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**SECTION: *ECONOMICS, BUSINESS ADMINISTRATION,
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POSITIONING THE OFFER OF FOUR STARS HOTEL FROM FELIX SPA BETWEEN BALNEO AND WELLNESS TOURISM

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Abstract: *Introduction/Objectives: In Romania, around consistent thermal water sources were developed centers / resorts profile SPA, spas named. Balneology is regarded as a branch of medicine dealing with disorders using mineral water. Completing the offer of hotels climatic spa resorts, in response to worldwide trends, it was done with wellness services. In this study we intend to investigate to what extent a four star hotel in the largest spa in the country, has an offer wellness not only name but also as content and consumer perception. Materials & Methods: The research methods used were: analysis of secondary data, research direct investigation based on a questionnaire applied among customers. Data were statistically analyzed primary and deepened. Results: The first two and last hypotheses were validated. The third hypothesis was validated in demand limit imposed by the observation unit. Hypotheses are: H1: Offer wellness services unit studied is one incomplete H2: Customer is not the specific Wellness Hotel H3: Consumer preference is for hotel guests climatic services, especially. H4: The hotel's current customers are satisfied with the quality of the services they received (a hypothesis based on the high percentage of customers who have been accommodated at this hotel). In conclusion, the results reflect a partial understanding of the concept of wellness by the hotel management and an openness of consumers for wellness services.*

Keywords: balneotourism; wellness tourism; hotel; Băile Felix; Romania

JEL Classification: L83; D12; M31

1. Conceptual delimitations

Wellness tourism is seen as a subcategory of health tourism and refers to people who travel and spend a stay with primary concern health care in the sense of preventing illness, maintaining or improving health.

However, there is a demarcation between wellness tourism and cure tourism, the positioning of wellness in relation to other health care services in the tourism industry, being explicitly presented by Mueller and Kaufmann (2000, p. 8) (Figure 1). As subcategories of health tourism we mention: medical tourism, cure tourism, wellness and spa tourism. Connell (2006) highlights the differences in the essence between medical tourism (which may require surgical intervention) and wellness and spa tourism.

Balneology is considered as a branch of medicine that treats diseases by using mineral water. Balneology is used when there is a medical problem, as a treatment or as a prevention. Balneo-tourism involves the use of balneological and therapeutic procedures (Georgiev & Vasileva, 2010) for tourists.

It is appreciated that between balneo-tourism and spa there is a major sense of correspondence, balneo-tourism including medical procedures that require the use of natural mineral water. The International SPA Association (2004) gives a broader meaning to the concept of spa, including services that reinvigorate mind, body and spirit (in Georgiev & Vasileva, 2010). The next step was the transition from balneotherapy to spa and then to wellness.

Wray et al. (2010) mentions that the term wellness tourism has traditionally been linked to the term spa and more recent forms of wellness tourism include: new-age tourism, yoga tourism, pilgrimage, holistic tourism. Romao et al. (2017) says: "Wellness tourists tend to combine different activities, including a variety of spa services based on water properties or therapies, along with physical exercise, hiking or cultural and educational activities".

The term wellness is widely used in European tourism, being considered an element of competitiveness. This idea has made hotels or hotel complexes specialize in wellness or complement their wellness offer. Wellness has been differently understood and applied by tour operators, combining and often confusion with spa services in many situations. The reason for this is that there is no standard definition of wellness but only a lot of interpretations. First of all, between wellness and wellness tourism there is a fundamental difference. The concept of wellness with all the associated philosophy was launched by American doctor Halbert Dunn in 1959. He defined wellness as the special state of health that includes the sense of well-being that sees man as body, spirit and mind, and dependent on its environment (in Mueller & Kaufmann, 2000). Travis (in Mueller & Kaufmann, 2000) sees wellness degrees as there are degrees of disease. Without reviewing all approaches and interpretations, we choose Ardell's interpretation (in Mueller & Kaufmann, 2000, p.6) that wellness is a state of health that involves the harmony of body, mind and spirit with self-responsibility, with care for physical beauty, a healthy diet, relaxation, meditation, mental activity / education, environmental sensitivity / social contacts. Two other terms are used together, namely: wellness and well-being, the first referring to the state of health while the second concerns all aspects of life (McMahon, Williams & Tapsell, 2010). Often, these terms are used with the same meaning as the poor translation in different languages (Smith & Puczko, 2009).

There is a close link between tourism and wellness, and its beneficial physical and mental effects are intensively studied (Chen & Petrick, 2013). The positive effects of travel experience on well-being and perceived health have been highlighted by numerous empirical studies, as Chen and Petrick's research (2013) shows.

Understanding the concept of wellness differs from a hotel structure to another and from one country to another. In Romania, most hotels have a wellness center (and spa sometimes) or wellness services that are strictly limited to infrastructure and maintenance programs and virtually no part of nutrition, relaxation, socialization, etc. Also, wellness services are often seen as an extension of balneoclimate treatment. In general, wellness services are associated with the presentation of a unit / destination offering to increase its attractiveness (Rodrigues, Kastenholz & Rodrigues, 2010).

Wright State University (in Konu, Touhino & Koumpupula, 2010) presents a wellness system that includes: physical, mental, spiritual, career, social life, family and financial component. An imbalance results if a component is underdeveloped or neglected.

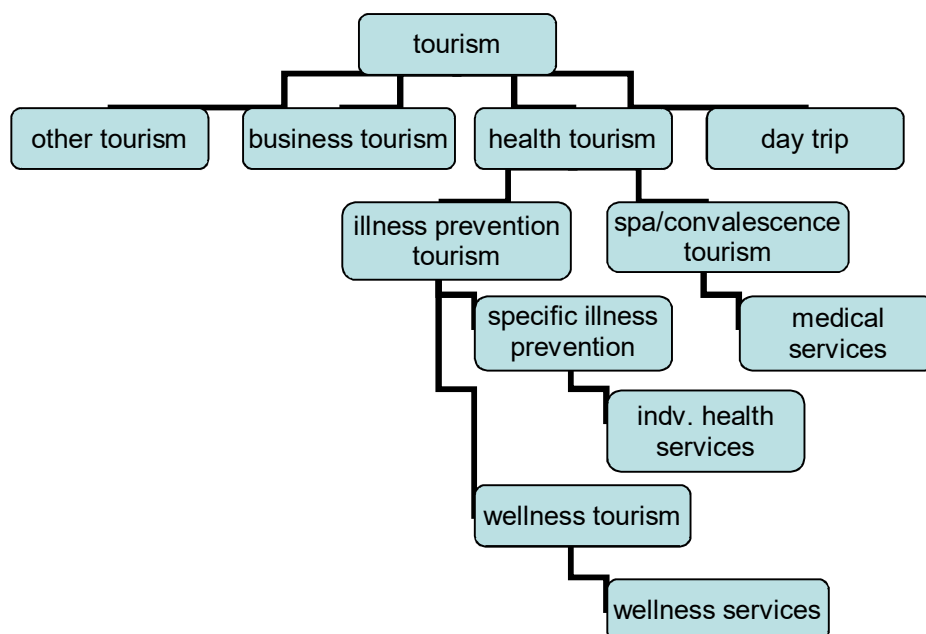


Figure 1: Subordination of wellness services within the tourist offer
 Source: Mueller & Kaufmann, 2010, p.8

Pesonen, Laukkanen & Komppula (2011) present the most common associations with wellness services, namely association with luxury (Konu et al., 2010) and expensive services (Smith & Puczko, 2009). Consequently, customer segments wellness services are seen as being composed of: people with high income older persons, motivated by the desire for relaxation and escape (Smith & Puczko, 2009). However, in many cases, linking the concept of wellness tourism to the elderly is done through the health problems most faced (Joppe, 2010). It is considered that wellness tourism prevents, relieves or treats certain diseases. In this case, any elderly person can be found in the target market. In some countries, wellness has become a label for added value added to services and as a way of positioning hotels on the luxury market (Gelbman in Pesonen, Laukkanen & Komppula, 2011). There is no strict list of facilities and wellness services that a hotel that claims to offer wellness, but we will make a summary of some empirical studies among the wellness hotels. Thus, Mueller and Kaufmann (2010, p. 12) analyze the wellness facilities and services offered in the offer of 3-5 star hotels (Table 1), which is completed by dividing the hotels into four categories: software hotels, hardware hotels, 'fake wellness hotels' and 'traditional medical cure institutions'.

2. Presentation of the Hotel¹ in Baile Felix

In Romania, around the consistent sources of thermal waters have developed centers / resorts with balneological profile, spa resorts.

Completing the balneological offer of the hotels in the spa resorts was made as a response to the influences from the traditional tourism pools in the world.

Baile Felix is a balneoclimatic resort situated in Sânmartin commune in Bihor County, Romania. Felix Bath is at approx. 10 km south of the city of Oradea and is now considered to be the largest spa resort in the country, according to its capacity of accommodation and second place, after the Black Sea coast, regarding the permanent regime and the number of accommodation places. The facilities in this resort allow for the successful treatment of rheumatism and neurological, gynaecological diseases, and medical facilities have facilities for electrotherapy, hydrotherapy, aerosols, massages, paraffin wraps and other balneal treatments. Băile Felix resort also allows for relaxing tourism.

Through the network of hotels and other structures, Baile Felix offers approx. 7200 accommodation places. Since 1995 it has been operating in the S.C. Tourism Felix S.A., which has made massive investments in tourism infrastructure in recent years. The main attractions revolve around the thermal water, with swimming pools, treatment and recovery centers, SPA centers, 5 star hotels and 2 star hotels.

3. Purpose, objectives and hypotheses of research

The purpose of the research is to identify the type of offer, the profile and the consumer preferences of the tourists within the Hotel in view of the positioning on the wellness tourism market.

The research is quantitative, cross-sectional, aiming to collect and compare information on the wellness tourism market in the hotel in Baile Felix. The research method was the questionnaire-based survey with operator application. The research period was November 25, 2015 - January 11, 2016 and targeted tourists at the Băile Felix Hotel. A total of 101 questionnaires were applied, of which 100 were validated. The tool was a questionnaire with 17 questions: 10 closed questions with one permissible answer, 3 with several possible answers, and 2 with the 5-level Likert scale. There were two open questions in the questionnaire.

The assumptions of the research are:

H1: The wellness offer of the studied unit is incomplete

H2: The hotel's clientele is not wellness-specific

H3: The hotel's customer preference is for balneological services, above all

H4: The hotel's current customers are satisfied with the quality of the services they received (a hypothesis based on the high percentage of customers who have been accommodated at this hotel)

¹ It is a four star hotel in Baile Felix. We did not use his name to hurt his public image. We will refer it in this paper as *Hotel*

4. Analyze data and interpret the results

H1: The wellness offer of the studied unit is one incomplete former and 2 open questions.

In general terms, wellness tourism is made by people concerned with maintaining or improving health and who, during their travel and stay, use services that help them in this direction. The sensitive aspect of the problem is that wellness refers to physical and mental health and spiritual balance. As a result, the services that make up the wellness offer should reach all these dimensions: physical, mental and spiritual. Because there is not necessarily a list of services and facilities that a wellness hotel has to offer, we have gone into testing the hypothesis from a study of several units that have a wellness offer (Table 1).

Table 1: Comparative analysis of wellness facilities and services offered by the hotel analyzed

Wellness facilities and services (Source: Mueller and Kaufmann, 2010, p.12)	Wellness facilities and services at Hotel
Wellness facilities provided by hotel groups	Wellness facilities provided by hotel groups
1. Sauna 2. Solarium 3. Sport fitness 4. Steam bath 5. Swimming pool 6. Whirlpool 7. Medical center	1. Sauna 2. Solarium 3. Sport fitness 4.- 5. Swimming pool 6. Wellness Whirlpool 7. Medical center
Wellness services provided by hotel groups	Wellness facilities provided by hotel groups
1. Healthy nutrition 2. Supervised sport 3. Massage 4. Culture 5. Relaxation	1. - 2. Individual and group kinetotherapy and hydrokinetotherapy 3. Massage 4. - 5. Relaxation procedures with thermomineral water
Other services	Other services
-	Walkway with river stones Geriatrics and gerontology (prevention and treatment of aging) Facial Treatments Gerovital

Source: processed on the basis Mueller & Kaufmann, 2010, p.12

After Wellness Tourism Worldwide (2011), the most popular wellness tourism services are:

- Beauty treatment (89% of respondents said they are very popular and popular)
- Sports and fitness services (89%)
- Spas for rest and recreation (85%)
- Spas and wellness spas (83%).

The hotel analyzed was spa treatment, having a tradition in this area. The analysis of the services and wellness facilities that the hotel has revealed shows a good service coverage, with two essential categories being missing: the differentiated menu and the cultural component (entertainment, animation, socialization).

We confirm H1 that the hotel analyzed does not have a complete wellness offer. We mention that an offer complete does not require the existence of all possible wellness services but services of all main categories that reach the three components: physical, mental and spiritual. At the analyzed hotel, the physical component is predominant and spiritual component is missing.

H2: The hotel's clientele is not wellness-specific

As the analysis of the sample of customers shows, most customers have previously been accommodated in this hotel. Of the 57 respondents who said they had been staying at this hotel 56.14% were multiple times, 22.81% were 2 - 3 times and 21.05% were only once. We can assume that they are the customers of the spa services the hotel offered in the past.

In formulating this hypothesis, we started from the classic profile of the wellness services consumer (Chen & Petrick, 2013), which has the following characteristics: female gender, average age (45-60), over-average income. We add university undergraduate studies.

For the studied sample, we checked the predominant (female) segment: how many women are aged 45-60, over-average income (over 2000 lei).

According to the analysis of the data gathered, most of the tourists (88%) from the Hotel are from Romania, in a very small proportion we find tourists from other countries like Israel, Germany, and Italy. Within the analyzed sample, 59% of the respondents are female and 41% are male. The sample was one of availability, but the share of women steadily exceeds the percentage of men among the hotel's clientele. Of the total of 100 people included in the sample, 47% are employees, 22% entrepreneurs, 16% retirees, 6% farmers, 3% students / 3% households and 3% unemployed.

Regarding the last graduate school of the interviewed persons, approx. half of the sample are college graduates (54%), followed by those who graduated from a postgraduate school (15,00%), high school (14%), respectively those who graduated from post-secondary school by 7% and the general school with a percentage of 6%, and with the lowest percentage, 4% are those who graduated from vocational school. Regarding the average monthly income of tourists at the Hotel we can see that most (23%) fall into the income category of 1,050 lei - 2,000 lei. With a very close percentage, 22% are in the category 2,000 lei - 3,000 lei and over 5,000 lei. Very close are those in the category 3.000 lei - 5.000 lei with a percentage of 21%. The lowest percentage (7%) is represented by the average monthly income category below 1.050 lei.

According to the data collected, the majority of the sample are those aged 50-64 years (38%), followed by those aged 34-49 (36%) and those aged 20 - 34 years

(14%). A lower percentage (9%) were retirees and young people (3%). Consequently, we do not validate the H2 hypothesis.

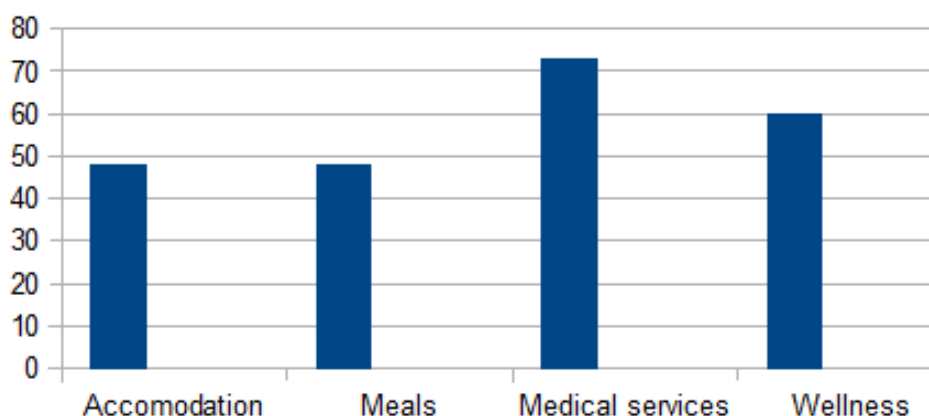


Figure 2: Preferred services by surveyed persons

Source: made by the authors

Structure of the predominant clientele: women (59%) of which 67.79% have university and postgraduate studies, 32.2% are aged 35-64 years and 67.79% have higher than average earnings. With an age difference, we invalidate H2, and we say the hotel's clientele is wellness-specific.

H3: The hotel's customer preference is for balneological services, above all

From the data presented above, we can see that 57% of the respondents have already been accommodated at the hotel, and the remaining 43% have not been accommodated at this hotel. Of the total of 100 people in the sample, most of them 45% have chosen this hotel on the recommendation of their friends, 32% on the Internet 14% through a travel agency, 5% on a booking website, and 4% have chosen this hotel from other sources. According to the above data, the most preferred (purchased) services were: medical services followed by wellness services, accommodation and meals. This situation shows us that, of hotel guests only consume wellness and medical services without being accommodated at the hotel (Figure 2). The hierarchy of wellness services according to the frequency of choice by the clients (Figure 3) shows that the first places are occupied by: the use of the wellness pool, the use of the indoor pool, relaxation baths with thermal water etc.

Question # 15 investigates what other services the tourists would prefer to find at the hotel, a key question for showing consumer preferences. This was an open question. The results show that tourists would also like to find other services at the hotel, such as a large-area laser procedure, entertainment services and hot and cold water pools.

The main services chosen are medical and wellness, even by customers staying in other accommodation facilities or coming from the proximity. The main wellness services chosen by the tourists are: indoor swimming pool, wellness pool, relaxation baths with thermal water, therapeutic massage, thermal water relaxation showers, river walkway, and fitness services. The less-chosen wellness services are relaxing

massages, cosmetic treatments, anti-cellulite massages and toning massages. The client's preference is for balneological medical services (among those that exist) as well as for entertainment services (which do not exist), so we can only validate the hypothesis H3, only partially.

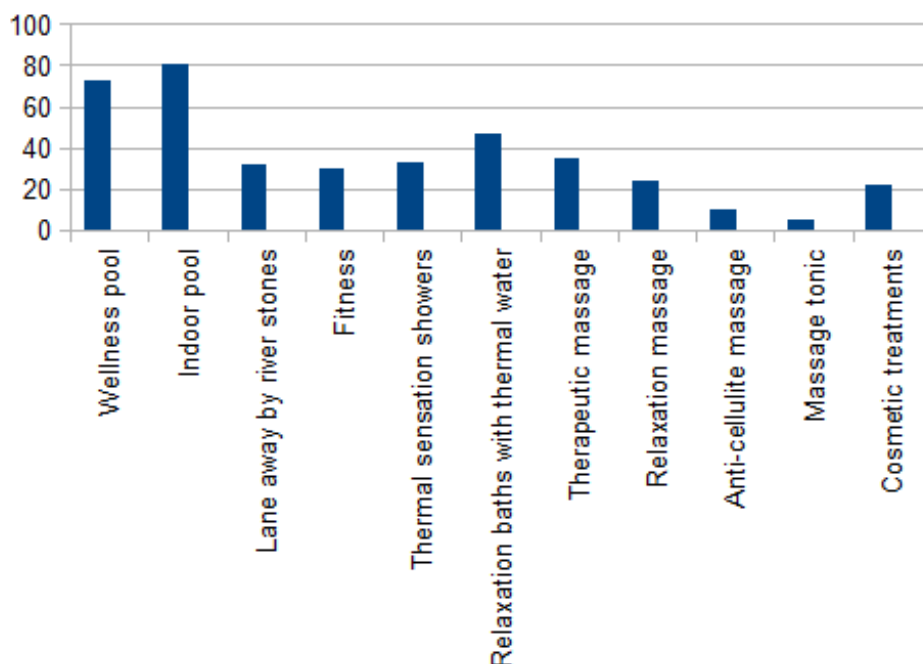


Figure 3: Preferred wellness services by those surveyed
Source: made by the authors

H4: The hotel's current customers are happy with the quality of the services they received

Regarding the degree of satisfaction with selected wellness services, the average is 4.78 on a 5-step scale. Ratings on quality attributes are presented in Table 2.

Given 1 to 5 values 1- Very dissatisfied, 2-Dissatisfied, 3-Indifferent 4 - Satisfied, 5-Very satisfied after sampling, Result that out of the total of 100 people surveyed, the average score is 4.78.

Question 13 was an open one and called for the establishment of an association of wellness services with one word. The most common responses were "relaxation, health, very good, professionalism."

We can observe that the extent to which the people surveyed were satisfied with the wellness services offered by the hotel are in all cases between satisfied and very satisfied. Consequently, we validate the H4 hypothesis. This hotel, chosen as a subject of study, is designed as a modern spa, relaxation and conference center, reopened in early 2007 after extensive renovations, modernization and expansion. Renowned for its therapy programs, the Wellness & SPA center and treatment of the hotel ideally use the healing properties of the water, thus continuing the millenary tradition of baths with thermal water. The hotel has a capacity for accommodation in

110 double rooms (of which 3 rooms for disabled persons), 80 single rooms and 20 suites. Each room is equipped with balcony, minibar, telephone, cable TV, internet connection, safe, air conditioning, hairdryer and bathrobe. It is the only hotel in Romania to which the certificate was granted EUROPESPA - med, showing that the European Spas Association standards (ESPA) on general therapy infrastructure, hygiene and safety of tourists.

Table 2: Evaluation of wellness services at the hotel

Answer options	Absolute Frequencies					
	The material basis	Attitude of the staff	Duration of procedures	Ambiance	Waiting time	Quality of supplies
1 Very dissatisfied	-	-	-	-	-	-
2 Dissatisfied	-	-	-	-	-	-
3 Neutral	1	4	4	-	-	3
4 Satisfied	14	18	18	16	14	26
5 Very satisfied	85	78	78	84	86	71
Medium	4.84	4.74	4.74	4.84	4.86	4.68

Source: made by the authors

5. Conclusions and limits of research

The research shows that the wellness offer of Băile Felix, although it has a complex offer, does not have a complete clue in the wellness vision. His offer is completely lacking in the spiritual component but also in the social component, which is also mentioned by current clients. The second hypothesis was invalidated, namely, it was found that the current customer service profile of the analyzed hotel is one of a wellness consumer. It is generally believed that a wellness consumer needs to have over-average income, generally speaking women, 45-60 years age and people with higher education.

As regards the third hypothesis on consumer preferences, it was found that they really preferred the specific balneological offer. However, they mentioned that they would like other services, services that best fit wellness offer, respectively entertainment and socialization. As far as consumer satisfaction with the services received is concerned, they are satisfied. In fact, a high percentage of customers have already used the services of this hotel in the past.

The problem of the wellness offer could be solved through a standardization of these services, thus ensuring all the mandatory components of body, mind and spirit. Even if the present customers are pretty satisfied per globally, they need services for improve their spiritual and intellectual parts of their life. By definition, wellness tourism should do that so the wellness offer of the hotels have to be diversified and completed.

A limit of this study is given by the small sample of consumers interviewed and by the fact that a single hotel was chosen.

