduction of the materiality determines the decrease of the likelihood of undiscovered wrong information, but increased the timing and extent of audit procedures. Where the materiality is set at a very high level, it appears the risk that misstatements, though usually significant, not to be discovered.

Inverse relationship between materiality and audit risk is taken into account when determining the nature, timing and extent of audit procedures. If, after the planning of the audit, the auditor concludes that the materiality level is low, then the audit risk is increased and he will improve this situation: either reducing the assessed level of risk of significant misstatements, where this is



possible, and maintaining the reduced level by carrying out extended or additional tests of controls, or reducing the risk of undetection by modifying the nature, timing and extent of planned substantive procedures.

### **3. The objectives of determining the materiality and the consequences of a certain level of misstatements**

The audit materiality allows:

- *better orientation and planning the mission* by focusing on significant accounts and systems (this doesn't mean that the auditor won't check the other elements, but rather, that he will pay less attention to insignificant elements – the examination of all accounting records and ensuring fairness they are made, reflected, classified and comprised in the financial statements is, usually, impossible to achieve);
- *avoiding unnecessary work*, namely, the avoidance of some elements research which, although they would be distorted, the misstatements would be below the materiality level;
- *giving reasons for the expressed opinion*: fidelity does not mean exactness, and the financial statements give a true and fair view, even if they contain errors, if their aggregate value is less than materiality.

Let's see how the auditor *evaluates the uncorrected misstatements effect* in the financial statements. According to the International Standard on Auditing 320 *Audit materiality*, the total uncorrected misstatements include:

- specific misstatements identified and uncorrected by auditor, including the net effect of uncorrected misstatements identified during the audit engagement of previous periods; and
- the best estimate of the auditor of other misstatements which can not be specifically identified (i.e., projected errors).

There are three cases here:

- if the total of identified and uncorrected misstatements *isn't material*, is required that management correct the financial statements: if management agrees, it's expressed an unqualified opinion in the audit report; if management does not accept, but presents additional information in the explanatory notes to the financial statements, it's expressed an unqualified opinion in the audit report, but it's added an emphasis of matter paragraph (the disagreement with the management, being made references to explanatory notes);
- if the total of identified and uncorrected misstatements *approaching to the materiality level*, the auditor will assess whether it is likely that undetected misstatements with uncorrected misstatements exceed the materiality level: if it's not likely to overcome the materiality level and management not correct the financial statements, it's required presentation of additional explanations in the notes and it's expressed an unqualified opinion in the audit report, but it's added an emphasis of matter paragraph (the disagreement with the management, being made references to explanatory notes); if it's probable overcome materiality level, the auditor done this: ask management to correct the financial statements or attempts to reduce audit risk by extending audit procedures, express an opinion other than an unqualified one, or an unqualified one with an emphasis of matter paragraph, depending on circumstances;
- if the total uncorrected misstatements *is material* the auditor requires management to correct the financial statements or attempts to reduce audit risk by extending audit procedures and expresses, as a rule, an opinion other than an unqualified one.

Because the auditors can not examine, as a rule, all events and transactions reflected in financial statements, they see the need to accept a certain level of omissions or misstatements in the financial reports. Using professional judgment in determining the level of errors, inaccuracies or omissions accepted may lead to different opinions about the fidelity of information in the financial statements.

To avoid expressing an unqualified opinion with an emphasis of matter paragraph when the materiality is set at a high level is indicated to mention the materiality level in the published audit report or in the explanatory notes, at least in the situation it is expressed such an opinion. A mention like this is necessary since it is certified that the financial statements give a true and fair view, even if they contain omissions or misstatements if their aggregate value is less than materiality level.

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# THE MATHEMATICAL CONCEPT IN PROMOTING THE ACCOUNTANCY POWER KNOWLEDGE

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*The account, the balance-sheet and the trial balance are the main accounting models based on the mathematical concept. By means of calculation and accounting models, based on the mathematical concept, the accounting has always ensured the registration and valorization of information regarding the past company’s business. Moreover, the mathematical instrument is essential in financial analysis, during the extrapolation of the data provided by the accounting system regarding the past results for guidance of the future economic activities.*

*Key-words: mathematical concept, accounting history, accounting models, account, balance-sheet*

*Cod JEL: M*

## **1. Introduction**

The accountancy was along the time in an interdependent relationship with other scientific disciplines, including Mathematics. Explaining the variations of movement of values and their influence on economic means and resources, it can not be done if we deny or diminish the role of mathematical concept in the accounting calculation. Do not forget that the first writings about the art of keeping accounts in the double parts occurred in some Mathematical works; both the accountancy calculation and the mathematical calculation being regarded necessary for following the economical activity. Throughout its evolution, the accountancy was not limited to use Mathematics only to resolve technical accounting issues, but also to substantiate its basic principles. The early nineteenth century brings the first theoretical contributions, which raises the science of accountancy on a new level, because of the call of the authors to concepts and principles of Mathematics. Thus, in 1808, in Berlin, J.G.Maisner publishes the work „Die kurnst in drei Stunden ein Buchhalten zu werden”. This author uses algebraic formulas to demonstrate the movements of securities in a heritage and develops in a new conception the new matrix of Degrangés. In 1850, the German author G. Kurtzbauer states in his work called "Lehrbuch der Einfachen and doppelten Buchhaltung" the materialistic duplicity theory (Voina, 1947) and two years later, G.D.Augspurg develops this theory by explaining the essence of double accountancy by a mathematical equality of the balances of the two sets of accounts, which supplement each other. Materialistic theories, regardless the number of series accounts, consider the accounts as a means of calculation containing material, having the role to represent the movements and changes in successive values of assets and liabilities (unlike theories that supersede personalized accounts dependents relationships legal rights and obligations of the undertaking company).

## **2. Contribution to the scientific basis of accountancy**

An important contribution to the scientific basis of accountancy, through the materialist theory duplicity was brought by the Swiss F. Hügli and J.Fr.Schär. Hugli, representatives of the materialistic theory with two sets of accounts, explained the essence of double accountancy by the two sets of calculations: a series of calculations on the property and a series of calculations on equity (net assets). The two sets of accounts are:

- series of accounts of various property components: active (A) in the form of assets and liabilities and passive (P), in the form of debts;
- series of capital accounts (C), in which is kept a evidence of the clean assets: owned capital and results. The relation under Hügli developed the theory is:  $A - P = C$ . The two sets of accounts,

regarding the values that reflect in the debit and in the credit are in inverse relation (Calu, 2005). Namely, total assets accounts series receives flow of positive values and negative values in the credit but wealth clean accounts series receive credit for the positive and negative flow values.

Presented as a model, the theory of F. Hügli defines thus: (Lepadatu, 1904):

$$\begin{array}{c}
 \begin{array}{ccc}
 \text{D} & \text{Total assets} & \text{C} \\
 \hline
 & + & - \\
 & A & P \\
 \hline
 \end{array}
 & = &
 \begin{array}{ccc}
 \text{D} & \text{Clean assets} & \text{C} \\
 \hline
 & + P & - \\
 & & A \\
 \hline
 & \underbrace{\hspace{10em}} & \\
 & & + C \\
 \hline
 \end{array}
 \end{array}$$

$$A - P = C$$

The mathematical formulation of the accounting reasoning, in the materialistic duplicity conception, was realized by J.Fr.Schär (Schär, 1921). He distinguishes in the company's economy, the elements of wealth assets and liabilities, understanding by wealth through passive, the debts. The difference between the active substance, as a positive part and passive substance, as negative part, represents the clean property, and capital, expressed through the relation (otherwise similar in terms of mathematics, by the relation used by Hügli):  $A - P = C$

Schematically, the mathematical concept can be presented as follows (Rusu, 1977):

|   |  |  |                  |  |                 |
|---|--|--|------------------|--|-----------------|
| The basic forms of the operations presented as equals   |  | The same basic forms of the equality presented in the shape of account |                  |  |                 |
| The left side of the equality   | The right side of the equality               | Accounts of substance  |                  | Capital Accounts                         |                 |
|   |  | increase of flow   | credit reduction | flow reduction                           | credit increase |
|   |  | +a   | ...              | ...                                      | +a              |
|   |  | +b   | -b               | ...                                      | ...             |
| 1.Initial wealth status<br>2.Exchange operations: the increase in substance<br>3.Operations of success: an increase in a substance<br>4.Loss operations: the reduction of a substance | The initial state of the capital             | +c   | ...              | ...                                      | +c              |
|   | The decrease of a substance                  | ...  | -d               | -d                                       | ...             |
|   | The increase of the capital                  |  |                  |  |                 |
|   | The decrease of the capital                  |  |                  |  |                 |
| The debtor balance of the substance accounts  | The creditor balance of the capital accounts | $(a+b+c) - (b+d) = a+c-d$  |                  | $-d+(a+c) = a+c-d$                       |                 |
| The essence of the double accounting  |  | Clean fortune recorded by underlining the substance                    |                  | Clean fortune by calculating the capital |                 |

Viewed in terms of mathematical, the above relations represent some expressed equality that is nothing new. But, attributing mathematical symbols the meaning of economical equality explains the possible variations of movements of values and their influence on the balance sheet.

The relation  $ACTIVE = PASSIVE$  ( $A = P$ ) reflects the function of accounting calculation system, the essence of double accounting, namely that, through the accounts, are two series of calculations and synchronous parallel, one regarding the assets and liabilities and, in summary, determines the outcome of economic activity. The changes represent successive asset and the liabilities is done through the mathematical tool.

Important representatives who tried to establish basis of the scientific concept of accounting under mathematical accounts, considering it as a branch of mathematics, were Léautey E. and A. Guilbault. These authors develop their theory into a whole series of works among which: "La science des comptes mise à la portée de tous" appeared in 1889. Considering the accountancy as a science of rational coordination of the relative accounts to the products of labor and capital transformations it represents the scientific basis of accountancy: Mathematics and political economy. The account as a tool for calculating the accountancy is based on one or more arithmetic operations. In the diographic system, the operation of the accounts finds expression in the mathematical formulas and mathematical equalities. Cutting one or more accounts and credit, one or more accounts with equal amounts, in order to reflect the movements of values, perform a mathematical account equation. Through continued research of the general problems of the accounting theory, the two show that any operation of production or exchange is an equation of economic dimensions and the resolution starts from the known to the unknown. Another theory - the materialistic theory with three sets of accounts (tri-account) was developed by a number of authors such as: W.le Coutre, G. Obst, Fr.Leitner and recently by HAFinney.

The specific relation to this theory is (Rusu, 1991):  $ACTIVE = PASSIVE + EQUITY$

In his H.A.Finney's view, the movement of values held by the expression of economic or legal documents can be reflected with six legitimate accounts, expressed algebraically as follows:

$$\begin{array}{l}
 1) \quad +A = \begin{bmatrix} -A \\ +P \\ +C \end{bmatrix} \quad 2) \quad \begin{bmatrix} +A \\ -P \\ -C \end{bmatrix} = -A \\
 3) \quad \begin{bmatrix} -P \\ +A \\ -C \end{bmatrix} = +P \quad 4) \quad -P = \begin{bmatrix} +P \\ -A \\ +C \end{bmatrix} \\
 5) \quad \begin{bmatrix} +A \\ -P \end{bmatrix} = +C \quad 6) \quad -C = \begin{bmatrix} -A \\ +P \end{bmatrix}
 \end{array}$$

The author provided in his works a special place to the summary of accountancy calculations. In the knowledge process and foreseeable leadership a basis for the formulation of many of economic decisions are provide. From the Romanian authors who were among the advocates of scientific accountancy status, considering it even a branch of mathematical sciences, we mention I.C.Panțu. He sustains, in his work named "the science of accounts or accountancy in the double parts" (Panțu, 1907), that the purpose of the accountancy is "to show the principles on which this mathematical science is based on, applied to the commercial life". In the same work, I.C. Panțu wrote: "The accountancy begins with an equation, it continues through operations related to the made operations and ends ... again by an equation".

The mathematical tools used by accountants are not limited to expressing only movements occurring at the level of accounts or balance sheet. It is used in the calculation of costs, in

amortization operations and in the analysis of accounting information, to support the decision-making process. For example, when calculating the costs, we use different mathematical procedures for assigning costs to the level of production, orders, etc.

### 3. Model and comparative analysis in accountancy

Comparative analysis conducted on the basis of accountancy is also a very useful calculation. By comparing the incomes, expenses, financial results, products profitability, etc. and by determining the absolute or relative variations from one period of management to another or from one enterprise to another we can follow the evolution of the company's business and can guide scientifically to future actions. A useful tool in obtaining the information foreseeable is the modeling. By definition, the model is a set of concepts and relations that provide results and forecasts. Drawing a background of results and predicting future outcomes (the phenomenon or process) constitute the main problem of designing a model. Estimates provided by a model should be compared with reality, which may lead to new forms of it. There can therefore continue to improve the models. In representation of an economic phenomenon (process) through a mathematical model it is necessary to highlight the factors of influence. Taking into account, as a result of non-knowledge studied phenomenon, of some unessential factors, the omission of others may lead to a model error, having no correlation with the reality. Modeling also allows the review by analogy a logical consistency of the theory and scientific assumptions released during analysis of the studied phenomenon. Modeling the accountancy, as an instrument of knowledge of the reality of motion values, helps to verify the accuracy of thinking, this leads to foundation of decisions.

#### **Accounting models can be grouped after several criteria, including (Paraschivescu, 1999) as follows:**

- after their function, so-called *Heuristic models*, which have a contrary purpose and relation reflection of the phenomenon investigated and *models of leadership*, which are directly related to the needs of the decision, being intended to answer certain issues. The latter type of model simplifies connections real phenomena (processes), reflected in accountancy, and seeking combinations achieving certain operations based on the criteria selected by the researcher. The Models of management relieve the process of guiding an activity and allow choosing the optimal variant of a lot of solutions. We include in the latter category of models from the production cost, the optimization of costs, sales and the forecast one.

- after their purpose, we can talk about *accounting descriptive models*, which describe only, without explanation, the driven response system (enterprise) to various stimuli (e.g. the supply of accountancy, the production, the sale, viewed separately) and analytical accounting models, which try to describe the system by causal relations, aiming at adjusting the system so driven by comparing results with objectives. An example is the cybernetic model. The usage of these models is effective whereas the successive interventions, are realized monitoring the economic system. From this point of view it bears the name of self-controlled models.

- after the coverage patterns we meet *accountancy at microeconomic and macroeconomic level*. Any of these types of models present a dual meaning. On the one hand, they constitute an important tool of knowledge, and on the other hand, they integrate in all governance instruments. The account was the first model used in accountancy, having for the science accountancy, the same meaning that a figure carries for mathematical science. The account was the base of various economic calculations and led to the crystallization of fundamental concepts in accountancy. With the help of accounts of all operations are performed in the economic company, thus ensuring storage of information concerning past and present activities.

The verification balance represents another accountancy model that meets control function. Architecture of the verification balance has as base the balance:  $ACTIVE = PASSIVE$ . The

synthetic control of each account balance is done with the help of the analytical balance. Between the analytical balances opened for each account balance and synthetic balance should be a full concordance. In this way, the initial balance, turnover and flow, as well as the credit and the final balance of the analytical balance should correspond to the amounts listed in the summary balanced. The bonds of dependency and subordination between analytic accounts can be expressed by mathematical relations as follows:

- in each analytical account that operate by the rule of active accounts:

$$\begin{aligned} v &= \text{sid} \\ v'1 + v'2 + v'3 + \dots + v'n &= \text{mda} \\ v''1 + v''2 + v''3 + \dots + v''n &= \text{mca} \\ \text{sid} + \text{mda} - \text{mca} &= \text{sfd} \end{aligned}$$

(v'i și v''i represent the debited and credited amounts of the certain account)

Similarly, for the operating accounts after the passive accounts:

$$\begin{aligned} u &= \text{sic} \\ u'1 + u'2 + u'3 + \dots + u'n &= \text{mdp} \\ u''1 + u''2 + u''3 + \dots + u''n &= \text{mcp} \\ \text{sic} - \text{mdp} + \text{mcp} &= \text{sfc} \end{aligned}$$

- the total of analytical subordinated accounts to a synthetic account must equal the total of synthetic account, both for the debit and credit. Thus, the accounting balance relationships can be written:

For the active accounts:

$$\begin{aligned} \sum_{i=1}^n \text{sid}_i &= \text{Sid} & \sum_{i=1}^n \text{mda}_i &= \text{Mda} \\ \sum_{i=1}^n \text{mca}_i &= \text{Mca} & \sum_{i=1}^n \text{sfd}_i &= \text{Sfd} \end{aligned}$$

For the passive accounts:

$$\begin{aligned} \sum_{j=1}^m \text{sic}_j &= \text{Sic} & \sum_{j=1}^m \text{mdp}_j &= \text{Mdp} \\ \sum_{j=1}^m \text{mcp}_j &= \text{Mcp} & \sum_{j=1}^m \text{sfc}_j &= \text{Sfc} \end{aligned}$$

- in the synthetic verification balance it is necessary to achieve the following accountancy balance relations:

$$\begin{aligned} \sum_{i=1}^n \text{Sid}_i &= \sum_{j=1}^m \text{Sic}_j \\ \sum_{i=1}^n \text{Mda}_i + \sum_{j=1}^m \text{Mdp}_j &= \sum_{i=1}^n \text{Mca}_i + \sum_{j=1}^m \text{Mcp}_j \\ \sum_{i=1}^n \text{Sfd}_i &= \sum_{j=1}^m \text{Sfc}_j \end{aligned}$$

Another accountancy model, particularly important is the balance sheet, designed in present on the equilibrium relation:

**ACTIVE – DEBTS =EQUITY**

The balance sheet presents in a synthetic and suggestive manner the financial situation at a certain time (usually at the end of the financial year). By comparing the data from the balance with the forecast data and analysis we can determine the deviations analysis and there can be taken measures to correct them if necessary. By comparing the data from prepared balance sheets at the end of successive periods of time, we may examine the evolution of the financial situation, the development of indicators calculated on the balance sheet, up to such trends and, by extrapolation, preparing forecasts for the next periods. The analysis of the balance sheet must be completed with the profit and loss account analysis, if possible, with the cash flow situations. The latter represents two other accountancy models.

In the results extrapolation stage, based on the provided data by accountancy, in order to guide future economic activity, the mathematical tool is indispensable. This is because it is necessary first to find the mathematical function that best approximates the trend of previous results and further interpretation, taking into account possible changes in next periods. Currently, the accountants - economists have different applications that allow the modeling of mathematical dependencies between different variables that influence the evolution of the analyzed system.

#### **4. Conclusions**

In conclusion, we can say that the use of rules and mathematical principles accompanied the accountancy along the long history. The mathematical concept established rules of operation of the account balance verification and balance. Mathematical relations underlying the accountancy principles and represents in fact the essence of accountancy that was underlined in time, in various works in this field. Due to the mathematical item, the accountancy is not only a science of quantity but also a science of equivalence of the relations and of the order of the patrimony. An important role of the instrument is the mathematical process of valorization of accounting information in the financial analysis calculations. This role was emphasized as the importance of prospective accounting side increased, as a tool to support the decision making process.

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## POSSIBILITIES OF USAGE THE COST INFORMATION BY THE MANAGEMENT

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*The cost information should be considered tools for the creation of value at a lower cost. Also, this approach shows the ability of costs informational system to provide relevant information that serves several purposes, namely: their usage in financial accounting (cost of acquisition, cost of production or of stock processing, full cost, outlet cost and period cost); the usage in making decisions (opportunity cost, relevant cost, irreversible cost); estimating (measurement) and performance management (hidden costs, controllable costs, externalized costs).*

**Keywords:** *cost, accounting management, fixed cost, variable cost*

**Cod JEL:** *M*

### **1.Information provided by the cost information system**

Making decisions is a difficult task, the costs representing a decisional basic factor. In the opinion of R.S. Kaplan and A.A. Atkinson teachers, the cost information is important for managers of at least three reasons: regarding the cost we decide the purchase, manufacture or abandonment of a product and the nature of the relationships with customers it is affected; the costs can provide a basis for substantiation of prices; by cost analysis we identify the needs of improving the products, the design or the production process.

| <b><i>Information provided by the informational costs system</i></b> | <b><i>Possible usages of the information by the management</i></b>  |
|--|---|
| The unit cost of a product, work or service                          | Decisions concerning the fixing of the sales price, production planning and costs control;<br>Decisions on purchasing, manufacturing or abandonment of a product;<br>Decisions related to the products portfolio management(the substitution, the redesign and products removal);<br>The estimation and management performance. |
| The cost of a section operation, of a department, of a factory etc.  | Decisions regarding the organizational structure, improving the production process and the activities control.  |
| Wage costs regarding for a lot of products or of a period            | Planning production, wage policy.   |
| The volume of rejects and technological waste                        | Production planning, the control of the material costs.   |
| The costs behavior depending on the activity level                   | Estimating the profit, decision of Make-or-buy type (outsourcing) and cost control;<br>Decisions regarding the ways to increase the company's performance.  |

Making decisions is a difficult task; the costs are a basic factor of the decision. For this are calculated and used several categories of costs. Therefore, to reach a decision, there are always important four types of information on costs, namely:

### **What costs are influenced by the decision to be taken?**

In the moment of making decisions, should be considered only costs that change depending on the chosen solution, on its time interval. Not all costs are the basis of making decisions, but only the relevant ones. A cost is relevant if issued on fitting time and its satisfactory precision. So, the relevant cost, called and the forecast cost is the additional cost trained by the making the decision. A cost that is represented in an alternative but is missing from the other alternatives is a differential cost. The differential method is essential in the making the decision and can be used both for decision making on a short term and long term. The costs that can be avoided and affected are relevant to the decision. An avoidable cost that is the one that can be entirely or partly removed as a result of a choice of several alternatives, in developing the decision

There are, however, and unavoidable costs, also indifferent costs, or non-relevant ones, which do not differ from one alternative to another. They are past historical costs, about which no longer can act on the basis of the future decisions. In special literature there were and also are concerns to the use of an appropriate terminology in the field of relevant costs.

### **From this point of view, there can be distinguished the following costs categories:**

- **reversible cost and irreversible cost.** A cost is irreversible when we can not reverse upon the decision of the employment, whatever solution is adopted, otherwise it will be, therefore, reversible. Thus, the decision to install a machine is irreversible, while the decision to work overtime is reversible;

- **controlled cost and given cost.** A cost is controllable when the governor has total power over all appearance of this cost (e.g., hiring an employee). The administrated cost appears when it is imposed to the decider outside the company (e.g., social costs, fiscal costs and taxes, royalties). The controllable cost increases shares, primarily due to salary expenses;

- **determined and discretionary costs.** A cost is determined when there is a clear relationship between it and the produced effect (e.g., the consumption of primary materials which is based on the obtained production). A cost is discretionary when the relationship with the outcome is more "discreet", so it will be hard to find a correlation between the administrative tasks and the use of office supplies. Unlike the determined costs, also called *mandatory costs* (due to contractual obligations, company policies, etc.), the discretionary costs may be easily changed (advertisings, the sponsorship volume);

- **visible costs and hidden costs.** A hidden cost is already generated (being a passed cost) and it can not be avoided, regardless the action that the manager decides to carry out. A cost is visible when the governor might know the actual expenses that were included in it;

- **internal and external costs.** External costs (outsourced) are costs that are transferred to third parties - for example: environmental costs with social character, they are not covered (fully) by the economical pollutant operator.

Opposing to this are the internal costs, consisting of expenses related to production activity of the company.

From this brief overview of costs, it results that the governor's decision is limited to all internal controlled costs. It will manifest itself strongly on visible, reversible and determined costs. On the contrary, the governor only influences very little the administrated and outsourced costs. The power of the governor on costs is therefore limited. The figure below attempts to summarize the inherent costs in any entity, taken or not into account by the analytical accounts.

Note that although the irreversible costs should not be taken into account when the decision making because you can not return on them, it can not be underestimate upon the importance of

the opportunity cost, or in other words, what can be achieved in the future (if the products can not be resold, their opportunity cost is zero).

## 2. Manager and costs

**The cost of opportunity or of choice** represents the appreciation which an economic entity offers to the changes that are given up when making the choice. It is the loss resulting from the waivers involved in any option. The managers try, ever more, to integrate the opportunity costs into the economical analysis of management problems; it is mainly social *opportunity costs*, such as the appearance of a conflict or social climate degradation as sources of loss. The opportunity cost is analyzed, more than a likely waste of resources, rather than a proper cost.

**By identifying the avoidable cost (differential)** of a specific taken decision, the manager deals with analysis costs, through the following steps:

- total costs associated with each considered alternative;
- the disposal attached costs;
- eliminating the costs that do not differ between alternatives;
- the development of the decision on the remaining costs.

*These are avoidable or differential costs.* We point out that understanding the behavior of costs, *the marginal contribution* (equal size to the difference between the turnover and the marginal cost) and of marginal calculation principles, generally are a challenge for any manager who wants a relevant decision. The marginal cost arose from the need to explain the reaction cost changes with the physical production and prices volume it is also known as "*additional cost*" or "*differential cost*". Especially in a competitive environment *for decision making it is considered a relevant marginal cost.*

### **What it is waived if a solution is chosen instead of another (to decide means to waive)?**

Making decisions involves choosing a solution to the detriment of another. The professor Henri Bouquin says that "every decision is a sacrifice and sacrifice is any opportunity cost. The opportunity cost is thus the sacrifice in terms that you bear an economic issue which proceed to a choice from several possible actions".

### **How will behave the costs that rise options considered after making the decision? What is the logic, what laws will they follow?**

To choose a solution, the costs behavior must be tested in each case. Knowing the behavior of costs in the theoretical and practical complexity is a basic tool to reach managers and it is used to increase its economic performance.

The term "behavior of the cost" relates to the extent the costs of an economic entity responding to a change in the activities taking place in that entity. An understanding of the behavior of cost structures and ability to provide the cost in a given situation is essential for planning, decision making and control of activities and requires an understanding of relationships entries - exits, among the resources used and results obtained. It can be said that an increase in physical volume of production causes an increase in the total cost. In a contraction, the volume of production to a certain extent, the costs decrease to a lesser extent than that in which they grew up when the volume of production has increased in that proportion. It is very important, the classification of costs in the fixed and variable. The variable costs allow the calculation of *a margin over variable cost* for each product by deducting the variable cost of turnover of the company. The size margin on the cost variable is a valuable information that a manager can use to support the decision to offer different products or not, and to increase sales to the cost and suppress them (quit) the unprofitable ones (for which the margin of the variable cost is negative).

### **How to intervene on costs?**

The ability to operate on a cost means to influence the causes of releasing the process (activities) they consume in the organization, the needs which the organization and capacity costs that it has.

We couldn't be able to act on future costs decided in the past (on the irreversible ones). The increasing of volume costs reduces the irreversible field of action of the governor. For this, costs must be identified before they exist, from the moment of decision that will be released. Thus, it was observed that in certain productive sectors, *the moment they can be operated on costs is the conception of the product*. Once operated, the production process, *the costs will be incurred* (costs determined by a prior decision), without being able to operate on them. These costs can be affected only by major changes in firms' policies. Therefore, all these considerations have led to the application of methods of calculation of costs such as Target Costing and Kaizen Costing. The information of a type cost should be considered tools for the creation of value at a lower cost. Also, this approach shows the ability of information system costs to provide relevant information that serves for several purposes, namely:

- *their use in financial accountancy* (cost of acquisition, cost of production or processing of stock, full cost, outlet cost and cost of the period of time);
- *the usage in making decisions* (opportunity cost, relevant cost, cost irreversible);
- *the assessment* (measurement) and performance management (hidden costs, controllable costs, externalized costs).

Most of these costs affect the quality of sold products, the company's image and therefore its performance. As a result, they are particularly important for managers in making decisions.

### **3. The Costs Relevancy**

One of the main objectives of the accountancy management is the calculation of costs. However, some authors, especially those from the Anglo-Saxon area, see *the cost accounting* as part of managerial accounting (logical, since the cost interests primarily the company's management). In this optic, the cost accountancy is built into an interface between the financial accountancy and management accountancy. At micro level, the firm's primary objective is to minimize costs and maximize profits. Therefore, periodic comparison of actual costs with the provided ones will allow deviations from the budget and make corrective decisions. In this context, to control costs becomes a primarily problem for manager and other responsible factors in a company. Management accountancy as a tool of a management control constitutes in an information system. The processing results of such a system, to be effective, must correspond to the objectives and needs expressed by its users. Therefore, the information system will provide cost-makers "best cost", the most appropriate management problems to be solved. The best price for a company is not necessarily the lowest, but that which occurs in the place and time and provides the user the desired accuracy. In this subjective situation, we may speak of *the relevance of costs*, which vary from one company to another; the method can determine the optimal choice of the calculation. Relevant costs relate to future costs on which to action and can be used in making decisions. In the foreign special literature, the relevance of costs is analyzed taking into account the *four criteria of assessment*, namely: the wage and prices development; the business activity level; the operation efficiency; the identification of responsibilities.

The concept of "relevance" differs from the cost "accuracy". The accuracy refers to the validity of arithmetic calculations that allowed the determination of costs. The "accuracy" is, however, a cost. The degree of accuracy of calculations can sometimes be obtained only with the "price" of prohibitive access costs to information in relation to the profit brought by the accuracy of calculations. In this context, it is better to determine a cost in the proper time than a strict exact cost, but late one. The continuing globalization of markets and rapid technological changes in production has created a fierce competition worldwide. To achieve any competitive advantage, operational entities in a society must adopt strategies that integrate environmental and market opportunities, and technology advantages in the most efficient way. In conditions of globalization, the management control, as an informational system, and the accounting management information system that specifically may be the most concerned regarding the

adaptation to new requirements involved in this process, especially that are subdued to permanent changes to keep updated to technological and organizational changes that have occurred in recent years. The gap that is currently in development of management accounting and production systems need to explain a model of management accounting more relevant. **The informational system accounting management tends, meantime, to become** “an informational system of the enterprise’s performances.” In the enterprise management, the performance measures "the success" (result) obtained through qualitative indicators and the quantitative ones. The performance is contributing to the overall outcome. Considering that the performances level is the result of the management decisions, the manager of the company needs a COST-VOLUME-PROFIT system of assessment. This system should allow the understanding of the past and the present, but also to combine the present into the future. The users of the information provided by management accounting require more and more from this system. The flexibility and adaptability of the information specific system it seems that became the factor has of the most important quality in its development. In contrast to traditional systems, tending to a mass production (with uniform and standardized products), and with a specialized personnel, there are now new systems from Japanese management principles, founded mainly on the concepts of adaptability and flexibility.

The information provided by management accountancy is the one that provides the feedback of economic processes, offering support and self-control. In the current conditions, the financial accountancy provides only passed information period (or passed periods), while management accountancy can provide both the current period and the future period.

A real revolution was in the calculation of costs, especially due to the common concerns of specialists in accounting and calculation costs domain with the marketing costs and not only with them. The explosion of advanced technology resulted, in our case, in the advanced production technology (Advanced Manufacturing Technology - AMT) revolutionizing the way products are made, in particular, to those who are called " world producers " (WCM - World-Class Manufacturers). For those with a rich experience in the market economy, the concept of advanced manufacturing technology (AMT), which includes automated production technology, production design and computer-aided (CAD - Computer-Aided Design, CAM - Computer Aided Manufacture) systems flexible manufacturing (FMS - Flexible Manufacturing Systems), robotics, control over quality (TQC - Total Quality Control), total quality management (Total Quality Management), and new elements of production management systems that include computerized planning requirements supply (MRP - Materials Requirement Planning), Just-In-Time (JIT = just in time) and others, are concepts which belong to the whole company, from the employee to top manager, meaning success or failure of the market, and its future existence or the bankruptcy.

#### **4. Conclusions**

All concepts are listed, however, directly related to the field and calculation costs. The arguments made by a large number of consultants, academics, industrialists and others shows that the traditional calculation of costs and measuring results are inadequate and unprofitable for companies using the AMT. Fundamentals for AMT concepts are outlined; one can examine the claimed deficiencies of traditional approaches to the methods of calculation of costs, when applied to companies that use the AMT. These deficiencies are so great that some experts said that a large part of the traditional methods of cost calculation is based on incorrect principles and realize losses of information, especially when applied in an AMT environment.

**The main issues raised in this case are the following:**

- **Costs absorption:** traditional methods of calculation of costs of production processes use for the allocation of indirect costs based on absorption coefficients dependent on the volume of production (hours or direct labor hours per car). These processes are considered unsuitable in a AMT environment;

- **Cost behavior:** managerial accounting "traditional" grade fixed and variable costs, depending on their dependence from the production volume. In an AMT environment, a large part of indirect costs are dependent on a number of factors, others than production volume. Traditionally, many changes in the long term costs have been widely ignored. In the AMT environment, wage costs are decreasing in proportion to total costs, and the treatment approach and indirect costs become more important;
- **Standard costs:** standard costs method and deviations analysis of costs is widely used in traditional control techniques, but their use in the AMT and JIT environment is questioned. The hesitation is determined as a general philosophy and approach detailed standard cost method. The idea of performance is, in this case, dependent on the achievement of pre-settled standards, so contrary to the philosophy of continuous improvement from AMT.
- **Financial measures in the short term:** many of the information provided by traditional management accountancy provide data for financial evaluating performances in the short term (costs, efficiency, etc.). All these are obtained, however, at the end of the management period and are little used. In contrast, the AMT focuses on what is available quickly, the objective being the improvement effect of investments, which is achieved by increasing revenues (through quality, delivery, etc.), reducing costs and investment demand.
- **Methods of costs calculation:** the traditional cost accounting uses sequential tracking of staple materials in various stages of manufacture, through the running production (WIP - Work-In-Progress) until the stage of the finished product. Using the JIT system becomes unnecessary, costly and non-informative, as factory production flow is still ongoing with stocks near zero and very few commands. Also, the JIT focuses first on the output and then on the previous operations.

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# **FLEXIBLE BUDGETS - A CHALLENGE FOR ROMANIAN COMPANIES IN THE FIELD OF TRANSPORTATION AND DISTRIBUTION OF THERMAL ENERGY**

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*This paper presents the significance of the budgetary system for guiding the strategic planning of the activity of an economic agent, the control of performances obtained in a period of time by profit centers, and the economic unit as a whole. Given the role of budgets in the decision making process of companies and that the economic environment in which they operate is constantly changing, the use of flexible budgets would reflect better the performance obtained, yet another issue to be discussed in the present paper.*

*Keywords: prediction, flexible budget, transportation and distribution of thermal energy*

*JEL classification: M4 Accounting*

## **1. The importance and the contribution of budgeting of transport costs and distribution of thermal energy to the increase of the company's economic efficiency**

To obtain performance in conducting the business of transportation and distribution of thermal energy, managers of responsibility centers are expected to know the cost and expenses arising thereof. The expenses and cost of which they form, is a barometer that gives information on the conditions in which that activity takes place, which enables management to track, analyzing and targeting processes to a more rational use of economic means and resources, which requires planning and developing budgets.

By planning, the management formulates their vision for the future. Planning is a prospective action that introduces future in the present actions and which will mark the will of the trader to act on the future.

This represents an amount of data on future developments incorporated into plans.

Typically the planning is backed-up by:

- a strategic plan that deals with the overall long-term objectives (5 to 10 years);
- an operational plan which details the overall objectives for the medium term (2-5 years);
- a series of budgets which are short-term forecasts (annual and quarterly detailed on months, weeks etc.).

Budgets have been constructed to help manage the various functions of the economic unit in financial and human terms, serving in management of the respective structure by motivating and making employees more responsible.

A budget is a detailed plan expressed in quantitative units, which show how a company will obtain and use resources in a period of time. The registration in budgets of data resulting from the forecasting represents the budgeting.

The budgetary process involves:

- *Planning*, as mentioned above. Forecasting is the key to success in business, and the budget impulses to do so.

- *Authority and responsibility*. Budgeting involves specifying the responsibilities of each manager receiving a budget.

- *Communication*. The budgetary process includes all levels of management, therefore, it is an important way of communication between management at a higher level and one in an average level in terms of objectives and their implementation, and when the budget is completed, approved plans are communicated to all personnel involved.

- *Control*. It involves comparing the results with the forecasted ones and reporting irregularities.

- *Motivation*. Management performance is measured according to the degree of meeting the targets set out in budgets; therefore the managers are motivated to engage in their development and establishment.

Budgeting, recording and calculating the costs of production generated by the supply of thermal energy per cost centers promote the principle of responsibility in domestic economic management.

The calculation object in the report to determine the actual cost is the activities of transportation and distribution, and within them, gigacalorie thus, the management accounting and cost calculation are organized on responsibility centers, namely, on cost centers.

Depending on the establishment, cost centers consist of two types: operational and functional.

Operational cost centers run operations related to technological activities of transportation and distribution of thermal energy, so it is an activity that can be quantitatively and qualitatively measured accurately.

Functional cost centers are those which run activities related to the organization, management and administration. The activity of functional cost centers may not always be measured quantitatively, sometimes it can be appreciated only qualitative, and the calculating of the costs generated by them is not identified on gigacalorie, as in the case of operational centers.

Regarding the administrative segment, detailing cost centers per services provides better information on costs of general administration, which increases the efficiency of budgetary control and decision-making by managers.

Budgeting costs per cost centers should so organized as to ensure their demarcation and location as accurately as possible during the preparation of pre-calculations, revenue and expenditure budget, tracking deviations of actual expenditure from the budgetary ones and more accurate calculation of effective cost for transportation and distribution of thermal energy.

Tracking the economic activity of a company per cost centers is highly significant provided that the normal operation of such a complex economic organism implies a precise determination of the place, role and duties incumbent on each compartment in the total budgeted objectives.

The budget method is considered by practitioners as one which helps the most the informational and decision-making process in activities which require a profound control of correlations that lead to profitability.

Budget can be defined generally as a “forecast of all revenue and expenditure”. Thus, the budget is:

- *allocation of objectives and means*;

A policy to a certain level defined by set purposes and means. The link between goals and means is very close, because such goals can be achieved only through the use of appropriate means.

- *a micro-economic balance*;

The budget is the challenge of a range of revenue and a series of expenses which must be in a permanent balance to ensure the financial resources needed to achieve forecasted goals and actions for a period of management.



The balance to be achieved cannot be obtained always at the level of a financial year, because the investment programs are carried out over several years, therefore the financial balance depends on dynamics, the development degree and success of the company.

- *allocation of responsibilities*;

Each leader of a center of responsibility, when purposes and means established in their charge, will be assigned with a corresponding responsibility. Achieving fewer objectives than the ones assigned will not take place using more means than established.

- a reflection of economic development;

The revenue and expenditure budget reflects the economic evolution of the company, providing information on business changes, price changes and economic situation.

- an economic model;

A model is a simplified representation of a whole. At economic level, it is also a mathematical and accounting model, in other words, is a schematic representation of a realities expressed monetary. The management of the activity for the transportation and distribution of thermal energy through coordination, monitoring and regulation aims at achieving the optimum pre-established parameters. The management assumes, in essence, the ability to decide. A decision is correctly directed only on the basis of the information arising from the analysis of technical, organizational and economic factors, effects and causes which they generate.

The budget fulfills several functions, such as:

- *prediction function* - based on the fact that the budget is the financial estimation of levels of resources, funds and expenditures for all activities taking place within a company;

- *control function* - is when expenses are performed and calculated, revenue is obtained as results of its own activities and needed funds are established. This function is exercised by tracking and analyzing the implementation of the budget, which provides: knowing how to implement the tasks set, the deviations, determining the causes that have generated these deviations; compartments which must act to improve the business etc.;

- *ensuring function of the financial balance* - the budget is used for routing and mastering the balance relations between expenditure and revenue. On the level of an economic agent, the financial balance reflects the financial resources needed to achieve forecasted goals and actions, respectively, the fulfillment of financial obligations.

Budgets go further than a forecast of possibility. They do not characterize the most likely possibility, but the most desirable possibility. This is a formalized voluntarism which reinforces self-constraint and simultaneously makes of it a collective agreement which coordinates the company business. This formalization will allow the fulfillment of budgetary control.

The budgetary control is among the tracking systems of the performance of economic entities, the notion of performance meaning the degree to which a budget responsible achieves their objectives.

A procedure of budgetary control concerns the comparison of the actual situation, namely results from activity, with the estimate situation, namely desirable objectives of the company for their transportation and distribution activities. Thus, the budgetary control task is to identify and explain deviations from the budget provisions.

To serve the management, the budgetary control is performed frequently enough, in order to take corrective measures in due time, and sufficiently decentralized to be located at the level where corrective decisions are taken and responsibilities are exercised.

In the process of budgetary control in companies which carry out transportation and distribution of thermal heat, the management controller is involved, who performs the control of the budget, i.e. the controlled person who must justify budget deviations.

The budgetary control of such companies is done monthly and meets two objectives:

- the control of budget execution, by identifying positive or negative deviations from the budget provisions - in this case the management controller carries out an analysis of past deeds;
- to readjust the budget forecast and take corrective measures - in this case the management controller is positioned on future actions.

Besides the regular budget control, at the level of each responsibility center, which has a budget, a permanent is exercised by each budget responsible. By means of this permanent control, they have the possibility to influence directly the indicators related to their actions, being able, at any time, to shift immediate actions or to inform general managers, if useful, to ask for immediate assistance.

During the budgetary stage, the objectives of the budgetary control are:

- to substantiate the budgeted level for each structural element of cost;
- to link revenue and expenditure budgets with the budgets with other activities;
- the effects of estimated measures to reduce costs (update of the heating network).

Although the most important and effective issue is budgeting costs, however, the control after their occurrence is necessary for finding existing deficiencies and taking necessary measures, and for budgeting the costs in the next period. Thus, the control objectives include all activities generating costs, aiming at:

- compliance with costs of budgets;
- economic, rational use and according to legal rules of the material, human and financial means;
- to identify deviations, over-regulation of unlawful consumption, to determine causes and responsible persons;
- to develop decisions to correct deviations in order to appropriate actual results related to the ones established by means of strategy and planning.

During such control, every manager, regardless of hierarchical level, should follow, monitor and adjust based on information the costs of the activity in their charge.

## **2.Flexible budgets - a necessity in budgeting costs of transportation and distribution of thermal energy**

The centralized system of heat supply is currently facing technological loss that has increased with the metering of consumers, the transition to a transparent billing system based on measurements exceeding the pace of investment in improving the system. Also, the decrease of consumption, based on industry worsening, housings' disconnection, and economy in the final consumer have led to increased losses by inappropriate exploitation of installed capacity.

The bankruptcy of economic industrial agents has had as consequence the allocation of fixed costs on households and implicitly the use of very high prices, felt, given the national reference price, as major pressures on local budgets, which support the price difference between the actual price and the national reference price. However, from 1 September 2006, the national reference price has been eliminated, being replaced by local prices.

In this context, the cost of transportation and distribution of thermal energy and their surveillance in the budgetary system is particularly important because of the functions that this economic indicator fulfills within the operators of heating systems to optimize decisions. Keeping the potential of providing the services related to the transportation and distribution of thermal energy of an enterprise depends on how they manage to recover by sale, the cost of items produced, and its development depends on the difference between the amounts received from providing services and generated expenses, therefore the budgeting of costs as close to their actual size is essential to conduct a profitable business.

At present, forecasting expenses for the transportation and distribution of thermal energy use static budgets, but this type of activity depends on climatic conditions. The revenue collected by the company will be proportional to the heat sold and consumed by beneficiaries, the budget expenses cannot be budgeted for a single level of activity as the weather conditions are not

known a year before they manifest. Thus, it would necessary the use of flexible budgets that unlike the static budgets schedule results for several levels of activity. They are particularly useful in estimating and analyzing operating expenditure. For example using data from the table below:

### **FLEXIBLE BUGET**

- Lei -

| Budgeted elements                       | Value             |                   |                   |
|---|-------------------|-------------------|-------------------|
|   |                   |                   |                   |
| <b>Thermal energy quantity (Gcal)</b>   | <b>300.000</b>    | <b>350.000</b>    | <b>380.000</b>    |
| <b>Variable expenses, out of which:</b> | <b>34.085.568</b> | <b>39.766.496</b> | <b>42.741.922</b> |
| Expenses for bought thermal energy      | 32.976.000        | 38.472.000        | 41.336.469        |
| Other variable expenses                 | 1.109.568         | 1.294.496         | 1.405.453         |
| <b>Fix expenses, put of which:</b>      | <b>1.832.728</b>  | <b>1.832.728</b>  | <b>1.832.728</b>  |
| Material expenses                       | 1.039.968         | 1.039.968         | 1.039.968         |
| Salary expenses                         | 792.760           | 792.760           | 792.760           |
| <b>Total expenses</b>                   | <b>35.918.296</b> | <b>41.599.224</b> | <b>44.574.650</b> |

The management accounting of companies in the field of transportation and distribution of thermal energy uses currently a static budget by means of which there was planned to be purchased a quantity of 380,000 Gcal of thermal energy in October 2008 but due to climatic conditions, only 306,670 Gcal were bought for which the expenditure amounted to 42,292,138 lei. If flexible budgets were used, the incurred expenditure should be compared in this case, with the first variant of the above budget and would be noticed an overrun of the budgeted amount of 6,373,842 lei, not savings of 2,282,512 lei as indicated by the static budget. Therefore, the flexible budget helps increasing the quality of financial and operational decisions with direct impact on profitability.

The central issue of the production companies in Romania and elsewhere, is that the management budget is not addressed from the perspective of flexible budgets, although they are needed especially for those whose work, respectively returns depend on factors that cannot be roughly determined around a value, but a larger period of time should be taken into account, when drawing up the budget. Thus, although flexible budgets are necessary, they remain, however, a challenge for companies of transportation and distribution of thermal energy.

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# ACCOUNTING TREATMENT OF WEB DESIGN ACCORDING TO INTERNATIONAL STANDARDS OF FINANCIAL REPORTING IAS / IFRS. AN INTERNATIONAL AND NATIONAL APPROACH

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*Great think regarding the Internet is the speed with which it has penetrated into our daily lives. History of the Internet began in 1960 but only in the early'90 the Internet has evolved to the point that we see today. An open society means also the right to communicate freely and free access to information. Specialists speak for a long time about the so-called Internet Revolution, which does not refer to simply surf on the Internet but in a new form of doing business, to sell. Ways of doing business is changing every second “The Internet has changed everything!” said Larry Ellison, Oracle chairman, one of the world heavy industry software for databases, and Andy Grove, general manager of Intel, the world leader in the production of microprocessors, go ahead and say: “all companies will be Internet companies or they will not be at all”.*

*Keywords:web design evaluation,recognition of web desing, accounting tretment of web design, international approach, national approach.*

*JEL Classification : M 41*

## **The main features of the Internet as a business environment**

The Internet is a business environment particularly advantageous. Characterized by speed, ubiquity (eliminating the barriers of space and time), interaction and flexibility, the Internet has now become an effective instrument for implementing of the marketing strategies.

Some authors consider the Internet as an ideal business environment in which small and medium businesses have the chance to compete successfully with large multinational companies. The research undertaken shows that these advantages are not so obvious for small and medium enterprises or that, ultimately, they can be operated only by the choice and implementation of optimal marketing strategies.

Advantages of the Internet considered as a new marketing environment are:

Internet facilitates direct communication and interaction with current and potential consumers. It is the ideal environment for the development of direct marketing;

-Internet allows a precise targeting and direct mail marketing to certain individuals, especially individuals who have been identified and characterized based on their behavior on the Internet. It provides a real opportunity to implement individual marketing techniques (one-to-one-marketing);

- Internet Users have the freedom to choose promotional messages or information they wish to access, so their involvement in pre- transactional process is much greater;

- The Internet offers the possibility of obtaining instant feedback from users is extremely efficient in providing services with direct impact on fidelity of consumers;

- The number of Internet users is growing rapidly and continues;

- Web sites provide more information on companies and products, in comparison with the classical instruments of trade information (brochures, posters, etc.)

The explosions of Internet and electronic commerce have led to most of the business to have its own website. A company may hire internal costs for development and operation of its website. The website can be designed for internal access (in which case it can be used for the presentation of policies and data storage on customers) or for external access (they are created and used for promotion and advertising of products and services company).

### **A. International Approach**

Given the substantial costs incurred by many companies for the creation and operation of websites, it became necessary to develop an accounting standard on accounting treatment of such transactions. In this regard was published in March 2002 SIC 32 - Intangible Assets-Costs associated with creating websites.

According to SIC 32 for costs associated with developing and maintaining websites are internally generated intangible assets falling under the governance of International Accounting Standard 38 - Intangible assets.

According to it, to be capitalized, the costs must be related expenditure "development phase" as described above. Must be strictly complied the conditions with the qualification phase of development and the ability to generate future economic benefits<sup>470</sup>.

Thus, if a company will develop a website primarily for advertising and promoting its products and will not likely that this site will generate future economic benefits from its use, then these costs will be recognized as expense in the results( the profit and loss account) in period which they were made. On the other hand if your site will be used to take orders for delivery, the probability to generate future economic benefits are obvious and the costs will be fixed in accordance with IAS 38.

SIC 32 - Intangible Assets-Costs associated with the creation of websites provides a description of the phases of developing a website. They are:

#### ***Planning.***

This phase includes the initiation of feasibility studies, defining objectives and specifies, evaluating of the alternatives and selecting preferences;

| <i>PLANNING</i>   | <i>ACCOUNTING TREATMENT</i>   |
|---|---|
| <ul style="list-style-type: none"> <li>- <i>Initiation of feasibility studies (cost of salaries of the specialists who prepared the feasibility studies,etc.)</i></li> <li>- <i>Defining hardware specifications (configuration PC and other hardware components) and software (software used, etc.)</i></li> <li>- <i>Evaluation of alternative products and suppliers;</i></li> <li>- <i>Selecting preferences</i></li> </ul> | <p><i>The costs of the planning phase are not recognized as intangible assets. They are specific to the "research phase" and are recognized according to IAS 38, as spending in that period took place.</i></p> |

#### ***Application development and infrastructure.***

This stage includes operations related to the domain name, purchase hardware components and operating software, installing developed applications and testing reliability.

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<sup>470</sup> Future economic benefits associated with the use of a website may be assessed when the website can be profitable.

| APPLICATION DEVELOPMENT AND INFRASTRUCTURE.  | ACCOUNTING TREATMENT   |
|--|--|
| <p><b>- Acquisition hardware components</b></p> <p>- Develop operating software (the software regarding operating system, software for creating and managing the site)</p> <p>- Develop application code (the salaries of specialists)</p> <p>- Installing the software developed by the web server (cost of salaries of specialized staff, consumable materials:</p> <p>- Reliability testing</p> | <p>For this operation will apply the requirements of IAS 16 – Tangible assets. Hardware components will be recognized as tangible assets and will be assessed in accordance with IAS 16.</p> <p>If the expense can not be directly attributed to preparing the website for operating it will be recognized as a period cost.</p> <p>If the expense can be directly attributed to preparing the website for operating in the manner intended by management and the website meets the criteria for recognition under IAS 38, then the costs will be capitalized (recognized as an intangible assets.</p> |

### **Develop graphic design.**

At this stage is included the work of design of how the presentation of web pages.

| GRAPHIC DESIGN OF WEB PAGES.   | ACCOUNTING TREATMENT   |
|--|--|
| <p>-the design graphic presentation of how the presentation of web pages</p> <p>- the choice of format page</p> <p>- the choice of colors, etc</p> | <p>At this stage the afferent costs should be recognized as intangible assets. However, if the expenditure can not be directly attributed to preparing the website for operating in the manner intended by management and are not satisfied the requirements of IAS 38, they will be recognized in the results account of the expends of period.</p> |

### **Develop the content of website.**

This includes creating, purchasing, training and rescue of the information.

| DEVELOP THE CONTENT OF WEBSITE   | ACCOUNTING TREATMENT  |
|--|---|
| <p>- Creating, acquitting, preparing information (identification tags, links, etc.).</p> <p>- Saving information either as text or as graphics on the website before the website</p> | <p>1. If the website content is developed with the purpose of advertising and promotion of products and services, then costs associated with these activities will be classified as period costs.</p> <p>2. If expenditure generated in this phase are directly attributable to preparing the website for operating</p> |

|   |   |
|---|---|
| <i>development;</i><br>- <i>Content Information:</i><br>- <i>products or services offered by the entity</i><br>- <i>information about the company</i><br>- <i>Sections that subscribers access</i><br>- <i>contact details and correspondence</i> | <i>in the manner intended by management and the website meets the conditions for recognition under IAS 38 (ability to generate future economic benefits and can be rated as reliable) will then be recognized as intangible assets.</i> |
|---|---|

After completion the stage of development of the website begins the operational phase. In this phase, the entity maintains and develops software, infrastructure, graphics and content of the website. Expenses incurred during the operating cost should be recognized as a period in which they occurred, unless it met the recognition criteria set out in Standard. Specify the activities of this phase are listed below<sup>471</sup>:

| <i>THE OPERATIONAL PHASE THE WEBSITE</i>  | <i>ACCOUNTING TREATMENT</i>  |
|---|--|
| - <i>Update graphics and content review</i><br>- <i>Registration the website through search engines</i><br>- <i>Adding new functions, features and content (links to other sites, etc.)</i><br>- <i>Securing information</i><br>- <i>Analyze the use of the site (count the number of visitors)</i><br>- <i>Review how to access safety</i> | <i>The costs of these activities, if fulfill the conditions for recognition under IAS 38, will increase the value of the website. If you do not meet the conditions to be fixed will be recognized as expenses in the period in which they occurred.</i> |

Other costs such as general administration costs, with training of employees on the use of the website will be recognized as expenses in the period indifferently if made during the development or phase of operation.

### ***Recognizing further websites***

Will apply the rules according to International Accounting Standard 38 - Intangible assets. Due to the technical characteristics and function of a website, some issues need to be nuanced.

Subsequent expenditure relating to the improvement or maintenance of their website has more to maintain the future economic benefits arising from the website, than to increase these benefits. This aspect will be further costs rarely restrained.

Another aspect to be shaded is about life. Because culminant progress in the field, websites likely to be very quickly outdated in terms of technology. Thus, entities must estimate the useful life on a prudent basis.

To further evaluate recognition initial moment, it is difficult for an entity to apply the revaluation model. To apply the revaluation, fair value should be estimated by reporting to an active market, or website is unlikely to have an active market. To these considerations is the best implementation model based on cost.

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471 See Appendix to SIC 32



## **B. National approach**

National regulations do not provide rules or recommendations regarding the accounting treatment of the creation and development of websites. In the absence of legal regulations, there may be two options on the accounting treatment of the creation and development of websites.

-The first variant involves the classification of costs by their nature, and in research expenditure and development expenditure<sup>472</sup>. Costs of research will be recognized as expenses in the period, while development expenditure will be restrained.

-The second variant implies recognition of the cost of production, applying the same accounting treatment of software created in the enterprise.

## **Conclusions**

The economic entities often spend their resources or to attract acquisition debt, development, maintenance or expansion resources intangible assets such as scientific or technical knowledge, design and implement processes and systems, including among them and is web site. Because these elements can be recognized and valued in a accounting entity, must meet the definition of tangible assets and identifiable character, control over a resource and existence of future economic benefits. In case the item is gained through a combination of enterprises, it is a part of goodwill, recognized at data acquisition.

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472 Development costs will be classified appropriately only if the conditions laid down in national regulations

# SEARCHING FOR THE FAIR STORY BEHIND FAIR VALUE FOR FINANCIAL INSTRUMENTS

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*Our paper aims at telling the whole story where fair value accounting is concerned. Harsh criticism has been brought to this concept under current circumstances that motivated our research. Without arguing for fair value as something it is not, we briefly try to point some relevant aspect on the situation. The paper starts on a conceptual level, looking at fair value through regulator's perspective, and further more analyzes some aspects of the current financial crisis. Findings make us think about the past and maybe thinking twice before shooting the messenger, since fair value reflects losses, but it can not generate them.*

*Keywords: fair value accounting, standards setting bodies, financial crisis.*

*JEL Classification: M40, M41*

## **1. Introduction**

Our paper intends to create a short overview on fair value as a standard of value in financial reporting. We can argue our choice starting with the ongoing shift of financial reporting standards for listed companies towards fair-valued-based reporting, notably the increasing importance of fair value as an accounting measurement attribute. Nevertheless, current events brought serious critics and opponents fighting to restrict the use of fair value within financial reporting.

We should mention the critical event triggering the shift towards the fair value paradigm was the Savings-and-Loans (S&L) Crisis in the USA during the 1980's, which laid open the deficiencies of the prevalent reporting system based on the historical cost. It resulted in regulatory action by SEC, which among other things advised the FASB to develop a standard on accounting for certain debt securities at their market value instead of amortized cost. Despite its limited scope, this initiative represented a major evolution in accounting though on the regulatory level (Arthur Wyatt refers to it as "possibly the most significant initiative in accounting principles developed in over 50 years" (Wyatt, 1991), a notion emphasized by the testimony of SEC General Counsel James Doty to the US Senate, who made it clear that "the time has run out on "once-upon-a-time accounting"").

Ever since the mid-1980's, the US Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) have systematically substituted market-based measures for cost-based measures. Starting out as a specific remedy for the inequities of the reporting model for certain financial instruments, fair value has manifested itself as the dominant measurement paradigm for financial instruments and, more recently, has increasingly been implemented for measurement of non-financial items. The cost and transaction-based reporting model is in decline, a new market value and event-based model is rising, with dramatic implications for the role and properties of balance sheet measurement and accounting income. Starting out as a special regulation for certain securities, fair value measurement was soon identified as the most relevant attribute for financial instruments.

The Financial Accounting Standards Board (FASB) made a fundamental decision that fair value is the most relevant attribute for financial instruments (FASB, 2004, p. 8). Although the quoted market value is the prescribed measure of fair value, the FASB adopted the term "fair value" instead of market value to encompass estimated values for financial instruments that are not

traded in active markets. The decision to mandate fair value disclosures was made amidst a long-standing debate between the advocates of fair value accounting and advocates of historical cost accounting. The basic premise underlying the FASB's decision is that fair value of financial assets and liabilities better enables investors, creditors and other users of financial statements to assess the consequences of an entity's investment and financing strategies. Advocates of historical cost, on the other hand, point to the reduced reliability of fair value estimates relative to historical cost. Their arguments suggest that investors would be reluctant to base valuation decisions on the more subjective fair value estimates (Barth, 1994, p. 3). Given the FASB's stated long-term goal of having all financial assets and liabilities recognized in statements of financial position at fair value rather than at amounts based on historical cost, the purpose of this study is to test claims that fair value is more informative relative to historical cost.

The Financial Accounting Standards Board and the International Accounting Standards Board (hereafter FASB and IASB) are jointly working on projects examining the feasibility of mandating recognition of essentially all financial assets and liabilities at fair value in the financial statements. In the United States, fair value recognition of financial assets and liabilities appears to enjoy the support the Securities and Exchange Commission (hereafter SEC). In a report prepared for a Congressional committee (SEC, 2005), the Office of the Chief Accountant of the SEC states two primary benefits of requiring fair value accounting for financial instruments.

First, it would mitigate the use of accounting-motivated transaction structures designed to exploit opportunities for earnings management created by the current "mixed-attribute" – part historical cost, part fair values – accounting model. For example, it would eliminate the incentive to use asset securitization as a means to recognize gains on sale of receivables or loans. Second, fair value accounting for all financial instruments would reduce the complexity of financial reporting arising from the mixed attributed model. For example, with all financial instruments measured at fair value, the hedge accounting model employed by the FASB's derivatives standard would all but be eliminated, making it unnecessary for investors to study the choices made by management to determine what basis of accounting is used for particular instruments, as well as the need for management to keep extensive records of hedging relationships. Nevertheless, as noted in the SEC report, there are costs as well associated with the application of fair value accounting. One key issue is whether fair values of financial statement items can be measured reliably, especially for those financial instruments for which active markets do not readily exist (erg specialized receivables or privately placed loans). Both the FASB and IASB state in their Concepts statements that they consider the cost/benefit trade-off between relevance and reliability when assessing how best to measure specific accounting amounts, and whether measurement is sufficiently reliable for financial statement recognition. A cost to investors of fair value measurement is that some or even many recognized financial instruments might not be measured with sufficient precision to help them assess adequately the firm's financial position and earnings potential. This reliability cost is compounded by the problem that in the absence of active markets for a particular financial instrument, management must estimate its fair value, which can be subject to discretion or manipulation. Assessing the costs and benefits of fair value accounting for financial reporting to investors and other financial statement users in particular reporting regimes is difficult.

Opponents of fair value measurement, on the other hand, criticize the questionable reliability of fair value measures, especially for model-based estimates relying on management's expectations and projections. In particular, the implementation of fair value as a balance sheet measure is the subject of intense discussion and debate. The controversy regarding fair value accounting for financial instruments as recently highlighted by the rejection of IAS 39 (revised 2003) for full EU endorsement, illustrates both conceptual and technical issues involved. Apparently, the debate is far from resolved.

## 2. A standard setting body's perspective

Both FASB and IASB stress the capacity of market values to incorporate, in an efficient and virtually unbiased manner, market consensus expectation about future cash flows. Our analysis on fair value starts with the FASB because of its initiative in the field. The set of accounting standards available within the American referential around 2004 did not include a unique source of general guidance, valid in the attempt of defining and estimating fair value. The guidance that concerned fair value could be found mainly in a series of intersected and "patched" accountancy standards, which referred to financial instruments. On the other side, the exiting accountancy standards showed an increasing level of the acceptance of fair value as attribute of evaluation (in comparison with the depreciation cost). Assuming that there is a high probability that future standards will include evaluation at fair value, the definition of this concept (fair value) as attribute of evaluation – accompanied by procedural guidance at the highest level, and concerning a consistent estimation of the concept – became a priority in the goal of the efficient application of already existing or new standards.

The goal of this new standard was to assist the users of information provided through financial reports, so that they could evaluate more appropriately the relevance and credibility of the estimations of fair value. The financial reports should also contain information about the data and models used to provide fair value estimations. The standard created by FASB in the autumn of 2006, SFAS 157 - *Fair Value Measurement* seems, on one side, to judder the foundation of historic cost based evaluation, but, on the other side, appears harmless because it does not impose the use of fair value on a wide scale (Miller and Bahnsen, 2007). In fact, the truth lies, as usual, somewhere in the middle, in the way that the standard acts both ways.

Indeed, the new standard does not impose the use of fair value in situations other than the ones already mentioned by previous standards. However, SFAS 157 modifies the 'status quo' in three essential ways. We refer here to the fact that the level concerning practical aspects is being raised, a new series of factors that must be considered is emerging. These factors must be taken in consideration when those fair values already mentioned in existing GAAPs are evaluated, so that the evaluation process can disclose information that is more important. Another effect was that the introduction of SFAS 157 cleared the way for SFAS 159 - *The Fair Value Option for Financial Assets and Financial Liabilities*. SFAS 159 created the possibility for fair value to be introduced and used in new ways. Another merit of this standard was that it prepared the field of financial reporting for the new Conceptual Framework developed by FASB. We rely on these affirmations and on the preliminary aspects contained in the (PV) *Objective of Financial Reporting and Qualitative Characteristics of Decision - Useful Financial Reporting Information*, introduced in 2006 by the same FASB. These stated that the fair value will be ultimately preferred as an evaluation attribute in financial reports (FASB, 2006). In this context, the introduction of SFAS 157, was meant to clarify and put things in order, is fully justified.

It is thus clear that the objective of the issuing of SFAS 157 is to bring uniformity and consistency to the professional literature, and to accountancy practice. One of its great contributions resides in the fact that it offered a real catalogue of situations in which fair value is used, and a standard annex presenting more than 60 cases in which fair value is valued and reported.

The core component of SFAS 157 is the description of Fair Value Hierarchy (paragraphs 22-31), that identifies the priorities that management should respect when estimating fair value of assets and liabilities. This hierarchy describes the input data of evaluation methods, without specifying what models should be used. In fact, these inputs represent the assumptions that market agents would use when evaluating the value of an asset or a liability. They can be represented by "visible inputs" and by invisible ones (invisible inputs). Visible inputs are based on the information provided on the market – thus belonging to independent sources – while invisible

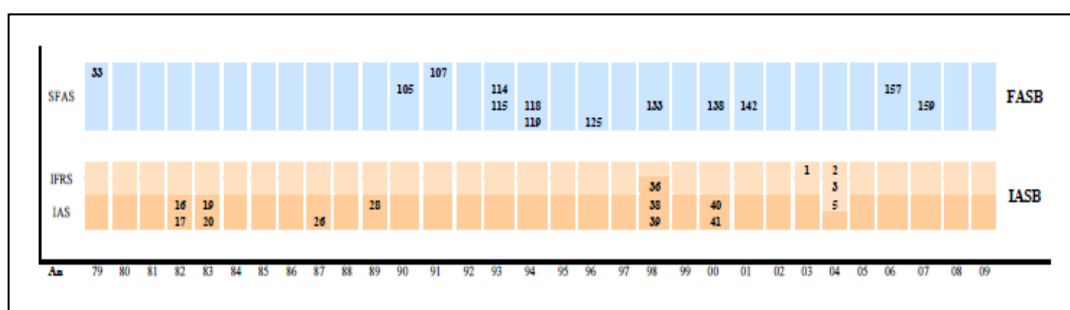
inputs represent the assumptions generated by the reporting entity, assumptions which would be used by the participants on the market to evaluate the respective asset.

The estimation of fair value follows, in principle, a three-tier hierarchy. The preferred level (1) fair value estimates are those based on quoted prices for identical assets and liabilities, and are most applicable to those assets or liabilities that are actively traded (e.g. trading investment securities). Level 2 estimates are those based on quoted market prices of similar or related assets and liabilities. Level 3 estimates, the least preferred, are those based on company estimates, and should only be used if level 1 or 2 estimates are not available. With the emphasis on market prices, the FASB emphasizes that firms should base their estimates on market prices as model inputs wherever possible (e.g. use of equity market volatility estimates when employing the Black-Scholes valuation model to estimate the fair value of employee stock options). If other models employing market inputs are not available fair value estimates can be constructed using entity-supplied inputs (e.g. discounted cash flow estimates). The governing principle is primacy of market-based measures – the refutable notion that market prices or market data are more informative and reliable than internal estimates. Not to forget that market prices represent the best estimate for fair value, if market conditions satisfy the fair value definition. The relevant “quality” of market prices is assessed because of the active market criterion, that is, regular trading of the item on a liquid market is required for the market price to qualify as an estimate of fair value. The second level of estimation hierarchy requires considering (modified) market prices of comparable items, where comparability naturally refers to the cash flow profile. Only when such prices cannot be used either, marking-to-market fails and fair value is mandated to be estimated using internal estimates and calculations. This marking-to-model, the use of accepted, theoretically sound pricing methods, represents a technique of last resort. Ample guidance exists on valuation models for financial instruments, and accepted methods can be found in the marketplace.