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THE EXPORT EFFICIENCY DYNAMICS OF ROMANIAN OWNED CAPITAL COMPANIES. LIMITS AND CHALLENGES IN A GLOBALISED WORLD

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Abstract: *Globalization process and the creation of single regional markets, i.e. the EU, play an important role in the dynamics of the integrated national economies and increase the degree of interdependence, generating both positive and negative externalities. The importance of foreign capital is very high for an emerging economy, in terms of increasing performance - productivity, international competitiveness, new job (highly skilled) creation, new technologies and knowledge transfer in the host country, modern management systems promotion, etc. The foreign trade activity analysis, especially on export as an economic growth factor, from the viewpoint of the companies' capital ownership, points out competitiveness and performance's aspects. In the same time, it allows the identification of those sectors where the commercial policy can support Romanian companies to develop efficient and productive businesses. High-tech products do not represent an attribute for big companies only; technological progress has created an inversely proportionate relationship between company size and technological level. Nowadays however, large companies still dominate the market due to the competitive advantage of RDI departments developed within the company. The comparative analysis of labour productivity reveals the higher contribution of the export of goods to the financial and economic results of FDI companies than those with domestic capital. The low(er) competitiveness of the Romanian companies is diminishing the openness potential to the foreign markets. The dependence of national exports on foreign-owned companies produces positive effects in the Romanian economy on the medium and longer term. To ensure the protection of the national interests and to allow an efficient development of industries would imply a strategy and implementation policy. The policy might consider the geographical location of industrial areas (resource efficiency and cost reduction), environmental conditions (the need to protect it), the specificity of the regional population (level of education, traditions) and the opportunities for professional development. Although the number of Romanian companies is increasing, their contribution to national exports decreases. Their reduced size, a high degree of capital fragmentation, the lack of both tradition on a competitive market and a national strategic orientation for export activity, as well as the shortage in brakes on the import of goods that can be produced in Romania, lead to the restraint of Romanian entrepreneurship.*

Keywords: export; Romanian capital; foreign capital; high-tech; productivity.

JEL Classification: F10; F15; F16; F23.

Introduction

The company's development based on export depends on a series of factors such as the business environment, the structure of the economy by activities or the technological intensity of the productive branches; the economic model strongly influence the competitiveness, on both micro and macroeconomic level. Optimal resources allocation and export-oriented market determined a higher performance in terms of profits, wage related productivity and market expansion.

The present study aims to analysing the performances of the export activity of the companies with Romanian capital, as an indicator of national competitiveness. We are focussed on inward processing activity and export of high-tech products. The evolution of exports and imports by type of capital of the companies in Romania, the labour productivity and the export intensity were analysed.

Export is one of the sustainable growth factors (Cerchez, 2007), (Zaman & Vasile, 2003), (Vasile & Banica, 2016). By contribution to gross domestic product, export can provide a long-term development of the whole economy. Under the condition of being stimulated and supporting in their investment activity, companies can produce, through exports, positive effects in the economy. This subsequently leads to new jobs creation, by wage increases and stimulating national and international consumption (Zaman, et al., 2012).

Globalization process and the creation of single regional markets, such as the EU, play an important role in the dynamics of the component economies, increase the interdependence and generate both positive externalities (such as trade intensification) and negative externalities (vulnerability and crises). In a strongly dependent economy on the evolution of major trading partners, especially from the EU Member States, the growth potential for export is limited. In addition, the value-added included in the Romanian exports is relatively low compared to other EU Member States. The net contribution of external trade to economic growth is not strong enough to have a significant impact and to create the self-sustaining "engines", meaning significant and sustainable export flows of groups of products and services where Romania have comparative advantages, strengthening export destinations or finding the necessary resources for investment development and technological renewal.

Foreign capital is a way to overcome the internal deficit of financial resources that would support economic and export growth. Foreign companies are very important for an emerging economy in terms of productivity, competitiveness, job creation, the introduction of new technologies and knowledge, the promotion of modern management systems (Zaman, et al., 2012) (Zaman & Vasile, 2006). On the other hand, inward-processing activities facilitates the import of knowledge and new manufacturing technologies, which, together with lower labour costs, partially compensate the host country's competitiveness deficit and support the growth of exports. This type of activity, as well as foreign direct investments, can lead both to microeconomic and macroeconomic growth only when policies in both areas converge.

In the 2018 Country Report for Romania, the European Commission considers that the Romanian business environment has deteriorated in recent years (European Commission, 2018). It is not the only international report that suggests reducing Romania's attractiveness. Thus, Romania dropped nine places in the World Bank

Doing Business Report (World Bank Group, 2018) ranked No. 45 in terms of ease of doing business, and in the Global Competitiveness Report, Romania fell from 62th to 68th rank (WEF, 2017). Performance remains particularly weak in terms of governance, qualification of labour, infrastructure, health and education, most companies forecasting a reduction in investment activity than expansion of their activity in the near future (European Investment Bank, 2018).

A national development policy and a real stimulated and protected domestic production, including the financial and human capital in the research and development sector (public and private) is necessary. Inward processing activities and foreign direct investments generate economic development mainly for the origin countries of foreign investments or ordering party in the inward processing businesses, and less on national level.

Research methodology

The foreign trade in goods statistics (NIS Romania) was the base for this study. The database was organised by the capital type of companies, the presence of high-tech goods or inward processing activity in the foreign trade of the respective companies. There were also been made analyses of the performance indicators of the production factors allocation (labour productivity) and the efficiency of the results (export intensity).

To highlight the advantages of the chosen selection and grouping attributes, the comparative performance analysis method was applied, based on the average values of the turnover and the number of employees, for each category of companies analysed.

The nomenclature applied for trade with high-tech products is the one used by Eurostat to disseminate data across the European Union. This nomenclature defines trade in high-tech products as the export and import of goods according to SITC - Rev 4 (International Standard Trade Classification), under the following categories: aerospace products; computers, electronics and telecommunications; pharmaceutical products; scientific instruments; chemical products; non-electric machines; weapons. The nomenclature follows the definition of the OECD (Organization for Economic Co-operation and Development), according to which high-tech are those goods for whose production a high intensity of research and development is required.

The foreign trade activity of the companies was differentiated by capital ownership, namely Romanian capital, mixed capital and foreign capital. Companies with Romanian capital refer to companies having state and / or privately owned entirely Romanian companies, mixed capital companies refer to Romanian and / or Romanian private capital associated with foreign capital and foreign companies are companies having foreign property.

Romania's Foreign Trade after 1989

The political changes in 1989 have irreversibly influenced Romania's foreign trade in the last decade. Exports of national goods sharply decreased, accounting in 1993 only 45% of the 1989 value in real terms. Imports have also been negatively influenced by 1989 events, but since 1992, they have steadily increased, exceeding the 1989 level. In 2016, Romania imported goods of 67344 million euro.

Romania's foreign trade relations experienced a remarkable evolution in terms of value, as compared to 1989, with imports increasing 100 times and exports over 132 times.

If in the early years of transition to a market economy the negative balance of the trade was easily explicable, but the continuation of this situation is only a reflection, of the incapacity to expand and conquer external markets for domestic products by firms with Romanian capital.

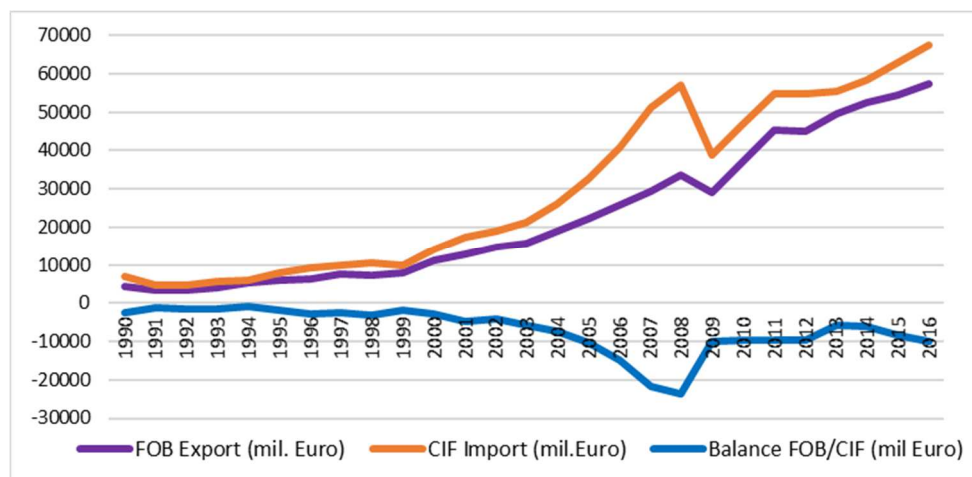


Figure 1. Romania's external trade in goods and GDP (1990-2016)

Source: NSI, TEMPO online database, <http://statistici.INSSE.ro/shop/>

After 1989, the Romanian economy experienced a multidimensional reform, through massive restructuring of the economy, the privatization of industrial enterprises, the transition from the centralised economy to the market economy and the need to ensure the functioning of the new structures. These changes in the economic approach were closely linked by the redefinition of external trade as level, structure and geographical markets.

Since the accession to the EU in 2007, a process of adjusting trade relations in the single market has taken place, the volume of foreign trade with the Member States being significantly influenced by expanding market at EU level. In 1991, 44.3% of Romania's exports were destined for European countries (the current EU28 membership), and in 2016 the weight of these countries in Romania's total export reached over 75%. In the case of imports, the orientation towards the EU Member States is even more pronounced, increasing from 36% in 1991 to 77% in 2016.

Romania's external trade recorded an average annual growth of 111.2% for exports and 110.5% for imports in the period 1990-2016. The trade deficit has steadily increased, from 2568 million euro in 1990 to a maximum of 23515 million euro in 2008, the year preceding the economic and financial crisis that has affected most of the world's economies. Since 2009, the trade deficit has decreased, so that in 2016 it was 9358 million euro. This reduction in the deficit was determined primarily by a sharp and major fall in imports in the context of the crisis.

Type of capital and foreign trade of Romania

The foreign trade companies were analysed for the 2008-2016 period in terms of capital type, as only for this limited period of time there are available data and statistical information.

Mainly foreign-owned companies carry out Romania's foreign trade activity.

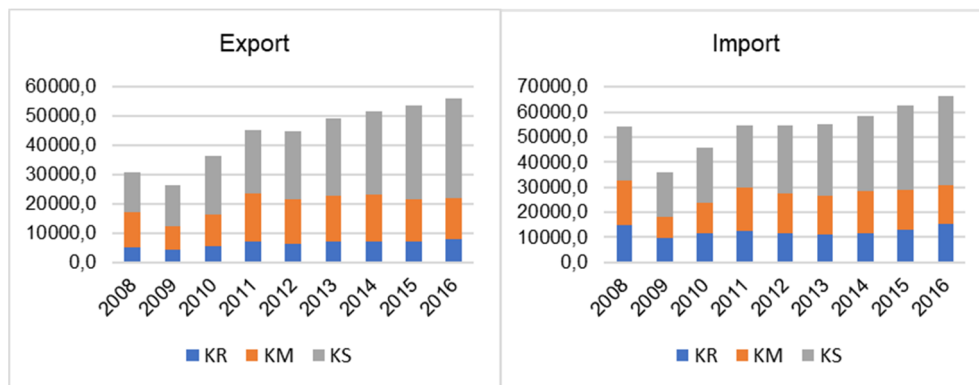


Figure 2. Romania's foreign trade by type of capital, 2008-2016 (mil. euro)

Note: KR=Romanian capital, KM=Mixed capital, KS=Foreign capital

Source: Authors calculation based on NIS data

In 2016, more than 59% of the export (in terms of value) and over 53% of the import have been carried out by companies with foreign capital, which shows a very high dependency of the national foreign trade on capital from other countries. The share of companies with Romanian capital is, on average, 14% of national exports throughout the analysed period, with a decrease trend compared to the period preceding the economic and financial crisis. Mixed capital firms account for about 31% of Romania's total exports, with a slight downward trend from year to year.

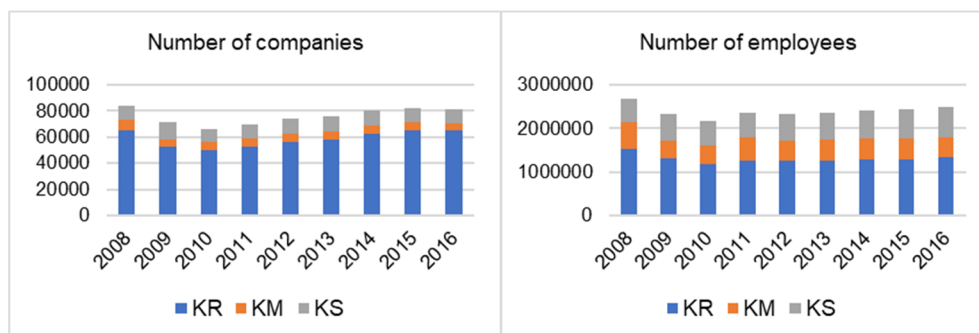


Figure 3. Number of companies and number the employees in external trade activity, by type of capital

Note: KR=Romanian capital, KM=Mixed capital, KS=Foreign capital

Source: Authors calculation based on NIS data

The Romanian companies are the most numerous, accounting for more than 78% of total in the year 2016, although they are ranked the last in terms of export value, among all companies analysed. Technological progress and, in particular, the information and communication technology sector, bring a specific component to foreign trade activity. Small businesses can reach a high level of export only on niche branches with value-added and high technological intensity.

The new business fields, which creates innovative products with specific utility for user, represent another argument to support the idea that also the small size companies can have a significant and sustainable foreign trade activity. Romanian companies are higher vulnerable on external trade market and face a lower flexibility and adaptive capacity on markets expectations.

Technological progress has developed an inversely proportionate relationship with company's size, but today large firms still dominate the market due to the comparative advantage of R & D and innovation within the company. The analyse of the labour productivity by type of capital is relevant for the efficiency of foreign trade companies.

Table 1. Labour productivity and average turnover in foreign trade companies

	Labour productivity (thousand euro/employee)				Average turnover (thousand euro /company)			
	Total	K.R.	K.M.	K.S.	Total	K.R.	K.M.	K.S.
2008	84.5	57.4	132.8	114.5	2592.3	1353.4	10053.8	5664.2
2009	76.6	52.0	114.9	106.0	2412.6	1294.2	8439.4	5097.3
2010	91.8	59.8	138.7	120.8	2931.4	1413.1	9793.3	6565.8
2011	93.6	58.3	130.4	136.5	3110.9	1398.2	10528.6	7304.7
2012	87.9	57.0	115.8	129.4	2685.2	1260.7	8361.5	7110.9
2013	96.4	57.2	143.2	139.1	2882.6	1232.0	10642.8	7832.0
2014	98.2	59.5	146.2	136.6	2814.1	1213.3	11302.0	7887.0
2015	98.1	64.2	131.8	136.3	2858.1	1259.9	10301.0	8488.5
2016	102.0	66.7	151.5	136.5	3040.5	1376.6	11891.9	9298.1

Note: Total = Average at national level, KR=Romanian capital, KM=Mixed capital, KS=Foreign capital

Labour productivity = Company's turnover /number of employees (thousand euro/employee)

Average turnover = Company's turnover / number of companies on each category (thousand euro /company)

Source: Authors calculation based on NIS data

The efficiency and average turnover of the companies with foreign and mixed capital exceeded the level reached by the Romanian companies. The average labour productivity, calculated as the turnover obtained by employee in the companies with foreign trade activity, increased during the analysed period, from 84.5 thousand euro / employee in 2008 to 102.0 thousand euro / employee 2016.

Romanian companies faces a reduced openness to the foreign markets. If we also consider the increase in the share of the foreign capital companies in Romania's total export as well as their decreasing number (increased productivity level), we

conclude that the productivity and efficiency gap deepens year by year between the two type of companies (foreign vs. Romanian). Technological advantage and trade experience in a globalised world are relevant in the case of foreign and mixed capital companies for the production of quality goods that incorporate high technology and, subsequently, they are more competitive on foreign markets. Competitiveness is also given by other factors such as brand, product sales network and comparative advantages given by low processing level of exported goods and reduced labour costs.

At the level of the whole economy, the presence of foreign capital is justified primarily by increased value-added based primarily on lower labour costs, although the qualification of the labour force is not much higher than in the Romanian companies. Thus, the average turnover in foreign company is about 5.5 times greater than the one reported by companies with Romanian capital.

Table 2. Export intensity and average number of employees on foreign trade companies, by type of capital

	Export intensity (%)				Average number of employees / company			
	Total	K.R.	K.M.	K.S.	Total	K.R.	K.M.	K.S.
2008	14.4	5.6	15.3	22.0	30.7	23.6	75.7	49.4
2009	15.8	6.3	16.9	21.6	31.5	24.9	73.4	48.1
2010	18.7	7.8	17.8	29.5	31.9	23.6	70.6	54.3
2011	20.5	9.7	23.0	28.4	33.2	24.0	80.7	53.5
2012	22.1	8.9	28.3	29.5	30.5	22.1	72.2	54.9
2013	21.8	10.1	22.9	30.2	29.9	21.5	74.3	56.3
2014	22.1	9.1	22.4	32.3	28.7	20.4	77.3	57.7
2015	22.8	8.6	22.9	34.4	29.1	19.6	78.1	62.3
2016	22.5	8.6	21.5	35.0	29.8	20.6	78.5	68.1

Note: Total = Average at national level, KR=Romanian capital, KM=Mixed capital, KS=Foreign capital

Export intensity = (Export / Turnover)*100

Average number of employees /company = Number of employees / number of companies on each category

Source: Authors calculation based on NIS data

Export intensity indicates the share of sales on foreign markets in total turnover. Companies from the same industry are not homogeneous in terms of productivity and employment. This indicator depends on the degree of integration on global value chain and international production and distribution network. Foreign companies registered higher export intensity, 35% in 2016 (relatively constant level in the analysed period) compared to only 8.6% registered by the companies with Romanian capital.

A relevant indicator for highlighting the size of firms is the average number of employees per company, on the three types of capital. Companies with Romanian capital are generally small firms with less than 50 employees, while companies with foreign capital and mixed capital are medium and large companies with an average

number of employees of 78 and 68 employees respectively, based on 2016 data). There is a great diversity on the level of foreign companies in terms of size. There are both medium and large enterprises but also small companies, on average the number of employees is 68 per company (2016), increasing year after year.

Foreign trade in high-tech goods, by type of capital

In 2016, Romania exported and imported high-tech goods of 4.9 billion euro and 7.7 billion respectively, 2.6 times greater than 2008 for export and 1.5 times greater for import. Although the need for national technology upgrading is high and Romania is facing limited possibilities for the innovation, creation, development and maintenance of national technological base to ensure the production of competitive goods at national and international level, the share of high-tech goods in the total import is reduced. In 2016, they represented only 11.4% of total imports. In the case of exports, the share is even lower, of 8.5% from total exports, a very small percentage that cannot ensure an export-led growth. The initial economic assumption was that high-tech exports generate high added-value exports, international recognition of the domestic goods quality, based on a high level of labour qualification and higher remuneration of employees. In theory, this fact produce a propagation throughout the economy of positive effects related to consumption and sustainable economic growth.

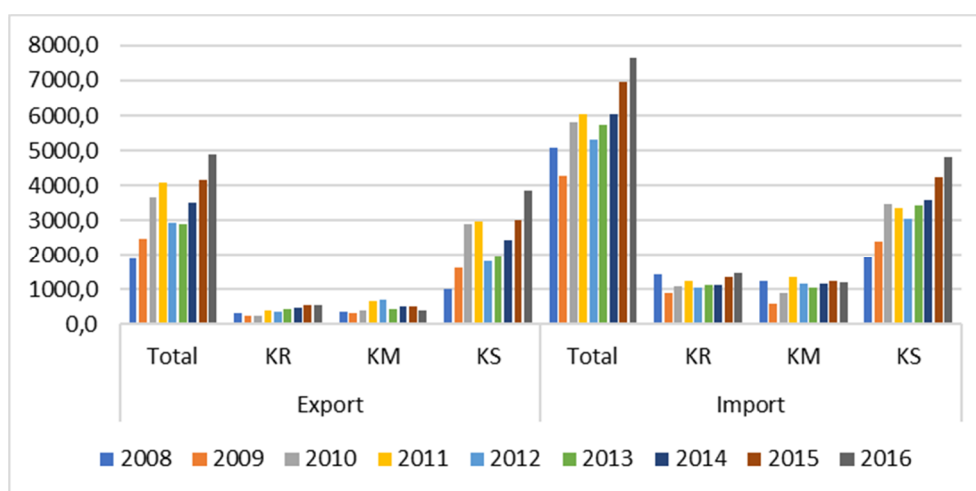


Figure 4. Exports and imports of high-tech goods, by type of capital (mil. euro)
Note: KR=Romanian capital, KM=Mixed capital, KS=Foreign capital. Data refers to the high-tech goods exported and/or imported, and not on the overall foreign trade activity of the companies.

Source: Authors calculation based on NIS data.

Trading high-tech goods on external markets might turn into a very important activity for Romania, given the tendency to export mainly raw materials or low processed goods instead of finished products. However, the share of high-tech goods is very low in the export structure, only 8.5% in 2016, increasing from 5.6 in 2008 but decreasing from 9.8 in 2010 (year after crises), with the largest reduction being

registered at the level of foreign companies. Thus, although the turnover, the external trade value and the number of employees are increasing year by year, the share of high-tech goods traded on the foreign markets by foreign companies does not follow the same growth trend. Foreign capital in Romania is not focussed on national or regional development in our country, by increasing performances of industries, but to achieve a high profit share. The (still) abundant national resources, both natural and human, and subsequently transfer the profits obtained to the origin country of the investments are the main benefits for foreign companies in Romania.

Table 3. Export and import of high-tech goods by type of activity and type of capital (mil. euro)

	Export				Import			
	Total	K.R.	K.M.	K.S.	Total	K.R.	K.M.	K.S.
2008								
Total HT goods	1887.8	294.6	340.7	1002.0	5082.6	1416.0	1235.1	1907.2
of which:								
Under PA	631.3	77.1	165.5	362.5	590.5	56.2	128.4	382.2
Under non-PA	1256.5	217.5	175.2	639.5	1013.4	48.2	283.8	500.4
2016								
Total HT goods	4865.4	522.7	401.7	3859.4	7660.5	1472.9	1196.2	4809.9
of which:								
Under PA	911.4	72.5	149.3	608.0	1013.4	48.2	283.8	500.4
Under non-PA	3954	450.2	252.4	3251.4	6647.1	1424.7	912.4	4309.5

Note: Average at national level KR=Romanian capital, KM=Mixed capital, KS=Foreign capital

HT goods = High technology goods (high-tech)

Under PA=High-tech goods obtained under inward processing activity

Under non-PA= High-tech goods obtained under other production activities than inward processing

Data refers to the high-tech goods exported and/or imported, and not on the overall foreign trade activity of the companies.

Source: Authors calculation based on NIS data

In 2016, foreign companies, increasing from 53.1% in 2008, exported 79.3% of high-tech goods. Romanian companies exported only 10.7% of high-tech goods, decreasing from 15.6% in 2008. It is worth mentioning that 81.3% of high-tech goods were produced and exported under inward processing businesses in this case foreign capital holding 66.8% while Romanian companies only 9.3%.

The Romanian and mixed companies carry out trade in high-tech goods to a very small extent and with a tendency to decrease, the aggregate share of the Romanian and the mixed capital in 2008 being of 33.7% while in 2016 decreased to 19.0% of total exports of high-tech goods.

On import side, the Romanian and mixed capital companies, beside an increase of 7.5% in total import of high-tech goods (from 27.4% in 2008 to 34.8% in 2016), cannot compete foreign capital, which registered an increase of 16.0% on imports and 26.2% on total exports of high-tech goods between the two years.

It can be concluded that the activity of foreign capital companies in Romania is mainly oriented towards the production and foreign trade in other sectors than high-intensive ones. These companies are present in our country to produce semi-finished materials and to obtain profits based on the transfer prices of their multinational companies. For the future, however, it is highly likely that Romania will become unattractive to foreign investors due to the process of increasing the cost of labour and / or other resources. If Romania intends to remain attractive for foreign investors, investments must be made in education and labour force qualification, according to development of jobs, knowledge, labour market requirement and, last but not least, the digitalisation which occurs on all the economic fields, including external trade in goods.

Conclusions

Romanian owned companies in the analysed period lost their external market position. The national export dependency on the foreign capital can produce positive effects in the Romanian economy, on a medium and longer term, provided there is a strategy and an implementation policy that can provide protection of the national interest and environment and improving life conditions and standards of population. Establishing a balance between national and foreign capital benefits in Romania would be a priority, as in the current global economic context of the globalization process, winners are the nations producing the highest value-added and not the states exporting raw materials or low-processed goods. National benefits from the presence of foreign capital might be achieved as long as Romania is situated in the economic interest and is part of the development strategy of foreign companies. When this reality will change, along with Romania's deeper integration into international structures, either a reorientation of exports to new markets or diversification of national supply to foreign markets will be necessary, which stimulates the national firms to create and produce sustainable goods for the national and international markets.

From the analyses performed in this study, it was concluded that the presence of the high-tech products in the portfolio of the companies represent one of the supporting factors of the activity of foreign capital companies in Romania. It turned out that foreign-owned companies are present in Romania to produce and export semi-finished products using national resources and only to a smaller extent to produce and export high-tech goods.

The dynamics of the included technological progress found in the Romanian companies' export products and services is relatively modest, so their natural orientation, as an argument for market survival, is towards commercial areas where they can have comparative advantages. This also involves extra-EU space, which, in some geographic areas, is less competitive than intra-EU space.

The productivity gap between the two types of companies (foreign capital on one side, and Romanian and mixed capital, on the other side) is revealed by the results of this study. The important role of foreign companies on the global value chain of the product or process, the access to high and diversified manufacturing

technologies are highlighted by the development of a much larger volume of export and turnover, beside the same number of employees as in the case of Romanian-owned companies are involved. The higher productivity and quality of goods resulting from the production process is reflected in higher efficiency ratios for foreign-owned companies.

Supporting the activity of Romanian companies is essential for reducing the dependence on foreign capital and ensuring the sustainability of economic development. This could be achieved by developing a balance between capital ownership, which would lead to:

- competitions by field of activity between capitals,
- stimulating the increase of the technological transfer rate to the Romanian companies,
- the development of cooperation networks based on complementarity, through component subcontracting or detailed specifications.

Export, as an economic activity, continues to remain an important growth factor. The natural and human resources available in Romania, together with the technology and knowledge that companies have access to, through foreign firms and especially foreign direct investments, must be used for the development of competitive national products of higher quality on foreign markets.

Performance and intensity indicators as well as average indicators of external trade activity by company size and type of business, can be appreciated an expression of business trends associated with increased visibility on foreign markets (as general theoretical approach), but in practice, for Romania, there are some specificities:

1. Romania's foreign trade is distributed on large foreign-owned companies. Their business plan is based on the strategy of the mother company and not on the Romanian strategy of economic development and foreign trade.

2. Romanian-owned companies are in general small and dependent on economic cycle. They mostly operate as satellite companies for the big international firms; their foreign trade is not linear but fluctuates from one year to another according to the international value chain and reflects less the sustainability promoted through the company strategy or national strategy. In this case, we considered in our analysis the multiannual trend of the evolution of foreign trade in these companies, associated with the annual repeatability factor (the presence of foreign trade activity each year and growth trend in multi-year vision).

3. Romania's economic activity, especially after its accession to the EU, has been substantially shaped out by the need and the possibility of carrying out the activity of foreign trade with EU partners. This has led to changes in the productive options of small businesses. This behaviour is associated with a national tendency to enlarge intra-EU trade relations and, in some cases, the dropping of some export opportunities in the extra-EU space.

4. After a period of accommodation of the Romanian companies with the activity of foreign trade in the intra-EU area (10 years), naturally follows a more mature period, associated with a reconsideration of the export destinations that can generate an increasing volume of extra-EU relations, not necessarily by reducing intra-EU relations, but by natural expansion in permissive markets.

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ADVANTAGES AND DISADVANTAGES OF LABOR MIGRATION

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Abstract: *The phenomenon of migration is associated with a number of economic advantages and disadvantages. Migration flows bring benefits or losses to those who affect them, but in varying proportions. For the home country of departure, the export of human capital, the labor force in which important investments have been made represent a loss of value added which could have been achieved in the country, the source of sustainable economic growth. For the host country of destination, the effects are generally not favourable. They are manifested in the labor market by: contributing to reducing the workforce deficit, alleviating the demographic aging process and tensions created on the labor and budgetary levels, contributions to increasing production, including exports. For the worker and his rudens the consequences are diverse but the balance is positive. Linked on the earnings we find: an income which guarantees the reproduction of the employment and his rudens workforce, which he would not have earned in the country; increasing the saving and investment capacity, either in durable goods or in launching a business; the emergence of a series of professional gains and work culture, knowledge, skills, behaviors, discipline and job security. This article treats in the first stage the terminological aspects of migrations. The objective of the paper is to make an evaluation of the advantages and disadvantages of labor migration.*

Keywords: *labor market; emigration; remittances; reduction of unemployment; migration of specialist; decrease of GDP (P.I.B.).*

JEL Classification: *E24; F22; R11; R51.*

1. Introduction:

Migration has existed since the beginnings of humanity, being of major importance in the history of human civilization. This phenomenon is not new, specific to contemporary society, it did not cease over time, and on the contrary, time demonstrates that migration records changes and new forms (Doquier, 2005).

The migration of Romanians abroad was a phenomenon that manifested itself immediately after 1989, although the characteristics of migratory waves in the early 1990s are different from those of the late 1980s or early 2000s: they had a strong ethnic component (the departure of Hungarians and Germans), or specifically targeted work destinations such as Turkey and Israel. By the mid-1990s, Western Europe is becoming a major destination for Romanian migration.

In 2002, the European Union (EU) abolished travel visas for Romanian citizens, which triggered a tripling of the number of Romanians working in Western states.

At present, the Romanians have come to represent the largest foreign minority in Italy and Spain, while the total number of Romanians living abroad is estimated to be between 3 and 3.5 million.

Ratha (2004), presented the relative importance of migrant workers' remittances as a source of development funding and some industrial measures that could lead to economic growth. The main topics of discussion proposed by Ratha were:

- Remittances are the second largest source of external funding for developing countries;
- Policy improvement and relaxation of foreign exchange controls may encourage the use of remittances for investment;
- By strengthening the financial sector infrastructure and facilitating international human trafficking, countries can increase remittance flows, thus generating more funds in official channels;
- Facilitating international labor mobility is a crucial means of increasing remittance flows in developing countries (Ratha, 2004).

International migration is a prerequisite for remittances. It discusses the means of strengthening the money-sending infrastructure and examines the impact of remittances on economic growth, investment and the distribution of revenue in the beneficiary economies. With regard to migratory flows, migration can be beneficial for the parties involved, whether they are the issuing countries, recipient countries or migrants themselves (Prelipcean, 2009).

There are both winners and losers in this process, but the net global effect is a positive one. Economic migration research can be done in different ways, such as cost-benefit analysis, empirical research data modelling, dynamic financial analysis. According to some authors, such as Pritchett (2006), Kahanec and Zimmermann (2009), the international labor force migration must be full, so that international trade-like advantages are obtained. Pritchett highlights the fact that international labor mobility can lead to world welfare. Kahanec, and Zimmermann state that solving demographic and economic problems at EU level is related to the free circulation phenomenon, the brain-drain phenomenon (brain circulation); free migration should no longer be seen as opposed to opening up the labor market and social security systems in the EU.

2. Advantages of migration

2.1. Remittances

Remittances (money transfers of emigrants) have important positive effects for the national economy because:

- Increase internal demand for goods and services, thus becoming a growth factor;
- Increase monetary flow;
- Contribute to improving the balance of payments and foreign currency reserves of the country (thus allowing for higher imports and more substantial development loans);
- Contribute to reducing the cost of money (exchange rate and interest rate, which means more credit for consumption and investment);
- Lead to increasing the standard of living of those concerned and their families, long-term and indirectly of the entire population;
- For money transfers made through the banking system, the ones personally brought by the emigrant must be added, which could mean a much stronger impact.

According to Ratha (2004), remittances can counterbalance the migratory loss for the country of origin.

Other authors such as Ledesma and Piracha show that emigration has a positive effect on employment, both by qualification of the labor force and by the increase in remittance investments, migrants returning to the country of origin contribute to increased productivity and the net migration rate has a positive value (Ledesma, Piracha, 2001).

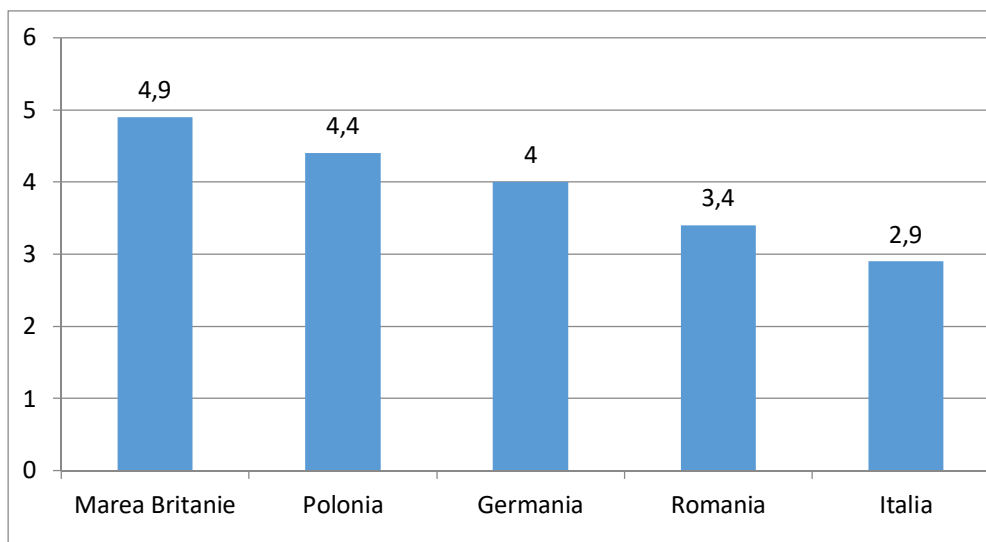


Figure 1. Top of the countries most migrated to

Source: author representation using National Statistics Institute statistici.insse.ro/shop/?page=tempo2&lang=ro&context=12

According to the National Institute of Statistics, Romania has entered the top of the European countries from which most people migrated. The UK is the first with 4.9 million; followed by Poland with 4.4 million; Germany with 4 million and fourth place Romania with 3.4 million people outside the country (INS, 2017).

Through the work done by migrants, positive effects for both the recipient state, as a result of the income and production achieved, as well as for the state of origin, through remittances and the repatriation of migrant workplace know-how gained in the host countries. Increasing the volume of migration leads to increased remittances.

The figure below gives information about the remittances of the Romanian migrants.

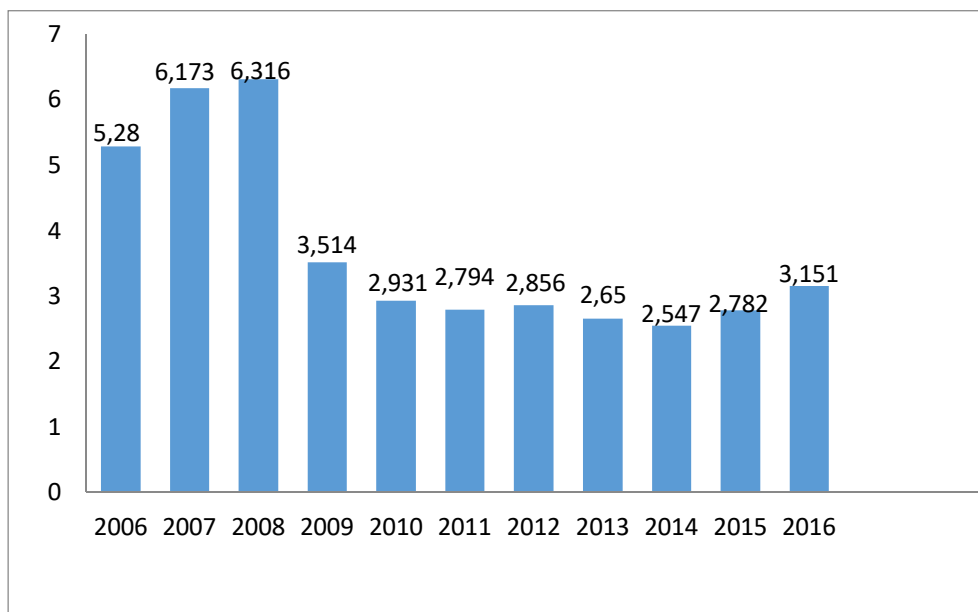


Figure 2. The value of Romanian migrant remittances in 2006-2016

Source: author representation using National Bank of Romania, available: <http://www.bnr.ro>

According to the National Bank of Romania, remittances reached in 2016 at the highest level after 2009, when they were 3.5 billion €, half of the amount that was before the crisis, and the largest source of remittances is From Great Britain.

The 3-4 billion € that enter Romania annually from those working abroad are a source of income (in many cases, the only source) for several million Romanians. These amounts have led to an increase in living standards, the explosion of housing construction, the increase in sales of equipment and goods for home comfort, the increase in the number of cars, etc.

Amounts of any remittance size are an essential factor in preventing households from falling into poverty. It is also important to note that remittance flows are also responsible for reducing rural poverty. Also, external economic migration, with its complex characteristics, contributes in a broad sense to the eradication of poverty according to the concept of promoted human poverty. At the same time, jobs were created and internal consumption was stimulated.

Remittances to Romania, as in other countries, are a potential source of savings and investment for capital formation and development (Stan, 2009).

Remittances have a particular impact on the development of their countries of origin, as they are the most stable source of currency. Money from remittances is rarely used to launch other entrepreneurial businesses than agribusiness. This is an alarming phenomenon that calls for urgent interventions to improve the business environment in rural settlements in Romania (Bleahu, 2004).

There are also tax implications. Thus, the money sent to the country by the migrant labor force strengthens the income tax base, causing the increase of the state budget revenue.

2.2. Reducing Unemployment through Migration

In line with the objectives of the Europe 2020 strategy, the European Employment Strategy aims to create more and better jobs throughout the European Union. The European strategy encourages measures aimed at achieving three major objectives by 2020:

- 75% of people aged between 20 and 64 are active in the labor market;
- Reducing school drop-out to less than 10% and increasing to at least 40% the share of higher education graduates among the 30-34-year-old population;
- Reducing by at least 20 million the number of people suffering or at risk of suffering from poverty and social exclusion (Chis, 2012).

These goals of the Europe 2020 strategy are aimed at the social field - employment and social inclusion / poverty reduction - which is an acknowledgment of their essential character in the processes of sustainable development and social progress and a way of strengthening the European Union's social dimension, for the next ten years (Strategia Europa, 2020).

The advantage of migration for migrant workers is that of finding a job with skills and qualifications, with a higher payment than in the country of home, to ensure a decent living standard.

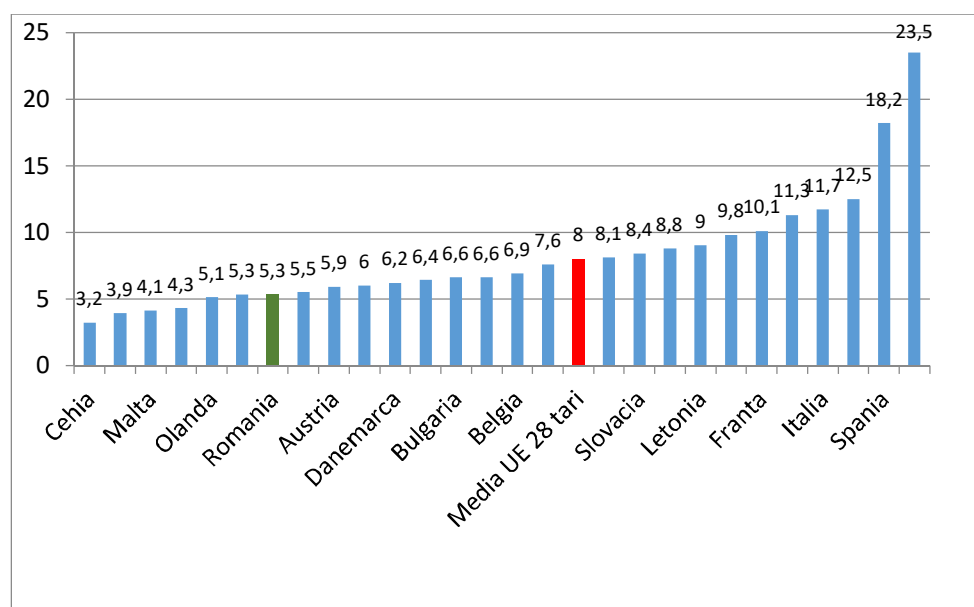


Figure 3. Unemployment rate in Romania in 2017

Source: author representation using National Statistics Institute statistici.insse.ro/shop/?page=tempo2&lang=ro&

According to the National Statistics Institute, the unemployment rate in 2017 reached 5.3%, being at the lowest level in the last decade. The factors that contributed to the decrease of unemployment (being at the lowest level in the last 10 years) are the increase of the number of new jobs and the external migration of the Romanians (INS, 2017).

According to the International Organization for Migration, through the free movement of persons, workers can freely choose both their residence and occupation. If a person seeks a job in his country of origin and finds something that meets his expectations, he can move and settle in the state where he received a favourable offer. It is a way of reducing the pressure on the budget on the social assistance and unemployment insurance system in the state of origin (OIM, 2016).

The chances of employment for a worker coming back from abroad in the country of origin are higher as the level of qualification increases as a result of the experience gained. This experience ensures an increased level of flexibility of the workforce and will ease the employment of the migrant worker, thus contributing to the reduction of unemployment in the country of origin. The decrease of the unemployment pressure on the labor market, because the export of the labor force also shows unemployment when the persons who go to work abroad did not have a convenient and paid job in the country or, if they were employed in work, the vacancies can be filled by the unemployed left in the country (Feraru, 2011).

Contact with the elements of civilization and culture in that state is another positive side of migration. Acquiring new experiences, knowledge, have a positive effect on individual development.

3. Disadvantages of migration

Among the negative effects of migration for countries of origin is the fact that a significant part of the highly skilled workforce is lost. By emigrating qualified staff, the home state can no longer benefit from the results of investing in the training and qualification of human resources, the cost of which is an expense that it no longer recovers.

Most of the time, migrant workers carry out activities that are inconsistent with graduate studies, with the qualifications and skills acquired. In this case, they make compromises by accepting jobs that are clearly inferior to their professional training. The result of this is that there is no longer professional continuity, disappearing some of the skills needed to practice the profession when it returns to the country, so it is noticed the negative impact of this discontinuation of specialized activity (Chenic (Crețu), 2012).

In the absence of bilateral agreements on social security, a migrant worker from non-EU countries may be in a state of disquiet not to benefit from social security benefits and unable to make use of the length of service acquired abroad (Tudorache, 2006). The effects of the departure of specialists to work abroad are felt for the country of home towards the decrease of the technological development, the reduction of the incomes and the rate of employment in the labor market.

We can avoid or counteract these effects in different ways: the financial motivation of the specialists, the creation of networks covering, on the one hand, the specialists from the country, on the other hand those established abroad, the exchange of short-term specialists, the stimulation of some investments that have as their source the sums sent to the country by migrant specialists.

The phenomenon of the emigration of Romanian youth has become a worrying phenomenon through its large amplitude, its limited reversibility, the important losses of active intelligence and the power of action that it engenders. Individually taken, emigration is a personal issue, a decision that a young person takes in connection with establishing his or her home. However, this decision involves multiple

determinations associated with the state of the local community, the family, the person concerned and even global society (Sandu, 2007).

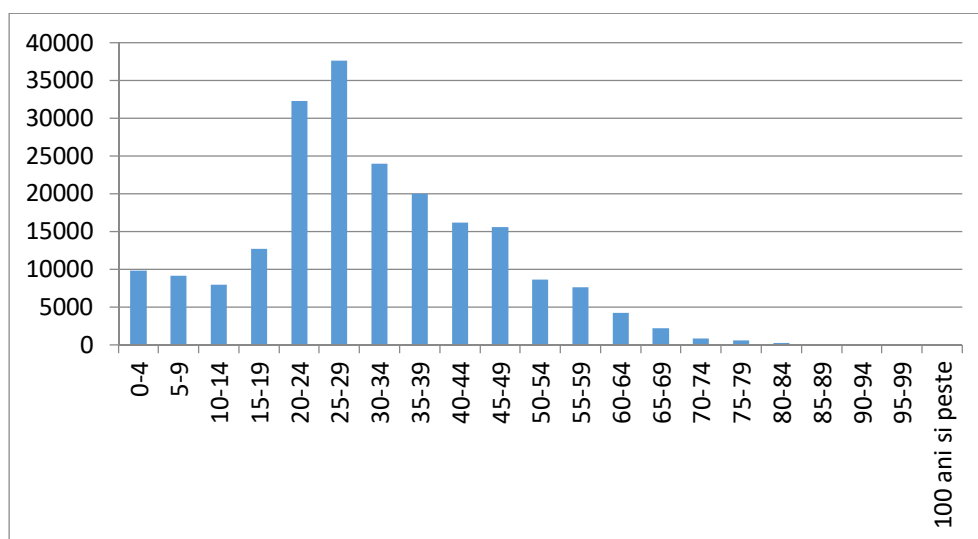


Figure 4. The number of Romanians who left the country for at least one year by age group

Source: author representation using Eurostat data, http://ec.europa.eu/eurostat/statisticsexplained/index.php/Migration_and_migrant..r

According to the European Commission Institute, most Romanian emigrants are aged between 20 and 40 years, there is a decrease in the employed population in the total population, in the local economy and the decrease of GDP due to the reduction of work potential and intellectual resources of the nation, which have a great influence on the level and pace of the development of an economy, because it expresses, through the degree of instruction, the scientific research capacity and the scientific values, etc.

Young workers, looking for jobs, hope for a better life emigrating. Intellectuals, especially young people with a qualification in the country or only in the process of qualifying, are primarily concerned with finding scholarships for postgraduate studies, masters, doctoral studies or postdoctoral training abroad, and unfortunately, few of them are thinking of return to the country. Finding an advantageous job abroad can be the successful outcome of their efforts. Faithfully, they can do their job in ideal conditions, perfecting, as could not have happened in the country. Thus, young people in Romania are mainly concerned with emigration as a potential means of stimulating, accelerating the attainment of socio-professional and human aspirations, their attitude being permissive, considering emigration a right of man and a form of the right to free movement and the right to freely choose the country in which to settle (Pociovalișteanu, 2012).

The risks and possible negative effects of remittances are the increase of inequalities in the community (as a rule, very poor families do not migrate) the decrease of the intention to engage in productive activities on the national market, the remittance

dependence, while the risk of the addiction culture that diminishes the individual initiative, the emergence of inflationary pressure, because excessive demand for land and houses leads to an artificial increase in their prices and, last but not least, the existence of the phenomenon of brain drain and the migration of skilled workers (Bagasao, 2005).

Conclusions

The paper provides an overview of the phenomenon of migration, a phenomenon considered to be controversial due to its many implications (economic, demographic, social and political) in our lives and analyses the advantages and disadvantages of labor migration.

Migration is an increasingly important component of contemporary society, a factor driving market globalization, and a tool for regulating imbalances in markets.

In Romania, the causes of migration are often of an economic nature: the concrete needs of the family, namely the household to which migrants belong, the economic problems facing Romania, as well as the need to try something new by imitating the successful models of other community and family migrants. Another cause of Romanian migration is the level of wages in Romania.

Migration has profound economic consequences for countries of origin, many of them useful, others more worrying. Among the potential positive effects of migration in the development process we come across: poverty reduction in countries of origin; reducing internal pressures on the labor market; remittances sent home by migrants; earning the brains as a result of returning migrants at home with new knowledge and skills.

The biggest advantage seen in terms of migration is remittances, which have incidence and can be explained by the positive impact on consumption, savings, investment, economic growth and other phenomena through consumption.

Financial remittances are vital in improving the livelihoods of millions of people in developing countries. The ability of citizens to engage in the territory of another Member State determines the reduction of the unemployment rate in the country of home.