After only 6 months from the appearance of SFAS 157, through the emission made by FSAB in February 2007 of SFAS 159 *The Fair Value Option for Financial Assets and Financial Liabilities*, whose elaboration, adoption and implementation surely would have been harder to realize if the basis would not have been put through its predecessor. The good part of SFAS 159 regards those innovative managers that will profit on the permissively of the standard like an occasion to increase voluntarily the quantity of information useful on the capital markets, through the intermediation of the offered financial information. We are not to forget though the possibility of exploration of its flexibility in offering a false image over some of the financial assets and debts of the entity, as a negative effect of the managers’ innovative capacities, stimulated through the standard. The theory offers us though an answer when facing this danger, considering these efforts negatively oriented, with a great lack of ethics, and un-useful, due to the fact that, earlier or later, capital markets will impose the well deserved punishment through the diminution of the quoted prices and the increase in capital costs. It is not to neglect the necessity of developing some mechanisms of corporative governance meant to encourage honest financial reports and objective ones (Ronen, 2008).

The IASB also develops an International Financial Reporting Standard on fair value measurement, which is based on SFAS 157. The sharp distinction of fair value and value in use clarifies that fair value measurement is not to include entity-specific competitive advantages, that is, no private skills and no private information. Given the gradual evolution of the fair value paradigm, its impact on current standards shall be summarized briefly. Currently, both US GAAP and IFRS require the disclosure of fair values for virtually all financial instruments (IFRS 7, SFAS 107). Guidance on fair value accounting for financial instruments is also identical in principle. IAS 39 and SFAS 115, 133 require trading securities and derivatives held for trading or as part of a fair value hedge to be measured at fair value with revaluation gains and losses taken directly to income. Available-for-sale securities are also carried at fair value, but gains beyond

the historical cost ceiling are recognized as other comprehensive income until realization. This recycling approach is also applied in accounting for derivatives that are part of a cash flow hedge. In both regimes, securities classified as held-to-maturity, non-securitized financial assets and obligations, except derivatives, are in principle accounted for at cost. This mixed model approach reflects standard setters' reluctance and affected parties' resistance to implementation of full fair value accounting, despite the tentative consensus on its conceptual merits especially on the relevance dimension. The IASB has taken a big step in this direction with the 2003 revision of IAS 39, which has introduced the "fair value option" to designate any financial instrument as "measured at fair value through profit and loss" at inception. Objections especially from bank regulators, notably the European Central Bank, resulted in a partial endorsement by the EU only ("carve out") and prompted the IASB to restrict the fair value option to areas where an accounting mismatch is eliminated. With the recent publication of SFAS 159 in February 2007, the FASB follows suit and implements a similar, yet less restrictive fair value option. The following figure shows a parallel of the main standards regarding<sup>473</sup> fair value, developed on time<sup>474</sup> by the two major accounting regulatory setting bodies, IASB and FASB:



### 3. History repeating – what have we learned?

We should never underestimate the fact that the capacity to achieve a true valuation is in fact the key to success in the domain of financial services, because in order to buy or sell a financial instrument, it is imperative to know its value. In addition, after one buys a financial asset or contracts a financial debt, valuation represents the key to success in risk management implied by this element, but also in reporting the created value, to the stakeholders. The credit crisis begun in 2007 was the cause of the job loss of numerous financial directors, but also of the bankruptcy and selling of numerous financial institutions. In time, 2 great problems seemed to be the base of this crisis. One of these is represented by the methods used to determine the fair value for financial instruments that started from the mortgage credits and were furthermore structured through a more or less complex setting. The second problem is the lack of information flow necessary to be known by investors, lack that could stop even the best valuation technique from generating a significant level of accuracy. (Deventer, 2008).

Derivative financial instruments such as those in CDO's category causes often significant losses to investors, but it has to be kept in mind that, by their nature, often they exist only with the goal that the companies that make their structure to sell them in tranches formed at a price greater than the cost of the collateral who is referred to. The investors who ignore this reality of possible losses resulted after the structure is done are too naïve for the CDO's market (Deventer, 2008). In fact, the most naïves of these have been guiding just after the ratings of the tranches within CDO's and after they made acquisitions, without trying to obtain a confirmation of the fact that

473 Defining, allowing the utilization, soliciting the utilization or making other references to the fair value.

474 Each standard is positioned at the date of the first apparition, without mentioning the following amendments, and the abrogated standards are correspondingly marked.

the price that was asked, represented a “fair value” (Matis and Bonaci, 2008). Through this, they have practically chosen to ignore the fact that rating agencies are paid by the entity that realizes the securities structuring and that this could be in favour of a superior rating compared to the real level of the implied risk. If the tranches within the CDO’s wouldn’t have gained a more favourable rating than the one it deserved, these structures would not have been able to produce money through grouping some titles accessible on the market that would have been resold afterwards at a higher price under the form of tranches. Those investors that have participated within the CDO market, having been based only on the ratings offered by the rating agencies should be sanctioned correspondingly by the management of the entities that are directly implied in making the investment or even by regulation organisms on the market (Deventer 2008).

We can state that the current financial crisis is due to the relaxations of the underwriting process within the credit market, and a far too high-accepted leverage in the last years for mortgage credits offered on the market (Wallace, 2008). These factors have raised significantly the underwriting process risk, but it was not correctly valued at the moment when the mortgage was issued. The mass process through which these credits have been transformed in shares that gave the investors the right to a part of the cash flow generated by these (assets securitization) didn’t do anything except to exacerbate the problem, when the rating agencies, despite the raised risk, gave high scores to some similar derivatives having as a base mortgage credits. This has determined an excessive increase in the demand for such securities, supporting in this way the demand on the real estate market and determining the increase in prices over time.

Nevertheless, fair value accounting within this process is just to capture the changes appeared in the market prices, as they materialize themselves. Even though the utilization of inadequate assuming in the initial valuation of the mortgages has surely contributed to mastering the actual problems, this represents finally an error of valuation and not a problem caused by the application of fair value accounting *per se*. That which the fair value actually does is to bring the true dimension of these errors of valuation, in the eyes of the investors, in a short interval of time (Wallace, 2008). The main difference between the reflection of an asset at the fair value or at a depreciation cost is represented by the recognition of some unrealized losses or gains in the alternative of fair value. However, these losses or gains represent in fact changes in the value of future generated incomes by the so-called asset. As a following, coming back to the actual financial crisis, the losses that the banks are ought to confess under the option of fair value, captivates in fact the true impact (upon the present and future incomes) at considering a higher degree of underwriting the mortgage credits that had been already given.

Despite all evidences proving how things happened and how the mechanism that created the crisis were created, fingers keep pointing toward fair value, but we should take a closer look at who are the ones pointing them. Since late September and the beginning of October 2008, Wall Street Journal published a series of articles that described how the banking industry is revolted against the fair value accounting, bringing a series of critics, the majority because these would impose to the banks to diminish the asset value within the balance sheet, at lower values as the ones showed on the market. It seems that the financial institutions militate for an elimination of the fair value, seen as a partial solution for the banking industry nuisances. Wall Street Journal presented a letter to the American Bankers Association – ABA, asking them that until the end of the third trimester to recognize that fair value is laced of significance within some liquid markets. However, considering the financial mechanisms previously presented, that state the major role the financial institutions had at the root of this financial crisis, can we still “point out” towards fair value? Moreover, much more than this, would the elimination of fair value lead to the solvency of the problems the financial institutions face? (Bonaci and Matis, 2008).

Starting with the beginning of fair value as a concept and ending by defending it under current circumstances, we would just like to kindly ask you not to forget the tales of the past, the Enron collapse inevitably coming to our thoughts. At that time, the new fair value accounting paradigm

was progressively incorporated into the framework of Generally Accepted Accounting Principles to serve along with the well-established historical-cost accounting, but, as today, the Enron debacle involved misuses of both paradigms. Then was also an opportunity to argue against “mark-to-model” valuation, and even more to suggest the time of fair value accounting had not yet come (Barlev and Haddad, 2004). Enron used, to a large extent, level 3 and level 2 inputs for its external and internal reporting. Level 3 valuation was first used for energy contracts, then for trading activities generally and undertakings designated as “merchant” investments, these fair values simultaneous being used to evaluate and compensate senior employees. As proven later, Enron’s accountants (with Andersen’s approval) used accounting devices to report cash flow from operations rather than financing and to otherwise cover up fair-value overstatements and losses on projects undertaken by managers whose compensation was based on fair values (Benston, 2006). Unfortunately, once again we find how *we learn from history that we learn nothing from history*, as George Bernard Shaw concluded.

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# CONSIDERATIONS ON REORGANIZATION. A COMPARISON OF REORGANIZATION RATES IN EASTERN EUROPE

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*In our paper, we discuss reorganization from two points of view: its purpose and the choice between reorganization and liquidation, by reviewing the existing literature. After setting an appropriate theoretical base for interpretation, we focus on comparing Romania's situation on reorganization with the situation in other EU countries from Eastern Europe. We find that the low reorganization rates in Romania are mirrored in most of the other countries, as well. Moreover, the fact that Romania has legal provisions inspired by international best practices can be considered a big plus.*

*Keywords: reorganization rate, reorganization versus liquidation, Eastern Europe*

*JEL: G33, K29*

## **1. Introduction**

Although Romania has a high insolvency rate<sup>475</sup>, the number of companies in financial distress that choose to reorganize in the insolvency procedure is very small. And because one cannot talk in comparing terms such as big or small unless there is a subject of comparison, we chose to look at the Romanian insolvency rates, and specifically the rates of reorganization, in a regional context. The countries we chose for our study (Romania, Hungary, Poland, Czech Republic, Slovakia, and Slovenia) are part of Eastern Europe<sup>476</sup>. We had in mind the similar geopolitical context of the countries in this region. A notable absence from this set of countries is Bulgaria. It is missing because it seems that no reorganization rates are published for this country. Consequently, we would have no use of including Bulgaria as well. A second criterion for choosing this particular set of countries was whether they are part of the European Union as Romania is. The reason for this is the partially harmonized legal framework that the EU "imposes" on member countries.

Our paper is organized as follows. The first two parts are theoretical discussions on reorganization from two points of view: the purpose of reorganization procedures and the choice between reorganization and liquidation in insolvency. We aim to set the appropriate base of interpretation for the analysis that follows in the next part. This last part focuses on comparing Romania's situation on reorganization with the situation in the selected countries. In order to do this, we started out by shortly describing the laws governing insolvency in these countries and then moved on to analyzing a set of data on reorganization rates. Valuable sources of information for this paper were the Coface statistics and country reports from 2006, 2007 and 2008.

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475 Estimated to 1.3% for 2008, and calculated to 1.1% for 2007, according to Coface studies cited in the bibliography.

476 According to the United Nations Group of Experts on Geographical Names on <http://unstats.un.org/unsd/geoinfo/ungegndivisions.htm#ecsee>.

## **2. The purpose of reorganization procedures**

Following principles set out by the World Bank and indications coming from the European Union<sup>477</sup>, European countries made serious steps towards adjusting their insolvency laws to what could become a common model (Brouwer, 2006). Principle number eight of the principles for effective insolvency promoted by the World Bank states that an insolvency law should provide both for efficient liquidation of nonviable businesses and those where liquidation is likely to produce a greater return to creditors, and for rehabilitation of viable businesses. Guidelines are offered as to what is meant by the terms used in stating this principle<sup>478</sup>, and a distinction is made between the strict, traditional meaning of liquidation and rehabilitation and the way in which different situations encountered in practice nowadays are entitled to altering the traditional meaning of these concepts. Consequently, the World Bank militates for a rescue regime – no matter what name this regime takes -, that would “permit a result that would achieve more than if the corporation was liquidated”. Many insolvency regimes around the world suffered major changes in the last years in order to comply with this view, changes that materialized into reorganization procedures.

Reorganization or restructuring is aimed at finding a method of rescuing the company from financial distress and salvaging all or parts of it for the benefit of all claimants. Typically, it involves a process of negotiation between debtors and creditors with a view to establishing a new mechanism for the settlement of claims that may differ from the absolute priority rule. (Hashi, 1997) This, in fact, means rewriting of debt contracts of different groups of claimants and creditors (Hashi, 1997), reorganizing activity in the company, selling part of it, disposing of unprofitable activities, closing down of subsidiaries, reducing the scale of production activities, partial lay-offs and so on. Reorganization means recontracting (Franks et al, 1996), recapitalization (Roe, 1983) which leads to deviations from the absolute priority rule. (Franks et al, 1996) It implies extended negotiations. The nature of a formal reorganization process affects the out-of-court resolution of financial distress. Private arrangements have evolved to avoid some of the costs of formal reorganizations.

Moulton and Thomas (1993) define successful reorganizations as “firms which maintained their corporate identities, continued as publicly traded firms on national stock exchanges, and had postreorganization assets of more than 50 percent of prebankruptcy levels”. In their view, to which we subscribe, if a new successor company can be clearly identified, even if a liquidation of the initial company is involved, it still classifies as reorganization.

## **3. Choosing between reorganization and liquidation**

As we have seen in the previous part of this paper, companies facing financial distress now have to make a choice: liquidation or reorganization<sup>479</sup>. Hashi (1997) opinionates that if financial markets and the acquisition mechanisms were to function efficiently and transparently, there would be no need for a supplementary insolvency procedure. The value of any company, including those in financial distress or bankrupt, would be known on the market. For the right price any company would find a buyer. However, the absence of completely efficient financial

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477 We agree with a remark that La Porta et al (1998) made: “Laws in different countries are typically not written from scratch, but rather transplanted from a few legal families or traditions”. The American insolvency model seems to pervade most of the world’s insolvency systems.

478 “In its strict sense, liquidation refers to immediate or early cessation of a business, the sale of the business or its productive units or the piecemeal sale of its assets. In contrast, a strict view of rehabilitation refers to the restructuring of a corporation that can be restored to productivity and become competitive” (World Bank, 2001)

479 For most countries, these two procedures are the ones that constitute the insolvency procedure. However, there are variations from this structure. As an example, see the UK Insolvency Law which provides three procedures for companies in financial difficulty: receivership, administration and company voluntary arrangement (Stigma study, 2002)

markets, together with the informational asymmetry between insiders and outsiders calls for a special mechanism to supplement existing property laws – the insolvency law.

“Reorganization has supplanted liquidation as the normal consequence of the failure of large corporations. It is offered as an alternative to the sacrifice of going concern values which usually far exceed liquidation values. Reorganization must offer equivalent opportunity for realization of creditors’ rights and expectations of priority – yet the attempt to insist on strict enforcement of priorities usually interferes with the conservation of going concern values.” The reorganization implied here presupposes shrinkage, at least in present realizable values, below the aggregate of creditors’ claims. Every reorganization plan is itself a launching of a new financial structure to carry the expectations of investors. (Foster, 1935)

Insiders are highly motivated to prefer reorganization instead of liquidation and a strict application of priority rule. This is the case because reorganization means recontracting, with less regard to the absolute priority rule. Often, for creditors, reorganization implies loss of share (Franken, 2003). Negotiations for recontracting give the debtor power and a position that could be used for the debtor’s advantage at the creditor’s expense (Hashi, 1997). Besides such selfish reasons, there are other considerations which encourage companies to opt for reorganization: the chance to reduce the loss caused to creditors, protecting jobs, maintaining productivity, or receiving government subsidy. Moreover, the fact that reorganization *is* an option means that very risky investment decisions taken by a hasty management under pressure of financial difficulties are less likely (Hashi, 1997).

#### **4. Eastern European reorganization rates – analyzing the data**

In order to compare Romania’s situation on reorganization with the situation in the selected countries, we shortly describe the laws governing insolvency in these countries and then move on to analyzing a set of data on reorganization rates.

The Czech Republic replaced the old Insolvency Act at the beginning of 2008. From this date on, insolvent companies have access to two types of procedures: bankruptcy and restructuring. The form of the last type of procedure is new for the Czech Republic. It allows for business continuance under creditors’ control so that debts could be repaid in a gradual manner. Since our paper uses data collected in 2006 and 2007, it is useful to mention the design of the old Czech Insolvency Act, as well. According to an OECD Economic Survey of the Czech Republic from 2004, the then bankruptcy legislation had some serious weaknesses: debtors were in the position of asset-stripping without being held responsible, the legal proceedings were long and time-consuming, and reorganization prospects were bleak.

The Hungarian insolvency system allows for a settlement with creditors (called “bankruptcy proceeding” interestingly enough), for reorganization or liquidation for insolvent companies (“business reorganization proceedings”) and for voluntary liquidation. Specialists have signaled serious flaws (such as creditors not being sufficiently represented or time-consuming procedures) that reflect in insolvency rates in this country.

As part of the European Union, Slovakia has adjusted its insolvency system according to EC Regulation no 1346/2000 on insolvency proceedings. Liquidation and reorganization are the options provided. Unlike in other systems, a debtor who has been classified as bankrupt may continue business activities until a court decision against such behaviour is requested by the trustee on behalf of the creditors. Reorganization must be approved by the court under the legitimate assumption that creditors will receive a larger settlement than in bankruptcy.

In Slovenia, forced settlement allows the insolvent debtor to submit a reorganization proposal to the court. The proposal focuses mostly on extending payment terms and will be subject to creditors’ voting. Bankruptcy proceedings are carried out by a court-appointed administrator and involve liquidation of the debtor. Also, there are legal provisions for forced liquidation initiated for “technical” reasons (e.g. unregistered documents or forms).

The Romanian insolvency law: Law no 85/2006 replaced law no 65/1994. Unlike the old law, Law no 85/2006 has provisions regarding two forms of insolvency procedure: the general procedure and the simplified procedure. The general procedure means that, after an observation period, the debtor may enter reorganization and then bankruptcy, or separately, only reorganization or only bankruptcy. According to Tandareanu (2006), the new insolvency law increases the number of cases in which a company cannot reorganize. It is desired that Law 85/2006 be a big step forward for increasing the efficiency of the insolvency procedure, assuring a balance of rescuing opportunities of insolvent companies and a controlled exit of nonviable debtors (Munteanu & Mihai, 2006). Under the auspices of the old law, reorganization has been used as a way of prolonging the life of the debtors. Law no 85/2006 aims at increasing the efficiency of the reorganization procedure, eliminating abusive invoking of reorganization in order to delay the exit moment by expediting the procedure and plan proposal (the plans are to be discussed, analyzed and compared in one creditors' assembly meeting), imposing discussions between debtor and creditors and improving creditor voting system.

|                    |                | Reorganization rate 2006(%) | Reorganization rate 2007(%) | Reorganization rate first half 2007(%) | Reorganization rate first half 2008(%) |
|--------------------|----------------|-----------------------------|-----------------------------|--|--|
| Country            | Czech Republic | 0,16                        | 0,68                        | 0,31                                   | 0,00                                   |
|                    | Hungary        | 0,23                        | 0,20                        | 0,28                                   | 0,18                                   |
|                    | Poland         | 16,67                       | 15,66                       | 19,05                                  | 15,98                                  |
|                    | <i>Romania</i> | 33,85                       | 0,70                        | .0,68                                  | 0,16                                   |
|                    | Slovakia       | 0,00                        | 0,00                        | 0,00                                   | 0,00                                   |
|                    | Slovenia       | 12,65                       | 11,25                       | 10,94                                  | 12,65                                  |
| East European mean |                | 10,59                       | 4,75                        | 5,21                                   | 4,83                                   |
| Standard deviation |                | 13,49                       | 6,89                        | 8,00                                   | 7,42                                   |

Table 1: Reorganization rates in Eastern Europe (calculated based on data from Coface studies)

Indeed, figures show that Romania has a low reorganization rate defined as number of reorganizations in total number of insolvencies, both opened strictly in the considered period of time. This is mostly the case for years following 2006, when the new insolvency law came into act (2007 shows a 0,70% reorganization rate, while in the first half of 2008 this is 0,16%). A 33,85% rate of reorganization in 2006 and a 33,15% drop in 2007 compared to 2006 proves that the reorganization option was used abusively under the old law to tergiversate the insolvency procedure. One of the striking facts that table 1 reveals is that after the new Insolvency Act came into effect on January 2008, no reorganizations were initiated in the Czech Republic. Poland has a high reorganization rate, but a low insolvency rate which means that debtors are encouraged to reorganize or that they really deserve to be kept as going concerns. In 2007, figures put Romania above Hungary and the Czech Republic, while in the first half of 2008, the order changes a bit. Compared to the East European reorganization rate mean, in 2007 and 2008 Romania is well under this value (e.g. 0,70% compared to the mean on 4,75% in 2007, or 0,16% compared to 4,83% in the first half of 2008). However, the standard deviation is also quite high. A high standard deviation implies that the reorganization rates in these countries are scattered away from the mean, which actually gives less significance to the mean.

## 5. Conclusion

All in all, besides showing a low reorganization rate, figures also show that Romania does not make a distinctive note from the other countries in the Eastern European region. All reorganization rates are under 20% and most of them are under 1%. Also, there are countries such as Slovakia that, though having provisions for reorganization in insolvency, have not initiated reorganizations (at least not in the years studied). Though it has its drawbacks, the changing of the insolvency law in 2006 was beneficial, at least from the point of view of the economic efficiency an insolvency law must bring to the marketplace. The mere fact that the legal provisions regarding insolvency, and reorganization especially, are in accordance with the world's best practices on the matter place Romania ahead of other countries in the region (such as Hungary) that are reluctant to make changes in this area.

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# SOME CONSIDERATIONS REGARDING THE CAPITAL COST OF THE ROMANIAN INSURERS IN THE CONTEXT OF FINANCIAL REPORTING UNDER GLOBAL ACCOUNTING STANDARDS (IFRS)<sup>♦</sup>

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*The current global financial crisis put the insurance industry at the cross-roads, as many other industries. In this study, we analyze the impact of the IFRS adoption in Romanian business milieu, and more specific, we focus on the insurance industry, which we find to be immature and not correlated yet with the global market yet. We predict that the Romanian insurance market will soon become more competitive if the number of players that announced their intention to activate on it is six time bigger than the present state. In such a scenario, more companies will seek for capital on the financial markets, in order to reduce the costs to obtain it. Being known that IFRS is needed to be listed on the capital markets, we consider being an advantage the early adoption of IFRS by the Romanian Regulator. Currently IASB is jointly developing with FASB, a more specific standard, which will increase the transparency of the insurers financial statements.*

*Key words: Convergence, Harmonization, Insurance Contracts, Capital Cost, IFRS 4, Current Exit Value*

*JEL codes: M4, G22*

## **1. Romanian Accounting System background and harmonization with IAS/IFRS**

It could be said that a full implementation of the IFRS could promote a country as a newfangled, organized and well regulated place to do business (Jermakowicz, Gornik-Tomaszewski, 2006). In the European Union (EU) and European Economic Area (EEA), there are more than 30 countries with integrated financial markets and more than 7000 listed firms. Since 2005 in EU the adoption of IFRS became mandatory, that makes it the largest regulatory experiments in financial reporting ever undertaken, and probably a vital step towards global GAAP harmonization (Christensen, Lee, Walker, 2007).

As we know, the financial reporting system is the key factor, and if it is supported by strong governance, quality endowed standards and sound regulatory frameworks; we have the ingredients for economic development. As the forces of globalization urge more and more countries to open their doors to foreign investment and as business itself expands across borders, both the public and private sectors are increasingly recognizing the benefits of having a commonly understood financial reporting framework supported by strong globally accepted auditing standards. Globalization of the world's economies, and the companies' wish to get involved in the financial markets, has inevitably brought the need for a single set of financial reporting standard.

Romania can be characterized as an intransigent member state of the EU. But in what concerns the accounting system, as some authors stated (Ionașcu & all, 2007a), "the national regulator tried to harmonize Romanian individual company accounting with the Fourth Council Directive and IAS at a time when the EU did not have any requirements concerning IAS/IFRS for Member States". As one could consider the Romanian initiative as a prochronism regarding the later decision of EU, and ruminate without knowing the real facts behind this, it can conclude that Romania took a wise and strategic decision. But as a "prolepsis" for this case (Ionașcu & all, 2007a) the authors

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concluded that „the harmonization decision of the Romanian accounting regulator did not fit an existing trend in the business milieu, only few companies prepare IAS/IFRS conforming financial statements out of the need to obtain foreign financing [...] this may suggest that the Harmonization Regulations submitted Romanian companies to an unjustified effort”. In another recent study (Munteanu, 2009), sustained also by other authors (Ionașcu 2007a; Ionașcu, 2007b; Rodrigues and Craig, 2007) it was considered to be a *mimetic* adoption of the IAS/IFRS by most the Romanian companies notwithstanding if they are listed or not.

In other European countries, like Portugal, the companies can voluntarily choose if they want to use or not the IFRS. In a empirical study based on the Portugal economy (Guerreiro & All, 2008), it was ascertained that smaller companies appear to be less inclined to abandon national accounting standards in favour of IFRS. Such companies are likely to feel more comfortable using familiar national standards – ones which will often match their national economic, social and legal backgrounds more closely. In the case of Romania, there has been no study to forego the decision of the Regulator to adopt the IAS/IFRS, so we can conclude that the decision was rushed.

However, even if the benefits of adoption IFRS in Romania are limited for few companies, our expectations are optimistic for the future. Since 2007, the business milieu has encountered a spectacular development, because of the new status of the country, as an EU member state. This of course means that Romanian companies are now in competition with the European companies, and the only way to survive is to make efficient business. First of all, in Romania, the cost of labor is still on a low level when compared with other member states, so many handmade businesses migrated in Romania since 2007 because of this. Secondly, the Eastern border of EU is merged with the Romanian border, and being a member state offer better privilege to attract investors in the market. Meanwhile, a competitive scramble to obtain capital (equity), will lead companies to seek for other options than loans. In such case, a good option could be to acquire it from the stock exchange market, not only the local one, but also foreign capital markets. Of course, there could have been an encumbrance for Romanian companies to be listed on international markets because of the need to reconsider financial information's to made them comparable with other similar firms from those markets. But this hindrance had been scavenged as a prolegomena to this situation, even if we don't believe that the Romanian Regulator forecasted this need. Now, having this background, one should keep in mind that is real economic performance, not financial reporting, that ultimately matters to investors.

## **2. Insurance Industry a Joint Project of the IASB and FASB**

When we choose to go for a specific sector of business, as is the insurance industry, we will find out that such industries are difficult to comprehend by unacquainted information users. That's why, the IASB considered to be a wise decision to issue a standard for the insurance industry, making it a novelty in the financial reporting standards.

Because of the complexity of this industry, IASB decided to develop a match up standard, but this could not have been done, until a deep research and a public debate regarding the subject would have been done. So, the IASB considered being prudent to make it a step by step project. In the first stage of this project, a transition standard had been issued, IFRS 4, in order to make it available at the moment when the 2002 IAS Regulation (Regulation EC No. 1606/2002) required European Union insurers whose securities are traded on a regulated EU market to use the IFRS for financial reporting starting in 2005. The sections of the IFRS dedicated to insurance contracts is hodiernal in the process of a substantially revision, in order to transform them to a market oriented valuation of the contracts. Of course, this constitutes the second stage of the insurance project, developed by IASB.

In the development of the project, there are many voices who claim that the IFRS will increase transparency due to more and better comparable information across companies and countries.



However, it seems possible that because of the reliance of the IFRS on numerous management-set assumptions, such as the proposed Current Exit Value constructions proposed by the IASB to assess the liabilities value, or interest rates, claim rates, mortality forecasting, etc, when calculating the fair values of insurance contracts, transparency will be reduced and the reliability of insurers financial statements more intricate for the users.

The IFRS 4 doesn't contain detailed accounting methods for insurance contracts. This means the insurers continue to value insurance contracts as they did before, usually by using their national specific GAAP's. In the second phase a new concept had been populated, Current Exit Value (Munteanu, 2008). Because normally, insurance contracts are not actively traded on the capital markets and their prices cannot be directly observed, financial pricing had been called. There has been suggested a three building blocks construction of the value. First block envisage that the unbiased estimates of the expected cash flows arising from insurance contracts are to be calculated. Secondly, the expected values are discounted using an interest rate, which is an exogenous factor market related, that should reflect the timing and risk inbuilt in the cash flows. This produces a straightaway recognition of the profit or loss for each contract at the inception.

When confronting the novel market oriented rules for insurers with the national specific GAAP's, some differences shows up. First, profits that outcome from the insurance contracts will be recognized earlier, and secondly, the volatility of an insurer's financial position (equity), and perhaps its profits, will change. It is expected that equity and profit volatility will both rise, but also in some cases the alternate may come about.

One more thing to mention is that FASB decided to get involved in the insurance project, making it a joint project with IASB. The objective of this joint IASB/FASB insurance contracts project is to develop a common, high-quality standard that will address recognition, measurement, presentation, and disclosure requirements for insurance contracts. Specifically, this project is intended to:

- Improve and simplify the financial reporting requirements for insurance contracts.
- Eliminate numerous pieces of current U.S. accounting literature that add to the complexity of accounting for insurance contracts.
- Provide investors with more decision useful information.

This joint project, was not part of the initial memorandum of understanding between the FASB and IASB, but was added relative recently, on 29 of October 2008. The Norwalk agreement issued by US FASB and IASB stated that: "each acknowledged their commitment to the development of high quality, compatible accounting standards that could be used for both domestic and cross-border financial reporting. [...] FASB and IASB pledged to use their best efforts (a) to make their existing financial reporting standards fully compatible as soon as is practicable and (b) to co-ordinate their future work programmes to ensure that once achieved, compatibility is maintained"<sup>480</sup>

Anyhow, no matter the stage of the development of the standards for insurance contracts, there are several benefits for the moment that are worth to be taken into account.

### **3. Implication of the IFRS and Insurance Project for Romanian Companies**

Currently, we assist on a global financial crisis that affected all the economy sectors, including the insurance industry. We can mention here the case of the giant insurer AIG, the biggest in the world, which activate in all continents, whose serious problems requested billions of USD from the American government to keep it alive. When AIG started its recession, the Romanian AIG Life has publicly stated that the problems of the parent AIG has nothing to do with it. As a confirmation, the Romanian Insurance Supervision Commission confirmed the good working parameters of the Romanian affiliated company at that time. How could that be possible?

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480 FASB/IASB Memorandum of Understanding, retrieved from [http://www.fasb.org/intl/MOU\\_09-11-08.pdf](http://www.fasb.org/intl/MOU_09-11-08.pdf)

First of all, let's analyze the Romanian insurance market. Nowadays, in Romania, the number of players in the insurance market is still small, 44 companies as can be seen on the Insurance Supervision Commission site. But, as the same organization informs, there are a number of more than 250 insurance companies that requested to fulfill the necessary requirements in order to start the activity in Romania. More to consider, from the small number of 44 companies that are currently active on the market, only 2 are listed on the Bucharest Stock Exchange. As the number of listed companies represent less than 0.05% of all the insurers, it can be considered as insignificant. But this fact, shows us something else, the insurers had searched for the capital mainly on banks, reinsurers or the parent companies.

Considering the insignificant number of insurers listed on Bucharest Stock Exchange, one can say that the insurance industry has not been so affected by the financial crisis. This of course is a false hypothesis, as long as we analyze the insurance business. Insurers are one of the most involved companies in the stock exchange market. They invest their incomes from the premiums in stock portfolios in order to obtain better results, rather than investing all the incomes in the banking system or treasury bonds. As in the last period of time, the capital market has encounter great losses, also the insurers lost from their investments.

In a first step conclusion, we can say that the Romanian insurance industry is not yet mature, not yet correlated with the global markets, but still at the inchoate state. As the prevision shows, the insurance industry will pass through a strong and continuous process of development. As mentioned before, more than 250 insurers are willing to enter the market, this constitute a good proof for the forenamed statement.

As we showed in a recently article (Munteanu, 2009), our prediction is that more and more insurers will choose to obtain capital for development from the capital market, as more and more players will enter the game. This is based on the theory of competition, and consists in the fact that insurers will try to find alternative sources for the capital, in order to obtain it at lower costs, gaining so an advantage over the competitors. The most appropriate source is the stock exchange market, so the insurers will no longer knock at the banks doors, but will consider the other alternative. Of course, from this some benefits ensue, the company will be considered transparent and serious by the entire business milieu.

But there is something else we would like to consider. Romania has harmonized its accounting system with the International Regulations (EU Directives and IFRS). This inspires to the investor that Romania is becoming mature and responsible, and it allows the user of financial information to compare the economic activity with any other country in EU. The rushing of the Romanian regulators who took a step forward, by imposing IFRS adoption to non listed companies, that fulfill some criteria's could be considered a mistake, but maybe on short term.

In the case of the insurance industry, we consider to be a good benefit that facilitates the access to the financial markets for the insurers. To change the financial reporting to the IFRS system doesn't mean the economic performances of an insurer will change. What IFRS intend to do is to change the information investors will receive about an insurer performance. Basically, IFRS may: improve information quality, worsen information quality or have no impact on the information quality.

We believe that first case is most likely, as long as it will deliver additional and more precise information. In this case, investors will have more precise information on the true equity and earnings volatility. This will lead to a reduction of the asymmetry between management and investors, because of the increased transparency. On average, all this facts will reduce the cost of capital. And in addition, if the new information revealed by a specific insurer, shows that the company is in a better shape and more performing than previously ascertained, we can expect an additive decrease in cost of capital for such an insurer.

If the IFRS improve the transparency of an insurer's performance, cushy comparisons between different insurers can be made. Surely, this will influence an insurer's access to capital markets,

nurture competition for capital, and result in a concentration of profitable business and knowledge, and make less the underperforming lines of business.

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# HARMONISIERUNG DES JAHRESABSCHLUSSES

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*IAS 1 regulates the contents and layout bases of the financial statements. Financial statements addressees are those who cannot demand customized reports from the company for their own information needs. A complete financial statement includes the statement of financial position – “balance sheet”, the statement of comprehensive income, the statement of changes in equity, the statement of cash flow and the notes. The financial statements must give a faithful picture of assets and earnings situation and of the companies’ cash flows and must be established at least every year. The accounting and the notes of events after the balance sheet date are regulated in IAS 10, while IAS 8 regulates the accounting errors and the voluntary changes of accounting methods.*

*Stichwörter: Jahresabschluss, Ergebnis, Gewinn- und Verlustrechnung, Bilanzierungsfehler*

*JEL Kode der Arbeit: M41*

## **1. Allgemeines zu Jahresabschluss und Anhang**

Die Grundlagen zum Inhalt und zum Aufbau des Jahresabschlusses sind in IAS 1 geregelt. Abschlussadressaten sind all jene, die vom Unternehmen keine eigenen, für ihre Informationsbedürfnisse maßgeschneiderten Berichte verlangen können. Unternehmen müssen die vorgesehenen Bezeichnungen der Jahresabschlussbestandteile und der Jahresabschlusspositionen auf ihre Bedürfnisse anpassen.

Ein vollständiger Abschluss umfasst die folgenden Elemente:

*-Aufstellung der Vermögenslage - „Bilanz“:* IFRS enthält kein festes Gliederungsschema. Allerdings sind bestimmte Mindestgliederungspunkte zu berücksichtigen. Unabhängig von der Gliederungsmethode muss gezeigt werden, welche Vermögenspositionen und Schuldspositionen innerhalb von zwölf Monaten nach Bilanzstichtag realisiert bzw. getilgt werden. Soweit dies nicht aus der Bilanz hervorgeht, sind Anhangangaben erforderlich.

*-Aufstellung des umfassenden Ergebnisses:* Unterscheidet verschiedene Erfolgskomponenten: Aufwendungen und Erträge, die in den Gewinn bzw. Verlust eingehen, und die, die in das andere umfassende Ergebnis eingehen. Die IFRS enthält kein vergleichbares Gliederungsschema, aber es sind einige Mindestbestandteile, die zu berücksichtigen sind (z.B. Umsatz, Finanzierungskosten, Steueraufwand u.a.). Die GuV kann sowohl nach dem Umsatzkosten- als auch nach dem einfacheren Gesamtkostenverfahren gegliedert werden.

*-Eigenkapitalveränderungsrechnung:* Zeigt die Veränderung des Eigenkapitals während der im Jahresabschluss dargestellten Perioden. Es enthält zumindest das umfassende Ergebnis der Periode, Fehlerberichtigungen, die Beträge von Transaktionen mit Eigentümern und für jede Eigenkapitalkategorie eine Überleitung der Buchwerte.

-*Kapitalflussrechnung*: Die Ermittlung und Darstellung wird in IAS 7 geregelt. Der Cash Flow gibt an, wie weit die Leistungen des Unternehmens in nutzbare, liquide Mittel transformiert werden konnten und wie diese verwendet wurden. Die Kapitalflussrechnung gliedert sich in laufende Geschäfts-, Investitions- und Finanzierungstätigkeit, auf Grund der unterschiedlichen Qualität von Cash Flow.

-*Anhang*: Ist systematisch zu gliedern und sollte Referenzen zu den Positionen in den oben genannten Elementen enthalten. Es enthält Informationen über die Aufstellung des Jahresabschlusses, gewählte Bilanzierungs- und Bewertungsmethoden, Bilanzpolitik, Ermittlung von Ertragsteuern, zukunftsbezogenen Annahmen, Aktivitätsbeschreibung, Rechtsverhältnisse des Unternehmens, Dividenden an die Eigentümer u.a.

Der Abschluss ist eindeutig als Einzel- bzw. Konzernabschluss zu identifizieren und von anderen Informationen im Geschäftsbericht deutlich abzugrenzen, um jede Verwechslungsgefahr für den Leser auszuschließen. Außerdem sind alle Jahresabschlussbestandteile eindeutig zu benennen (Bilanz, Anhang usw.). Deutlich sichtbar anzugeben sind auch die Unternehmensbezeichnung, Stichtage und dargestellte Perioden, Berichtswährung und die Rundungsmethoden.

Der Jahresabschluss muss ein getreues Bild der Vermögens- und Ertragslage und der Cash Flows des Unternehmens vermitteln. Solange der Abschluss nicht vollständig mit den IFRS übereinstimmt sind alle Hinweise auf eine (teilweise) Übereinstimmung zu unterlassen.

Ein vollständiger Jahresabschluss nach IFRS ist zumindest jährlich aufzustellen. Die IFRS enthalten keine Bestimmungen zur Festlegung des Bilanzstichtags. Ein vom Kalenderjahr abweichendes Geschäftsjahr ist jedenfalls zulässig; maßgeblich für die Bestimmung des Stichtags ist das nationale Handelsrecht. Die IFRS erfordern nur eine Begründung im Anhang, warum die Periode kürzer oder länger ist als ein Jahr.

Der Jahresabschluss muss zumindest die Vergleichsdaten aus der Vorperiode enthalten. Die Vergleichszahlen sind grundsätzlich für alle Beträge im Jahresabschluss erforderlich, die für die aktuelle Periode dargestellt werden. Wird die Art der Darstellung geändert, dann hat diese Änderung rückwirkend für die Vergleichszahlen der Vorjahre zu erfolgen.

## **2. Ereignisse nach dem Bilanzstichtag und Fehlerberichtigung**

Die Bilanzierung und die Anhangangaben von Ereignissen nach dem Bilanzstichtag werden in IAS 10 geregelt. Ereignisse nach dem Bilanzstichtag sind vorteilhafte oder nachteilige Ereignisse, die zwischen Bilanzstichtag und der Freigabe des Jahresabschlusses zur Veröffentlichung auftreten.

Bilanzierungsfehler und freiwillige Änderungen von Bilanzierungsmethoden werden in IAS 8 geregelt. Wird ein Bilanzierungsfehler entdeckt oder eine Bilanzierungsmethode freiwillig geändert, dann sind die Vorjahreszahlen so darzustellen, als ob niemals ein Bilanzierungsfehler aufgetreten wäre bzw. als ob die neue Methode seit jeher angewendet worden wäre.

Bilanzierungsfehler sind falsche Inhalte oder unterlassene Angaben in einem Jahresabschluss einer Vorperiode. Sie resultieren aus der falschen Anwendung oder Nichtberücksichtigung von Informationen, die bei Genehmigung des Abschlusses vorhanden waren oder vernünftigerweise beschaffbar gewesen wären.

Zusätzlich ist im Anhang die Art des Fehlers zu beschreiben, die Auswirkungen auf alle betroffenen Bilanz- und GuV-Posten aller dargestellten Perioden, die Auswirkung auf die Eröffnungsbilanz der ersten dargestellten Periode sowie auf das Ergebnis je Aktie und das verwässerte Ergebnis je Aktie.

## **3. Jahresabschluss zum 31. Dezember 2007 einer deutscher GmbH**

Die Gesellschaft ist eine 100 %ige Tochtergesellschaft der mit Sitz in Frankfurt am Main. Die Vorsteuerbeträge wurden bei der Muttergesellschaft geltend gemacht. Nach § 2 I GewStG unterliegt der Betrieb der Gewerbesteuerpflicht.

Durch die Jahresfehlbeträge aus den Jahren 2005 und 2007 ergibt sich ein nicht durch Eigenkapital gedeckter Fehlbetrag in Höhe von T€ 317,2 aus. Es besteht die Vermutung einer bilanziellen Überschuldung, dass durch eine qualifizierte Ranrücktrittserklärung des größten Gläubigers beseitigt wurde.

Der Jahresabschluss wurde auf der Grundlage und unter Beachtung der Handels- und steuerrechtlichen Buchführungs-, Bilanzierungs-, Ansatz- und Bewertungsvorschriften aufgestellt. Hinsichtlich des Aufbaus und der Gliederung wurden die Vorschriften des §§ 266 und 275 HGB zugrunde gelegt, die das Handelsgesetzbuch für Kapitalgesellschaften fordert.

Die GuV ist nach dem Gesamtkostenverfahren gegliedert. Die Gliederung und Bewertung der Bilanz- und GuV-Posten entsprechen den gesetzlichen Vorschriften.

## BILANZ der GmbH

### AKTIVA

31. Dezember 2007

|  | €                 | Geschäftsjahr €      | Vorjahr €            |
|--|-------------------|----------------------|----------------------|
| A. Anlagevermögen  |                   |                      |                      |
| I. Sachanlagen   |                   |                      |                      |
| 1. andere Anlagen, Betriebs- und<br>Geschäftsausstattung                             |                   | 30.525,54            | 32.609,00            |
| B. Umlaufvermögen  |                   |                      |                      |
| I. Vorräte   |                   |                      |                      |
| 1. fertige Erzeugnisse und Waren   | 18.828.438,36     |                      | 18.813.932,90        |
| 2. geleistete Anzahlungen  | <u>262.379,52</u> | 19.110.817,88        | 284.059,92           |
| II. Forderungen und sonstige<br>Vermögensgegenstände                                 |                   |                      |                      |
| 1. Forderungen aus Lieferungen<br>und Leistungen                                     |                   | 44.788,19            | 10.005,66            |
| III. Kassenbestand, Bundesbankguthaben,<br>Guthaben bei Kreditinstituten und Schecks |                   | 382.584,07           | 354.398,61           |
| C. Rechnungsabgrenzungsposten  |                   | 201.948,77           | 11.225,24            |
| D. Nicht durch Eigenkapital gedeckter<br>Fehlbetrag                                  |                   | 317.209,88           | 193.316,87           |
| Übertrag   |                   | <u>20.087.874,33</u> | <u>19.699.548,20</u> |

### PASSIVA

31. Dezember 2007

|  | €                    | Geschäftsjahr € | Vorjahr €     |
|--|----------------------|-----------------|---------------|
| A. Eigenkapital  |                      |                 |               |
| I. Gezeichnetes Kapital  |                      | 25.564,59       | 25.564,59     |
| II. Kapitalrücklage  |                      | 1.456.574,24    | 1.456.574,24  |
| III. Verlustvortrag  |                      | 1.675.455,70-   | 1.722.311,38- |
| IV. Jahresfehlbetrag   |                      | 123.893,01-     | 46.855,68     |
| nicht gedeckter Fehlbetrag   |                      | 317.209,88      | 193.316,87    |
| buchmäßiges Eigenkapital   |                      | <u>0,00</u>     | <u>0,00</u>   |
| B. Rückstellungen  |                      |                 |               |
| 1. sonstige Rückstellungen   |                      | 3.500,00        | 3.500,00      |
| C. Verbindlichkeiten   |                      |                 |               |
| 1. Verbindlichkeiten gegenüber<br>Kreditinstituten                           | <b>13.000.000,00</b> |                 | 11.449.346,94 |
| - davon mit einer Restlaufzeit bis zu einem Jahr € 0,00 (€ 11.449.346,94)    |                      |                 |               |
| 2. erhaltene Anzahlungen auf Bestellungen                                    | 205.412,02           |                 | 160.166,82    |
| - davon mit einer Restlaufzeit bis zu einem Jahr € 205.412,02 (€ 160.166,82) |                      |                 |               |

|  |              |                      |                      |
|--|--------------|----------------------|----------------------|
| 3. Verbindlichkeiten aus Lieferungen und Leistungen                              | 129.554,00   |                      | 218.957,79           |
| - davon mit einer Restlaufzeit bis zu einem Jahr € 129.554,00 (€ 218.957,79)     |              |                      |                      |
| 4. Verbindlichkeiten gegenüber verbundenen Unternehmen                           | 6.560.454,06 |                      | 7.489.958,81         |
| - davon mit einer Restlaufzeit bis zu einem Jahr € 6.560.454,06 (€ 7.489.958,81) |              |                      |                      |
| 5. sonstige Verbindlichkeiten  | 187.030,25   | 20.082.450,33        | 377.617,84           |
| - davon mit einer Restlaufzeit bis zu einem Jahr € 187.030,25 (€ 377.617,84)     |              |                      |                      |
| D. Rechnungsabgrenzungsposten  |              | 1.924,00             | 0,00                 |
| Übertrag   |              | <u>20.085.950,33</u> | <u>19.699.548,20</u> |

### GEWINN- UND VERLUSTRECHNUNG der GmbH

|  | Geschäftsjahr €    | %      | Vorjahr €         |
|--|--------------------|--------|-------------------|
| 1. Umsatzerlöse  | 1.142.370,39       | 100,00 | 962.290,84        |
| 2. Abschreibungen  |                    |        |                   |
| a) auf immaterielle Vermögensgegenstände des Anlagevermögens und Sachanlagen sowie auf aktivierte Aufwendungen für die Ingangsetzung und Erweiterung des Geschäftsbetriebs | 4.184,30           | 0,37   | 4.911,08          |
| 4. sonstige betriebliche Aufwendungen  | 563.819,70         | 49,36  | 257.965,81        |
| 4. sonstige Zinsen und ähnliche Erträge  | 2.030,42           | 0,18   | 874,80            |
| 5. Zinsen und ähnliche Aufwendungen  | 696.970,86         | 61,01  | 652.373,65        |
| 6. Ergebnis der gewöhnlichen Geschäftstätigkeit  | <u>120.574,05-</u> | 10,55  | <u>47.915,10</u>  |
| 7. sonstige Steuern  | 3.318,96           | 0,29   | 1.059,42          |
| 8. Jahresfehlbetrag  | <u>123.893,01</u>  | 10,85  | <u>46.855,68-</u> |

### KONTENNACHWEIS zur BILANZ zum 31.12.2007

#### AKTIVA

| Konto | Bezeichnung  | €                | Geschäftsjahr € | Vorjahr €     |
|-------|--|------------------|-----------------|---------------|
|       | andere Anlagen, Betriebs- und Geschäftsausstattung                           |                  |                 |               |
| 400   | Betriebsausstattung  | 27.281,54        |                 | 30.882,00     |
| 415   | Mietereinbauten  | <u>3.244,00</u>  | 30.525,54       | 1.727,00      |
|       | fertige Erzeugnisse und Waren  |                  |                 |               |
| 3980  | Errichtete Gebäude zum Verkauf geleistete Anzahlungen                        |                  | 18.828.438,36   | 18.813.932,90 |
| 1510  | Geleistete Mietnebenkostenvorauszahlungen                                    |                  | 282.379,52      | 284.059,92    |
| 1400  | Forderungen aus Lieferungen und Leistung                                     |                  | 44.788,19       | 10.005,66     |
|       | Kassenbestand, Bundesbankguthaben, Guthaben bei Kreditinstituten und Schecks |                  |                 |               |
| 1210  | Bank 1626998 900   | 229.703,89       |                 | 347.815,45    |
| 1215  | Bank 1626998 901   | 53.779,23        |                 | 0,00          |
| 1220  | Bank 1626998 902   | 216,58           |                 | 6.583,16      |
| 1250  | Bank 162699B 903   | 84,37            |                 | 0,00          |
| 1251  | Termingeld 5626998900  | <u>98.800,00</u> | 382.584,07      | 0,00          |
|       | Rechnungsabgrenzungsposten   |                  |                 |               |
| 980   | Aktive Rechnungsabgrenzung   |                  | 201.948,77      | 11.225,24     |

Nicht durch Eigenkapital  
gedeckter Fehlbetrag  
Kapitalfehlbetrag  
Summe Aktiva

|                      |                      |
|----------------------|----------------------|
| 317.209,88           | 193.316,87           |
| <u>20.087.874,33</u> | <u>19.699.548,20</u> |

## PASSIVA

| Konto         | Bezeichnung  | €          | Geschäftsjahr €      | Vorjahr €            |
|---------------|--|------------|----------------------|----------------------|
| 800           | Gezeichnetes Kapital   |            | 25.564,59            | 25.564,59            |
| 840           | Kapitalrücklage  |            | 1.456.574,24         | 1.456.574,24         |
| 868           | Verlustvortrag vor Verwendung  |            | 1.675.455,70-        | 1.722.311,38-        |
|               | Jahresfehlbetrag   |            | 123.893,01-          | 46.855,68            |
|               | Kapitalfehlbetrag  |            | 317.209,88           | 193.316,87           |
| 977           | Rückstellungen für Abschluss<br>und Prüfung                                    |            | 3.500,00             | 3.500,00             |
|               | Verbindlichkeiten ggü. Kreditinstituten  |            |                      |                      |
| 641           | Darlehen Deutsche Bank   |            | 13.000.000,00        | 0,00                 |
| 1240          | EuroHypo AG Baukonto # 80 17   | 0,00       | 13.000.000,00        | 11.449.346,94        |
|               | davon mit einer Restlaufzeit bis zu einem Jahr € 0,00 (€ 11.449.346,94)        |            |                      |                      |
| 1240          | EuroHypo AG Baukonto # 80 17   |            |                      |                      |
|               | erhaltene Anzahlungen auf Bestellungen   |            |                      |                      |
| 1710          | Erhaltene  |            | 205.412,02           | 160.166,82           |
|               | Mietnebenkostenvorauszahlungen   |            |                      |                      |
|               | davon mit einer Restlaufzeit bis zu einem Jahr € 205.412,02 (€ 160.166,82)     |            |                      |                      |
|               | Verbindlichkeiten aus Lieferungen<br>und Leistungen                            |            |                      |                      |
| 1600          | Verbindl. aus Lieferungen u. Leistungen  | 117.434,32 |                      | 175.830,07           |
| 1610          | Verbindl. aus Lieferungen u. Leistungen  | 125.119,66 | 129.554,00           | 43.127,72            |
|               | davon mit einer Restlaufzeit bis zu einem Jahr € 129.554,00 (€ 218.957,79)     |            |                      |                      |
|               | Verbindl. ggü verbundenen Unternehmen  |            |                      |                      |
| 701           | Verb. gg. Muttergesellschaft   |            | 6.560.454,06         | 7.489.958,81         |
|               | davon mit einer Restlaufzeit bis zu einem Jahr € 6.560.454,06 (€ 7.489.958,81) |            |                      |                      |
|               | sonstige Verbindlichkeiten   |            |                      |                      |
| 1400          | Forderungen aus Lieferungen u. Leistung  |            | 92,25                | 762,25               |
| 1700          | sonst. Verbindlichkeiten   |            | 141.526,67           | 333.425,85           |
| 1732          | Erhaltene Kautionen  | 45.411,33  | 187.030,25           | 43.429,73            |
|               | davon mit einer Restlaufzeit bis zu einem Jahr € 187.030,25 (€ 377.617,84)     |            |                      |                      |
| 990           | Passive Rechnungsabgrenzung  |            | 1.924,00             | 0,00                 |
| Summe Passiva |  |            | <u>20.087.874,33</u> | <u>19.699.548,20</u> |

## KONTENNACHWEIS zur GuV zum 31.12.2007

| Konto | Bezeichnung                             | €          | Geschäftsjahr € | Vorjahr €  |
|-------|---|------------|-----------------|------------|
|       | Umsatzerlöse                            |            |                 |            |
| 8200  | steuerfrei Erlöse nach § 4 Nr. 12 a USt | 408.385,45 |                 | 438.531,02 |
| 8201  | steuerfrei NK nach § 4 Nr. 12 a UStG    | 81.118,24  |                 | 0,00       |
| 8400  | Mieterlöse 16% USt                      | 554.059,40 |                 | 506.500,92 |
| 8402  | Miet - Nebenkosten                      | 78.748,58  |                 | 0,00       |
| 8403  | Erlöse aus Erst. für Aufwendungen       | 0,00       |                 | 1.515,95   |
| 8405  | Stellplatzmiete                         | 20.058,72  | 1.142.370,39    | 15.742,95  |
|       | Abschreibungen auf immaterielle         |            |                 |            |



Vermögensgegenstände des  
Anlagevermögens und Sachanlagen sowie  
auf aktivierte Aufwendungen für die  
Ingangsetzung und Erweiterung des  
Geschäftsbetriebs

|      |   |                  |             |             |
|------|---|------------------|-------------|-------------|
| 4830 | Abschreibungen auf Sachanlagen            | 4.184,30-        |             | 4.031,08-   |
| 4855 | Sofortabschreibung GWG                    | <u>0,00</u>      | 4.184,30-   | 880,00-     |
|      | sonstige betriebliche Aufwendungen        |                  |             |             |
| 4215 | Pacht Parkplätze                          | 15.930,00-       |             | 15.930,00-  |
| 4230 | Heizung                                   | 552,29-          |             | 0,00        |
| 4240 | Gas, Strom, Wasser                        | 128.576,12-      |             | 41.566,41-  |
| 4242 | Abfallentsorgung                          | 11.225,82-       |             | 3.548,48-   |
| 4243 | Abwasser                                  | 14.639,00-       |             | 4.856,73-   |
| 4244 | Straßenreinigung                          | 4.819,71-        |             | 1.694,96-   |
| 4300 | Nicht abziehbare Vorsteuer                | 18.321,81-       |             | 0,00        |
| 4360 | Versicherungen                            | 34.107,78-       |             | 9.613,65-   |
| 4380 | IHK Beiträge                              | 215,00-          |             | 215,00-     |
| 4381 | Beiträge Straßenausbau                    | 6.856,67-        |             | 0,00        |
| 4410 | Gebühren                                  | 25.858,16-       |             | 2.229,69-   |
| 4550 | PKW Abstellplätze                         | 0,00             |             | 2.741,67-   |
| 4610 | Werbekosten                               | 3.500,00-        |             | 6.726,85-   |
| 4640 | Repräsentationskosten                     | 1.283,84-        |             | 3.585,00-   |
| 4650 | Bewirtungskosten                          | 21,85-           |             | 61,38-      |
| 4660 | Reisekosten                               | 1.268,77-        |             | 105,04      |
| 4760 | Maklerprovision                           | 0,00             |             | 7.621,00-   |
| 4780 | Geschäftsführungsaufwand                  | 58.618,45-       |             | 54.749,82-  |
| 4801 | Notruf-/Wartungsvtr. Auzug ABC GmbH       | 9.024,26-        |             | 9.846,89-   |
| 4802 | Repa. und Instandh. Aufzug ABC GmbH       | 3.154,58-        |             | 0,00        |
| 4803 | Miete (Feuerwehranschluss)                | 1.388,15-        |             | 0,00        |
| 4805 | Reparatur/Instandh. Betriebs- u. Gesch.   | 0,00             |             | 25.621,53-  |
| 4808 | Wartung BOS Gebäudefunkanlage             | 1.812,85-        |             | 1.062,50-   |
| 4900 | Sonstige betriebliche Aufwendungen        | 0,00             |             | 222,06-     |
| 4901 | Trinkgelder                               | 0,00             |             | 6,40-       |
| 4910 | Porto                                     | 17,60-           |             | 14,85-      |
| 4920 | Telefon                                   | 9.549,99         |             | 10.975,74-  |
| 4922 | Internetkosten                            | 110,89-          |             | 99,60-      |
| 4923 | FM Vertrag De Te Immobilien               | 104.049,65-      |             | 32.346,97-  |
| 4930 | Bürobedarf                                | 388,86-          |             | 688,95-     |
| 4950 | Rechts- und Beratungskosten               | 82.209,48-       |             | 11.442,50-  |
| 4955 | Buchführungskosten                        | 3.080,00-        |             | 3.127,50-   |
| 4957 | Abschluss- und Prüfungskosten             | 4.810,40-        |             | 4.002,40-   |
|      | sonstige betriebliche Aufwendungen        |                  |             |             |
| 4970 | Nebenkosten des Geldverkehrs              | 1.317,80-        |             | 1.560,67-   |
| 4971 | Finanzierungskosten                       | 34.446,10-       |             | 0,00        |
| 4980 | Betriebsbedarf                            | <u>1.763,80-</u> | 563.819,70- | 1.911,65-   |
| 2650 | Sonstige Zinsen und ähnliche Erträge      |                  | 2.030,42    | 874,80      |
|      | Zinsen und ähnliche Aufwendungen          |                  |             |             |
| 2110 | Zinsaufwendungen f. kfr. Verbindlichkeil. | 6,86-            |             | 0,00        |
| 2120 | Zinsaufwendungen f. lfr. Verbindlichkeit. | 696.964,00-      |             | 502.287,26- |
| 2121 | Zinsen für Baukonto # 80 17               | 0,00             | 696.970,86- | 150.086,37- |

|      |                                 |                    |                  |
|------|---------------------------------|--------------------|------------------|
| 4241 | sonstige Steuern<br>Grundsteuer | 3.318,96-          | 1.059,42-        |
|      | Jahresfehlbetrag                | <u>123.893,01-</u> | <u>46.855,68</u> |

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# FROM THE HARMONIZATION NEED TO THE SPONTANEOUS ACCOUNTING HARMONIZATION

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*The issue of international accounting harmonization has achieved, mainly within the last decade, a significant dimension in the field of international accounting research. The main determinant factor for this state of the art is the process aiming at reducing the differences between national accounting systems. Such a desideratum was first undertaken by IASB, but also by professional or governmental bodies at national, regional and global level. Beyond the significance of the qualitative or empirical research in the field of international accounting harmonization, a special emphasis is put on the conceptual development of this topic. The developments in the area is extensive and records an ascendant trend. Having these realities as a starting point, our research offers the whole picture of accounting harmonization at the conceptual level. The placement of this process is found between the dimension of need and spontaneity.*

*Keywords: accounting diversity, accounting harmonization, measurement, spontaneous harmonization*

*JEL Classification: M40, M41*

## **1. Introduction**

Considering the aspects highlighted within the international accounting researches, we can state that the domain that is often disputed at an international accounting diversity level is the one of the financial reports, on the one hand because of the national regulations and on the other hand because of the typology of the categories of users of present financial-accounting information on different countries, that could be analyzed on one point.

In case we elaborate a complete typology of the differences found within the accounting systems, we have to deal with two large categories: (1) differences regarding the presentation, recognition and measurement of the accounting elements and, respectively (2) differences regarding the financial-accounting information perception and rendering.

Under these circumstances we estimate that accountancy is a technology that applies in many political, economic and social contexts, but starting with the 1990's, the globalization of regulations and of accounting practices developed a particular importance, in conclusion, the national vision on the financial reports and of the accounting system cannot be supported anymore (Nobes and Parker, 2006, p. 6). This way, due to the evolution of these activity domains (political, social and economic), we assist to the creation of a global accounting environment, where we focus more and more on the unity concerning the financial reports, in the situation of maintaining at a certain level the national diversity.

Even all this being given, the differences in the sphere of financial reports are thought to be normal (Nobes and Parker, 2006, p. 4), and this fact is due to a series of determining factors, either in a positive way or in a negative one.

## **2. Dimensioning the accounting diversity**

Apart from these approaches, we express our beliefs that there is a relevance point beyond which the international accounting diversity becomes a determining factor opposed to the harmonization process. According to this point, the accounting diversity can have a positive role, becoming a stimulus of the accounting harmonization process, in a way where the dimension of the diversity does not represent an obstacle in the elaboration of a language of accounting globally accepted.

On the other hand, if we try to make a list of all possible causes or determining factors of the accounting diversity then we should take into consideration the previous researches that either represent these elements, or tried to establish if the differences from the accounting practice are correlated with identified determining factors.

All the elements considered to be determining factors of the accounting diversity generated real discussion between the authors of the studies that dealt with such problematic, because it is difficult to establish if a certain element can be labelled as cause of the diversity or its consequence. In this context, Nobes and Parker (2008, p. 25), appreciated that some factors that seem to encourage the differences in the accounting systems are not necessary causes of the differences. There is a possibility they may be their results.

A synthesis of the accounting diversity determining factors, according to the most recent approaches, can be thus developed: (1) the degree of global economic integration, (2) the finance sources, (3) the politic and legal system, (4) the fiscal system, (5) the accountant status, (6) the culture, (7) the language of accounting and, finally, (8) any other possible external influences can be placed in a different category.

The issues of the international accounting diversity is recommended to be studied, starting by placing the accounting systems in reference groups, which means, on the one hand a risk we have to take (given the case of a deductive approach), and on the other hand, a complex demarche generally focused on statistical bases (given the case of a inductive approach). The importance of such classification of the accounting systems lies mainly on the fact that the study of a phenomenon based on a cluster analysis has lower chances to fail.

The classification systems provide an approach created to simplify a complex world (Roberts *et al.*, 2005, p. 198). These type of classifications are often useful for attaining a high level of comprehension of certain characteristics specific for a national accounting system at one point (Elliott and Elliott, 2006, p. 9), but also to explain the existing accounting diversity at an international level (Riahi-Belkaoui, 2002, p. 56).

Apart from the approaches and the classifications specific for the national accounting systems, already considerate as consecrated, on terms of scientific knowledge, according to the results of our previous research (Mustață, 2008), regarding the quantification of the accounting harmonization need degree, we developed a new classification of the national accounting systems. At the base of the new classification, that we suggested are the values obtained for GINGAAP Index in the case of the selected accounting systems.

According to the results we can state that there are three main groups of accounting systems as follows: (Type C) accounting systems where international accounting regulations are applied, even if there isn't necessary, (Type A) accounting systems where there is a relative balance between the need to apply the IAS/IFRS and their actual application, (Type B) accounting systems where the application of international accounting regulations is needed.

### **3. Conceptual issues within accounting harmonization**

If we focus on the conceptual approach of the accounting harmonization, the convergence and the standardization, we will notice there is in the literature a significant diversity of these processes visions and dimensions specific for the international accountancy. Apart from these concepts, we can highlight the fact that the major purpose of the international accounting harmonization is very important because the variation of the international accounting practices is very large (Nobes and Parker, 2006, p. 94). The approach done by Nobes and Parker (2002, p. 75), according to which there are two different ways corresponding to the desideratum of reducing the international accounting differences – standardization and accounting harmonization – as well the conceptual approaches from the technical literature for diversity and uniformity establishes that there is a connection between these four concepts.

The estimated results of the international accounting harmonization lie in the existence of accounting regulations globally accepted, and if we managed a total of pros for the global accounting standards we would state that, as a whole, the accountancy deals mainly with the problematic of the evaluation and measurement, which means that it's natural to expect the evaluation principles be the same or a bit similar in any state or accounting system. The language used to provide explanations concerning the accounting information could be different; the reported values must not be affected by linguistic limits.

The companies that operate and report in more than one country must not experiment different evaluation methods for the financial results mainly because of the accounting principles specific to the country where their headquarters is placed. (Roberts et al., 2005, p. 7). But, as we have stated so far, we sustain the approach according to which the existence of a single set of accounting regulations globally accepted represents a desideratum hard to achieve, but the harmonization need of the accounting systems and the premises of a spontaneous movement support the hypothesis according to which reducing the differences between the accounting systems represent a possible project for future researches. At the base of such a process must be found the two major manifestation forms of the accounting harmonization process – formal and material harmonization.

The difference between the definitions of the two harmonization forms is clearly observed by Fontes *et al.* (2005, p. 418), who sustains the idea according to which the differentiation between the formal and material harmonization is very important. Thus, the formal harmonization refers especially to the way the accounting standards are elaborated, and the material harmonization focuses on the level of accordance and comparability demonstrated in the present accounting practice as opposed to the process of implementation of the accounting standards, within the national accounting systems.

Further, on, we can state that in fact the formal harmonization is a necessary first step towards the material harmonization. Although there are alternant solutions and realities, we sustain the idea according to which hitting the target of a financial reporting practice globally accepted must pass through the intermediary phase of accounting regulations harmonization.

On the other hand, the studies done by van der Tas (1988, p. 158; 1992, p. 70) differentiate the formal harmonization of the material and spontaneous ones. According to this approach, the formal harmonization is in fact the harmonization of existing accounting regulations (for example: Rahman *et al.*, 1996), the material harmonization refers to the accounting practices influenced by the regulations or by the market forces, while the spontaneous harmonization represents a subcategory or a particular form of the material harmonization (Parker and Morris, 2001, p. 303).

The spontaneous accounting harmonization can be seen as a deviation or an alternative to the natural evolution of the accounting harmonization process, based on the formal harmonization-material harmonization relation. Such a situation appears when there are registered deficiencies during the regulations' harmonization process or when its course rhythm does not respond to the conformity and adjustment need of the financial reports, come from the accounting practice and reality.

On the other hand we can estimate that the spontaneous harmonization is a response reaction to the need of accounting harmonization coming from the accounting practice or, in other words, the spontaneous harmonization is a result of the market forces and not an effect of the accounting regulations (Parker and Morris, 2001, p. 303) and of the process of their harmonization.

#### **4. A final thought**

Given these realities, also seen in the chart above we can identify the main tendencies afferent for the international accounting harmonization process. One of the problematic that developed during 2004-2007 is the one represented by the accounting harmonization study, directly correlated and

associated with the globalization phenomenon. The problematic of cost dimensioning (Benston *et al.*, 2006; Ionașcu *et al.*, 2007) afferent to the IAS/IFRS implementation on an accounting system scale represents another current tendency within the sphere of researches begun during the international accounting harmonization.

Apart from such a scientific approach, we can assume that in the sphere of researches in the harmonization process there is a new dimension focused on the harmonization need problematic of a national accounting system concerning an international reference system. Developing studies for the harmonization need dimensioning and measurement for the national accounting systems tends to become a current preoccupation in the sphere of international accounting scientific research.

### **Acknowledgements**

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# ARE ROMANIAN UNIVERSITIES PREPARING LEADERS IN ACCOUNTING?

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*In 2005, the Report on the Results of the Global Accounting Education Benchmarking Pilot Project, prepared by Phelps and Karreman, found that higher education institutions were not providing the leadership role necessary to close gaps in accounting education in a timely manner. The purpose of the paper is to identify, at Romanian level, the actual stage of accounting curricula regarding the disciplines which contribute to the development of accounting graduates as leaders. The study is developed at license curricula at Romanian universities' level under the umbrella of Bologna process. The outcomes of the paper identify weak points of national accounting education system which helps us to implement more effectively the international requirements on accounting education.*

*Keywords: accounting education, leadership in accounting, GAEB Report, accounting curricula*

*Cod JEL: I21*

## 1. INTRODUCTION

Although we all realize the importance of leadership, it still remains an elusive concept according to CIMA Report<sup>481</sup>. Theorists tend to fall into three groups: those who focus on personal characteristics (trait theory followed by behavioral theory), those who concentrate on the leader – follower situation and those who attempt to relate leadership styles to the overall organization context and climate (Burnes, 2000)<sup>482</sup>. In our study we focused on the leader – follower situation theory for the reasons presented below.