The inconvenience of labor migration for the country of home are: the loss of investment in human capital through the migration of highly skilled labor, the generation of a labor shortage in some areas, the stagnation of the economy, the aging of the population and the decline in GDP due to the loss of creativity and neutralization the labor capacity of those who go to work abroad or even the decline in the competitiveness of the national economy as a result of the decrease in the qualitative characteristics of the labor resources;

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SOCIAL CAPITAL FORMATION: DO ICT MATTER FOR EUROPE?

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Abstract: *Information and Communication Technologies (ICTs) have impacted the way in which individuals, government and society interact each other. As a consequence, ICTs represent a dynamic and new way by which it could be possible to explain the countries' development into the Knowledge-Based Society. Why is it possible to consider ICTs as a dynamic instrument for explaining this phenomenon? ICT can create networking, to connect learning experience and innovation to each other. Alongside the growing increase in ICTs, the concept of social capital in the twenty years has found interest in all sectors due to the rise of the concept of virtual community. In this context, researchers have focused on the role it could play in building communities, increasing economic productivity and contributing to country development. In this sense, ICT and social capital concepts interlink with each other in a variety of ways: social capital could contribute to the diffusion of ICT but, at the same time, ICTs could have a role in the social capital formation. Given the possible interactions between the two concepts, this paper aims to map out the relationship between ICT and social capital studying the related variables' disparities among European countries. This paper shows evidence of the geography of this relationship in Europe. For the statistical and geographical analysis, we used a non-linear cluster neural network, the Self-Organizing Map (SOM). This tool was used to analyse the performance of European countries in 2015. The properties of the algorithm lead the SOM map to be a representation of the statistical property of the original dataset used to create it thanking the learning nature of the algorithm; the statistical dissimilarity is translated into space distance and vice versa. Also, it was possible because the dataset has been mapped onto the surface of the SOM by adding each neuron up to colour gradient. The results show the isolation of Balkan and Eastern European countries. In particular, we found that ICT may promote social capital, that is, ICT could play a decisive role in creating and developing social capital. These results prompt the formulation of new policies for European countries.*

Keywords: *social capital; ICT; neural networks; country performance.*

JEL Classification: *A13; O18; O33; R11; R12.*

1. Introduction

It is known that innovation plays a vital role in economic growth and development. However, participation in cultural activities in different countries fails to yield similar results. ICT and social capital are themselves two concepts interlinked with each other in a wide variety of ways. At the same time, this relationship could be considered more ambivalent: ICTs could help the formation of social capital within local communities, but ICTs could be seen as new opportunities to create new social linkages and, as a consequence, expanding the formation of social capital.

Understanding this possible relationship between ICT and social capital is useful for at least two reasons: first, as much empirical evidence affirms, social capital could play an essential role in the realisation of economic opportunities. Secondly, new ICT devices, like the Internet of Things (IoT), could be used to understand their impact in the society in which we live, including social capital issues. This paper aims to map out the relationship between ICT and social capital through the study of the relative disparities among European countries. The analytical tool employed for the analysis is the Self-Organizing Map (SOM hereafter), an unsupervised computational neural network. This tool is helpful for highlighting, from a topological perspective, the patterns of the proxies used and for better understanding if ICT could play a determinant role in building social capital in Europe.

This paper is structured as follow. The second section gives a literature review about the relationship between ICT and social capital. The third section reports the variables used for the construction of the database evaluated in the analysis. The following part details the measures and the results of the Self-Organizing Map. The study ends with a part where we present the implication regarding the findings.

2. The potential relationship between ICT and social capital: A literature review

The social capital concept has reflected the diversity of disciplines and research's contributions to the debate on it. In this context, it is possible to say that social capital could have a positive relationship with, as Parissaki and Humphreys (2005) said in their work, "not only on those who 'own' it, but also the community (region) at large" (Parissaki and Humphreys, 2005). This effect could be explained by the externalities that are generated by network spillovers.

To have a better comprehension of the possible positive or negative relationships, first, it is necessary to make a distinction between the various type of social linkages, like strong and weak ties. As suggested by Granovetter (1973), the strength and the increasing importance of the weak ties are important factors for having success in the economic field. Regarding the term "weak ties" O'Brien et al. affirm that "The essential characteristic of [types of] social capital is not its weakness or strength but rather its extensiveness and inclusiveness" (O'Brien et al., 2005:1046). Subsequently, it was introduced by Woolcock in 2001 three different categories of social capital:

- 1) Bonding social capital, defined as strong ties between like people;
- 2) Bridging social capital, defined as more distant or "weak ties" of like persons;
- 3) Linking social capital, defined as weak ties that reach out to, unlike people/ organisations.

In this theoretical framework, in which way ICT interact with social capital. A firm answer to this question it is not possible, but some more general dynamics and patterns could be identified. Recent empirical studies, like Benkler (2006), have found that ICT could enable individuals to thicken existing ties and generate new ones. For example, mobile phone and email are used to be in touch with family and friends. Together with that, ICT considered as an online interest-oriented dimension helps to develop new ties between like-minded people for a variety of purposes, like tools for communication and collaborative information sharing or creation of meeting spaces where like-minded people can gather and socialise.

3. Data

This empirical study investigates the patterns of the relationship between ICT and social capital in Europe in 2015, using data from Eurostat's database. During the study, we have chosen the variables in the following Table 1 and 2015, as a period of analysis, because we needed to cope with three main restrictions. The first and second restrictions regard the data availability by European countries. Longtime series data were available, for the 20 European countries, only for ICT and economic variables, instead of the social capital proxies' data were available only for 2015. Consequently, we have decided to restrict the period of analysis to 2015 only. The third restriction was about the choice of aggregate proxies for social capital because the different conceptualisations of social capital might lead to ambiguities at the operational level. It will imply the selection of different research strategy: during this study, social capital is considered to be an attribute of networks (or societies, countries).

Following this approach, the choice of country-level indicators derived from some empirical literature like Andriani and Karyampas (2009), Degli Antoni (2006). After choosing the variables, indicators are divided into three macro-categories linked to European experience: Social capital, ICT use and Economy. These categories reflect the different but interwoven structures of the relationship between ICT and social capital at the country level, as could be observed from Table 1 below.

Table 1: List of performance indicators from Eurostat (year: 2015)

Function	Indicator
Social capital	Participation in any cultural activities in the last 12 months
	Participation in informal voluntary activities
ICT use	Households – the level of internet access
	Households – broadband connection to the Internet
Economy	GDP per capita
	Total R&D Expenditure

Source: Authors' representation

The first set of indicators considered by this research concerns social capital. We have used, as social capital proxies, variables related to the associative world because, according to Putnam (2010), the associational activities are an essential framework where social capital could occur and grow. If we refer to this Putnam approach, social capital could be considered under functional aspects. Information and trust are vital for a network because they represent most of the network's 'intangible' resources, which help the society to achieve either economic and social outcomes (like well-being and higher employment rate) or uncertain outcomes (such as a sense of social security). All of these aspects occur if information represents the primary resource that individuals or groups want to achieve through the availability of social connections.

Following this approach, the 'Participation in any cultural activities in the last 12 months (percentage values)' (variable: Participation in any cultural activities in the last 12 months) and the 'Participation in informal voluntary activities (percentage values)' (variable: Participation in informal voluntary activities) are used as indicators for social capital.

The second set of indicators we used is related to the use of ICT. Information and Communication Technologies (ICTs) have impacted the way in which individuals, government and society interact each other. As a consequence, the evolution of social capital within or outside of geographical boundaries may depend on several elements, especially the availability and practical use of broadband connectivity. All of those elements – together with the issues of online trust – determine the frequency of interactions. Following this idea, the 'Households – level of internet access (percentage of households)' (variable: 'Households – level of internet access') and the 'Households – broadband connection to the Internet (percentage of households)' (variable: Households – broadband connection to the Internet) are chosen as proxies of the ICT usage level in a European countries.

The last set refers to the economic performance of the European countries at an aggregate level. We have used this kind of variables as a proxy of the ability of networks and social capital interactions to be translated into economic assets and, subsequently, into economic 'capital', used to achieve their economic standing. To become economic capital, it is necessary that social capital move from private goods into a public one causing the rising of collective and cumulative economic benefits. Based on this approach, the 'GDP per capita (PPS_EU28)' (variable: GDP per capita) and the 'Total R&D expenditure (percentage of GDP)' (variable: Total R&D Expenditure) are used as indicators for the economic performance level of the European countries.

4. Patterns of European countries in 2015

In this empirical study, we have performed a non-linear clustering analysis with the Self-Organizing Map, one of the most essential and widely used neural network architecture. This type of architecture was developed by Kohonen (2001). We have used the SOM approach to provide a year evaluation of the structure of this relationship. We choose this tool, at least, two reasons: first, instead of multidimensional scaling approach, its input observations are not categorised a priori and, as a consequence, the structure is unknown. The output network can be considered as a sort of statistical space or virtual topology in which the spatial configuration is closely linked to the spatial properties of the dataset. Secondly, this tool could understandably show complex entities. This property is particularly crucial at policy support level, where the understanding of such relationships is crucial for appropriate decision-making.

For studying the relationship between ICT and social capital, we have divided the analysis into two steps: in the first step, we have considered the evolution of the European countries in 2015. In the second, we have analysed the relationship more deeply through the study of the Feature Maps of the six variables that we used.

Regarding the first step, the following Figure 1 shows the location of European countries in 2015: a mass of European countries is located in the centre of the SOM map.

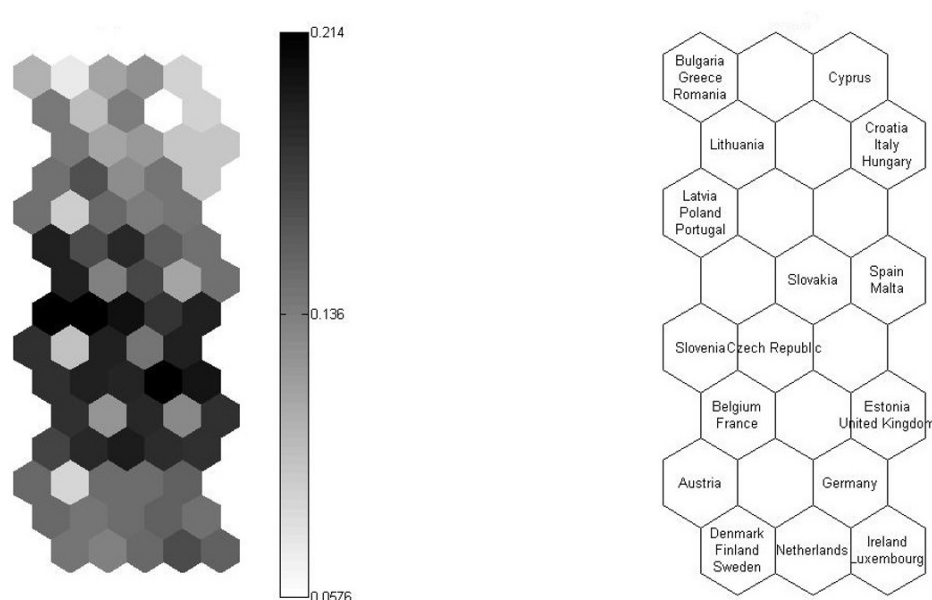


Figure 1: U-Matrix

Source: Authors' computation and representation

This position has the effect of isolating the Balkan, the Eastern and part of the Mediterranean countries from the Northern ones which remain, respectively, at the upper and bottom part of the map. Consequently, it creates a gap between them and the rest of the sample. In this case, the black – and – white of the cells constitute the intracluster homogeneity degree: the light colours reveal high intra-cluster homogeneity, while the dark colours represent a lack of homogeneity.

Following, we have analysed 2015 through the use of its Feature Maps. Figure 2 shows the feature maps for each of six variables that we used. The values are displayed on a gradient colour range, from white (the lowest) to black (the highest). This tool permits:

- To obtain different profiles for the regions of the SOM;
- To discover in which socio-economic aspects the EU countries are strong or weak;
- To understand by which means the feature maps drive the final result.

It is possible to observe that the Northern European countries, located at the bottom of the maps, excel in nearly all considered variables. As profiled before into the Figure 1, the Balkan, Eastern and part of Mediterranean countries, clustered in the upper part of the maps, show low values in all considered variables. In contrast, Northern countries, such as Denmark, Finland and Sweden; and some Centre European countries, like Belgium, France and Germany, obtain similar results due to the high score in 'Total R&D Expenditure' and 'Households-broadband connection to the Internet'.

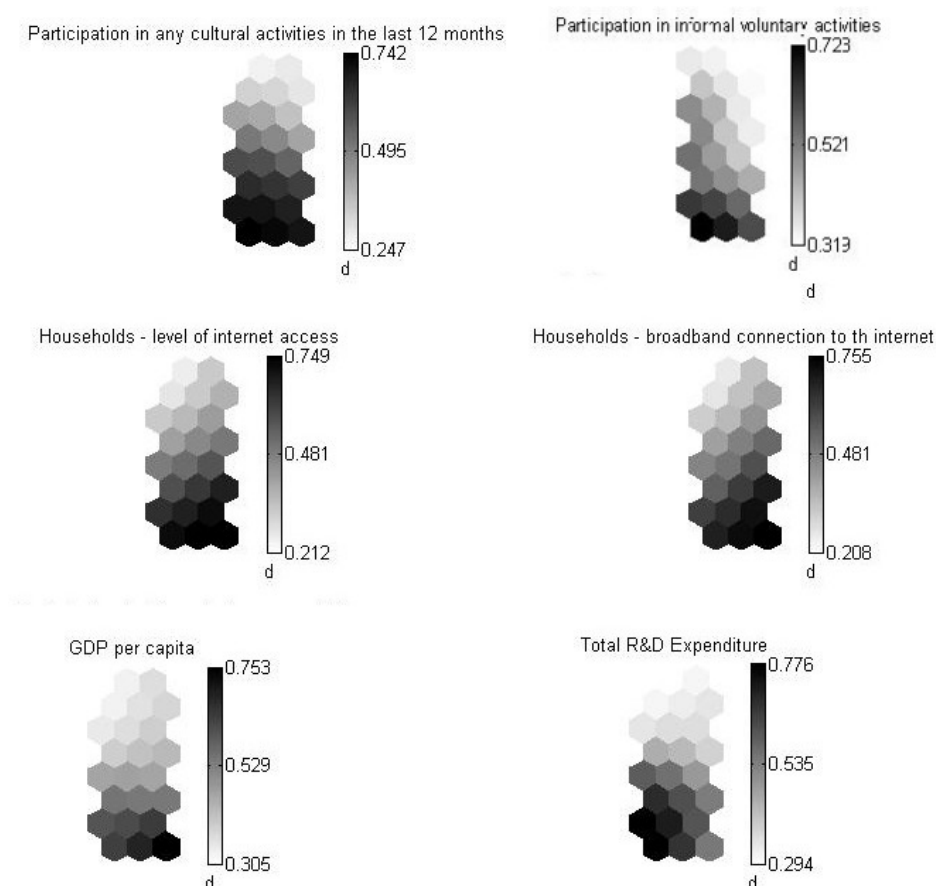


Figure 2: Feature maps of the variables
Source: Authors' computation and representation

From this analysis, it emerges that in Europe ICT may promote social capital formation, as we have previously highlighted in the literature review. Growing empirical evidence suggests that Internet makes more natural and useful to be active within the local communities' initiatives and, at the same time, it contributes to reinforcing social belonging to members. Furthermore, Internet, as Katz and Rice affirm in their work (2002), can build a new form of social capital being "in many ways different and more powerful than the local, physical means of earlier areas" (Katz and Rice, 2002: 332).

5. Conclusions

This paper has the scope to study the possible existence of a positive relationship between ICTs and social capital in Europe. Considerations in the previous section indicate the presence of a possible positive relationship between the two concepts. However, little doubts remain if ICT could play a strategic role in the communities

and social capital formation processes; because the degree use of ICT could create a strongly differences among social capital, especially between strong and weak ties:

1) ICT is unlikely to create bonding social capital due to the difficulties to build trust within virtual communities; while, as we have highlighted in the literature review, ICT could receive benefits from the existence of substantial social capital ties;

2) ICTs are unable to originate bridging and linking social capital because of the incapacity to identified and interact with people having similar interests.

To sum up, ICT could open a variety of ways to empower the countries' development in the modern society. With ICT, social capital could have essential importance for the countries' ability to achieve social and economic development in the society.

All of these perspectives on the potential benefits of ICTs, provide a possible focus for future researchers. Methodologically, we will improve the time-level of the analysis using a more extensive time series, moving from a short-term analysis to a long one. After, we will also set up an analysis on the dynamics of phenomena through the analysis of variations between the ICT and social capital variables because other external factors could interfere this relationship.

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DEVELOPING OPTIMAL PRODUCTION STRUCTURE WITH LINEAR PROGRAMMING MODEL

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Abstract: *As nowadays, besides productions of food and forage materials, herbaceous and woody energy crops can be used to optimize the production structure, I have found it practical to present a model that is based on a Simplex algorithm. A multi-periodic linear programming model should be applied, if we would like to examine not only the traditional arable crops but also herbaceous and woody energy crops. In my article, the basic structure of the multi-periodic linear programming model and its theoretical background will be presented, with which, after filling it with corresponding data, an economic structure could be developed.*

Keywords: *linear programming; operations research; application; multi-periodic LP; cultivation.*

JEL Classification: C60; Q19.

1. Development and significance of operations research

Linear programming model is a part of operations research. It dates back to World War II in England, when a research team emerged to find solutions to military problems, such as carrying military supply substitutions. The name "operations research" originates from this, since the word "operation" refers to military operations (Bajalinov and Imreh 2001). Later, researches of this area realized that the results of previous researches could also be used in post-war peacetime. As an example, it became easy to find out the fastest ways to deliver products to customers and to develop locations of optimal military storage facilities. As a result of the progression of computers, operations research improved rapidly both in terms of content and scope. Operations research became a more and more recognized method in research departments of large corporations. Most of the operations research methods that are used nowadays have been developed and have become mathematically precise during these decades (Temese and Varró, 2007).

From that time, operations research has become a rather application-oriented science, which uses information to its methodological development from other sciences, such as mathematics, information technology, engineering and economics, so it is quite interdisciplinary. Therefore, operations research is one of the most significant and most versatile methods that is used to promote practical decisions in socio-economic life (Temesi and Varró, 2007).

It can be stated that operations research is an extremely comprehensive and complex science, so it is difficult to give a unified and complete definition of the method. Wayne L. Winston, author of *Operations Research: Application and Algorithms* says that operations research is a science that approaches decision making from a scientific point of view and it helps to determine the best structure and operation of a system, especially, when resources are scarce (Winston, 2003).

According to another well-known researcher, operations research is a discipline that deals with comprehensive preparation of optimal decisions and the method to determine the best way of realizing those decisions, primarily in economic, sociological, technological and military fields. Primarily, it uses mathematical models and it is closely related to electronic data processing (Ferenczi, 2006).

Operations research could be applied efficiently in many areas of business, such as production management, corporate strategy planning, financial management processes and corporate engineering developments (Temesi and Varró, 2007).

On most occasions, operations research is performed in an organization, for example in an institution, company, economic-technological unit etc. Within these organizations, everyday activities might cause conflicts that need to be solved (or improved, modified). In such cases, the organization needs to modify, improve, optimize its activity, which involves decision making. To make a decision, suggestions are needed, that is to say decision alternatives are needed. To process an alternative, the problem itself must be defined first.

1.1. Concept and significance of the model

The most effective method for preparing and making decisions is to apply different models. A model is the imaging of reality that represents the examined object, situation, process, usually with significant simplifications, focusing on the essence of the problem (Ábrahám, 2013). Therefore, the model is the simplified image of objective reality. Simplification grabs and highlights the essence. Thus, the model contains the most important components, properties and connections of the examined object (Ferenczi, 2006).

Consequently, in operations research, we create a model of a problem that emerges in real life, which represents the examined object materially and conceptually. So, the model allows to acquire new knowledge in the cognitive process and in the research; it could be an intermediate link between theory and reality (Csernyák et al., 1987).

There are various types of models for processing problems, as shown in Figure 1.

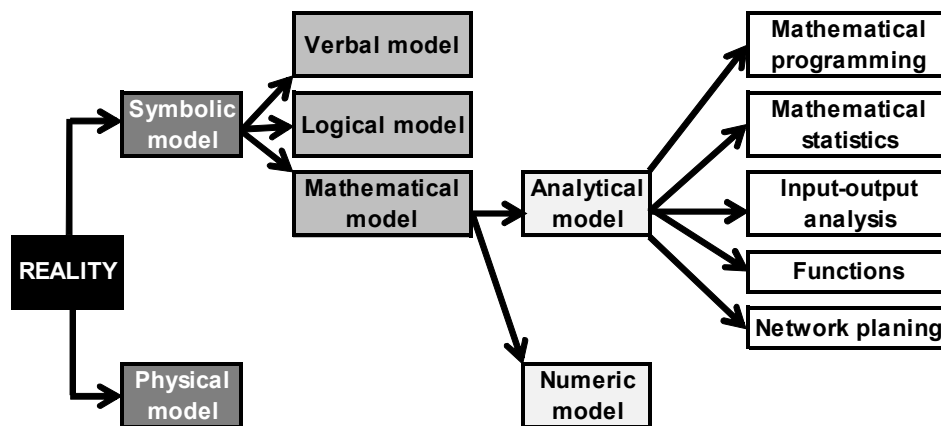


Figure 1: System of models according to their application

Source: Own-editing

As Figure 1 shows, models can be divided into two major groups. The first group contains physical models and material models. Their subgroups are the iconic and analogue models. An iconic model is the least abstract physical replica of reality; however, it cannot imitate its function and internal processes. Analogue models are closely associated with iconic models. The difference between them is that analogue models are able to imitate reality's internal contexts and its function. Tangibility and physical appearance are basic characteristics of these two models.

The second group consist of symbolic models that allows the conceptual imaging of reality. It has three subgroups: verbal models (use language tools to draw the problem, for example a debate), logical models (its most important elements are the logical symbols, could be used more efficiently to solve complex problems, have fewer errors than verbal models) and mathematical models (the best to solve high-level problems, as it is clear-out and thorough). Verbal models contain many errors and redundancies, so they are not adequate to solve complex socio-economic problems.

Mathematical models have further subgroups: numerical and analytic models. Numerical models consist of digits, they can be used to make certain forecasts, while analytic models consist of digits and logical symbols and they can give solutions to exact problems. Basically, this type of model is the best for imaging and solving complex problems (Nagy, 2014).

In my research, I examine mathematical programming (linear programming) within analytic models.

1.2. Development and practice of linear programming

The currently known scientific method, linear programming was developed to solve complex practical problems (Cabot and Erenguc, 1986). The solution of economic problems and tasks was the first major group of research areas, where the available resources were used in the most efficient ways to maximize the benefits. These problems were modelled with linear functions (Hirkó et al., 2000).

Linear programming task is a conditional extremity function, in which conditions are given in the forms of linear equation and inequation, and under these conditions we are looking for the minimum or the maximum of a linear function of the objective function (Bajalinov and Imreh, 2001).

Besides solving the problems that emerge in different areas of corporate management (delivery, product selection etc.), linear programming models can also be used expansively in the preparation of corporate plans (Mayer, 1998). The best-known subtype of linear programming models is the linear objective function optimization (Terlaky, 2001), which can be used in many different areas. For instance, in the case of manufacturing companies, determining the maximum revenue and appointing the profit-making product portfolio; in animal husbandry, it can be applied to make feed formulations that provide the most effective results; in road construction, to define the asphalt composition from which the best quality of asphalt could be made; creating food recipes with a given purpose (e.g. nutritional content); to solve portfolio problems (Hirkó et al., 2000).

Considering the above-mentioned issues, linear programming is a rather versatile scientific method, it is worthily one of the most essential applications of operations research. The method precisely expresses the principles of rational management: achieving the desired economic goal with the lowest possible input /input oriented/ and maximizing the income from the available resources /output oriented/. These

two terms are equivalent and match the methodology of linear programming. According to these, tasks of linear programming can be divided into two groups: "Maximum task" (principle of maximizing the income) and "Minimum task" (principle of minimizing the expenditure).

Tasks of linear programming could be done easily by using the Solver extension of Microsoft Excel software. Solver uses the simplex method, which is the most effective solving algorithm in linear programming, to perform optimization. The objective function and limiting conditions of optimization problems can be linear and non-linear. Solver solves linear equation systems with change of basis, while for non-linear problems, it uses the gradient method (Glevitzky, 2003). Solver adjusts the values in the decision variable cells to satisfy the limits on constraint cells and produce the result you want for the objective cell.

1.3. Linear programming model on optimizing the crop ratio

I have already mentioned in the previous section that operations research, in a narrow sense, is a scientific method that finds functional maxima and minima to prepare decisions and to define economic optimum (Csáki and Mészáros, 1981). Its features include linear and non-linear programming models, stockpiling models and network planning. Agriculture can be considered a specific field of linear programming, including the sector of crop production. The application of decision support systems is crucial in this area; its significant researchers are worth-mentioning: Dantzig, 1963; Csáki, 1969; Csáki and Varga, 1976; Szelényi, 1977; Dinya, 1978; Király et al., 1978; Vinczeffy, 1980; Csáki and Mészáros, 1981; Forgács, 1981; Tóth, 1978; Nemessályi, 1982; Ertsey and Tóth, 1985; Ertsey, 1974 and 1986b and Nagy, 2009. These researchers were engaged and were outstanding in the following activities: optimization of feed utilization, feed manufacturing, complex corporate planning, crop production technologies, automation of corporate planning.

In the beginning, the widespread use of linear programming in agriculture was limited by the capacity of computers and by the lack of knowledge of the method. After the 1968 economic reform, corporate independence and the introduction of the methods of operations research to agrarian higher education, new perspectives have opened for the practical application of these methods. In the 1970s and 1980s, the Debrecen operations research school, led by József Tóth, achieved significant results in processing planning procedures and their practical application supported by computer programs based on linear programming (Ertsey et al., 2002). In the early 90s, computers and information technology developed quite rapidly, which resulted in the progression of decision support. With the development of information technology, it became easier to establish models, which, through system-approached analysis, helped to establish economic decisions and helped to methodize the processes of agriculture.

It is important to note that operations research helps to prepare decision making, it supports the decision-making process; however, it is not its task to make the decision itself (Williams et al., 2005). Decision making is multiple-stage process, which has 6 different elements (Figure 2.).

During status analysis, the initial state of the corporate should be reviewed and the statistical analysis should be performed (analysis of variance, trend computation, regression analysis).

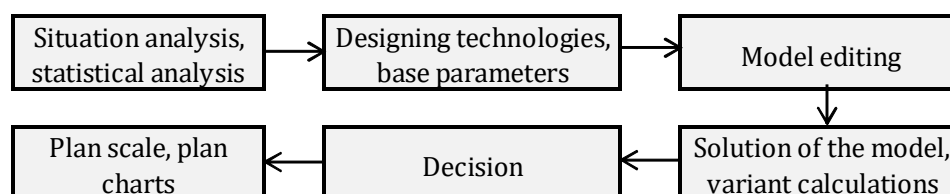


Figure 2: Multiple-stage process of decision preparation
 Source: Own editing, based on ERTSEY et al., 2002

Conceptualizing includes the principles of production, utilization of resources, quality of production and market connections and limitations. In technology planning, a work plan, technological calculations, sector calculations have to be defined, just as the average yield of activities and the value of the objective function coefficient. By defining these, calculations could be automatized and the models could also be established.

The farming process, crop production, was built from sectoral systems; its general pattern is shown in Figure 3. The process of sectoral planning is based on databases, which are also known as master data. The two most important criteria in selecting master data, are the following: to have a decisive role in developing technological operation sequences and to attribute those sequences with features, which ensure the establishment of a connection between them so that the complete system could operate. The master database of land, power, machinery, manpower, work operation, plants and green crops should be developed under these circumstances. It is important to note, that these notions can only be considered as a whole system, they could not be examined separately.

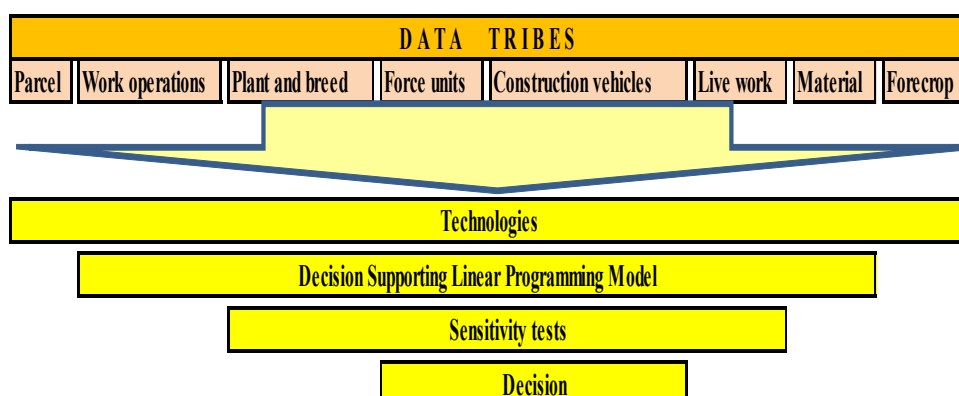


Figure 3: The process of decision preparation related to crop production planning
 Source: Own editing, based on ERTSEY et al., 2002

Using master data, technological operations could be established that gives the time limit, which must be kept to ensure the optimal growth of the given plant. With these operations, we can make a plan for the given year and we can make the production values and expenses calculable (Ertsey et al., 2002; Ertsey and Fenyves, 2005)

The establishment of the production structure and the making of the related decision are the results of the process of decision-making and the planning process (Winston, 1997), which have the following well-defined and interconnected work phases:

- site quality, evaluation and analysis of the system of natural and economic resources;
- development of concepts;
- planning of technologies of the given sectors;
- establishing a mathematical model that describes the system of land use;
- developing different versions of decisions, developing alternatives and their analyses;
- the decision.

During the run of the base model, the least possible limit should be used. Developing the variants, only one parameter should be changed at a time, because in this way, influencing factors can be defined precisely. To frame versions of decisions, it is recommended to apply sensitivity analysis, since it could really help to make the final decisions.

1.3.1. Presentation of the objective function of linear programming models

In the model, it is recommended to make individual sectors compete based on their marginal contributions, as the individual crop production sectors contribute to the corporate income by the margin of their manufacturing output and the variable costs. By running the model, our aim is to establish a production structure that provides the highest income, or to achieve a given production structure using the lowest costs. If the model is optimized based on marginal contribution, which is the most common goal, then the coefficients of the model's objective function will show the extent of the contributions of activities to the corporate income.

Within variable costs, it is advisable to calculate material expenses (sowing-seed, cutting and pesticide), personnel costs, ancillary services and other direct costs (20% of variable costs).

Within ancillary services costs, fuel costs can be counted as a variable cost. According to the calculations of Pfau and Széles (2001), within the costs of maintenance and repair, 60-70% can be defined as material expenses and 30-40% as personnel costs. Depending on the form of the corporation and its operation, it is also necessary to take the public utility charges into account, which are usually not fixed. In model calculations, the percentage of the cost of ancillary services should be defined on the basis of the activities of the corporations. Therefore, within the cost of maintenance and repair, the percentage of variable costs is 85, while the percentage of fixed costs is 15.

1.3.2. Annual balance assumption of crop production LP model

Making a crop production model, it is always recommended to use a given size reference farm (x hectare), which have to be filled with parameters used in practice. In a crop production linear programming model, the following variables should be configured:

x_j : the planned acreage of the j^{th} plant;

y_j : the j^{th} resource;

β_i : the amount of the planned seasonal labor during the i^{th} period, usually in hours of shifts;

δ_b^h : the quantity of the h -typed machines to be purchased, in case of investment;

δ_i^h : the number of leased shift hours in the i^{th} period;

H_i : the amount of loan taken during the i^{th} period.

Values in the indexes could include the following values:

$$j = 1, 2, \dots, n; \quad i = 1, 2, \dots, m; \quad h = 1, 2, \dots, u$$

Establishing a crop production model, the following balance assumption have to be established:

- Non-negativity, which is important because neither the solution nor the application can contain negative values. Balance assumption: $x_1, x_2, \dots, x_j \geq 0$,
 $y_1, y_2, \dots, y_j \geq 0$,

- Balance assumptions related to land use are significant due to the proper utilization of the land. In the case of exquisite utilization of the land, the balance

assumption is equal. Balance assumption: $\sum_{j=1}^n f_j x_j = F$, where f_j is the j^{th} specific

area requirement of crop production value, while F means the available cropland. In some cases, an upper bound could be applied, for instance, when the land was not fully utilized, or if we have had different plans for some parts of

the area. In this case, the balance assumption is $\sum_{j=1}^n f_j x_j \leq F$.

In my model, the areal balance assumption is used to help to define how many hectares we would like to cultivate and whether we would like to include the effects of the preceding crop. Maize can be sowed in every 2 years to the same land, sunflower and autumn rapeseed in every 5 years and autumn wheat in every 3 years.

- Balance assumptions for labor are best considered in decades in the model, however, it is possible to examine them by months. Balance assumption:

$$\sum_{j=1}^n m_{ij} x_j \leq M_i, \text{ where } m_{ij} \text{ is the specific labor requirement of the } j^{\text{th}} \text{ plant during}$$

the i^{th} period (in working hours), while M_i is the available capacity expressed in working hours.

When we are making a plan, it is also important to consider the fact that in peak periods, besides the permanent staff, seasonal workers, who are usually working with a fixed-term contract, are also needed. In this case, labor is a non-fixed capacity but as a flexible bound, and the number of employees is optimized jointly

with the production structure: $\sum_{j=1}^n m_{ij} x_j \leq M_i + M'_i \beta$, where M'_i : the number of

working days worked by one employee during the given i^{th} period, while β means the number of employees. The final solution of the model provides the required number of workers in peak period.

- Balance assumption of current assets necessities: $\sum_{j=1}^n e_{ij} x_j \leq E_i$, where e_{ij} :

specific currents assets necessities of j^{th} activity during the i^{th} period, while E_i is the current assets capacities available in the i^{th} period.

The available capacity should not be less than the total current assets necessities. The unit is one thousand Forints on both sides.

- Machine balances are to be calculated by the types of machines and categories

of machines per decades. Balance assumption: $\sum_{j=1}^n g_{ij}^h x_j \leq d_i^h$, where d_i^h : the

number of shift days that can be performed by the h -type machine during the i^{th} period (i.e. the available capacity), g_{ij}^h the specific machine demand of the j^{th} activity in shift days of the h -type machine in the i^{th} period.

Based on balance assumptions, the linear programming model looks like the one shown in Table 1.

Table 1: Planning arable crops production for one year with the simultaneous optimization of resources and crop ratio

	Plant ₁	...	Plant _n	Consumption	Relation	Capacity
Crop rotation	Technology matrix			Quantity consumed =SUMPRODUCT function	=	Available resources (number value)
Powertrain capacity					< =	
Other limiting factors						
Objective function	gross margin per hectare			GOAL (MAX gross margin)		
Solution (hectare)	area per plant					

Source: Own editing

1.3.3. The multi-periodic crop ratio model

The multi-periodic linear programming model is for several years. For its establishment, the first step is to make a technology matrix for one year, then the certain technologies should be interlaced (diagonal hyper matrix) with the help of the so-called transfer variables. I placed annual crop production models to the diagonal of the matrix and zero values to the other elements of the matrix (Table 1). When we establish a model, the following aspects should be taken into consideration: a model should reflect reality as much as possible; it is also important that it should be easy-

to-use from a mathematical point of view and also from an IT point of view. The LP model could be easily run in Microsoft Excel.

Table 1: The basic pattern of multi-periodic linear programming model




		1 st year							...	T' year							...	'n' year							R	C			
		VC			EP			M _i		M _g	VC			EP				M _i	M _g	VC			EP				M _i	M _g	
		VC ₁ ...	VC _n	EP ₁ ...	EP _n	VC ₁ ...	VC _n				EP ₁ ...	EP _n	VC ₁ ...	VC _n	EP ₁ ...	EP _n				VC ₁ ...	VC _n	EP ₁ ...	EP _n						
1 st year	VC	T _m																									<=	F _i	
		V _m																									<=	F _i	
		M _m																								<=	M _i		
		SGM _m																								<=	d _i ^h		
		GM _m																								<=	d _v ^h		
EP	T _{EP 2nd year}				-1																					=	0		
	...					-1								1											=	0			
	T _{EP 2nd year}							-1									1								=	0			
⋮																										⋮	⋮		
'i' year	VC	T _m																									<=	F _i	
		V _m																								<=	F _i		
		M _m																								<=	M _i		
		SGM _m																								<=	d _i ^h		
		GM _m																								<=	d _v ^h		
EP	T _{EP i+1.Év}														-1											=	0		
	...															-1									=	0			
	T _{EP i+1.Év}																								=	0			
⋮																										⋮	⋮		
'n' year	VC	T _m																									<=	F _i	
		V _m																								<=	F _i		
		M _m																								<=	M _i		
		SGM _m																								<=	d _i ^h		
		GM _m																								<=	d _v ^h		
CF		MC							BF	MC							BF	MC							0	MAX MC!			
S		PS							BM	PS							BM	TSZ							BM				

Where:

VC	: Vegetable cultivation variable n=1,2,...,k	GM _m	: Machine work is a balance sheet condition
EP	: Energy plantation varians n=1,2,...,k	T _{EP_n} ye	: Settlement transfer condition n=1,2,...,k
M _i	: Temporary work (work hours)	CF	: Objective Function
M _g	: Machine work (work hours)	S	: Solution
T	: Transfer variable	PS	: Production structure (100 hectares)
BF	: Specific cost of rental work	R	: Relation (=;<=>)
BM	: Amount of rental work (work hours)	CF	: Vector capacity
E	: Resources	F _i	: Available land (100 hectares)
T _m	: Balance sheet for the area	M _i	: Provide workforce (work hours)
V _m	: Conversion balance requirement	d _i ^h	: Available for work (work hours)
M _m	: Balance sheet for labor force	d _v ^h	: Machine work available (work hours)
SGM _m	: Balance sheet for own machine work	MC	: Marginal contribution (one thousand HUF/100 hectares)

Source: Own compilation

In the basic pattern of the model, the signs for each parameter are represented by the following symbols:

	negative sign		positive sign
	negative and positive sign		

A reference farm with average parameters could be easily defined with more than 100 variables and a few 1000 balance assumptions. Balance assumptions should

be formulated on the basis of practical experience on acreage, crop rotation, maximum size of plantation, skilled and unskilled labor and machinery.

It is preferable to interlace the consecutive years of the multi-periodic linear programming model with individual balance assumptions:

- If we compare only arable crops with each other, we should use it to take the green crops into account
- If we intend to plant woody energy crops into one of the examined reference farms, several aspects should be taken into consideration:
 - If the plantation has become a part of the production structure in the first year, from the following year onwards, the size of the acreage has to be the same or even bigger
 - If the plantation was not included in the production structure in the first year, then in the second year, it should be taken into account that it might be a part of the production structure from that year. In this case, delayed harvest periods should be taken into consideration.

To make modelling easier, I have come up with a special balance assumption; as the plantation remains in the same area for 15-20 years, depending on its species, it occupies the area. Therefore, calculating with the crop rotation limits can be ignored. In the model, this bound can be solved by introducing the following balance

$$x_j^k = x_j^{k+1}$$

assumption: \downarrow , ahol, where $k=1,2,\dots,n$: number of the current

$$x_j^k - x_j^{k+1} = 0$$

year, x_j^k is the given year, while x_j^{k+1} is the year, following the given year.

2. Summary

By writing my article, my aim was to develop a summary about how to optimize production structure nowadays. Since linear programming has been used in several areas for decades, it is also possible to optimize crop production with it. Since nowadays we would like to produce raw materials for food and for forage in less-favoured areas, I have developed a multi-periodic linear programming model. By uploading the model with basic data, sensitivity analysis is also possible, from which, information could be gained on resources and activities.

Bio-note

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BALNEAL TOURISM AND ITS IMPORTANCE FOR ROMANIA

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Abstract: *In this article we analyze the particularities of the balneal tourism in Romania. Since antiquity, balneal treatments have occupied a place in the therapeutic arsenal of both "scientific" and traditional medicine. Time span and technological progress in the medical sciences did fail to diminish the significance of balneotherapy. Even this treatment has improved, tainted with very precise indications and contraindications, which did enriched using new procedures, and gained a scientific foundation. Over the time, Romania has an important economic development due to tourism, thus being able to rank among the most valuable tourist areas in our country. Parallel to this, the number of spa resorts and mineral water springs has increased and the spa facilities have improved. Significant is the fact that around them a real hotel industry was structured and that unknown rural settlements turned into balneotherapy resorts, elegant, in which all the tourist props have found a great potential for development.*

Keywords: *tourism; spa; balneal; health; therapy; rehabilitation.*

JEL Classification: L83.

1. Introduction

In the last decades, through its important social and economic effects, balneal tourism has become a major segment of the international tourism market, to which important material and human resources are concentrated, with a deepening involvement of science and technology, tourist services and of a complex and high quality invoice, called to meet the vital needs of modern man, determined by the evolution of living conditions and the health of the population. Today, balneotherapy or balneoclimatology has become more comprehensive a medical specialty involved in the process of public health improvement, with prophylactic and rehabilitation possibilities, but also a branch of tourism with an important role in the national economy. Also, balneary tourism is a specific form of tourism for recreation and rest, which aimed at preventing certain diseases, avoiding the increase of overflow and certain diseases determined by the rhythm of modern life, being one of the most constant forms of touristic circulation, thus helping to increase utilization coefficient of accommodations and achieving increased average revenue per day / tourist with a relatively stable customer base (Ioniță and Pîndiche, 2011).

Balneal tourism is a major sector in the Romanian tourism industry, due to its specific peculiarities. It is known that almost a third of the thermal and mineral waters that benefit Europe is concentrated in Romania, and their health effects have been attested over the centuries (Snak at all, 2001).

The Romanian wealth of factors resides in *two determinants*: the complexity of the natural factors, respectively the reunion in the same resort of the main environmental factors together with a wide range of mineral cure substances with beneficial

polifactor effects; the existence in Romania of all types of balneal minerals that can be used for the entire range of balneary treatment profiles. Balneal tourism requires complex treatments to achieve some recovery in resorts, as well as conducting tours and trips in the surroundings and rest (Antonovici, 2012).

1.1. Role and Importance of Balneal Tourism

Romania can develop a quality balneal tourism, with approximately 8,500 mineral and thermal sources that hold them. The Balneary Tourism Employers claim that Romania is the richest country in Europe in terms of balneal resources, accounting for about one third of Europe's mineral and thermal sources, but only 10% of the springs are exploited due to under-financing, lack of investors but also because of the scientific research gap. Romania has a very high chance of development because it has rich and varied natural and anthropogenic resources. Their efficient and in the interest of the national economy represents a chance for Romania's development. The potential of this sector is huge, but little exploited. It is the economic branch with the highest international competitive advantage, and its economic performance is modest. Economically, balneary tourism is a factor of economic progress, with broad and positive implications for the development of the whole society, acting in the direction of introducing tourism resources, the historical cultural heritage, the great attraction and some of contemporary achievements in the fields of construction and art. (Neacșu et al., 2009).

Balneal tourism contributes to ensuring a balanced money flow, both on the domestic tourism and on international tourism. Balneal tourism by its specificity, generate new jobs, playing a major role in attracting surplus labor from other sectors and thus alleviate unemployment. Through tourism elements are effectively exploited such as the beauty of the landscape, the healing qualities of the mineral or thermal water, lakes treatment, sludge treatment, gas treatment, mines, medicinal plants, climatic factors cleaning, ionization, as well as cultural artistic events, art monuments, historical vestiges, folk tradition. Spa tourism acts as a stimulating factor for the global economic system. By developing tourism, there is a significant increase in production, its contribution to GDP being proportional to the level of development of each country (Țigu, 2003).

In European healthcare systems balneal resorts are important tourist destinations, especially for consumers looking for health and leisure. If in Romania, at first, the tourism product had only basic elements, traditional, based strictly on aspects of balneology (equivalent to medical spas in the United States of America), concerning treatments or treatments in the presence of a doctor, today the product is complemented by other balneal services, becoming a combination of traditional services (specific procedures and treatments) and rejuvenation services (Kapczynski, Szromek, 2008)

1.2. Trends in Balneal Tourism

In Romania, the notion of "health" and social tourism are generally assimilated to the balneal tourism as a form of tourism with a long tradition. Over 160 localities benefit from therapeutic mineral resources, of which more than 27% have been declared tourist resorts of national or local importance, according to the Romanian legislation, recognized resorts on the European tourist market. The most important are: Băile Felix, Băile Herculane, Sovata, Tușnad, Vatra Dornei, Techirghiol, Mangalia, Călimănești - Căciulata, Olănești, Băile Govora etc.

The tourist product offered by balneal resorts is based in particular on treatment services such as healthcare, convalescence, elements that address especially elderly people, but there are also resorts offering wellness packages. Alternative maintenance medicine has great potential for development by addressing, through appropriate offers, both domestic and foreign tourists. Foreign tourists come mainly from Hungary, the Republic of Moldova, Germany, Israel, Italy, Austria, France and Poland, having as their main motivation for travel relaxation and rest. As far as the type of Romanian tourists is concerned, they are mainly people of the third age (Tourism development strategy in Romania, National Institute for Research and Development in Tourism INCDT).

The emergence of a legislative act that gives the title of "balneal resort", which has been accredited by many resorts, has created a favourable trend for this area and gives investors more confidence to develop their business in balneal tourism. However, comparing with resorts in other countries, we think the basic difference is the way the resort looks, the possibilities of leisure and the ways of access to the resorts, but they are more dependent on other structures of the state or the local administration (Cândea et al., 2012).

There are suppliers of internationally renowned equipment, as well as Romanian companies, for all types of equipment and products specific to the balneary industry. The acquisition of state-of-the-art equipments and products is one of the major concerns of health care and wellness owners who want to maintain and increase their number of customers. We do not think we can talk about gaps, but rather a rich and diversified offer, which sometimes creates difficulties for investor's selection (Ioniță and Pîndiche, 2011).

The Employer Organization of Balneal Tourism in Romania, as the only association in the field, advocates the rights and interests of investors in spa tourism. There is a permanent dialogue with the authorities and a good collaboration with other tourism associations for the correlation of activities; at the same time, it promotes the potential and specific programs offered by the spa tourism companies for increasing the number of local tourists, but also for attracting foreign tourists.

Diversification of the services offered to the clients, from the point of view of the nature of the product, the duration of the cures (medical care, antistress remedies and remittances), entertainment programs, attendant programs and the practice of differentiated tariffs. All these require a sustained structural policy to meet the major objective of attracting a wider clientele through the balanced distribution of the investment fund in all the components that make up the balneal product.

The future of balneal tourism depends on the choices to be made in this area, under the combined pressure of socio-political factors and the medium-term growth rate (Ianc, 2006).

In our country, the Romanian Balneology Association annually evaluates the balneal resorts in Romania, which this year presented the classification in the National Balneology Congress, taking into account the level of investments in treatment bases, infrastructure and their promotion, respectively the quality of tourist services and medical services, including the balneal resorts of Techirghiol, Băile Tușnad, Băile Govora, Călimănești-Căciulata, Covasna, Băile Felix, Sovata, Turda, Sîngeorz Băi and Borsec that have reached a level of excellence (Surdu et al., 2012).