The leader-follower situation approach is based on identifying situations in which leaders are effective and this theory concentrates on leaders' actions and subsequently on the context in which they led. According to CIMA Report, the action-centered leadership approach focuses on three core activities of leaders: achieving the required results, by building an effective team and growing and developing each individual. Although the activities are interdependent on each other, the underlying objective is achieving the task, which is considered to be crucial. The leader-follower situation approach is based on recognition that leaders need to be technically excellent. Their technical abilities (as the primarily basis for future development) transposed in terms of professional knowledge or competences are analyzed in the present study. Nowadays, information is something you can find everywhere and it can be accessed by multiple channels via internet. Even that, the competence is the only one feature that can allows individuals to unlock the code of information. Without competence, information has no significance and it cannot build its muscles (Nordström *et. al*, 2007)<sup>483</sup>. But the durability of knowledge is not for always. According to Nordström *et. al* innovation represents a necessity but also a reality of business life. The cycle innovation-imitation–commoditization becomes speedier. As the competition become tougher the knowledge turn into being vanish.

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481CIMA Report, Technical Briefing–Developing and promoting strategies, Leadership skills—an overview, [http://www.cimaglobal.com/cps/rde/xbcr/live/leadershipskillsoverview\\_techrpt\\_0501.pdf](http://www.cimaglobal.com/cps/rde/xbcr/live/leadershipskillsoverview_techrpt_0501.pdf)

482 Burnes B., *Managing change*, Prentice Hall, 3rd edition, 2000.

483 Nordström K., Ridderstråle J., *Karaoke capitalism*, ediția I 2007.



We can ask ourselves *what are the market needs in these circumstances?* Calls for change in the field of accounting education date back at least to the '60s (Hurt, B., 2007)<sup>484</sup>. The scientific world represented by Albrecht and Sack<sup>485</sup>, Glautier and Underdown<sup>486</sup>, Gabbin<sup>487</sup> emphasizes the importance of developing the accounting education in the view of converging it to the practical necessities of the economic life. Moreover, Albrecht and Sacks, Titart, Braun and Mayer<sup>488</sup> accentuate in their studies the future risks that lie in displaying the accounting education in the context of the great scandals and bankruptcies that were registered. Those mentioned above are joined by Burnett<sup>489</sup> who states that accounting profession will not survive if it does not align to the changes of the financial world. The world needs strong people with perfect personalities and knowledge that can fit perfect to the job.

## 2. THE SCOPE AND METHODS OF THE STUDY

Motivation of the paper has its starting point in The Report on the Results of the Global Accounting Education Benchmarking (GAEB) Pilot Project: *Promoting Regional Integration, Transparency and Accountability by Supporting the Development of the Accountancy Profession*, developed in 2005 by R. William Phelps and Dr. Gert Karreman of CARANA Corporation.

The GAEB pilot project objective is to increase transparency and accountability in transition and developing countries by supporting the development of the accountancy profession. Working with professional accountancy bodies in the Balkans, a quantitative assessment tool was developed that measures how well an accountancy body prepares its members to possess both the capability and competency required by international standards (GAEB Report, 2005:1). Moreover, the report goes into deeply investigation regarding the way universities fulfill their role in preparing leaders in accounting.

The report identifies, at Romanian level, that higher education institutions were not providing the leadership role necessary to close gaps in accounting education in a timely manner.

Considering all these, the *purpose of the paper* is to identify the actual stage of accounting curricula regarding the disciplines which contribute to the development of accounting graduates as leaders. The study is developed at license curricula at Romanian universities' level under the umbrella of Bologna process.

Concerning the *methods* used, we chose as a benchmark the IFAC (International Federation of Accountants)'s requests on accounting education at pre-qualification education level presented in the Introduction to International Education Standards (IES) and in IES 2. We described and analyzed IAESB (International Accounting Education Standard Board)'s requirements available for free on IFAC's web site and presented in concise IFAC's expectations on this field.

After identifying the international benchmark on accounting education we moved further to investigate the GAEB's Pilot Project results (came into publicity in 2005) concerning accounting curricula at Romanian' universities level. We performed this phase by analyzing the report.

Moreover, we compared GAEB's Project results in 2005 with the findings of researcher Deaconu Paul. Deaconu's research in accounting education developed in the paper "Directions of the accounting educational curricula in the Romanian universities and the conformity with IES

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484 Hurt, B., Teaching what matters: A new conception of accounting education , Journal of Education for Business, May/June 2007, p.295.

485 Albrecht W. S., Sack J., Charting the Course through a Perilous Future, December 2000; available at [www.aaahq.org/pubs/AESv16/toc.htm](http://www.aaahq.org/pubs/AESv16/toc.htm)

486 Glautier M. W. E., Underdown B., Accounting: theory and practice, 7th edition, Prentice Hall, 2000, New York.

487 Gabbin A., The Crisis in Accounting Education, April 2002; available at [www.aicpa.org/PUBS/jofa/apr2002/gabbin.htm](http://www.aicpa.org/PUBS/jofa/apr2002/gabbin.htm)

488 Titard P.L., Braun R. L., Meyer M. J., Accounting education: response to corporate scandals, November 2004; available at <http://www.aicpa.org/pubs/jofa/nov2004/titard.htm>

489 Burnett, S., The future of accounting education: a regional perspective, Journal of Education for Business, January/February 2003, p.129.

provided by IFAC” was presented at AMIS Conference 2008 in Bucharest. This study is for now the first one in Romania concerning the improvement of accounting curricula at university level. Base on this dynamic comparison, we had the opportunity to identify a trend in the improvement process of Romanian universities’ accounting curricula; moreover we were able to evaluate if some Romanian universities fulfill the international recommendations on accounting education.

### **3. WHICH ARE IFAC’S EXPECTATIONS?**

Because the GAEB’S benchmark used in universities’ evaluation the IESs, we are going to highlight IAESB’S pronouncements in order to be aware about the standards they recommend.

IES prescribe standards of generally accepted ‘good practice’ in the education and development of professional accountants that express the benchmarks that member bodies are expected to meet in the preparation and continual development of professional accountants. They establish the essential elements of the content and process of education and development at a level that is aimed at gaining international recognition, acceptance and application.

In the introductory part of IES it is stated the goal of accounting education and practical experience as being to produce competent professional accountants capable of making a positive contribution over their lifetimes to the profession and society in which they work. In this way, individuals who become professional accountants should have a constant desire to learn and apply what is new. And all of that due to the huge pressure for change in economic life imposed by globalization, information and communication technologies, the expansion of stakeholder groups, including regulators and oversight boards, complex arrangements and transactions of organizations. Professional accountants are now expected to serve the needs not only of investors and creditors but also the information needs of many other users of financial and non-financial information (Introduction to IES, par. 16).

Taking into consideration all presented, accounting profession has to prove more and more accountability as long as the demand in the profession is high and continue to rise. Paragraph 20 of Introduction to IESs underlines the existence of a professional accountants’ greater contribution to society than ever before and emphasizes that the viability of accountancy as profession depends on the ability and willingness of its individual members to accept responsibility for meeting the challenges. The key point for reaching the challenges is that individuals should develop and maintain competence achieved by education, practical experiences and continuing professional development.

Because competence is gained through a mix of study, work and training, an important role belongs to educators. Further, paragraph 38 states that educators delivering professional accounting education programs have to respond to the changing needs of the international accountancy profession as well as individual professional accountants. During pre-qualification education, teaching methods should focus on providing students with the tools for self-directed learning after qualification, being free to adopt any methods that work best in their particular cultures. However, educators may need to be trained and encouraged to use a broad range of learner-centered teaching methods that include using case studies and projects, working in groups and in-office environments, adapted instructional methods and materials, a curriculum based on self learning, using technology and e-learning and a proper evaluation methods. Delivering all of these teaching methods in a purely academic environment is not the only solution. Integration of education and practical experience can bring benefits by drawing on work-based examples to enable students to apply knowledge. IESs are drawing the basic knowledge necessary for students to be competitive in an ongoing challenging economy, they don’t suggest courses but they identify the subject areas that need to be covered. It is said that one important defining factor of the curriculum is the set of professional knowledge, professional skills, and professional values, ethics and attitudes relevant to a particular country, region, culture or professional body while continuing to recognize the broader global view (Introduction to IES, par.24). According to IES

2, par.11, professional accounting study should be a part of the prequalification program; this study should be long enough and intensive enough to permit candidates to gain the professional knowledge required for professional competence. Students should pursue a degree in accounting, or a professional qualification, to gain this knowledge. The content of professional accounting education should consist of:

*A. accounting, finance and related knowledge.* This component should include the following areas: financial accounting and reporting, management accounting and control, taxation, business and commercial law, audit and assurance, finance and financial management and professional values and ethics. This part needs to be delivered at least at the level of an accounting degree (IES 2, par. 24).

*B. Organizational and business knowledge.* This component should comprise the following subject areas: economics, business environment, corporate governance, business ethics, financial markets, quantitative methods, organizational, behavior, management and strategic decision making, marketing and international business and globalization. According to IES 2 par. 26, organizational and business education equips prospective professional accountants with knowledge of the environment in which employers and clients operate. It also provides the context for the application of all the professional skills acquired during the pre-qualification process.

*C. Information technology knowledge and competences* comprise general knowledge of IT, IT control knowledge, IT control competences, IT user competences and one of, or a mixture of, the competences of, the roles of manager, evaluator or designer of information systems. Paragraph 30 of IES 2 states that as part of their pre-qualification education, all professional accountants are expected to participate in at least one of the roles of manager, designer or evaluator of information systems or a combination of these roles as identified in IEG 11. That means that at the point of qualification, candidates are expected to have a knowledge and understanding of the competency elements in at least one of these roles.

The Romanian accounting body as IFAC's member undersigns at these efforts for a better educational curricula by assimilating the IES standards on its own educational curricula (Diaconu, 2008)<sup>490</sup>. An investigation on this area was made through GAEB's report during the period June 2004 – January 2005 in Romania among other countries like: Albania, Bosnia&Hertegovina, Bulgaria, Kosovo, Macedonia, Moldova and Montenegro. The results of GAEB's report concerning Romania are presented below.

#### **4. GAEB'S PROJECT PILOT RESULTS**

GAEB initiative supports important objectives of the OECD Principles of Corporate Governance and the United Nations Convention against Corruption and accelerates development of the accountancy profession and supporting regional and member institutions as well as region-wide harmonization of financial reporting and professional standards based on global benchmarks. Its initiative is founded on international standards and best practices derived from sources such as IFRS, IFAC Statements of Membership Obligations, EU Directives, and the revised OECD Principles of Corporate Governance.

GAEB initiative aims to accelerate the development of the relatively underdeveloped accountancy profession and supporting institutions in transition and developing countries and employs a regional approach to accomplishing its overall harmonization and institutional development objectives. Designed from an institutional development perspective, the pilot version of the GAEB methodology identifies strengths and weaknesses in legal, regulatory and

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490 Diaconu, P., Directions of the accounting educational curricula in the Romanian universities and the conformity with IES provided by IFAC, AMIS Conference 2008, Bucharest.

institutional frameworks covering the professional qualification, education and training of accountants and auditors.

According to GAEB report, the main areas of interest for benchmarking purposes in this pilot project are the position and responsibilities of the professional bodies, the qualification requirements for accountants and auditors, professional education and practical experience. For each area, development indicators are defined and compared with international benchmarks.

The report presents a short overview of each professional body identified, structured on general view, priorities benchmarks and details about all of the criteria mentioned before. At Romania level, two professional bodies were investigated: Body of Expert and Licensed Accountants (CECCAR) and Chamber of Financial Auditors (CAFR).

Our extracts from the report are presented further and they are focused on matters concerning universities.

Regarding the entry-level stage, in 2003 the majority of new members had a degree in economics. Under this degree are specialties in accounting, management, IT, finance, marketing, agriculture economics and macro/micro economics. A minority of the new members had a general university degree.

Three out of ten universities in Romania offered at that time an acceptable business curriculum that included accounting, auditing, taxation, IT, managerial accounting and finance. There were still confusion with respect to tax law and financial accounting; concerning the quality of training in IFRS, this was considered to be poor. As a general conclusion, input from higher education was classified as sustainable.

According to the report, a comparison between IES and the actual situation (in 2004) led to the following conclusions:

- There were material deficiencies in Accounting, Finance and Related Knowledge.
- There were critical deficiencies in Management Accounting & Control, Audit & Assurance and in Professional Values & Ethics.
- Organizational and Business Knowledge had material deficiencies that reflected the development of the market divided in two “sections“: foreign companies benefiting from experience from abroad and domestic companies.
- Deficiencies were concentrated in Corporate Governance (urgent), Business Ethics (critical), Organizational Behavior (critical) and Marketing (critical). The development of Information Technology in professional education was classified as sustainable.
- There were material deficiencies in intellectual skills, technical and functional skills. Moreover, critical deficiencies were identified in personal skills, interpersonal skills, organizational and business management skills and in values, ethics and attitudes.

The report states that a specific attention was needed for professional education and practical training in skills, values, ethics and attitudes

As we mentioned before, according to GAEB, only few of Romanian universities offered an acceptable business curriculum, which we can consider to be very risky from the graduates point of view: if graduates are not prepared with basic knowledge in core area of accounting they will cannot meet the market ongoing and higher expectations. And this will turn into very poor professional services which can affect business dramatically. Because the report doesn't name the universities whose curricula was considered to be acceptable, we have endeavored to find out studies regarding this topic in order to support the findings of GAEB's report. Another more relevant reason would be to outline an opinion about the actual stage of Romanian universities' accounting graduates.

## 5. FINDINGS REGARDING HOW TIGHTLY CONNECTED IS ROMANIAN ACCOUNTING CURRICULA TO IESs

In Romanian trade literature we were able to find only one research in this area: *Directions of the accounting educational curricula in the Romanian universities and the conformity with IES provided by IFAC*, whose author is Diaconu Paul. The research was presented at AMIS Conference in June 2008.

Diaconu's work focuses on extracting an educational matrix from IES and comparing it with the local educational matrix produced by Romanian universities in order to evaluate the consistency of the conformity between them. Based on IESs, he extracted the main topics recommended to form a general accepted educational curricula and evaluated the structure of the disciplines which are considered by IES as needed to be part of ideal educational curricula. He attributed points of importance for each economics discipline, skills, general educational discipline or practical course presented by the educational curricula with the accent on the first category.

Using the matrix, he compared the educational curricula of selected universities by name and supposed content of the disciplines with the international requirements and evaluated the disciplines using points until the maximum level of the matrix. The study took into consideration all the disciplines included in the curricula even many of them are optional or facultative. The analyzed universities were: Academy of Economic Studies – Faculty of Accounting and Management Information System Bucharest, Babes-Bolyai University Cluj Napoca, Transilvania University Brasov and Romano-American University Bucharest.

The cohesion with IESs is presented below in terms of percentages:

| Universities                         | The cohesion with IESs (%) |
|--------------------------------------|----------------------------|
| Babes Bolyai University, Cluj Napoca | 83                         |
| Academy of Economics Study Bucharest | 78                         |
| Transilvania University Brasov       | 65                         |
| Romano-American University Bucharest | 57                         |

Diaconu's research proves that Romanian universities (at least those analyzed) are doing efforts to adapt their accounting curricula in order to comply with the international general accepted benchmark in the field.

The number of investigated universities is only four, but the most representative Romanian universities (in number of students, history, infrastructure and projects won) are the former and the latter besides another two universities which are not comprised into the study (because they don't public curricula information on the webpage). Saying this, we concluded that the research performed was made based on the transparency degree of the websites. Because of this, we would not afford ourselves to draw up a general conclusion but meanwhile it allowed us to detect a trend towards IES application in Romania.

## 6. CONCLUSIONS

In 2005, the Report on the Results of the GAEB Pilot Project found that Romanian higher education institutions were not providing the leadership role necessary to close gaps in accounting education in a timely manner. According to the report, a lot of improvements had to be done in order to prepare leaders in accounting, like the elimination of the identified deficiencies and the improvement of information technology area.

Three years later, in 2008, a Romanian researcher tried to identify if national accounting curricula fulfill the international pronouncements and, based on his research, he recommend the following improvements in:

- Accounting, Finance and Related Knowledge, by including the areas: History of Accounting and Accounting Thought, Accounting for Non-Profit Organizations and Use of Non-Financial Performance Measures in Business. It is interesting to observe that Audit & Assurance area should be improved according to GAEB Project and was not a subject of any debate in 2008, his place being taken by other areas, mentioned before.

- Organization and Business Knowledge have to be one especially in Corporate Governance and Business Ethics. So long, the deficiencies in these two areas were not solved properly.

- Information Technology knowledge seems to be a sensitive area. According to Diaconu, this area needs major improvements: at Babes Bolyai University severe improvements were recommended, at Academy of Economic Studies the approach of the theme have to be changed: from a creator to a user of computers, and at Romano-American University there was a need for a deep reevaluation of this area.

- Professional Values, Ethics and Attitudes. In this are, Romano-American University and Transilvania University were characterized by a lack of discipline that approach this theme.

As a final remark to the comparative approach performed in this study, we can conclude that the problems identified in 2005 were solved partially but still remain a lot of area to be improved. We have to consider that improving curricula, particularly in a domain like accountancy, it is not a static process. The continuous changes in the economic life have to be transpose in the curricula and so the process of keeping it up to date is a dynamic one.

As we can see from the presented study, Romanian universities can assure the premises of leadership. The both evaluations performed over the accounting curricula have proved that the degree of cohesion with IES is increasing rapidly. Keeping in mind that universities' mission is to prepare graduates who can fulfill the market expectations, we consider that they will offer leaders in the near future.

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# ECONOMIC RESEARCH, BETWEEN SCIENTIFIC ACCOMPLISHMENT AND CURRENT REALITY

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*Scientific research is the cornerstone of the academic environment. Given this, it is interesting to establish the way in which economic research, especially accounting research, keeps up with the current reality both at the national and international level or it is separated by its scientific nature somewhere above the day to day issues. This study analyzes the evolution of the mainly approached research themes presented in scientific conferences held in national renowned universities and subsequently tries to establish a connection between the findings and the current global economic issues. The research methodology implies the combination between quantitative and qualitative research, based on theoretical aspects translated then into practice through the empirical study. The study's findings will be useful both to the academic environment and to the individuals interested in knowing the evolution of accounting research themes and their timely influential factors.*

*Keywords: accounting research, conferences, themes, Romania*

*JEL: M40*

## **1. Introduction**

This paper conducts an analysis of the current main research themes in the academic environment. The focus is on conferences or scientific gatherings within four Romanian universities/faculties of economic studies.

Such an analysis is necessary for various reasons. Firstly, the study aims at establishing the degree in which the Romanian academic research is updated in comparison to the European and global research (in other words, we want to establish if the national academic environment follows the external trend in what regards research conducted and disclosed in conferences, or if our system is behindhand, „out-of-date”). Secondly, we focus on determining the economic specializations studies with most interest – especially the accounting’s position in this hierarchy. Another argument at the basis of this demarche, but less important, is the fact that current research in the academic environment could lead to major discoveries in the economic field moreover as today there is the need to globally „reinvent” economy. We mention „economic reinvention” as the world states are strongly affected by the economic crisis and many questions emerge regarding the efficiency of certain economic behaviors. This subject was highly debated upon even within faculties of economic profile, and we are on the mission to determine the key elements of the debates, materialized in the economic fields that teachers, students and other interested parties focus on.

There is still one issue that needs clarification in what regards its relevance to this study: why is accounting influenced by the currently researched themes? Although the current research themes do not focus on accounting, the findings are relevant because of interdisciplinarity i.e. the connection between accounting and other economic fields (especially the financial filed) but also other social sciences (especially politics).

### **1.1. Objectives. Hypothesis**

The paper has the following objectives:

1. Identifying the main research themes adapted to the circumstances in Romania;
2. Establishing the Romanian research themes’ update degree;
3. Establishing accounting’s position within the research themes’ hierarchy.

In order to reach these objectives we established two hypotheses.

H1. The number of conferences held in the past three years has a growing trend, taking into account the increasing changes specific to the field of economics both nationally and globally.

H2. The accounting has a low level position in the research themes' hierarchy; researchers show little interest in it as they are preoccupied with addressing more urgent issues.

### ***1.2. Research methodology***

This is an empiric case study, part of mainstream research, as it is focused on research themes adapted to the current situation. According to the mainstream nature, its research objectives are phenomena, processes, current stages and realities. It is based on hypothetico-deductivism as it starts from incipient premises, but also on technical control as quantitative and qualitative analyses are the research techniques used.

The paper was drawn up in numerous stages. Thus, in the first stage we established the research area to four Romanian faculties of economic studies. These faculties are: Faculty of Economics and Business Administration (FSEGA), „Babeş-Bolyai” University of Cluj-Napoca; Bucharest Academy of Economic Studies (ASE); Faculty of Economics and Business Administration (FEAA) „Alexandru Ioan Cuza” University of Iaşi and Faculty of Economy and Business Administration (FEAA) West University of Timișoara. We identified the conferences, scientific gatherings and workshops that took place in the past three years (2007, 2008 and 2009) at these faculties and universities. We selected from the names of these events the key words (the themes) and the main areas of concern. We further determined the percentage of each field in the total number of fields and the percentage of each theme in the total number of themes. Afterwards we interpreted the results, underlining the present-day themes and the position of accounting subjects in the general hierarchy.

Information regarding the scientific gatherings was collected from the official web sites of the analyzed universities and faculties. Where data was insufficient we resorted to internet search engines in order to find as many academic events as possible. The accuracy of the findings depends upon the update of the web sites and the exhaustively supply of information.

### ***1.3 Literature review***

In order for any study to gain value it must be analyzed by as many field researchers as possible. The ideas issued by different specialists may indicate new research directions, may clarify some aspects, and may add value to the initial study. The adequate environment for this type of interactions can be found in conferences, round tables, scientific gatherings.

„Circulate your papers to colleagues and ask them for both substantive and expositional comments. Give the paper in seminars at your school and other institutions before submitting to a journal” (Zimmerman, 1989: 461).

This type of meetings would add value to journals which could include in their review process better elaborated articles, articles valued before submission not just afterwards. Green et al. (2002:155) said „So how should authors maximize the value of the journal review process? They should circulate their papers and give seminars to colleagues to receive constructive criticism before submitting to a journal”.

Hammermech (1992:170) advised young economists to present their papers and circulate them to colleagues; „a presentation can improve your work...present your work at seminars, professional meetings and conferences...do not be embarrassed to send your work to senior people”.

## **2. Current research themes in specialized articles**

After analyzing the conferences held all over the world for the past years, using electronic data bases such as Proquest, Springerlink and Ebscohost we noticed the fact that in the field of economics the stress lays upon regional development, workforce, with frequent references to the unemployment rate and employment opportunities, efficient resource allocation, mitigation of the economic crisis' effects, harmonization, convergence.



## **2.1 International held conferences**

Having in mind the international conferences held in different countries we can identify the current research themes. Thus, at the fourth edition of the World Congress and the 25th Annual Reunion in North America, Portland, Oregon the discussed issues concerned: different approaches to sustainable management resources, natural resources extraction and production of material resources, the correct valuation of the production cycle within an economic entity, accounting material flows, risk valuation. (Information, Decision and Control, 2007).

During this same year an annual conference was held in Westminster, London, UK, regarding the effects of development. The subjects discussed include: the influences that could manifest over the future 30 years of development and the stages of development, which will be the biggest issues of the following 3 decades, which are the thinkers and leaders that envision the direction of development.

Another conference of international nature was held in Atlantic City between the 1<sup>st</sup> and 3<sup>rd</sup> of December 2008, and its theme was: The Economic Development of the Workforce. During the debate there were references to: business plans stimulation, usage of renewable sources of energy, the development and control of financial services (NJBIZ, 2008).

In Boston, during the same year, there was a conference on economic stimulants for unemployment, pitfalls and opportunities to finding a job, the unemployment rate and life standard (International Tax and Public Finance, 2008).

As expected, during 2009, the most debated subject concerns the evolution of the economic crisis and the possibilities to mitigate it. Thus, in Bruxelles, The European Economic and Social Committee discussed about the impact of the crisis on each member state. Laurențiu Plosceanu, the President of The Romanian Entrepreneurs Association presented the current situation in Romania in the context of the economic crisis, the Government's anti-crisis plan, its origins and the necessity to update it.

The "International Conference on the Educational Global Crisis" was held in the United Kingdom.

Mostly nowadays, in the context of the current crisis, the analysis on development in different fields is carried on. In this respect there will be a conference on adequate practices regarding the sustainability of certain under-privileged sectors. The conference's themes are: land, water and productivity consolidation in the case of rough rice crops, rice demand, ecological agriculture and the local usage of different breeds but also their impact on the natural resource renewal. The conference will be held within IPB1 (Conference Institutional Center) in Bogor Indonesia between the 7<sup>th</sup> and the 9<sup>th</sup> of October 2009.

## **2.2 National held conferences**

The results of the analysis on the faculties mentioned above in the years 2007, 2008 and 2009 are shown in Table 1. "Number of scientific gatherings held at the researched universities".

**Table no 1. Number of scientific gatherings held at the researched universities**

| <b>University</b>           | <b>Year</b> | <b>2007</b> | <b>2008</b> | <b>2009</b> | <b>TOTAL</b> |
|-----------------------------|-------------|-------------|-------------|-------------|--------------|
| ASE                         |             | 25          | 20          | 2           | 47           |
| FSEGA                       |             | 3           | 6           | 4           | 13           |
| FEAA IAȘI                   |             | 8           | 5           | 4           | 17           |
| FEAA TM                     |             | 2           | 3           | 1           | 6            |
| Total Romanian Universities |             | 38          | 34          | 11          | 83           |

It is noticeable that the Romanian academic environment shows a remarkable interest for scientific gatherings. Many of the conferences are held at the Bucharest Academy of Economic Studies as in Romania regional development is an on-going long-term process, and the center of

the economic, social and political life is still placed in Bucharest. Second place goes to FEAA “Alexandru Ioan Cuza” University of Iași, third FSEGA “Babeș-Bolyai” of Cluj-Napoca, while FEAA West University of Timișoara is the fourth in our hierarchy. The economic specialization in which researchers showed interest along with the main themes of the scientific gatherings are presented in Table 2 “Economic specializations”.

**Table no 2. Economic specializations**

| <b>Field</b>          | <b>Number of occurrences</b> | <b>Percentage</b> |
|-----------------------|------------------------------|-------------------|
| Management            | 7                            | 9.59              |
| Statistics            | 3                            | 4.11              |
| Econometrics          | 1                            | 1.37              |
| Finance               | 19                           | 26.03             |
| International economy | 29                           | 39.73             |
| Accounting            | 5                            | 6.85              |
| Marketing             | 5                            | 6.85              |
| Macroeconomics        | 4                            | 5.48              |
| Total occurrences     | 73                           | 100.00            |

Each field’s percentage of the total occurrences of the fields:

Percentage = total occurrences of the fields / total occurrences \*100

Most scientific demarches are related to management, finances and international economy while accounting is only on the fourth position in what regards the researchers’ interest. For the past few years statistics and econometrics have gained territory as a result of the changes incurred and the new trends of research. Up until four or five years ago speciality papers focused on analyzing the theoretical aspects, the regulations and legislative methodology. Nowadays, quality research implies analysis and interpretation of mathematical, statistical models thus resulting in an interdisciplinarity far more constructive to evolution.

We separated the current research themes into general and specific themes according to Table 3 “Current research themes”.

**Table no 3. Current research themes**

| <b>General themes</b>                      | <b>Number of occurrences</b> | <b>Percentage</b> |
|--|------------------------------|-------------------|
| The economic/financial crisis              | 11                           | 21.15             |
| The European Union                         | 12                           | 23.07             |
| The Integration                            | 5                            | 9.61              |
| The corporative/organizational environment | 4                            | 7.69              |
| Statistical modulation                     | 3                            | 5.76              |
| Monetary policies                          | 4                            | 7.69              |
| Financial/Capital Markets                  | 7                            | 1.92              |
| International Finance                      | 2                            | 3.84              |
| Public administration                      | 2                            | 3.84              |
| Public debt                                | 2                            | 3.84              |
| Total general themes                       | 52                           | 100.00            |
| <b>Specific themes</b>                     | <b>Number of occurrences</b> | <b>Percentage</b> |
| Payment                                    | 1                            | 2.70              |
| Audit                                      | 1                            | 2.70              |
| Development                                | 13                           | 25.00             |
| Competitivity                              | 7                            | 18.91             |
| Globalization                              | 3                            | 8.10              |

|                       |    |        |
|-----------------------|----|--------|
| Instability           | 3  | 8.10   |
| Information           | 4  | 10.81  |
| Regulations           | 5  | 13.51  |
| Total specific themes | 37 | 100.00 |

Each theme's percentage of the total occurrences of themes:

Percentage = total occurrences of the fields / total occurrences \*100

It is noticeable that economic development, the European Union and the economic/financial crisis are the most debated subjects. This hierarchy is in accordance with the Romanian academic environment because Romania is mostly interested in sustainability as a member of the European Union. The number of conferences on EU integration held at the faculties from our country between 2007 and 2008 has the highest percentage. By the end of 2008 and the beginning of 2009 the situation is offset by the subject of the financial crisis.

Themes on accounting are rarely debated. In respect to this there are some conferences on public administration, public debt, payment in the public sector, audit and accounting convergence. The academic environment in Cluj-Napoca deals with the subject of audit and accounting convergence annually within a conference with the same title. The Bucharest Academy of Economic Studies debates on public administration in Romania in the context of entering the European Union. The focus of economic research is on the influential factors of the state's incomes and expenses such as the economic crisis or the affiliation to a world-important union. Other interesting subjects are international transactions, capital markets, the social impact of economy, the development of economic efficient models.

### 3. Conclusions and discussions

The results of this study highlight the idea that scientific research and conferences are currently mostly focused on the global economic-financial crisis. The crisis is indeed one of the main subjects of interest but between 2007 and 2008 the scientific demarches in the Romanian academic environment were mainly concerted with Romania's position in the European Union and the Romanian economic system's alignment to the western system.

In respect to the interpretation of the hypothesis, the first one i.e. "The number of conferences held in the past three years has a growing trend, taking into account the increasing changes specific to the field of economics both nationally and globally" is invalidated by 75%. In the Romanian academic environment there were 83 scientific gatherings – conferences, workshops and research activities. There is a high interest on the part of the Romanian professors and students in academic demarches but this interest is not equally distributed within the Romanian territory as the majority of the event takes place in Bucharest. As the annual evolution of the number of conferences shows there is a growing interest of the academic environment from Cluj-Napoca, Iași and Timișoara in organizing more and more scientific events. However, there is a decrease in the number of conferences held. On the one hand this could be a result of the financial crisis that affects all sectors, including the educational and research areas. On the other hand this can be explained by the growing quality of held conferences as there is a longer period in their succession which enables the studies to be better elaborated with a higher value. This trend can be noticed even at an international scale as renowned universities organize conferences at two, three or four year apart.

Further within this theory it was speculated that Romanian universities replicate the research themes of British universities. This was also informed as in the case of Romania there is a high interest for national issues and our country's position as a new member of the European Union. In the second part of the analyzed period the conferences focus on the economic-financial crisis,

but this can also be explained as the crisis reached a global level and economists are interested in this subject at an international level.

The second hypothesis i.e. “The accounting has a low level position in the research themes’ hierarchy; researchers show little interest in it as they are preoccupied with addressing more urgent issues” is fully confirmed. Researchers are not highly interested in accounting. In the Romanian academic environment there are conferences focused on this issue. This is how the conference on financial-accounting audit and accounting convergence was established (FSEGA, Cluj-Napoca). Another subject from the accounting field in accordance with Romania’s integration the European Union was adapting public administration to the European regulations. However, the accounting themes are among the latest positions within the current research themes’ hierarchy.

#### **4. Future research**

For the future, an interesting direction for expanding the study would include a detailed analysis of the general and specific accounting themes subject to research. Moreover, a comparison with the situation in other countries could also be interesting. It is a known fact that the United Kingdom sets the directions in scientific research. Numerous economic theories have been issued by British, American or French scientists. In addition, each of these cultures has its own particularity which triggers prolific scientific research.

Another issue which we wish to address in future analyses is the Romanian students’ interest in certain research subjects. Thus, by conducting a survey on a representative we could determine how students value the timely degree of conferences held in the Romanian academic environment. Also, we could identify in this way the interesting themes that could be approached. Using the same survey we could establish if students in Romania consider that universities create the adequate environment for research studies or if, on the contrary, they are tempted to conduct research activities abroad.

These are the current objectives of future research but, of course, they will be adjusted according to the evolution of the Romanian and international economic environment and their future representativeness.

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## BY RECOGNITION FINANCIAL ASSETS AND LIABILITIES. DIVERSITY AND PROBLEMATICS

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*And our country has opted for a combination of the two assessment systems, but fair value is provided only for goods received for free (if economic). Accounting regulations in accordance with European directives require the use of fair value for financial instruments, including derivatives in the consolidated financial statements under the same restrictive conditions as those contained in Directive fair value. Therefore, you can see its use restricted, limited and the economic environment and legislative existing in Romania, characterized by<sup>491</sup> the priority rules of legal privileges and tax to the detriment of economic, accounting mentality that does not support the new concept with all its implications, poor development of capital market which is the main source for information on fair value, knowledge of evaluation standards.*

*Keywords: cash-flow, financial assets, recognition, market*

*JEL classification : M41 – Accounting*

By recognition operation is to remove the balance of a financial asset, a financial debt or of parts thereof. She was one of the most controversial aspects of the original version of IAS 39. The revised IAS 39 lays down, for situations in which the retraction of a financial asset is not obvious, a set of steps as a decision tree, which the entity should apply. This hierarchical approach is briefly explained in what follows.

Stage 1: Determine if the entity applies the retraction an active full or part thereof. IAS 39 allows the application of these criteria not only active in their entirety, but also for parts of them. Rule retraction supports an active part of that cash flows can be identified in a separate component. Therefore, the test can be applied by recognition :<sup>492</sup>

Stage 2: The rights expired on cash flows? If the entity is no longer receiving cash flows related to assets transferred, it has no value and should retracted. Such a situation occurs when the rights of its cash flow will expire or are lost. Appropriate payment of debts by the borrower or termination obligations toward the creditor.

Stages 3 and 4: the entity transferred substantially all risks and benefits or to hold? If the entity has transferred substantially all risks and benefits of ownership of assets, it must be retracted. IAS 39 does not explain what is meant by the phrase "significantly", which means that the necessary professional reasoning to solve this problem. U.S. GAAP understood by the phrase "right to at least 90% of cash flows (or economic benefits)."<sup>493</sup>

An entity will by recognition financial asset when and only when: a) the contractual rights on cash flows from decurse financial asset expire, or b) Financial assets transferred assessing the extent to which the entity retains the risks and benefits of asset holders Financial. Therefore, the

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491 A. Deaconu, from historical cost to fair value, economic truth, no. 19/2003, p. 23.

492 \*\*\* Financial Instruments under IFRS. Revised IAS 32 and IAS 39 and IFRS 7. A guide through the maze, PricewaterhouseCoopers, October 2006, <http://www.pwc.com/ifrs>.

493 Deloitte Touche Tohmatsu, Financial Instruments - Applying IAS 32 and IAS 39: Summaries, guidance, examples and comparisons U.S. GAAP, IAS Plus, Hong Kong, 2001, p. 80.



continues to be recognized and the unrecognized which is based on relative fair values of those parties at the time of transfer. In cases purpose, an asset maintenance will be kept as part of the Treaty continues to be recognized. The difference between:

- the value allocated retracted

- the amount consists of the consideration received for the unrecognized and any cumulative gain or loss that was recognized directly in equity will be recognized in the profit and loss. A gain or loss accumulated that would be recognized directly in equity is allocated in the party continues to be recognized and the unrecognized which is based on relative fair values of those parts.

When a entity shares value has a larger financial asset between the part that continues to be recognized and that is the unrecognized, the fair value of the party continues to be recognized must be determined. When the entity has a tradition of selling parts similar to the party continues to be recognized or if there are other transactions in the market for such parts, recent prices of the current transaction provides the best estimate of fair value. Where there are no quotas or price recent market transactions to support the fair value of the parts continues to be recognized, the best estimate of fair value is the difference between the fair value of financial assets greater whole and the consideration received by the entity which has been transferred party is by recognition.

In the sale of part of a financial asset, the seller must cancel the recognition that parts sold and to record a gain or loss, the difference between the book value of the part sold and the proceeds received. Assigning the value of accounts sold shall be based on the proportion of the fair value of that part in the fair value of assets. Where it is unable to determine the fair value of the remaining (unsold), then the entire fair value, size of the accounts, shall be awarded the full sold. The Guidelines for Implementation of IAS 39 are presented two methods that can determine the fair value can be allocated from the sold financial assets. The first method will be presented in a first step.

Examples<sup>497</sup> that illustrate these two methods are presented below:

Suppose that A acquires a market debt (1000 bonds) with a principal value of 100 um, with a coupon, a rate of return of 11%. Subsequently sold to investors 90% of the principal, and 90,000 um, with an interest rate of 6%. Enterprise A retains the remaining 10% of the principal, and 10,000 um, with an interest rate of 5% (11% -6%). Part of the remaining unsold bonds shall constitute a guarantee therefore is subject to the 90% of bonds sold. In these circumstances, the A will recognize a gain from the sale equal to 4.286% of the principal, and 4286 um, determined by:  $90,000 \text{ um} - 90,000 \text{ um} \times \frac{6\%}{11\%}$ , where 85714 is  $100,000 \text{ um} \times \frac{90\%}{90\% + 15\%}$ :

|   |                       |                    |
|---|-----------------------|--------------------|
| <b>90.000 u.m. Current account with banks =</b> | <b>%</b>              |                    |
|   | <b>Bonds</b>          | <b>90.000 u.m.</b> |
|   | <b>Gain from sale</b> | <b>85.714 u.m.</b> |
|   |                       | <b>4286 u.m.</b>   |

where 15% represents 10% of the principal and related interest rate 5% remaining. Another method (second) are based on market quotations of bonds similar to those acquired and subject to current sales. Suppose that these obligations are listed at a value of 101% of the principal. He estimated that the enterprise value we hold in bonds is 11% of principal amount, representing the difference between the stock market 101% and the proportion transferred to investors 90%. Under this method, the A will recognize a gain of 0.90% of principal amount determined as follows:

$0.9\% \times 100.000 = 90\% \times 100.000 \text{ um} - 89.1\% \times 100.000$ , where  $89.1\% = 90\% / 101\%$

|   |              |                    |
|---|--------------|--------------------|
| <b>90.000 u.m. Current account with banks =</b> | <b>%</b>     |                    |
|   | <b>Bonds</b> | <b>90.000 u.m.</b> |
|   |              | <b>89.100 u.m.</b> |

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497 The example is inspired by the work Dutescu A., Guidelines for the understanding and application of IAS 39 Financial Instruments: Recognition and Measurement, Ed CECCAR, Bucharest, 2004, p. 128.

**Gain from sale****900 u.m.**

Do not buy the bonds from the market, but these bonds represent loans created business, then use the second method for determining fair value because the sale of part of assets by investors is considered a current market transaction.

By recognition a debt is a financial entity shall remove a financial debt or debt of a financial balance sheet when, and only when it is closed - in when the contractual obligation is extinguished or expire.<sup>498</sup>

An exchange between a creditor and a debtor's existing debt instruments with substantially different conditions will be counted as debt liquidation original financial and in recognition of a new financial liabilities existing or parts thereof, whether or not attributable to financial difficulties in which the debtor, should be accounted for as being a financial liquidation of the debt and initial recognition of a new financial debt. Read following examples<sup>499</sup>:

1. Assume that the purchase of their bonds on the market with the intent to resell them later, the market price of bonds is 110 um, and the nominal value of 120 um is therefore bond issuer will cancel the recognition of their bonds purchased, and the difference will be recorded as a gain:

|                                   |   |   |                 |
|-----------------------------------|---|---|-----------------|
| <b>Borrowing from bond issues</b> | = | % | <b>120 u.m.</b> |
| <b>Current account with banks</b> |   |   | <b>110 u.m.</b> |
| <b>Net financial instruments</b>  |   |   | <b>10 u.m.</b>  |

Although the intention of selling later bond will not be registered as a new debt issuer's financial accounts.

2. Assume that the bond issue with a principal value of 100.000 um and a discount of 20,000 um, and sells enterprise B. Meanwhile, the company has paid the sum of 100,000 C um undertaking to assume responsibility for obligations pay the principal and interest on. However, the A is still responsible for payment of principal and interest, where the C would not pay. In these circumstances, because the A was not legally excluded from the payment of obligations issued securities can not cancel the debt financial recognition, although it transferred the responsibility of C. Therefore, obligation lending will continue to be presented as a debt of 100,000 um in the accounts at the issuer and the payment of 100,000 um by the C will appear as a claim:

- issuing and placing of bonds:

|                     |   |   |                                    |
|---------------------|---|---|------------------------------------|
| <b>100.000 u.m.</b> | % | = | <b>Loan obligatar 100.000 u.m.</b> |
| <b>80.000 u.m.</b>  |   |   | <b>Current account with banks</b>  |
| <b>20.000 u.m.</b>  |   |   | <b>Discount bonds related</b>      |

- payment of 100.000 um by the C :

|                     |                         |   |                                   |                     |
|---------------------|-------------------------|---|-----------------------------------|---------------------|
| <b>100.000 u.m.</b> | <b>Financial Claims</b> | = | <b>Current account with banks</b> | <b>100.000 u.m.</b> |
|---------------------|-------------------------|---|-----------------------------------|---------------------|

3. Assume that company A sells the bond B with a principal value of 100.000 um and a discount of 20,000 um, with an interest rate of 10%. Subsequently, the ceding company B 50% in bonds and receives in return other bonds with a principal value of 60.000 um and an interest rate of 9%. Therefore, A will cancel the recognition of 50% of the bonds originally sent to B and will recognize a nine debt for an amount of 60.000 u.m.:

|                    |   |   |                           |                    |
|--------------------|---|---|---------------------------|--------------------|
| <b>60.000 u.m.</b> | % | = | <b>Loan obligatar new</b> | <b>60.000 u.m.</b> |
| <b>50.000 u.m.</b> |   |   | <b>Loan obligatar old</b> |                    |
| <b>10.000 u.m.</b> |   |   | <b>Profit and loss</b>    |                    |

The procedure to cancel a debt of recognition and the recognition of an old debt can take place when the present value of future cash flows to date, determined under the new conditions. 4. Assume that company A has a duty of 200 um to be paid by the B. However, the A is excluded from the creditor to pay the debt because it is transferred to the C for the amount of 200 um

498 \*\*\*, IAS 39 "Financial Instruments: Recognition and Measurement", Official Journal of the European Union, L 363/9.12.2004, <http://europa.eu.int>.

499 The example is inspired by the work Dutescu A., Guide understanding and application of IAS 39 Financial Instruments: Recognition and Measurement, Ed CECCAR Bucharest, 2004, p. 138-143.



enterprise assumes the obligation reimbursements of the obligation where C will not pay at maturity. Fair value of the obligation is 190 um Therefore, the record book is:

|                                   |          |          |                                   |            |
|-----------------------------------|----------|----------|-----------------------------------|------------|
| <b>390 u.m.</b>                   | <b>%</b> | <b>=</b> | <b>%</b>                          | <b>390</b> |
| <b>u.m.</b>                       |          |          |                                   |            |
| <b>200 u.m. Old bond</b>          |          |          | <b>New bond</b>                   | <b>190</b> |
| <b>u.m.</b>                       |          |          |                                   |            |
| <b>190 u.m. Profit and loss C</b> |          |          | <b>Current account with banks</b> | <b>200</b> |
| <b>u.m.</b>                       |          |          |                                   |            |

The difference between the value of a financial debt or part of the financial debt liquidated or transferred to another party and the consideration paid, including any assets other than cash transferred or debt incurred will be recognized in profit or loss. Again purchase if an entity part of a financial debt, the entity will share book value of debt prior to the financial side which continues to be recognized and the unrecognizing which is based on relative fair value of those parts on again purchase. The difference between book value and unrecognizing the allocated amount paid, including assets other than cash transferred or debt incurred for the unrecognizing ã will be recognized in profit or loss. In many cases, transfer of assets involves the issuing of derivative instruments that can be more or less explicit. Derivatives embedded in these transfers are sometimes difficult to identify, but the identification and evaluation are crucial in applying the criteria of unrecognizing because certain elements derived control that can significantly influence the cancellation of recognition. Any derivative is a potential constraint for use in customer assets transferred in such a way as to allow obtaining the corresponding economic benefits. For this reason it is necessary to careful assessment of derivatives and their characteristics, taking into account issues such as<sup>500</sup>:

- derivatives can operate automatically or require them to exercise one of the parties;
- exercise may be free or in the event of a future event
- future can be sure to take place or may be subject to another event production
- events may be subject probable, possible or removed;
- in certain circumstances is not possible to assess certainty of these events;
- exercise price of derivative can be fixed above, below or be equal to the market value of initial assets Support, in other cases it is variable;
- derivatives can be combined to give various types of derivative instruments.

When an entity uses settlement date accounting for in an asset that is then assessed at cost or the cost of cushion, the assets are recognized initially at fair value at the date of trading. Fair value of a financial instrument at initial recognition is normally the price transaction, ie the fair value of the amount received or paid. However, if part of the consideration given or received is for something outside of the financial instrument, the fair value of financial instruments is estimated using a valuation technique. For example, the fair value of long term loan or a debt that is not bear interest can be estimated as the present value of all future entries of cash flows using the updated key interest rates in the market for similar financial instruments regard to the conditions, type of interest rate and other factors with similar credit ratings. Any additional amount lent is an expense or a reduction in income, except when be recognized as another type of asset.

If an entity is the source of the loan has an interest rate outside the market and receives some fees to purchase the compensation, the entity recognizes the loan to fair value, ie net of fees that it receives. Entity discount increase profit or loss using the effective interest rate.

And our country has opted for a combination of the two assessment systems, but fair value is provided only for goods received for free (if economic). Accounting regulations in accordance with European directives require the use of fair value for financial instruments, including

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500 Deloitte Touche Tohmatsu, Financial Instruments - Applying IAS 32 and IAS 39: Summaries, guidance, examples and comparisons U.S. GAAP, IAS Plus, Hong Kong, 2001, p. 88.

derivatives in the consolidated financial statements under the same restrictive conditions as those contained in Directive fair value. Therefore, you can see its use restricted, limited and the economic environment and legislative existing in Romania, characterized by<sup>501</sup> the priority rules of legal privileges and tax to the detriment of economic, accounting mentality that does not support the new concept with all its implications, poor development of capital market which is the main source for information on fair value, knowledge of evaluation standards, etc.. The discussions on the controversial topic of using the fair value are far from being completed and will continue long because , "in terms of accuracy, it is in the same area with" fair picture ". Both concepts are constantly moving, influencing to each other "<sup>502</sup>and is of great topical issues. Given that dialogue is beneficial in any area, we hope the current barriers will be overcome and will reach an agreement that benefit both producers and users of financial statements.

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501 A. Deaconu, from historical cost to fair value, economic truth, no. 19/2003, p. 23

502 Tabara N., Horomnea E., conceptual demarcations on fair value, Public Finance Review and Accounting, no. 5 / 2002, p. 17.

# INFORMATION AND COMMUNICATION IN BANKS - KEY ELEMENTS OF THE INTERNAL CONTROL SYSTEM – AN EMPIRICAL ANALYSIS BETWEEN ROMANIAN, AMERICAN AND CANADIAN MODELS OF CONTROL

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*The purpose of this paper is to focus on one of the most important aspect of the internal control in banking system – information and communication - trying to identify on which of the two well-known international models of control (COSO or CoCo) is our national one most appropriate to.*

*The research methodology is based on an empirical analysis between Romanian regulation and the models already mentioned. To reach to a conclusion we tried to identify several key issues closely related to information and communication, and to determine the degree of similarities and dissimilarities between the three selected frameworks, by using statistical indicators.*

*The paper has some limitations, too, because it only approaches formal harmonization. So, those issues analyzed through the regulations' perspectives need to be closely quantified in matters of their actual implementation, which offer us outlooks of future research.*

*Keywords: Information, Communication, COSO model, CoCo model, Romanian framework*

*Cod JEL: G21, M42*

## **1. INTRODUCTION**

The necessity of a stronger internal control system consists on the main management's objectives (to maintain a reliable system, to ensure timely preparation of reliable information, to safeguard assets, to optimize the use of resources and prevent and detect error and fraud), which were along time the subject of many international studies<sup>503</sup>.

Both well-known COSO and CoCo models for an efficient and effective internal control system have been, as well, the subject of various research papers<sup>504</sup> along time.

As internal control frameworks, most authors<sup>505</sup> reached to the conclusion that the two models (COSO and CoCo) complement each other. All these authors see internal control as a process designed to facilitate and support the achievement of business objectives, which covers consideration of significant risks in operations, compliance and financial reporting, and which are mainly focused on the same objects, such as improving business effectiveness.

Romanian internal control system framework is a newer one, dated from 2003, when the our National Bank settled the regulation regarding internal control system and audit in banking field,

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503 Alvin A, Lemon W.M and Loebbecke J., Auditing: An Integrated Approach, Scarborough, ON: Prentice Hall Canada Inc., 5th Edition, 1993; FMCBC, Enhancing Management Involvement with Internal Control, Financial Management Capacity Building Committee, 2005, pg. 2.

504 Gramling A., Internal Control Systems, Encyclopedia of Business, 2nd Edition, 1990, [http://findarticles.com/p/articles/mi\\_gx5209/is\\_1999/ai\\_n19125759](http://findarticles.com/p/articles/mi_gx5209/is_1999/ai_n19125759); Callaghan J.H., Savage A. and Mintz S., Assessing the Control Environment Using a Balanced Scorecard Approach, The CPA Journal Online, March 2007; Rezaee Z., What the COSO report means for internal auditors, Managerial Auditing Journal, vol. 10, no. 6, 1995, pg. 5-9

505 Rittenberg E. L, Martens F. and Landes C.E, Internal control guidance – not just a small matter, Journal of accountancy, March 2007; Hirth R.B.Jr., Better internal audit leads to better controls, Financial Executive, November 2008, [www.financial executives.org](http://www.financial executives.org); Kinney W.R.Jr., Research Opportunities in Internal Control Quality and Quality Assurance, Auditing - A Journal of Practice & Theory, Vol. 19, Supplement, 2000, pg. 84

emphasizing their importance in managing significant risks. Even if this framework is an implementation of the Basle Committee on banking Supervision's settlement, it designs an internal control system, so there has to be a more or less similarity between it and the two international well-known models, which is going to be the aim of our research.

## 2. AIM OF THE STUDY AND RESEARCH METHODOLOGY

Our empirical study is aimed to identify on which of the international internal control models (COSO or CoCo) is based the Romanian internal control system framework for credit institutions, as regards *information and communication*. In order to reach to a conclusion, we made an analysis with character of comparison between the two international models, as well as our national regulation and each of them. In this study, we focused our attention on aspects related to information and communication, one of the most important components on any internal control system.

Our empirical analysis was performed by testing the similarities and dissimilarities between the three sets of regulations regarding information and communication – the internal control system's component analyzed, taken two at a time in order to reach to a conclusion about the comparability degree existent between them.

The source of information for our research was the three regulations mentioned above which were codified and assayed by using a statistical method, which is being detailed in the chapter dealing with the comparative approach of the national framework by reference to the two international internal control models.

The findings of our study, which come from analyzing formal harmonization in the area of internal control system, are correlated to the literature review, but as every other research, our paper has some limitations, too, which offer us outlooks of future research. We should not forget that our study is only about a formal harmonization, which needs to be broadened to the current development stage of the national banking system, focusing on the degree in which the regulation is put into practice and its purpose is being achieved.

## 3. LITERATURE REVIEW

Internal control has different meanings to different parties. That is why, it is very difficult to give an only-one definition of the internal control system, because it can be seen from different angles. In the followings we are going to focus our attention on two of the most important international models of control.

The first one is **COSO's** model<sup>506</sup>, which tries to establish a common definition. Under COSO's report, *internal control* in its broader sense is defined as a process affected by an organization's board of directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of *objectives* in the following categories: (a) effectiveness and efficiency of operations; (b) reliability of reporting and (c) compliance with applicable rules, laws and regulations.

The second model of *internal control* is the **CoCo's** one, which is focused on behavioral values rather than control structure procedures as the fundamental basis for internal control in a company<sup>507</sup>. According to this, *internal control*<sup>508</sup> is put into the context with how a task is performed, defining it as those elements of an organization (including its *resources, systems,*

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506 COSO, Internal Control – Integrated Framework, Committee of Sponsoring Organizations of the Treadway Commission, 1992, [www.aicpa.org](http://www.aicpa.org) / [www.coso.org](http://www.coso.org)

507 Protiviti Independent Risk Consulting, An Overview of the COSO Internal Control – Integrated Framework, 2004, [www.knowledgeleader.com](http://www.knowledgeleader.com)

508 CICA, Guidance on control, Criteria of Control Board, The Canadian Institute of Chartered Accountants, 1995, [www.cica.ca](http://www.cica.ca)

*processes, culture, structure and tasks*) that, taken together, support people in the achievement of the *objectives*.

If COSO divided internal control into five main components, CoCo uses four essential elements as groupings within which it articulates 20 criteria of control. These criteria create the basis for understanding control in an organisation and for making judgements about the effectiveness of it, a characteristic, which was from the very old time the subject of many studies<sup>509</sup>.

#### **4. EMPIRICAL COMPARATIVE APPROACH REGARDING INFORMATION AND COMMUNICATION BETWEEN ROMANIA, AMERICA AND CANADA**

##### **4.1 The Romanian banking internal control system framework on information and communication vs. COSO and CoCo models**

**Internal control**, as it was defined by the Basel Committee on Banking Supervision<sup>510</sup>, as well as by the National Bank of Romania<sup>511</sup> represents "*a continuous process in which takes part the board of directors, senior management and all level of personnel, and whose aim is to ensure that all the established goals will be reached.*" We have to stress that internal control is not just a procedure or a policy, performed at a certain point in time, but rather it is a continually operating action at all levels within the bank.

In order to reach the internal control goals, credit institutions must design a system based on five inter-related *elements*, the same as those from COSO's model of control, one of these being **information and communication**.

Firstly, adequate information and effective communication are essential for a proper functioning of the internal control system. From our National Bank perspective, in order to be essential, information must accomplish the following *qualitative characteristics*: *relevance* (imposed by both international models of control), *reliability, completeness and opportunity* (recommended by CoCo's criteria of control), *accessibility* (required by COSO) and *comparability*.

Secondly, when we talk about *information* we have to refer both to the *internal* ones (financial or operational) and the *external* ones (related to other events or circumstances relevant to decision making process). Similarly, according to COSO, the information needs to be determined if it is for the employees and elected officials of the municipality or the citizens, and if it is financial or non-financial.

Furthermore, a critical component of every bank's activity is to establish and maintain an *informational system* and to issue and implement *procedures for the use of information*. Even if there are not retrieved such stipulations in COSO's model, the CoCo's one consider that there have to exist information systems, which should be reassessed as objectives change or as reporting deficiencies are identified, as well as follow-up procedures, which should be established and performed enabling control to remain effective. Moreover, the National Bank of Romania stipulates the necessity of an *alternative plan for safeguarding information*.

Finally, as regards *communication*, all three frameworks consider that banks should implement *communication channels*, whereby employee's duties and responsibilities should be effectively communicated, and it is required to be designed in two-ways. Moreover, COSO considers that

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509 Turnbull Report, Internal Control Guidance for Directors on the Combined Code, 1999, [www.ecgi.org](http://www.ecgi.org); Tongren J.D., CoActive control, Internal Auditor, 1995, pg. 42-44; Gibbs J. and Keating P. Reengineering Controls, Internal Auditor, 1995, pg. 46-49

510 Bank for International Settlements, Basle Committee on Banking Supervision, Framework for internal control systems in banking organisation, 1998, [www.bis.org](http://www.bis.org)

511 National Bank of Romania, Regulation no. 17/18.12.2003 regarding the organisation and internal control of the banks' activities and the administration of the essential risks, as well as the organisation of the internal audit activity in banks, published in M.O. no. 47/20.01.2004, art. 3, lit. c)

communication should be separately handled as internal (among the employees and managers) and external (communication with the citizens).

#### 4.2 Empirical comparative approach of the Romanian framework for information and communication in credit institutions, by reference to international COSO and CoCo models

In order to achieve our aim - to identify on which of the international internal control models (COSO or CoCo) is based the Romanian framework for establishing the most efficient information and communication in credit institutions, we conducted an empirical study based on an analysis with character of comparison between the three sets of regulations (the two international models and the Romanian one).

We have started from the main principles for control activities required by COSO and the criteria of control also related to this aspect, as these are defined by CoCo, trying to establish the link between them. Thus, we have identified a series of issues regarding information and communication, which we organized within four main topics as follows: (1) *qualitative characteristics of information*, (2) *the area of information*, (3) *informational system and procedures for the use of information* and (4) *communication's characteristics*.

Starting from these topics, we proceeded to compare aspects related to information and communication, one of the most important component of the internal control system, as it appears within the three frameworks. Thus, we have allocated the 1 or 0 values for each possible and/or existent requirement within at least one of the considered regulation, where the 1 value shows that the requirement exists within that framework, and 0 value is given for the situation when the requirement is not found within the considered framework.

**Table I. Exemplification of the analysis method used for the considered topics**

| Information & Communication - Analyzed elements   | The character of the requirement |      |         |
|---|----------------------------------|------|---------|
|   | COSO                             | COCO | Romania |
| <b>Qualitative characteristics of information</b> |                                  |      |         |
| - <i>reliability</i>                              | 0                                | 1    | 1       |
| - <i>relevance</i>                                | 1                                | 1    | 1       |
| - <i>completeness</i>                             | 0                                | 1    | 1       |
| - <i>opportunity</i>                              | 0                                | 1    | 1       |
| - <i>accessibility</i>                            | 1                                | 0    | 1       |
| - <i>comparability</i>                            | 0                                | 0    | 1       |

In the above table (Table I.) there are presented the 1 and 0 values that have been allocated to each requirement of the four components analyzed.

In order to achieve the proposed comparison, we have considered that the best analysis, in case of this type of approach, is represented by the nonparametric correlation and the association degree between two or more than two considered variables. Thus, we have used for our research the Jaccards' association coefficients, which have been used before in studies focused on comparisons between different sets of regulations. On the other hand, the two Jaccard's coefficients offer the possibility of quantifying both the association degree and the dissimilarity degree between different sets of requirements regarding information and communication, taken into consideration for analysis.

So, in order to dimension the compatibility degree or, in other words, the association between two or more internal control systems, the calculation formula for the Jaccards' coefficient shows as follows:

$$S_{ij} = a / (a + b + c) \quad \text{and} \quad D_{ij} = (b + c) / (a + b + c)$$

where:

- $S_{ij}$  represents the similarity degree between the two sets of analyzed frameworks;
- $D_{ij}$  represents the degree of dissimilitude or diversity between the two sets of analyzed frameworks;
- a represents the number of elements which take the 1 value for both sets of frameworks;
- b represents the number of elements which take the 1 value within the  $j$  set of frameworks and the 0 value for the  $i$  set of frameworks;
- c represents the number of elements which take the 0 value within the  $j$  set of frameworks and the 1 value for the  $i$  set of frameworks.

The information and communication elements analyzed in this empirical study are there fore given the 1 value for containing a certain requirement and the 0 value for non-containing that considered requirement.

As a result of the effective measurement of the comparability degree between the Romanian framework and the international models COSO and CoCo, based on Jaccard's coefficients, we have reached to the conclusion that our national regulation is much more similar to CoCo's model of control rather that to the COSO's one, as presented in the following table (table II).

**Table II. Comparison analysis based on Jaccards' coefficients**

| <b>Information &amp; communication</b>  | Romania vs. COSO |          | Romania vs. COCO |          | COSO vs COCO |          |
|---|------------------|----------|------------------|----------|--------------|----------|
|   | $S_{ij}$         | $D_{ij}$ | $S_{ij}$         | $D_{ij}$ | $S_{ij}$     | $D_{ij}$ |
| Qualitative characteristics of information ( <i>reliability, relevance, completeness, opportunity, accessibility, comparability</i> )   | 0,333            | 0,667    | 0,667            | 0,333    | 0.200        | 0.800    |
| The area of information ( <i>internal / external; financial / non-financial</i> )   | 0,333            | 0,667    | 0,000            | 1,000    | 0,000        | 1,000    |
| Informational system and procedures for the use of information ( <i>informational system, follow-up procedures, alternative plans</i> ) | 0,000            | 1,000    | 0,667            | 0,333    | 0,000        | 1,000    |
| Communication's characteristics ( <i>internal / external, two-ways</i> )  | 0,333            | 0,667    | 1,000            | 0,000    | 0,333        | 0,667    |
| <b>TOTAL</b>  | 0,250            | 0,750    | 0,583            | 0,417    | 0,133        | 0,867    |

## 5. FINDINGS AND CONCLUSIONS

The results of our analysis show the level of similarities between the national framework and the two international regulations. As it can be seen, the Romanian stipulations regarding information and communication issued by our National Bank is closer to CoCo model rather than to the COSO's one. Also, the values of the statistical coefficient used in our study demonstrate that there is also a high degree of dissimilarity between COSO and CoCo models, higher than the one between Romanian regulation and COSO's model as it is also shown in the table above, we can conclude that the Romanian framework is a complex one, including a various types of characteristics and requirements needed for ensuring an effective information and communication in banking sector.

According to the literature review regarding the two international models of internal control system, there isn't any kind of assessment on which of these models is better, or which of these is good and which is bad. Starting from this argument, we could reach to the conclusion that Romanian banking system is well settled as regards information and communication, in accordance to very well known international models and, also, to the international supervising authority that we should not forget - the Basle Committee on Banking Supervision.

In the end we need to mention the limitations of our study. First of all, we should not forget that that our empirical research only approaches formal harmonization in the area of internal control systems, more exactly regarding information and communication – the analyzed issue. In order to diagnose not only the existence of a “system” for information and communication, but also the functionality of it we need to go deeper and to continue our research. Only an empirical analysis on insights of the banks internal controls, based on the information provided by credit institutions, would show the degree to which the foresights of the international models of control, which seem to have been assumed by the national regulation, are actually put into practice and respect their purpose. These would show the level of material harmonization which should be analyzed in correlation to the formal one, which was the subject of this study. So, all these offer us outlooks of future research.

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# CANCELLATION OF A LEASING CONTRACT – EVALUATING THE ASSET REGAINED

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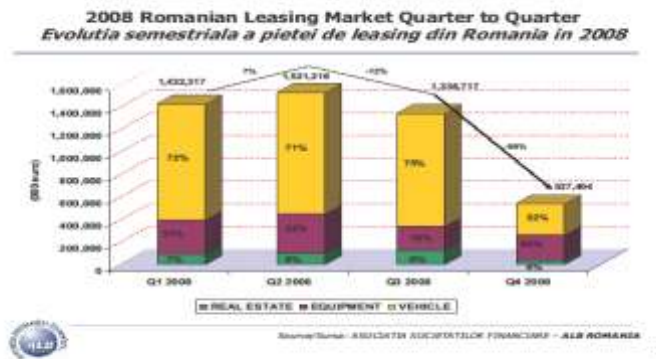
*The most recent financial crisis had many effects during the last year. Majority of the existing companies, worldwide, were harmfully influenced by it. More important, professions and economies were shocked by the crisis. Romania is no exception from the rule. Our article focuses on Romanian financial leasing companies, in a pretty difficult period, and its subject is how lessors are supposed to evaluate and recognize the asset regained when the financial leasing contract is cancel due to lessee' s inability to pay its monthly invoices.*

*Keywords: Financial crisis, financial leasing, evaluate, fair value, cancellation of a leasing contract*

M41 F30

## 1. Introduction

In Romania in the last quarter of 2008, the leasing market decreased by almost three times as compared to the second or third trimester of 2008<sup>512</sup>.

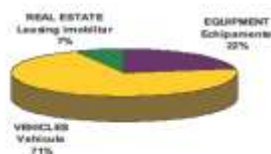


And this reverse trend comes after 4-5 years of increasing annually by almost 50% (medium yearly increase). But in 2009 numbers may look even worse than in assumptions. This is because the Romanian leasing market is structured as follows: 71% vehicles, 7% real estate and 22% equipments<sup>513</sup>.

512 "Romanian leasing market for 2008", ALB Romania , [www.alb-leasing.ro](http://www.alb-leasing.ro);

513 "Romanian leasing market for 2008", ALB Romania , [www.alb-leasing.ro](http://www.alb-leasing.ro);

2008 Romanian Leasing Market Structure by Asset Type  
*Structura pietei de leasing din Romania dupa tipul bunului*  
4,817,654 (000 euro)



Strada/Straz: ASOCIATIA SOCIETATILOR FINANCIARE - ALB ROMANIA

Due to financial crisis, many common people that could have easily accessed a finance leasing in 2006-2008 have nowadays problems with paying monthly payments for their cars (considered luxury good more than necessity goods). During the crisis the demand of luxury goods is the first that decreases. Also important, depreciation of Romanian currency led to higher monthly payment for leasing contract.

Under these conditions, most of the Romanian financial leasing companies are in the position to cancel their contracts (usually after three unpaid invoices) and to recover the goods. Nowadays, the number of recovered good is increased by 4-5 times then the last years. The situation is not easy for Romanian leasing companies due to the tendency of the cars' value to depreciate significantly (especially for second hand cars), to the decreased demand on the market for cars, to the higher cost with storage and current repairing of such used cars and due to the difficulty to measure the value of the goods returned and the value of the loss.

For the rest of the article we will stay focus on measuring the values of returned goods from canceled financial leasing.

## 2. Romanian accounting regulation for financial leasing companies (non-banking financial institutions)

For Romanian leasing companies, regulated since 2006 by the Romanian National Bank, the accounting standards, issued by BNR are fully applicable starting with 2008. In December 2008 new accounting regulation were issued by BNR and replaced the old ones. According to order 13 issued by BNR (Romanian National Bank), non-banking financial institutions use the rules stated by the above mention order for measuring and evaluating assets. According to Order 13 / 2008, paragraph 83, assets are measured when first recognized, at one of the following values:

1. Acquisition cost in case they were bought;
2. Production cost in case they produced / obtained by the company;
3. Fair value if they were obtained for free ( as a donation).