The demand for holiday balneal resorts, rising from year to year, increased sales by 20% in the season of 2017, and even more in the more developed areas, followed by those for mountain resorts and the Danube Delta over time which was below sales

expectations for the seaside. And the value of stays was sold on holiday vouchers which were below expectations, and by the end of July they did exceed a value of 10.3 million euros. Investments made in accommodation facilities in the balneal resorts, relaxation and treatment centers have changed the perception that balneal area is only for people with various diseases and included product offer several travel agencies. From the data of the National Association of Tourism Agencies, families with children who preferred their holiday hotels with aqua park, thermal pools, balneal centers were the main clients of the year 2017. The most requested resorts were Băile Felix, Băile Herculane, Sovata, Covasna, Vatra Dornei, Călimănești-Căciulata, Băile Olănești, for an average stay of 7.5 nights. The capricious weather, the offers for foreign destinations, the direct sale made by some seaside hotels, the higher prices on average by 10% compared to 2016 led to the decrease of the number of tourists in the seaside resorts in the season 2017, the sales recorded by the agencies tourism was generally at the level of last year. Mamaia was still in the top of the Romanian preferences, followed by Eforie, Venus, Jupiter and Neptune, especially chosen by families with children, the average seaside stay was 5.5 days (<http://www.economica.net>).

Also, in 2017, in Băile Felix, hoteliers have made more investments to attract tourists eager to spend their holidays in thermal water. They have modernized relaxation and treatment centers, and as evidence that there is demand, the resort has been opened. Oradea and Băile Felix have been promoting Romania's balneal tourism in recent years, while the Hungarian government is making an aggressive campaign to attract tourists from Romania to balneal resorts beyond the border.

The Romanians who work in the Hungarian resort are of great help to the thousands of co-nationals coming annually in Hajdúszoboszló. They are especially attracted the largest spa complex in Hungary, arranged in the area on 30 hectares. The water park is constantly in the hands of the central authorities, who invest large amounts of money in tourism. Only this year the Hungarian government has allocated nearly ten million euros for the modernization of the resort complex 70 kilometres away from Oradea.

Romania is among the European countries with a remarkable balneal fund, with a third of its thermal and mineral waters on its territory. Our country benefits from a network of 34 balneal resorts treating a myriad of diseases, from rheumatic and articular, neurological, cardiovascular, respiratory, digestive, hepatobiliary, renal or gynaecological, dermatological, ocular, post-traumatic and post-operative diseases, to endocrine, metabolic and nutritional diseases, paresis and paralysis, varicose veins, blood diseases, anaemia, asthenia, allergies, depressions, neuroses, physical and intellectual impairment or occupational diseases. The balneal services in Romania are also very varied, including physiotherapy, kinetotherapy, electrotherapy, hydrotherapy, aerosols, thermotherapy, aerohelioterapia, carbonated baths, medical and maintenance gyms, massage, etc. Many balneal facilities are close to tourist attractions, tourists having multiple options to spend their free time in a pleasant and interesting way. (<https://www.agerpres.ro/economie/2017>).

The maximum number of balneal treatments provided for 2018 in the property treatment units of the National House of Public Pensions are 59,527 places, spread over a maximum of 19 sending series, according to a draft by the Government Decision published on the website of the Ministry of Labor and Social Justice. The drafting note specifies that in Law no. 3/2018 - The State Social Insurance Budget

Act 2018 provides amount of 344.237 mil. RON for this purpose. Thus, the number of places for balneal treatment contracted with other interested economic operators, up to the level of the amounts provided for in this purpose in the state social insurance budget for 2018, will be added to the planned number of places, which will be determined after the award of the contracts, depending on the prices offered on the ticket. Taking into account the social character of the activity referring to balneary treatment, the CNPP will set a maximum price / ticket in order to ensure the benefits for as many beneficiaries as possible. For balneal treatment tickets, the contracted seats will be spread over a maximum of 19 series of 16-day presentation sessions. The cost of the spa treatment ticket will include the 12 day treatment fee. The number of balneary treatment tickets to be granted free of charge to the categories of persons benefiting from the provisions of special laws, with a reparatory character, shall be no more than 15% of the total number of tickets. In the course of a calendar year, the entitled person can receive a single treatment ticket and the distribution of the spa treatment tickets will be made by the National House of Public Pensions through the territorial pension houses (<https://www.dcnnews.ro/locuri-la-tratament-balnear-in-2018>).

1.3. Quantitative and qualitative aspects of supply and demand for balneal tourism

The richness and variety of natural cure factors available to Romania, the tradition and experience in the field of balneology acquired over time, Romania have made it, as an important tourist destination (Badulescu, 2014; Mester et al, 2008). As a result, the tourist circulation in balneal resorts has, under the influence of many economic, social and motivational factors, for each of its components: different internal and external evolutions. The important component of the tourist market, respectively the offer includes all the natural and anthropic attractions, general and tourist infrastructure, workforce and services. Designing a competitive tourism product does not imply a simple combination of them, but a harmonization of the different components to create a homogenous product as much as possible. Characterized by the discrepancy between its exceptional potential and the degree of capitalization and non-compliance with the world's requirements, the Romanian balneal tourism offer can constitute an important component of national and even international tourism following a proper restructuring process. Romania has an exceptional balneal resort which makes it one of the first places in Europe (Stăncioiu et al., 2013).

The motivation for the modern resort development is motivated by the evolution of demand, as we have already said under the strong influence of fashion, which is rapidly coming to us as well as by the increasingly strong tendency of the people to develop to care for their health in terms of removing the negative effects of an unhealthy lifestyle. This new approach will have positive consequences both due to the superior capitalization of the existing resources and the increase of the occupancy rate due to the pulling of a much more diversified segment of the tourists as well as to the general state of health due to the inclusion in this approach of the psychic state of the client is often neglected. Concerning the motivation to keep a large number of traditional resorts is determined by the existence of an important segment of clients who require such treatments every year, as well as the global tendency in the health status of the population, characterized by the increase of the incidence of diseases high morbidity covered by health tourism (Hall, 2013).

2. Tourism forecasts in 2018

Tourism is a highly dynamic field that depends both on global economic fluctuations, which are reflected in the tourist's purchasing power as well as in political events that can influence the movement from one state to another. On this less international stable background, Romania appears to be increasingly interested in those who are eager to spend a holiday in our country (Badulescu, 2014). The year of 2018 will also be preferred for the balneal and spa tourism, a growing area globally, one of the destinations being Hungary, with Hajdusószóló balneal resort. In Romania, a lot of investments were made in the private area, which led to an increase in the quality of services, so that the Romanian balneal resorts will have a higher occupancy rate than in 2017. The "luxury travel" sector will also develop, as there is already a preference for such trips, because tourists are willing to spend more to accommodate luxury locations at the expense of "low budget" vacations, with an emphasis on exotic destinations.

Employers' representatives in balneal tourism are requesting tax incentives for this sector to continue investing in treatment bases. In Romania, some balneal resorts compete with the brand-name resorts in Europe as a result of the modernization.

In recent years and in the balneal sector, major investments have been made, so some resorts have come to compete with brand-name resorts in Europe, but to continue the upward trend and attract as many investors as possible, employers' representatives argue that there is a need of stronger state support by granting tax incentives such as VAT reduction.

Year 2018 is also declared the Europe-China Travel Yearbook, which represents an opportunity to increase Europe's visibility as a holiday destination for the Chinese. In general, the tourism sector continues to increase visible beyond economic results worldwide. Tourism experiences are more important than the accumulation of material goods and the increase in the frequency of domestic and foreign flights, as well as the possibility of purchasing online accommodation on reservation platforms or price comparisons, will help to achieve this. Here's how to increase DIY (do it yourself) vacations (<http://povestidecalatorie.ro/previziunile-anului-2018-in-turism/>). The implementation of a development program is based on strategies, the quality of which depends on the success of this action, which can be materialized both in increasing the demand for Romanian balneal tourism and the integration of the spa resorts in our country in the top of the ones with a good share market in Europe, as well as in determining the largest number of Romanian tourists to choose as a holiday resort a balneal resort. It is said that in Romania there is almost one third of the thermal springs in the whole of Europe, and in recent years the balneal resorts have begun to reinvent themselves and to return to the limelight (Surdu et al., 2012).

3. Conclusions

This work is aimed for tourists, interested people who want to invest in tourism, thus posing a challenge for all those who love tourism. For a while now, tourism has made a more immeasurable activity, as it has been developed in other forms of social economy (industry, agriculture, commerce).

It is important to know that, apart from the balneal profile of the Romanian resorts (with specific treatments for digestive, rheumatic, degenerative, dermatological

diseases) given by our mineral wealth, Romania is among the countries where health services are much cheaper than in the rest of Europe, (60% cheaper than in other European countries), fertility treatments (Sovata), services of a high standard of care, geriatrics.

Year 2017 was declared by the World Tourism Organization (UNWTO) "The International Year of Sustainable Tourism".

Considering that there are global campaigns to promote sustainable tourism and encourage those forms of travel that support this type of tourism, more and more travellers will become aware of the importance of environmental and nature responsibility. They will be more and more interested in the impact on the environment, the social and economic impact of the destinations they visit and will particularly support those companies that actively involve and support these values. Demand for holiday in balneal resorts has been increasing from one year to another, and in 2017 sales were about 20% higher in more developed areas, according to market data. Investments in accommodation facilities in balneal resorts, relaxation and treatment centers have changed the perception that the balneal area which is only for people with different conditions and included the product in the offer of several travel agencies. Experts are of the opinion that 2018 will be the best in the last 20-30 years for balneal tourism.

The national tourism development strategies in Romania must harmonize the strategies developed at the regional, local and every resort level, taking into account the European strategies, in order to highlight the richness of the Romanian offer of this kind and to attract the interest of the foreign tourists attracted to the balneary resorts in the developed countries of the European Union not only of the quality of the offer but also of its sustained promotion. Authorities want to develop a green balneo-tourism cluster at national level to ensure the development and promotion of spa and ecotourism products on the international market.

That is why the special advantages offered to Romania by its great balneal potential have to turn into a competitive advantage, which in the conditions of an adequate strategy becomes one of the key elements of Romanian tourism.

Starting from these prerequisites, the paper aims to highlight the main directions of development of the balneal tourism in the urban areas with tradition in the field and, on the basis of these, to outline possible development strategies, which would allow the Romanian balneal tourism to become competitive.

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THE USE OF THE RENEWABLE ENERGIES IN THE VISEGRAD GROUP AND ROMANIA

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Abstract: *The purpose of our research is to compare the use of renewable energy sources in the Visegrad Group (Poland, Czechia, Hungary and Slovakia) and Romania. The widespread renewable energies are solar, wind, hydropower and biomass energy. We chose these countries because they had similar fate and presents. I was wondered whether they can catch up Western Europe in the use of the renewables. In the 20th century, these countries had enough resources without the renewables. However, the spreading of the renewables have begun in these century, and its spreading accelerated after the joining to the European Union. The Middle European countries have begun use the renewables earlier, and they utilized their possibilities but for nowadays Romania has become a significant factor in the European renewable energy production, tight behind the Western members. In this region the most important renewable energy resources are the hydropower and the biomass energy. In the examined countries some hydropower plants were built a hundred years ago and these power plants rather count as industrial monuments than real factors in the energy sector. Some of the countries use the biomass energy more, mainly for heating, these countries are Hungary and Czechia. Other countries like Slovakia trust in their rapid rivers to produce electric power. And there is Romania which country benefits both. It is welcomed that other renewables like wind and solar energy began to add to the examined countries' energy sector. From the database of Eurostat, we made some ratios to compare the countries with each other and the European average production. With means we could measure the share of the renewables in the whole national production in average, and the deviations for each country. Finally we made a possible forecast for the increasing of the renewables in the examined countries.*

Keywords: *renewable; energy; Visegrad; Romania; EU directive; 2020.*

JEL Classification: O13.

Introduction

First of all we would like to introduce the renewable energies in general. Renewables are the ones, which can be used and they can reproduce themselves within a human lifespan. We can divide these into two groups according their consumption. Into the first group belonging the wind and the solar energy. These type of energies are constantly useable, especially the solar energy, which come from the Sun anytime. The other group is the stock typed renewables, with the biomass, the hydropower for example. These type of energy can exhaust if we consume them reckless, but with responsible management they can be sustainable. (Bulla, 2011)

The first great power to introduce the renewables into its policy was the European Union. According to Câmpenau and Pencea (2014) the Union's attitude towards the renewables was influenced by four big global occasions. Two out of these four was fairly recent. One of these was the global depression between 2007 and 2010. By this time the Union tried to decrease its dependency on foreign energy resources, and invested in newer and more effective technologies including renewable energy sources. The other one was the recognition that our continent failed to keep pace in economic growth with the United States, Japan and China. The non-renewable coal is still the primary resource of these countries especially of China because of its low price. This state questioned the short term benefit of the renewables. (Câmpenau and Pencea, 2014)

Nonetheless the European Union is the pioneer of the sustainable economy with low greenhouse gas emission. The EU has its directive which targets 20% of the final energy consumption from renewable sources by 2020. This is the *Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC*. To achieve this, each EU member country had to mark a national target, which they thought they could reach by 2020 and these national targets are in each country's national energy plan. These plans include sectorial targets for electricity, heating and cooling, and transport too. A mandatory 10 % minimum target to be achieved by all Member States for the share of biofuels in transport by 2020. That is how the national targets ranging from Malta's 10% to Sweden's 48%. But this developing will not stop in 2020. By 2030, the EU targets the renewables at least 27% of final energy consumption. This will make the EU global leader in the use of renewable energies. (European Parliament et al., 2009 and European Commission et. al., 2017)

The examined area for us is some Middle European countries such as Poland, Czechia, Slovakia, Hungary and Romania. They have very different climate and geographical conditions so they cannot use renewables in the same way. But now we can focus on some similarities. Each country has some of Europe's great rivers such as the Danube (Slovakia, Hungary and Romania), the Vistula (Poland) and the Elbe (Czechia). Most of their area belong to the humid continental climate excluding the highest mountains and the coastal territories. Each country have fairly developed economy including their agriculture and forestry which produce the biomass energy. From global view, only hydropower, solar energy, wind power and biomass energy have enough importance to influence the national energy consumptions. In our case Romania has highly developed hydropower industry and rapidly increasing solar and wind energy sector. Romania has high mountains, those are where the rapid rivers have their sources. Thanks to this Romania's electricity production is granted from renewable energies with the share of 43% in 2016. (From which hydropower has 31%, wind has 10% and solar has 1% share) (Dragomir et. al., 2016)

Slovakia has the highest peaks among these countries so it is unequivocal, that this country has great hydropower industry too. In 2016, renewables granted the 25% of the Slovakian electricity production (From which hydropower has 17%, solar energy has 2% and biomass energy has 6% share). We can see that hydropower, solar energy and wind energy can be used primarily in electricity production, while the other three countries have lack of these energies. They use mostly biomass energy which can be used in heating and transporting. Hungary has the lowest renewable ration in electricity sector. It is only 11%, from which the biomass has 7%, the

hydropower and the solar energy have 1-1% and the wind energy has 2% share. It is almost the same in Czechia. Renewable energies have the share of 12% from the Czech electricity production, with 6% of biomass, 3% of solar energy, 2% of hydropower and 1% of wind energy. Poland is one of the biggest biomass energy consumer in the Union. Although it does not mean that biomass is only used for producing electricity. Only 14% of Poland's electricity production comes from renewables (From which wind energy has 8%, biomass has 5% and hydropower has 1% share) (International Energy Agency 2017a, 2017b, 2017c, 2017d)

The purpose of our research is to compare the use of renewable energy sources in the Visegrad Group and Romania. We chose these countries because they had similar fate and presents. We wondered whether they can catch up Western Europe in the use of the renewables.

Methods

Our method's basis was the reports and timeline data from Eurostat and European Environment Agency. With these and some other sources such as national energy plans and European scientific literature we gained the important data for compare the use of the renewable energies in the examined countries, and forecast whether they can succeed the national target by 2020 or not.

The comparing ratios make easier to notice the difference and similarities between the examined countries. Then we examined the growth rate in each country and the 2020 targets. The examined countries compared in their national plans to the 2005 data and we compared this to the last public data, which is 2016. So the 2016 and the targeted 2020 data are divided by the 2005 data.

And last the timeline data were represented in a graph, which indicates each country's trending lines to forecast the growth.

Results

Without research, the winner amongst these countries is Romania. It has the highest percentage of renewable energies in heating, electricity and the overall consumption. Romania take advantage of its decent opportunities. Romania has the highest 2020 target and back to 2005 had the highest percentage too. In Table 1 you can see the growth rate of the share of the renewables in each examined country.

Table 1: Growth rate of the share of renewable energy in gross final energy consumption from 2005

Country	2016 ratio	2020 target ratio
Poland	1.57	2.08
Czechia	2.44	2.21
Slovakia	1.79	2.09
Hungary	3.30	3.40
Romania	1.44	1.38

Source: Own editing based on National renewable energy action plans

We can clearly see, that Romania and Czechia has surpassed their targets by 2016. Romania's low ratio numbers have a simple explanation: as we mentioned above, it had the highest percentage of the renewable sources in the final energy

consumption. So it had the first place among the former Soviet ally countries. Romania stands on a higher level in renewable energy than the other examined countries. It has the lowest growth rate but we have to bear in mind that it had way higher base in 2005 than the others. Czechia and Hungary started from the lowest level that is why they have the highest growth rate. Poland is currently the farthest from its target. In Table 2 you can see the share of the renewable energies in gross final energy consumption by sector in each country in 2016.

Table 2: Share of the renewable energies in gross final energy consumption by sector in 2016 (%)

Sector	Poland	Czechia	Slovakia	Hungary	Romania	EU-28 av.
Electricity	13.4	13.6	22.5	7.2	42.7	29.6
Heating	14.7	19.9	9.9	20.8	26.9	19.1
Transport	3.9	6.4	7.5	7.4	6.2	7.1
Total cons.	11.3	14.9	12.0	14.2	25.0	17.0

Source: Own editing based on Eurostat data

This table highlights that Romania is leader among these countries and Poland is the tail-ender. Only in transport use do not have Romania the lead. We can clearly see that the hydropower countries (Slovakia and Romania) have the higher percentage in electricity production. Among the high Carpathian Mountains originate fast flowing rivers, and the Danube is touching Slovakia and Romania border, this river is Europe's second longest river with great hydropower potential. Romania has the biggest hydropower plant in Europe called the Iron Gates, and it is shared with Serbia.

Slovakia had it great international hydropower plant with Hungary called the Gabčíkovo-Nagymaros Waterworks, but only the Slovak part was built, because Hungary tried to terminate the project due to environmental causes.

Hungary, Romania and Poland have great plains with decent agriculture. The agricultural by-product make up a significant proportion of the biomass resources. As we mentioned above biomass energy is primarily used by heating. In some cases renewed thermal power plants use biomass to substitute the peat and lignite which have low energy density. The other big source of the biomass energy is the forestry. In this area Hungary has the lowest percentage of forests, the others are near to the European average. Firewood is often used by communal heating. You can see that the biomass countries have higher percentages in heating than the European average.

The renewables in transporting have nearly the same numbers as the European average excluding Poland. According to the 2020 directive 10 % minimum target to be achieved by all EU member states for the share of biofuels in transport. This target currently is not surpassed by any of the examined country.

In the next part of the results we made some forecast whether the countries can achieve their targets or not. For the easier visibility we divided the countries into two graphs. For Figure 1 was chosen Romania and Poland because they have bigger economy and are more populated than the other three. In Figure 1 you can see the share of renewable energy in gross final energy consumption in Romania and Poland.

As you can see both countries had nearly constant growth of renewables. According to their national energy plan, Romania's 2020 target is the 24% sharing. It was mentioned earlier, that Romania has the lowest target compare to the 2005 base year. However, Romania's 2005 data (17.4%) is still higher than the other countries' 2020 target. In the graph you can see that Romania reached the 25% in 2015. With this growth rate Romania can reach 26% or 27% share.

Poland has a slower growth than Romania. The Polish target is the second lowest comparing to the 2005 base (7.2%). Poland has targeted the 15% by 2020, but in this rate of growth cannot be achievable. Poland energy sector based on coal, which price remained relatively low, and it prevents the relevant renewable energy investments in Poland.

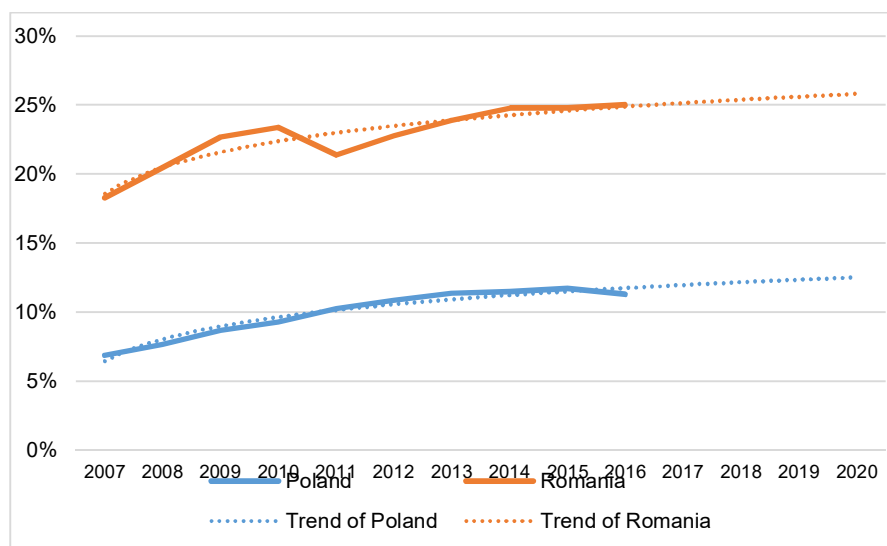


Figure 1: Share of renewable energy in gross final energy consumption in Romania and Poland

Source: Own editing based on Eurostat data

In Figure 2 you can see the share of renewable energy in gross final energy consumption in the rest of the countries. As we mentioned earlier Hungary and Czechia had the lowest percentage in 2005 (Hungary had 4.3% and Czechia had 6.1%) so they had the biggest growth through these years. Hungary has targeted nearly 14.5% and they achieved it in 2013 but they had a throwback and dropped to around 14%, but with this growth rate they can achieve again the target and can reach even higher percentages by 2020. It depends on the agricultural yield because most of the biomass energy comes from agricultural by-products.

Czechia had more balanced growth than Hungary. The Czech target is to reach 13.5% share of renewable energies. As you can see they have surpassed their target in 2013 and unlike Hungary they managed to keep their result. The Czech growth rate predicts that this country can reach 16% by 2020. Slovakia had an average base percentage (6.7%) in 2005 among these countries. They targeted 14% by 2020, the Slovak renewable sharing in not as billowy as the Hungarian, but as constant as the Czech, it is located between these two. The Slovak growth rate is not enough to

reach their target by 2020, they can reach a whole percentage less share for the renewables only about 13%.

Excluding Romania, each country has very simple energy sector with a dominant energy resource. In Poland and Czechia it is the coal with over 50% share. In Slovakia and Hungary it is the nuclear energy with over 50% share. It is dangerous depending on one kind of resource because it makes the country's economy vulnerable.