First, we must stress the limitation imposed by this paragraph: there is no rule for goods received in exchange. In fact, when we talk about cancellation of a leasing contract and returning the assets, some financial assets (namely the receivables - net investment in leasing and the current debt) are exchanged with another asset, or they are paid using the delivery of another asset, not a financial one.

Also, there are no rules for recognizing or derecognizing financial assets, or for evaluating the gain or loss in this situation.

From those reasons, Romanian financial leasing companies use a wide range of solution to measure the value of the asset regained, to classify it, and to derecognize the net investment in leasing when the leasing contract is cancelled.

### 3. International accounting regulation

Even if IAS 16 *Property, plant and equipment*<sup>514</sup> it is not applicable, we can look it up and inspire ourselves at least for a little bit. According to IAS 16, paragraph 24, if an item of property, plant or equipment was acquired in exchange for a non-monetary asset or assets, or a combination of monetary and non-monetary assets, the cost of such an item of property, plant and equipment is measured at fair value unless (a) the exchange transaction lacks commercial substance or (b) the fair value of neither the asset received nor the asset given up is reliably measurable.” So, for newly recognized assets in exchange of other assets, the fair value is to be used.

It is very important to stress the fact that in case of a cancellation of a leasing contract and returning the assets IAS 16 *Property, plant and equipment* is not applicable. The reason is that the asset that was the object of the contract, when returned, it shouldn't be classified as a fixed asset in the scope of IAS 16, but as a an inventory, in the scope of IAS 2 *Inventory*<sup>515</sup>. IAS 16 defines an item of property, plant or equipment as being a tangible asset that:

- (a) are held for use in the production or supply of goods or services, for rental to others, or for administrative purposes; and
- (b) are expected to be used during more than one period.

IAS 2 define inventory as being assets:

- (a) held for sale in the ordinary course of business;
- (b) in the process of production for such sale; or
- (c) in the form of materials or supplies to be consumed in the production process or in the rendering of services.

As we can see, for the leasing company the asset returned is not a fixed asset, because it will not to be used in the production or supply of goods or services, for rental to others, or for administrative purposes, but probably it will be also used for selling under new financial leasing contracts (most of the cases).

In rarely cases when the goods received because of the contracts cancellation are to be used either by the company or for operational leasing contracts (namely the leasing company intends to rent such assets to new customers) than the goods returned are to be classified as fixed assets, and not inventories.

If we search the answer to our question (how to evaluate the assets received) in IAS 39 *Financial Instruments: Recognition and Measurement*<sup>516</sup>, paragraph 26 states that: “On derecognition of a financial asset in its entirety, the difference between:

- (a) the carrying amount and
- (b) the sum of (i) the consideration received (including any new asset obtained less any new liability assumed) and (ii) any cumulative gain or loss that had been recognized in other comprehensive income [...] shall be recognized in profit or loss.”

In other words, the difference between the carrying amounts of the net investment in leasing and the debt recorded from monthly invoices and the value of the asset recovered from the lessee is to be recognize in the profit or loss account as an expense or revenue. The value of the asset returned should be the fair value, as no other value is available in this situation ( we should take

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514 IAS 16 Property, plant and equipment, IASB, [www.iasb.org](http://www.iasb.org);

515 IAS 2 Inventory, IASB, [www.iasb.org](http://www.iasb.org);

516 IAS 39 Financial Instruments: Recognition and Measurement, IASB, [www.iasb.org](http://www.iasb.org);

into consideration that the assets was not recognized in the lessor's financial statements and the carrying amount of the financial asset is not relevant for the value of the asset returned).

In some cases, the lessor, even if it comes in the possession of the assets that was formally the object of the leasing contract, and even if the fair value of that good exceeds the carrying amount of the financial assets, it has a right, according to the contract, to receive from the lessee a price for canceling the contract. In this situation, a new financial assets is to be recognize, according to IAS 39 *Financial Instruments: Recognition and Measurement*. In this situation, the new financial asset is to be treated as a consideration received in exchange of the old financial assets ( net investment in leasing).

In case the lessor intends to suit the customer for the unrecovered debt from the monthly invoices, then that financial asset is not to be unrecognized. Only the difference between the carrying amount of the net investment in leasing and the fair value of the regained asset is to be recognized in the profit and loss account.

#### **4. Fiscal aspects**

From a fiscal point of view, it is more acceptable to evaluate the asset regained at its fair value and to consider it a payment in exchange of the net investment in leasing, and to separately recognize the loss from the unrecovered debt from monthly invoices. The reason is that the Romanian Fiscal code allow the companies to deduct expenses with losses from customers in the same percentage as the previous deductible provision.

According to BNR orders, if a debt is not paid for more than 90 days, the Romanian leasing companies must recognize a 100% provision for that debt, but only for the capital and interest portions. Also, when the customers (lessees) were officially declared bankrupt, the lessor may deduct 100% from the lost debt and more important may recover VAT from the budget.

In cases in which the leasing companies evaluate initially the assets regained at the net carrying value of the financial assets related to the customers (net investment in leasing and debt form current invoices) and afterwards evaluate the fair value of the asset (this represents a very common method for Romanian leasing companies to evaluate the regained asset) the expense recognize with depreciation of the asset is non deductible. Plus, when and if finally the debtor is officially declared bankrupt, it is very difficult for the leasing company to adjust in its favor the VAT collected in the invoices issued to the lessee.

#### **5. Conclusion**

It is mandatory for Romanian leasing companies to fairly recognize the assets recovered form leasing contracts that were cancelled. The correct way to classify such assets is as a current assets, meaning inventory, unless the company has the intention to used it in the production or supply of goods or services, for rental to others, or for administrative purposes. In this situation the correct classification should be as fixed asset.

The value used for regained assets should be the fair value measured at the date of re-possession. If the leasing company doesn't derecognize the debt unrecovered ( from invoicing) and finally the former lessee is declared bankrupt, VAT may be recovered from the budget and the entire expense with the lost debt is deductible.

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# VEHICLES - ADJUSTED VAT AND THEIR ACCOUNTING VALUE

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*The most recent Romanian legislation set new rules for deducting VAT in case of vehicles. Also since 2007 there were some situation for fixed assets in which VAT was not to be deducted and, if it was deducted, was to be adjusted, starting with May 2009 VAT for cars used by administrative employees is not to be deducted anymore. How does that influences their accounting values? We will illustrate the answer in the following article.*

*Keywords: carrying value, VAT, initial recognition, taxes, adjusting VAT, depreciation*

*M41 H30 H32*

## **1. Introduction**

Due to the financial crisis, Romanian budget was severely affected by the lack of revenues. In order to collect more money, the Romanian government increased most of the taxes, introduced a minimum tax on profit or income and restrained the right to deduct VAT for most of the taxpayers.

In some situation, stated by the Romanian Fiscal Code, taxpayers must adjust in their favor or not the VAT deducted (or not) related to the capital goods. All these situations are described and illustrated by the fiscal code and its methodological norms. The most important definitions and legal aspects are presented below.

## **2. Definitions and legal fiscal aspects<sup>517</sup>**

Capital goods are all the fixed tangible assets, as well as the operations of construction, transformation or modernization of the fixed tangible assets, except the repairs or maintenance works on such assets, even if such operations are performed by the beneficiary of a rental, leasing or any other contract by which the fixed tangible assets are made available to another person.

Fixed tangible assets are any tangible asset that is held for use in the production or delivery of goods or in the provision of services, for rental to others, or for administrative purposes, if the asset has a normal period of use of more than one year and has a value of more than the limit provided by the law (for the moment the limit is 1,800 RON).

The deductible tax related to the capital assets is the tax paid or due related to any operation in connection with purchase, production, construction, transformation or modernization of these goods, except the tax paid or due related to the repair or the maintenance of such goods or the tax related to the acquisition or the spare parts for the repair or the maintenance of the capital goods.

The deductible tax related to capital goods, shall be adjusted:

A) for a period of 20 years, for the construction or purchase of an immovable good, such as for the transformation and the modernization of a immovable good, if the value of the modernization of at least 20% of total value of immovable transformed and modernized good.

B) for a period of 5 years, for the capital goods purchased or produced, other than immovable goods;

The adjustment of the deductible tax is performed:

a) if the capital good is used by the taxable person:

1. integrally or partially, for other purposes than economic activities;

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517 Law 571/2003 Romanian Fiscal Code;

2. for the performance of operations that do not allow the right of deduction of the tax;  
3. or the performance of operations that do not allow the right of deduction of the tax in a different proportion compared to the initial deduction;

b) if certain modifications of the elements used for the computation of the deducted tax occur;

c) if a capital goods with a imitated, partially or wholly, right of deduction is the subject of any operation for which the tax is deductible. In the case of a delivery of goods, the additional value of the tax that is to be deducted is limited to the value of the collected tax related to the acquisition of the respective good;

d) if the capital good ceases to exist, except the cases in which it is proved that the respective capital good was the subject of a self purchase or delivery for which the tax is deductible;

Besides, starting with May 2009<sup>518</sup>, VAT related to the acquisition (i.e. either local purchase, intra-community acquisition or import) of motorized road vehicles, as well as the one related to the

acquisition of fuel destined for the vehicles having the characteristics mentioned below, owned or used by taxpayers, is non-deductible. The rule applies only to motorized road vehicle that are exclusively used for passenger road transportation, weighing no more than 3,5 tones and with a maximum of 9 seats (including the driver's seat). However, vehicles used for commercial/resale purposes, used for paid passenger transport including taxi, the ones used for supply of services against consideration (e.g. rental to third parties, subject to financial or operational lease agreements, etc.), as well as those exclusively used for special destinations (e.g. for interventions, security and protection, courier services, transport of employees to and from the place of performing their activities, vehicles used by sales-agents, for delivery services , for recruitment of personnel services, as TV reporting vans, etc.) do not fall under the above VAT non-deductibility provisions<sup>519</sup>.

### **3. Adjusted VAT, part of the carrying value of the asset ?**

In some case it might be part, in other not. Let us take a look in Romanian accounting regulation, naming Order 1752/2005. According to paragraph 54, the initial acquisition cost comprises its purchase price, including import duties and other non-refundable purchase taxes, delivery and handling costs and any costs directly attributable to the acquisition of the asset. Trade discounts and rebates are not to be part of the initial cost<sup>520</sup>.

More detailed rule are stated in the paragraph 91 to 94, related to the acquisition cost of fixed assets. According to above mentioned paragraphs, when first recognizes, fixed tangible assets should be measured at their initial cost, whose form depend on the way the assets was obtained. As for examples of cost allowed to be capitalized in the carrying amount, as they are directly attributable to the acquisition of the asset, we can name:

- a) salaries expenses, social securities expenses and other related costs;
- b) cost with raw material;
- c) costs of site preparation;
- d) initial delivery and handling costs;
- e) installation and assembly costs;
- f) expenses for authorizing the construction;
- g) professional fees;

The initial carrying value may include the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located, the obligation for which an entity

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518 OUG 34/2009;

519 HG 44/2004 Methodological norms for the Fiscal code;

520 Order 1752/2005;

incurs either when the item is acquired or as a consequence of having used the item during a particular period and the evaluation is plausible.

IAS 16 *Property, plant and equipment* gives more details about the costs that can be part of the initial carrying value and about those that should be recognized as expenses when incurred. According to paragraphs 16 to 20, the cost of an item of property, plant and equipment comprises<sup>521</sup>:

(a) its purchase price, including import duties and non-refundable purchase taxes, after deducting trade discounts and rebates.

(b) any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management.

(c) the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located, the obligation for which an entity incurs either when the item is acquired or as a consequence of having used the item during a particular period for purposes other than to produce inventories during that period.

As for examples of directly attributable costs:

(a) costs of employee benefits arising directly from the construction or acquisition of the item of property, plant and equipment;

(b) costs of site preparation;

(c) initial delivery and handling costs;

(d) installation and assembly costs;

(e) costs of testing whether the asset is functioning properly, after deducting the net proceeds from selling any items produced while bringing the asset to that location and condition (such as samples produced when testing equipment); and

(f) professional fees.

Probably the most important difference between the Romanian rules and IAS 16 is that IAS 16 establishes the moment in which the capitalization in the carrying amount must stop. According to paragraph 20: "Recognition of costs in the carrying amount of an item of property, plant and equipment ceases when the item is in the location and condition necessary for it to be capable of operating in the manner intended by management. Therefore, costs incurred in using or redeploying an item are not included in the carrying amount of that item."

Now, let us return to our question: when is VAT non deducted part of the carrying value of the car ? The answer is very simple: **only when VAT is adjusted in the beginning, and not after the first recognition of the asset, it may become part of the carrying value of the asset.**

Below there are some examples to illustrate that answer.

### **Example 1**

A company bought a car for its CEO (Chief Executive Officer). As the car is to be used by the manager for its own transportation, it falls under the provision for non-deductibility of VAT, set by the Fiscal Code. From the beginning the company knows the usage of the car. No VAT might be deducted in this case. Since VAT is not to be recovered, it becomes part of the acquisition cost.

### **Example 2**

A company (that manages a hotel and a casino) buys a car which is going to be used for both the hotel and the casino ( according to the Romanian fiscal code, for activity as casino the company is exempted from VAT with no rights for deduction of VAT incurred). The last year VAT prorate was 80%. According to the fiscal code, the company must deduct VAT according to the VAT prorate as it is a mixed taxable person. VAT deductible for mixed acquisition ( used for both

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521 IAS 16 Property, plant and equipment, IASB, [www.iasb.org](http://www.iasb.org);

taxable and non taxable operations) during the year is computed by using the VAT prorate determined for the previous year and at the end of the year the effective VAT prorate for the current year is to be computed and VAT deducted is to be adjusted.

When the car is bought, the company will consider VAT that could not be deducted as part of the initial carrying value ( 20% from the invoiced VAT).

Assuming that at the end of the year the effective VAT prorate is 50%, in our opinion the 30% difference from the VAT deducted and the VAT finally deductible is to be also part of the initial carrying amount. Even if Order 1752/2005 gives us no clues about how those difference must be considered and classified, in our opinion even if the car was bought months ago and started to be used, the new portion of the VAT non deductible doesn't show us a subsequent event, but more a estimation of a value made by the company. By the end of the year, as the real value could have been determined, the carrying value of the assets should be corrected.

### **Example 3**

A company buys a car which it is intended to be used for transportation of employee between their houses and office, according to the Fiscal code. In the beginning the company deduct VAT in 100%. After 2 years, the car is given to the manager to be used in personal advantage. According to the Romanian fiscal code, VAT must be adjusted in this situation. But the VAT nondeductible is to be capitalize in the carrying value of the asset or not ?

In our opinion the answer is no. This is because this is a subsequent event, unrelated in any way to the initial recognition. So the adjustment should be recognized in the profit and loss account as an expense.

### **Example 4**

A company ( mixed taxable person) that uses a car for both activities ( taxable and exempted). According to the fiscal code the VAT prorate should be determined yearly and the differences should be recognized. In our opinion, just like in the above example, because this is a subsequent event, unrelated in any way to the initial recognition, the adjustment should be recognized in the profit and loss account as an expense.

### **Example 5**

A company acquires a car from a financial leasing company. In our opinion, as long as the financial leasing is defined as a service and not an acquisition according to the Romanian Fiscal Code, it is not under the provision of no deductibility of VAT for acquisition of cars. So the company may deduct VAT.

Yet, for the final payment ( option price), as the title of ownership is transferred, the VAT is not to be deducted. Never the less, since the asset was initially recognized when the contract was signed and the asset was received, this final adjustment is also a subsequent event, unrelated in any way to the initial recognition, the adjustment should be recognized in the profit and loss account as an expense, and should not be part of the carrying amount.

## **5. Conclusion**

Carrying amount of an assets measured at its first recognition should comprise the purchase price and all non-refundable purchase taxes, plus any costs directly attributable to bringing the asset to the location and condition. When VAT is adjusted when the asset is first recognized, then it becomes part of the initial carrying value. When VAT is adjusted after the first recognition of the asset, then it is an expense and the company should record it in the profit and loss account.

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*The final product of accounting which is intended towards satisfying the informational needs of the various users is a component part of a semiotic communication process whose outcome is that the transmitted messages “bear” in themselves knowledge/ information which can be “read” and “exploited” correctly only if there is a common basis for interpreting the “accounting signs”.*

*Keywords: financial reporting, accounting communication, semiotic process.*

*M: Business Administration and Business Economics; Marketing; Accounting.*

### **1. From accounting to financial reporting as a means of communication**

Accounting emerged out of the human being's need to have knowledge of his fortune/ possessions, of his economic activity and of the obtained results. Seen from the perspective of the relationship between the user of the accounting information, on the one hand, and the one who obtains it, on the other hand, we can distinguish a few stages in the evolution of accounting.

In a first stage, that of the beginnings, an owner managed his business directly, and with this purpose he kept his own bookkeeping that he needed, reflected as a single entry bookkeeping, under the form of the book of incomings and outgoings. In this stage the producer and the user of the information represent one and the same person, the managing/ administrating owner (trader, manufacturer, pawn-broker or banker).

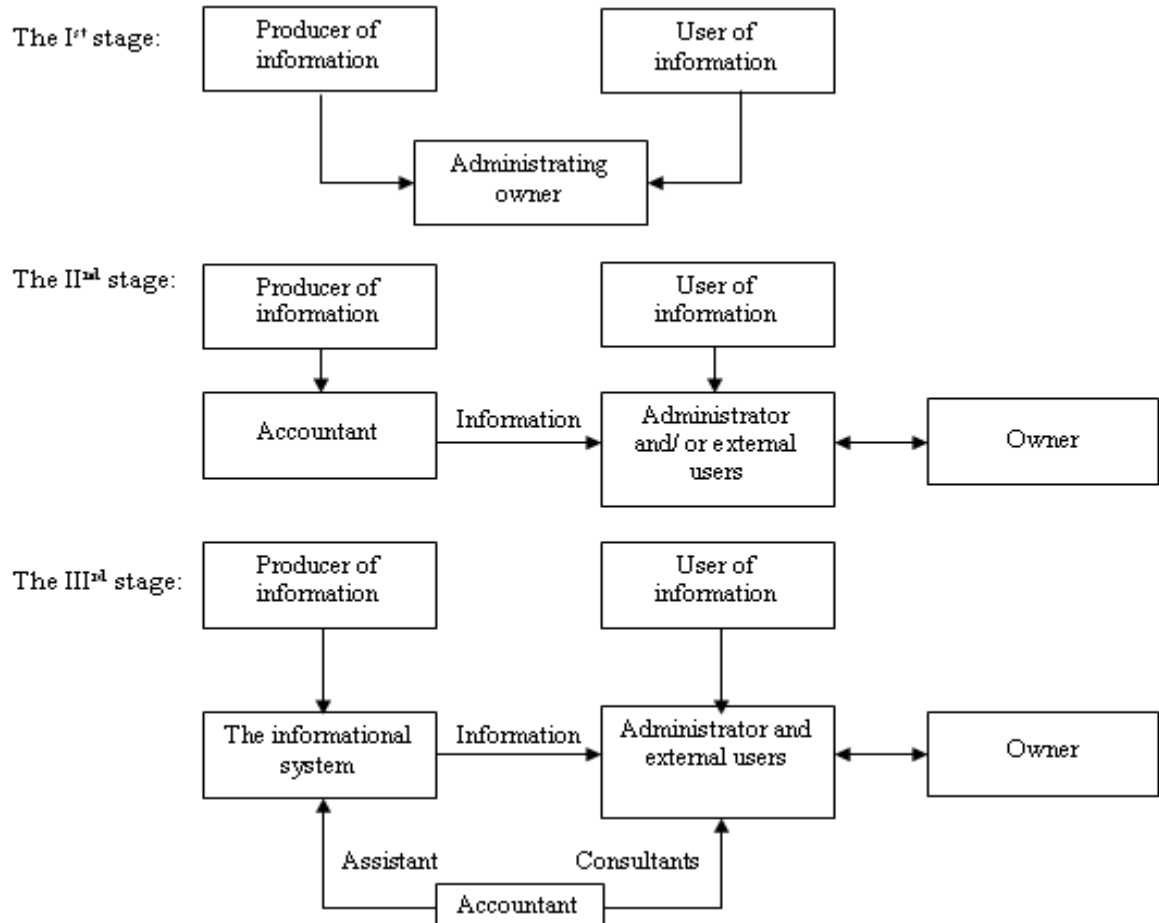
Subsequently, simultaneously with the development of the economic activity, accounting was distinguished as a separate profession and started growing in complexity, acquiring, with time, the evolved form of double-entry accounting. In this second stage, the producer/ transmitter of information, namely the accountant, is distinct from the user of the information, respectively from the administrator who, in his turn, can be a different person from the owner. Within this stage, in parallel with the progress observed in matters of the accounting methodology and in matters of the technical methods employed in accounting, more periods can be identified, from the relatively long lasting one when the task of the accountant was dominated by the routine activity of calculating and recording performed manually, to the one within which the usage of calculating and accounting machines eased the work of the accountant, decreased the number of routine activities in favor of activities for conceiving, for valorizing the obtained information under the form of analyses which were necessary for decision-grounding and, finally, we make reference to the stage of applying informatics in accounting.

Concurrently with the integral or quasi-integral digitalization of accounting, we can consider that there occurs the third stage of evolution, in which the role of the accountant, namely that of a producer of information, is taken over by the technological system of information, and the accountant expert is the assistant of the informatics expert, who conceives, implements, and

maintains the system under exploitation, and he is also the counselor of the administrator in the process of decision-taking. The syntagm “accounting without accountants” is available only if, having in view the digitalization of accounting, we ignore the other competences professional accountants can have, and, in this case, only those regarding the production of information, and these tasks are now taken over by the computer.

In this stage of evolution, accounting can now be considered a form of communication and, due to this fact, it can be approached from a semiotic perspective. In fact, in the technical accounting literature the so-called paradigm of the informing nature of accounting (as a practical activity), according to which it represents an informational system and a formalized language of business.

Synthesizing, the above mentioned stages can be represented as follows:



**Figure no. 1 Stages in the evolution of accounting**

## 2. The process of communication from the perspective of semiotics

Ferdinand de Saussure is considered to be one of the researchers whose innovative ideas represented in the work “Lectures on General Linguistics” have revolutionized linguistics, semiology and anthropology. What is the relationship between these three domains? Communication. It represents the meaning of our existence as human beings and the result of the interaction between and among people. This meaning is, in its turn, deduced from the existence of signs, and from their appropriate association. Each sign or group of signs represents a signification, a meaning (or more of them). As a result, the sign lies at the basis of communication and gives meaning to it. Under the circumstances, the above mentioned author suggests that it was of vital importance for a new science to appear, and this could study the

existence of signs and their impact on social life, namely semiology or semiotics (from the Greek word “semeion” meaning sign and “logos” meaning science). Therefore, Saussure is considered to be the founder of this domain from a philological and linguistic perspective.

Semiotics considers communication as a process of producing and exchanging meanings (significations) between sender and receiver, with the aim of producing/ generating knowledge, and not as a mere process of transmitting messages. It is concerned with the way in which messages (or text) interact(s) with people in order to produce meanings (significations). ‘The focus is on the “text” and on the manner in which it is being “read”. The “reading” represents the process of discovering the meaning which occurs when the “reader” interacts or *negotiates* with the “text”. The negotiation occurs when the “reader” filters the message by means of the “sieve” of the cultural model, regarding the signs and the codes which make up the message. The more we share the same codes and the same sign-system, the closer the two meanings attributed to the message will be<sup>522</sup> (the meaning given by the source and by the receiver). Hence, within a simple informing campaign, communication is seen as a process of transmitting a message without further delays, but when those concerned aim at the exchange of values, or the transformation of representations and attitudes, then the semiotic approach of communication becomes a compulsory condition for success.

In the study *Sémiotique, marketing, communication*, J. M. Floch wrote: “Semiotics is obviously the study of signs as long as it goes beyond these signs and it examines what is produced behind these signs”. Thus, beyond the study of signs, semiotics is also concerned with describing the conditions of producing and understanding the meaning by means of signs.

The explanatory dictionary of the Romanian language defines semiotics as a science “dealing with the general study of signs and of systems of signs”. Taken apart from the original meaning attributed to it in medicine (a sub-domain of medicine which deals with the study of the symptoms and of the indications specific for certain diseases, as well as with the methods of foregrounding and diagnosing them<sup>523</sup>), semiology could be applied in almost every domain (the so-called regional semiology): in communication, journalism, law, theatrical performance or literature and, more recently, it was interconnected to very diverse social practices, such as: marketing, advertising, education, public performance and, why not, accounting. We can thus say that it is a pluridisciplinary domain. This fact was somewhat normal because signs can be found everywhere, they surround us and, as a result, we are obliged to understand them. Some of them are easier to understand because their decoding is specific to human nature, whereas others ask for a specific collection of information/ knowledge which could make communication possible and, more than that, which could make it efficient. Here is a simple example corresponding to the first category of signs: when the flowers bloom (the sign) we inevitably think that spring is drawing near (the meaning) and we share this joy with the others (the communication process). On the other hand, the depreciation of the national currency (the sign) has various consequences (the meanings) whose communication (written or oral) can be understood only if there is a common set of knowledge items between or among the participants in the communication process.

As all the sciences make use of signs under one form or another, we can say that “semiotics is a science of sciences”<sup>524</sup>. It can also be named an organon, a “methodology which is accessible to and which can be used efficiently by any other scientific discipline”. Thus, described in very general terms, any communication act can be studied with the help of a few instruments of the semiotic analysis.

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522 Borțun, D., Borșa, T., *Semiotica vizualului – Partea I: Semiotică, limbaj și comunicare interculturală*, Universitatea Națională de Arte, Facultatea de Arte plastice, București, 2007, page 20, [www.scribd.com](http://www.scribd.com).

523 \* \* \* [www.dexonline.ro](http://www.dexonline.ro).

524 Ștefan Trăușan-Matu, *Semiotica*, [www.racai.ro/~trausan/semiotica.pdf](http://www.racai.ro/~trausan/semiotica.pdf).

The communication process from a semiotic perspective is named *semiosis*, a term which was first employed by Charles Sanders Peirce, the originator of semiology from a philosophical perspective (logical) and who “distinguishes the living organisms from the inanimate ones”<sup>525</sup>. According to him, “semiosis” represents “an action or an influence which constitutes or involves cooperation among three subjects: a sign, its object and its interpretant”. Thus, a sign is distinct from the object it represents in reality, and the latter has an effect in the mind of the interpretant only if the sign is correlated with his experience concerning the “object”. For instance, the sign 5311, at a first sight, could be seen as a simple number (sign), but, for an accountant, it represents the “cash in the cashier” (object) and, more than that, the accountant transmits a signification (interpretant) depending on the correlation with other accounts (signs).

Unlike Peirce, Saussure was concerned “more with the manner in which signs (or, in his case, words) are correlated with other signs, rather than with the way in which they connect with the Peircean “object”. He focuses more directly on the sign itself. For Saussure, the *sign* is a physical object having a meaning or a “sign composed of a signifier and a signified”. The *signifier* is the image of the sign as we perceive it – the trace on a sheet of paper or the sounds in the air, so it is seen as something physical; the *signified* is the mental concept being referred to. This mental concept is pretty much “the same for all the members of the same culture, who speak the same language”<sup>526</sup>. He named the relationship between the signifier and the signified *signification*<sup>527</sup>. This is obviously built by “someone” on the basis of the correlation between the other two. In the example mentioned above, we can say that the signifier is “5311” and the signified is represented by the “cash in the cashier”. The signification results, as we have said above, from the correlation with other signifiers.

In essence, the two models of the two “precursors of semiotics”, as well as those of their successors, emphasize three elements which are involved in any study of signification. These are: “*the sign, what the sign refers to and the ones using it* (the consumers of the sign)”<sup>528</sup>.

But in a communication process these must be correlated with the other classic elements of communication. Therefore, just as the communication by means of signs is the “essence” of semiotics, elements such as “the messages and the code, the source and the destination, the channel and the context also make up, separately and together, the vast domain of semiotic researches. Nevertheless, the central concept is represented by the sign”<sup>529</sup>.

### **3. The semiotic model of the accounting communication process**

It is known that accounting, as an indispensable activity of any patrimonial entity, is an act of communication due to the very reason that it emerged out of the need to know and to manage efficiently one’s own resources, and so to transmit something to someone. This fact is more easily provable as each element of the classical process of communication – presented above – can be identified within the so-called accounting communication.

Therefore, we believe that the structural elements of the communication process, in the case of accounting, can be represented as follows:

- the *source* (the *sender* or the *receiver*) (1): the subject who is familiar with the signified phenomenon, namely the producers of the accounting information; we think here of those persons whose job is to observe the events and the transactions which lead to movements of values, or to

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525 Sebeok, T., Semnele: o introducere în semiotică, translated by Sorin Mărculescu, Ed. Humanitas, București, 2002, page 4.

526 Borțun, D., Semiotică. Teorii ale limbajului, Școala Națională de Studii Politice și Administrative, Facultatea de Comunicare și Relații Publice „David Ogilvy”, București, 2006, page 20, www.scribd.com.

527 Idem4, page 5.

528 Borțun, D., Borșa, T., Semiotica vizualului – Partea I: Semiotică, limbaj și comunicare interculturală, Universitatea Națională de Arte, Facultatea de Arte plastice, București, 2007, page 20, www.scribd.com.

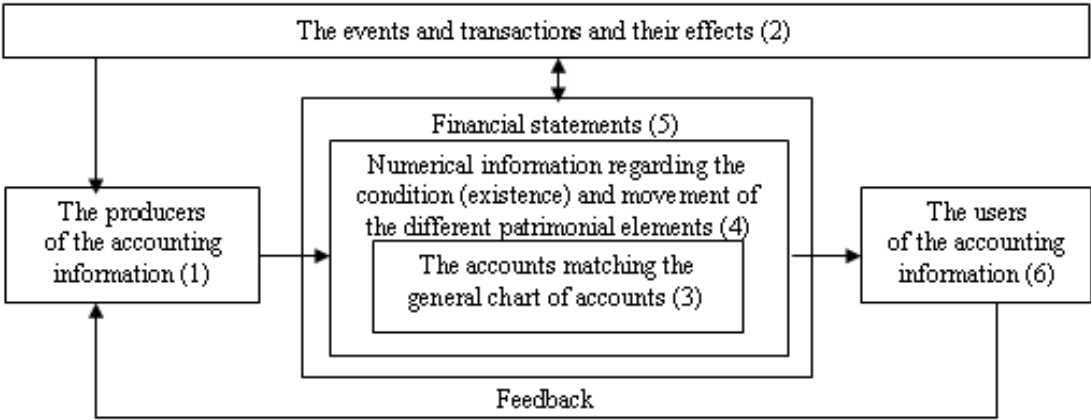
529 Idem4, page 18.

commit to memory (to memorize by drafting justifying documents) and to process the data referring to these movements of values, to present and to communicate the information obtained within the procedure of accounting processing;

- the *context* (the *referent*) (2), namely the aspect/ thing under discussion, the one being communicated about: the effects of the events and transactions upon the financial position, upon the financial performance or upon the alterations intervening regarding the financial position;
- the *code* (3) or the repertory of signs which correspond to certain ideas: for instance, the accounts matching the general chart of accounts;
- the *message* (4) formed of signs, namely a part of the referent which is transformed by a code: numerical information regarding the condition (existence) and movement of the different patrimonial elements presented in a codified way;
- the *channel* (5), or the physical support of the transmitted information: basically, it is represented by the financial statements whose structure and contents are being regulated;
- the *destination* (the *receiver* or the *recipient*) (6), namely the decoding subject: the internal and the external users of the accounting information.

But accounting does not only constitute itself as a communication process. Having in view the aspects discussed in chapter 2, the accounting communication process can indeed be considered a semiotic process. Why is that? Because the “essence” of accounting does not simply end with “passing” the accounting information through the six stages/ factors mentioned above. The accounting information transmitted is accompanied by certain significations and it could lead to new significations when interacting with the users. The plain fact that the accounting information is “expected” by someone, as a user, and that it will be processed and interpreted and not just taken as such, demonstrates the semiology of accounting. It is of real importance what is transmitted by means of accounting information, but the manner in which the accounting information is “read” is, sometimes, vital for an entity. It is not by chance then that there are qualitative characteristics the accounting information should fulfill in order to be useful, and they are not prescribed randomly, on the contrary, they are prescribed as norms (The general framework for the elaboration and presentation of financial statements).

If accounting is a semiotic process, as we have mentioned before, then, certainly, there must be a semiotic model of the accounting communication process. In what follows, we will try to describe it.



**Figure no. 2 The semiotic process in accounting**

First of all any model has a target. And what is the target of the accounting communication process if not that of satisfying the informational needs of the users so that their decisions could

be pertinent and realistic? How exactly is this performed? Certainly, by means of the synthesizing statements of the accounting information, chiefly named financial statements.

The professional accountants, within their duty as producers of the financial-accounting information (*source*), with or without the assistance of an informational system, perform their activity as employees in various organizations, as workforce in firms offering accounting services, or as individual accountants having as tasks the gathering, registration, processing and transmission of information to different users.

The information acquired by means of the accounting process has at its foundation a complex process of synthesizing the effects of events and transactions (*context*), starting from the principle of double representation which involves the concomitant representation – regarding the destination and the source – of each patrimonial element which undergoes changes during the development of an entity's activity.

Each patrimonial element can be found in synthetic accounting as codified by means of three or four figures (*code*), accompanied by a certain name, a symbol which is known in accounting as account, and, with its assistance, we can keep a record of the financial situation at the beginning and at the end of the period, and we can keep a record of the movements of that element within the accounting period. For example, in order to keep a record of the cash in the entity's cashier and of the changes it undergoes (inputs and outputs) there is the 5311 account "Petty cash in lei". The product of accounting, the value situation of patrimonial elements at the end of the accounting period, with a few detailed aspects about the alterations occurring during the period, synthesized in a regulated form (*message*), is publicly transmitted by means of the financial statement (*channel*).

A general definition of financial statements, taken from the technical accounting literature, is the following: "*synthesis documents by means of which information of an accounting-financial type is presented, in a formalized structure, and which is necessary to the majority of users*"<sup>530</sup>.

The Accounting Law no. 82/1991 mentions the fact that financial statements "must offer an accurate image of the financial position, of the financial performance and of the other items of information regarding the activity performed"<sup>531</sup>. In the International Accounting Standards/ the International Financial Reporting Standards (IAS/ IFRS) we find a similar definition with the endorsement that "*financial statements are a structured representation of the financial position and of the financial performance of an entity*"<sup>532</sup>.

According to IAS/ IFRS and to the national accounting regulations, *the objective of the financial statements is that of offering items of information regarding the financial position, the financial performance and the cash flows of an entity, which are useful for a wide range of users in taking economic decisions*. In fact, almost all users (*destination*) need this information in order to<sup>533</sup>: decide when to buy, keep or sell parts of capital; evaluate the administration capacity or the responsibility of the management; evaluate the capacity of the entity to pay its personnel and to offer other benefits to the employees; assess the warranty that the entity can offer for the loans given to it; determine the profit and the dividends which can be distributed; elaborate and use statistical data concerning the national income; regulate the entities' activities.

The governments can establish different or supplementary requirements for its own aims, but these influence the financial statements if they respond to the needs of the other users, too.

*The general framework for the elaboration and presentation of financial statements* contains a classification of the various users of the information from the documents for the synthesis and the

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530 Horomnea, E., Bazele contabilității, Ed. Sedcom Libris, Iași, 2003, page 308.

531 \* \* \* Legea Contabilității nr. 82/1991 (The Accounting Law no. 82/1991) modified and completed, republished in the Official Monitor of Romania no. 454, June 18, 2008, article no. 9.

532 \* \* \* The International Financial Reporting Standards (IFRS) 2007, including the International Accounting Standards (IAS) and interpretations on the 1st of January 2007, CECCAR, București, 2007, page 09.

533 Idem11, page 34.

financial-accounting reporting in seven categories (*investors, employees (and their representative agents), financial creditors, suppliers and other commercial creditors, clients, the government and its institutions, the public*), together with their informational necessities. We observe that in this enumeration the *management of the company/ entity* is missing and the reason is that, even if it is interested in the information comprised by the synthesis documents of accounting, it always has access to supplementary financial and management information which constantly helps in setting up the planning processes, those of decision-taking and of control. More than that, the management has the ability to determine the form and the contents of such supplementary information so as to satisfy its own needs.

In their diverse nature, the users of the accounting information and their informational needs can be rendered as follows:

- *the investors*, as the ones who use the capital, request information so as to decide whether they should buy, keep or sell. The shareholders are also interested in information which allows them to assess the company's capacity to pay the dividends;
- *the employees (and their representative agents)* are interested in information regarding the stability and profitability of the firm, as well as in information which allows them to evaluate the firm's capacity to offer them remuneration, pensions and other advantages, as well as other professional opportunities;
- *the financial creditors* are interested in information which allows them to determine whether the loans given and the corresponding interest rates will be reimbursed before the due date;
- *the suppliers and other commercial creditors* are interested in information which allows them to know whether the enterprise will be capable to pay the owed sums before the due date, and if it is liable to continue its activity (especially in the case of suppliers for whom the enterprise represents the main client);
- *the clients* are interested in information concerning the continuity of the firm's activity, especially when they develop a long-term collaboration with the respective firm or when they are dependent on it (as a main supplier);
- *the government and its institutions* are interested in information regarding the distribution of resources and the allotment of incomes, items of information that they need so as to regulate the activity of the firms and to determine the fiscal policy, as well as a basis for the calculation of the national income and of other similar statistical indicators;
- *the public* can be influenced by enterprises in various ways, and, as a consequence, this user is interested in information related to the recent evolution and the tendencies concerning the development of the enterprise and the consequences of the enterprise's activities upon the local economy.

Each user of the information within the financial statements will perceive, in a unique way, the reality connected to the patrimonial entities depending on the level of economic knowledge and, particularly, on the level of accounting knowledge a user has. More than that, the message transmitted by accounting is interpreted differently by various persons according to their informational necessities, to the actions they seek to start, etc.

If in the information above we have made reference to the financial reporting as being a form of accounting communication, we must not consider that the latter cannot take other forms too, as, for instance, the consultation of an account's situation in an account book, the presentation or the consultation of the trial balance, etc.

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# USING MANAGEMENT CONTROL TO ALIGN ORGANIZATIONAL STRATEGIES AND TO MEASURE PERFORMANCES

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*Practice shows that, in order to improve internal and external communication, managers need to increase the request of information about their business administration. So, for this, they need a complementary system which assures them this kind of information and data. The related actions in this way are: forecast and control. Management control appeared as an answer to the evolving concerns toward economic efficiency and represents a privileged tool of management, defined as the process through which managers assures themselves that the resources are acquired and used with efficiency, efficaciousness and pertinence for realizing the objectives of an organization.*

### *Keywords*

*management control, strategy, performance*

*JEL Classification: M - Business Administration and Business Economics; Marketing; Accounting*

## **1. INTRODUCTION**

The American Accounting Association defined accounting in 1966 as the process of identifying, measuring and communicating economic information to permit informed judgments and decisions by users of the information. This definition is important because it recognizes that:

- accounting is a process which main preoccupation is to capture business events, record their financial effect, summarize and report the result of those effects.
- it is concerned with economic information, both financial and non-financial and its purpose is to support “informed judgments and decision” by users in order to record, report and interpret business transactions.

Meanwhile accounting is seen as fulfilling three functions:

1. **Scorekeeping** – capturing, recording, summarizing and reporting financial performance.
2. **Attention-directing** - drawing the attention of managers to, and assisting in the interpretation of, business performance, particularly in terms of the comparison between actual and planned performance.
3. **Problem-solving** – identifying the best choice from a range of alternative actions.

The attention-directing and problem-solving functions are taking place through three inter-related functions:

- *Planning* – refers to establishing goals and strategies to achieve goals.
- *Decision-making* – using financial information to make decisions
- *Control* – using financial information to maintain performance as close as possible to plans.

The mentioned inter-related functions are important and relevant as increasingly businesses have been decentralized into many business units and managers need financial and non-financial information to develop and implement strategies for the future; making good decisions about products, services and their prices; and ensuring that plans are put into action and are achieved. This can be done by *management accounting* and *management control*.

## 2. RESEARCH METHODOLOGY

This article is a theoretical study and its purpose is to present the relationship between management control, performances and strategy using information and data gathered from the existing literature on national and international level.

After covering the available literature in this field, based on a qualitative analysis, we want to demonstrate in this article that management control becomes an effective informational system and assures organizational coordination and development, capable to answer to 3 basic questions: *What for?*, *For who?* and *On who?* The outcome becomes strategic for the organization on a long term and for all the actors within it.

## 3. MANAGEMENT CONTROL – ROLE AND NECESSITY

Anthony defined management control as: “the process by which managers assure that resources are obtained and used effectively and efficiently in the accomplishment of the organization’s objectives”<sup>534</sup>. In time Anthony developed a model that differentiated three planning and control functions:

**-Strategy formulation** was concerned with establishing goals and objectives, strategies and policies, defining resources and policies used to achieve those objectives and goals. This function is oriented towards external environment and operates with strategic decisions on long term. This fed into

**-Management control**, which was concerned with the implementation of strategies and assures that resources are obtained and used effectively and efficiently in order to achieve objectives. This function operates with tactic decisions.

**-Task control**, which comprised the efficient and effective performance of individual tasks. This function is oriented towards internal environment and operates with current decisions.

Otley argued that such a separation was unrealistic and that management control was “intimately bound up with both strategic decisions about positioning and operating decisions that ensure the effective implementation of such strategies”<sup>535</sup>.

Building on Anthony’s earlier definition, in 2000 Anthony and Govindarajan defined management control as “a process by which managers at all levels ensure that the people they supervise implement their intended strategies”<sup>536</sup>.

In 1995 Berry *et al.* admitted that management control: “is the process of guiding organizations into viable patterns of activity in a changing environment ..... managers are concerned to

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534 Anthony, R. N. *Planning and Control Systems: A Framework for Analysis*. Boston, MA: Harvard Business School Press, 1965

535 Otley, D. *Management control in contemporary organizations: Towards a wider framework*. *Management Accounting Research*, 5, 1994, pg. 298

536 Anthony, R. N. and Govindarajan, V. *Management Control Systems*. (10th international edition). New York, NY: McGraw-Hill Irwin, 2000, pg.4;

influence the behavior of other organizational participants so that some overall organizational goals are achieved”<sup>537</sup>.

All and all management control is a system of rules, a collection of inter-related mechanisms and consists of formal, information-based routines and procedures used by managers to maintain or alter patterns in organizational activities.

Managers use internally and externally generated information to govern their organizations. Because one of the managerial functions requiring information is control we can talk about **management control system (MCS)** in every organization.

According to Anthony and Govindarajan a Management Control System has the following components:

1. A **detector** or **sensor**, which is a measuring device that identifies what, is actually happening in the process being controlled.
2. An **assessor**, which is a device for determining the significance of what is happening. Usually, significance is assessed by comparing the information on what is actually happening with some standard or expectation of what should be happening.
3. An **effector**, which is a device that alters behavior if the assessor indicates the need for doing so. This device is often called “feedback.”
4. A **communications network**, which transmits information between the detector and the assessor and between the assessor and the effector.

Most businesses have a variety of control systems in place. For example, a control system may reflect a set of procedures for screening potential suppliers or employees, a set of criteria to evaluate potential and existing investments, or a statistical control process to monitor and evaluate quality. Regardless of the specific actions taken, a management control system should serve to guide organizations in designing and implementing strategies such that organizational goals and objectives are achieved.

#### **4. The Impact of MANAGEMENT CONTROL ON STRATEGY AND PERFORMANCES**

To maintain a competitive position a company must generate the information necessary to define and implement its organizational strategies. Strategy is the link between an organization’s goals and objectives and the operational activities executed by the organization. In the current global market, firms must be certain that such a linkage exists.

Strategy can be defined as: “the art of creating value. It provides the intellectual frameworks, conceptual models, and governing ideas that allow a company’s managers to identify opportunities for bringing value to customers and for delivering value at a profit. In this respect, strategy is the way a company defines its business and links together the only two resources that really matter in today’s economy: knowledge and relationships or an organization’s competencies and its customers”<sup>538</sup>.

The accomplishment of a strategy reclaims taking in consideration the different management horizons:

- The strategic horizon* – settles the goals and objectives on long term, 5-10 years, and as a result of these elaborates strategic plans.
- Budgetary horizon* – translates into practice the established goals and objectives on medium term using budgets and operational plans.
- Operational horizon* – elaborates, applies, pursuits and analyses action plans.

Management control acts within each horizon using specific instrument on every level and the controlling process is bounded to the decision making process. The Management Control Systems (MCS) enables managers to perform strategic analyses on issues such as determining

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537 Berry, A. J., Broadbent, J. and Otley, D. The domain of organizational control. In A. J. Berry, J. Broadbent and D. Otley (eds), *Management Control: Theories, Issues and Practices*, London: Macmillan, 1995, pg. 4

538 Richard Normann and Rafael Ramirez, *From Value Chain to Value Constellation: Designing Interactive Strategy*, Harvard Business Review (July–August), 1993, pg. 65;

core competencies and organizational constraints from a cost-benefit perspective and assessing the positive and negative financial and non-financial factors of strategic and operational plans.

Johnson and Kaplan emphasized the importance of non-financial indicators arguing that<sup>539</sup> short-term financial measures will have to be replaced by a variety of non-financial indicators that provide better targets and predictors for the firm's long-term profitability goals, signifying this as a return to the operations based measures that were the origin of management accounting systems.

Within organizations performance measurement has been and it is dominated by management control systems that are focused on control and than improvement. Performance measurement goes beyond the boundaries of traditional management accounting and could be achieved by accountants having a better understanding of the operational activities of the business and building this understanding into control systems design; connecting control systems with business strategy, which has to some extent been addressed by the proponents of strategic management accounting (see below); and focusing on the external environment within which the business operates, through a value-chain based approach.

Anthony once said, on one hand, that management control is the process through which managers use their power to influence other members of the organization to implement strategies, to realize goals and objectives and, on the other hand, it integrates facts on long, medium and short terms, having well determined implications in human factors, objectives and assignments.

## **5. CONCLUSIONS**

The management of an organization involves two key areas: planning and control. Every organization requires plans to determine priorities and resource allocation and a mechanism by which execution against the plans can be controlled.

Management control is the process by which management ensures that the organization carries out its strategies effectively and efficiently. By management control managers look to conceive and to elaborate reporting instruments aimed to allow the leaders to act realizing economical, global coherence between objectives, resources and performances. In management control systems accounting information provides a window through which the real activities of the organization may be monitored.

An organization's strategy must be appropriate for its resources, circumstances, and objectives. The process involves matching the company's strategic advantages to the business environment the organization faces. One objective of an overall corporate strategy is to put the organization into a position to carry out its mission effectively and efficiently. A good corporate strategy should integrate an organization's goals, policies, and action sequences (tactics) into a cohesive whole, and must be based on business realities.

The performance measurement systems, on the other hand, should encourage managers to act in the best interest of the organization and its subunits and to support organizational missions and competitive strategies.

In the end we can say that management control is a core business function and exists as a separate, well-established discipline within the management field. The extension of this discipline to business ethics and its partial merging with legal risk management has been one of the more important developments in international business of the last two decades.

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# AN EVOLUTIONARY APPROACH OF CORPORATE SOCIAL RESPONSIBILITY REPORTING

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*Business reporting trends in the last decades have put in the front line the importance of non-financial disclosure and the growing needs of the potential shareholders that expect any company in which they invest to meet certain minimum standards in terms of governance and disclosure.*

*The paper describes the evolution of social responsibility reporting at international, regional and national level.*

*Key word: social responsibility, corporate reporting, voluntary disclosure*

*JEL code: M14, M41, M48, G38*

## **Introduction**

The later trends in business reporting have put in the front line the importance of non-financial disclosure and the growing needs of the potential shareholders that expect any company in which they invest to meet certain minimum standards in terms of governance and disclosure.

In this evolving international context, where the mandatory disclosure of financial information is completed with voluntary disclosure of financial and non-financial information, as well, the aim of the present paper is to explore the extent of social responsibility reporting within the annual reports of Romanian listed companies. To achieve this goal we carried out a thorough investigation of the Romanian companies listed on Bucharest Stock Exchange (BSE) and data from all the these entities have been collected.

The main contribution of this article consists in the study of the sustainability reporting in a country where this concept has known a poor development till recent years and companies that have embraced it were in a pioneering phase in their reporting policy. First of all, it tries to give an insight look of Romanian theoretical background on corporate social responsibility and shapes several key issues regarding sustainability development. Secondly, this study intends to bring an explanatory contribution to the development of social responsibility by building a research design based on several disclosed items concerning CSR practices for Romanian listed companies. The study is divided in two parts. The first part consists of two sections and presents the theoretical background for the corporate sustainability and social responsibility concepts, the basic theories and the reporting framework at international, regional and national level for sustainability. The second part represents the empirical study based on the analytical investigation of the extent of social responsibility reporting within the annual reports of Romanian listed companies. In the end of the paper it can be found the concluding remarks and directions for further research.

For the purpose of this paper we will limit the theoretical background only to those issues related with “corporate sustainability”(CS) and corporate disclosure theories.

*Corporate sustainability* sets out the company’s performance areas and strategies focused on environmental protection, social justice and equity and economical development. The *Corporate Social Responsibility* is a concept defined before the one of SD. Bowen (Bowen, 1953 cited in

Carroll 1999) assumes that companies should have obligations, should follow lines of action compatible with the “values of society” and McGuire (1963) stated that economic and legal duties of companies should be extended to some society responsibilities. Later, Carroll (1979 and 2004) presented the four components of social responsibility: economic, legal, ethical and discretionary or philanthropic. In his vision these are expectations that society has of a company and that companies have to decide which of them to focus on.

*Accountability Theory.* Accountability is a concept in ethics with several meanings. Regarding corporate governance it means the legal or ethical responsibility to provide an account or reckoning of the actions for which one is held responsible. Often accountability is used as a synonym for responsibility but in corporate terms they have different meanings. Accountability differs from responsibility in that the latter refers to one’s duty to act in a certain way, whereas accountability refers to one’s duty to explain, justify, or report on his or her actions. The contribution of corporate accountability theory to corporate sustainability is that it helps define the nature of the relationship between corporate managers and the rest of society. It also sets out the arguments as to why companies should report on their environmental, social, and economic performance, not just financial performance.

In the later 90’s CSR became an organizational imperative concept to address known as the “triple bottom line” (Elkington, 1998) of “people, planet, profit” and different organisations started to issue models and guidelines for CSR reporting. Even so, there are authors that have a complete different view about CSR (Friedman, 1962, 1970; Handy, 2002; Martin, 2002; Kooskora, 2006). They considered that “there is one and only one social responsibility of business - to use its resources and engage in activities to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition, without deception or fraud”. Thus, they subscribe to the shareholder theory.

We may observe that the two opponent theories: “shareholder’s theory” and “stakeholders’ theory” may influence companies in their decisions and behavior regarding social responsibility.

In the classical theory, the only role of businesses in society is profit making, focusing on the profit of the shareholders. On the other side, the stakeholder theory, states that companies have also a social responsibility that requires them to consider the interests of all parties affected by their actions. Corporate sustainability borrows elements from both SD and CSR concepts. Sustainable development (Wilson, 2003) sets out the performance areas that companies should focus on, and also contributes to the vision and societal goals that the corporation should work toward, namely economic development, environmental protection, social justice and equity. Corporate sustainability and CSR are distinct, but interacting concepts that are usefully formalized in terms of capital-theoretic and welfare-economic approaches (Hediger, 2008).

The early ‘90s have brought in corporate reporting a new trend of sustainability reporting. The new concept has been adopted especially by the MNC’s. These companies had reorganized their disclosure policy and near by financial information they started to disclose information regarding their economic, environment and social performance. The disclosure of CSR information is based on the stakeholders’ behavior and the disclosure theories that we will present briefly in the following section.

### **Theoretical background regarding disclosure**

The modern stakeholders needs for information are more sophisticated, they ask for more information than the one provided by the financial statements. Nowadays, these stakeholders are valuing the company not only by financial numbers but also by its non financial and strategic performance. The annual reports are now seen as the primary source of corporate information disclosure. Additionally to mandatory information annual reports may also provide voluntary information, so annual reports have become important sources for communicating companies’ financial and non-financial information. The efficiency of disclosure process is dependent upon

the needs of the stakeholders and of the interests of the management of the corporation. (Debreceeny, Gray, Mock, 2001). In order to understand better the need for voluntary disclosure of information of all types we have looked upon the main important economic based theories: agency and signalling theory and thoroughly studied them. We have found that *agency theory* is frequently used in the literature to analyze the determinants of accounting choices. As Jensen and Meckling (1976) noticed agency theory argues that there is an avoidable monitoring cost for shareholders, paid to prevent expected expropriations by management.. Managers lack incentive to maximize companies' value since their wealth is not affected by the maximization of the companies' value. Financial statements in opinion of Prabowo and Angkoso (2006) are one main device to reduce the agency problem, although there are other mechanisms such as efficient market for corporate control, governmental regulation, and efficient job market for managers and managerial stock ownership program. By forcing managers to prepare standardized financial statements, shareholders can monitor and control the managers' action with the proxy of company's financial performance. There exist growing requirements for managers to not only disclose financial information by financial statements, but also non-financial information such as history of share price. As Healy and Palepu (2001) and Botosan and Plumlee (2002) considered it is expected that by disclosing additional, not mandated information, managers and owners can actually reduce agency costs.

*Signalling theory* exists before investors put their money into certain companies. Akerlof (1970) sees information asymmetry as a „lemons” problem that arises when a person wants to buy a used car. Disclosing more financial and non-financial information to potential investors can reduce the information problem.

### **Corporate Social Responsibility: Global, European and national reporting frameworks**

The „corporate social responsibility“ topic have involved and challenged different international, regional and national organisations in a process of standard making together with thousands of companies that report information about. Because the non-financial reporting has known a fast growing, in 1997 the Global Reporting Initiative was developed by the Coalition for Environmentally Responsible Economies and the Tellus Institute through a joint project. Supported also by the United Nations Environment Programme, the GRI promotes the international harmonization of reporting “of relevant and credible corporate environmental, social and economic performance information to enhance responsible decision-making.” The GRI have developed and disseminate a globally harmonized reporting framework for so called sustainability reporting, or non-financial reporting (NFR). In 2006, after a development process involving thousands of stakeholders worldwide GRI released the third iteration of its Sustainability Reporting Guidelines (G3 Guidelines). The newest development of GRI is the request address to governments through the Amsterdam Declaration on Transparency and Reporting from March 2009.

*European regulations.* Starting with 2001, European Union has created an European framework for CSR. The document is known as European Commission Green Paper on “Promoting an European Framework for Corporate Social Responsibility”. The aims of this document were, firstly, to launch a debate about the concept of corporate social responsibility and, secondly, to identify how to build a partnership for the development of a European framework for the promotion of CSR. The Green paper also defined CSR as “a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis”, as they are increasingly aware that responsible behavior leads to sustainable business success. In 2002, the Commission issued a Communication on “Corporate Social Responsibility: A business contribution to Sustainable Development”, presenting a strategy to promote CSR across the Union. Following the recommendations outlined in the above-mentioned document, an EU Multi-Stakeholder Forum on CSR (CSR Forum) was



set up. It brought together representatives of business, trade unions and civil society. The Forum succeeded in reaching a consensus among participants, but it also revealed significant differences of opinions between business and non-business stakeholders. In 2006, the Commission issued a Communication on "Making Europe a Pole of Excellence on Corporate Social Responsibility" suggesting the creation of certain coalitions for CSR.

Social and environmental reporting is made by companies mainly on a voluntary basis. However, this is starting to change. Some Western European countries have endorsed a regulation for CSR reporting. Denmark introduced a law on mandatory "Green Accounts" for large companies in 1995. Since 1999 in Netherlands companies have legal obligations to report CSR information. France followed in February 2002 with a legal act that obliges listed companies to include social and environmental evaluations in their annual reports. Norway, Sweden, UK and Germany have also some requirements for reporting brief information about environment, social and sustainability aspects in the companies annual reports. In Central and Eastern European countries there is no mandatory requirement to publish environment or sustainability reports. Also, there is still no EU wide approach to social and environmental reporting. The Commission's Communication on Corporate Social Responsibility states that in this initial phase, reporting should remain as flexible as possible. However, the Commission recognises that a greater consensus on the type of information that should be included on social reporting might be needed in the future to allow for meaningful benchmarking.

Between Western and Central Eastern European countries still remain important differences regarding the social responsibility concept. On the one side, in the Western Europe both governments and companies are active in the field but, on the other side in CEE countries most of them emerging economies, CSR and sustainable development are concepts almost new. In the CEE countries a dynamic process of social and economic change was occurring, primarily through the process of European integration.

The National Corporate Responsibility Index (NCRI) is the world's first attempt to measure the state of corporate responsibility across 80 countries, drawing on available data on key factors including levels of corruption, business adoption of environmental management and the state of corporate governance. It also examines the extent to which there is an enabling national environment for corporate responsibility to emerge and develop. While Western Europe (in particular Nordic states) was the best performer in this Index, with seven countries amongst the ten most responsible ones, this is not true for the CEE region. The ranking shows that Eastern Europe can be roughly divided into two regions. The first one comprises countries that have joined the European Union in 2004, such as Estonia or Slovenia, which are performing relatively well. The other group including Bulgaria, Romania and the Balkan countries, still face serious problems in that respect, meaning that business practices are not yet aligned with corporate responsibility.

*CSR in Romania.* Recently the topic of CSR is also emerging in Romania; the dominant opinion is that CSR initiatives represent only an indicator of excellence in management. Besides the multinational companies only a small part of the highly profitable companies have the available resources to become socially involved. In Romania, as in many transition countries this was primarily the result of multinationals introducing ethical business principles. Even though the standard CSR terminology and language is not universally understood in Romania, issues such as health and safety, fair working conditions, environmental protection and community engagement are common public concerns. The basic instruments of CSR such as: values statements, codes of conducts or ethics, social responsibility reporting, auditing and certification are rather hard to find in Romanian enterprises, only the Romanian subsidiaries of large multinationals are using them. For the moment CSR works rather as another public relations tool for companies and the concept has slowly spread among Romanian companies.

On the other side, the Romanian Government shows interest for the problem of social responsibility and the legislation in the field of environment, employment, restructuring of local authorities was permanently improved. But, there are still many claims coming especially from the civil society and also from the business sector for improving legislation and taxation in order to support institutions for actions of social responsibility.

The most important certification body in the country is the Romanian Society for Quality Assurance (SRAC). SRAC is a professional non-profit association and independent NGO, focusing on third party certification of management systems, in compliance with national and international standards. It aims at promoting a quality culture through information sharing, training and management systems certification. SRAC is the first Romanian body accredited for environmental management systems (ISO 14001) and occupational health and safety management systems (OHSAS 18001), and forms part of the International Certification Network (IQNet), the most important international group of certification bodies and the largest provider of Management System Certification services. Social Responsibility Reporting in Romania has no framework and presently is not yet regulated at national level. Reporting is a necessity if companies are to know and understand their social and environmental impacts, and how to minimize the dangers and maximize the opportunities associated with new and emerging challenges. Those companies that disclose information regarding this topic have to follow the European and international guidelines.

### **Conclusions and directions for future research**

It is worth mentioning that one of the features of domestic companies that are operating in the ex-communist countries is that shareholders and employees are considered the main stakeholders; the other stakeholders like government and local communities are considered having less interest.

This suggests that Romanian companies are focusing mainly on the internal aspects of their operations, referring to everything that is directly linked to their bottom line and employee welfare. The fact that external stakeholders are considered far less important could be explained by the tradition of limited empowerment of the civil society in general, which do not exert considerable influence on private sector activities. In addition, the declining role of government as a result of the privatization process and market liberalization has contributed to such development. In Western European countries, companies due to the pressure from stakeholders and the desire to avoid public scandals started producing social and environmental reports. Voluntary disclosure has become part of the operational culture of many companies all over the world – a trend, which is also evident to some extent among leading enterprises in Romania (Popa, Farcane and Pop, 2008).

The basic instruments of CSR such as: values statements, codes of conducts or ethics, social responsibility reporting, auditing and certification are rather hard to find in Romanian companies. The findings suggest that the triple bottom line concept exists, but it is not very advanced in BSE listed companies. In order to achieve further improvement, government have to make social and environmental reporting mandatory and raise awareness by providing clear reporting guidelines in the field. Our survey of the companies listed on BSE actively traded showed that disclosure of CSR information does not generally belong to the strengths of Romanian companies at the present. However, we found companies whose CSR related information provision and disclosures considerably exceeded the average.

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## STANDARDS, RULES OR PRINCIPLES BASED ACCOUNTING REGULATION

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*Some approaches in accounting regulation, found by us in the case of some European countries are successful compilations between the Anglo-Saxon regulation model and the European-continental model, as well as others are made up only on the continental model. In essence, each and every model is unique in its own way, however, there are to be noted the elements of originality and innovation found in some countries unlike the others. The approach found in the Estonian model successfully combines the regulation by legislation specific to Europe with the regulation by national standards conceived and inspired according to the international referential specific to the Anglo-Saxon model. This type of „double regulation” is opposable to the „unique type of regulation” met in some countries. Our paper is focused on the contrastive comparative approach, being centered on the recognition of advantages and disadvantages of the regulation elements identified in several European countries.*

*Key words: accounting regulation, standards, rules, principles, European countries*

*JEL codes: M41, G14*

### **Introduction**

The fall of the communist regime, the transition from a planned and centralized economy to a market economy, have generated profound changes, both in the organizational environment, in the socio-cultural, relational and educational, as well as in the way of administration of business in the Central and Eastern European Countries. The administration of enterprises as well as the organization and managing the accountancy of these have dramatically changed. The profound process of change, by the transition from a totalitarian system to a democratic one, has required changes, at times real revolutions in the accountancy of the countries in this region.

Our endeavour in the present paper is a research on the evolution of accounting regulation from the Central and Eastern European countries after the collapse of the Soviet system. Knowing the starting point of these countries in reforming the accountancy, our objective is that of following the various controversial aspects of the normalization of accountancy in this period. This is also the reason why we shall ask several questions along our study, in an attempt to find answers as well.

Our study aims at a comparative approach of the way in which the accounting regulation is performed in this region of Europe, of course taking into account the implementing of the European Directives in the legislation of the member countries and the harmonization and convergence process with the international accounting referential. Although at a first analysis of the ways of accounting regulation in the respective countries the things look similar, as if following the same pattern, upon a more detailed and advanced analysis, we observe that there are different tendencies.

Thus, countries such as Estonia and Slovenia, are different from others such as Hungary, Poland, the Czech Republic or Romania, by the two essential components of the regulation device: the

legislation and regulations on the one hand, and the Domestic Accounting Standards on the other hand.

The paper aims at „*casting more light*” upon the process of accounting regulation and of the way this is accomplished in the countries of Central and Eastern Europe. Since it critically and constructively examines the evolution of normalization of accountancy in this region, it brings a significant contribution to the development of the autochthonous specialty literature, which does not abound too much in such transversal comparative studies.

Our study is focussed on the contrastive comparative approach, being centered on the recognition of advantages and disadvantages of the regulation elements identified in the countries in this region. A central place in our study is also taken by the discussion regarding the institution responsible with the accounting regulation within these countries.

### **Accounting regulations versus accounting standards. The case of several CEE countries**

As explained above, in this study we explore differences between national/domestic accounting regulations and national/domestic accounting standards. Several specialized literature sources refer to the two above mentioned models of accounting regulations as representing only one. Thus, the terms used in order to describe both the process of accounting regulation and the way it is rendered into practice, very often interlap. Still, things have to split and analyzed differentially.

We initiated this scientific approach starting from the hypothesis that there are CEE countries which have elaborated and have been using only accounting regulations or rules to complete the Accounting Law but on the other hand there are countries that have elaborated and have been using accounting standards together with the Accounting Law.

The aim of this section of our study is to identify which CEE countries besides those analyzed above, have created and elaborated their own accounting standards in accordance with IAS/IFRS. In addition, this comparative approach aims at highlighting the most significant differences in elaborating, developing and implementing these domestic standards.

Following our idea, there are some questions looking for right answers: *Is there any statutory backing for the established accounting standards? Does the local standard setting process promote or complicate convergence between domestic and international standards? Is there any lesson that other countries could learn about the process of achieving convergence between domestic and international standards? Could de jure harmonization transform standards into rules?*

**In Poland, Czech Republic and Hungary** as a Code Law countries the majority of accounting requirements are contained in the Accounting Act rather than in Accounting Standards. Thus, the principal Polish accounting regulations consist of: the Accounting Act, Decrees from MoF concerning accounting by banks, insurance companies, investment funds, pension funds, consolidation and financial instruments and *two PAS concerning cash flow statements and deferred taxation* that have been issued by the Polish Accounting Standards Committee. Czech Accounting Standards for accounting entities are introduced in 2003 enforced starting with 2004, enclosed to Accounting Act (457/2003, 257/2004) and Decree no. 500 (2003). The Accounting Act amended, mandates that listed companies prepare annual legal entity financial statements in accordance with CzAS and consolidated financial statements in accordance with either the CzAS, IAS, or other internationally recognised accounting standards. As the ROSC (february 2003) pointed out CzAS remain applicable to SMEs, and the accounting standards setting body should be composed of professional accountants, business representatives, regulators, and other stakeholders, such as the Ministry of Finance and the tax authorities. *The case of Hungary is also very interesting* from different perspectives: the existing type of accounting regulation, the development of DAS, etc. In the past, HAS have been set up by the Ministry of Finance and incorporated in the Act on Accounting. Beginning January 1 2005, these standards were applied

only to the legal entity financial statements of companies and to the consolidated financial statements of non-stock exchange listed companies that do not choose to present financial statements prepared in accordance with IFRS. Recently the Hungarian Accounting Standards Board has been established to take over the responsibility for setting HAS from the MoF. Its establishment reflects the desire of the MoF for accounting standards to be developed by the accounting and auditing professions rather than by government. The MoF envisages that the Board will work to ensure full convergence of HAS with IFRS within six to eight years.

### **Main elements of the accounting regulatory process in the Baltic countries**

Since 1990 all three countries have adopted new accounting legislation. In all three countries this new legislation, constitutes a significant departure from the former accounting system based on the Soviet chart of accounts. In opinion of Marie Nigon (1993, Accounting Reforms in Estonia, Latvia and Lithuania, Main Issues) the new accounting legislation has been inspired by the accounting legislation of three Nordic countries: Denmark for the Latvian Law, Sweden and Finland for the Estonian Law, and the EC Accounting Directives. It is therefore not surprising that the new laws of the three republics while different in scope and contents allow many common elements.

Analysing comparatively the evolution of accounting regulation in the three countries we consider Estonia has outdistanced the other two countries, even if the main aim of our research is not to conceive a hierarchy of the most effective model of accounting regulation. Nevertheless, this country has a special place not only among CEE countries, but also for the Baltic countries, from this point of view.

The Estonian financial accounting system has been constituted from Estonian Accounting Law as well as from the Estonian Accounting Standards, issued and improved by Estonian Accounting Standard Board, since 1995. In some sense, this concept is a unique compilation of Anglo-American approach and Continental European approach.

In Estonian accounting regulation the Accounting Law represents the European approach whereas the Estonian Accounting Standards stands for the Anglo-American approach. Such compilation has a number of advantages in the first period of accounting regulation creation (transition period) and enables the flexible manner of the transition process.

Our explorative analysis of the accounting regulations in the CEE countries revealed that, besides Estonia, only Slovenia has introduced the mentioned double set accounting regulation, in the first half of the 1990's. In the second half of the 1990's this approach was implemented in several market economy countries like Germany, Norway, Sweden and then in Latvia, Lithuania. Such type of double set accounting regulation was introduced gradually or instantly in Bulgaria, Albania, Moldova, Ukraine, Kazakhstan, Bosnia-Herzegovina and other EE countries.

Arthur Praulins in 2006 identified *17 Estonian Accounting Standards* adopted by the Accounting Board an independent authority, which may be characterized as „*mini version*” of IAS/IFRS. The law allows to apply international standards in place of national ones, producing both individual and consolidated accounts. Estonia is one of the first European states, which gives companies such right of choice. As the practical experience shows big companies normally choose the complete version of international standards, but SME stay loyal to national regulations. Estonia considerably outdistances Latvia not only in the area of national accounting standardization, but also conferring the right to make choice between national and international accounting standards.

In Lithuania, after active discussions taking place in the end of 1990's, which concerned accounting standardization necessity, feasibility and its possible trends of development (elaboration on national standards or taking over of international standards), there was taken a decision to start a two-kind national accounting standards elaboration: Ministry of Finance was responsible for budget institution accounting standards and Lithuanian Accounting Institute was

authorized to elaborate the standards for revenue oriented enterprises. This process was especially active in the second half of 2002, when on 19 December, first 11 national/domestic accounting standards were adopted. On 20 December 2003, 9 more standards added, and on 10 November 2004, the following 5 standards. The process of national/domestic standards elaboration goes on.

Performing comparative analysis of different aspects of Estonian, Latvian and Lithuanian accounting system regulation, we found a number of differences (Table 1).

*Table 1. Differences between Baltic countries accounting system regulation*

| <b>Parameter</b>  | <b>Latvia</b>   | <b>Estonia</b>   | <b>Lithuania</b>   |
|---|---|--|--|
| Basic normative acts regulating accounting at the moment            | Accounting Law<br>Enterprise Annual Reporting Law<br>Consolidated Annual Reporting Law                                      | Accounting Law   | Accounting Law<br>Financial Accounts Law<br>Consolidated Annual Reporting Law  |
| Elaborated the concept of national accounting system development    | no  | no   | Concept of Lithuanian accounting system reorganization and development (10.06.1997)<br>Main trends of Lithuanian accounting and audit system development in 2002-2020 (20.11.2001) |
| The author of the first national standards and start of elaboration | Committee of Methodology of Latvian Association of Sworn Auditors<br>Latvian Accounting Standards Consultative Board (1997) | National Accounting Board (1995)   | Lithuanian Accounting and Audit Institute (1997)   |
| Existing national accounting standardization institution            | Accounting Board  | Accounting Standards Board   | Lithuanian Accounting Institute  |
| Adoption and effective date of first accounting standard            | 1999  | 1995   | 2002   |
| <i>Number of being in force national accounting standards</i>       | 8   | 17   | 25   |
| Spreading of national and international accounting standards        | Thematic match of national and international accounting standard  | Separate national standards comprise contents of several international standards | Some national standards comprise topics of several international standards   |



|   |    |   |     |
|---|----|---|-----|
| National accounting standards which have no international analogue  | no | Exist Liquidation-sheet and final balance Profit free proprietorships and funds | yes |
| National accounting regulation institution elaborates tutorial recommendations and accounting standards interpretations | no | yes   | yes |

(Source: Praulins A., 2006)

### Some key issues concerning accounting regulation in former Soviet Union countries

Another point that could matter in a comparative approach is about *Russia's* adoption of IAS/IFRS. Even the standards that have been adopted may not always represent the current original version. For example, the Russian standard on income taxes is based on the old version of the IAS income tax standard, not the new one. This fact is acknowledged within the Russian accounting community but it may not be well-known outside Russia. Another less known fact about DAS is that the Russian versions of the standards that have been adopted are not mere translations from the English language. In many cases these are abbreviated, simplified versions of the original English IAS/IFRS. RAS tend to be much shorter, more detailed and conceptual. They usually cover only a fraction of IAS/IFRS content. In short, it may not be accurate to state that Russia has adopted IAS/IFRS. It would be more eloquent to say that RAS are simply based on IAS/IFRS. Often the differences between RAS and IAS/IFRS are not large or important. However, the difference may be substantial, such as in the area of accrual principles.

In *Georgia*, the GFPAA has developed a reduced set of accounting standards, which have been approved by the Accounting Commission and adopted by the Ministry of Justice. These „*temporary accounting standards*” for small companies are derived from IFRS and exclude the IFRS provisions that the GFPAA deemed irrelevant for small companies. The GFPAA has also developed a further reduced set of standards for use by non-profit legal enterprises. The draft Law adopts these standards for entities that do not have an auditing obligation. Both of these sets of reduced standards are seen as temporary in anticipation of Accounting Standards for SMEs, which are being developed by IASB. The Accounting Commission intends to adopt the IASB SME standards once these can be translated.

*Ukrainian Accounting Standards* produce financial statements that are intended principally to meet the information needs of the tax authorities. For instance, UAS 7 Tangible Assets allows the use of tax depreciation methods (among other methods) that may not reflect the pattern in which the asset's economic benefits are consumed by the enterprise. Preparers of such financial statements tend to use tax methods where permitted, and do not give much attention to the quality of information that does not directly affect tax computation. UAS financial statements differ materially from IAS/IFRS financial statements.

As respect to *Moldovian accounting regulatory process*, an important aspect is that the *MoF* has developed a specific accounting standard for small and medium enterprises, which is useful for bookkeeping but needs some simplification and does not provide SMEs with a clear financial reporting framework. NAS 4 *Accounting by Small Business Entities* was developed pursuant to Article 14 of the Accounting Law in order to provide a set of „principles of accounting, preparation of accounting registers and financial statements” adapted to SMEs' less complex transactions and resources. It includes an indicative chart of accounts that limits the types of

entries to a few basic categories of assets, liabilities, equity, revenues and expenses, as well as certain off-balance sheet items. Financial statements prepared in accordance with NAS 4 are defined as follows: „balance sheet, income statement, annex to the financial statements and explanatory notes” (NAS 4, paragraph 42). However, no definition is given of the content of those notes, or which of the disclosures required by NAS 5 *Presentation of Financial Statements*, can be omitted or adapted. Moreover, NAS 4 does not set out any principles for the recognition of transactions and for assets and liabilities’ measurement.

### **Principles versus rules in the accounting regulatory process**

Hines (1988) demonstrates that when we draw up accounting rules, we determine what we view of reality we present. Explaining this, if we decide that internally generated intangibles should not be measured, we also determine that a whole class of assets owned by a company is not part of the picture given by the balance sheet and therefore the reality (true and fair view) that the balance sheet is supposed to reflect is shaped by decisions on the accounting rules. So, those who make the accounting rules establish which aspects of the company are highlighted and which are neglected in financial reporting. But, they do not create something that does not exist, although we all know that some companies do try to use the rules in such way. Accounting rules always reflect some perception of which aspects of a company can and should be measured.

To regulate or not to regulate, and if regulate how to do it, these questions, are part of a main issue concerning the accounting regulatory process. The purpose of regulation, the enforcement of regulation, and the social acceptance of regulation are other parts of the questions raised above. On the other hand, in the accounting literature, there has been significant debate about the relative merits of principles and rules that would tend to suggest that the two approaches are mutually exclusive. Principles often include rules to assist in their implementation. Similarly, rulebooks often contain options where different actions and potentially quite different results still meet the objectives of the rules.

Authors like Thomadakis (2007) prefer the use of principles to guide the actions of individuals and groups rather than establishing detailed sets of rules. His opinion is that we can be confident that some people will ignore legal requirements regardless of their form of expression while others will look to circumvent the law by acting within its letter but ignoring its spirit, exploiting small print and loopholes. He also see principles as having an inherent aspirational quality that rules simply cannot support. Another highly practical attraction is that establishing principles rather than rules allows regulation to respond effectively to evolving conditions without the need for constant amendment. Just as consistency of actions promotes confidence, too frequent amendments to rules can actually undermine it.

The same author puts up the question: What makes good regulation? In his opinion the answer is a simple one: “good regulation serves the public interest through supporting ongoing confidence in processes, such as the market process, in which the public participates and in activities, such as auditing, on which the public relies”. Thomadakis (2007) consider the design of good regulation must fit the following criteria:

- necessity;
- transparency;
- proportionality;
- effectiveness;
- flexibility.

**In conclusion,** we have to underline the need and importance of principle based standards in accounting regulatory process. Is the case of IFRS’s. In our opinion the way the IFRS’s are build and conceived is a one to follow by the CEE countries. The arguments can be found in the above mentioned ideas. In order to have a good accounting regulation we have to recognize a structure of a principle based standards. That means we must have:

- recognition principles;
- measurement principles;
- derecognition principles; and
- presentation and disclosure principles.

Naturally, these principles must derive from conceptual framework and rely on professional judgment in their application in certain business context.

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## ACCOUNTING TREATMENT OF BENEFITS IN KIND

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*From the salt portion of the Romanian soldier up to the concept of the Labour Code which consider that the salary is the remuneration of the persons working exclusively on a labour agreement relationship, its accounting have had to adapt even to the tax requirements which considers even as salary revenues even the ones obtained by individuals from services relationships, including the individuals employed based on special laws, such as: public clerks, professors, individuals working under the public army and police etc. Presented below is the standard structure of the salary computation, valid for the calendar year 2009, as well as the standard social security contributions. After an example of a net salary calculation, enclosed with this report is presented an Excel computation for the above, while this report will present in its final stage to the particularities of the accounting for benefits in kind.*

*Keywords: benefits in kind, social security contributions, monthly net salary income, taxable salary income, salary tax*

*The article's JEL code: M41*

### **Considerations on the Accounting Treatment of the Benefits in kind**

The Labour Code is mentioning that the salary is the remuneration of the individuals working exclusively on a labour agreement relationship: "the individual labour agreement is the agreement in which an individual, „the employee” is rendering its services under the supervision and being dependent to an employer, either another individual or a legal entity, for remuneration called „salary”. Besides the above, salary revenues are obtained even by a large scale of other individuals which are not involved in an employment relationship but in a dependent rendering of services, as per the provisions defined by the Fiscal Code at art. 55: „salary income are defined as in-cash and in-kind income obtained by an individual under a labour agreement relationship, as well as the income realized according to a special status conferred by the law, indifferently to the period to which it refers or the name of the related income or the form in which they are granted, including also the remuneration for temporary labour incapacity”; a list of other income obtained from similar activities are mentioned in paragraph 2 of the same article.

As subject of the labour rights and obligations, individual is called „employee” and the Labour Code is establishing an exception for the general accepted exercise capacity age (i.e. 18 years): „An individual has working capacity at the age of 16 years. The individual can conclude a labour agreement as employee even at the age of 15 years with the approval of its parents or legal tutors for activities in accordance with his or her physical development, aptitudes and knowledge and if such labour activities are not damaging the individual personal health, development and professional qualification<sup>540</sup>. According to the Romanian laws, the salary granted can not be lower that the minimum gross salary establish at national level.<sup>541</sup> "An individual can conclude

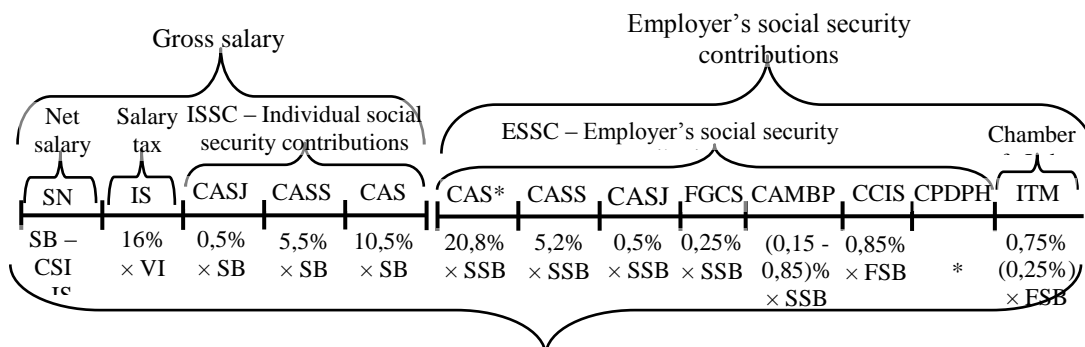
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540 Law #53/2003 regarding the Labour Code, published in the Official Gazette, Part I #72 dated 05.02.2003, art.13.paragraphs (1) and (2), with its further amendments.

541 As of 1 January 2009, the minimum national gross salary is established at 600 lei per month, for a full working schedule of 170 hours in average per month, representing 3,529 lei/hour, in accordance with art. 2 from Government Decision #1051/2008 published in the Official Gazette Part I #649 dated 12.09.2008.

individual labour agreements in his/her capacity of employer from the moment of earning his/her exercise capacity"<sup>542</sup>.

We present below in Figure #1 the salary structure while in Table #1, the percentages of the social security contributions valid and applicable for calendar year 2009 in Romania.



Salary structure and the social security contributions for calendar year 2009

Figure #1

Where:

**SB** – Monthly gross salary;

**VNL** – Monthly net income (SB - CSI);

**VI** or **VBC** – taxable income (SB - CSI - DP);

**ISSC** – Individual social security contributions (withholdings from gross salary);

**IS** – (Income) Salary tax;

**SN** – Monthly net salary;

**SSB** – Total of monthly gross salaries;

**ESSC** – Employer's social security contributions;

**CAS** – employer's pension fund contribution, for normal working conditions;

**CASJ** – employer's unemployment fund contribution;

**CASS** – employer's health fund contributions;

**CAMB** – employer's for work accidents and professional diseases contribution;

**CCIS** – employer's medical leave contributions;

**FGCS** – employer's contribution to salary guarantee fund;

**CPDPH** – employer's solidarity fund contribution for disabled persons;

**ITM1** (0,75%) și **ITM2** (0,25%) – commissions – professional fees due to the Chamber of Labour for the administrative management of labour books.

Table #1. Percentages of the social security contributions applicable in the calendar year 2009

| No. | Description of the related contribution   | Percentage   | Legal ground  |
|-----|---|--|---|
| 1   | Individual pension fund contribution for different working conditions, according to the Law #19/2000 <sup>543</sup> | 10,5 % computed at the individual gross salary, including all bonuses and other remuneration | <b>Art. 18</b> – Paragraph (1) lit. a) from the State Social Security Budget Law for calendar year 2009 published in the Official Gazette #122, Part I, 2009. |

542 Idem Labour Code, art. 14.

543 In the individual pension fund contribution is including the 2,0 % quota related to private pension funds, as provided by the Law #411/2004 regarding the private pension funds, republished, with its further amendments.

|    |   |  |   |
|----|---|--|---|
|    | (art.18 paragraphs (2) and (3));  |  |   |
| 2. | Employer's pension fund contribution for normal working conditions, according to the Law #19/2000 (art.18 paragraphs (2) and (3));  | 20,8 % computed at total realised gross salaries, including all bonuses and remuneration (25,8 % - special working conditions, 30,8 % - extreme working conditions   | <b>Art. 18</b> – Paragraph (1) lit. a), b), c) from the State Social Security Budget Law for calendar year 2009 published in the Official Gazette #122, Part I, 2009.   |
| 3. | Employer's unemployment fund contribution, according to the Law #76/2002 (art.29);  | 0,5 % computed at total realised gross salaries  | <b>Art. 19</b> – Paragraph (1) lit. a) from the State Social Security Budget Law for calendar year 2009 published in the Official Gazette #122, Part I, 2009.   |
| 4. | Individual unemployment fund contribution, according to the Law #76/2002 (art.29);  | 0,5 % computed at the gross salary   | <b>Art. 19</b> – Paragraph (1) lit. b) from the State Social Security Budget Law for calendar year 2009 published in the Official Gazette #122, Part I, 2009.   |
| 5. | Employer's contribution to the salary guarantee fund, according to the Law #200/2006 (art.7 paragraph (1));   | 0,25 % computed at total gross realised salaries   | <b>Art. 19</b> – Paragraph (1) lit. d) from the State Social Security Budget Law for calendar year 2009 published in the Official Gazette #122, Part I, 2009.   |
| 6. | Employer's contribution for working accidents and professional diseases, depending on the risk working conditions, according to the Law #346/2002;  | 0,15 % - 0,85 % computed at total gross realised salaries <sup>544</sup>   | <b>Art. 20</b> – Paragraph (1) from the State Social Security Budget Law for calendar year 2009 published in the Official Gazette #122, Part I, 2009.   |
| 7. | Individual health fund contribution due by the individuals insured according to art.257 from Law # 95/2006 (employees and individuals assimilated to employees, excepting individuals which benefit of the health | 5,5 % computed at gross income from salaries or income assimilated to salaries which are subject of income tax, as well as other taxable bases mentioned in art.257. | <b>Art. 1.</b> – paragraph (1) lit. a) from the Emergency Government Ordinance #226/2008 dated 30.12.2008, regarding certain finance-budgetary measures, published in the Official Gazette #899, Part I dated 30.12.2008. |

544 Starting as of 1 January 2008, as per the Government Emergency Ordinance #91/2007, published in the Official Gazette Part I #671/2007, the taxable base for the calculation of the social security contributions have been amended and their annual percentages should be established by the Social Security Contributions State Budget Law.

|    |   |   |   |
|----|---|---|---|
|    | insurance without any contribution);  |   |   |
| 8. | Employer's health fund contribution, according to art. 258 from Law #95/2006;   | 5,2 % computed at total gross realised salaries.  | <b>Art. 1.</b> – paragraph (1) lit. b) from the Emergency Government Ordinance #226/2008 dated 30.12.2008, regarding certain finance-budgetary measures, published in the Official Gazette #899, Part I dated 30.12.2008. |
| 9. | Employer's medical leave contribution, according to Emergency Government Ordinance #158/2005;   | 0,85 % computed at total gross realised salaries  | Art. II from the Emergency Government Ordinance #91/2006, published in the Official Gazette #958/2006.  |
| 10 | Commission to the Chamber of Labour for the administrative management (archiving and update) of the labour books, according to the Law #130/1999;     | 0,75 % computed at total gross realised salaries  | Art. 5 paragraph (1), lit. a) from the Law #130/1999 regarding the protection of individuals working based on labour agreements, republished in the Official Gazette #190/2007.   |
| 11 | Commission to the Chamber of Labour for the administrative management (review and certification) of the labour books, according to the Law #130/1999; | 0,25 % computed at total gross realised salaries  | Art. 5 paragraph (1), lit. b) from the Law #130/1999 regarding the protection of individuals working based on labour agreements, republished in the Official Gazette #190/2007..  |
| 12 | Employer's contribution to solidarity fund for disabled persons, according to the Law #448/2006;  | 50% from the minimum national gross salary multiplied with the number of working positions for which the corresponding number of disabled persons were not hired or engaged under other types of relationships <sup>545</sup> | Art. 77 from the Law #448/2006 regarding the protection and promoting the rights of disabled persons published in the Official Gazette #1006/2006 with its further amendments.  |

The net salary computation is assuming this calculation at the main working position and/or other positions. According to the Labour Code, an employee could have more positions (functions) based on different individual agreements concluded with different employers, benefiting of salaries corresponding for each of the position, with the exceptions provided by law for incompatibility of the functions. From a fiscal perspective, by main working position is

<sup>545</sup> The obligation is alternative and is conditioned by the number of employees, please refer to art. 77 from Law #448/2006.

understood the working position where certain tax facilities are granted for the purpose of computing the salary tax. The choice of the main working position is made by the employee and generally represents the position where the employees has a labour agreement concluded for a normal daily working time.

In accordance to art. 57 from the Fiscal Code - "The determination of the income tax for salary income", the beneficiaries of salary income are liable for a monthly final salary tax, computed and withheld by the payer of the salary income as follows:

a) in case of the main working position, by applying 16% at the taxable income computed as the difference monthly net income (determined by deducting from the gross monthly salary of the monthly individual social security contributions) and the following:

- individual personal deduction granted for the respective month;
- contribution to the labour union (if the case) for the respective month;

- contributions to the private pension funds at the maximum threshold of EUR 200 per year (computed in the lei);

b) in other cases, by applying 16% at the taxable income computed as the difference between the monthly gross salary and the monthly individual social security contributions – calculation performed at each working position;

The beneficiaries of the salary income are entitled of a deduction from their monthly net income called personal deduction, personal deduction which is granted on a monthly basis but only for the salary income obtained at the main working position.

Considering the computation method mentioned in the article 3 from Order of Ministry of Public Finance #19/2005 regarding the monthly personal degressive deductions in conjunction with the monthly gross salaries - SB and the number of dependants - NPI, the following calculation relations can be established for the personal deduction as presented in Table #2:

|   |                        | Table #2   |             |
|---|------------------------|--|-------------|
| Gross salary - SB(RO)   | Up to: 1.000           | between: 1.000,01 ÷ 3.000                                | over: 3.000 |
| K   | 1                      | $1 - \frac{SB - 1000}{2.000}$                            | 0           |
| Personal deduction:<br>$DP = (250 + 100 \times NPI) \times K$ | $250 + 100 \times NPI$ | $(250 + 100 \times NPI) \times \frac{3.000 - SB}{2.000}$ | 0           |

### Example

The net salary calculation for a gross salary of 1.500 RON (15.000.000 ROL) for an employee with only one dependant, at the main working position, in the month of February 2009, is presented below:

$$VNL = SB - CSI = SB - CASJ - CASS - CAS = 1.500 - 0,5\% \times 1.500 - 5,5\% \times 1.500 - 10,5\% \times 1.500 = 1.500 - 8 - 83 - 158 = 1.251 \text{ lei}$$

$DP = (250 + 100 \times NPI) \times K$ , in which NPI = 1 represents the number of dependents which from a tax perspective can not exceed the number of 4, while „K” is computed as:

$$K = 1 - \frac{SB - 1.000}{2.000} = 1 - \frac{1.500 - 1.000}{2.000} = 0,75$$

$$DP = (250 + 100 \times 1) \times 0,75 = 262,5 = 270 \text{ lei (rounding-up to ten lei).}$$

$$VI \text{ or VBC} = VNL - DP = 1.251 - 270 = 981 \text{ lei, while the salary tax:}$$

$$IS = 16\% \times VBC = 16\% \times 981 = 157 \text{ lei}$$



$$SN = SB - CSI - IS = 1.500 - 249 - 157 = 1.094 \text{ lei}$$

For a fast computation of the salaries, Excel worksheets can be used

### EXCEL WORKSHEET

|    | A   | B       |
|----|---|---------|
| 1  | February/2009<br>- Working days                         | 20      |
| 2  | Name, Surname   | Spanu N |
| 3  | Main working<br>position – normal<br>working conditions | 1       |
| 4  | Days worked   | 20      |
| 5  | Number of<br>dependants                                 | 1       |
| 6  | Contracted gross<br>salary                              | 1.171,0 |
| 7  | Realised gross<br>salary                                | 1.171,0 |
| 8  | Management<br>indemnisation                             | 0,0     |
| 9  | Seniority bonus<br>15%                                  | 176,0   |
| 10 | Other bonuses   | 0,0     |
| 11 | Other income  | 0,0     |
| 12 | VBLS (Monthly<br>gross salary)                          | 1.347,0 |
| 13 | C.A.SJ. 0,5 %   | 7,0     |
| 14 | C.A.S.10,5 %  | 141,0   |
| 15 | C.A.S.S. 5,5 %  | 74,0    |
| 16 | Personal deduction                                      | 290,0   |
| 17 | Monthly net<br>income (VNL)                             | 1.125,0 |
| 18 | Taxable income<br>(VI or VBC)                           | 835,0   |
| 19 | Salary tax (IP)   | 134,0   |
| 20 | Net salary (NP)   | 991,0   |
| 21 | Advance (AV -<br>40%)                                   | 401,0   |
| 22 | Rest payable (RP)                                       | 590,0   |

| <i>Explanations for column "B"<br/>(information of formulas)</i>  |
|---|
| 20  |
| Spanu Nicolae   |
| 1   |
| 20  |
| 1   |
| 1171  |
| =B6*B4/B1   |
| 0   |
| =ROUND(15%*(B7);0)  |
| 0   |
| 0   |
| =B7+B8 +B9+B10+B11  |
| =ROUND(0,5%*B12;0)  |
| =ROUND(10,5%*B12;0)   |
| =ROUND(5,5%*B12;0)  |
| =(IF(B12<=1000;250+IF(B5<=4;B5;4)*IF(B5<0;0;1)*100;0)+IF(B12>1000;1;0)*IF(B12<=3000;ROUNDUP((250+IF(B5<=4;B5;4)*IF(B5<0;0;1)*100)*(1-(B12-1000)/2000);-1);0)*IF(B3>0;1;0) |
| =IF((B12-B13-B14-B15)<0;0;(B12-B13-B14-B15))  |
| =ROUNDDOWN(IF((B17-B16)<0;0;(B17-B16));1)   |
| =ROUND(16%*B18;0)   |
| =B12-B13-B14-B15-B19  |
| 401   |
| =B20-B21  |

The benefits in kind (excepting the ones mentioned in art. 55 - paragraph (4) from the Fiscal Code), related to a dependent relationship include without being limited to:

- a) utilisation of any employer's goods, including any vehicle, for private purposes, excluding the travel between home and working place and return
- b) accommodation, subsistence, clothes, employees for household activities, as well as other goods and services free-of-charge or at prices lower than the market prices;
- c) non-reimbursable loans;
- d) cancellation of any receivables of the employer towards the employee;
- e) subscriptions and cost of telephone conversations, including prepaid telephone cards, used for private purposes;
- f) travel documents for any transportation means used for private purposes;
- g) insurance policies paid by the employer for its own employees or other income beneficiaries, at payment date, besides the mandatory insurance policies.

For the accounting of the benefits in kind, the following options can be used by recording these transaction using the debit of the account 421 "Employees – accrued salaries" and the credit of one of the accounts:

Either an expenses account, in case of a benefit in kind related to the acquisitions of the employer (the expenses accounts are used depending on the related benefit in kind granted, for example account 607 "Cost of goods sold related to merchandises", 605 "Utilities expenses"):

|                                |   |   |  |
|--------------------------------|---|---|--|
| 421                            | = | 607   |  |
| "Employees – accrued salaries" |   | " Cost of goods sold related to merchandises" |  |

- either an operational revenues account, in case of a benefit in kind granted in general from the own production (example, account 708 "Revenues from sundry activities"):

|                                |   |                                    |  |
|--------------------------------|---|------------------------------------|--|
| 421                            | = | 708                                |  |
| "Employees – accrued salaries" |   | " Revenues from sundry activities" |  |

Another method for recording the benefits in kind granted to the employees is the one which is assuming a sale to the employee. For example if benefits in kind are granted from the own production, the following steps should be undertaken:

1. Including the products granted as benefits in kind in the salary expenses together with the salary rights:

|                   |   |                                 |  |
|-------------------|---|---------------------------------|--|
| 641               | = | 421                             |  |
| "Salary expenses" |   | " Employees – accrued salaries" |  |

2. Calculation and recording of the salary withholdings will be made starting from the sum between the salary rights and the value of benefits in kind granted as products from own production. The recording of the salary withholdings and the salary payment is made in accordance with the previous sections.

3. Granting of the benefits in kind:

|                                 |   |  |                     |
|---------------------------------|---|--|---------------------|
| <b>421</b>                      | = |  | %                   |
| " Employees – accrued salaries" |   |  |                     |
|                                 |   |  | 701                 |
|                                 |   |  | "Sales of products" |
|                                 |   |  | 444                 |

“Salary tax”

4. Cost of goods sold for the products granted as benefits in kind:

|                                     |   |                     |
|-------------------------------------|---|---------------------|
| <b>711</b>                          | = | 345                 |
| “Revenues from production in stock” |   | “Finished products” |

5. If the goods granted as benefits in kind are subject of VAT and excises, the related accounting entry will be:

|                             |   |               |
|-----------------------------|---|---------------|
| <b>635</b>                  | = | %             |
| ”Expenses with other taxes” |   | 4427          |
|                             |   | “Output VAT”  |
|                             |   | 446           |
|                             |   | “Other taxes” |

**References:**

1. Law #19/2000 regarding the System of Public Pensions and Other Social Security Allowances
2. Law #76/2002 regarding the unemployment security system and the stimulation of labour employment
3. Law #346/2002 regarding insurance for labour accidents and professional diseases
4. Law #411/2004 regarding the private pension funds, republished, with its further amendments
5. Law no. 571/2003 regarding the Fiscal Code, published in Part I of the Official Gazette of Romania No. 927 of December 23, 2003, with further amendments
6. Law #53/2003 regarding the Labour Code, published in the Official Gazette, Part I #72 dated 05.02.2003
7. Law #200/2006 regarding the guarantee fund for salary related obligations
8. Law # 95/2006 regarding the reform in the health
9. Government Decision #1051/2008 published in the Official Gazette Part I #649 dated 12.09.2008
10. Law #122 for State Social Security Budget for calendar year 2009 published in the Official Gazette Part I, 2009

# FISCAL AND ACCOUNTANCY ASPECTS CONCERNING THE ECONOMIC ACTIVITY OF INTRA-COMMUNITARIAN GOODS TRANSPORT

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*As general type of activity, transport is framed in the vast category of services. However, from a fiscal point of view, transport services are treated as an exception, in comparison with the manner in which the services are approached, in general.*

*In the frame of the transport services, the intra-communitarian transport presents certain particularities. Therefore, the present paper holds forth the approach from a theoretical point of view of a series of fiscal aspects specific to economic operations of intra-communitarian goods transport, but also to study different practical examples in the purpose of presenting afferent fiscal and accountancy treatments.*

*Key words: intra-communitarian transport, performance place, person obliged to pay the VAT, accountancy.*

*The article's JEL code: M 41-Accounting*

It constitutes *intra-communitarian goods transport*<sup>546</sup> any type of goods, for which the departure and the arrival place are situated in two different states that belong to European Union. In the situation when during the intra-communitarian transport (between the departure and the arrival place) another tertiary state outside European Union is crossed over, the intra-communitarian goods transport quality is not affected.

## **1. Fiscal aspects concerning intra-communitarian goods transport**

The intra-communitarian goods transport is settled by article 133, paragraph (2), letter (c) from the Law no. 571/2003 concerning The Fiscal Code, with subsequent changes and completions and point 15 from the standards given for this article application, approved by H.G. 44/2004, with subsequent changes and completions. In synthesis, according to the present legislation<sup>547</sup>, by intra-communitarian goods transport we understand any goods transport for which:

- the departure and arrival place are situated in two different Member States – *properly intra-communitarian transport*; or
- the departure and arrival place are situated in the same Member State, but the transport is made in direct connection with an intra-communitarian goods transport – *national transport assimilated to intra-communitarian transport*.

The issue of the properly intra-communitarian goods transport will be dealt with in what follows.

**The place of the intra-communitarian goods transport performance** is considered to be the departure place of intra-communitarian goods transport<sup>548</sup>, meaning the point from where the transport operation starts. By exception, if the transport service is performed by a beneficiary that communicates a registration code with VAT purpose available in another Member State than the departure one, the performance place is represented by the Member State that issued the VAT code, in the basis of which the service was performed for the beneficiary.

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546 Persons transport presents a different fiscal regime.

547 Article 133, paragraph (2), letter c) from Law no. 571/2003 concerning the Fiscal Code, with subsequent changes and completions and point 15 from the standards given for this article application, approved by H.G. 44/2004, with subsequent changes and completions.

548 Article 133, paragraph (2), letter c), from The Fiscal Code.

If the client does not communicate this code the taxation place is in the Member State of goods departure, the transporter having the obligation of registering in the intra-communitarian transport departure Member State for the payment of the value added tax.

**The person obliged for VAT tax in Romania**, for which the services representing the intra-communitarian goods transport, is the performer<sup>549</sup>. By exception, if the performer is not established in Romania (even though he is registered in VAT purposes in Romania<sup>550</sup>) and the beneficiary is also registered in VAT purposes in Romania<sup>551</sup>, the person obliged to pay the VAT is the beneficiary.

In the case when the code communicated to transport firm is attributed by the Member State from where the goods departed (in this case the exception does not apply any longer), the taxing place is the departure place of the goods, and the person obliged to pay the VAT is the beneficiary by inverse taxation.

**VAT exemptions.** Under certain circumstances the goods transport may benefit from exemptions with deduction right, such as: goods transportation from a tertiary territory, with the condition that the value of this transport will be included in taxing basis of the imported goods; goods transport, direct connected to the exportation of these goods outside Community; goods transport that are placed in suspense customs regime<sup>552</sup>.

In the case of intra-communitarian goods transport, there are no VAT exemptions, but only a few exceptions: the transport of some non-communitarian goods found in external transit regime; intra-communitarian goods transport made towards and from the islands belonging to autonomous regions from Azores and Madeira; the transport afferent to an exportation.

In what follows the case when the performer of the transport services is established in Romania will be analyzed, but also the case when the beneficiary of the intra-communitarian goods transport is a person established in Romania.

Case 1. The performer is established in Romania

In this case the following particular situations may occur:

a) if the beneficiary is established and registered in VAT purposes in Romania, the performer will invoice with VAT any transport operation:

- that starts in Romania;
- that starts in another Member State and ends in Romania; or
- that starts and ends in another Member State.

b) if the beneficiary is established in Romania and registered in VAT purposes in another Member State communicating the VAT code from the respective state, the performer will invoice without VAT, the taxing being made in the other Member State;

c) if the beneficiary is established in Romania but he is not registered in VAT purposes, the performer will invoice with VAT for any transport operation that starts in Romania;

d) if the beneficiary is not established in Romania and he has not communicated any VAT code from another Member State, the performer will invoice with VAT any transport operation that starts in Romania;

e) if the beneficiary is not established in Romania and he communicates a VAT code from another Member State, the performer will invoice without VAT, the taxing being made in the other Member State.

**Case 2. The performer is established in another Member State**

In this case the following particular situations may occur:

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549 Article 150, paragraph (1), letter a), from The Fiscal Code.

550 According to article 153 paragraph (4), from The Fiscal Code settlements.

551 According to article 153 or 1531, from The Fiscal Code.

552 Popa Adriana-Florina, Popa Nicu, The excises and taxes settled by The Fiscal Code, CONTAPLUS Publish House, Bucharest, 2008.

- a) if the beneficiary is established and registered in VAT purposes in Romania, he will receive an invoice without VAT; both deductible and collective VAT will be registered in VAT deduction;
- b) if the beneficiary is established in Romania, but he is registered only for intra-communitarian acquisitions, he will deposit the special VAT deduction and he will owe VAT to the budget;
- c) if the beneficiary is established in Romania but communicates a VAT code form another Member State, the transport operation is not taxable in Romania, but in the other state;
- d) if the beneficiary is not registered in VAT purposes in Romania, he is not obliged to VAT payment afferent to intra-communitarian goods transport operation.

## 2. Aspects concerning the intra-communitarian goods transport operations' accountancy

A series of practical examples will be presented in order to underlie the intra-communitarian goods transport operation accountancy rules.

### 2.1. The reflection of intra-communitarian goods transport operation in Romanian performer's accountancy

**Example no. 1.** S.C. INTRACOM TRANSPORT S.R.L., established and registered in VAT purposes in Romania, transports goods from Romania to Spain, for MONDOSPANISH society from Spain, a society that does not communicate to Romanian transporter a registration code in VAT purposes available in Spain or in other Member State.

The fiscal treatment that will be applied for this case is the following:

According to general rule form The Fiscal Code, the intra-communitarian goods transport takes place in Romania, because the performance place is considered Romania and the beneficiary does not communicates to the performer a registration code. Therefore, the intra-communitarian goods transport is taxable in Romania.

The accountancy treatment that will be applied for this case is the following:

The invoice issued by the society from Romania will contain VAT, and the reflection of the services performance operation in S.C. INTRACOM TRANSPORT S.R.L. accountancy will be realized hereby:

$$\frac{4111 \text{ „Clients”}}{4427 \text{ „TVA collected”}} = \frac{704 \text{ „Incomes from executed works and performed services”}}{\%}$$

**Example no. 2.** S.C. INTRACOM TRANSPORT S.R.L., established and registered in VAT purposes in Romania, transports goods from Romania to Spain, for MONDOSPANISH society from Spain. The Spanish beneficiary provided for Romanian transporter its registration code for VAT purposes from Spain.

- The fiscal treatment that will be applied for this case is the following:

In this case, because the beneficiary society communicated its registration code for VAT purposes from Spain, the performance place will be considered Spain, the transporter's being applied the exception from the general rule. Therefore, the intra-communitarian goods transport is taxable in Spain.

- The accountancy treatment that will be applied for this case is the following:

The invoice issued by the society from Romania will not contain VAT, the Romanian transporter not having the obligation of invoicing with VAT, and the reflection of the intra-communitarian transport operation (operation not taxable in Romania) in S.C. INTRACOM TRANSPORT S.R.L. accountancy will be realized hereby, maintaining the deduction right according to article 126, paragraph (9) letter b) from The Fiscal Code:

$$\frac{4111 \text{ „Clients”}}{704 \text{ „Incomes from executed works and performed services”}} =$$

The Spanish beneficiary will proceed to inverse taxing, applying the VAT quota available in Spain, respective the one of 16%.

**Remark:** We make the specification that for this case, the transporter has to check the availability of the registration code in VAT purposes given by the beneficiary, using one of the methods presented in the O.M.F.P. no. 1706/2006, published in O.M. no. 894/02.11.2006.

The exception may extend for the situation where the beneficiary was registered in VAT purposes in Italy too and provided to the transporter the registration code in Italy. By applying this exception foreseen at the article 133 paragraph (2) letter c) from The Fiscal Code, the place of the intra-communitarian goods transport made by S.C. INTRACOM TRANSPORT S.R.L., would have been for this case Italy. Accordingly to this, the applicable VAT quota would have been 20% - the VAT quota afferent to the Italian state.

**Example no. 3.** S.C. INTRACOM TRANSPORT S.R.L., established and registered in VAT purposes in Romania, transports goods from Romania to Spain, for MONDOSPANISH society from Spain. The Spanish beneficiary is registered in VAT purposes both in Spain and Italy, but he provided to Romanian transporter its registration code for VAT purposes available in Italy.

- The fiscal treatment that will be applied for this case is the following:

In this case, because the beneficiary society communicated its registration code for VAT purposes from Italy, the performance place will be considered Italy, the transporter's being applied the exception from the general rule. Therefore, the intra-communitarian goods transport operation is taxable in Italy.

- The accountancy treatment that will be applied for this case is the following:

The invoice issued by the society from Romania will not contain VAT, and the reflection of the intra-communitarian transport operation (operation not taxable in Romania) in S.C. INTRACOM TRANSPORT S.R.L. accountancy will be realized hereby, maintaining the deduction right according to article 126, paragraph (9) letter b) from The Fiscal Code:

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4111 „Clients” = 704 „Incomes from executed works and performed services”

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**Example no. 4:** S.C. INTRATRANSPORT S.R.L., established and registered in VAT purposes in Romania, transports goods for an expedition house - S.C. TRANSFERROM S.R.L. – society established and registered in VAT purposes also in Romania. The goods are transported by a society from Italy in Romania. S.C. TRANSFERROM S.R.L. communicates to the transporter its registration code in VAT purposes available in Romania, code attributed therefore to another Member State than the one of transport's departure.

- The fiscal treatment that will be applied for this case will be the following:

Because the beneficiary society communicated its VAT code from Romania (the place of goods' arrival and not the departure one), the performance place will be considered Romania, the transporter's being applied the exception from the general rule. Therefore, the intra-communitarian goods transport operation is taxable in Romania.

- The accountancy treatment that will be applied for this case is the following:

The invoice issued by the transporting society will contain VAT (19%), and the reflection of the intra-communitarian transport operation in S.C. INTRATRANSPORT S.R.L. accountancy will be realized hereby:

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4111 „Clients” = %  
704 „Incomes from executed works and performed services”  
4427 „TVA collected”

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**Example no. 5:** S.C. INTRACOM TRANSPORT S.R.L., established and registered in VAT purposes in Romania, transports goods from Spain to Romania, for MONDOSPANISH society, person established and registered in VAT purposes in Spain. The beneficiary provided for Romanian transporter its registration code available in Spain.

- The fiscal treatment that will be applied for this case will be the following:

The place of departure of the intra-communitarian goods transport is Spain, and the arrival place is in Romania, and the beneficiary communicates its VAT registration code.

But, because the beneficiary from Spain provides the registration code in VAT purposes attributed in Spain – the Member State of goods transport departure, the exception from the rule will not be applied, the performance/taxation place being considered, according to the basic rule, the Member State of goods transport departure. The person who will be obliged to VAT tax payment is the beneficiary, by inverse taxing procedure.

## 2.2. The reflection of the intra-communitarian goods transport operation in Romanian beneficiary accountancy

**Example no. 1.** The MONDOFRANCE society, established and registered in VAT purposes in France, transports goods from France to Romania, for ASCOROM S.R.L. society from Romania, society that does not communicate to the French transporter a registration code in VAT purposes available in Romania or in another Member State.

- The fiscal treatment that will be applied for this case will be the following:

According to the general rule of The Fiscal Code, the intra-communitarian goods transport takes place and it will be taxed in France, because the performance place is considered the departure place of goods, respective France, the beneficiary not communicating to the performer a registration code.

The accountancy treatment that will be applied for this case is the following:

The invoice issued by the society from France will contain VAT, and the reflection of the service performance operation in S.C. ASCOROM S.R.L. accountancy will be realized hereby:

$$\frac{624 \text{ „Expenses with transport of goods and staff”}}{4427 \text{ „VAT collected”}} = 401 \text{ “Suppliers”}$$

**Example no. 2.** The MONDOFRANCE society, established and registered in VAT purposes in France, transports goods from France to Romania, for ASCOROM S.R.L. society from Romania, society that communicates to the French transporter a registration code in VAT purposes available in Romania.

- The fiscal treatment that will be applied for this case will be the following:

In this case, because the beneficiary society communicated its VAT code available in Romania, the performance place will be considered Romania, and not France, the departure place. The transporter’s will be applied the exception from the general rule. Therefore, the intra-communitarian goods transport operation is taxable in Romania.

The performer will issue an invoice without VAT, and the beneficiary will submit the intra-communitarian goods transport operation to inverse taxation<sup>553</sup>.

The accountancy treatment that will be applied for this case is the following:

The beneficiary, S.C. ASCOROM S.R.L. will receive an invoice without VAT, but will highlight in accountancy both deductible and collective VAT, in the VAT deduction, on the basis of accountancy note:

$$4426 \text{ „VAT deductible”} = 4427 \text{ „VAT collected”}$$

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<sup>553</sup> According to obligation stipulated in article 150 paragraph (1) letter c), respective article 157 paragraph (2), from The Fiscal Code.



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# DETERMINATION OF MATERIALITY THRESHOLD PATTERN IN AUDIT MISSIONS

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*Given the vagueness character of the guideline offered both by the International Standards on Auditing and the Minimal Norms on Auditing, considering the importance of the materiality threshold in designing the plan and the audit program, we tried to justify the need to establish a certain level of this materiality threshold considering not only the comparison basis offered by the practical norms issued by the Financial Auditors Chamber of Romania, but also considering the audit risks and the audit costs.*

*About the materiality threshold we can say that it represent the quantity dimension of false presentations assumed by the auditor through the valuation of the audit risk.*

*In quantification of materiality threshold we started from the assessment of the audit risks and determination of the grantable errors, on segments, in accordance with cumulated impact of all these over the economical and financial indicators and later by cumulating all grantable errors in establishing the materiality level.*

*Keywords: materiality level, grantable error, audit risk*

*JEL codes: M42*

Considering that the materiality threshold plays a major role in determination of the audit report type, the Commission of Financial Accounting Standards defined the materiality threshold as follows: "The importance of an omission or a false presentation of the accounting information, which, through the overall circumstances, gives way to a probability that the professional judgment of a reasonable person relying on that information should have been changed or influenced by the respective omission or false presentation".

When an auditor discovers a significant error of false presentation of information, that auditor will notice the client at once in order for the client to make the proper corrections and if the client refuses, in this case, the auditor will issue a qualified opinion.

From this definition we can make an opinion about the difficulties met by the auditors in determination of the materiality threshold. This definition refers to the reasonable users that rely on financial statements in taking decisions. In this case the auditors must have knowledge about who are the probable beneficiaries of the financial statements of the client and what decisions are to be taken on the basis of these situations.

The materiality threshold may differ in magnitude from one organization to another, and it can be influenced both by the client dimensions, profitableness rates and the risks of the company, which the auditors assess by quantize the immanent risks and control risk.

The auditors, since the early stage of planning the audit, makes an valuation of the risk to which they are subjected to in the case in which they express an opinion that is not in concordance with the reality, being capable in this way to determine the acceptable audit risk which will be inversely proportional to the risk to which the auditor is subjected to.

There is a close connection between the audit risk and the materiality threshold meaning that the materiality threshold is the arbitrary measure for the relative estimation of the risk audit.

As follows we will present, for example purpose, in order to asses the significance, a company that has as main activity - road construction activity.

The main factors with influence over the audit risk are closely related to the general economical environment and to the nature of client activity, management, client attitude towards the audit and also to the accounting personnel.

Factors characteristic for the economical environment are as follows:

- Competition is growing and it is influenced by political factors;
- The main clients of the company are represented by the local city halls;
- The economy is in recess and most of the city hall reduced their budget for investments;
- Difficult access to lending;
- The shareholders are spread but there are two shareholders with majority rights that are also involved in the company management;
- The majority of shareholders intend to sell their shares if an opportunity appears;
- The company is financing its growth mainly through credits but also through profit capitalization:
- The company technical equipments are territorially dispersed at working places;
- The company is currently participating to public tenders where there are certain qualifying conditions related to the financial indicators.

All these factors determine the auditor to rate the risk related to the economical environment which affects the audit's client as being high. This risk exposes the auditor to some risks that he wishes to diminish. This fact is achieved by accepting a lower audit risk.

As regarding the factors that have an influence over the management risk our attention was drawn only by the fact that the management control is weak in the way that exist no control normative and this will have an influence over the control risk so that is the reason why we evaluate the management related risk at a reduced level.

The accounting personnel related risk is evaluated at a moderate rate because, although it exists competent personnel with adequate means, there are certain pressures related to timelines for presenting certain works and the company is currently having a personnel shortage.

The client attitude related risk towards the audit is considered to be reduced because is the second year when this company is audited and the errors occurred in prior year were corrected without any conflicts.

As a conclusion we can say that the risks to which the company is subjected to are high especially because of the economical environment and the auditor will diminish the acceptable audit risk, most probably by diminishing the materiality threshold in order to be as less as possible exposed against potential users.

The auditor takes into consideration the materiality threshold at the global level of financial statements and also in relation with the balance of individual accounts with its transaction classes and presentation of information.

The materiality threshold can be influenced by:

- Legal requirements and settlements;
- Reasons related to the individual account balances of financial statements;
- The existing relations between those mentioned above.

This process can have as result different levels of the materiality threshold depending on the aspect of financial statements taken into consideration.

The materiality threshold can be defined as the error level which taken individually or cumulated with other errors could determine the information user to change his decision.

Therefore, we shall present a simplified balance sheet of the company and we shall simulate different levels of errors and their implications in possible decisions of the users.

The sensitivity analysis guides the auditors towards determining the materiality threshold in the conditions of existence of some errors presented in financial standings.

Thus we have tried to determine the level of the presentations considered insignificant in the circumstance of qualitative factors' nonexistence.

## RON

| Financial statements                   | Anul N            | Anul N+1          |
|--|-------------------|-------------------|
| Fixed Assets                           | 13.380.821        | 23.589.627        |
| Stocks                                 | 3.852.984         | 4.993.492         |
| Debtors                                | 5.886.797         | 17.116.365        |
| Cash And Bank                          | 7.286.794         | 177.959           |
| Total Current Assets                   | 17.026.575        | 22.287.816        |
| Prepayments                            | 113.468           | 160.522           |
| <b>Total Assets</b>                    | <b>30.520.864</b> | <b>46.037.965</b> |
| Short-Term Debts                       | 12.472.913        | 16.929.072        |
| Short-Term Debts from operation        | 10.302.554        | 11.625.615        |
| Financial Short-Term Debts             | 2.170.359         | 5.303.457         |
| Debts Payable After More Than One Year | 5.099.634         | 9.002.169         |
| Share Premium Account                  | 2.200.000         | 2.200.000         |
| Revaluation Reserves                   |                   | 8.152.400         |
| Reserves                               | 2.515.505         | 4.526.865         |
| The Outcome Brought Forward            | 731.632           | 2.868.354         |
| The Outcome Of Financial Year          | 6.602.582         | 2.359.105         |
| Total Own Assets                       | 11.587.211        | 19.519.646        |
| Provisions                             | 462.508           |                   |
| <b>Total Liabilities And Equity</b>    | <b>30.520.864</b> | <b>46.037.965</b> |
|  |                   |                   |
| <b>Net Turnover</b>                    | 47.668.150        | 60.735.211        |
| <b>Operating - Profit</b>              | 8.623.320         | 4.899.114         |

In our sensitivity analysis we have started from the financial statements of a business corporation. We have analyzed the financial standing of the business corporation by applying analytical procedures determining the following essential indicators for a company's viability:

- the economic return calculated as a ratio between the operating profit and the total assets;
- the financial return calculated as a ratio between the result of the exercise and the equity capital.
- the commercial return calculated as a ratio between the operating profit and the turnover.
- the general liquidity calculated as a ratio between the circulating assets and short-term debts.
- the current liquidity calculated as a ratio between the difference among the circulating assets and stocks and short-term debts.
- the general solvency calculated as a ratio between the total assets and total debts.
- the patrimonial solvency calculated as a ratio between the equity capital and the total liability.

The overvaluation of the receivables implies simultaneously the management discharge too, practically involving an undervaluation of the receivables, a growth of the debts with value added tax and of the profit tax, as well as an overvaluation of the profits.

Subsequently we have simulated overvaluation / undervaluation of receivables with impact on the stocks undervaluation / overvaluation, debts overvaluation / undervaluation, and profit overvaluation / undervaluation of profit but also on the financial-economic indicators.

The simulation was carried out with the help of a random numbers generating programme which:

- has simulated a maximum overvaluation of the receivables with 24% and a maximum undervaluation of the receivables with 23%;
- has simulated a discharge from the management of the stocks by the overvaluation of the commercial margin with 39% and an undervaluation of the commercial margin with 9 percent considering that the commercial margin of a company is of 10%.

We have determined the acceptance and rejection hypotheses by the establishment of the limits of the indicators hence the users' decisions will be changed.

| Indicator            | Calculated level | Maximum admitted level | Minimum admitted level |
|----------------------|------------------|------------------------|------------------------|
| General liquidity    | <b>132%</b>      | 140%                   | 120%                   |
| Current liquidity    | <b>102%</b>      | 110%                   | 90%                    |
|                      |                  |                        |                        |
| General solvency     | <b>178%</b>      | 190%                   | 160%                   |
| Patrimonial solvency | <b>42%</b>       | 39%                    | 45%                    |
|                      |                  |                        |                        |
| Economic return      | <b>10,6%</b>     | 11,30%                 | 9,9%                   |
| Financial return     | <b>12,1%</b>     | 13%                    | 11%                    |
| Comercial return     | <b>8,1%</b>      | 8,60%                  | 7,70%                  |

### ***Hypothesis 1***

It shall be admitted overvaluations / undervaluation in the patrimonial elements which will generate a general liquidity with values between 120% and 132%

It shall be admitted overvaluations/ undervaluation in the patrimonial elements which will generate a current liquidity with values between 90% and 110%

It shall be admitted overvaluations / undervaluation in the patrimonial elements which will generate a general solvency with values between 160% and 190%

It shall be admitted overvaluations / undervaluation in the patrimonial elements which will generate a patrimonial solvency with values between 39% and 45%

It shall be admitted overvaluations / undervaluation in the patrimonial elements which will generate an economic return with values between 9.7% and 11.5%

It shall be admitted overvaluations / undervaluation in the patrimonial elements which will generate a financial return with values between 11% and 13%

It shall be admitted overvaluations / undervaluation in the patrimonial elements which will generate an economic return with values between 7.7% and 8.6%

In the case where the indicators' level is situated out of the ranges established in the above diagram, the undervaluation / overvaluations of the patrimonial elements will be rejected.

Subsequently we shall compare the level of the indicators resulted from simulation with the acceptance or rejection hypotheses and we hereby shall determine the maximum level of the erroneous presentations accepted in the overvaluation / undervaluation of the profits, overvaluation / undervaluation of the receivables, overvaluation / undervaluation of the debts, overvaluation / undervaluation of the stocks.

a) We shall compare the simulation number 21 of Annex 1 which gives us the minimum limits of the validation hypotheses offering to us the following values:

The economic return 10,1%

The financial return is of 10,9%

The commercial return is of 8,4%

The current liquidity is of 90%

The other indicators do not have variations comparing to the initial status.

Consequently if the company's profit would be overvalued with the amount of lei 256.707 the real indicators of the company would have the above shown values. Thus the maximum limit of profit overvaluation accepted by us is of lei 256.707.

b) We shall compare the simulation number 29 of Annex 1 which gives us the maximum limits of the validation hypotheses offering to us the following values:

The economic return 11%

The financial return is of 13%

The commercial return is of 8,2%

The current liquidity is of 112%

The other indicators do not have variations comparing to the initial status.

Consequently if the company's profit would be undervalued with the amount of lei 256.707 the real indicators of the company would have the above shown values. Thus the maximum limit of profit undervaluation accepted by us is of lei 212.440.

Hence the materiality threshold applied to the balance accounts which have implications in the profit and loss account shall be established to 256.707 for overvaluations and 212.404 for undervaluations.

For the overvaluations or undervaluations of the operations which do not have implications over the results it can be established other level of the materiality threshold.

Consequently an error of 5% from total assets for asset accounts and of 5% from total passive for passive accounts could be considered insignificant in the absence of qualitative factors which affects the materiality threshold, this error of 5% represent an absolute error of lei 2.301.898 and it could be considered insignificant if the error belong to the balance sheet accounts.

These being the maximum admitted amounts we will try to determine the materiality threshold for every category taking into consideration:

- the account weight in total assets
- the accepted audit risk;
- the level of inherent risks for every account therefore at the expected level error in every account
- the impact of the error in profit
- the carry out of the audit process
- the cost of getting the audit samples
- the population characteristics

***Tabel - materiality threshold allocation of accounts***

| Balance sheet elements                           | Anul N+1   | Weight in total balance sheet | Maximum admitted level | The impact of the error in profit | Maximum admitted level |
|--|------------|-------------------------------|------------------------|-----------------------------------|------------------------|
| Materiality threshold for balance sheet accounts | 2.301.898  |                               |                        |                                   |                        |
| Materiality threshold for profit accounts        | 256.707    |                               |                        |                                   |                        |
| Fixed Assets                                     | 23.589.627 | 51,2%                         | 1.179.481              | 10,0%                             | 25.671                 |
| Stocks   | 4.993.492  | 10,8%                         | 249.674                | 40,0%                             | 102.682                |
| Debtors  | 17.116.365 | 37,2%                         | 855.818                | 45,0%                             | 115.510                |
| Cash And Bank                                    | 177.959    | 0,4%                          | 8.895                  | 5,0%                              | 13.280                 |
| Total Assets                                     | 46.037.965 |                               |                        |                                   |                        |
| Short-Term Debts                                 | 16.929.072 | 37%                           | 846.450                | 70%                               | 179.695                |

|                       |           |     |         |     |        |
|-----------------------|-----------|-----|---------|-----|--------|
| Long Term Debts       | 9.002.169 | 20% | 450.108 | 22% | 56.475 |
| Share Premium Account | 2.200.000 | 5%  | 110.000 | 2%  | 5.134  |
| Revaluation Reserves  | 8.152.400 | 18% | 407.620 | 2%  | 5.134  |
| Reserves              | 4.526.865 | 9%  | 226.340 | 2%  | 5.134  |

*Annex 1 simulation of financial indicators*

| Poz | Economic return | Financial return | Comercial return | General liquidity | Current liquidity | General solvency | Patrimonial solvency | over/ under evaluations |
|-----|-----------------|------------------|------------------|-------------------|-------------------|------------------|----------------------|-------------------------|
| 1   | 10,8%           | 12,4%            | 8,1%             | 132%              | 106%              | 177%             | 42%                  | -72311,2343             |
| 2   | 11,1%           | 13,0%            | 8,4%             | 132%              | 107%              | 178%             | 42%                  | -211755,193             |
| 3   | 9,9%            | 10,4%            | 7,6%             | 130%              | 89%               | 178%             | 42%                  | 377297,829              |
| 4   | 11,0%           | 13,1%            | 8,2%             | 132%              | 116%              | 177%             | 42%                  | -228694,505             |
| 5   | 10,6%           | 11,9%            | 8,0%             | 132%              | 101%              | 178%             | 42%                  | 44787,7699              |
| 6   | 10,7%           | 12,1%            | 8,1%             | 132%              | 100%              | 178%             | 42%                  | -13088,9897             |
| 7   | 11,4%           | 13,8%            | 8,5%             | 133%              | 113%              | 177%             | 42%                  | -380553,88              |
| 8   | 10,6%           | 12,1%            | 8,1%             | 132%              | 102%              | 178%             | 42%                  | -686,091086             |
| 9   | 10,9%           | 12,8%            | 8,1%             | 132%              | 112%              | 177%             | 42%                  | -149249,617             |
| 10  | 10,5%           | 11,7%            | 8,0%             | 132%              | 97%               | 178%             | 42%                  | 78892,942               |
| 11  | 10,0%           | 10,6%            | 7,6%             | 131%              | 92%               | 178%             | 42%                  | 331469,541              |
| 12  | 10,6%           | 12,0%            | 8,0%             | 132%              | 101%              | 178%             | 42%                  | 22841,8475              |
| 13  | 10,9%           | 12,6%            | 8,2%             | 132%              | 106%              | 177%             | 42%                  | -115631,451             |
| 14  | 10,7%           | 12,2%            | 8,1%             | 132%              | 104%              | 177%             | 42%                  | -34571,4753             |
| 15  | 10,6%           | 12,0%            | 8,0%             | 132%              | 101%              | 178%             | 42%                  | 25247,5446              |
| 16  | 10,6%           | 12,1%            | 8,0%             | 131%              | 105%              | 177%             | 42%                  | -7169,2809              |
| 17  | 10,7%           | 12,1%            | 8,1%             | 132%              | 102%              | 178%             | 42%                  | -8412,56725             |
| 18  | 11,1%           | 13,1%            | 8,4%             | 132%              | 109%              | 177%             | 42%                  | -237251,506             |
| 19  | 10,6%           | 12,0%            | 8,1%             | 132%              | 102%              | 178%             | 42%                  | 8792,43691              |
| 20  | 10,6%           | 11,9%            | 8,1%             | 132%              | 96%               | 178%             | 43%                  | 36429,1272              |
| 21  | 10,1%           | 10,9%            | 7,8%             | 131%              | 90%               | 178%             | 43%                  | 256707,227              |
| 22  | 11,5%           | 14,0%            | 8,7%             | 133%              | 112%              | 178%             | 42%                  | -428561,445             |
| 23  | 10,6%           | 12,0%            | 8,1%             | 132%              | 101%              | 178%             | 42%                  | 8732,22411              |
| 24  | 10,6%           | 12,0%            | 8,1%             | 132%              | 99%               | 178%             | 42%                  | 12421,6056              |
| 25  | 11,1%           | 13,2%            | 8,2%             | 132%              | 115%              | 177%             | 42%                  | -249614,204             |
| 26  | 10,8%           | 12,4%            | 8,1%             | 132%              | 105%              | 177%             | 42%                  | -78204,586              |
| 27  | 10,7%           | 12,3%            | 8,1%             | 132%              | 107%              | 177%             | 42%                  | -58686,0789             |
| 28  | 10,5%           | 11,7%            | 8,0%             | 132%              | 97%               | 178%             | 42%                  | 92261,7197              |
| 29  | 11,0%           | 13,0%            | 8,2%             | 132%              | 112%              | 177%             | 42%                  | -212441,545             |
| 30  | 10,5%           | 11,6%            | 8,0%             | 132%              | 94%               | 178%             | 43%                  | 105109,631              |
| 31  | 10,6%           | 12,0%            | 8,0%             | 132%              | 101%              | 178%             | 42%                  | 29711,7463              |
| 32  | 10,6%           | 12,0%            | 8,1%             | 132%              | 101%              | 178%             | 42%                  | 10366,603               |
| 33  | 10,6%           | 11,9%            | 8,0%             | 132%              | 101%              | 178%             | 42%                  | 33359,1653              |
| 34  | 10,7%           | 12,1%            | 8,1%             | 132%              | 103%              | 178%             | 42%                  | -8053,96194             |
| 35  | 10,7%           | 12,3%            | 8,1%             | 132%              | 106%              | 177%             | 42%                  | -41718,3664             |
| 36  | 10,7%           | 12,2%            | 8,1%             | 132%              | 103%              | 178%             | 42%                  | -17492,637              |
| 37  | 10,7%           | 12,1%            | 8,1%             | 132%              | 103%              | 178%             | 42%                  | -13567,6655             |
| 38  | 10,6%           | 12,1%            | 8,1%             | 132%              | 102%              | 178%             | 42%                  | 669,791138              |
| 39  | 11,0%           | 13,0%            | 8,3%             | 132%              | 111%              | 177%             | 42%                  | -207932,573             |
| 40  | 10,5%           | 11,8%            | 8,0%             | 131%              | 101%              | 178%             | 42%                  | 54811,2056              |

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# POSSIBILITIES OF IMPROVING INFORMATIONAL QUALITY REGARDING THE FINANCIAL POSITION

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*Starting from the analysis of the Romanian accounting regulations applicable to the economic operators, as well as from the findings of a study we have done regarding the financial statements of certain commercial societies quoted on the Bucharest Stock Exchange, in this article we signal some aspects which, in our opinion, require some clarifications and which could have as an effect the improvement of informational quality related to the financial position presented in the balance sheet.*

*Keywords: financial position, accrued expenses, deferred income, provisions, subsidies for investment*

*M: Business Administration and Business Economics; Marketing; Accounting*

It is considered that the balance sheet in a vertical format allows providing information about the **financial position**, showing the relationship between assets, liabilities, and equity. The financial position of an enterprise is affected by<sup>554</sup>: the economic resources it controls; its financial structure; its liquidity and its solvency; its capacity to adapt to the changes within the environment where it performs its activity.

The equation by means of which it is calculated the synthetic information about the financial position, and which is specific to the vertical balance sheet is:

$$\boxed{\text{Total assets} - \text{Total liabilities} = \text{Equity}}$$

But in the current format of the balance sheet drawn by the Romanian enterprises, namely in the vertical balance sheet, it is not calculated a total of the assets and a total of the liabilities. On the contrary, there is a gradual calculation of the *equity*, finding out intermediary indicators, and these are: (1) *Net current assets/ Net current liabilities*; (2) *Total assets minus current liabilities*. These two intermediary indicators are meant to indicate in fact the *Working capital* and the *Permanent capitals*, indicators of the financial balance, and, for their calculation, within the financial analysis, the “financial balance sheet”<sup>555</sup> is used.

In order to calculate these intermediary indicators it is necessary to separate the debts and liabilities depending on the liquidity and exigibility, having in view the time limit of a year. In the case of liabilities this calculation is totally solved by means of the current structure of the accounting balance sheet. The Romanian Accounting Regulator provisioned the following two structures in the balance sheet<sup>556</sup>:

- D. Liabilities: amounts becoming due and payable within one year;
- G. Liabilities: amounts becoming due and payable after more than one year

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554 See the Framework for the Preparation and Presentation of Financial Statements of IASC/ IASB, paragraph 16.

555 The accounting balance sheet in a vertical format resembles the financial balance sheet, but they are not identical because the two balance sheets are based on different perspectives: the accounting balance sheet is based on the continuity of the activity (going concern) whereas the financial one is based on the perspective of ceasing the activity.

556 Both of them include the same classification of liabilities according to their character: loans from the issuing of bonds, separately presenting the loans from the issuing of convertible bonds; sums owed to the crediting institutions; advance money cashed in the accounts due to orders; commercial liabilities – suppliers; payable combination; sums owed to the affiliated entities; sums owed to the entities the company is connected to by virtue of participation interests; other liabilities, including fiscal ones and the liabilities regarding social insurance.

On the other hand, in the case of debts the problem of presentation in the balance sheet is only partially solved depending on the time-limit for the cashing in. It is only for a part of the debts classified at the initial recognition as non-current assets (long term receivables) – namely for those considered as having a commercial character<sup>557</sup> – that the presentation at distinct positions in the balance sheet is provisioned depending on the time-limit when they are due to be cashed in<sup>558</sup>.

The organism of normalization, probably considering that these are only exceptions when the debts classified at the moment of initial recognition as current assets (registered in accounts of the 4<sup>th</sup> class) having more than a year as a settlement date, did not ask for their presentation as a distinct position in the balance sheet, but only includes an endorsement as follows: “II. Debts (Amounts becoming due and payable after more than one year must be shown separately for each item)”. The endorsement is taken literally from the IV<sup>th</sup> European Directive. We understand then that such a presentation will have to be performed in the explanatory notes (obviously, the offering of such information in notes allows the users to adjust the information). If this is the situation, then we observe some inconsistency in the regulator’s reasoning. In the case of liabilities classified at initial recognition on a short term the presentation on distinct positions in the balance sheet is provisioned depending on the deadline for payment. But as long as in the balance sheet of a customer the liability to the supplier is presented, for instance, as a “amounts becoming due and payable after more than one year”, it is normal that the balance sheet of the supplier in discussion should contain a separate presentation if the debt to the customer, as a “amounts becoming due and payable after more than one year”<sup>559</sup>.

Continuing our reasoning, if for the debts classified at initial recognition as being current assets there is the requirement that the sums to be cashed in after more than a year will be presented separately, we think that it is necessary for the deferred income and accrued expenses to be presented separately – information which is taken into account for the indicator *Net current assets/ Net current liabilities* – and these should be presented within 12 months.

It is known that the indicator *Net current assets/ Net current liabilities*, which we conventionally record as  $Ac_n/Lc_n$ , are determined, in the balance sheet, by means of the equation:

$$Ac_n/Lc_n = Ac + E_a - L_{< 1 \text{ year}} - I_d$$

in which:

$Ac$  = total current assets<sup>560</sup>;

$E_a$  = Accrued expenses;

$L_{< 1 \text{ year}}$  = Liabilities to be paid within one year

$I_d$  = Deferred income.