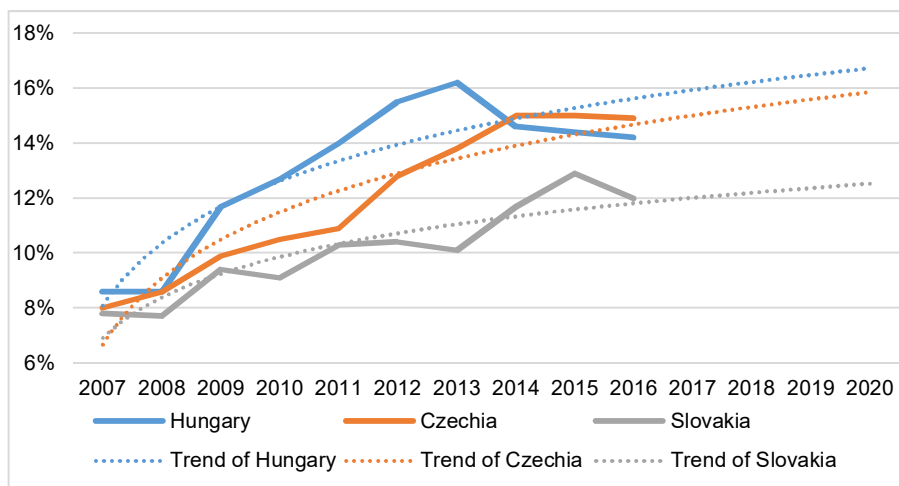


Figure 2: Share of renewable energy in gross final energy consumption in Hungary, Czechia and Slovakia

Source: Own editing based on Eurostat data

Conclusion

We examined the use of the renewable energies in the Visegrad countries and Romania. The European Union wants to reach its 20% target by 2020. Its goal is constantly meet some barriers, such as economic depression which prevented the renewable energy investments and so the lowered fossil fuel prices what obstruct the research too. Nonetheless the EU set newer goals by 2030. The examined countries want to keep up with the EU directive so they achieved big developing in the use of renewable energies.

The leader amongst these countries is Romania with no doubt. Their renewable share increased by 1.4 times by 2016 and their 2005 base year is bigger percentage than the other countries 2020 targets. This country has reliable and sufficiently diverse energy sector. They use hydropower, wind energy, solar energy to produce electricity and biomass energy for the heating. Romania is the only examined country which has more than one sector with higher percentage share of renewables than the EU average. These sectors are electricity and heating.

Czechia is the other country which reached its 2020 target, and still has growing potential. Its electric sector relies a bit on biomass energy, hydropower and solar energy. Czechia uses renewable energy for heating higher percentage than the EU average. The Czech renewable share in the in gross final energy consumption increased by 2.44 by 2016.

Hungary has a special case. It reached their target in 2013, but by 2016 it dropped below the target. The Hungarian energy sector had the lowest percentage share of the renewables, but it increased by 3.3 times. The Hungarian energy sector's most relevant renewable energy is the biomass energy. They use in both electricity production and heating. Just like Romania and Czechia, Hungary has higher share of renewables in heating than the EU average.

Slovakia has the third highest growth rate, although this is not enough to achieve its target by 2020. Slovakia primarily use renewable energies to produce electricity. The Slovak electricity sector relies on its hydropower plants and biomass energy. With this electricity sector Slovakia is near at the EU average in renewable energies in the electricity production.

Poland has the second lowest growth rate after Romania, but the Poles do not have a high base year like Romania. Poland was overtaken by Czechia, Slovakia and Hungary, despite Poland had the second highest percentage in 2005. With this growth rate the Poles cannot achieve their target by 2020.

In the end it is needed to mention that these countries excluding Romania is still below the EU average and they have to invest more on renewable energy using technologies if they do not want to fall behind in the EU. Romania is a good example for the other four countries how to take advantage of the climate and geographical conditions. They have different conditions but each country can find the segment from the Romanian renewable sector which suits to them and they can learn about it.

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INCLUSIVE ENTREPRENEURSHIP PROGRAMMES IN ROMANIA IN 2014-2020. THERE IS AN IMPROVEMENT COMPARED TO 2007-2013?

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Abstract: *In addition to our previous research regarding inclusive entrepreneurship, this paper tries to analyse the progresses made by Romania in the field of entrepreneurship programmes for disadvantaged groups on labor market in 2014 - 2020 by comparison with the 2007-2013 period. The present paper aims to investigate whether Romanian inclusive entrepreneurship programmes for 2014-2020 both financed by the European Union (EU) and the Romanian Government respond to the specific needs of inclusive entrepreneurship target groups in the present context of Romanian SMEs development. The first part of the paper explores the dynamics of business creation in Romania and the sectors of interest for business creation as well as the strengths and weaknesses of the Romanian business environment and entrepreneurship policy. In the second part, the paper compares the two forms of inclusive entrepreneurship programmes financed by the EU and the Romanian Government. The main conclusion of the paper is that there is a clear improvement of the inclusive entrepreneurship programmes in Romania for 2014-2020 compared to 2007-2013 in the context of general improvement of Romanian business environment but existing reforms should continue.*

Keywords: *inclusive entrepreneurship; business creation; business environment; entrepreneurship policy; inclusive entrepreneurship programmes.*

JEL Classification: *E 24; J24; O38.*

1. Introduction

In addition to our previous research regarding women entrepreneurship in Romania (Dodescu et.al., 2010; Dodescu and Bădulescu, 2010; Bădulescu and Dodescu, 2010) and inclusive entrepreneurship and inclusive entrepreneurship policy in Romania in the European Union (EU) context (Dodescu and Pop Cohuț, 2015a; Dodescu and Pop Cohuț, 2015b; Dodescu, Pop Cohuț and Chirilă, 2017; Pop Cohuț and Chirilă, 2017), based on OCED/EC inclusive entrepreneurship framework (OECD/EC, 2013, 2017), this paper tries to analyse the progresses made by Romania in the field of entrepreneurship programmes for disadvantaged groups on labor market in 2014 - 2020 by comparison with the 2007-2013 period. We have previously found that target groups for inclusive entrepreneurship policy in Romania are especially youth (the most disadvantaged group), followed by women and rural people (Dodescu and Pop Cohuț, 2015a), the strengths of inclusive entrepreneurship policy in Romania in 2007-2013 are related especially with EU structural and agricultural funds, particularly, European Social Fund, and for the 2014-2020 period inclusive entrepreneurship policy must to focus on access to finance as key instrument (Dodescu and Pop Cohuț, 2015a; Dodescu and Pop

Cohuț, 2015b) and to design specific measures tailored on local needs (Dodescu, Pop Cohuț and Chirilă, 2017; Pop Cohuț and Chirilă, 2017). The present paper aims to investigate whether Romanian inclusive entrepreneurship programmes for 2014-2020 both financed by the EU and the Romanian Government respond to the specific needs of inclusive entrepreneurship target groups in the present context of Romanian SMEs sector development.

2. Business Creation in Romania the context of SMEs Development and Business Environment Improvement

With a density of SMEs at half the EU average, Romania aims to increase the density of active SMEs by over 50% by 2020, increase the total number of employees in active SMEs to 3,233,000 (+ 23.23%), increase the Gross Added Value of SMEs to 38,000 mil. (+ 41.83%), increase labour productivity to 11.754 (EUR / employee) (+ 15.09%) as shown the Romanian Government (RG, 2014a) Strategy for the development of Small and Medium Enterprises and improving the business environment in Romania - Horizon 2020 (RG, 2014a).

These bold goals are about to be met as shown the data provided by the Romanian National Trade Register Office (RNTR, 2017). Following declines in 2010-2015 as result of the economic and financial crisis, the net number of new businesses is recovering in 2016-2017, as seen in Table no. 1.

Table no. 1. New business registrations during the period January 1, 2017 – August 31, 2017, compared to the same period of 2016, Romania

No. of business registrations in the period January 1, 2017 – August 31, 2017													
OTH	COS	EEIG	EIG	FE	IE	ANP	JSC	LP	SLP	ES	CS	LLC	Total
3	93	1	2	1319	9998	17245	93	15	5	1	4	74157	102936
No. of business registrations in the period January 1, 2016 – August 31, 2016													
OTH	COS	EEIG	EIG	FE	IE	ANP	JSC	LP	SLP	ES	CS	LLC	Total
2	146	-	-	646	7956	15400	64	14	-	-	3	52460	76691

Source: (RNTR, 2017), Legend: OTH - Other state economic units not transformed in autonomous societies; COS Cooperative societies - Cooperatives and non-transformed agricultural associations; EEIG - European Economic Interest Grouping; EIG - Economic Interest Group; FE -Family enterprise; IE-Individual enterprise; ANP - Authorized Natural Person; JSC - Joint Stock Company; LP - Limited partnership; SLP Simple Limited Partnership; ES - European Society; CS - Collective Society; LLC – Limited Liability Company.

As it can be seen in Table no. 1, the total number of new businesses registered in Romania showed an increase of 34.22% during the first half of 2017 as compared to the same period of 2016, and largest increases were registered in the case of the following forms of organization: Limited Liability Companies (LLCs), an increase of

41.36%, followed by Individual Entities (IE) 25.67% and Authorized Natural Persons (ANP) 11.98%.

Also, the data and forecasts provided by the European Commission (EC) are optimistic too. In 2016, economic growth reached a peak in the post-crisis period (4.9%), and will remain solid in the next period, according to EC estimates: 4.4% in 2017 and 3.7% in 2018; the labour market has grown as result of economic growth and significant wage increases, and unemployment is approaching the low levels before the crisis and is projected to continue to decline over the period 2017-2018 (EC, 2017a). Romanian SMEs' value added increased by 44.6 % in 2012-2016, from all SME size classes - micro-firms are distinguished with an 86.6 % increase in value added (EC, 2017b). In 2016-2018 an estimated value-added growth of about 16.5 % is expected in all SME size classes and 59 200 new jobs are predicted to be created in SMEs, almost all of them in micro firms and small firms (EC, 2017b). In 2016, Romania recorded growth in SME employment in 2016 by 2 %, and SME value added increase by more than 5 % (EC, 2017c).

Looking at sectors, according with Annual report on European SMEs 2016-2017 (EC, 2017 c), the employment recovery in SMEs was most dynamic in services industries in Romania as well as in the EU-28 in 2017, but Romania registers the lowest shares (below 3 %) of the high-growth firms (EC, 2017b, c). On average in the EU-28, 'information and communication' and 'administrative and support services', followed by 'transportation and storage' and 'professional, scientific and high tech services' were the sectors with the highest rates of fast-growing firms that determined the strongest SME employment growth in 2017 (EC, 2017c).

According with Romanian National Trade Register Office (RNTRO, 2017), as regards the areas of business creation interest in Romania (NACE codes), in 2017 - 'wholesale and retail trade; repair of motor vehicles and motorcycles' is situated on the first place with a share of 19.54% of the total registered businesses but, compared to the same period of 2016, the total number of business dropped by 15.12%. The trade sector is followed by 'agriculture, forestry and fishing' with a share of 11.79% of the total businesses created (with an increase of 35.21% compared to 2016) and 'manufacturing' with a share of 10.22% (with an increase of 164.99% % compared to the same period of 2016), as seen in Table no. 2.

Table no. 2. New business registrations during the period January 1, 2017 – August 31, 2017, compared to the same period of 2016, Romania

Name of the NACE section	No. of business registrations during the period January 1, 2016 – August 31, 2016	No. of business registrations during the period January 1, 2017 – August 31, 2017	Change
Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use	3	9	200,00%
Administrative and support service activities	2889	4687	62,24%

Name of the NACE section	No. of business registrations during the period January 1, 2016 – August 31, 2016	No. of business registrations during the period January 1, 2017 – August 31, 2017	Change
Arts, entertainment and recreation	2436	4599	88,79%
Professional, scientific and technical activities	6906	9399	36,10%
Public administration and defence; compulsory social security	13	14	7,69%
Agriculture, forestry and fishing	8974	12134	35,21%
Other service activities	3147	5594	77,76%
Wholesale and retail trade; repair of motor vehicles and motorcycles	23692	20109	-15,12%
Construction	6096	9475	55,43%
Water supply; sewerage, waste management and remediation activities	227	443	95,15%
Accommodation and food service activities	3647	5379	47,49%
Mining and quarrying	52	70	34,62%
Manufacturing	3933	10422	164,99%
Information and communication	3595	5978	66,29%
Financial and insurance activities	1387	966	-30,35%
Electricity, gas, steam and air conditioning supply	45	56	24,44%
Human health and social work activities	2236	2944	31,66%
Transportation and storage	4893	6966	42,37%
Real estate activities	1292	1752	35,60%
Education	1228	1940	57,98%
Total	76691	102936	34,22%

Source: RNTRO, 2017.

As seen in Table no. 2, the large majority of newly created firms in Romania were born in traditional (i.e. non-ICT) sectors, but the increase in the number of newly created firms, in 2017 compared to 2016, in 'information and communication' (66,29%) and 'professional, scientific and technical activities' (36,10%) is encouraging (RNTRO, 2017).

From the Small Business Act (SBA) perspective, Romania's SBA profile 2017 presents a mixed picture. From 2008 to 2017, Romania's SBA performance has visibly improved, especially for the following SBA principles: 'entrepreneurship' (Romania is the EU leader for this principle but this is the only area where the Romania scores above the EU average), 'second chance', 'responsive administration', 'state aid & public procurement', 'access to finance' and

'internationalisation' (in line with the EU average) (EC, 2017b). Also, there are bad news, too. Romania shows the lowest scores in the EU for the following SBA principles: 'single market', 'skills & innovation' and 'environment' (EC, 2017b). If the greatest progress is recorded for 'entrepreneurship', the most visible deterioration is recorded for 'skills and innovation'.

From our research perspective, the most important aspect of Romania's SBA profile 2017 is related with recognizing the existence of a significant number of policy measures between 2016-2017 in 9 out of the 10 SBA policy areas, including in areas where performance still scores low, such as 'skills & innovation' (EC, 2017b).

Even considers that the overall progress in implementing the SBA in Romania has been moderate until 2017, the EC recognizes the existing reforms and recommends that 'further reforms should continue, together with consolidation and enforcement of existing ones, with a view to promoting internationalisation, fostering innovation and ICT skills, and boosting SMEs' confidence in e-commerce transactions' (EC, 2017b). Except these, predictable legislation, simplification and modernisation of the business environment are the most important recommendations of the EC for entrepreneurship policy in Romania (EC, 2017b).

3. Romanian Inclusive Entrepreneurship Programmes for 2014-2020

Therefore, the highest level of potential entrepreneurship in the EU coexists with a density of SMEs at half the EU average, indicating that there is a potential untapped entrepreneurial spirit in Romania. In this context, the promotion of entrepreneurship and self-employment is a direction of action, present also in the national strategic documents -Governmental Strategy for the Development of the SME Sector 2009-2013, Governmental Strategy for Development of the Small and Medium Enterprises Sector and Improvement of the Business Environment from Romania - Horizon 2020; 2014-2020 Partnership Agreement; National Employment Strategy 2014-2020; National Strategy for Competitiveness 2014-2020; National Strategy on Social Inclusion and Poverty Reduction for 2015-2020 etc., the main objectives and priorities being as follows: increasing the number of SMEs, increasing the number of employees in SMEs, creating a business environment favourable to businesses, to private initiative and to entrepreneurial spirit, supporting the increase of the competitiveness of the Romanian business environment on the local, regional, national, European and international level (RG, 2011; RG, 2014a; RG, 2014d; RG, 2014e; RG, 2014f).

In order to support the promotion of entrepreneurship and self-employment for disadvantaged groups on labor market, especially youth, women, rural people, the funding opportunities for creating a business are primarily linked to European funds, but also to the national budget, as shown in Tables no. 3 and 4.

Table no. 3. Inclusive Entrepreneurship Programmes funded by the European Union, in Romania, in 2014-2020, open calls in 2017

Target group/ Mode of financing	Objectives	Tools of the entrepreneurial policy used
Priority Axes / Major Areas of Intervention for Inclusive Entrepreneurship / Programmes		
<i>European Regional Development Fund - Regional Operational Programme (ROP) 2014-2020</i>		

Responsible: Ministry of Regional Development and Public Administration		
2. Improving the competitiveness of SMEs		
2.1 Promoting entrepreneurship, in particular by facilitating the economic exploitation of new ideas and by encouraging the creation of new businesses, including through business incubators		
Micro-enterprises in urban areas which have been established at least one year prior Business Incubators and Accelerators Funding: Maximum 200,000 Euro (90%)	Objective: Strengthening the market position of SMEs in competitive areas	Access to funding Construction / upgrading and expansion of production / service space for SMEs/ incubators / business accelerators
The European Agricultural Fund for Rural Development - National Rural Development Programme (NRDP) 2014-2020		
Responsible: Ministry of Agriculture and Rural Development		
6: Encouraging the diversification of the rural economy by promoting the creation and development of SMEs in non-agricultural sectors in rural areas		
6.2 Encouraging the diversification of the rural economy by promoting the creation and development of SMEs in non-agricultural sectors in rural areas		
Micro-enterprises in rural areas; farmers or members of agricultural households Funding: Maximum 70,000 Euro 50,000 Euro (100%)	Objectives: Creating new non - agricultural activities in general for small entrepreneurs in rural areas; Diversifying the rural economy by increasing the number of SMEs in the non-agricultural sector.	Access to funding Lump sum for financing non-agricultural activities in rural areas based on a business plan
6: Encouraging the diversification of the rural economy by promoting the creation and development of SMEs in non-agricultural sectors in rural areas		
6.4 Investments in the creation and development of non-agricultural activities		
Micro-enterprises in rural areas; farmers or members of agricultural households Funding: Maximum 200,000 Euro (90%)	Objectives: Stimulating business in rural areas, contributing to the growth of non-agricultural activities carried out in rural areas; Development of existing non-agricultural activities; creating jobs and reducing disparities between rural and urban areas.	Access to funding Lump sum for financing non-agricultural activities in rural areas based on a business plan
European Social Fund - The Human Capital Operational Programme (HCOP) 2014-2020		
3: Jobs for All, 3.7 Increasing employment by supporting non-agricultural enterprises in the urban area		
Responsible: Ministry of Labour and Social Justice		
Romania Start-up Plus		
Natural persons (e.g. unemployed, inactive,	Objective: encouraging entrepreneurship and self-	Access to funding

people who have a job and set up a business to create new jobs) Funding: 40,000 euro/ business plan (100%)	employment by supporting the establishment of non-agricultural enterprises in the urban area.	The Entrepreneurship Scheme Administrator will implement the Entrepreneurship Scheme: Stage I - Entrepreneurial training Stage II - Implementation of funded business plans Stage III - Programme to monitor the functioning and development of funded businesses
Diaspora Start-up		
Natural persons (e.g. unemployed, inactive, people who have a job and set up a business to create new jobs) Funding: 40,000 euro/ business plan (100%)	Objective: encouraging entrepreneurship and self-employment by supporting the establishment of non-agricultural enterprises in the urban area.	Access to funding The Entrepreneurship Scheme Administrator will implement the Entrepreneurship Scheme: Stage I - Entrepreneurial training Stage II - Implementation of funded business plans Stage III - Programme to monitor the functioning and development of funded businesses
Romania Start-up Nation		
Micro-enterprises, small and medium-sized enterprises Funding: Maximum 200,000 lei/business plan, (80%)	Objective: Increasing employment by supporting non-agricultural enterprises in the urban area	Access to funding Encouraging entrepreneurship and self-employment by supporting the development of non-agricultural SMEs in the urban. At least 2 permanent and full-time jobs will be created. Work must be maintained for a full period of at least two years after the date of payment.
European Commission Funds - GD Enterprise and Industry		
Erasmus Programme for Young Entrepreneurs		
Young entrepreneurs Funding: Grant funds	Objectives: Providing on-job training for new entrepreneurs in small and medium-sized enterprises elsewhere in the EU; facilitate exchanges of experience and information between entrepreneurs.	On-job-training - allows young European entrepreneurs to spend up to 6 months working together with an experienced entrepreneur from another EU country to learn how to develop and improve their own business.

Source: Compiled by the authors, based on ROP (POR) 2014-2020 data. General Guide with Annexes, available on-line: <http://www.inforegio.ro/ro/por-2014-2020/ghid-2014-2020.html>; HCOP (POCU) 2014-2020, Open call Guides, <http://www.fonduri-structurale.ro/program-operational/2/programul-operational-capital-uman>, NRDP (AFIR), available on-line: <http://www.afir.info/>; Erasmus for Young Entrepreneurs, available on-line: www.erasmus-entrepreneurs.eu.

Table no. 4. Inclusive Entrepreneurship Programmes funded by the National Central Budget, in Romania, in 2017, open calls in 2017

Target group / Mode of financing	Objectives	Tools of the entrepreneurial policy used
Responsible: Ministry of Business, Trade and Entrepreneurship, Territorial Offices for SMEs and Trade		
START-UP NATION 2017 Programme		
Potential entrepreneurs and SMEs Funding: Maximum 200,000 lei (100% of eligible costs)	Objectives: Encouraging and stimulating the establishment and development of SMEs, Creating new jobs, The insertion on the labour market of disadvantaged persons, unemployed and graduates, Increasing investment in innovative new technologies.	Access to funding Support for start-ups, support for the development of small and medium-sized enterprises De minimis funding based on a business plan
Programme for the development of market activities for market products and services - TRADE - SERVICES Programme 2017		
SMEs Funding: Maximum 250,000 lei (90% of eligible costs)	Objectives: Encouraging and stimulating the development of small and medium-sized enterprises Strengthening the capacity of economic operators to promote market products and services; Develop and modernize the activity of traders and service providers.	Access to funding Support for economic operators by facilitating access to finance, improving their economic and technical performance, adapting to market requirements. Creating and maintaining jobs, Enhancing consumer protection and food security.
Programme for the SUPPORT OF CRAFTMANSHIP 2017		
SMEs, cooperative societies, authorized natural persons, individual enterprises, family businesses, and professional associations or foundations Funding: Maximum 2000 lei / beneficiary for transport and maximum 1600 lei / beneficiary for accommodation	Objectives: Stimulating the development of crafts and small industries in Romania, Strengthening the class of craftsmen, Protecting jobs that involve a large number of manually executed tasks in their practice Re-launch of traditional products and products including popular art and craft items, Promoting these products and services on national and international markets.	Encourage participation in fairs, networking Supporting craftsmen in promoting their own products and preserving and stimulating wider promotion of local traditions There is free participation in the fair for the selected applicants after enrolment in the programme. Within the national fair, eligible beneficiaries will be able to present their own products.
EMPRETEC Programme		

Existing or potential entrepreneurs, top managers, including specialists from public or private organizations supposed to behave in an entrepreneurial or managerial manner Funding: 504,000 lei for 100 beneficiaries	Objectives: Supporting the development of small and medium-sized enterprises, creating new jobs, increasing the number of small and medium-sized enterprises able to cope with competition and competitive forces in the conditions of globalization of markets.	Training: The UNCTAD EMPRETEC Romania workshops are funded to support the development of SMEs in areas of interest for the development of entrepreneurial abilities in order to acquire the theoretical knowledge and practical applicability needed to start and develop a business.
SME FAIR 2017 Programme		
Micro-enterprises set up by business start-up entrepreneurs, authorized natural persons, individual enterprises and family businesses, professional associations or foundations Funding: Total budget 5.000.000 lei, it is estimated that de minimis aid will be granted to 4000 beneficiaries	Objectives: promoting entrepreneurship, stimulating business development and employment in the SME field, facilitating contacts between potential entrepreneurs / SMEs / economic agents / public or private institutions providing services to the SME sector, in order to increase the number of successful entrepreneurs and improvement of the economic and technical performances of SMEs, stimulating and supporting innovative SMEs.	Encourage participation in fairs, networking Organizing FSME 2017 , in the 8 development regions of Romania, for a period of minimum 3 days. The programme is an integral part of the <i>European SME Week 2017</i> .
MICROINDUSTRIALISATION 2017 Programme		
SMEs that operate in the industry sector (eligible NACE codes) Founding: maximum 90% of the value of the eligible project costs, maximum 450,000 lei / beneficiary; Own contribution - at least 10%	Objectives: Supporting investments in priority economic sectors - eligible NACE codes, such as: Food Industry; Manufacture of textiles; Manufacture of apparel and so on; Tanning and finishing of hides; etc. Increase the volume of activity and competitiveness of SMEs in these sectors.	Access to funding De minimis aid schemes for implementing business plans
INTERNATIONALISATION 2017 Programme		
SMEs operating in certain areas (eligible NACE codes) Funding:	Objectives: Stimulating the business environment by creating new tools for the individual promotion of Romanian SMEs to facilitate their	Access to funding De minimis aid schemes to support the access of eligible Romanian economic operators to external markets

200,000 euros, the equivalent in lei, respectively 100,000 Euros for the beneficiaries	access to foreign markets and the development of partnerships for internationalization.	
Multi-annual national programme for the development of entrepreneurial culture among women SME managers - WOMEN MANAGERS 2017		
Female managers Funding: 50,000 lei/ Beneficiary (90%)	Objectives Improving the economic performance of existing women-led businesses by accessing sources of funding from the state budget; Stimulate self-employment and increase the number of female entrepreneurs in the business community;	Access to funding Start-up support De minimis aid based on a business plan
National Credit Guarantee Fund for Small and Medium Enterprises (FNGCMM)		
SME Credit Guarantee Program		
SMEs	State-guaranteed loans	Access to funding State-guaranteed loans

Source: Compiled by the authors, based on the data from the Ministry of Business, Trade and Entrepreneurship, Directorate of Entrepreneurship and Programmes for SMEs available on-line: <http://www.aippimm.ro/> FNGSIMM, available on-line: www.fngcimm.ro.