Or, how does this indicator represent the “*net current assets*” if in the contents of the elements at the basis of its calculation (accrued expenses and deferred income, respectively) there are values which become due in a period which exceeds a year?

557 Receivables corresponding to the contracts of financial leasing and to other assimilated contracts, as well as other long term receivables.

558 The ones due to be paid in a period of less than 12 months are shown as Trade debtors, and the ones due to be paid in a period of time exceeding a 12 months, as financial immobilizations, at the position Other Loans.

559 It is clear that we could be tempted to say here “to be presented as immobilized assets” but, according to the national accounting regulations, “the presentation of assets as immobilized assets or as current assets depends on the purpose of their usage” (item 27), and not on the accomplishment or clearance date. We can see that, from this perspective, the Romanian regulatory agent considers the “debts corresponding to the contracts of financial leasing and to other assimilated contracts, as well as other immobilized debts” to be immobilizations only partially, or partial current assets.

560 Stocks + Debts + Short term investment + Cash and bank accounts.

Analyzing the annual financial statements of various entities it was revealed that there are cases when the debt corresponding to the deferred income (as an effect of invoicing) or the liability corresponding to the accrued expenses is recorded among the long term receivables, or liabilities which must be paid in a period exceeding 12 months<sup>561</sup>, while the deferred income and accrued expenses are considered to be current assets or liabilities having a clearance date less than 12 months, and they are taken into consideration when calculating the indicator *Net current assets/ Net current liabilities*. It is obvious that, in such cases, this indicator is misrepresented. We believe that the deferred income and accrued expenses, which have more than 12 months as a falling due, should affect the intermediary indicators in the balance sheet which are established taking into account the immobilized assets or the liabilities to be paid in more than a year's time limit.

As for the indicator *Total assets minus current liabilities* ( $TA - L_{< 1 \text{ year}}$ ), this is calculated by adding to the *Total immobilized assets* ( $A_i$ ) the *Net current assets* ( $Ac_n$ ) and by subtracting the value *Subsidies for investment* ( $SV_{inv}$ ). Thus,

$$TA - L_{< 1 \text{ year}} = A_i + Ac_n^{562} - SV_{inv}$$

Observing such an equation, a question necessarily arises: what is the role of *subsidies for investment* in this equation in which, having in view the denomination of the indicator, we understand that the elements taken into account represent either current liabilities or assets?

Our opinion is that the *subsidies for investment* in this equation have the role of correcting the value of immobilized assets, and this is in fact the reason for which they were received. As a result, even if the Romanian accounting regulation establishes, as a reporting request, that the presentation in the balance sheet of the subsidies should be taken as deferred income, and not by deducting them from the value of assets so as to calculate its net value<sup>563</sup>, yet it considers the subsidy as a diminution of the immobilized assets' values when the indicator *Total assets minus current liabilities* is calculated.

Note: As a result of the alterations of accounting regulations by means of the OMPF no. 2374/2008, when calculating the indicator *Total assets minus current liabilities* the subsidies for investment are no longer taken into account. As long as the Romanian regulator makes no remark on this aspect, we are inclined to believe that there might be an error in the elaboration of the structure of the balance sheet. Or it is possible that the Romanian regulator could have changed its perspective regarding the subsidies for investment and to consider them as elements of the equity. In this case it would have been better if the subsidies for investment had been taken into consideration when calculating the indicator *Equity – Total* and this fact did not happen. In addition, in the accounting regulations (item no. 197) it is clearly settled that “subsidies must not be directly registered in the capital accounts and reserves.

Starting from the indicator *Total assets minus current liabilities*, in order to calculate the *Equity*, we should diminish its value by subtracting the *Non-current liabilities* (the sums to be paid in a period of time exceeding a year).

Consequently, whether we want to reach the synthetic information regarding the financial position directly – as the difference between the *Total assets* and the *Total liabilities* (which requires the calculation of the value of these terms) – or gradually, by means of intermediary

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561 See, for instance, the interests for the financial leasing which are registered complying with the leasing contract as revenues, and, respectively, as expenses.

562 So that our reasoning could be clearer, we considered that the indicator *Net current assets/ Net current liabilities* has positive values, representing, therefore, the *Net current assets*.

563 These represent actually the two methods of presenting the subsidies for investment in the balance sheet according to IAS 20 Accounting for government grants and disclosure of government assistance. As for the IVth Directive, this does not contain any mention concerning subsidies.

indicators, we find the *Provisions* which are presented separately in the structure of the balance sheet<sup>564</sup>. Are they considered to be *Liabilities* or *Equities*?

It is known that in the specialized literature some authors do not consider that the provisions for risk and expenses are liabilities, but they are seen as elements “assimilated by the equities”, or as “owned resources with a special destination”, whereas other authors see them as liabilities.

Nevertheless, the position of the Romanian regulator is clear and it considers the provisions as liabilities. This results both from the definition given to the provision which can be found in the Romanian accounting regulations<sup>565</sup> – a definition taken from IAS 37: *Provisions, Contingent Liabilities and Contingent Assets* – and from the fact that, in the structure of the balance sheet, the indicator *Equity* is already calculated, without taking into consideration the *Provisions*, too.

And if the provisions are liabilities, then they should also be classified according to exigibility<sup>566</sup>: more than a year, or less than a year. If we consider that all the provisions are non-current liabilities, some of the indicators of solvency and liquidity could obviously be affected.

A distinct presentation of the two categories of provisions, having in view a 12 months’ time limit, could enable the indicator *Total assets minus current liabilities*<sup>567</sup> to truly represent what is expected, namely the *Permanent capitals* (liabilities with a falling due which is longer than a year + equities)<sup>568</sup>. As a result, the indicator *Total assets minus current liabilities*, in its current form in the balance sheet, should also be diminished by subtracting that part of the provisions constituted for a period less than a year, enabling only the provisions constituted for more than a year to function as permanent capitals.

What is important is that the indicator *Total assets minus current liabilities* should correctly represent what is expected from it to represent (Permanent capitals), but, besides this, it is important because it intervenes in the calculation of other economic and financial indicators, such as, for instance, the *profitability of the employed capital* and the indicator *debt-to-equity ratio*.

As a conclusion to the problem discussed here, we consider that the accrued expenses, the deferred income and the provisions, just as the debts under the form of current assets, should be structured in two categories depending on to the term and presented in the balance sheet as such,

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564 It is well-known that in the balance sheet, together with the actual structures of assets (immobilized assets and current assets), liabilities (two categories, depending on the exigibility) and equities, there can also be found other structures like: accrued expenses, deferred income (containing subsidies for investment and deferred income) and provisions. Regarding the accrued expenses and deferred income (and also regarding the subsidies for investment) we have expressed our opinion in the information above, when we discussed about the intermediary indicators. The problem of provisions still has to be clarified.

565 A “provision is a liability of uncertain timing or amount” (see Accounting regulations compliant with the IVth Directive of CEE, endorsed by OMPF no. 1752/ 2005, item 184, indent (1), and in IAS 37, Provisions, Contingent Liabilities and Contingent Assets, paragraph 10. The fact that the provision is a liability also results from the contents of art. 20, indent 2, of the IVth Directive, transposed into the Romanian accounting regulations (item 34): “Provisions are intended to cover liabilities the nature of which is clearly defined and which at the date of the balance sheet are either likely to be incurred, or certain to be incurred but uncertain as to amount or as to the date on which they will arise”.

566 Such a separation of provisions depending on the due date is taken into consideration by the Romanian regulator in case of the public institutions. The provisions occur as a distinct position in the two types of balance sheets regarding liabilities: “current liabilities” and “non-current liabilities” (see Balance Sheet presented in Annex 13 for Methodological Norms Regarding the Organizing and the Management of Public Institutions’ Accounting endorsed by OMPF no. 1917/ 2005).

567 Obviously, the presentation of provisions which have as a falling due less than a year as being current liabilities will also influence the value of the indicator previously presented by us, namely the Net current assets/ Net current liabilities.

568 The organism of normalization (regulatory) aimed that, by means of the indicator calculated in the balance sheet, it could present the Permanent capital, and this also results from the explanation of the terms in the equation used for the calculation of the indicator the profitability of the employed capital, in Note 9, specifically “the employed capital [...] includes the equity and the non - current liabilities or total assets minus current liabilities”.

in order to be able to take their value into appropriate consideration when calculating the indicators.

We consider that if the structure of the balance sheet will not be modified as shown above, it is important that such information should be offered at least in some notes, with details according to the term, in order that the users who want to draw comparisons to be accurately informed.

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# LE LIVRE DES RISQUES – INSTRUMENT EFFICACE DANS L'APPLICATION DE LA STRATEGIE D'AUDIT INTERNE FONDE SUR LES RISQUES (RISK BASED AUDITING)

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*Risk occurrence is inherent in all the economic activities performed by an enterprise. Risk quantification is primordial when taking an economic decision until the completion thereof. Risk management responsibility or control in an organization, quality determination and its measurement or supervision belongs to an independent function attached to general management. This function has broad competence and the vocation to cover all the risks arising from the organization's work. Its role is to intervene at all levels in the risk management decision-making chain. Its permanent missions are primarily deemed to make recommendations on risk policies, portfolio analysis and company risk management tools, thus providing the quality and the effectiveness of the economic processes and ensuring reliable and comprehensive reports for general and strategic management.*

*Mots Clés: relevance des risques, l'audit interne, le livre de risques, plan d'audit*

*Code JEL: M42*

## **Considérations générales**

L'atteinte des objectifs fixés par l'entreprise passe avant tout par la gestion et la maîtrise des risques. L'IFACI définit la notion de risque comme étant « un ensemble d'aléas susceptible d'avoir des conséquences négatives sur une entité et dont le contrôle interne et l'audit ont notamment pour mission d'assurer sa maîtrise ». Ces risques pouvant être dus au fonctionnement de l'organisation ou à l'activité de l'entreprise.

C'est pour cela que l'entreprise met en place un processus de contrôle interne pour identifier ses risques puis essayer de les minimiser voir de les supprimer. Suite à cette identification des risques, l'entreprise doit mettre en place une politique de changement.

Or on constate que rare sont les responsables qui se préoccupent de cette notion de risque. En effet, selon une enquête conduite par Ernst and Young<sup>4</sup> et IFACI dans plusieurs pays d'Europe, il en résulte que seul 53% des entreprises françaises prennent en considération la notion de *Risk Management*. Elles jugent le risque comme « un élément déterminant. Alors que 42% des entreprises estiment que le risque n'est pas un facteur déterminant pour la mise en place d'un contrôle interne de qualité.

## **Les composants des risques**

Les différents types de risques : risque social, risque financier, risque informatique, risque de transport, risque commercial, risque politique, risque juridique...

Le risque se décompose en 2 parties :

- 1) Dans le risque, on trouve la notion de gravité, des conséquences et de l'impact négatif que peut avoir le risque sur l'entreprise. Pour y faire face, une politique de protection s'avère être nécessaire.
  - 2) Autre composant du risque consiste en la probabilité qu'une ou plusieurs situations se produisent et qu'elles échouent. D'où la nécessité d'une politique de prévention.
- On retrouve ces notions dans la définition du risque donné par COSO: “ la possibilité d'occurrence d'un événement ayant un impact sur les objectifs. Il se mesure en termes de conséquences et de probabilité”.

### **Cartographie des risques**

L'identification de la cartographie permet d'atteindre 3 objectifs :

1. Inventarier, évaluer, et classer les risques de l'organisation.
2. Informer les responsables afin que chacun soit en mesure de d'adapter le management de ces activités.
3. Permettre à la Direction Générale et avec l'assistance du *Risk Manager*, d'élaborer une **politique de risque qui va s'imposer**:

- aux responsables opérationnels dans la mise en place de leur système de contrôle interne.
- aux auditeurs pour élaborer leur plan d'audit, c'est à dire fixer les priorités.

La stratégie RBA (*l'audit fondé sur les risques*) au niveau de l'organisation en conformité à la théorie du D. Griffiths consiste dans la réalisation des conditions suivantes:

- les risques inhérents significatifs sont identifiés;
- les risques sont évalués et sélectionnés;
- les risques résiduels sont pris en compte.

Ces trois conditions peuvent être réalisées si:

- le Conseil Directeur de l'entreprise a adopté un paquet de politiques de contrôle ;
- l'appétit du risque a été approuvé par le conseil ;
- les directeurs exécutifs possèdent les habilités demandées pour l'identification et l'évaluation des risques, pour l'étude, la mise en application et la surveillance des systèmes de contrôle qui assurent l'implémentation des politiques adoptées.

Nous présentons ci-joint les étapes de la stratégie de l'audit **fondé** sur les **risques**:

**Etape No 1.** L'analyse du Livre des Risques et le choix des risques dont les auditeurs doivent formuler une opinion concernant le degré de contrôle exercé;

**Etape No 2.** L'élaboration du plan d'audit (annuel) et l'obtention de l'approbation du comité d'audit y afférent;

**Etape No 3.** La réalisation des missions d'audit qui vont fournir la base d'informations fondement pour les opinions des auditeurs;

**Etape No 4.** L'actualisation des domaines d'audit et de la liste de risques.

Dans l'étape **L'analyse du Livre des Risques** seront obtenues les assurances concernant le niveau acceptable de risque que la direction doit établir. Les risques situés en dessus de ce niveau acceptable sont des risques majeurs (significatifs) et doivent être évalués et identifiés correctement. Les procédures utilisées par les auditeurs internes dans l'Etape no. 1 sont les suivantes:

- des interviews réalisées avec le management exécutif et le Conseil d' Administration concernant les risques dont la société est exposée;
- la documentation des aspects suivants:
  - la détermination des objectifs de l'organisation;
  - les méthodes d'évaluation des risques significatifs ;
  - l'échelle d'évaluation de la relevance des risques ;
  - la déclaration du conseil concernant la détermination de l'appétit pour le risque;
  - la modalité d'intégration des risques dans les processus décisionnels ;

- l'étude du livre des risques ;
- l'analyse des documents obtenus.

L'élaboration d'une conclusion concernant la crédibilité et la possibilité d'utiliser le livre des risques pour les actions ultérieures. Si le livre des risques n'existe pas alors le susnommé doit être réalisé par un département distinct « L'évaluation des risques »

### **Les techniques d'élaboration du livre des risques**

**Définition:** Le livre des risques représente un inventaire des risques (une base de données) identifiés par la société qui mettent en danger les objectifs de la société. La responsabilité concernant la construction et l'actualisation de cette base de données revient au département charge avec le management des risques. Dans cette situation le volume de travail des auditeurs internes est très diminuée. En manque d'un tel département du management des risques, les auditeurs internes ont le rôle de soutenir et conseiller la Direction de l'entreprise en vue de l'élaboration du Livre des risques, de leur évaluation et en vue de déterminer l'appétit pour le risque.

Le livre des risques comprend tous les risques significatifs. A'abord on va identifier les risques potentiels qui menacent les **objectifs** de l'organisation. Pour chaque risque potentiel on va attacher un procès de contrôle en vue de réduire et de contrôler l'effet d'un risque potentiel. Mais, par des analyses ultérieures, on va identifier comme suite un procès rationnel d'itérations, quelles sont les menaces des processus de contrôle aux niveaux inférieurs. Autrement dit un risque engendre un processus de contrôle qui devient un objectif menace par d'autres risques et pour lesquels nous avons d'autres contrôles.

En vue d'identifier les risques on peut utiliser trois procédés:

1. L'interview;
2. Les ateliers (équipes) de travail en vue d'identifier les risques (enl- risk work-shops) ;
3. Les enregistrements comptables.

Comme suite l'interview nous pouvons obtenir un point de vue individuel concernant les risques auxquels l'organisation est exposée. Parmi les avantages de ce procédé on peut rappeler: la facilité de la réalisation de l'interview (on travaille avec une personne); un plus de confort pour la personne interviewée dans la formulation des appréciations concernant les risques inhérentes (bruts, potentiels) par rapport à la situation du travail en équipe. Désavantages: la difficulté en vue d'homogénéiser les points de vue individuels et dans le classement et la priorité des risques.

Les ateliers de travail en vue d'identifier les risques peuvent élaborer des listes de risques qui mettent en danger les objectifs de l'organisation, une appréciation de la dimension de la probabilité d'apparition et de leurs conséquences. Les avantages d'un tel procédé consistent dans l'apparition de nouvelles idées comme suite l'interaction des personnes.

Les enregistrements comptables: Par l'analyse de chaque classe, groupe, position des situations financières ou des enregistrements comptables de l'entreprise, ainsi que des événements et des plus importantes transactions qui peuvent mettre en évidence des risques potentiels importants.

### **L'appréciation de la relevance des risques (R)**

Dans cette phase l'auditeur doit déterminer les risques significatifs par rapport à l'appétit pour le risque. L'appréciation de la relevance des risques peut être faite selon le modèle mathématique suivant, par le département de management des risques:

$$R = C \times P$$

Soit C = conséquence résultée comme suite le déclenchement du risque – une note sur l'échelle de 1 à 5;

Soit P = la probabilité d'apparition des risques;



**Tableau 1. Estimation de la relevance des risques**

| Si le risque est déclenché les conséquences sont:                                     | Note accordée pour conséquence Degré i | La probabilité d'apparition est: | La relevance du risque |
|---|--|----------------------------------|------------------------|
| 0   | 1                                      | 2                                | 3=1x2                  |
| Clôture partielle ou totale de l'unité une longue période de temps                    | 5                                      | Très grande Note 5               | Très grande 5x5 = 25   |
| L'impossibilité de réaliser les objectifs majeurs pendant une longue période          | 4                                      | Elevée Note 4                    | Elevée 4x4=16          |
| L'impossibilité de réaliser les objectifs majeurs pendant une période limitée         | 3                                      | Moyenne Note 3                   | Moyenne Résultat 9     |
| L'apparition des dommages sans influence pour les objectifs majeurs l'organisation    | 2                                      | Diminuée Note 2                  | Diminuée Note 4        |
| L'apparition des dommages mineurs influence pour les objectifs majeurs l'organisation | 1                                      | Très diminuée Note1              | Très diminuée Note1    |

Nous utilisons la terminologie suivante en matière d'évaluation des risques:

**Le risque inhérent (brut, absolu)** c'est le risque dimensionné avant l'évaluation de l'efficacité et l'efficience des contrôles internes; Le risque inhérent est utilisé en vue de fonder les plans d'audit annuels et d'identifier les missions d'audit qui seront entreprises.

**Le risque résiduel (net, contrôle)** c'est le risque dimensionné après l'évaluation de l'efficacité et de l'efficience des contrôles internes de l'organisation. **Le risque résiduel est déterminé pendant les missions d'audit, en vue d'évaluer l'efficacité et l'efficience des contrôles effectués sur les dits risques.**

L'évaluation de la signification des risques inhérentes peut être réalisée par l'élaboration d'une matrice où seront inscrits à côté de chaque élément le résultat entre la conséquence du risque inhérent et la probabilité de l'apparition dudit risque.

Soit A la matrice de la signification des risques avec les éléments  $a_{ij}$  où la ligne i sont définies les conséquences du risque inhérent et sur la colonne j nous avons la probabilité de l'apparition dudit risque.

**Tableau 2. La Matrice A avec les résultats obtenus dans l'étape d'analyse du risque**

|                                   |   | La probabilité du risque inhérent |    |    |    |   |
|-----------------------------------|---|-----------------------------------|----|----|----|---|
|                                   |   | 5                                 | 4  | 3  | 2  | 1 |
| La conséquence du risque inhérent | 5 | 25                                | 20 | 15 | 10 | 5 |
|                                   | 4 | 20                                | 16 | 12 | 8  | 4 |
|                                   | 3 | 15                                | 12 | 9  | 6  | 3 |
|                                   | 2 | 10                                | 8  | 6  | 4  | 2 |
|                                   | 1 | 5                                 | 4  | 3  | 2  | 1 |

Le conseil de direction va définir son appétit pour le risque pour l'intervalle (1;4) comme zone de risques acceptables et qui ne fait pas l'objet de l'audit interne. Pour l'intervalle (5-25) nous avons la zone d'intérêt pour l'audit interne et qui peut être regroupée comme suit:

Pour l'intervalle (5-9) seront réalisées des missions d'audit une fois à trois ans;

Pour l'intervalle (10-15) seront réalisées des missions d'audit une fois à deux ans;

Pour l'intervalle (15-25) seront réalisées des missions d'audit une fois par an.

### ***L'étape L'élaboration du plan d'audit.***

**Par le plan d'audit l'auditeur va essayer les suivantes: d'identifier les risques qu'il les inclut dans le plan d'audit, d'affecter des missions d'audit pour ces risques et d'assurer que le plan d'audit est en concordance avec le livre d'audit.**

Le critère prioritaire reste l'appétit pour le risque précisé par la direction pour un intervalle qui a la moindre relevance du risque (dans la situation ci-dessus entre 1 et 4). Pour la zone d'intérêt de l'auditeur l'échelle (5-25) ci-dessus peut être détaillée ou restreinte selon les préférences de l'auditeur. Dans ce sens, sont élaborés des plans d'audit multi-annuels ou semestriels selon les nécessités de l'organisation pour les priorités des missions.

Concernant les risques situés au-dessus du niveau de l'appétit pour le risque, peuvent exister les situations suivantes pour l'acceptation du plan d'audit de ces risques:

Les risques pour lesquels la direction les accepte au niveau dimensionné antérieurement et qui ont attachés des programmes contingents de surveillance, pourront être inscrits dans le plan d'audit;

Les risques pour lesquels ont été adoptés des programmes de mesures de prévention du type des transferts;

Les risques que la direction envisage de les éliminer ou de les contrôler;

Les risques examinés et évalués par un tiers et qui peuvent fournir une assurance directe au conseil d'administration sur le degré de contrôle exercé;

Les risques passés qui ont été apportés à la limite de l'appétit pour le risque, fait prouvé par les rapports d'audit interne antérieurs.

**La théorie du reste** sera appliquée également dans la phase d'élaboration du plan d'audit dans le sens que tous les autres risques qui ont été filtrés seront inclus dans le plan d'audit.

Le plan d'audit doit être approuvé par le comité d'audit et par le Conseil d'Administration et il doit comprendre au moins les éléments suivants:

- La nature de la mission d'audit;
- La période de temps nécessaire et la date de début de l'action d'audit;
- Les risques et les processus de contrôle y afférents;
- Le nom des auditeurs qui vont participer à ces missions

En plus le comité d'audit peut demander des informations supplémentaires concernant les suivantes:

- Les risques et les processus qui vont faire l'objet de la mission d'audit;
- Les risques et les contrôles sur lesquels les auditeurs internes vont formuler une opinion au vu des résultats cumulés; Les activités de conseil qui seront fournies par l'auditeur interne pour le but de diminuer les risques résiduels aux niveaux inférieurs de l'appétit pour le risque;

Les risques non couverts à cause des politiques de l'organisation ou des ressources limitées;

**En Roumanie l'activité d'audit interne est réglementée par** Les Normatifs du 19/04/2007 concernant les **STANDARDS D'AUDIT INTERNE** publiée dans le Bulletin Officiel, I-ère Partie no. 416 du 21/06/2007

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## L'AUDIT INTERNE, UNE VALEUR AJOUTÉE POUR LES SOCIÉTÉS ROUMAINES DANS LA PÉRIODE DE CRISE FINANCIÈRE

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*Internal audit is an essential element of the company's economic and strategic management especially in times of financial crisis. Internal audit assists organizational management by providing independent assurance and by identifying possible means to increase economic yield and efficiency. During the current financial crisis Romanian companies choose to preserve their internal audit function, an activity that is to provide information and analysis as objective and independent items of advice in order to bring in economic added value to the company's activity and improve economic management. Internal audit, as a tool to assist the professionals' decisions, leads to the achievement of the company's objectives by a systematic and disciplined approach for the evaluation and improvement of risk management and internal control efficiency.*

*Mots Clés : risque, l'audit interne, contrôle interne, procédure*

*Code JEL: M42*

### **L'évolution de l'audit interne en Roumanie**

L'audit interne est une activité d'assistance et conseil à la gestion qui a beaucoup évolué dans le monde depuis la 2<sup>nd</sup> guerre mondiale. Autrefois cantonné aux questions comptables l'audit touche aujourd'hui toutes les activités de l'entreprise et assure par conséquent une grande variété de service d'audit et de conseil. L'audit interne est aussi une activité indépendante qui donne à une organisation une assurance sur le degré de maîtrise de ses opérations, lui apporte ses conseils pour les améliorer, et contribue à créer de la valeur ajoutée. Il aide cette organisation à atteindre ses objectifs en évaluant par une approche systématique et de gouvernement d'entreprise et en faisant des propositions pour renforcer leur efficacité.

Jusqu'en 1999, en Roumanie aucune réglementation n'existait concernant l'audit interne, qui pouvait être pratiqué au niveau des sociétés commerciales. Ce n'est qu'en 2000 par l'Ordre du ministre des Finances no. 1267 du 21.09.2009 publié dans le Bulletin Officiel no 480 du 02.10.2000, que les Normes minimales d'audit interne ont été approuvées. En conformité aux dispositions ci-dessus, l'audit interne devient obligatoire à compter du 2001, pour les entités qui étaient obligées d'auditer les situations financières.

La modalité d'organiser l'audit interne en Roumanie était laissée tout à latitude de l'entreprise. Aussi comme dans la situation de la modalité d'organisation de la comptabilité de gestion dans la pratique des entreprises roumaines on a enregistré une totale manque d'intérêt. Seules, les banques commerciales sous la pression de la Banque Nationale ont réussi d'organiser des départements d'audit interne et ont publiée également le Livre d'audit interne de ladite organisation. Par la Décision de la Chambre des Auditeurs financiers No. 35 du 30.11.2004 ont été assimilés les Standards Internationaux d'Audit Interne et le 19.04.2007 par la Décision no 88

CAFR ont été approuvés les Normes d'Audit Interne de la Roumanie. En conformité à la Décision No. 88, les auditeurs internes fournissent deux activités : des services d'assurance et des services de conseil.

La profession d'auditeur interne en Roumanie s'appuie sur le cadre de référence international des pratiques professionnelles qui guide la conduite de l'audit interne dans des contextes très divers. Les particularités législatives ou réglementaires ainsi que les spécificités des organisations (métiers, culture, taille...) sont autant des raisons pour veiller à l'application du Cadre de référence international des pratiques professionnelles de l'audit interne. Il contient des dispositions minimales requises pour un bon exercice de la profession. Une mise à jour importante de ce dénominateur commun de la pratique professionnelle de l'audit interne rentrera en application dès le 1er janvier 2009.

Cadre de référence international des pratiques professionnelles de l'audit interne comprend:

- la **Définition de l'Audit Interne**, qui n'est pas concernée par la révision. Ce texte a été adopté le 21 mars 2000 par le Conseil d'administration de l'IFACI;
- le **Code de Déontologie** précisant les principes et les valeurs qui doivent guider le comportement des auditeurs internes;
- les **Normes** enrichies par des interprétations. Elles donnent des lignes directrices pour la réalisation de la mission des auditeurs internes et la gestion de leur activité.

La partie non obligatoire, mais très fortement recommandée du Cadre de référence international des pratiques professionnelles de l'audit interne comprend :

les **Modalités Pratiques d'Application (MPA)** qui sont remaniées pour plus de clarté. Les MPA mettent en exergue les meilleures pratiques pour se conformer à la Définition de l'Audit Interne, au Code de Déontologie et aux Normes.

- les guides pratiques tels que les **GTAG (Guide d'audit des systèmes d'information)**. Ils proposent des procédures et des méthodes d'audit pour des domaines déterminés.
- les prises de position commentent les rôles et les responsabilités de l'audit interne.

### **Les objectifs et les missions d'audit dans la période de crise financière**

L'audit interne assiste les membres de l'entreprise ou de l'organisation dans l'exercice efficace de leurs responsabilités. A cet effet, l'audit interne leur fournit des analyses, fait des appréciations, des recommandations, donner des avis et des informations concernant les activités. L'audit apporte sa contribution à l'ensemble des activités de l'entreprise et dans chaque domaine. Qu'il s'agisse des aspects financiers administratifs commerciaux informatiques et sociaux, son importance doit davantage primer. Diriger, c'est planifier les tâches, organiser les responsabilités, conduire les opérations et contrôler le marché. Tout cela fait du management une profession que l'audit en tant qu'outil de gestion.

L'audit interne consiste donc à *observer, étudier et analyser la situation des comportements, des faits, des structures et des documents sociaux par rapport à des référentiels internes à l'entreprise*. Cela nous permet donc de relever les écarts, de rechercher les causes, d'étudier leurs conséquences ou implications, de relever les risques de l'entreprise de manière à mieux les maîtriser, les supprimer et à mieux assurer les suivis des procédures de contrôles internes.

Désormais, la mission d'un auditeur va consister en l'examen des composantes de l'organisation et des conditions de son fonctionnement. Deux grandes missions lui sont assignées. Ainsi selon la nature, on distingue des missions de conformité, de régularité et des missions vers l'efficacité. Il s'agit pour un auditeur interne d'évaluer le contrôle et de proposer des améliorations. En matière de régularité, l'auditeur s'intéressera aux tâches et aux résultats. Il cherchera à analyser le travail effectuée par rapport au référentiel. Il cherchera à savoir si le résultat est correct. Autrement dit l'auditeur aura :

- à examiner la fiabilité et l'objectivité de l'information financière ainsi que les moyens utilisés pour identifier, mesurer, classer et présenter ces informations.

- à examiner les systèmes établis en vue d'assurer le respect des politiques de gestion des plans, des procédures, lois et représentations qui peuvent avoir une influence sur la vie de l'entreprise.

- à examiner enfin les dispositions prises pour protéger et sauvegarder le patrimoine et si nécessaires vérifier l'existence de l'entreprise.

Elle consiste à évaluer l'efficacité de l'entreprise et à proposer des améliorations. Il faut se garder d'examiner les systèmes tels qu'ils sont. L'on doit davantage s'interroger sur la fiabilité de tout système et de sa capacité à obtenir, à générer les résultats escomptés. Il faut toujours relier les systèmes à leurs finalités. Autrement dit l'auditeur aura :

-à apprécier l'utilisation économique et efficace des ressources, l'adéquation des moyens aux objectifs, l'adaptation des structures et la qualité de l'information.

-à examiner les opérations et les programmes de l'organisation audité afin de s'assurer que les résultats sont conformes aux objectifs fixés, aux activités opérationnelles. En fait, il s'agit de voir si les opérations sont exécutées conformément aux provisions.

### **La fonction d'audit interne**

La fonction d'audit interne donne à cet égard l'assurance raisonnable que les opérations menées, les décisions prises sont « sous contrôle » et qu'elles contribuent donc aux objectifs de l'entreprise. Et si tel n'était pas le cas, elle apporterait des recommandations pour y remédier. Pour ce faire l'audit interne évalue le niveau du contrôle interne, c'est-à-dire la capacité des organisations à atteindre efficacement les objectifs qui leur sont assignés et à maîtriser les risques inhérents à leur activité. C'est donc une fonction éminemment utile aux dirigeants, quelque soit le niveau d'extension de son champ d'action sur l'efficacité et la performance au delà de la simple conformité. L'objectif est d'assister les responsables dans l'exercice efficace de leurs responsabilités en leur fournissant des analyses, des appréciations, des recommandations et des commentaires concernant les activités contrôlées.

L'audit interne est concerné par toutes les phases de l'activité de l'entreprise qui intéressent la Direction Générale. Ceci implique d'aller au delà des aspects financiers pour atteindre une compréhension des opérations examinées. En effet l'auditeur externe doit élaborer un plan d'audit s'appuyant sur le travail de l'audit interne qu'il remet au conseil d'administration de l'entreprise pour la vérification des comptes. Dès lors les questions qui méritent d'être étudiées sont de savoir si l'audit interne peut-il sécuriser les travaux du commissariat aux comptes ? Pour être efficace l'auditeur externe il s'appuie sur le travail de l'audit interne ?

Ce sont autant de questions auxquelles nous essayerons d'apporter des réponses après décrire au préalable les procédures qui permettent de concevoir un plan d'audit interne.

L'audit interne a pour objectif général de donner à la direction l'assurance raisonnable que l'entreprise est gérée de manière saine et efficace. Pour ce faire, il s'assure, dans les domaines décrits comme champ d'application, que :

- les ressources et les actifs de l'entreprise sont dûment enregistrés dans ses livres et préservés comme il convient ;

- les données financières, opérationnelles, comptables et autres qui sont générées par l'entreprise ou utilisées pour sa gestion sont exactes et fiables ;

- l'intégrité, la fiabilité, la confidentialité et la disponibilité continue des systèmes d'information sont garanties ;

- l'application des procédures et méthodes de gestion des risques et le fonctionnement du contrôle interne sont efficaces ;

- les stratégies, procédures et manuels de l'entreprise en rapport avec ce qui précède sont appropriés et respectés ;

- la gouvernance, les opérations, ainsi que diverses fonctions et activités relatives aux domaines concernés sont efficaces et rationnelles.

Les activités d'audit interne sont conduites dans différents environnements juridiques et culturels, dans des organisations dont l'objet, la taille, la complexité et la structure sont divers, ainsi que par des professionnels de l'audit, internes ou externes à l'organisation. Bien que ces différences peuvent influencer la pratique de l'audit interne dans chaque environnement, le respect des *Normes internationales pour la pratique professionnelle de l'audit interne* est essentiel pour que les auditeurs internes puissent s'acquitter de leurs responsabilités. Lorsque certaines dispositions des Normes sont contraires à la législation ou à la réglementation en vigueur, les auditeurs internes doivent respecter les autres dispositions et communiquer les informations appropriées. Dans le cadre des missions d'assurance, l'auditeur interne procède à une évaluation objective en vue de formuler en toute indépendance une opinion ou des conclusions sur un processus, un système ou tout autre sujet. Il détermine la nature et l'étendue de ses missions qui comportent généralement trois types d'intervenants:

1. la personne ou le groupe directement impliqué dans le processus, le système ou le sujet examiné autrement dit le propriétaire du processus;
2. la personne ou le groupe réalisant l'évaluation l'auditeur interne, et;
3. la personne ou le groupe qui utilise les résultats de l'évaluation l'utilisateur.

Les missions de conseil sont généralement entreprises à la demande d'un client. Leur nature et leur périmètre font l'objet d'un accord avec ce dernier. Elles comportent généralement deux intervenants: **premièrement**, la personne ou le groupe qui fournit les conseils en l'occurrence l'auditeur interne, et **deuxièmes** la personne ou le groupe donneur d'ordre auquel ils sont destinés le client. Lors de la réalisation de missions de conseil, l'auditeur interne doit faire preuve d'objectivité et n'assumer aucune fonction de management.

### **Le cadre méthodologique d'audit interne**

Pour une reprise d'entreprise réussie, il est nécessaire de procéder à la réalisation de différents audits qui permettront une évaluation au plus juste et surtout de limiter au maximum les risques inhérents à la société cible. Dans la mesure où une reprise d'entreprise ne ressemble jamais à une autre, la nature des audits à réaliser doit bien entendu être adaptée à chaque cas.

Trois types d'audits sont généralement à effectuer: l'audit comptable et financier, l'audit juridique, fiscal et social et l'audit d'environnement. Pour cela, il est nécessaire de s'entourer de spécialistes tels que les experts-comptables, juristes etc..

Etudions un peu plus précisément les points examinés lors de l'audit comptable et financier. Les différentes investigations effectuées par les auditeurs comptables et financiers sont généralement regroupées autour de plusieurs axes développés ci-après. Dans un premier temps, il est primordial de prendre connaissance de la société cible et de son environnement et en particulier de son secteur d'activité, des marchés sur lesquels elle intervient, de la concurrence à laquelle elle est confrontée mais aussi des cadres législatif et réglementaire dans lesquels elle évolue, etc...

L'auditeur s'attachera également à identifier les forces et les faiblesses des principales fonctions et procès de l'entreprise: direction générale, fonctions commerciale, d'achat, de stockage et de production, de gestion des ressources humaines, de logistique, contrôle de gestion, comptabilité, système d'information et de contrôle interne. Il examinera par ailleurs les principaux postes du bilan du dernier exercice clos en analysant leur contenu et en étudiant leur évolution par rapport au bilan de l'exercice ou des exercices précédent(s).

L'audit comptable comprend également une revue des principes, des règles et méthodes comptables utilisés et plus précisément une appréciation de leur pertinence, une analyse des éventuelles changements intervenus et une identification des principales différences avec ceux de l'acquéreur ainsi que les meilleures pratiques. Sont par ailleurs à prévoir une analyse de la situation financière et en particulier de la structure et de l'échéancier de l'endettement et du flux de trésorerie ainsi qu'une recherche et une analyse des engagements hors bilan.

L'auditeur procède aussi à une revue analytique du compte de résultat du dernier exercice clos: analyse des variations significatives par rapport au compte de résultat de l'exercice ou des exercices précédent(s), du budget de l'exercice clos et de celui de l'exercice en cours. Il effectue un examen des comptes de gestion et en particulier des tableaux de bord et états de comptabilité analytique pour analyser la rentabilité sectorielle, par affaire, par produit ou encore par site géographique.

Bien évidemment, l'examen de l'exercice en cours et en particulier des événements significatifs, des comptes de résultats intermédiaires, etc. est également indispensable. Il s'accompagne d'une revue des comptes prévisionnels et notamment du budget de l'année en cours et des plans à moyen terme.

A cela s'ajoute une revue du carnet de commandes et des événements post clôture. Par ailleurs, en collaboration avec l'acquéreur, l'expert-comptable s'appliquera à identifier toutes les restructurations nécessaires et l'impact des synergies éventuelles avec d'autres sociétés que l'acquéreur pourrait déjà diriger. Une analyse de la dépendance commerciale ou financière vis-à-vis de la société mère ou des sociétés apparentées sera également à prévoir et parallèlement un examen des conditions de fixation des prix des prestations intra-groupe, et le cas échéant, des prix de transfert avec des filiales ou établissements étrangers.

Enfin, il ne faudra pas oublier de procéder à une lecture attentive des rapports du commissaire aux comptes, à une revue des procès-verbaux des conseils, des assemblées d'actionnaires ainsi que des réunions du comité d'entreprise lorsqu'il en existe un. Ces travaux d'audit réalisés par l'expert-comptable, en collaboration étroite avec l'acquéreur, permettront à ce dernier de mettre toutes les chances de son côté pour la réussite de sa reprise. En particulier, cet audit lui permettra se prémunir contre différents risques :

- la manque de sincérité des comptes;
- la précarité financière ;
- la baisse de rentabilité ;
- certains risques fiscaux et sociaux ;
- la fragilité du fonds de commerce ;
- les insuffisances de l'outil industriel ;
- des engagements hors bilan aux conséquences non mesurées, etc....

Afin de minimiser davantage les risques liés à la reprise d'une entreprise, l'acquéreur pourra également demander au cédant des garanties conventionnelles, communément appelées

## **Conclusion**

Au termes de cette étude, nous pouvons tirer plusieurs enseignements sur l'audit interne une valeur ajoutée dans la mission d'un auditeur externe. Nous avons pu d'écrire sommairement le contrôle interne en rappelant ses différentes composantes, et son rôle. Ainsi on a étudié de façon minutieuse l'audit interne ses définitions, objectifs et missions et nous avons parlé des procédures de l'audit interne et contrôle interne. Le contrôle interne constitue un élément vital de toute organisation. Il permet à celle-ci de maîtriser son comportement et d'assurer la sécurité de ses membres. Son action est permanente et continue.

L'environnement concurrentiel des entreprises roumaines oblige ces dernières à mettre en place et à faire évoluer en permanence leur système de contrôle interne pour l'adapter aux contraintes et aux modifications de l'activité et de l'environnement pour le rendre plus sécuritaire pour l'entreprise. Pour avoir un contrôle interne efficace il faut qu'il y ait :

- séparation des tâches et contrôle du respect des procédures adoptées.
- environnement favorable et adhésion du personnel et de la direction aux principes retenus en vue d'instaurer un climat d'intégrité et de valeurs éthiques de bonne gouvernance d'entreprise.
- une organisation claire, comprise et diffusée à tous les partenaires internes et externes de l'entreprise.



- une délégation de pouvoirs contrôlée et visant l'efficacité de l'organisation.
- une traçabilité des transactions, en vue d'effectuer des contrôles de responsabilités.
- un manuel des procédures pour éviter l'informel qui peut instaurer l'anarchie.
- réaliser des contrôles systématiques parfois ou du moins périodiques pour rendre le dispositif de contrôle interne plus dynamique et adapté.

Il convient d'ajouter qu'une harmonisation des lois sur le contrôle interne en Roumanie serait sans doute bénéfique pour la finance d'entreprise, ainsi toute entreprise pourrait disposer d'un corps unique de règles afin d'améliorer sa fiabilité, sa comparabilité et sa transparence des états financiers.

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# NEW DIMENSIONS IN ENTERPRISE'S FINANCIAL PERFORMANCE REPORTING: THE STATEMENT OF COMPREHENSIVE INCOME

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*The financial performance represents the desideratum of any enterprise, and its obtaining and future projections display a special importance for all financial situations' user. In order to meet these expectations, the accountancy normalization organisms - Financial Accounting Standards Board (FASB) and International Accounting Standards Board (IASB) - were preoccupied by finding patterns that would reflect complete information, adequate, comparable, actual, relevant and viable concerning the enterprise's performance. The present paper examines the informational valences of actual patterns concerning the financial performance reporting in whose centre the concept of comprehensive income is found.*

*Keywords: financial performance, income, comprehensive income, Accounting Standards*

*JEL classification: M42, M48*

## **1. The comprehensive income concept**

Starting from one of the basic principles of accountancy – *going concern*, an enterprise's performance cannot be still evaluated only on the basis of past and present data, and the taking into consideration of the future is also imposed, respective the passing from accountancy result to *comprehensive income*.

The *comprehensive income* concept (fr. *résultat global*) extends more and more and is at the basis of discussions projects developed by Financial Accounting Standards Board (FASB) and International Accounting Standards Board (IASB) during the convergence process.

A first definition for the comprehensive income is given by Statement of Financial Accounting Concepts No. 3 *Elements of Financial Statements* (SFAC 3) in December 1980, directive replaced afterwards by SFAC 6 (December 1985). SFAC 6 defines comprehensive income as “*the change in equity (net assets) of a business enterprise during a period from transactions and other events and circumstances from nonowner sources. It includes all changes in equity except those resulting from investments by owners and distributions to owners.*”<sup>569</sup>

In order to reflect more completely the enterprise's performance, the teachers M. Ristea and C.G. Dumitru<sup>570</sup>, suggest the following formula for determining the *comprehensive income*:

$$\begin{aligned} & \text{The profit/loss period recognized in the income statement;} \\ & (+/-) \text{ incomes/expenses, gains/losses recognized directly in equity (plus-values or} \\ & \text{minus-values from revaluations, gains/losses from the exchange rate resulted} \\ & \text{from financial situations of the existent entity's conversion)} \\ & (+/-) \text{The profit/loss from the effects of the accountancy policies changes} \\ & (+/-) \text{The profit/loss from the effects of the fundamental errors correction} \\ & \hline & = \text{Comprehensive income} \end{aligned}$$

<sup>569</sup> FASB, Statement of Financial Accounting Concepts No. 6 (SFAC 6) Elements of Financial Statements, Stamford, 1985, para.70, <http://www.fasb.org/pdf/con6.pdf> accessed on 8 April 2009.

<sup>570</sup> M. Ristea, C. Dumitru, Business Accountancy, Economic Tribune publish house, Bucharest, 2006, p. 19.

*IASB, defines total comprehensive income as the change in equity during a period resulting from transactions and other events, other than those changes resulting from transactions with owners in their capacity as owners. Total comprehensive income comprises all components of "profit or loss" and of "other comprehensive income".*<sup>571</sup>

The concept of *comprehensive income* announced by IASB, accepted on international level, is similar to the one proposed by general American frame (FASB) in 1980 and is wider than the net income concept based on historic costs. It may comprise the unrealised capital gains, and other changes of the enterprise's real values. The introduction of this new concept opened the way towards other evaluation criteria than the ones circumscribed in historic costs extent.<sup>572</sup>

## **2. The reporting of financial performance from the comprehensive income's point of view**

The comprehensive income made during time the subject of different assertions and standard projects.

*The first accounting standard* addressing the issue was enacted in Europe. In 1992, the *United Kingdom Accounting Standards Board* issued *Financial Reporting Standard 3 (FRS 3)* that introduced a *statement of total recognized gains and losses* as a *Accounting Standards Committee* issued an exposure draft of a new income standard and modified it in 1997. It is conceptually similar to recent U.S. comprehensive income efforts.<sup>573</sup>

The efforts of American standardisers concerning the financial performance reporting were materialized in June 1997 in *Statement no. 130 "Reporting Comprehensive Income"*.

This statement established the standards for reporting comprehensive income in a full set of general-purpose financial statements effective for fiscal years beginning after December 15, 1997. Comprehensive income represents the change in equity of an entity during a period from transactions and other events and circumstances from nonowner sources. Comprehensive income is composed of traditional net income plus items of "other comprehensive income."

FAS No. 130 allows companies to select from *three* alternative formats for reporting comprehensive income<sup>574</sup>:

- the components of other comprehensive income and total comprehensive income being reported below the total for net income in a statement that reports results of operations,
- in a separate statement of comprehensive income that begins with net income, and
- in a statement of changes in equity.

*In present*, the most important international organism that regards the realization of complex process of accountancy normalization and convergence is *The International Accountancy Standards Board - IASB*, organism specialized mainly in the elaboration of standards for stock exchange and multinational societies. As a consequence of the critics came from the settlement organs of value titles, of accountancy professionals and other interested parts, The International Accountancy Standards Board decided the revision of *International Accounting Standard - IAS 1 "The presentation of Financial Statements"*.

IAS 1 tries to establish a unique frame, coherent and homogenous, that would offer for users complete information on the financial position, financial performance and an entity's cash flows (see figure 1).

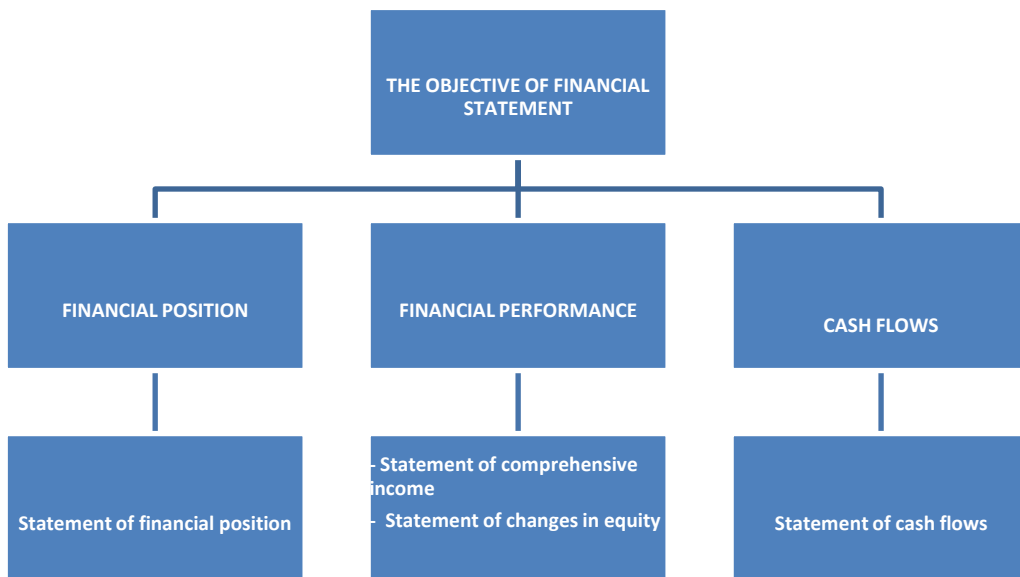
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**Figure 1 The objective of financial statements**

Source: IAS 1 revised in 2007, <http://eur-lex.europa.eu/en/index.htm>

Applicable to all entities situated under the incidence of *International Financial Reporting Standards (IFRS-es)* IAS 1 revised in 2007 is valid for the annual periods that begin at or after the date of 1<sup>st</sup> of January 2009 and brings profound changes on the *situations concerning the financial performance reporting*, materialised in changes both in *presentation of changes in equity* and *presentation of comprehensive income*, IAS 1 being in concordance with FASB requires presented in SFAS 130 *Reporting Comprehensive Income*.

The incomes and expenses elements recognized in a period, according to IAS 1, paragraph 81, should be presented either:

(a) ***in a single statements of comprehensive income***, where both the component elements of the profit or loss and elements of the comprehensive income are found, or

(b) ***in two situations:***

-separate income statement;

-the statement of comprehensive income that starts with the profit of loss and continues with the presentation of other elements of the comprehensive income.

As a minimum, the statement of comprehensive income shall include line items that present the following amounts for the period (IAS 1, paragraph 82):

(a) revenue;

(b) finance costs;

(c) share of the profit or loss of associates and joint ventures accounted for using the equity method;

(d) tax expense;

(e) a single amount comprising the total of:

(i) the post-tax profit or loss of discontinued operations and

(ii) the post-tax gain or loss recognised on the measurement to fair value less costs to sell or on the disposal of the assets or disposal group(s) constituting the discontinued operation;

(f) profit or loss;

(g) each component of other comprehensive income classified by nature (excluding amounts in (h));

(h) share of the other comprehensive income of associates and joint ventures accounted for using the equity method; and

(i) total comprehensive income.

Certain elements of the comprehensive income, that contain the income and expenses elements (inclusive the reclassification adjustments) are *excluded* (not recognized) from the current profit or loss as it is allowed or imposed by other IFRS-es, but are directly recognized as *other elements of the comprehensive income*.

The components of ***other comprehensive income*** include (IAS 1, paragraph 7):

(a) *changes in revaluation surplus* (see IAS 16 Property, Plant and Equipment and IAS 38 Intangible Assets);

(b) *actuarial gains and losses on defined benefit plans* recognised in accordance with paragraph 93A of IAS 19 Employee Benefits;

(c) *gains and losses arising from translating the financial statements of a foreign operation* (see IAS 21 The Effects of Changes in Foreign Exchange Rates);

(d) *gains and losses on remeasuring available-for-sale financial assets* (see IAS 39 Financial Instruments: Recognition and Measurement);

(e) *the effective portion of gains and losses on hedging instruments in a cash flow hedge* (see IAS 39).

The publishing of the revised IAS 1 marks the closing of the first phase of the project initiated by IASB together with USA for ***revision and harmonization of financial statements presentation***. The second phase that started already on the 16<sup>th</sup> of October 2008 in the same time with the publishing of the Discussion Paper (DP) Preliminary Views on Financial Statement Presentation is to examine and answers to *fundamental questions* connected to ***presenting the information in financial statements***<sup>575</sup>.

The boards propose the following two objectives for financial statement presentation<sup>576</sup>:

- ***cohesiveness***: formatting the information in financial statements so that a reader can follow the flow of information through the various statements;

- ***disaggregation***: separating information that responds differently to economic events.

Taking into consideration the two above mentioned aspects, major changes in presenting the comprehensive income are involved, information that should be structured on the following four categories<sup>577</sup>: - ***business activities*** (sub-categorised into *operating* and *investing*),

- ***financing activities***,

- ***income taxes*** and

- ***discontinued operations***.

One of the fundamental questions connected to the presentation of information concerning the performance reporting is<sup>578</sup>:

*"Should an entity present comprehensive income and its components in a single statement of comprehensive income as proposed?"*

From the received answers, the conclusion that the filling in of just one statement that would reflect the comprehensive income and its components was reached, respective the ***situation of the comprehensive*** result, the option of presenting the profit and loss components in *a income*

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575 Discussion Paper on financial statement presentation October 2008: Discussion Paper, paragraphs 3.24–3.33, <http://www.iasb.org>, accessed on 22 April 2009.

576 Deloitte's IFRS Global Office has published a special edition of our IAS Plus Newsletter Explaining the Discussion Paper on financial statement presentation October 2008: Discussion Paper <http://www.iasplus.com/agenda/perform2.htm>, accessed on 22 April 2009.

577 Discussion Paper, Preliminary Views on Financial Statement Presentation, No. 1630-100, October 16, 2008, p.15, <http://www.iasb.org>, accessed on 20 April 2009.

578 <http://www.iasb.org>, accessed on 20 April 2009

*statement* distinctly (according to IAS 1, paragraph 81, b) will be excluded. For the comprehensive income the require of presenting a subtotal for “profit or loss” or “net income” will be maintained. As argument we mention that the presenting of *two measures* for reflecting the financial performance (comprehensive income and net income) will create confusion among information users, these not knowing which of the measures is more nearer and should be taken into consideration in investment decisions, in credit decisions or in capital resource allocation.

### 3. Conclusions

Each of the *users* regards different objectives and wishes to have access to the particular information that vary according to the decision that is to be taken, the engaged capitals size, investment duration, the interests that it defends, the aimed purpose, the assumed risk, the advisers' competences and aptitudes. Under these circumstances, we can appreciate as correct the affirmation according to “the *accountancy* purpose is not uniquely of constituting in a memory of enterprise's operations but in a means of periodical calculation of an enterprise's economic performance indicator, *the result*<sup>579</sup>”.

The accountancy standardization bear by IAS 1 revised in 2007 influences the enterprise's organic dynamics, demanding to organize the financial statements in such manner that would communicate transparently the *firm's integrated financial picture*, solving therefore some of the aspects concerning *the accountancy convergence*.

The accountancy next to incomes and expenses of *gains and losses* leads to an indicator that projects new dimensions of analysis performances namely the *comprehensive income*, being an indicator much more comprehensive than the net income.

Altogether, the profound changes to which the financial performance reporting is put launched numerous *controversies*: some specialists considering that the old performance presenting pattern centred on *net income* is continuously a pertinent one and the others sustaining the new performance reporting pattern based on *comprehensive income* level. There should be mentioned that the new approach does not exclude the profit or loss elements, becoming a component of the comprehensive income.

The passing from the *net income* to *comprehensive income* allows on one side the measuring of the *future performance* since it takes under consideration not only the realised incomes but the unrealised ones also, susceptible to realise in the future, and on the other hand supposes the passing from evaluation in historic costs to *fair value* evaluation.

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# SOCIAL WELFARE AND TAXATION EFFECTS ON INSURANCE. AN INTERNATIONAL EMPIRICAL STUDY

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*This paper analyzes the influence of the level of economic development as well as the level of taxation on insurance activity. To this purpose we reviewed the national and international literature and collected data on international level (for both year 2005 and 2007) to check the relationship between them.*

*Our findings confirm the relationship between economic development and insurance activity, but our data does not support the association between taxation and insurance.*

*Keywords: insurance, premiums, taxation, economic development*

*JEL codes: G22, H24, H25*

## **1. Introduction**

In today's financial crisis emphasized by high unemployment, fulminate bankruptcy of many firms and impossibility of quantification of negative economic and social consequences, the taxation of insurance represents an important issue both for insurers and the European or/and national supervisory body of insurance market, and also for individuals or/and legal entities.

EU attempts to harmonize first the national legislations regarding the taxation and then those relating to insurance (as specified in the quantitative impact studies QIS 1-4), aiming to ensure the specific solvency of insurance companies. This action encountered serious difficulties arising from the existing differences between regulations, terms of economic and social life, traditions and culture, lack of information regarding the usefulness of insurance and their political group interests. Taking in consideration the significance of fiscal considerations in the decision to subscribe insurances contracts, different European countries, including Romania, have tried and managed through its fiscal laws to apply different ways for fiscal deductibility of insurance expenses. In fact, after 1990, in the majority states worldwide, this form of fiscal relaxation through deductibility stimulated growth of gross premiums subscribed per capita.

## **2. Fundamental concepts in the taxation of insurance activities**

The taxation of insurance should be regarded and analyzed both from the perspective of gross premiums subscribed and received by insurance companies and services from the insurer. Regarding the taxation of insurance, it can be tackled by technical and socio-professional perspectives.

Technical approach to taxation of life and non-life insurance can be achieved through taxation of insurance premiums and/or insurance indemnities. The taxation of insurance premiums summarized either on their deductibility/non-deductibility, either to reduce tax.

The deductibility/non-deductibility of premiums is capped and capping may operate individually or globally in insurance products, in fixed amount (per person, couple, husband and family



member) or percentage of total taxable income and in the form of limiting on bonus, income, premiums and income. Tax reduction instead is always limited, and operate in absolute size, in the percentage share of tax or part of income, in the amount determined by the law.

Tax benefits of the insurer may be achieved through the analysis of rents in the form of payments through periodic sums insured. Periodic payments for operating are different from one country to another, and its taxation may be total, partial differential or exempted. In case of insured sum we find taxation or non-taxation of the amount insured by the insurance policy (known as capital) and/or non-taxation or taxation differences between the amounts paid by the insurer and the total insurance premiums paid by the insured person.

Socio-professional approach concerns taxation of insurance premiums through the different socio-professional categories (natural persons, legal persons, authorized persons) and the pensions insurance.

Insurers' benefits may take various forms (daily allowances, sums insured in case of life or death, rents, amounts provided for single-premium policy, those with capitalization) depending on the policy and concluded the nature of risk covered. Taxation of these benefits are achieved with the principles and logic of tax (a tax on insurance premiums or benefits), but depends on the binding and/or voluntary policy.

### **3. Literature review**

Boyer (2002) presents an interesting case in USA where the taxation of insurance benefits is preferable to the taxation of premiums. When insurance fraud is present - in the form of ex post moral hazard - a tax on insurance premiums increases the number of fraudulent claims in the economy, whereas a tax on insurance benefits may reduce fraud. More importantly, however, policyholders are made better off with a benefit tax than with a premium tax.

Altenburger et al. (2008) develop a common solution for the separation problem in accounting and in taxation which is innovative, theoretically correct and practically applicable. The principal design innovation is the way of distinction of different deposit components and their classification into different types. Dividing them into 'implicit' and 'explicit' deposit components delivers the theoretically correct results for unbundling of insurance contracts both for accounting and tax purposes.

Tzeng and Huang (2004) examine in their paper the impact of tax deductions on optimal insurance contracts. Their results show that the implementation of tax deductions increases the deductible but may or may not decrease the coinsurance.

Grace et al. (2008) using a state-level panel data set from 1992-2004 for the property-casualty insurance industry, find in their paper that the insurance premium tax has a negative but modest effect on employment in the insurance industry.

As the Romanian literature is concerned, the topic of insurance taxation is very vaguely studied.

Stoicescu and Teodorescu (2003) published a research regarding the national insurance market in the context of accession to the European Union, paper which draws a comparison between the insurance system in Romania and other European countries in 2002, where they highlight the low level of insurance premiums subscribed by the population reported, and the low value of the insurance premiums subscribed per capita.

Once with the introduction of the optional insurance premiums (the 3rd pillar of the pension system), the interest for debate over insurance taxation has increased. Various studies have addressed the level of deductibility of voluntary health insurance premiums from the date of introduction of these premiums and concluded that their interest for signing them was well below the level at which employers might be tempted to purchase such policies for their employees (Mosoianu, 2007). After the study was published, the value of deductibility of health insurance premiums was changed, meaning the increase of them.

The low interest for the treatment of the insurance taxation can be explained by the fact that the market mechanisms are not yet sufficiently established, and as an argument we bring the failed action of the Romanian legislator to boost the development of insurance, attempt started in early 2004. Thus was launched the initiative to encourage housing insurance by providing individuals tax deduction who contracted an insurance of dwelling, for amounts paid as insurance premiums, not exceeding a ceiling equivalent to 200 euro. The effects were not those expected, so that in the beginning of next year, the tax deductions for housing insurance premiums were eliminated from the Fiscal Code.

Insurance in our country is characterized by an incipient state of development compared to the developed countries where insurance is part of tradition and education. Factors leading to the limitation in the interest about insurance in Romania concern at least the following courses of action: misunderstanding the role of insurance and thus ignoring the benefits that arise from the signing of an insurance policy, lack of interest in insurance, low proportion of middle class correlated with the financial factor, the existence of unfair competition practices, too little inspired management and focused on immediate advantages, problems related to inflation, unemployment, low income citizens. (Cristea et al. 2008).

Countries that have a culture in insurance activities have implemented certain tax advantages for insured persons, one of which is the deductibility of insurance premiums. By comparison, Romania is situated very low as the deductibility of insurance premiums is concerned and our legal approach tends to develop insurance premiums at a level considered satisfactory compared to the average states of the European Union. Thus, in March 2008 PRIMM magazine published a comparative study of the evolution of insurance in Romania between 1997-2007 (Ghețu and Doreonceanu, 2008) which shows that the evolution of insurance premiums subscribed were growing, but in terms of the degree of penetration in GDP and insurance density per capita, which had a tendency to increase during the period under study, are well below the average of the European Union countries.

#### **4. Hypotheses, variables and data sources**

Based on the general economic literature we can suppose that the level of life of the society is linked to the capability of the people to spend for security purposes. This can explain the lack of interest in insurance in Romania, as discussed by Cristea *et al.*, 2008. Therefore we issue the following hypothesis:

***H1: The level of life is positively associated with insurance activity.***

On the basis of the previously presented literature (Boyer, 2002; Grace *et al.*, 2008; Stoicescu and Teodorescu, 2003; Mosoianu, 2007) we conjecture a negative relationship between taxation and insurance activities, i.e. as the level of taxation decreases this favors and stimulates the insurance sector. Our next hypothesis is therefore:

***H2: Taxation is negatively associated with insurance activity.***

Since we are interested on the effect of several factors on insurance activity, we developed the following variables:

- Proxies for insurance activity: *premiums subscribed* (life and non-life premiums, mil. USD), *number of companies* and *number of employees* in the insurance sector;
- Proxy for level of life: *GDP per capita* (USD/inhabitant);
- Proxy for taxation: *premium tax* (life and non-life, mil. USD).

The underlying econometric model is:

$$\text{Insurance activity} = \alpha_0 + \alpha_1 \text{Level of life} + \alpha_2 \text{Taxation} + \varepsilon$$

Our sample comprises 36 countries worldwide. Since these countries are followed by most of the (international) regulators and institutions, we consider them as the most relevant, securing the representativeness of our sample on international level. To enhance the robustness of the research we collected data for 2 years (2005 and 2007) as specified below:

Table 1. Sources of data

| Variable                    | Data source  |
|-----------------------------|--|
| Year 2007                   |  |
| GDP, population, premiums   | <a href="http://www.iii.org/international/toc/">http://www.iii.org/international/toc/</a>  |
| No. of companies, employees | <a href="http://stats.oecd.org/wbos/index.aspx?r=341031">http://stats.oecd.org/wbos/index.aspx?r=341031</a><br><a href="http://www.cea.eu/uploads/DocumentsLibrary/documents/1224519688_eif.pdf">http://www.cea.eu/uploads/DocumentsLibrary/documents/1224519688_eif.pdf</a><br><a href="http://www.nsi.bg">www.nsi.bg</a><br><a href="http://www.csa-isc.ro">www.csa-isc.ro</a> |
| Premium taxation            | <a href="http://www.pwc.com/extweb/pwcpublications.nsf/docid/f5e7616e79072bfcca256fc0000a3ad0">http://www.pwc.com/extweb/pwcpublications.nsf/docid/f5e7616e79072bfcca256fc0000a3ad0</a><br><a href="http://www.mabisz.hu/english/publication/yearbook/index.html">http://www.mabisz.hu/english/publication/yearbook/index.html</a>   |
| Year 2005                   |  |
| GDP, population             | <a href="http://server.iii.org/yy_obj_data/binary/772943_1_0/international_fact_book_2006-2007.pdf">http://server.iii.org/yy_obj_data/binary/772943_1_0/international_fact_book_2006-2007.pdf</a>  |
| premiums                    | <a href="http://server.iii.org/yy_obj_data/binary/789034_1_0/international_fact_book_2007-2008.pdf">http://server.iii.org/yy_obj_data/binary/789034_1_0/international_fact_book_2007-2008.pdf</a>  |
| No. of companies, employees | <a href="http://stats.oecd.org/wbos/index.aspx?r=341031">http://stats.oecd.org/wbos/index.aspx?r=341031</a><br><a href="http://www.cea.eu/uploads/DocumentsLibrary/documents/1224519688_eif.pdf">http://www.cea.eu/uploads/DocumentsLibrary/documents/1224519688_eif.pdf</a><br><a href="http://www.nsi.bg">www.nsi.bg</a><br><a href="http://www.csa-isc.ro">www.csa-isc.ro</a> |
| Premium taxation            | <a href="http://www.pwc.com/extweb/pwcpublications.nsf/docid/d0f9b818a9d597f9ca25730f0012f17e">http://www.pwc.com/extweb/pwcpublications.nsf/docid/d0f9b818a9d597f9ca25730f0012f17e</a><br><a href="http://www.mabisz.hu/english/publication/yearbook/index.html">http://www.mabisz.hu/english/publication/yearbook/index.html</a>   |

## 5. Data Analysis and Discussion of Results

For the analysis of our data we used SPSS 16.0 software. Since we lack the necessary space here to discuss the technical issues related to the analysis (please see Table 2 for these details), we explain the steps as we generated the findings.

Two years have been analyzed as we found fiscal data only for these years (Table 1, taxation). For each year we ran four models, testing all the proxies for “insurance activity”, such as: life premiums subscribed, non-life premiums subscribed, number of companies and number of employees in the insurance sector and the corresponding dependent variables (see model specifications in Table 2).

According to our findings, GDP per capita is positively associated with the insurance activity proxies on acceptable significance levels (t-values are positive and the computed significance is less than 5%), as is shown by models 1, 2 and 3 in both years, which confirm that the level of life has a significant impact on insurance.

Model 4 behaves differently, where the number of employees is used as proxy for the insurance activity. We believe this is for data management reasons, since the status of ‘employment’ is

defined differently in the countries worldwide (some count only full time contracts while others include also collaborators), thus the data being heterogeneous.

We therefore accept the first hypothesis, according to which the level of life is positively associated with insurance activity.

Table 2. Results generated

| <b>Panel A. Year 2007</b>  |      |        |         |                     |
|--|------|--------|---------|---------------------|
| <b>Model 1: Life premiums = <math>\alpha_0 + \alpha_1</math> GDP per capita + <math>\alpha_2</math> Life premium taxation + <math>\varepsilon</math></b>         |      |        |         |                     |
|  | Sign | t      | Signif. | Adj. R <sup>2</sup> |
| GDP per capita   | +    | 2.182  | 0.037   | 0.087               |
| Life premium taxation  | -    | -0.203 | 0.841   |                     |
| <b>Model 2: Non-life premiums = <math>\alpha_0 + \alpha_1</math> GDP per capita + <math>\alpha_2</math> Non-life premium taxation + <math>\varepsilon</math></b> |      |        |         |                     |
|  | Sign | t      | Signif. | Adj. R <sup>2</sup> |
| GDP per capita   | +    | 2.062  | 0.048   | 0.071               |
| Non-life premium taxation  | -    | -0.499 | 0.622   |                     |
| <b>Model 3: Companies = <math>\alpha_0 + \alpha_1</math> GDP per capita + <math>\alpha_2</math> Non-life premium taxation + <math>\varepsilon</math></b>         |      |        |         |                     |
|  | Sign | t      | Signif. | Adj. R <sup>2</sup> |
| GDP per capita   | +    | 2.196  | 0.039   | 0.121               |
| Number of companies  | -    | -1.393 | 0.178   |                     |
| <b>Model 4: Employees = <math>\alpha_0 + \alpha_1</math> GDP per capita + <math>\alpha_2</math> Non-life premium taxation + <math>\varepsilon</math></b>         |      |        |         |                     |
|  | Sign | t      | Signif. | Adj. R <sup>2</sup> |
| GDP per capita   | +    | 1.240  | 0.232   | 0.013               |
| Number of employees  | -    | -0.970 | 0.346   |                     |
| <b>Panel B. Year 2005</b>  |      |        |         |                     |
| <b>Model 1: Life premiums = <math>\alpha_0 + \alpha_1</math> GDP per capita + <math>\alpha_2</math> Life premium taxation + <math>\varepsilon</math></b>         |      |        |         |                     |
|  | Sign | t      | Signif. | Adj. R <sup>2</sup> |
| GDP per capita   | +    | 2.639  | 0.013   | 0.139               |
| Life premium taxation  | -    | -0.060 | 0.953   |                     |
| <b>Model 2: Non-life premiums = <math>\alpha_0 + \alpha_1</math> GDP per capita + <math>\alpha_2</math> Non-life premium taxation + <math>\varepsilon</math></b> |      |        |         |                     |
|  | Sign | t      | Signif. | Adj. R <sup>2</sup> |
| GDP per capita   | +    | 2.471  | 0.019   | 0.120               |
| Non-life premium taxation  | -    | -0.717 | 0.479   |                     |
| <b>Model 3: Companies = <math>\alpha_0 + \alpha_1</math> GDP per capita + <math>\alpha_2</math> Non-life premium taxation + <math>\varepsilon</math></b>         |      |        |         |                     |
|  | Sign | t      | Signif. | Adj. R <sup>2</sup> |
| GDP per capita   | +    | 2.655  | 0.015   | 0.183               |
| Number of companies  | -    | -1.235 | 0.231   |                     |
| <b>Model 4: Employees = <math>\alpha_0 + \alpha_1</math> GDP per capita + <math>\alpha_2</math> Non-life premium taxation + <math>\varepsilon</math></b>         |      |        |         |                     |
|  | Sign | t      | Signif. | Adj. R <sup>2</sup> |
| GDP per capita   | +    | 1.580  | 0.132   | 0.031               |
| Number of employees  | -    | -1.078 | 0.295   |                     |

As the connection between taxation and insurance is concerned, our empirical findings do not support the hypothesis we developed (H2), since the t-values of the taxation variable are not significant in neither of the models on an acceptable level (5%). One can observe, however, that the predicted negative sign is always verified (we have negative t-values for the taxation variable).

We believe that this unexpected situation can be explained also by the quality of data; we must admit that we had strong difficulties in collecting the fiscal data for each country, since very legislation has many specific rules, exceptions etc.

We must therefore reject the second hypothesis, according to which the level of taxation is negatively associated with the insurance activity.

## 6. Conclusions

The taxation of insurance affect the activity of insurance companies through awareness raising policyholders, based on the awareness of their insurance needs headlong into the context of current unstable market economies. This financial instability that characterizes the current economic life is reflected in the level of insurance companies' activity through the changes of essential insurance policies concluded, different from one country to another. Although worldwide in general, especially in Europe (through the forthcoming European Directive on solvency to be implemented in the near future), attempting to achieve and strengthen the solvency of insurance companies, job insecurity and financial difficulties of firms create negative economic repercussions on the insurance. Attractive insurance products designed by insurance companies do not always register the expected success.

A form of fiscal loosening in this field would be very welcome, so that the interest for insurance to be able to record an increase, and we mention the experience of the Central and East European countries, where, especially after 1990, the volume of insurance premiums distributed per capita has increased substantially due to favorable tax deductibility of insurance premiums.

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# THE STANDARD-COST METHOD IN THE VARIANT STANDARD-UNIQUE COST, DIRECTION OF IMPROVEMENT OF THE BOOKKEEPING AND OF THE COST CALCULATION IN THE BREAD MANUFACTURE

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*The standard-cost method makes part of the category of methods of previsional calculation and of efficient follow-up of the production process which allows the establishment of the production costs with anticipation regarding the beginning of the production process and the achievement of the budgetary control of the costs through the determination of the divergence between the real and pre-set costs taking into account the divergences and their causes in the same time with the development of the production process.*

*The standard-cost method is a modern and efficient method for the bread manufacture. This method offers undeniable advantages in what concerns the operative study and analysis of the production efficiency, being thus able to accomplish an important function in the leadership of the modern enterprise: it is an investigation and previsional instrument and it represents a precious means when you have to make a decision.*

*Key words: efficient unit cost, standard general cost, divergences, unique standard-cost.*

*JEL codes: M41*

The standard-cost method makes part of the category of methods of previsional calculation and of efficient follow-up of the production process which allows the establishment of the production costs with anticipation regarding the beginning of the production process and the achievement of the budgetary control of the costs through the determination of the divergence between the real and pre-set costs taking into account the divergences and their causes in the same time with the development of the production process.

According to the concept of this method, the production costs must be calculated with anticipation and one must use pre-set measures. In the same time with the development of the production process, the operative follow-up of expenses is organized as through a comparison with standard costs in order to establish the divergences regarding the expenses and their causes so that the budgetary control of the cost should be accomplished.

In the original conception of the standard-cost method, one doesn't need to calculate the effective cost because the standard cost is considered both scientific and real cost. This is the reason why any divergence of the efficient costs from the standard ones is considered as a divergence from the normality and must be put on the account of financial results.

However, one may calculate the actual cost of the production obtained. This is made through the addition or, according to the case, the diminution from the standard cost of the deviations taken from the bookkeeping which will be followed not only by taking into consideration the types of expenses and their causes, but also the products. The way of calculation is the following:

$$Cu_e = \frac{Ct_s \pm A}{Q} \quad \text{RELATION 3}$$

in which:

$Cu_e$  - represents the unitary actual cost

$Ct_s$  - total standard cost;

A - deviations;

Q – quantity of production obtained

The essence of the method Standard cost consists of establishing with anticipation the direct costs of production (materials, conversion costs, etc.) which are named „standards” and the indirect costs (common costs of the sections, general costs of the enterprise and marketplace expenses) which are named cost budget. In this way, the standard costs become costs established in advance on a scientific base according to the conditions imposed by the production processes.

The typical structure of a total cost of production (absorbing) calculated after the method of standard costs usually has three main articles of the calculation:

-materials

-conversion costs

-overheads

The differences between the actual and standard expenses at the three articles of calculation are considered deviations from the natural conditions of manufacturing. The application of the method consists of:

1. the calculation of the standard costs for every product;
2. the organization of the system of calculation and evidence of deviations from the standard costs;
3. the follow-up of the production costs according to the requirements of the standard cost method

## **DEVIATIONS FROM THE STANDARD COSTS FOR THE MATERIALS**

There are two ways of deviations: deviations of **quantity** or derived from consumption and deviations derived from the **difference of prices**.

The deviations from standard consumptions for raw materials and materials are determined on the following basis:

- 1) on the basis of the document issuance, with the relation

$$A_{CM} = \Delta_{CM} \times P_S \quad \text{where:}$$

$A_{CM}$  = the value of the deviations derived from consumption;

$\Delta_{CM}$  = quantitative deviation;

$P_S$  = price of standard supply

- 2) on the basis of the way of debiting the quantity of necessary materials before being consumed

$$A_{CM} = (C_E - C_S) \times P_S \times Q \quad \text{where:}$$

Q = quantity of manufactured products;

$C_S$  = quantitative standard consumption for every product;

$C_E$  = actual quantitative consumption for every product

- 3) on the basis of daily inventory of the materials which were not consumed at the manufacture place from the sections and the establishment of the actual consumption which will be compared with the standard consumption

The deviations derived from **the difference of prices** at the materials can be calculated in two ways:

- 1) according to the supplied materials:

$$A_{PM} = (P_E - P_S) \times C_J \quad \text{where:}$$

$A_{PM}$  = deviation from the difference in price of the materials;

$P_E$  = actual unitary price;

$P_S$  = standard unitary price;

$C_J$  = quantity of materials supplied.

- 2) according to the consumed materials:

$$\Delta_{PM} = (P_E - P_S) \times C_E \times Q$$

## DEVIATIONS FROM THE STANDARD COSTS FOR THE CONVERSION COSTS

1) deviations from the way in which the productive hours (of time) are used:

$$A_T = (t_E - t_S) \times T_{SS} \times Q$$

2) deviations from the standard wage rate:

$$A_T = (T_{SE} - T_{SS}) \times t_E \times Q \quad \text{where:}$$

$A_T$  = deviation from work efficiency;

$t_E$  = actual time;

$t_S$  = standard time;

$T_{SS}$  = standard wage rate;

$Q$  = quantity of manufactured products;

$T_{SE}$  = actual standard rate

## DEVIATIONS FROM STANDARD OVERHEADS

1) deviations from the budget of expenses;

2) deviations from the production ability;

3) output deviations

The first things which have to be done in order to apply the standard-cost method consist of working out the standard calculations for every product, the follow up, the analysis and the report of deviations of actual from standard costs in order to make budgetary control, the bookkeeping organization according to the conditions of application of the standard-cost method.

In order to work out the standard calculations for every product, the following things are necessary: *to work out standards for direct expenses* which supposes to work out quantitative standards for materials and conversion costs and to work out value standards regarding the supply prices and standard wage rates; *to work out standards for indirect expenses or overheads* which involves the achievement of the following things: making the budget for indirect expenses of production, on one hand and, on the other hand, making the budget of general expenses of company management; *to work out calculations regarding standard unitary cost for each product* which involves making the budget of unitary cost in the structure of the calculation articles which are specific to the enterprise.

To work out standards regarding production costs imposes the establishment of assortments and of the volume of standard production which may determine the best use of the production capacity from the bread manufacture.

The calculation, follow up, analysis and report of deviation of actual costs from standard ones is made in an operative way (daily, weekly, once at ten days, etc.) taking into consideration the expenses, the articles of calculation and the causes (if it is necessary, one can take into consideration even the product or their component parts) in order to make the budgetary control of the costs and to make decisions regarding the management of the value side of the production process.

One has to make reports or situations regarding the deviations from the mentioned structure and when all the data is centralized one may get the report or the situation of the deviations from the enterprise.

The application of standard-cost method has advantages such as rationalization of calculation work because the unitary standard cost determined with anticipation is counted as a real cost and one doesn't have to calculate anymore the actual cost of the end production and of the production on the stock at the end of each management time. The deviations are considered as deviations from the normal and they are put on the account of the financial results of the enterprise. The end production and the production on the stock may be discounted at the standard cost. This



characteristic does not eliminate the possibility of calculation the actual unitary costs at some periods of time through the allocation of deviations to the end production or to the production on the stock according to certain conventional criteria such as the standard costs of the production. Another advantage of the standard-cost method is that although it has at its basis the concept of total costs using the classification of production expenses in direct and indirect ones, it also uses the classification of production expenses in fluctuant and fixed which allows the analysis of costs taking into consideration the production volume and the calculation of certain indicators specific to the direct-costing method such as the balance point, the point of optimal activity, the covering factor, the coefficient and the safety interval, all these being necessary in order to make a decision on scientific basis.

Through this method one can make the operative control of the way in which material and human resources are consumed through a distinct, permanent and complete follow up of deviations while the activity is done and not at the end of it as in the classical methods. The deviations are identified both in the operative evidence and in the bookkeeping from the moment of its appearance and until the moment when they are distributed upon the financial results.

The main characteristics of the standard-cost method consists of the existence of an adequate frame for operative comparaisons between actual and pre-established costs which are taken as reference. The application of the standard-cost method, in the variant standard-unique cost, leads to the growth of the practical value of the bookkeeping information and, implicitly, to the improvement of the economical activity.

In conclusion, we consider that the adoption and the introduction of the standard-cost method in the enterprises from the industry of bread manufacture, in the variant standard – unique cost, answers the necessity of growing the degree of information utility regarding internal activity and is integrated in the modern conception of leadership based on objectives, continuous improvement of costs usability in the production orientation and in the reinforcement of the economical management.

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# EFFECTS OF RESIDUAL VALUE REVISION ON THE LESSOR'S RESULTS IN THE FINANCE LEASE CONTRACTS

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*The finance lease is, from a financial point of view, an alternative to bank loans. The residual value is a basic parameter of the finance lease contract. It is set out according to the depreciation and amortization manner of the asset subject matter of the lease contract. In this article is analyzed the impact held by diminishing the unguaranteed residual value on the financial position and results of the lessor in the finance lease contracts.*

*Keywords: lease, residual value, accountancy estimation, lessor, lessee.*

*JEL Classification: M41, F30, G19.*

## **1. Conceptual boundaries concerning the finance lease**

Given the rapid evolution of technical progress, the finance lease became a necessary element for financing investments and for a real economic growth. The evolution of worldwide lease is connected closely to the requirements of the lease beneficiaries that act in different branches of the economy.

Seen from the point of view of the lessor, the lease operation is "buying a good for renting purposes, followed by renting it for selling purposes"<sup>580</sup>. The main problem of lease is "in the opposition between economic and legal"<sup>581</sup>. From the point of view of the French authors, Bernard Esnault and Christian Hoarau, accountancy is "a quantitative technique for collecting, processing and analyzing information concerning economic and legal events in the company's life"<sup>582</sup>. From a legal point of view, the asset subject matter of the lease operation is a capital for the lessor because it is part of its patrimony. From an economic standpoint, the asset is a technical capital available to the lessee. The finance lease is one of the most eloquent examples for practically applying the principle of substance prevailing over form. Through separating the ownership and exploiting the asset, the lease finances technical capital through income supplied by its exploitation.

An often-encountered form of lease is represented by triangular lease operations<sup>583</sup>. The initiative of such an operation belongs, usually, to the user that needs a certain good and that proceeds to analyzing the market for identifying a possible supplier and a financier. After the supplier and the user have reached an agreement for concluding a selling-buying contract, the user will supply to the financier a petition comprising data concerning the technical and functional characteristics of the good wanted, its financial status, identifying the supplier and negotiated details as regards the selling-buying contract. If the financier accepts the request, it will become part of the deal, taking over since that time the negotiation with the supplier, on its own name.

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580 Matiș, D., 2003 – Contabilitatea operațiunilor speciale, Editura Intelcredo, Deva, p. 251.

581 Malciu, L., 2000 – Contabilitate aprofundată, Editura Economică, București, p. 178.

582 Esnault, B., Hoarau, C., 1994 – Comptabilité financière, Presses Universitaires de France, Paris, p.137.

583 <http://www.finantare.ro/ghd-leasing.html>.

## **2. Residual value – an important element of the finance lease contract**

The elements of the finance lease must be analyzed from the point of view of International Accountancy Standards because, right now, the accountancy of a company “is marked by two basic facts: on one hand, normalizing and regulating the general accountancy and, on the other hand, developing the accountancy research”<sup>584</sup>. For regulating the lease, the International Accounting Standards Board (IASB) has drafted the standard IAS 17 “Lease contracts”. The American standard concerning lease is FAS 13 “Lease”. The Financial Accounting Standards Board (FASB) drafted it. The two international bodies launched<sup>585</sup> on March 2009 a discussion on defining some common points of view for including in the future the lease in accountancy.

Both standards stated above take into account the residual value for setting out the elements of a finance lease contract. The explication is that, next to lease instalments, the residual value is a potential exit of the user’s cash flow. The residual value is “real or estimated market value of the asset taken over in lease at the end of the contract”<sup>586</sup>. The residual value must not be mistaken for the recovery value that is “estimated value of a fixed asset at the end of its regulated life span”<sup>587</sup>. There must be stated that, as against the international standards the supply a separation of the residual value in guaranteed and unguaranteed, the Romanian standards do not supply this differentiation.

For the lessor, the guaranteed residual value is, according to IAS 17, that part of the residual value that is guaranteed by the lessee or by a third party not affiliated to the lessor that may, from a financial point of view, fulfill the obligations assumed through the guarantee. For the lessee, the guaranteed residual value is that part of the residual value that is guaranteed by the lessee or by a party affiliated to it.

The unguaranteed residual value is that part of the residual value whose achievement by the lessor is not certain or only a party affiliated to the lessor guarantees it. The lessor estimates this value and it is very important for it because the net investment in the lease operation will be recovered up to the level of the unguaranteed residual value. Through subtracting the guaranteed residual value from the residual value estimated by the lessor, results the estimated unguaranteed residual value. In almost all circumstances, the lessor will know the unguaranteed residual value. The unguaranteed residual value occurs when the lessee acquires an insurance policy from an insurance company against the risks remained uncovered through the insurance achieved by the lessee. To the degree the insurance made is aimed at the risk of achieving the residual value of the good, the part in the residual value that surpasses the residual value guaranteed by the lessee or by a party affiliated to it is deemed, for performing accounting calculus, an unguaranteed residual value.

## **3. Effects of modifications in accountancy estimates achieved by the lessor**

The international standard IAS 8 “Accounting policies, modifications in accountancy estimates and errors” states in paragraph 5 that the modifications of accountancy estimates result from new information or evolutions and, consequently, they are not rectifications of errors. From now on will be emphasized the effects of modifications in accountancy estimates made by the lessor as regards the unguaranteed residual value. This value must be revised regularly because it is the basis of determining the net investment in lease.

According to the provisions in paragraph 4 from IAS 17, the net investment in lease is the gross investment in lease updated at the implicit interest rate from the lease contract. The gross

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584 Colasse, B., 2000 – Comptabilité Générale, 6e Édition, Economica, Paris, p.20.

585 <http://www.leaseurope.org/uploads/documents/press-releases/pr090320.pdf>.

586 Achim, M.V., 2005 – Leasingul: o afacere de succes, Editura Economică, București, p. 137.

587 Constantinescu, C.C., 2006 – Leasingul financiar: realitate și perspectivă, Editura Economică, București, p. 133.

investment in lease is the sum between minimum lease payments received by the lessor and the unguaranteed residual value.

The minimum lease payments are those payments during the lease period that the lessee must or will be bound to make, excluding the contingent rent, the costs of services and the taxes that the lessor will pay and that will be reimbursed to it together with the following:

- for the lessee – any amounts guaranteed by the lessee or by a party affiliated to the lessee;
- for the lessor – any residual value guaranteed to the lessor by the lessee, by a party affiliated to the lessee or by an independent third party able from a financial point of view to satisfy this guarantee.

Let us take into account a finance lease contract in which a lessee takes over on 03.01.N., in lease a vehicle from a lessor, for a four-year period. The lessor purchased the vehicle from a domestic supplier, for a purchase price of lei 90 000. At the time of concluding the contract, the lessor collects a down payment of lei 18 000. The interest rate provisioned in the contract is 10%. The guaranteed residual value is lei 14 000. The unguaranteed residual value is lei 3 236. The value of minimum lease payments is set out to lei 19 000. Payments occur annually, at the end of each lease period. We will consider that the unguaranteed residual value is revised at the end of year N+2, the revised value being lei 2 236. We have in view analyzing the evolution of lessor's results following the modification in the unguaranteed residual value.

In table no. 1, the minimum lease payments are divided in two components: reimbursing part of the initial investment and reimbursing the net investment, this being compensating the lessor for its investment and services that represents a financial income. For the lessor, the minimum lease payments made by the lessee will be registered as royalty collected annually.

**Table no. 1: The status of the net residual investment according to the unguaranteed residual value estimated initially**

| <b>Payment date</b>       | <b>Royalty</b> | <b>Interest</b> | <b>Reimbursed capital</b> | <b>Net residual investment</b> |
|---------------------------|----------------|-----------------|---------------------------|--------------------------------|
| (1)                       | (2)            | (3) = 10% x (5) | (4)=(2)–(3)               | (5)                            |
| 03.01.N – Down payment    | 18 000         | -               | 18 000                    | 90 000                         |
| 03.01.N+1                 | 19 000         | 7 200           | 11 800                    | 72 000                         |
| 03.01.N+2                 | 19 000         | 6 020           | 12 980                    | 60 200                         |
| 03.01.N+3                 | 19 000         | 4 722           | 14 278                    | 47 220                         |
| 03.01.N+4                 | 19 000         | 3 294           | 15 706                    | 32 942                         |
| 03.01.N+4 residual value: |                |                 |                           | 17 236                         |
| - guaranteed              | 14 000         |                 | 14 000                    |                                |
| - unguaranteed            | 3 236          |                 | 3 236                     |                                |
| <b>Total</b>              | <b>111 236</b> | <b>21 236</b>   | <b>90 000</b>             | -                              |

There must be stated that the lessor does not recover the amount lei 3 236 through the royalty, this amount representing the unguaranteed residual value. The lessor will recover its investment in the lease operation up to the unguaranteed residual value.

According to the estimations made at the time of initiating the lease contract and after analyzing the information in table no. 1, the following data may be determined:

- initial gross investment  $Ig_0 = 111\,236$  lei;
- uncollected financial income  $Ifu_0 = 21\,236$  lei;
- initial net investment  $In_0 = 90\,000$  lei.

By keeping the initial estimations, two years after beginning the development of the finance lease contract will be obtained the following data:

- gross investment  $Ig_2 = 19\,000 + 14\,000 + 3\,236 = 55\,236$  lei;

- uncollected financial income  $Ifu_2 = 8\,016$  lei

$$Ifru_2 = 55\,236 - (19\,000/1,1 + 19\,000/1,1^2 + 14\,000/1,1^2 + 3\,236/1,1^2) = 8\,016 \text{ lei};$$

- net investment  $In_2 = 55\,236 - 8\,016 = 47\,220$  lei.

After revising the unguaranteed residual value, at the end of year N+2, the following data are obtained:

- revised gross investment  $Ig_r = 19\,000 + 19\,000 + 14\,000 + 2\,236 = 54\,236$  lei;

- revised uncollected financial income  $Ifu_r = 7\,842$  lei

$$Ifu_r = 54\,236 - (19\,000/1,1 + 19\,000/1,1^2 + 14\,000/1,1^2 + 2\,236/1,1^2) = 7\,842 \text{ lei};$$

- revised net investment  $In_r = 54\,236 - 7\,842 = 46\,393$  lei.

Data concerning the gross investment, the uncollected financial income and the net investment are registered in table no. 2.

By comparing the values obtained according to the initial estimation to the ones obtained after revising the unguaranteed residual value, adjustment of the gross investment, uncollected income and net investment are obtained that influence that financial status and results of the lessor.

**Table no. 2: Adjusting the net investment at the end of year N+2**

| Element                          | Values obtained according to the initial estimation |          | Revision | Adjustment |
|----------------------------------|---|----------|----------|------------|
|                                  | Year N  | Year N+2 | Year N+2 | Year N+2   |
| Gross investment (1)             | 111 236   | 55 236   | 54 236   | - 1 000    |
| Uncollected financial income (2) | 21 236  | 8 016    | 7 842    | - 174      |
| Net investment (1 – 2)           | 90 000  | 47 220   | 46 394   | - 826      |

The lessor will have to acknowledge the difference of lei 826 as loss. The gross investment in the lease operation is diminished by lei 1 000, and the unachieved financial income diminished by lei 174. All these adjustments are due to modifying the unguaranteed residual value at the end of year N+2.

The value of minimum lease payments is not altered; it is set out in the contract. Modifying the accounting estimations is made only in the structure of minimum lease payments, applying the current and future financial statements according to IAS 8 “Accounting policies, modifications in accountancy estimates and errors”.

The new structure of royalties and the new values of the net residual investment, determined after modifying the accounting estimations, are supplied in table no. 3.

The lessor does not recover the amount lei 2 236, representing the unguaranteed residual value, through royalty and that is why it must be taken into account for calculating the net investment.

**Table no. 3: The status of net residual investment after modifying the unguaranteed residual value**

| Payment date              | Royalty | Interest        | Reimbursed capital | Net residual investment |
|---------------------------|---------|-----------------|--------------------|-------------------------|
| (1)                       | (2)     | (3) = 10% x (5) | (4)=(2)–(3)        | (5)                     |
| 03.01.N – down payment    | 18 000  | -               | 18 000             | 90 000                  |
| 03.01.N+1                 | 19 000  | 7 200           | 11 800             | 72 000                  |
| 03.01.N+2                 | 19 000  | 6 020           | 12 980             | 60 200                  |
| 03.01.N+3                 | 19 000  | 4 639           | 14 361             | 46 394                  |
| 03.01.N+4                 | 19 000  | 3 203           | 15 797             | 32 033                  |
| 03.01.N+4 residual value: |         |                 |                    | 16 236                  |

|                |                |               |               |   |
|----------------|----------------|---------------|---------------|---|
| - guaranteed   | 14 000         |               | 14 000        |   |
| - unguaranteed | 2 236          |               | 2 236         |   |
| <b>Total</b>   | <b>110 236</b> | <b>21 062</b> | <b>89 174</b> | - |

Adjusting the gross investment, the uncollected financial income and the net investment following the modification of accounting estimations generations modifications in the lease operation's results for the lessor. These modifications are determined according to the data in the tables presented above and they are gathered in table no. 4.

*Table no. 4: Effects of modifying the unguaranteed residual value on the lessor's results*

| Years           | Element   | Initial variant | Rectified variant | Adjustment  |
|-----------------|---|-----------------|-------------------|-------------|
| <b>Year N+1</b> | Financial income                                      | 7 200           | 7 200             | 0           |
|                 | <b>Gross result</b>                                   | <b>7 200</b>    | <b>7 200</b>      | <b>0</b>    |
| <b>Year N+2</b> | Financial income                                      | 6 020           | 6 020             | 0           |
|                 | Expenses from diminishing the net investment in lease | -               | 826               | 826         |
|                 | <b>Gross result</b>                                   | <b>6 020</b>    | <b>5 194</b>      | <b>-826</b> |
| <b>Year N+3</b> | Financial income                                      | 4 722           | 4 639             | -83         |
|                 | <b>Gross result</b>                                   | <b>4 722</b>    | <b>4 639</b>      | <b>-83</b>  |
| <b>Year N+4</b> | Financial income                                      | 3 294           | 3 203             | -91         |
|                 | Expenses in the unguaranteed residual value           | 3 236           | 2 236             | -1 000      |
|                 | <b>Gross result</b>                                   | <b>58</b>       | <b>967</b>        | <b>909</b>  |
|                 | Accrued financial income                              | 21 236          | 21 062            | -174        |
|                 | Accrued expenses                                      | 3 236           | 3 062             | -174        |
|                 | <b>Accrued gross result</b>                           | <b>18 000</b>   | <b>18 000</b>     | <b>0</b>    |

After analyzing the data in table no. 4, can be seen that modifying the unguaranteed residual value after two years since initiating the finance lease contract generates an adjustment of the financial income, as well as of the expenses accrued by the lessor in the four years of developing the contract. In year N+2, the gross result diminishes by lei 826 after recording the expense from diminishing the net investment in lease. In year N+3, diminishing the financial income by lei 83 generates a reduction of the gross result by the same amount. In year N+4, the value by which expenses are diminished is greater than the value by which the income is diminished, and its influence on the gross result is positive. The accrued gross result is the same in both cases because the accrued expenses and the accrued income are adjusted by the same value.

#### 4. Conclusions

The residual value is a key element for calculating lease instalments, as well as the other cost elements of the lease operation. The greater the residual value, the more increases the cost of financing and the risk assumed by the lessor is greater also. The financier can estimate the residual value according to its development strategy and its ability to manage risks.

Unlike IAS 17 that supplies a difference between the guarantees residual value and the unguaranteed residual value, the Romanian standards in the lease area do not supply this differentiation. We believe that according to the provisions of IAS 17, the lessor can revise regularly the unguaranteed residual value. Given the fact that the net investment in lease is recovered up to the level of the unguaranteed residual value, the preferred idea would be for the unguaranteed residual value to be diminished at the time of the revision. Such a modification of

the accountancy estimation, allowed by IAS 8, will allow the lessor to diminish the risk of the residual value and, at the same time, to maintain its financial results and status.

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# THE IMPORTANCE OF KNOWING THE ENTERPRISE'S HIDDEN COSTS

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*The cost is one of the most important indicators at the level of the enterprise. The exact determination of the cost presents a special importance for appreciating the performances of the company. Disfunctions appear in the activity of any enterprise and their correction actions generate hidden costs. The hidden costs are a little or at all identified by the traditional systems of management accounting. The paper proposes the presentation of hidden costs which appear in the enterprise's activity, of the evaluation method, as well as the presentation of some opinions regarding the reduction possibilities of hidden costs.*

*Keywords: hidden costs, visible costs, disfunction, decision*

*Jel Codes: M41, M42*

## **Introduction**

The base function of the economic informational system within the enterprise is to produce information on the basis of which decisions are adopted. The accounting offers the greater part of this information, being one of the principal components of the economic informational system. In the process of elaboration of decisions, the information regarding the cost has an important role, the managers being interested not only in the enterprise's former costs but also in the future costs. The management accounting offers information regarding the costs level but its role is not reduced only to costs calculation, but it has to allow to the decision factors within the enterprise to act for their control.

An enterprise is considered performant if it succeeds in creating value for its shareholders. Between costs and performance, there is a direct relation, a high level of costs has as effect a low level of performance and inversely. The performance analysis is not sufficient, the managers having to administrate the performance. The information regarding the cost influences the elaboration process of economic-financial decisions within the enterprise on various ways: the relation cost-price, relation cost-profit, relation cost-economic efficiency.

We cannot dimension the company's performance if we don't succeed in the precise determination of costs generated by the enterprise's activity. Those who take decisions within the enterprise don't have the same degree of control over all costs. Thus, resulting the necessity that the decision factors identify the costs they can influence and the costs they cannot influence.

The limited character of available resources and the desire of managers and shareholders to increase the enterprise's financial performance, enhance the need to know more precisely the costs level.

According to the opinion of professors Kaplan and Atkinson, the information regarding the costs is important for managers for at least three reasons<sup>588</sup>:

- on the cost basis, there are decided the product's purchase, manufacture or abandoning and it is influenced the nature of relation with clients;
- the costs can represent a base for prices substantiation;

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588 Kaplan, R.S.; Atkinson, A.A., Advanced Management Accounting, third edition, Prentice Hall International, 1998, p. 222.



- through the cost analysis, there are identified the needs of improvement of products, design or production process.

### **What are hidden costs?**

The traditional management accounting centred upon the registration and pursuit of costs supported by the enterprise for the achievement of its economic function. In the last decades, there was a great emphasis on the enterprise's social function that generated a series of hidden costs, unexplained by the traditional systems of management accounting.

The professor Henri Savall from ISEOR (The Social-Economic Institute of Organisations and Enterprises) from Lyon, proposed and developed the hidden cost-performance method. The method was experienced in various areas of activity and in companies of different sizes, having between 20 and 18.000 employees.

A cost is considered hidden if it doesn't appear explicitly in the information systems of the enterprise. In exchange, the visible costs are those which are detected by these systems.

The visible costs present three fundamental characteristics:

- have precise denominations, normalized and recognized;
- are analysed after known and precise rules;
- are the object of a regular supervision which has as purpose the checking of their evolution in comparison with a certain settled objective.

H. Savall and V. Zardet consider that any element of the cost that lacks one of the three properties is by definition a "hidden cost". Other authors consider that the particularity of hidden costs is that they are engaged out of the official procedure although achieving considerable levels.

The enterprise's activity is permanently perturbed by the disfunctions appearance. The enterprise react to correct these disfunctions. These actions of correction generate some costs for the enterprise: losses due to the functioning at an inferior level to that programed, additional wage expenses for the employees that replace the absent ones, overconsumption of energy, additional external services, wastes e.t.c. Thus, the hidden costs represent the monetary expression of correction activities of disfunctions.

The costs due to disfunctions represent the difference between real functioning and the ideal functioning of the enterprise. The concept of ideal functioning of the enterprise refers to achievement of objectives taking into consideration the constraints and limits of social, psychological and physical nature of the employees, considered not only individually but also collectively.

In the specialty literature, the cost is dealt with not only as an expression of factors consumption in order to produce something, but also as sacrificed chance, as a renunciation cost to something else. We can mention also in the range of hidden costs „the postponed occasions costs". These represent the profit lost as a result of nonrealization of a product, service or work at the convenient time.

The costs and hidden performances are in relation of reciprocal determination thus: an increasing cost means low performance, and a low cost means the increasing of enterprise's performance.

There are known phenomena at the origin of hidden costs. The hidden costs are supported from results and are not isolated as such, not being related to the phenomenon that generated them. For instance, the quality low cost in the manufacture process has as consequence the increase of return cost of bad products or the increase of control costs.

For the disfunctions correction, the enterprise supports some additional costs. These are related to an additional human activity or to an additional consumption of material resources. Thus, the enterprise consumes additional material resources for the disfunctions correction, and its staff is obliged to develop additional activities which they wouldn't have developed in the case of normal functioning of the enterprise.

H. Savall and V. Zardet consider that there are five disfunctions<sup>589</sup> generated by anomalies, perturbations or deviations between ideal functioning and that stated by the enterprise: absenteeism, work accidents, staff rotation, quality defects and diminution of direct productivity. The disfunctions may enhance hidden costs in six organizational domains: time management, work conditions, work organization, implementation of the strategy, integrated training and communication-coordination-pursuit of objectives.

The hidden costs divide into two categories. The first category is formed of hidden costs that are comprised in visible costs. These are effective costs and correspond to the real losses of the enterprise. The second category is formed of hidden costs which are not comprised in the visible costs. These are also called potential costs and are represented by absence of production resulted from disfunctions. These are virtual costs, corresponding to a subactivity.

The hidden costs may have also external causes as: strikes of public services or their adverse functioning, the justice's incapacity to solve in time the commercial litigations.

### Hidden costs evaluation

Hidden costs evaluation is made extra bookkeeping and it is based on the very precise determination of disfunctions and of their consequences, from inside by those with full knowledge of the case.

For the hidden costs evaluation, we have in view five components: excess salaries, overtimes, overconsumption, nonproduction, noncreation of potential.

Excess salaries refer to wage deviations which appear when the absent employee is replaced by another with a bigger wage or by additional staff. Also, excess salaries are a consequence of lack of staff and time spend for the errors correction of some employees.

Overtimes correspond to the correction activities as formation of a substitute, useless activities deployed by some employees, activities of searching information, inefficient equipments.

Overconsumption represents the additional consumption of material resources (energy, materials and other consumptions which wouldn't be necessary if the company hadn't disfunctions).

Nonproduction analyses the absence of activity caused by events as equipments flaw, work accidents, strikes. This component corresponds to lost occasions to realize and sell a product.

Noncreation of potential represents the cost in human times of immaterial investment actions at which the enterprise has been obliged to give up temporarily, as its decision factors were concerned with disfunctions correction and hadn't enough time to look after strategy. The delay of an investment can lead to rentability compromising, and in this case we deal with a strategic hidden cost.

Hidden costs evaluation can be made on the model<sup>590</sup> from the Table no.1.

| Indicators          | Excess salaries (1) | Overtimes (2) | Over-consumption (3) | Non-production (4) | Non-creation of potential (5) | Total hidden costs (1+2+3+4+5) |
|---------------------|---------------------|---------------|----------------------|--------------------|-------------------------------|--------------------------------|
| Absenteism          |                     |               |                      |                    |                               |                                |
| Work accident       |                     |               |                      |                    |                               |                                |
| Staff rotation      |                     |               |                      |                    |                               |                                |
| Quality of products |                     |               |                      |                    |                               |                                |
| Deviations          |                     |               |                      |                    |                               |                                |

589 Savall, H.; Zardet, V., Maitriser les couts et les performances caches, Economica, Paris, 1995, p. 127-132.

590 Savall, H., Les couts caches et l'analyse socio-economique des organizations, Encyclopedie de gestion, Economica, Paris, 1997, p. 715.

|                     |                  |  |  |                   |  |  |
|---------------------|------------------|--|--|-------------------|--|--|
| from productivity   |                  |  |  |                   |  |  |
| TOTAL               |                  |  |  |                   |  |  |
| Economic concepts   | Historical costs |  |  | Opportunity costs |  |  |
| Accounting concepts | Overexpenses     |  |  | Non-products      |  |  |

**Table no.1. Model hidden costs evaluation of the enterprise**

**Source:** Savall, H., -, „Les coûts cachés et l’analyse socio-économique des organisations”, Encyclopédie de Gestion, Economica, Paris, 1997, p.720.

In the case of absenteeism, the enterprise pays not only the wages of absent employees but also those of their substitutes. We have to take into consideration the fact that the persons called to replace the absent ones are without experience, fact that generates losses at the work place and the carrying out of some work tasks behind time. Beside the absents and substitutes’ wage, the enterprise has to support also the wage of the person that instructs the substitute.

The quality faults of products have to be remedied, and this activity implies additional work time, wages and material resources consumption.

### Conclusions

The financial performance of the enterprise is improved when it succeeds in reducing the proportions of its disfunctions. This performance, obtained by diminution of hidden costs is not reflected separately from accountancy and thus, it is called hidden performance. The hidden costs reduction offers to the enterprise additional resources that can be used for development or for survival on the market.

The knowledge of all enterprise’s costs is usefull for those who decide in the enterprise not only for its analysis but also for the performance administration. In present economic conditions, a rigorous control is imposed over all categories of resources that the enterprise disposes of.

The world-wide studies demonstrated that by their size, the hidden costs are important for companies, aspect that lead to the finding of solutions for their diminution.

For the reduction of hidden costs level, it is necessary to act over the causes of disfunctions which appear within the enterprise. These causes are characterized by diversity and complexity. The hidden costs evaluation is influenced by the enterprise’s dimension, by the complexity of its activity and by the organization method of the accounting informational system.

In the reduction of hidden costs an important role is due to the enterprise’s staff. Each employee of the enterprise is a possible generator of hidden costs, as he can create disfunctions within the enterprise.

The enterprise has to follow not only the attainment of economic-financial performance but also of the social and environmental one. The improvement of costs-hidden performances method must be one of the objectives of administration accountancy. The costs-hidden performances method is difficult to put into practice despite the advantages offered. The determination of disfunctions and costs generated by these is difficult and implies other costs.

In our opinion, the hidden costs of the enterprise can be greatly reduced but not totally eliminated. Thus, the enterprise has the possibility to eliminate the greater part of its disfunctions, but it couldn’t act over the external causes generating hidden costs as the public services strikes or the difficult functioning of justice system.

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# RECENT DEVELOPMENTS OF MANAGEMENT CONTROL: PILOTING AND SOCIAL REPORTING

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*Recognition of human resources as the main source of value creation and competitive advantage has led to increased concerns of researchers to measure how important this resource is valued at organizational level. Quantification of the social component, translated through the adoption of appropriate indicators, has a relatively long life, after the accounting attempts of E. Framholtz (1960) and Scandinavian approaches. The paper analyses, in a first phase, the use of social indicators in the control of management, then highlights the latest developments in the field, offering new perspectives of quantification of human resources' contribution in organizational performance, in the new concept of responsibility towards the company environment.*

*Keywords: social management, control, evolution, piloting, social reporting*

*Jel classification M1, M2, M4*

## **I. Use of social indicators**

### ***I.1. Issues and objectives of social control management***

R. Anthony and Dearden define management control as "the process by which managers ensure that resources are obtained and used efficiently and effectively in achieving organizational objectives." In this process human resources constitutes a major chapter, by itself, with a specific name, that of social control management. B. Martory considers the social control management one of the components and extensions and control management system...a system of social support in piloting the organization, with the objective to contribute to the management of human resources in terms of performance and cost.

Management control objectives are socially attached to the four major lines of action which is characteristic, namely:

- *to inform*, which is achieved by tracking social data and measurement results accompanying social policies;

- *to diagnose*, detect the disruptions and the causes that they generate;

- *to foreseen*, respectively to alert about disruptions identified and to anticipate the developments;

- *to manage*, which means to improve social management and guide components for the purposes of human resources policies.

Although they have many similarities and uses mostly the same indicators, the management is different from social audit:

- *social audit* can be internal or external, may be directed to a part of the organization (department, service) or a key category of the employees. It is a fragmentary approach and has no connection with the current systems of managing the company. Social control management is different because it integrates usually to the permanent budget management, providing an essential element of it;

- *social audit* is distinctive in the large decentralized organizations, which have established procedures and check how they are respected by its various sub-units. Its main

objective is not aimed to facilitate the decision, but the appreciation of conformity of information systems and social decision rules and with legal requirements.

### ***I.2. Social indicators***

Researches conducted in the management of social indicators have revealed their existence in numerous works since the 1980s, but in practice, in this last case to a lower measure. Analysis is carried out according to various criteria, which are the economic contribution of human resources at the performance of the organization, structural developments of the staff, the development on activities, and developments of quality matter.

**Economic and financial indicators.** By these indicators can be measured the economic contribution of human resources or the human resources function to the performance of the organization. The most known are the indicators of productivity, efficiency, using in the numerator an indicator of the work submitted, and in the denominator a human environment index, expressed in value or volume.

Table 1 gives examples of using the most economic-financial indicators in the management of social control.

Group III of the indicators occurred recently in the Anglo-Saxon countries, with the emergence of financial performance indicators aimed at assessing the value creation for shareholders, namely: economic value added, market value added, added value of human capital and the rate of investment in human capital.

All these indicators should be analyzed with caution, particularly those specific to labor productivity, named, therefore, apparently because hiding behind their qualitative intangible are factors to be considered, such as the organization, quality of coordination between teams, competence of employees etc. therefore, the size of productivity, for example, may take place by reducing the denominator, increasing the numerator, or by movements of both sides.

| <b>No.</b> | <b>Group of indicators</b>          | <b>Indicators</b>  |
|------------|-------------------------------------|--|
| I.         | Productivity indicators             | <ol style="list-style-type: none"> <li>1. Turnover / Staff</li> <li>2. Value added / Staff</li> <li>3. Value added / Fund salaries</li> <li>4. Production / Staff</li> </ol>   |
| II.        | Indicators of human resources costs | <ol style="list-style-type: none"> <li>1. Personnel expensives / Staff</li> <li>2. Fund salaries / Turnover</li> </ol>   |
| III.       | Indicators of financial management  | <ol style="list-style-type: none"> <li>1. Human Economic Value Added (HEVA), as:<br/>Economic Value Added / Staff</li> <li>2. Human Capital Value Added (HCVA), as:<br/>Turnover – (Expenses - Remuneration) / Staff</li> <li>3. Human Capital Return of Investment (HCROI):<br/>Turnover - (Expenses - Remuneration) / remuneration</li> <li>4. Human Capital Market Value (HCMV), thus calculated:<br/>Market value added / Staff</li> </ol> |

**The structural indicators.** This group of indicators allows the characterization of structure and organization staff and may serve in actions of benchmarking between multiple centers of responsibility. As criteria can be used the level of education, profession, distance from the operational center (direct and indirect employees), but also age and sex in a very used tool in the human resources management, such as the age pyramid.

**Specific indicators of human resources function.** Basic activities that occur in human resources management such as recruitment, training, remuneration, therefore increasing importance for the human factor in the enterprise, some requirements in terms of quality, deadlines and compliance with budgetary provisions. For each of these activities have appeared indicators that are following the triptych “cost, term, quality”.

**Indicators of social climate.** Social climate can be identified as the degree of satisfaction that the staff has in an organization and can be appreciated through groups of quantitative indicators, which shows external movements (the turnover), absenteeism, conflictuality but also qualitative, by which is meant to assess its degree of satisfaction and involvement. Measuring staff satisfaction involves conducting a survey or a poll to the staff organization, their own questionnaire or by using a validated questionnaire, such as that proposed by the Minnesota Satisfaction Questionnaire (MSQ). In a similar way may proceed in the case of measuring staff involvement, they get an overall score through the famous OCQ [Organizational Commitment Questionnaire], finished by a group of researchers headed by L.W. Porter.

A more representative and more analytical instrument, which offers opportunities for diagnosis and identification of disruption, therefore with a high operational in May, was finished by B. Martory.

Besides social climate indicators can be placed and those who aim to measure the professional risk of occupational health. They follow mainly the situation of work accidents.

## **II. Social responsibility of the organization [SRO] and use of the human resources indicators**

Social indicators have a new area of application, following the emergence of new management tools and evolution of management models in recent years. The latest developments, characterized by paying attention to social responsibility of the organization, have directed the use of social indicators in models of reporting or piloting of sustainable development.

### ***II.1. Fundamentals and factors of evolution of social responsibility of organization***

A first definition of social responsibility of the organization is offered by the European Commission, which considers it as "voluntary integration of environmental concerns and social enterprises in their commercial activities and relationships with stakeholders". Social responsibility of the organization is today a concept related to the concept of sustainable development which means that the organization must take care not only to its growth and profitability, but also the impact of its activities on the environment and on all social aspects, present and future. The envisaged stakeholders are shareholders, managers, employees, customers, providers, social partners, community, collectivities etc.

Norms have appeared (ISO 14001, Social Accountability, SD 21000, etc.) and European texts that introduced the concept of sustainable development or aspects of its rules through quality, safety and environment. Several NGOs have passed a reference of principles and standards in the field of auditing or reporting of social environment, such as Accounting 100, Global reporting initiative etc. Following such steps, many European companies are advancing an annual environmental report and social called “report of social development”.

New issues of social responsibility is, for many companies, a set of constraints regarding the financial rules, the environmental, quality, security, health work, pressure from NGOs, new rules of international competition, that compel them to be more transparent and to extend in this way, their reporting practices.

Organizations in OECD countries are faced with increasing demands of the community in respect to major social and ecological balances. Voluntaristic environmental policies of the community and international institutions are well received by the public concerning an increased vigilance for companies. In the face of such changes in attitude, organizations must integrate

environmental variables and social systems in their management, to develop systems of reporting and social pilotage.

## ***II.2 Reporting and social responsibility of organization***

Most of the western organizations publish an annual report of environment. In France, by the New Economic Rules, Article 116, companies listed on regulated financial markets are required to publish information on environmental consequences and their social activities. As a form, such information is included in special sections in company's annual report (extracted from the social balance through social indicators) or a separate report. These documents can be found and investigated by the Internet, under "Investors" rubric of important organizations.

Regarding this form of reporting, it appeared a full international standard who has the tendency to impose the Global Reporting Initiative (GRI). Adopted at the end of 1997, this rule has the mission to develop directives for global application performance to meet economic, environmental and social enterprises, and to governmental and nongovernmental organizations. Adopted by the coalition for responsible environmental economies (CERES) in association with the United Nations Environment (PNUE), GRI incorporates the active participation of the enterprises, NGOs, accountancy organizations, associations of businessmen and other organizations around the world, proposing a set of structured principles and a battery of important economic indicators, environmental and social.

Given the recent appearance of GRI, the specialists who study issues of social responsibility have emphasized two components may that can appear to the organizations:

- a real reporting, located at the same level with the accounting records of accounts, through which are informed the stakeholders about the existing situation;
- an institutional communication developed by enterprises that are not truly socially responsible and follow only a picture of "civic enterprise."

Identifying the true position of the organization assumes the deepening of the analysis to the level of internal management systems, to realize to what extent the environmental variables and social indicators are included in the balanced scorecards, in the objectives of staff, in its internal management. However, the same experts have pointed out that many large enterprises develop a genuine pilotage at social responsibility level.

## ***II.3. Piloting social responsibility of the enterprise***

The most popular approaches for piloting social are those of the "way" type, which suggest the involvement of all actors responsible of the company, through internal audits and self systems. For many companies the question is how to translate into practice the environmental variables and the social ones, how to mobilize all stakeholders around the value and how to take their behavior accordingly. Therefore it appeared in such an application of the BSC method the sustainable development issues.

Although initially Kaplan and Norton have not directly addressed the problem of integrating sustainable development and social responsibility in the BSC, it was more or less mentioned in different versions that have subsequently developed. The social data is on an adequate place in training and innovation axis, in the form of objectives and indicators such as reducing absenteeism and mobility eternal, satisfaction of staff and sometimes more general data such as on "being a good neighbor", accompanied by indicators as the number of ecological accidents or security.

BSC encourages aligning all operational activities to the vision of long-term strategy, and the question of opportunity and integration into the current issues of piloting sustainable development. To answer to these demands, several researchers have proposed the development of the existing model, and thus appeared the 'Sustanaible Balanced Scorecard ', abbreviated SBSC.



A research program supported by the University of St. Gallen, and Lueneburg and INSEAD has made several experiments in enterprises and has submitted proposals in this regard. For many researchers, SBSC is translated by adding a fifth axis, called "Society" or "Non-market" or through the introduction of sustainable development strategies within the existing four axes. Bieker and Gminder identified five models of integration of environmental dimensions in the social and BSC:

- **partial approach**, whereby one or two indicators of sustainable development are integrated in a few well-chosen dimensions of the BSC;
- **additional approach**, which adds a fifth axis of the four axes of the traditional BSC;
- **a total approach** that integrates environmental and social aspects in all axes BSC, thus allowing the organization in promoting a strong knowledge related to sustainable development;
- **addressing the cross**: in this case the strategies of sustainable development are included in the schedule "cause-effect" as indicators of value, allowing the fulfillment of the vision and strategic objectives;
- **the "shared function"** means disclaimer BSC level of a specific Direction for Sustainable Development, by the Human Resources Scorecard, which BSC was adopted to the human resources function.

### ***Conclusions***

In further years is remarked a considerable development of social control management, especially through the appearance of piloting and reporting using a well structured overview of indicators. Besides the social management, management control himself integrated in a global and strategic vision, the human dimension in the models that we use. It's a natural evolution, closely related to the general evolution of managerial models that consider human resources, through their knowledge and skills are key resources of enterprise, value creation and competitive advantage. The evolution of social control management recorded steps with the appearance of Balanced Scorecard, a Scandinavian approaches in terms of intellectual capital and social indicators that is evolving today on a promising through reporting systems and piloting of social responsibility and enterprise development sustainable. These indicators seek to measure social dimension, to transform qualitative variables by their nature (competence, work satisfaction, involvement) in quantitative variables by means of a global score. Other efforts are made in the development of reporting systems and piloting of social enterprise through the creation or adaptation of adequate instruments for measuring.

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## THE ROLE OF SUPREME AUDIT INSTITUTIONS IN THE EFFICIENT MANAGEMENT OF BUDGET EXPENSES

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*The Supreme Audit Institutions (SAIs) perform the external audit on public entities and are designed to closely monitor the performance management of the financial resources in the public sector, as well as the state public and private patrimony management. In order to provide a fair and unbiased monitoring report, the Court of Accounts or the Supreme Audit Institutions, as they appear in the specialized literature, must be independent politically and also they must put an obstacle in the path of clientism-based group interests, both political and economic.*

*The Supreme Audit Institutions or The Court of Accounts, in case of our country, should always concentrate on aspects such as „value for money”, as well as on efficiency and effectiveness in terms of maximal cost-effectiveness, because state resources are limited compared to its needs and to the needs of the interested parties outside the system*

*Key-words: external audit, SAI, performance audit, performance measurement system (PMS)*

*JEL: M42*

The word “audit” derives from the Latin verb *audire*, which means “to listen to”. Starting from this primary sense, it was modified in time, thus getting to the meaning of audition, control in English and French. As practice, we can find it even in the earliest of times. Around 1559, Queen Elisabeth the First imposed formal attributions for auditing payments to the royal treasury. Thus, if we assimilate “royal treasury” with the modern “state budget”, we can say that this noble profession dates back from the XVth century. In 1866, the National Audit Law regulates the public audit in Great Britain. The law was amended and completed in 1921 and 1983, when the right of the Controller and Auditor General to carry out the performance audit came into force. The British National Audit Office’s motto is: „Let’s help the nation spend wisely!” The objectives in view refer to the cost-effectiveness and the efficiency of using public money, as well as to the program audit, which includes determining the degree in which the expected results and benefits are reached, or whether the entity has observed the main laws and regulations concerning the respective programs.

The term of audit in the extended sense was made popular by means of the Anglo-Saxon accounting expertise practices all over Europe and was assimilated by many countries in the 1960’s.

In Romania, it has been adopted along with the alignment of the national accounting regulations to the international and European standards and norms. The objective of the audit is generally the enhancement of economic, accounting or any other type of information. The audit is manifested in almost all the areas of the economic and social life, such as quality, management, etc.

We can say that the performance management of the financial resources in the public sector, as well as the state public and private patrimony management represents the most evolved form of external audit, to which the Supreme Audit Institutions in all the Western countries and not only tend to. As it is commonly known, the financial resource of a state is perhaps the only limited resource closely watched by all the contributors. Therefore, the analysis of the management of this resource is performed both by specialists and by dilettantes whose opinions are easily made public, even if they are not properly informed and negatively affect the resource's manager in most cases. For this reason, but not exclusively, the performance management of the financial resources in the public sector, as well as the state public and private patrimony management is vital for the provision of beneficiaries with accurate and certified information.

The internal control together with the evaluation and the audit consist of processes and mechanisms designed to ensure that fact that the budget planning and the use of public resources are made according to the law, observe the strategy objectives established by the government and the Parliament and are connected to the real world of operations and programs. In the absence of such mechanisms, the political decisions would risk being based on distorted information and to be ignored by the relevant operative organization, while the resources would risk being poorly managed. An important function of the audit in the public sector is to provide the decision-making boards with regular and permanent guarantees as to the quality of reports referring to expenses and that way the assets and bounds under public control are managed.

Public institutions are complex entities with a specific type of management and of decision-making process both at the central and at the local level. This type of institution always functions in an environment affected by powerful political pressure, both in its daily activity and especially during the electoral campaigns or political changes; it is also submitted to changes because of the political pressure. We must not ignore the fact that the management of such public entities is permanently evaluated and scrutinized and often criticized its beneficiaries and by the groups of interests, among which the media, the non-governmental, political or economic organizations, etc.

In the public sector, the audit generally and the performance audit specifically stands for an independent evaluation of the extent to which an activity, program or institution functions efficiently and effectively, while observing the principle of cost-effectiveness.

Performance in public institutions, as well as in the entire public sector, *represents only a relative notion*, whose measurement can be carried out in various ways<sup>591</sup>.

The managers, either active or not from a political point of view, holding the top position in public institutions must be aware of the need to implement performance measurement systems (PMS). The existence of these systems can influence the management processes, with respect to the management decision in all the aspects involved.

The existence, respectively the implementation, application and usage of the performance measurement systems influence the management elements, such as:

- The improvement of budgetary process, respectively of the relationship between the existent resources and the obtained results;
- The functioning of the public institution or entity within the parameters of efficiency, effectiveness and quality of services while observing the principle of cost-effectiveness, the motivation of those involved in the activity of the entity, the staff;
- In order to increase the degree of conformity of the activity without affecting or harming the contributor, the improvement of their activity, as well as of their performance by further education are carried on at European standards;

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591 OECD, 1994, Performance management in government: performance measurement and results oriented Management, Paris, PUMA/Occasional/OSCE

-The continual improvement of the management control mechanisms, as well as the permanent update of the evaluation standards for all the structures within the entity.

It is worth mentioning the fact that the decisive role in implementing and functioning of the performance measurement systems can be completely attributed to the managers involved in the activity of the public entity, but the support for its application, as well as the provision of feedback represent matters of the competence of auditors, either internal or external.

Although there is a common opinion according to which the operational audit refers to efficiency and effectiveness, using this term has stirred and is still stirring much controversy. In order to describe the control of efficiency and effectiveness of public entities, the preferred term by most people is manager audit or management audit, while the term of operational audit is ignored.

These persons usually opt for the definition of the operational audit in its extended sense, including the evaluation of the internal control mechanisms as part of an auditing process. Others do not agree that there is a difference between the terms “management audit”, “operational audit” and “manager audit”.<sup>592</sup> Quite a few prominent specialists prefer the extended sense of the notion of operational audit, if we consider the condition that the aim of the test is determining the efficiency and effectiveness of each component of the public institution.

The management audit tests the decisional system of the organization, so that it can “mainly provide information on the way in which the audited entity is managed on basis of the principles of cost-effectiveness, efficiency and effectiveness”<sup>593</sup>.

Pollitt C. mentions in his work, “Performance Audit in Western Europe” the four possible roles that a supreme audit institution can play:

-*Public accountant*, - he draws up reports designed to strengthen the responsibility and transparency of public institutions;

-*Management consultant*, - he offers assistance to public institutions;

-*Scientific or research organization*, - they create and disseminate information on the functioning of programs and projects;

-*Judge and magistrate*, - they decide respectively on the legality of the public institutions' activities and on the degree of observance of the legal procedures.<sup>594</sup>

In conformity with the law, in our country, public institutions and organizations have structured internal audit departments. From this perspective, testing the effectiveness and efficiency of the internal control mechanisms by an internal auditor is part of the operational audit only if its objective is to help the public institution or organization manage its activity more efficiently. The major problem is that the above-mentioned departments are only formally functioning within these entities, both at the central and the local level.

The main factors that lead to this type of „formalism” of the audit departments are mostly subjective. Nevertheless, they impede on the consolidation of this activity which is properly considered a valuable resource in increasing the performance in public organization management decision process. An example of such subjective factor is the totally distorted manager perception of the necessity of an audit or of an auditor. The auditors are considered as mere „controllers”, whose job is to check up their decisions and stop the management process. Thus, the confusion between control and audit is perpetuated, whatever its form. Another subjective factor is the lack of management support, but also the incapacity of auditors to impose themselves and to make themselves indispensable to a certain extent in the process of fundamenting management decisions, especially at the local level, where the influences, both political and economic, are obvious. Enumerating such factors can continue, a factor at least as important as the two previous ones being the severe lack of financial resources necessary to properly carry out this activity, in

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592 Arens/Loebbecke – 2003, « Audit – an Integrated Approach », the ARC Publishing House from Chişinău p. 911

593 Bogdan, A.M., Financial Audit in the Conditions of the Alignment to the International Accounting Standards. Possibilities of Improvement <http://wwwbiblioteca.ase.ro/downres.php?tc=2393> pag.43.

594 Pollitt C. - Performance Audit in Western Europe, 2003, p.160.

an independent way that can trigger other factors, such as the lack of specialists in this field at the level of state structures, mostly because of low wages compared to the professional formation and expertise of the auditors, as well as to the excessive volume of work and responsibility. Taking into account all these, we have intentionally left for the end one of the most important factors, which originates from the previous one, that is the poor professional skills of auditors presently functioning in the state structures.

Changing these aspects cannot come from the managers, as it is difficult to change people's perception of what an audit means. Still, it can come as a political decision, stipulating that all the managers of public institutions consult the audit department when making a decision, while imposing that the whole process should be concluded only after a solid information.

Another suggestion of changing this misinterpretation can come from the Supreme Audit Institutions, respectively from the Court of Accounts, which are the institutions that perform the external audit on public entities and are designed to closely monitor the performance management of the financial resources in the public sector, as well as the state public and private patrimony management. In order to provide a fair and unbiased monitoring report, the Court of Accounts or the Supreme Audit Institutions, as they appear in the specialized literature, must be independent politically and also they must put an obstacle in the path of clientism-based group interests, both political and economic. They must be able to make a „cool-headed” analysis of the performance management of the financial resources in the public sector, as well as the state public and private patrimony management.

The Supreme Audit Institutions or The Court of Accounts, in case of our country, should always concentrate on aspects such as „value for money”, as well as on efficiency and effectiveness in terms of maximal cost-effectiveness, because state resources are limited compared to its needs and to the needs of the interested parties outside the system.

The external audit performed by the Supreme Audit Institutions can be vital for the management of government finances. It must cover, if possible, all the financial operations of the public authorities, especially those included in the budget. The external audit should mainly aim at certifying the accuracy of reports concerning budget execution and other financial data, as well as concerning public funds. The Supreme Audit Institutions should first identify the causes generating „loss” and „inefficiency”, starting from their effects, and then make recommendations in order to eliminate them and to consolidate the systems and operations involved.

In order to implement a healthy reform process in this respect, we should include among the priority areas of the external audit reformation the decision to separate the Supreme Court of Accounts from the political influence, as well as to ensure its independent functioning as a government executive branch, by providing appropriate financing and equipment, well-trained personnel in the field of auditing techniques and implementation of analyses and audit based on the 3 E's (efficiency, effectiveness, cost-effectiveness) and on the „value for money” audit type. Last, but not least, we must mention the fact that personal responsibility and special imperative laws, stipulating much more severe punishment for public clerks in comparison with a simple employee for a similar crime are meant to strengthen the reformation process and to consolidate the position of the supreme audit institution, especially in countries experiencing a never-ending transition. We must understand that the poor management of both the financial resources from the public sector, and the public and private state patrimony can be interpreted as undermining the economy, if we take into account the fact that all budget corrections are based on increasing taxes and fees, which are borne by the contributor, both individual persons and companies. This in fact leads sooner or later to the strangulation of the macroeconomy in favor of a clientism-based economy.

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# ADOPTING INFORMATION TECHNOLOGY (IT) IN MANAGEMENT ACCOUNTING IN ORDER TO ACHIEVE IT-BUSINESS ALIGNMENT

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*Practice shows that, in order to improve internal and external communication, managers need to increase the request of information about their business administration. In order to cope with the current requirements, to improve internal and external communication, there is a demand for accurate, reliable and versatile information on financial processes, internal business processes, customer perspectives, learning and growth perspectives and costs.*

*Also, nowadays we assist a rapid development of information technology (IT), the use of electronic instruments in everyday activities of the entities which opens new directions for research regarding: financial perspectives, performances and strategies. Management accounting uses various systems in order to cope with the existing requirements. The Balanced Scorecard (BSC) is a management system that enables organizations to clarify their vision and strategy and translate them into action.*

### *Keywords*

*management accounting, strategy, business alignment, information technology (IT)*

*JEL Classification: M - Business Administration and Business Economics; Marketing; Accounting*

## **1. Introduction**

In present context preoccupations regarding strategies, performances and performance measurement are major challenges within organizations. We are also the witnesses of globalization, technological and organizational mutations, the automation of the production processes.

This entire phenomenon emphasizes the role of management accounting and its instruments. The Balanced Scorecard has become a popular management tool which identifies and measures the indicators of an organization's current operations and the drivers for future performance from four perspectives of the business: financial, customer, internal and innovation and learning.

Moreover, changes of information technology (IT) have been commonplace for many years. The IT industry increased very efficiently and resulted as the intensification and consequences of organizational and environmental changes. In these condition becomes vital the collaboration, strong relationship and communication between management accounting, strategy, performance measurement and information technology.

## **2. Research methodology**

This article focuses mainly on the knowledge in the field of management accounting and information technology (IT), specifically on performance measurement and organizational strategy, through a qualitative approach. Qualitative research can produce significant results with the methods it uses, such as: comparative analysis, interpretive research, action research.

This article is a theoretical study and its purpose is to present the relationship between performance measurement instruments and information technology using information and data gathered from the existing literature and practice on national, European and international level.

### 3. The importance of management accounting and strategy

**Management accounting** was defined by the National Association of Accountants (NAA) as “the process of identification, measurement, accumulation, analysis, preparation, interpretation and communication of financial information, which is used by management to plan, evaluate and control within an organization.”

All and all, the main purpose and objective of management accounting is to become an effective orientation instrument, a dashboard, a consultant in establishing internal and external actions, procedures and decisions which are essential for every organization. The management accountant’s role is to provide managers with feedback information, to enable them to determinate if operations and activities are proceeding according to plans and to identify those activities where corrective actions are necessary. Management accounting<sup>595</sup> should provide economic feedback to managers to assists them in controlling costs and improving the efficiency and effectiveness of operations.

Management accounting information is used for<sup>596</sup> : (1) Formulating strategy; (2) Planning and controlling activities; (3) Disclosure to employees; (4) Decision taking; (5) Optimizing the use of resources; (6) Disclosure to shareholders and others.

Also management accounting involves ensuring that there is effective<sup>597</sup>: strategic planning, formulation of short-term operation plans: budgeting, financial management, communication of financial and operating information, financial control: corrective action to bring plans and results into line, internal audit: reviewing and reporting on systems and operation.

Strategy and strategy implementation also requires continual focus on the change initiatives and on the performance against targeted outcomes. If managers are not energetic leaders of the process, change does not occur, strategy is not implemented, and the opportunity for breakthrough performance is lost.

Usually, an organization begins by developing a strategy statement and then translates it into the specific objectives and initiatives of a strategic plan. As managers execute the strategic and operational plans, they continually monitor and learn from internal results and external data on competitors and the business environment to see if the strategy is succeeding. Finally, they periodically reassess the strategy, updating it if they learn that the assumptions underlying it are out-of-date or faulty, starting another loop around the system.

This activity involves a 5 stage system within an organization<sup>598</sup>:

- (1) Develop the strategy;
- (2) Translate the strategy;
- (3) Plan operations;
- (4) Monitor and learn;
- (5) Test and adapt the strategy.

Often, executives at companies currently doing well create stretch targets to ensure that the organization does not become complacent. They use the Balanced Scorecard to communicate a vision for dramatically better performance than the present. Executive leadership makes the need for change obvious to all. Once the change process is launched, executives establish a governance process to guide the transition. This process defines, demonstrates, and reinforces the new

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595 Drury C. (2001), *Management Accounting for Business Decisions*, Second Edition, Thompson Learning

596 CIMA – Chartered Institute of Management Accounting, 1991;

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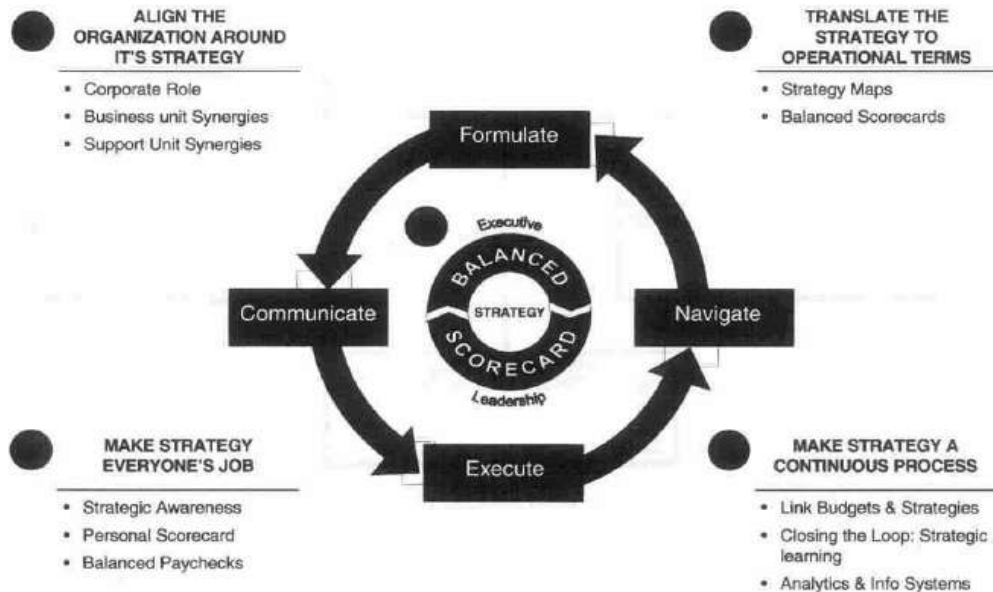
597 Sangster A. (1994), The adoption of IT in management accounting: the expert systems experience, *Journal of Information Technology*, p: 159 – 169

598 Kaplan R., Norton D., „Mastering the Management System”, *Harvard Business Review*, January 2008, p. 63-77;



cultural values to the organization. Breaking with traditional power-based structures is important. The creation of strategy teams, town hall meetings, and open communications are all components of the new management approach.

The principles mentioned above can be presented as follows:



**Figure 1 – The five principles of a strategy focused organization<sup>599</sup>**

For many organizations, the Balanced Scorecard has evolved from a measurement tool to a strategic management system. While the original intent of the scorecard system was to balance historical financial numbers with the drivers of future value for the firm, as more and more organizations experimented with the concept they found it to be a critical tool in aligning short-term actions with their strategy. Used in this way the scorecard alleviates many of the issues and barriers of effective strategy implementation mentioned before<sup>600</sup>.

#### **4. The Impact of IT on Management Accounting and strategy**

In order to adjust the balance between the traditional functions of management accounting, such as score keeping, attention directing and problem solving, and extend the role of management accounting through new areas like strategic problem solving, IT and IT implementation may also be an important factor.

In time the advances in technology have increased the type and quantity of financial and non-financial data collection and its diffusion within organizations. Information technology (IT) is a critical resource for every company competing in the global economy of the digital era. Depending on the industry, market and business goals it can enable or drive a company's competitive strategy. In addition, IT has become the essential infrastructure of any company, the backbone for corporate information flow and the enabler or driver of business processes<sup>601</sup>.

599 Noorein I.S., Kaplan R., Jones M.L.H., Menitoff R.(2000), The Balanced Scorecard: A Strategic Management System for Multi-Sector Collaboration and Strategy Implementation, Quality Management in Health Care, Summer2000, Vol. 8 Issue 4, pg. 26

600 Olve N.G., Sjöstrand A. (2006) Balanced Scorecard, 2nd Edition, Wiley, Capstone, pp. 19-22

601 Huang C.D., Hu Q. (2007), Achieving IT-Business Strategic Alignment via Enterprise-Wide Implementation, Information Systems Management; Spring 2007; 24, 2; pg. 173

IT has also changed the nature of management accounting and the management accountant's role<sup>602</sup> especially because there has been a general increase in output and speed and a move towards automation of production and activities which together have led to considerable differences in the management accountant's role between organizations and industries.

| Activity                   | General result   | Current position   |
|----------------------------|--|--|
| <b>Scorekeeping</b>        | Labour productivity increases<br>Report production speed increases<br>Information disaggregation increases<br>Enquiry response speed increases | Impact fragmented<br>Variable across organizations<br>Variable between industries<br>Often same as manual system<br>Extra time gained by score keeping |
| <b>Attention directing</b> | Automatic trend highlighting<br>Automatic exception reporting<br>Release of management accountant's time                                       | No significant impact  |
| <b>Problem solving</b>     | Analysis<br>Report generation  | Varying use<br>Evidence suggesting difference in usage related to age<br>Users not always satisfied with the results                                   |

**Table 1 – The impact of IT on management accounting<sup>603</sup>**

The more traditional areas of management accountant's activities are concerned mainly with numerical concepts rather than symbolic ones and are, consequently, less appropriate areas for expert systems developments.

Another limiting factor may be the differences in interorganizational ethos and managerial decision-making style which mean that any management accounting-based expert system must be customized to match the specific needs and requirements of the organization in which it is to be used.

Still, IT and these generic expert system packages should be used in the performance of specific management accounting-related tasks. This system enables managers to consider alternative approaches to new product development proposals, evaluate major strategic investments and consider the consequences of cost-reduction plans and buying and leasing equipment.

Knowing these advantages the IT-business alignment becomes a priority in every organization. This process is more than a passively matching operation of IT with business activities. It involves<sup>604</sup> active design, management and execution of the IT functions in accordance with the company's goals and strategies.

In order to achieve sustainable alignment between IT and business there is a need for four key elements and processes within an organization<sup>605</sup>:

- **Integrating IT planning with business planning** – the reflection of business objectives and strategies in the IT planning and operation. Without being operationalized in the planning process, alignment will remain more theoretical than practical.

602 Sangster A. (1994), The adoption of IT in management accounting: the expert systems experience, Journal of Information Technology, p: 159 – 169

603 Sangster A. (1994), The adoption of IT in management accounting: the expert systems experience, Journal of Information Technology, p: 159 – 169

604 Huang C.D., Hu Q. (2007), Achieving IT-Business Strategic Alignment via Enterprise-Wide Implementation, Information Systems Management; Spring 2007; 24, 2; pg. 174

605 Luftman J.N., Kempaiah K., Nash E., (2006) Key issues for IT executives, MIS Quarterly Executive, 5(2), pg: 81-99

- *Maintaining effective communication channels* – it helps IT and business understand each others needs and work together well and it needs also communication channels between IT managers and business executives (Brown, 1999).
- *Developing strong relationship between IT and business* – the CIO's' interactions with other top management can positively influence the assimilation of IT in an organization.
- *Institutionalizing the culture of alignment* – a successful alignment system must possess and demonstrate the flexibility to adapt in an often changing environment

## 5. Conclusions

Researchers and practitioners have recognized the importance of IT and IT-business alignment. When alignment exists IT delivers systems and services that are crucial to the company's strategies, operations or user needs. Making plans based on the business strategy, IT can anticipate what the business requires in the future and lay out a trajectory to meet the upcoming needs.

Despite the critics, IT is a necessary evil in every organization's activity. IT is an indispensable strategic resource but it requires major investments. However, experience in IT management shows that IT and business alignment is easier said than done because IT is a highly technical field. We can talk about a cultural gap between IT and business and this is an impediment to align IT functions with the rest of the business. That is why alignment remains one of the top issues in IT management.

IT-business alignment is not just a process but a mindset of how IT can work for and with business all the time. In other words it's a basic principle of interaction between IT and business. In so doing alignment can maximize the potential return on IT investment.

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# HARMONISIERUNG DER INTERNATIONALEN RECHNUNGSLEGUNGSSYSTEMS

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*In the course of globalization, it has become necessary that Europe-based, globally active company debt and equity increasingly on international capital markets. Thus the efficiency in the procurement of capital can be secured, is a unifying of accounting standards make sense. The European Commission will support the standardization of accounting in the European market ahead. In the USA., the accounting is releasing under US-GAAP regulation, an internationally recognized framework.*

*Keywords: harmonization, convergent, accounting system, guidelines*

*Jel codes: M*

## **1.Einführung**

Die Harmonisierung der Rechnungslegung ist ein wichtiger Faktor heut zutage sowohl für die nationalen als auch für die internationalen Unternehmen. Der Durchbruch der internationalisieren ist in den letzten Jahren sehr gestiegen, sehr viel Unternehmen investieren immer mehr im Ausland. Dieser Durchbruch führt dazu das man immer mehr eine Harmonisierung der Rechnungslegung nötig hat. Wichtig ist das man die Auswirkungen einer Harmonisierung sowohl auf Nationalen wie auch auf internationaler Ebene analysiert.

Wenn man verschiedene Ländere betrachtet kann, kann man feststellen, dass man auf nationaler Ebene von vielen untersieden sprechen kann, deswegen kommt der Wunsch einer Konvergenz. Man stellt fest eine Serie von unterschiede zwischen den Ländern. Zu den Wichtigsten unterschiede Zählen Folgende:

- Legislative Regelungen auf nationaler Ebene
- die Beziehung zwischen Steuern und der Berichterstattung
- einfluss auf die Position von Fachkräften und Wirtschaftsprüfer
- anwendung der Rechnungslegungstheorien
- Vorgeschichte und Sprachbarieren

## 2. Vorgehensweise

In der vorliegenden Arbeit geht es nicht um die Formulierung oder die Überprüfung einer allgemeingültigen Theorie. Es gibt mittlerweile viele Untersuchungen in Zusammenhang mit der Internationalisierung der Rechnungslegung bei kapitalmarktorientierten Großbetrieben.

Um die vielschichtige Thematik aufzuarbeiten, wurde eine ausführliche theoretische Auseinandersetzung vorgenommen. Im Speziellen wurde die Komplexität in verschiedenen Forschungsgebieten wie IAS/IFRS und US-GAAP. Anschließend werden potenzielle Risiken und Barbieren der Harmonisierung der Rechnungslegung präsentiert.

## 3. Abgrenzung der Begriffe und der Notwendigkeit einer Harmonisierung

Im Zuge der Globalisierung ist immer wichtiger das Unternehmen die mit Eigenkapital und ausländisches Kapital gegründet sind auf den internationalen Finanzmärkten agieren. Für eine effizientes Kapitalmarkt, benötigt man die Harmonisierung der Konten über die, die Europäische Kommission die Verordnung vom 19.07.2002 verabschiedet hat. Diese Verordnung erfordert die Annahme und Einrichtungen der IAS / IFRS-Abschluss ab den 01.01.2005. (EG Auftrag Nr.1606/2002 Erlass vom 19. Juli 2002).

In den USA wird die Rechnungslegung nach der Verordnung der US-GAPP erstellt, eines der bekanntestens internationalen Vorschriften

**Harmonisierung der Rechnungslegung:** Ist der Prozess, durch den man Regeln, oder Rechnungslegungsvorschriften verbessert, damit sie vergleichbar werden.

**Die Konvergenz der Rechnungslegungsstandards:** Ist der Prozess, der Rechnungslegungsvorschriftenentwicklung, die zu einer Angleichung führen.

Um den Inhalt dieses Konzepts zu verstehen, starten Sie von der Realität, dass eine perfekte Harmonisierung der Rechnungslegungsvorschriften nicht geben kann, da jedes System durch die wirtschaftlichen Variablen, Finanziellen, Steuerlichen, Sozialen, rechtlichem und kulturellem Umfeld beeinflusst wird. Regionale Harmonisierungsbestrebung haben die Unterschiede zwischen der Rechnungslegung gemildert, aber sie sind nicht in der Lage diese ganz zu beseitigen. Zum Beispiel, die IV-Richtlinie der EU, obwohl diese Regelung in allen Mitgliedstaaten anwendbar ist, wurde dies nicht gleichmäßig vorgenommen.

Die Lösung wäre für all diese Probleme ist die Konvergenz, übersetzt Angleichung ohne identisch übernahm der international Accounting Standards. Genauer gesagt, die Konvergenz erfordert eine einheitliche Reihe von Standards, mit der Möglichkeit der Anpassung an die nationalen Gegebenheiten, die mit den Vertretern der verschiedenen Länder entwickelt werden.

Die nationalen Rechnungslegungsstandards sollten ihre Vorschriften an die internationalen (IAS / IFRS) anpassen oder sogar diese Annahme mit einer Reihe von Änderungen, die erlaubt sind.

Nach der Meinung von Professor A.Prost und L. Klee präsentieren die europäischen Richtlinien zahlreiche kritische Punkte wie zum Beispiel:

**-Sprachbarriere:** Es gibt es keine offizielle Sprache, also kann eine Bestimmung der ;- Richtlinien in den verschiedenen europäischen Ländern einen andren Sinn ergeben durch die Übersetzung;

**-nationale Traditionen:** die Art der Rechnungslegung, die in verschiedenen europäischen Ländern funktioniert, die einen Einfluss auf die Anwendung der Regeln ausüben die sich auf die Objektivität der Anwendung;

**-Management und Informationen:** Sind so verschieden von einem Land zum anderen wie von einem Beruf zu einem anderen;

**-Spiel Optionen,** die sich im gesamten Wortlaut der Richtlinien vorkommen vor allem: Grundsätze der Erstellung und Darstellung von Abschlüssen, die Bewertung von Waren, die Anhänge, Bestimmungen über die Ausstellung und der Konten Kontrolle.

#### **4.Methoden für den Vergleich der Rechnungslegungssysteme**

Für den Vergleich der unterschiedlichen Systeme wurde in der Literatur eine Reihe von Voraussetzungen entwickelt. Majala erreicht vier hierarchischen Ebenen für die Prüfung der Rechnungslegungspraktiken und vergleichen diese: 1. die kulturelle Ebene, 2. die theoretische Ebene, 3. die Ebene der Regelungen, 4. das Format

##### **4.1. Die kulturelle Ebene**

Die Kultur kann als Ausgangspunkt für die Analyse der Rechnungsführung betrachtet. In diesem Teil erscheinen die Bedingungen für das Gleichgewicht: historische Entwicklung der Rechnungslegung, die politischen und wirtschaftlichen Akteure und die Rechnungslegungsvorschriften. Das Kennen dieser Elemente ist wichtig zum Verstehen der Buchführung und für die erklären der Ähnlichkeiten und Unterschiede in den verschiedenen Systemen<sup>606</sup>.

##### **4.2. Die Theorie Ebene**

Durch die theoretischen Forschungen stellt man die theoretischen Konzepte der Buchführung fest. In seltenen Fällen basiert sich die praxisorientierte Bilanzierung auf die Grundlage von Ausgewogenheit Theorie, in den meisten Ländern Rechnungslegungspraxis basiert sich auf der Grundlage von Theorien und Wirtschaftsbegriffe. Die Theorie Forschung hilft zu erklären und zu interpretieren der Finanzabschlüsse<sup>607</sup>.

##### **4.3. Die Ebene der Regelungen**

Die Analyse der Regelungen geht von der Frage aus: "Wie und in welchem Maße ist ein Rechnungsführungssystem normalisiert?" wie auch die Anwendbarkeit von: Gesetzen, Verordnung, gerichtliche Entscheidung, Normen und Mandate<sup>608</sup>.

##### **4.4. Das Format**

Die Forschung des Formats Niveaus basiert im Wesentlichen auf die Veröffentlichungen der finanziellen Abschlussprüfung. Hier finden sie Ähnlichkeiten und Unterschiede in der Bewertung der Verfahren auf der Grundlage der Bilanz, der Gewinn-und-Verlust-Rechnung, der Anhänge und der finanzielle Bericht. Der Grad der tatsächlichen Leistungen auf dem Gebiet der Harmonisierung der Rechnungslegung eines Lands oder Ländern kann man in diesen veröffentlichten Daten feststellen<sup>609</sup>.

#### **5. Das Konzept der Rechnungslegung Harmonisierung in der Europäischen Union**

Rechnungslegungssysteme können zu einer Harmonisierung führen durch die Übernahme einer standardisierten Rechnungsführungssystemen. Die Harmonisierung des Rechnungswesens kann auch durch die Übernahme von den restlichen Ländern, der schon existierenden Methoden und Regeln in einem Land zustande kommen<sup>610</sup>.

Der Prozess der Harmonisierung kann erreicht werden durch die Zusammenarbeit zwischen den verschiedenen Rechnungslegungssystemen der Beteiligten Ländern durch die Festlegung klarer Regeln und Verfahren<sup>611</sup>. Durch die Harmonisierung der Rechnungslegung möchte man eine Vereinfachung der Buchführung sowohl auf nationaler Ebene wie auch auf internationaler Ebene. Eine Verringerung der Unterschiede in der Rechnungslegung ist wünschenswert, in einem ersten

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<sup>606</sup> Majala, Reino A Conceptual Frame of Reference for Comparative Studies of International Accounting Practices, 1991,S.184,327-328;

<sup>607</sup> Majala, Reino A Conceptual Frame of Reference for Comparative Studies of International Accounting Practices, 1991,S.327-328;

<sup>608</sup> Majala, Reino A Conceptual Frame of Reference for Comparative Studies of International Accounting Practices, 1991,S.328;

<sup>609</sup> Majala, Reino A Conceptual Frame of Reference for Comparative Studies of International Accounting Practices, 1991,S.327;

<sup>610</sup> Glaum, Martin und Mandler, Udo: Rechnungslegung auf globalen Kapitalmärkten: HGB, IAS und US-GAAP, Wiesbaden 1996,S.36;

<sup>611</sup> Glaum, Martin und Mandler, Udo: Rechnungslegung auf globalen Kapitalmärkten: HGB, IAS und US-GAAP, Wiesbaden 1996,S.36

Schritt möchte man einen erleichterten Angleich zwischen den Finanzabschlüssen der verschiedenen Ländern erreichen. Durch einen Standard können eine Reihe von Unterschieden zwischen den Rechnungslegungsstandards vermieden werden<sup>612</sup>.

Die Verminderung der unterschiede zwischen den verschiedenen Ländern wird durch den Harmonisierungsgrad gemessen. Diese hängen von den Regelungen, Jahresabschlüsse, Informationsgrad und den Informationsinstrumenten ab<sup>613</sup>. Bei einer Harmonisierung auf internationaler Ebene, sei es durch Anpassung oder durch die Zusammenarbeit, spricht man über Länder, die in diesen Prozess einbezogen. Über den Grad der Harmonisierung sollten alle Länder die in diesem Prozess teilnehmen informiert werden, zum Beispiel in der Europäischen Union sollten alle Länder dieser Angleichungen zustimmen.

Die Harmonisierung in der Europäischen Union hat als Grundlage den Vertrag zur Gründung der Europäischen Wirtschaftsgemeinschaft (EWG) vom 25.03.1957, die in Rom unterzeichnet wurde. Durch die Abstimmung der Rechnungslegungsvorschriften von den Mitgliedstaaten der EU zielt darauf ab, wirtschaftliche Märkte, durch Unterstützung bei der Schaffung der freien Stellen in den Mitgliedsländern durch den Schutz ihrer Gläubiger. Harmonisierung dient zur Verbesserung der Bedingungen für gleiche Wettbewerbsbedingungen für alle diese Einrichtungen und Information gleichermaßen.

Um Rechtssicherheit zu gewährleisten, stehen den Europäischen Union unterschiedliche Methoden und Vorschriften zur Wahl. Viel wichtiger und wirksamer ist die Entwicklung von europäischen Richtlinien. EU-Richtlinien werden von Mitgliedstaaten innerhalb eines bestimmten Zeitraums entwickelt. In der folgenden Tabelle wird der Verlauf der Harmonisierung der Rechnungslegung in der EU und EWG dargestellt:

**Abb.1. Verlauf der Harmonisierung der Rechnungslegung in der EU und EWG**



Quelle: Dr.Thies Lentfer, 2005/2006 Folie 14 (Internationale Rechnungslegung Vorlesung)

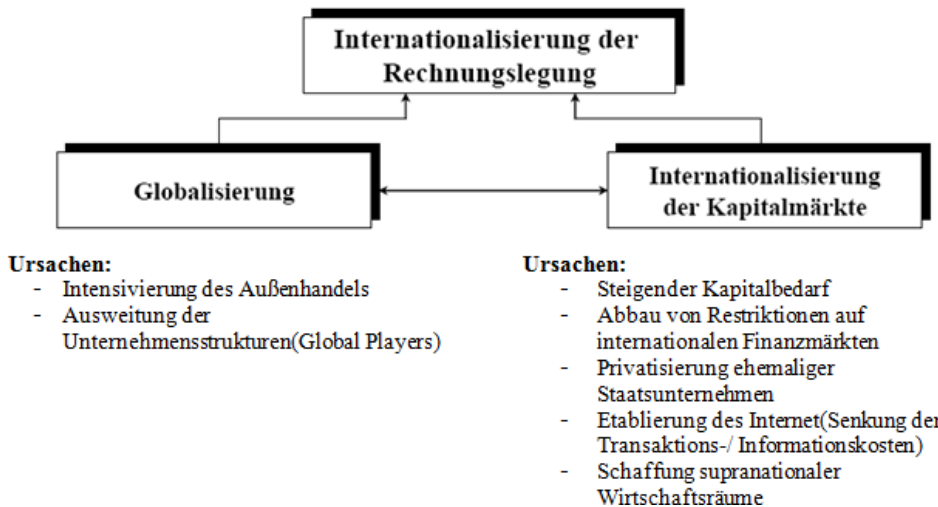
In der Europäischen Union folgt man in der Harmonisierung der drei Säulen der europäischen Gesetzgebung in diesem Bereich:

<sup>612</sup> Pellens, Bernhard: Internationale Rechnungslegung, 3. überarb. und erw. Aufl., Stuttgart 1999, S.362-363;

<sup>613</sup> Majala, Reino A Conceptual Frame of Reference for Comparative Studies of International Accounting Practices, 1991, S.184;

- Vierte Richtlinie 78/660/EWG des Rates vom 25. Juli 1978 des Vertrages über den ;- Jahresabschluß von Gesellschaften bestimmter Rechtsformen
- Siebente Richtlinie 83/349/EWG des Rates vom 13. Juni 1983 des Vertrages über den konsolidierten Abschluss
- Achte Richtlinie 84/253/EWG des Rates vom 10. April 1984 des Vertrages über die ;- Zulassung der mit der Pflichtprüfung der Rechnungslegungsunterlagen beauftragten Personen.

Gründe zur Harmonisierung der Rechnungslegung kann man in der Abb.2 betrachten.



Quelle: Dr.Thies Lentfer, 2005/2006 Folie 14 (Internationale Rechnungslegung Vorlesung)

## 6.Mögliche Schwierigkeiten im Harmonisierungsprozess und weitere Entwicklung

Mai 2000 schlug IOSCO vor, dass alle Unternehmen die, die 30 IAS / IFRS Anwendung die als Core-Standard gelten an der Börse zugelassen werden sollen. Eine mögliche Barriere bezüglich dieser Regelung könnte Seitens der US-amerikanischen SEC kommen, da diese zusätzliche Informationen verlangen. Damit ein Unternehmen, auch an der US-amerikanischen Börse agieren kann, muss diese auch die zusätzlichen Informationen, die von der SEC Regelung verlangt werden vorlegen. Obwohl die Unternehmen, die ihr Jahresabschluss nach den US-GAPP Normen erfassen, können an der europäischen Börse mitagieren, da die US-GAPP die IOSCO-Empfehlungen enthalten.

Die Änderungen der " Improvement to Existing IFRS " sollte als Anfang der Übernahme der existierenden IAS / IFRS gesehen werden. Im weiteren Verlauf der Harmonisierung sollen weitere Standards, Normen und Regelungen von IASB ertwickelt werden. Es ist wünschenswert dass die Harmonisierung von beiden Seiten sowohl von Seite der SEC als auch der Europäischen Union. Eine vollständige Harmonisierung ist nicht in Sichtweise.

## 7.Schlussfolgerungen und Vorschläge

Die Experten meinen, dass der Harmonisierungsprozess gescheiter ist, und bringen folgende Argumente:

- Es existiert keine konzeptionelle Basis;
- Es existiert keine wirklich Absicht eine Veränderung vorzunehmen auf nationaler Ebene (obwohl die nationalen Normen schon legt, nach dem internationalen Normen angeglichen sind, aber in der Praxis werden diese nur teilweise angewendet oder in geringer mass)



- Es gibt eine viel zu grosse Verbindung mit dem steuerlichen und rechtlichen Bereich
- schließlich kann man sagen, dass die Rechtlinien vorzüglich sind mit den Mitgliedstaaten, da sie eine große Freiheit in der Anwendbarkeit genehmigen.

Die Mission der Europäischen Kommission bei der Harmonisierung sollte die Übernahme von IAS / IFRS in der Gesetzgebung sein, ohne Ausnahmen oder Abweichungen von ihnen, damit man nicht zu Entwicklung von neuen europäischen Normen kommt. Eine Harmonisierung der Rechnungslegung sollten nicht nur Vorteile für die Unternehmen bringen, sondern es sollte eine optimale Lösung sein für die gesamte Wirtschaft.

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## RECOGNITION OF FINANCIAL INSTRUMENTS INITIAL RECOGNITION. MULTIFORME AND CONCRETE

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*An entity should recognize a financial asset or financial debt in the balance sheet only when it becomes party to the contractual provisions of the instrument..*

*For financial instruments classified as liabilities, IAS 39 does not contain specific requirements related to the accounting date and transaction settlement. Liabilities are recognized when the company becomes party to contractual provisions, and when one party has not fulfilled obligations or is a derivative contract falling within the scope of the standard. Another important aspect of the recognition of financial instruments is that of compound instruments. They should be classified separately on the components. Each component is recognized separately first duty is assessed, then allocating the residual value of the equity.*

*Keywords: accounting, standards, directives, financial instruments*

*JEL classification : M41*

Recognition of a classic acquisition of financial assets should be based on the date the contract (being the date on which the entity commits to purchase an asset) - Method evaluation transaction data - or on the settlement date (the date of the transfer or delivery of assets) - the method of assessment on the settlement date. Any changes to the fair value of assets between the date the contract and settlement date will be recorded by the same method as that used for asset recognition.

The initial assessment is made when a financial asset or financial debt is recognized (a) initially and must be rated (A) to its cost, which would mean determining valoarii fair contraprestației offered or received for it. Transaction costs are included in the initial assessment of all financial assets or liabilities.

#### **INITIAL COST =**

- the fair value of the payment date or promises
- + transaction costs associated
- +/- certain gains or losses from operations to cover the risk

For the recognition of standard contracts may use one of two ways: the transaction date (the date on which the commit to buy an asset), the settlement date (the place at which the transfer/delivery of the asset) \*. normally between the data do not accumulate interest. If the choice of the two variants, for items valued at fair value is necessary to recognize gains or losses incurred related to date, even if those assets or financial liabilities are not recognized in the balance sheet

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\* American Standards not leaves it to each company the choice of method for the recognition of trades "regular way". It is customary that all firms operating in the same area to use the same method.

<sup>614</sup> Ristea M., Dumitru C., Curpăn A., L. Manea, M. Nichita, D. Sahlian, policies and accounting treatments of fixed assets, Editura Tribuna Economica, Bucharest, 2007, p. 212.

than on the settlement date of the contract. Any changes to the fair value of assets between said moments will be recorded by the same method as that used for asset recognition. The method used should be applied consistently for each of the four categories of financial assets which are valued according to the principles listed in Table. 1.1.

**Tabelul nr. 1.1. Methods of assessment and recognition of financial assets**

| <b>Financial asset</b>  | <b>Assessment</b> | <b>Methods of recognition</b>  |
|---|-------------------|--|
| Assets valued at fair value with losses / gains recognized in the profit and loss | Fair value        | Fair value changes are recognized in profit or loss                      |
| Receivables and loans   | Cost cushion      | Is not recorded, usually fair value changes. Subject to impairment tests |
| Instruments held to maturity  | Cost cushion      | There are fair value changes. Subject to impairment tests                |
| Financial assets available for sale   | Fair value        | Changes are recognized in equity. Subject to impairment tests            |

Consequently, an entity should recognize in its balance of all rights and obligations resulting from the primary tools or derivatives as assets or financial liabilities.<sup>615</sup>

Transaction date method involves: 1) if the purchaser recognition of the asset to be received and the debt represented by the price paid, 2) in the seller's recognition aside assets sold and the emergence of a claim for the price charged. Contracts accounting standard method of settlement date means the recognition of assets only after receipt / transfer derecunoașterea in its delivery to the customer. Illustrate these methods by the following example: in a year I buy a financial asset (bonds) for the sum of 10.000 um, which represents the fair value at the date of the contract (transaction date). On December 31, year N, the fair value becomes 11000 um, and at the end of January, year N +1 (settlement date), it is 13,000 um.

Methods of accounting change fair value on the category of financial instruments in which the asset is classified and reference data (or the date of settlement). If we use the time reference date, accounting records will be

- the date of acquisition recognition asset, regardless of category:

**Financial Assets\* = Liabilities 10.000**

- at December 31, year N:

- held for investment at maturity (which are recorded at cost) does not proceed to any record,

- for the assets available for sale shall be made to the new reassessment of fair value:

**Assets = Financial Reserve variation fair value \*\* 1.000**

- for assets valued at fair value revaluation is performed:

**Active = Financial gain has not change the fair value \*\*\* 1.000**

- at the end of January, year N +1, are:

- for investments held to maturity shall be settled, it is still valued at cost:

**Financial liabilities = Current account with banks 10.000**

- assets available for sale reassessment is carried at fair value and debt settlement:

**Active Financial Reserve = Fair value changes 2.000**

**And**

**Financial liabilities = Current account with banks 10.000**

<sup>615</sup> Ristea M., Dumitru C., Curpăn A., L. Manea, M. Nichita, D. Sahlian, policies and accounting treatments of fixed assets, Editura Tribuna Economica, Bucharest, 2007, p. 213.

- for assets valued at fair value revaluation is carried out and the debt is settled:

**Active financial = Changes in fair value 2.000**

**and**

**Financial liabilities = Current account with banks 10.000**

If the settlement date as the reference point, the accounts will be this way:

- the date of acquisition not recorded anything, regardless of category of employment;
- from December 31, year N:
- Investment held to maturity (which are recorded at cost) does not proceed to any record,
- for assets available for sale revaluation performs at the new fair value, but not the record itself, but the claim related change Value:

**Financial Claims = Reserve change the fair value 1.000**

- for assets valued at fair value revaluation is carried out:

**Financial Claims = Financial gain has not change the fair value 2000**

- at the end of January, year N +1 shall be:

- for investments held to maturity are recognized assets and settlement:

**Financial Assets = Current account with banks 1.000**

- assets available for sale assets are carried out recognition, settlement and revaluation at fair value:

**Financial Assets = Current account Financial banks 10.000**

**Financial Assets = Financial Claims 1.000**

**and**

**Financial Assets = Fair value changes 2.000**

- for assets valued at fair value, financial assets is recognized, the debt settled and made the revaluation value to date:

**Financial Assets = Current account with banks 10.000**

**Assets = Claims Financial 1.000**

**Financial Assets = Unfulfilled gain from fair value changes 2.000**

To assess the impact that application of a method of recognition or else it has on the financial position results and a firm, present comparative situation for the three types of financial assets considered in Tables 1.2, 1.3 and 1.4.

**Table. 1.2. Impact of methods for the recognition of assets valued at fair value**

| Element                       | Method „The trade date” |               |                    | Method „The settlement date” |              |                    |
|-------------------------------|-------------------------|---------------|--------------------|------------------------------|--------------|--------------------|
|                               | Date of acquisition     | December 31   | Date of settlement | Date of acquisition          | December 31  | Date of settlement |
| Current account with bank (1) | -                       | -             | -10.000            | -                            | -            | -10.000            |
| Financial asset (2)           | 10.000                  | 11.000        | 13.000             | -                            | -            | 13.000             |
| Financial Claims (3)          |                         |               |                    | -                            | 1.000        | -                  |
| <b>Total assets(1+2+3)</b>    | <b>10.000</b>           | <b>11.000</b> | <b>3.000</b>       | <b>-</b>                     | <b>1.000</b> | <b>3.000</b>       |
| Financial Debts (4)           | 10.000                  | 10.000        | -                  | -                            | -            | -                  |
| <b>Total liabilities (4)</b>  | <b>10.000</b>           | <b>10.000</b> | <b>-</b>           | <b>-</b>                     | <b>-</b>     | <b>-</b>           |
| Win unfulfilled (5)           | -                       | 1.000         | 2.000              | -                            | 1.000        | 2.000              |

|                            |          |              |              |          |              |              |
|----------------------------|----------|--------------|--------------|----------|--------------|--------------|
| Output Current (5)         | -        | 1.000        | 2.000        | -        | 1.000        | 2.000        |
| Result carried forward (6) | -        | -            | 1.000        | -        | -            | 1.000        |
| <b>Total equity (5+6)</b>  | <b>-</b> | <b>1.000</b> | <b>3.000</b> | <b>-</b> | <b>1.000</b> | <b>3.000</b> |

As shown in Table 1.2 and Table 1.3, on the settlement date, regardless of the recognition method used, the impact is the same: to increase assets and increase 3000 um equity by 3000 um on the outcome of current and deferred, in case, and the reserve for fair value changes in the doielea case. The situation is similar for the other two moments (the acquisition date and December 31). Regarding investments held to maturity, the cost of maintaining their cushion and non value changes leading to neafectarea equity.

**Table. 1.3. Impact of methods for the recognition of assets available for sale**

| Element                          | Method „ The trade date” |               |                    | Method „The settlement date” |              |                    |
|----------------------------------|--------------------------|---------------|--------------------|------------------------------|--------------|--------------------|
|                                  | Date of acquisition      | December 31   | Date of settlement | Date of acquisition          | December 31  | Date of settlement |
| Current account with bank (1)    | -                        | -             | -10.000            | -                            | -            | -10.000            |
| Financial asset (2)              | 10.000                   | 11.000        | 13.000             | -                            | -            | 13.000             |
| Financial Claims (3)             |                          |               |                    | -                            | 1.000        | -                  |
| <b>Total assets (1+2+3)</b>      | <b>10.000</b>            | <b>11.000</b> | <b>3.000</b>       | <b>-</b>                     | <b>1.000</b> | <b>3.000</b>       |
| Financial Debts (4)              | 10.000                   | 10.000        | -                  | -                            | -            | -                  |
| <b>Total liabilities (4)</b>     | <b>10.000</b>            | <b>10.000</b> | <b>-</b>           | <b>-</b>                     | <b>-</b>     | <b>-</b>           |
| Reserve - fair value changes (5) | -                        | 1.000         | 3.000              | -                            | 1.000        | 3.000              |
| <b>Total equity (5)</b>          | <b>-</b>                 | <b>1.000</b>  | <b>3.000</b>       | <b>-</b>                     | <b>1.000</b> | <b>3.000</b>       |

**Table. nr. 1.4. Impact of methods of recognition of the investments held to maturity**

| Element                       | Method „ The trade date” |             |                    | Method „The settlement date” |             |                    |
|-------------------------------|--------------------------|-------------|--------------------|------------------------------|-------------|--------------------|
|                               | Date of acquisition      | December 31 | Date of settlement | Date of acquisition          | December 31 | Date of settlement |
| Current account with bank (1) | -                        | -           | -10.000            | -                            | -           | -10.000            |
| Financial asset (2)           | 10.000                   | 10.000      | 10.000             | -                            | -           | 10.000             |

|                              |               |               |          |          |          |          |
|------------------------------|---------------|---------------|----------|----------|----------|----------|
| <b>Total assets (1+2)</b>    | <b>10.000</b> | <b>10.000</b> | <b>0</b> | <b>-</b> | <b>-</b> | <b>0</b> |
| Financial Claims (3)         | 10.000        | 10.000        | -        | -        | -        | -        |
| <b>Total liabilities (3)</b> | <b>10.000</b> | <b>10.000</b> | <b>-</b> | <b>-</b> | <b>-</b> | <b>-</b> |
| Output Current (4)           | -             | -             | -        | -        | -        | -        |
| <b>Total equity (4)</b>      | <b>-</b>      | <b>-</b>      | <b>-</b> | <b>-</b> | <b>-</b> | <b>-</b> |

Where, on December 31, the fair value of financial assets becomes um 8500, the accounting records for the assets available for sale, is amended in the following manner:

- under the "date": • December 31 year N:

**Reserve for fair value changes \* = Activ Financial 1.000**

year January 31 • N 1 - revaluation is carried at fair value and the debt is settled:

**Active Financial Reserve = change fair value financial liabilities 4.500**

**Financial claims = Current account with banks 10.000**

- under the "settlement date": • December 31 year N:

In this account shows both increases and decreases the value of assets available for sale, indifferent of their size. According to IAS 39, this account must be bifunctional. English books, the "Reserve for fair value" is passive, not the manner prescribed for the registration of any negative fluctuations of the excess value beyond the existing stocks.

- Revaluation is carried out at the new fair value, but not the record itself, but the debt value associated change:

**Reserve for fair value changes = Debt 1.000**

- January 31 exercițiul N 1 - is efectuează asset recognition, settlement and revaluation at fair value:

**Financial Assets = Current account with bank 1.0000**

**Debt = Activ Financial Assets 1.000**

**And**

**Financial Reserve = Fair value changes 4.500**

We will address the issue of a contract of sale accounting financial situation to use one of the two methods mentioned above. For illustration we propose the following example: On December 25 the year N (date), a company enters into a contract for the sale of a financial asset (bonds) to the current fair value of Euro 2500. Asset was purchased prior to 2300 Euros, and recouping the cost is 2300 Euros. On December 31 N, the fair value of assets is 2550 Euro. On January 10 I 1 (settlement date), the fair value is 2580 Euros. If a standard contract of sale (regular way), changing its fair value between trade date and settlement, is not recorded in the accounts, even if the company applies the "settlement date", and the asset is not yet derecunoscut.<sup>616</sup> Following the acquisition, holds the balance in a financial asset, valued at Euro 2300.

- under the " trade date":

- 25 December year N:

- for investments held to maturity, available for sale assets and assets valued at fair value are:

**Financial claim = % 2.500**

<sup>616</sup> \*\*\*, IAS 39 "Financial Instruments: Recognition and Measurement", Official Journal of the European Union, L 363/9.12.2004, <http://europa.eu.int>.

**Financial asset 2.300**

**Gain from disposal of assets 200**

-December 31 year N: not done any recording, regardless of the type of financial asset.

-January 10 year N +1: debt collection are:

**Current account with bank = Financial claim 2.300**

- under the "settlement date"

- December 25 year N (which is the day the contract):

- for investments held to maturity not done any recording.

- to available for sale assets, the revaluation is fair to the new value, which is performed even on the transaction:

**Financial asset = Reserve for fair value changes 200**

- for the kind of assets valued at fair value, revaluation is carried out:

**Financial asset = Unfulfilled gain from fair value changes 200**

- December 31 year N: not done any recording, regardless of the type of financial asset.

- January 10 year N +1:

- for investments held to maturity, are selling:

**Financial claim = % 2.500**

**Financial asset 2.300**

**Gain from disposal of assets 200**

- for the assets available for sale, sale and recorded the passage of the amendment value of equity in the results:

**Current account with bank = Financial asset 2.500**

**Reserve for fair value changes = Financial income 200**

- for assets valued at fair value, recorded sales:

**Current account with bank = Financial asset 2.500**

For financial instruments classified as liabilities, IAS 39 does not contain specific requirements related to the accounting date and transaction settlement. Liabilities are recognized when the company becomes party to contractual provisions, and when one party has not fulfilled obligations or is a derivative contract falling within the scope of the standard. Another important aspect of the recognition of financial instruments is that of compound instruments. They should be classified separately on the components. Each component is recognized separately first duty is assessed, then allocating the residual value of the equity.<sup>617</sup>

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# BENCHMARKING –AN INNOVATION INSTRUMENT OF MANAGEMENT ACCOUNTING

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*This work proposes an analysis of dynamics and changes occurred in the competition domain where the entities operate in present, but also an identification of the necessities in finding a durable competitive advantage through a number of two fundamental instruments of administration "Activity Based Management" and "Benchmarking" which in the administration accounting acquire an important role, constituting the base for the strategic planning process.*

*Keywords: benchmarking, sustainable development, analysing methods, local development strategies*

*JEL codes: M41*

The increasing quality and the innovation of new products represent a compulsory objective for the enterprises which operate within a global market, being forced to improve their production processes, to render their organization more efficient and more effective. From this perspective, using an innovative quality instrument, which has an intrinsic link with the quality concept and the competitive dynamics, is that of benchmarking, which can become strategic for MSEs.

This may offer useful information to the entities for a concrete approach of the benchmarking; explaining what it is, to what it is useful, illustrating the common operational model for each application pointing out the main benchmarking models for MSEs, used in present on national territories. The concrete benchmarking definition consists in "the continuous and systematic measurement activity of the administration processes of an entity with the aim to confront them with the economical processes developed by the leader enterprises, wherever they are situated with the aim to obtain some precious information which will help that company in improving its own performances". We have to retain the fact that an administration accounting system ABM<sup>618</sup>, can represent an efficient instrument in making the benchmarking philosophy to spread all over the entities and to be integrated by the management in a transversal way to the different action area. Another objective followed in this paper represents the benchmarking approach as a necessary theory for giving birth to a learn-organization, understood as an organization able to produce and to obtain, to transfer knowledge, and also to modify its own behaviour according to its newly acquired information.

Under this profile the benchmarking, due to the study of the practices adopted by the best companies (best practices), they agree on an entity to know in an adequate manner its own functioning and identification mechanisms, the levels of optimum performance which define the best of breed (the best in the branch). In this situation we pass to a short analysis of the evolution which gave birth to the ABM. Broadcasting in industrial companies the methods of emphasizing,

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<sup>618</sup> Ostinelli, Toscana (1995)- "Does Benchmarking needs Activity Based Management: A critical analysis's of some-Italian Cases. Paper presented 18-th European Accounting Association Congress, Birmingham (UX), May

analyzing and accounting costs, founded on activities (Activity Based Costing, Activity Based Management), starts with the 80's.

In the ABC as we can deduce from the acronyms, the activities constitute the base for following the specific objectives, such as: "cost modelling (representing the production cost); cost management (cost administration); cost assignment (appropriation cost); process management (which consists in the process administration as assembly of activities)". In the area of this methodologies, the ABC represents the most important answer for the rebuilding necessities and the administration accounting systems, satisfying the new economic information needs. The ABC is founded on the principles that cost derive from activities which consume resources, and products generate cost, as a result of the necessary activities of projecting, production, distribution and selling them. In this matter the ABC gets to the total production cost, different than that obtained with the help of traditional measurement systems, from different considerations, of indirect costs, un-correlated to the volume of "out put", but by the auxiliary activities and by the support.

Among others, the ABC constitutes not only an accounting methodology, but it represents even a starting point for introducing a managerial style founded on the analysis of the activity and the correlation between them, with the purpose of guaranteeing the realization of the economic objective. In conclusion, its main aspect is not based only on the correct measurement total cost per product, but also in the analysis of the activities which represent for the management an extraordinary instrument of knowledge regarding what's happening in the company, giving a well known contribution to the management, improving and administering these activities.

In many cases, imposing an ABC system, having in view the administration aspect, significant of information, has constituted the bases in the ABM (Activity Based Management) system implementation. The ABM represents a more advanced ABC which configures as a strategic initiative, which has as a goal the implication of the entire organization in satisfying the client's needs, in the administration of processes and in the continuous improvement, un-restricting itself as in the case of the ABC, to monitoring the efficiency of the activity.

Recurring to the ABM, derives from shifting the attention which has been verified in the last years, from product to process, from a functional vision of the activity to an administrative vision and to a competition of the process. In particular is understood that a simple analysis of the activity in view to determinate the total cost, the ABC logic, doesn't consent the identification of the activities which produce value to the client or which impose improving interventions. Only by knowing the processes, it is possible to obtain such information, putting in view the transition towards different functional areas and the problems which may come out. The approach of the ABM represents a managerial accounting system, capable the necessary managerial administration processes, favouring the management, broadcasting a culture founded on following the improving objectives of the process and on the orientation of the their effective realization. In view of applying the ABM, it is necessary to proceed by using the documents afferent to the economic process. These procedures consist in representing the organization system as an integrated ensemble of administrative processes, among which the limits of activities are verified of which also the implied organizational units are composed. Through the documents afferent to a process, they aim at understanding of its current state and which are the contributing modifications for improving the results and raising the generation of value for the clients. In the operational plan, there are two types of different approaches for reaching the decomposing of the economic system in the elementary activities and in the successive mixture of such activities and administration processes: tackling the economic functions; tackling the economic processes objectives

The first approach, by not taking into account the market consumer, is unable to perceive the existing connections between the different activities which are carried on within a company and the contribution through which each activity offers value creation.

In the second approach, the economic processes are individualized starting with the consumers' preferences and expectations. The attention is concentrated on those activities which allow the company to be different compared to the competitors, with the aim to point out the interdependences that exist between the different organization unities in relation with the economic objectives<sup>619</sup> and strategies.

A fundamental importance in the implementation of an ABM project represents the reading and the understanding of the processes and activities, on the base of the performance parameters, for understanding how the practices have to be improved and the causes that constitute the base for the existing problems have to be removed. For this, it is necessary to establish a target of performance, for each process, on the base of the relevant optimal elements on the reference market. Each deviation from the performance level of a process from prefixed optimal parameters will be investigated with the aim to discover the causes of the differences, subsequently intervening on the variables that provoked these deviations.

Passing on to examining the role that the managerial accounting can have in the benchmarking initiatives, we stress upon the fact that the ABM, which fundamentals on the profound knowledge of the economic activities and processes, we introduce an adequate and efficient approach for giving birth to benchmarking initiatives. With the aim to clarify the benchmarking concept, which can remind the definition, emerged from the first benchmarking initiatives, conduct to David. T. Kearnes, a managing director of Xerox Corporation.

The implementation of the benchmarking system, as part of the top management within the Xerox company, at the end of the '70's, depended on the necessity to face the competitive challenges launched by the Japanese competitors. Those years, Xerox initiates a series of initiatives against "L.L.Bean", the leader company in selling through correspondence, with the aim to study the logistics activities, the deposition techniques and the expedition processes. Thanks to these initiatives, Xerox discovers which of them was able, even beyond its own sector, to gather important information for administrating and solving in an optimal manner the problems related to deposition and distribution.

These initiatives aimed to evaluate the internal performance<sup>620</sup> in order to be able to compare it to the external one – taken as reference parameter, identifying the high "gap" for improving the economic competition. At the same time, Xerox concentrates these initiatives on the processes and methodologies adopted by the leader companies, and the benchmarking has been extended in a systematic manner towards all the economic phenomena, becoming more and more integrated in the administration process. The success obtained by Xerox in this experience, in terms of improving the practices and the economic processes, determined many companies to follow its example. It is sufficient to remind that, nowadays, over 50% of the first 500 companies considered the most efficient ones, have adopted the benchmarking initiative.

The operational methodology by means of which the benchmarking is implemented consists in the following phases: the confrontation of their own performances with the best and the most competitive companies (Best in Class), in the basic sector in which the company operates, as well as in totally different sectors; the choosing and the interpretation of the organizational system through the processes optics; the pointing of the "optimal", identifying the adequate practice and performance standard for following those efficiency levels with the aim to consent to the management to establish more rationally its own objectives, its own strategies and the criteria of increasing the value of the optimal levels research.

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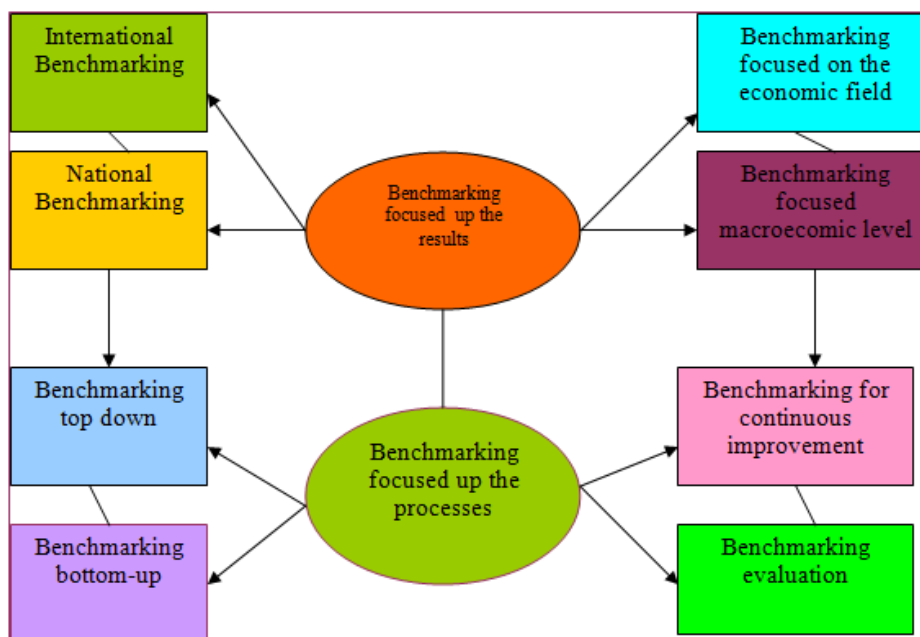
<sup>619</sup> Fabrizio De Filippis, "Le politiche di sviluppo rurale nell'Unione Europea: un secondo pilastro tutto da inventare", Working Paper 13/01 Dicembre 2001, Roma.  
[http://vrlab.epfl.ch/Publications/pdf/Herbelin\\_Vexo\\_Thalmann\\_VRMHR\\_02.pdf](http://vrlab.epfl.ch/Publications/pdf/Herbelin_Vexo_Thalmann_VRMHR_02.pdf)

<sup>620</sup> David Cannon, Joseph H. Godwin, Stephen R. Goldberg, (2008), Corporate Governance and Enterprise Risk Management (p 83-85), The Journal of Corporate accounting & Finance, Volume 19 Issue 2 , Pages 1 - 106 (January/February 2008)

So, the benchmarking allows the manager to identify through the confrontation with the leader companies the critical areas of the administration on which we can effectuate opportune interventions. At the same time, through the benchmarking, the management orientation is perfected towards performance and efficiency, especially for the areas which are not directly exposed to the concurrence and the performance of which is measured through costs and incomes. As regards the subject of the empiric cases, we report the results of a research effectuated in 1994, with the aim to understand if the companies which complied with the benchmarking initiatives for using the ABM accounting managerial systems in order to identify the best practice, introducing them within the company and externalising them over all the economic functions. In this research, eight companies with consolidated experience in benchmarking have been analysed: Alcatel Face, Standard, Himont, Digital, Equipment Italy, Motorola Division – cellular phones, 3M Italy, IBM SEmea, Nones, Rank Xerox. From the analyse of these cases (excepting Himont and Motorola Division – cellular phones), we observed that six out of eight examined companies included, in different forms, an ABM managerial accounting system<sup>621</sup>. We can say that the efficiency of the benchmarking initiative can have well-defined advantages in adopting the ABM managerial accounting systems.

### The optimizing management of the quality through

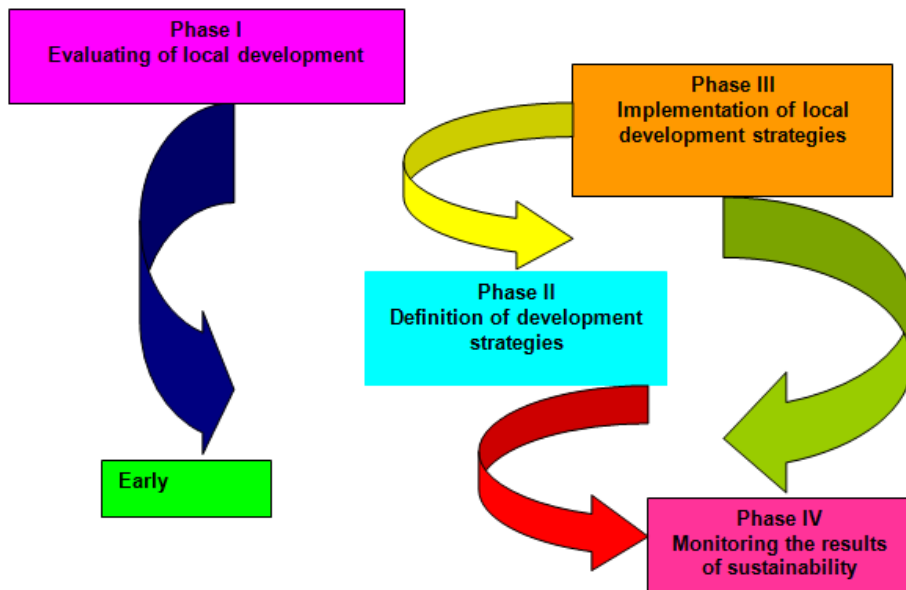
At the locally level, a very big importance will have the European strategies. The Member States apply now the main lines of the European orientation in employment and in drafting the national reform programs.



**Fig. no.1- Benchmarking in the public sector**  
**Source: Ministry of Finance of Denmark**

Prior to initiating a benchmarking activity it is necessary to consider three frequently questions:  
 -what is intentionally a measure?  
 -who want to perform the confrontation?  
 -Why analogies we expect to find?

<sup>621</sup> Jagdish Pathak, Mary R. Lind, (2007), *Integrated information systems: SAS 94 and auditors* (p 57-67), (2007), Volume 18 Issue 6 , Pages 1 - 108 (September/October 2007), The Journal of Corporate Accounting & Finance



**Fig no.2 -The process of local development**

Benchmarking bottom-down is initiated at the level of which is carried out. Different by top-down approach it is based on horizontal cooperation at locally level<sup>622</sup>. Frequently, using bottom-down approach is a successful evaluation of a lower number of units, in comparison with top-down benchmarking, but can ensure a better script to put in evidence improved proceedings of benchmarking, and that does not call for reason reduce the number of participants but due to sharing and trust experience which establishes between partners during cooperation.

### **Conclusions**

Benchmarking can be considered a process of learning through continue confrontation with operators some of the same sphere of activity and not also. It represents a systematic and continuous approach for identification of performance standards (benchmarking), to confront them and to identify the practices that allow to become the new standard reference (new best in class), who focuses on the observation of processes, products and more. Benchmarking suggest strategies to improve to follow of performance. In summary, the main objective of benchmarking is to identify the best areas and most competitive in stimulating change. These changes can be achieved by identifying and adopting "excellent practice".

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## SARBANES - OXLEY ACT- THREAT OR OPPORTUNITY FOR AUDITORS?

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*Recent events of financial publication revealed a need for introduction of an effective reform process of the traditional control methods and processes of decision-making entities.*

*The crisis of corporate governance systems, the need to introduce new codes and self-binding and legislative rules, have pushed the legislature to the U.S. issued Sarbanes –Oxley Act model. Accountants and financial specialists describe the benefits of implementation of the SOX model, saying that the quality of the area contributed only marginally in the creation of such benefits. If there would be no coercion of attitude towards implementing the ISO 14001 or ISO, including requirements for integration of best practice financial, SOX would have had reason to exist.*

*Key words Sarbanes Oxley, quality, standard ISO 9001:2001 compliance, financial scandals, audit*

*JEL Classification: M 41*

Sarbanes-Oxley Act of 2002 was issued to respond to financial scandals involving the biggest U.S. companies. These scandals have led to serious loss in public confidence, especially firms in the Accounting and Reporting

The financial scandals of Enron, WorldCom, Global Crossing, Qwest Communication International, All First, Rite Aid, Republic Securities, Im Clane have created a wave of mistrust among investors on the North American market.

President G.W. Bush has had to adopt a firm position on how and techniques used to confront the biggest crisis of American companies and the confidence of market operators. American President has managed to do so by imposing a high respect for the rules and principles of ethical conduct adopted by business and management companies, but also through the development of legislative intervention known as the so-called "10 points" (ten -point plan).

Ten-point plan proposed in March, when it was triggered only scandal is a type of motion response of the U.S. president to get back that confidence in financial markets and regulations related to their confidence that Americans have been lost. This Plan may be summarized as follows: more severe penalties (imprisonment up to 10 years) who commit fraud and certify false balances or who obstructs justice for destroying documents: establishment of a new Corporate Fraud Task Force (which seems to be substituted by the Board The law created Sarbanes Oxley), increased powers SEC (Securities Exchange Commission) on the "freezing" profits unlawfully managers and administrators; delay contracting company of appropriations leaders, a more comprehensive development of the transactions and operations of purchase -- sale of shares of administrators and managers, strengthen the SEC position by raising funds.

This proposal is fully the republican concept on regulation of financial markets: the market regulates itself. Republican ideology is based on that concept to make operational and efficient market, the legislature should intervene as little as possible, showing how this proposal, in fact, the law adopted so far will not be changed, but only worsen. After World Com scandal, the Senate has passed beyond the proposal of the President. Committee on Banking, Housing and Urban Affairs of the Senate chaired by Senator Paul S. Sarbanes proposed new Bill, known as Public Company Accounting.

Reform and Investor Protection Act of 2002 (S2673) which has ongoing work that led Congress to adopt Sarbanes- Oxley law Act. This Bill was characterized by cutting regulatory changes, which differ from the proposals made by the President. On 16 July 2002, the Senate unanimously approved the Sarbanes Bill and later Oxley Bill but there is discussion conference committee, how to find a point of agreement between the 2 versions. However, President Bush announced since then the public would be signed any text approved by Congress, even if it had not been consistent with the proposal of president.

Press comments at that time, said that because of the approaching date of elections and the electoral loss of Bush's popularity among Americans, who had been involved in these financial scandals (friend of the president of Enron), it was clear willingness to cooperate and do something concrete to solve the problem and even play the U.S. investor confidence.

He incite the Congress to speed the time, because he proposed that the final test to be ready for August. On 2 July 2002, Bush signed into East room the White House, the new Sarbanes-Oxley Act in 2002, so called because the resulting combination of the 2 Bills, mentioned above. The new law follows the same structure and content of the Sarbanes Bill, to which were added to the end (Title VIII and IX) - the rules relating to penalties provided by Bill Oxley.

Sarbanes-Oxley model provides new standards, more advanced for Corporate Accountability, and penalties for non-ethical behavior, becoming a reference parameter for reforms to protect the economies of the population, more and more countries.

Sarbanes-Oxley Act of 2002 became law on 30 July 2002, consisting of 130 pages and includes 11 sections. This act creates a new control body "Compagnie Public Accounting Oversight Board (PCAOB), which controls the revizors of public companies. Section 13-aa Act, advise the Board to determine the activities of auditing and attestation standards appropriate standards of quality control standards for audits of companies that will be used in setting the rules committee, or if necessary to protect the interests of investors. These responsibilities include the establish of professional normes which regularized the independence of revisors and effective system of internal control.

The purpose of the Sarbanes-Oxley Act is to protectof the investors through a system of information on:

- Accuracy;
- Comprehensibility
- Integrity;
- The best corporate governance;
- Strengthening of control systems by creating Public Company Accounting Oversight Board (PCAOB) the best system of internal control;

PCAOB - as a result of Sarbanes-Oxley Act, was created April 18, and in turn delivered as "iterate Auditing Standards' revision of the" GAAS "- proposed and promulgated by the AICPA and the ASB, already on April 16 2003. On 7 October 2003, the PCAOB issued "auditing standards" entitled "An International auditing of control over performing in financial Reporting Confection with an Audit of Financial Statements".

The audit covered the standards mentioned above, is known as "Integrated Audit", because the audit of the financial statements is combined with the audit of internal control on financial reporting.

The basic key points of these standards relate to:

- Introducing the concept of "integrated audit";
- Recognition that the internal control is not the measure of all realities "and that implements the internal control in entities in various ways;
- Description of the responsibilities of management and documentation required;
- Description of the responsibility of auditors and reporting requirements;
- Establish criteria for evaluation of weaknesses and gaps,



- Describes the management of internal control quarterly in accordance with oxo Act, Section 302

- Provide evidence on auditor independence.

What is new in the model of "integrated audit"?

Section 404 b of the Act states that a certification of an auditor which will assess the internal control system of management should not be subject to separate tasks. This operation, making the audit of the annual financial statements and the auditors of internal control, closely correlated with each other.

The proposed standard is an integrated standard, making use of the operation required for the audit of internal control and the relationship between the audit of the annual financial statements.

The result of implementation of the Integrated Audit model includes 3 opinions:

- An opinion on the effectiveness of internal control over financial reporting;

- An opinion on the effectiveness of management's own assessment of internal control of financial reporting;

- An opinion on the preparation of the annual financial statements.

The PCAOB standard describes the responsibilities of management, namely:

- Responsibility for the effectiveness of internal control;

- The evaluation of effectiveness of internal control, using a model appropriate control structure (COSO);

- The base support of the assessment, with appropriate records and documentation relating thereto;

- Written report on the effectiveness of control - if the responsibility is not satisfactory, the independent auditors will have to communicate through a dispute with Committee audit and issue a negative opinion on the internal control system.

Management must assess the effectiveness of internal control, using the concept of basic "Responsibility assurance". As auditors, the management should obtain a reasonable level of assurance (eg a high level of confidence) on the overall effectiveness of internal control system, by this management will get the same records of the auditors on the structure and operational effectiveness of internal audit of the financial statements. However, the work of auditors not absolve the management of their compliance responsibilities of the internal control effectiveness on the market.

Responsibility Assurance is based on the concept that there is a possibility that internal control system to not identify or not to show significant errors in the balance sheet and any type of survey error to be significant in time. It is important to emphasize that Responsibility Assurance is not the same as "absolute Assurance", but refers to a high level of confrontation.

Sarbanes Oxley - has created Public Company Accounting Oversight Board (PCAOB) to oversee auditing of public companies' balance sheets in the U.S. through stringent records, applying the standards, controls and disciplinary programs.

This Sarbanes Oxley requires SEC (Securities Exchange Committee) in collaboration with government bodies and others organisms, such as Secretary of Finance Minister and head of the U.S. Federal Reserve Council of State, to selected board members (the Council).

### ***The purpose of PCAOB***

PCAOB was created by the U.S. Congress for "Overseeing of public audit companies - which are the subject of law and security issues, in order to protect the interests of investors and the public , interests in the preparation and presentation of financial statements, of acting independently of creditors against the company whose securities are dealt on a regulated market.

### ***Structure PCAOB***

- Sarbanes Oxley Act states that the Committee is based in Washington and is a non-profit organism.

The PCAOB structure is as follows:

- PCAOB is comprised of 5 members;
- Members are elected by the SEC;
- Members fulfill this task for 5 years;
- Two members must be CPA;
- The member's position of this body is "full time".

### ***The financing PCAOB***

Is funded by companies listed on American Stock Exchange.

PCAOB is currently looking how can have access to foreign companies.

Expenditure incurred is borne by the audit companies.

SEC approval: SEC must approve on PCAOD:

- Annual budget
- The proposed regulations, including auditing standards

The ***PCAOB functions*** are presented in ACT and include the Register of Audit Companies with sets standards for: audit, quality control, ethics, independence, preparation of audit reporting-improve audit quality through inspection companies to audit; investigation of work and discipline of auditors, imposing sanctions against audit firms and persons associated with it.

### ***The standards for Quality Control and sanctions***

PCAOB has the task of improving the audit quality through inspections of companies in the audit conducted annually for those who have the greatest number of tasks (operations and applications) and every 3 years for other company carrying on a normal or minimum audit. The quality control standards must include: the overseeing the rules of ethics and independence; the procedures relating to the functions, training and staff development; the internal inspections; other topics required by the PCAOB

The penalties for non conformity in the credit company or individual concerns: censoring (failure or exclusion from society partnership audit or require the company to close with the person in question).

- Limiting the activity of the audit or persons;
- Suspend or revoke the registration of the audit;
- To impose criminal or civil: \$ 15 million for companies and for 750000 \$ for person An audit company can not audited the internal control of listed companies, as required in section 303 of the Act, without the prior audited financial statements. Auditor's work should not only concern the management to determine whether internal control has been effective, the auditor must go beyond this, testing the effectiveness of internal control and, in addition to assessing the adequacy of the managerial process.

### ***Sarbanes Oxley - Corporate Governance***

Companies listed on the NYSE must adhere to new rules on Corporate Governance since 2004. Several NYSE new rules include: requirement that a majority of Board members be independent; establishing regular meetings separate for independent components for the Board; council must nominate the following committees should be compose by Committee of compensation; nominate The Governance Committee Corporate Audit

## **SARBANES OXLEY ACT - threat or opportunity for auditors**

Introduced as follow of financial scandals SOX outbreak is in the center of attention of top management and in the world of finances. Although underlying SOX exists the excellence process, as in the ISO 9001 ,quality professionals do not seem to evaluate opportunities that can be born from the integration between quality and funding level of management.

SOX was signed and introduced in the U.S. legislative body on 30 June 2002, as following the outbreak of financial scandals and Enron WorldCom, taking birth in order to protect the shareholders and public in generally by the accounting errors and fraudulent practices, using accuracy and reliability of economic operations .

If I had to quote him by President G. Bush, this law aims "to prevent and punish fraud and administrative corruption, on hand to give justice to those who commit errors and project for interests of shareholders and addiction."

The financial world is mandated, through SOX, to develop the practices of excellence, implementing and integrating a similar process to ISO 9001:2000; this things realizing without to a minimum involvement of quality professionals.

### **The benefits of SOX compliance with ISO9001: 2001**

The SOX compliance legislation is a legal responsibility for the major U.S. listed companies, while ISO 9001:2000 is an international standard of quality. Those who operate in large companies, who have strong links with business in the U.S. or working in overseas subsidiaries, they know that SOX had a significant impact on activity in many areas.

Obviously, those who operate in the financial sector companies have the most different tasks in this new instrument, although many of these organizations only a little time could resume strides normal. Also, the process has been sometimes difficult and expensive to implement, not missed in many companies the positive results.

As can be read in the financial reports drawn up by managers or those who operate as auditors, the SOX compliance, in particular at section 404, seems to have given an advantage. Based on section 404, 'improved financial statements, on "Evaluation of internal management controls", those who prepared the reports are obliged to publish in their annual reports the information regarding the purpose and the adequacy character of internal control structure and procedures for financial reporting. In this way must be evaluated the efficient of internal control and adequate procedures. Of audit companies, are also required to the same report to attest and to reporting of assessment on the structure efficiency and internal control procedures, with reference to financial reporting.

The benefits that involves, demonstrating that the conformity with such measures is to:

- contribute to the centralization and standardization of several important economic processes-which could reveal an advantage in next acquisitions and growth in generally
- help to increase the level of knowledge of internal control in all organizations-difusing under Section 404 of content, the concepts of control, not only to financial aspects, but also to the staff for any type of activity
- represents an opportunity for those responsible for IT to develop an important role in the company, knowing their value in the eyes of management.

These examples underline the fact that SOX, as a factor for change, as a necessity of excellence practice and as a way means of increasing respect to appropriate controls. However, the question remains which should be made of "world" qualities if these observations were made by company managers when implementing ISO 9001 and ISO 14001. Given that SOX implementation has been done successfully, emphasis to the quality with a totally role on secondary or null, the benefits have often been cited in the company without having to remember the synergy of the Sarbanes Oxley Act and management quality.

## **The audit according SOX and to ISO 9001:2000**

Financial World continue to assess compliance rather than excellence practices or details in favor of further, his attention has been directed toward a careful recording of data, while the tendency of quality is oriented to testing results in a whole and between related processes. In theory, the company managers had to think immediately about the approach to standards of excellence established in the international quality standards ISO 9001:2000, at the same time as compliance with SOX. But top management, affected by the traditional network and confident, regardless of the potential synergy between the Sarbanes Oxley Act and rules of management for quality has almost totally ignored the quality sector, including the most qualified auditors, when implemented SOX. There have been American companies that have eliminated the position of audit quality, encompassing quality auditors in the financial sphere, inside which are in fact trained internal financial auditors. The reason is that the operation of a regular audit, to verify compliance will lead to the same result, but in doing so will avoid double competence and will consent of company to save the costs which would be allocated to traditional quality management and whose value is less defined.

## **Conclusions**

Sarbanes Oxley Act, may represent the way that the quality can reach the top management, but higher costs than those foreseen, could - as has already happened in some cases - reverse this equation. The time has come that development of financial processes to be integrated with the requirements for quality, reporting, with flows, with the methods of risk assessment, the operations audit, and a number of other activities. Reduce costs and eliminate redundant elements are of prime importance and, depending on synergies, quality management professionals can provide a significant number of tools for those involved in the operations audit, and those which operate at top management level. Several organizations already combined teams of audit, sharing economic hardships, mutual learning, given that you must perform the audit operations in the areas in the past were evaluated separately.

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