From the analysis of the two categories of programmes, we can distinguish the following aspects: although they have similar objectives such as strengthening the market position of SMEs in competitive areas, increasing the volume of activity and competitiveness of SMEs (ROP and Trade - Services Programme 2017, EMPRETEC programme, Micro industrialisation programme 2017), they differ greatly in the fact that the European funding programmes have a multi-sectoral dimension, while national programmes focus on one or more sectors targeted by the activity.

Some national programmes have different specific objectives: stimulating the business environment by creating new tools for the individual promotion of Romanian SMEs to facilitate their access to foreign markets and the development of partnerships for internationalization (Internationalization Programme 2017), state-guaranteed loans (SME Credit Guarantee Programme); for both categories of programmes, we identify specific targets for vulnerable target groups: the European youth entrepreneurship stimulation programme (Erasmus for Young Entrepreneurs Programme) and the women managers' support programme (Women Managers 2017). There are overlapping objectives and programmes: Start-up Nation programme funded by European funds and Start-up nation 2017 programme funded by national funding. Although there is a major potential for the development of agricultural activities in Romania, as well as an increase in the concern of Romanian entrepreneurs in the initiation of agricultural businesses (the share of agribusiness created in 2017 represents 11.79% of the total number of initiated businesses and represents an increase of 35.21% compared to 2016), we see that finance and incentive programmes for businesses in rural areas, especially those funded by European funds, have as objectives the development of non-agricultural businesses

- the creation of new non-agricultural activities, generally for small entrepreneurs in rural areas; diversifying the rural economy by increasing the number of micro and small enterprises in the non-agricultural sector; the development of existing non-agricultural activities (NRDP); encouraging entrepreneurship and self-employment by supporting the establishment of non-agricultural enterprises in the urban area (Start-up Plus, Diaspora Start-up, Start-up Nation).

For both categories of programs, we have identified similar conditions for providing funding for job creation and preservation these at certain time intervals. For example, to the ROP 2014-2020 Programme, the condition is to increase the average number of employees as a result of the project implementation and the obligation to keep the average number of employees so achieved for a period of 3 years from the completion of the final payment, or the average number of employees maintained at least at the level recorded in the last fiscal year before the application for funding, for the entire duration of the grant contract and for the project's sustainability. Also, the Romania Start-up Plus and Diaspora Start-up programmes, the specific conditions are related to the employment of at least 2 persons in the funded business and the obligation to maintain jobs for a minimum of 18 months during the implementation period and the project's sustainability. For Start-up Nation and Start-up Nation 2017 programmes, beneficiaries must create at least one full-time job for an indefinite period and maintain their employment for at least 2 years after the project implementation is completed. In the National Micro industrialisation Program 2017, the beneficiary has the obligation to employ at least 2 employees for an indefinite period of time and to keep the number of existing jobs at the date of application opening and the number of jobs created by the program for a period of 3 years from the year following the receipt of the allowance financial non-reimbursable funds.

4. Conclusion

Although there is a clear improvement of inclusive entrepreneurship programs in Romania for the period 2014-2020 as compared to 2007-2013 in the context of the overall improvement of the Romanian business environment, the European and national funding programmes for inclusive entrepreneurship are faced with difficulties in implementing and monitoring the sustainability of newly developed or newly created businesses. The development and financing of a business plan as required by certain programmes funded by European funds (Start-up, Diaspora Start-up) and national (Start-up Nation 2017) are not enough for potential entrepreneurs from disadvantaged groups on labor market, the survival of a new business and the maintenance of the created jobs depend to a large extent on personalized counselling and monitoring services, at least for the first 2 years after the business creation.

Besides the difficulties connected by signing the financing contract and obviously the pre-trial process, the difficulties related to excessive bureaucracy, the complexity of the sometimes ambiguous legislative aspects, the procurement procedures etc., we consider that for a beneficiary of funding non-reimbursable, in the current labour market conditions, the creation of new jobs and especially their preservation over certain imposed periods are the most difficult conditions to fulfil. Creating and developing a business is not always linked to an increase in the number of employees, for example, the acquisition of performing machines may even reduce the number of jobs from the point of view of business efficiency.

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POSSIBILITIES OF DEVELOPING THE PRODUCTIVITY APPROACH. PROPOSALS IN CERTAIN MAIN DIRECTIONS

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Abstract: *Even if very much used in most economic research, the productivity issue and its common indicators do not profoundly capture the whole complexity of the productivity's very inner meaning. Our paper aims at developing elements in the purpose of setting original concrete proposals and suggestions for a more accurate unorthodox approach on productivity. It aims at applying a widened economics angle, in contrast with the common business view (focused on business private interest) based on usual performance criteria. Our research is a purely theoretical one, proposing conceptual grounds for applied quantitative and qualitative analyses that involve, as part of a larger research project, the productivity matter, in the purpose of those widening horizon. Our approach is conceptually fundamentally apart from the usual ones. Namely, in accordance with the reasons explained in each section, our paper is interested in indicators and manners of analysis that bring corrections to the unusual ones concerning market competitiveness, efficiency, productivity, by (a) completing the productivity formula (section 3), by (b) conceiving new indicators, as an alternative, may be even opposite to the usual ones (section 4), or by (c) building a system of equations that approach the market reality in an unusual way (section 5). Concretely, we aim at giving bigger attention to social and systemic aspects, to "externalities", to certain connected qualitative and quantitative features of "productive" economic processes; from the point of view of the interconnections on the market, the paper also explores some aspects of possible price relationships (negotiations) among economic entities, and related value transfers. Concluding propositions concerning prices, original concepts, analyzing ways, evaluating principles and correlation indicators are set and put forward, as apart from the most usual ones, and as possibilities of further theoretical and practical developments and in the purpose of practical application. Our proposals will be useful for economic researches that want to be more consistent with the growing complexity of the economic reality and that dare to put under question the most common approach, ratio and manner of analysing productivity.*

Keywords: *productivity; serviceability; pure and perfect market.*

JEL Classification: *D62; Q51; L11.*

1. Introduction

The common concept of productivity takes this indicator into account as a ratio between production (most often in terms of market value) and the factors under consideration (most often the labour factor, expressed by number of workers or in other ways). Usually, analyses of economic entities are made in this view, whether they are strictly limited to the issue of productivity, or whether they include other related aspects (profitability, market competitiveness ...). Researches commonly

target the performance of those economic entities from *their* point of view (for their benefit, and above all, the "internal" performance).

The scientific background in this regard is vast: it includes most of the research on productivity. See Djellal & Gallouj (2008), for related scientific synthesis, theoretical delimitations and syntheses, and also for important developments in the productivity matter. Having such documentary basis, this article does not propose to make another presentation of the literature on productivity. Moreover, it does not focus on the calculation of productivity as an indicator, or / nor on methodological aspects concerning such calculations. We are not concerned in this article with punctual-applied research; so presentations of certain particular analyses from the literature are not necessary for this research, not even as examples: the presentation of such specific analyses from the very rich research literature on productivity remains outside the concerns of this research. As a result, we do not add more to our references to literature in this manner or orientation: In fact, in that what concerns the researches on the productivity issue, for our paper, the optics and the way of approach matter. And this is, in principle, the same in the overwhelming majority of research in the field (most of them being applicative, empirical).

Our paper proposes and applies a switch of the angle of seeing the economic activities and companies, from the most common angle, focused on business individualist purposes, to that given by the original servicity approach. We propose and describe several alternative ways of analysis that can be applied in empiric researches, conceived as a more general approach. The necessary references for each element we are describing or developing are made in the section to which they belong.

In this introductory section we have to say that the present paper is a theoretical-conceptual one, so that, once we have made the necessary references to the synthesis and contributions of Djellal & Gallouj, we only mention the additional widening of the vision developed in the quoted book, widening made in Jivan (2014). However, we emphasize that the dominant economic conception presumes that productivity and growth are the fundamentals of the quality of economic and social (in this respect we exemplify only Stiglitz's formulation: "those with higher productivity gained higher incomes, reflecting their increased contribution to society"; Stiglitz, 2012, p. 81). But the concern of the common approach is and remains close to "growth for the sake of growth", as Sedlacek points out (Sedlacek, 2012, p. 164). Given Sedlacek's criticisms of this "quantitative" style, we support his position on the need for "more and better performance". Our theoretical research is done in the spirit of the same desire for "the better" that the quoted volume regards. Paraphrasing Romer (2008), we also consider that new methods and means are needed. Namely, in this paper we are considering indicators designed to bring about a more complex understanding than the common one, which often turns out to be simplistic (*i.e.* focussing only on quantity increases); we consider widening the perception angle of the market reality, we consider that the common approach is most often from a single angle - that of the economic entity on which the productivity analysis is centred. Therefore, we include such an extension in an original approach to relations between economic agents (through so-called "service transfers"). The optics in which we propose broadening the horizon is the one developed in Jivan (2014), wherein the necessity to increase the horizons of the productivity analysis is supported, in the sense of overcoming (and avoiding) the focus only on the *specific* (punctual, local,

momentary or immediate, "short-sighted", individualistic, biased) and passing to the opposite: the concern for the *general* in space, temporal, social ... dimensions.

The presented theoretical developments and the formulated proposals constitute a basis for conceptual foundation for applied analyses using the indicators and equations in the present paper, also revealing the possibility of observing differences between companies, various differences, by the nature of the calculated indicators, within the limits of the databases available

2. Genuine productivity vs. actually calculated productivity

Forgetting the liberalist origins of the concept of productivity, the focus on *appropriation* of values almost replaced the focus on genuine value *creation* (Jivan, 2014). The economic science must modify the very approach on productivity and growth. The servicity concept (Jivan, 1993) puts under question the specific (individual, local, immediate...) point of view and promotes a broader analytical horizon (as general or comprehensive as possible at a certain moment of human kind knowledge development).

The meaning of "productive" has to take into account the creative aspect (in the sense of originating from the concerned entity), and the receptive aspects (in the sense of receiving to the concerned entity, from the external space. Calculation of productivity, however, measures receipt (income). Dominant economic theory only assumes / presumes that market mechanisms fairly reward creativity (internal productivity), declaring it equal to income. The importance of trade and marketing for the success of entrepreneurs is thus denied; or the role of all entrepreneurial market activity is assimilated to value creation (production), to productivity itself.

Such reducing (simplistic reductionist), productivity approaches ignore the increasing importance of trade activities and the fact that nowadays competition is not done primarily through production, but rather through marketing.

The concept of production permits two approaches: the utility (benefit, advantage) from the point of view of an economic entity, but also the utility / benefits in terms of the economic entities that enter into economic relations with it (with the economic entity that we are analyzing).

According to the servicity approach, the revenues obtained on the market do not rigorously measure the creation, the beneficial contribution made, or the service is rendered by an economic entity; that is on the ground that, in addition to the direct contribution (production) made by the concerned economic entity, there come also the market activity, the variable circumstances, the negotiations (with all relational, information and power related aspects; see *infra*, section 5). The latter decisively alter the chances of a fair remuneration of creation (productivity), due to the entrepreneur's own contribution, beneficial not only to himself but also to the recipients of his / her offers / performance.

The servicity indicator puts forward the idea contained in the usual formula of productivity, but with the interpretations of the servicity theory, *i.e.*, reiterating the conceptual nature of the original Physiocrat liberalism (in this respect, please see the explanations in Jivan, 2014). However, the distortion of the meanings of productivity – in the common way of calculating the indicator –, which, as said above, expresses the capacity to attract incomes, to absorb values from the environment, required a more comprehensive corrective optics: that of servicity.

For now we will refer to narrow servicity (σ_n). Narrow servicity takes into account only the interests of other economic entities, other than the concerned one (Jivan, 2000). This is opposite to the common sense of the usual productivity indicator (which is calculated from the angle of the interests of the enterprise concerned). The comparison with productivity is more relevant in the case of narrow servicity (see also the concrete observations made infra, section 4, regarding some concrete proposals of indicators of productivity analysis in a widened view, from the angle opposite the usual / common). Broad servicity (serviceability) puts together the results that are concerned by the economic entity (targeted by the common productivity indicator) and those in the opposite angle (targeted by narrow meaning of servicity), providing the complex picture of the related reality. The servicity indicator can be written according to the principle below (Jivan, 2000, p. 104):

$$\sigma = \frac{\Delta S}{Ef},$$

where:

σ is the servicity indicator;

ΔS – the rendered service;

Ef – the effort or the factor (factors) taken into account.

Such principle of building indicators stays on the basis of building new, more appropriate, indicators, as told in the next sections.

3. Shortly about a socio-ecologically added indicator of productivity

The competitive stress for productivity growth let in an, at least partially, ignored position, the effects of the economic entities concerning the social and, also, the ecological dimension of humans' life; the social impact is not usually concerned in the common calculation of the productivity indicator. Therefore accurate completions should be made, in the purpose of revealing aspects of the social dimension. In this section we present a productivity formula that contains main completions aiming at revealing such social and even ecological elements that are ignored in the usually calculated productivity. The formula was conceived during a doctoral research concerning the social equity (as a part of several research projects developing the "servicity" approach, grounded in Jivan 1993, 2000, 2014; please see also the previous section). The formula can be found in Mihai (2014), and the presentation developed in this section is on the basis of that doctoral research.

$$\psi = \frac{VNB \left(\frac{1}{EMP} + \frac{1}{CAP} \right)}{GINI} * (\beta - EF), \text{ pentru } GINI > 0$$

where:

ψ - Productivity adjusted by sustainability and equity;

VNB – Gross National Income

EMP – Number of persons occupied (employees and enterprisers together)

CAP – Capital compensation

β - Bio-capacity

EF – The Ecological Stamp of Consumption

The formula shows the productivity gained on labour and capital factors (together), calculated with Gross National Income (GNI). To those components of the

productivity calculations, another one was added: a component designed to express a social aspect, correlated with equity: the GINI index; this, taking values between 0 and 100, shows the differences between entities within the economies of the analyzed countries. In the formula in question, it is placed in the denominator, which highlights the increases in the complex productivity indicator proposed (cited in this section), the higher the dispersion (social differentiation, inequalities) are lower. The values of the GINI index point out the more advantageous situations (and thus the economies of the countries, the more socially equitable), as they have smaller inequalities (closer to 0) and respectively, the more disadvantageous, the greater the inequality / the greater the inequality.

The ecological dimension is captured by the inclusion in the formula and the environmental footprint of consumption. This is given by the area that supports consumption in a country and is calculated for primary production and imports, and this sum is diminished with the amount of the export footprint. It is calculated as the number of hectares needed for the production of consumer goods and for the absorption of carbon emissions.

A conceptual limit of this formula is that, in the optics of servicity (Jivan, 2000), the issue in question is not inequality revealed by the GINI index, but inequity; and inequality does not necessarily mean inequity.

The formula we quote here is a complete correction brought to the common productivity formula.

4. New Formulas Proposals

The principle of calculation of the servicity ratio is by dividing positive effects (as numerator) to negative ones (as denominator), as developed in Jivan (2000).

In the unusual approach of the present paper, indicators are conceived (originally interpreted ratios in uncommon correlations): for the calculation of the servicity indicators proposed and discussed in the present paper, we considered the socially beneficial effects, consisting in particular of the incomes came from personnel hiring), as positive (constructive) aspects in terms of material income. We consider/ take into account the *employment*, the number of people employed N , or the volume (value) of salaries paid, as opposed to the values absorbed by the economic entity from its environment (income in monetary units or *revenue* R). The numerator should be the service rendered by the economic entity to its environment, by employing people and paying wages is put in correlation with the own company's welfare (its private income get from producing with the employees).

The activity of economic entities generates income for themselves, induces, as we have pointed out, labour revenue in the benefit of labour used by those economic entities, as well as other possible revenues occasioned by the activities carried out in the countries in which they operate.

The common approach – both in economics terms and, mostly, for business –, puts / considers (R) revenue as directly proportional to productivity (at the numerator of its calculation formula); but in the servicity approaching, value collections capture rather the business success on the market just in the private advantage / interest of the analyzed company, but not always in the direction of improving the social dimension (in what concerns, for example, the social objectives of integration, inclusion, environmental benefit, reduction of social polarization ...).

Personnel employment is a beneficial effect, taking into account also that "Unemployment – the market's inability to create jobs for so many citizens! – is the most terrible market failure, the biggest source of inefficiency and one of the major causes of inequality" (Stiglitz, 2012, pp. 12-13). Employment is not a (social) objective for companies, they do not explicitly target it, but our research was interested in the number of employees precisely from this point of view of the socially beneficial effect for the country where the personnel is hired.

Therefore, based on our research aim, and taking into account the availability of data, we propose *servicity indicators concerning the employment* occasioned by companies' economic activities. Such indicators are alternative to the common calculates productivity ratio. They can concern the employment, totally, or in structure. The main scientific interest of the present paper concerns the employment in less developed countries, *i.e.* the "frontier" (*f*) and "emerging" (*e*) ones. This some can calculate the servicity indicators focussed on the employment effect in the two environments already pointed out: the servicity indicator concerning the total employment (N/R), and that concerning the employment particularly in the type of countries we mentioned (N_{fe}/R).

Other servicity indicators can also be built.

By calculating the above ratios, concrete analyses are allowed; studying such servicity indicators compared to the different economic companies on the market, the curves of their evolutions can reveal interesting dynamics; and, of course, comparisons with the dynamics of the usual labour productivity are possible too. The indicators calculated in that servicity view optics can be compared to common labour productivity, these indicators we propose being "in the mirror" of the commonly calculated indicator of labour productivity ($w = R / N$). Interesting conclusions can be drawn regarding, in particular, the hierarchies that can be set after each indicator, from its point of view, among several companies analyzed.

We note that the common labour productivity formula (R / N) is perceived in the servicity optics described above, as an indicator of average revenues at each job created, so as the efficiency of employing – an indicator capturing the advantages of a firm (strictly for its own benefit) from personnel employment.

5. Price Relations and Value Transfers

As we have shown from the beginning of the present paper, the incomes of the economic entity obtained on the market represent an absorption from its (economic, social, natural) environment, no matter where the values are created: by its own contribution, or the entrepreneur benefits by the values created by other economic entities, or existing in nature and extracted from it. Transactions are made under-pricing conditions that are more or less advantageous for the concerned enterpriser or, respectively, for other economic entities. If we express only the external sources from which our enterpriser can benefit, "by market" (negotiations, marketing activity ...), *i.e.* if we take into account only the contributions to value creation other than the own creative contribution of the concerned enterpriser, the gain (π_e) of such enterpriser is obtained on the basis of its own negotiating power, by benefiting from the servicity (σ_s) of actors that are supplying inputs (suppliers) and that (σ_c) from customers:

$$\pi_e = \sigma_s + \sigma_c.$$

Greater income, got from prices more advantageous for the company (and less advantageous for business partners) are used to calculate a higher productivity (in units of value) of that firm. But productive activity and productivity need to be understood in their complexity: the approach from the servicity view emphasizes that rendered service is even greater as its *own* creation is greater, the benefitting of the values within the environment (Mother Nature, other entities in the economy and society) are, on the contrary, smaller. Thus we can write:

$$\sigma = Q_{\text{internal}} \text{max} / q_{\text{external}} \text{min}.$$

The above formula is essentially the expression of productivity. The differences that we highlight between calculated productivity and servicity (serviceability) refer almost exclusively to the calculation method (see especially Jivan, 2014; see also the references made above in the section 2).

We can express servicity transfers to the concerned entity as follows:

- from customers (buyers): $\tau_c = Q \cdot |p_2 - \varphi_2|$;

- from suppliers (vendors): $\tau_f = q \cdot |\varphi_1 - p_1|$.

In the equations we used (and will use) the next indicators, with the symbols in brackets (for these formulas we used their description in Jivan, 2016):

- the output (Q , in physical units) produced (created) by the economic entity;
- the factor (q) considered (input; in physical expression) used by the concerned;
- the price (p_2) actually received by the economic entity at the sale of the output;
- the fair price (φ_2) of that type of output;
- the price (p_1) actually paid by the economic entity when buying input items (factors);
- the fair price (φ_1) of that type of inputs (factors);
- the profit (π) calculated by the economic entity considered;
- the fair profit / return (ρ) that could be calculated for the entity being analyzed.

In order to can put the issue in terms that allow for a mathematical analysis, we can operationalize the ideas and situations highlighted by using the profit indicator, instead of the "transfers" above. With reference to profit, we propose to take into account two distinct situations: the formal (market) and the theoretical (perfectly equitable, corresponding to the "pure and perfect" market model, meaning no noticeable differences in information, market position, and power of influence ...):

$\pi \rho$

$$\pi = Qp_2 - qp_1;$$

$$\rho = Q\varphi_2 - q\varphi_1.$$

The issue can be analyzed in two steps: firstly the relation between the concerned economic entity and its clients, and then the relation with its suppliers. It means that firstly the prices for the output of the economic entity are taken into analysis, and just than the prices for the inputs. Here supplementary hypothesis may intervene in the purpose of better building the system of equations, assuming, for instance, that certain variables are constant, in certain well defined conditions (time and space conditions, or other).

From the above relations, it follows:

$$\varphi_2 = (\tau_f + q \cdot p_1) / q$$

and

$$\varphi_1 = (Q \cdot p_2 - \tau_c) / Q.$$

Servicity transfers from the entity concerned:

- to customers: $\tau_c = Q \cdot |p_2 - \varphi_2|$;

- to suppliers: $\tau_f = Q \cdot |p_1 - \varphi_1|$.

From those relations, it follows:

$$\varphi_2 = (\tau_c + Q \cdot p_2)/Q$$

and

$$\varphi_1 = (q \cdot p_1 - \tau_F)/q.$$

Servicity:

$$\sigma = (Q \cdot \varphi_2)/(q \cdot \varphi_1).$$

By replacing the calculated expressions of φ_2 and φ_1 in the rendered service formula, we obtain (after Jivan, 2016)

$$\sigma = (Q \cdot p_2 - \tau_c)/(q \cdot p_1 + \tau_F).$$

That is, the servicity is given by the ratio between the revenues of the economic entity corrected by the part of those revenues representing servicity transfers from the customers (at the numerator) and the corrected payments to the suppliers (at denominator); the numerator is corrected by deducing the revenues those transfers; the denominator is corrected by adding the transfers from the suppliers.

The numerator thus calculated represents that part of the achievements (receipts) of the entity that is not vitiated by obtaining, through market various mechanisms and manifestations (negotiations, differences of power on the market, or maybe even by cunning on the market), higher sales prices, *i.e.* market transfers on in the own account of the concerned actor.

The revenues thus corrected, which servicity counts as a numerator, can be called *strictly fair* ; they are opposed to the usual ones on the market, which are, on the contrary, as maximized as possible.

The denominator considered in this calculation represents those costs that are not vitiated by obtaining – by imposing on the market the position and the interests of the economic entity being analyzed – lower costs, that is to say transfers of value to suppliers). In analogy with the above (regarding receipts), we can call these costs *strictly fair*.

By this calculation, we attempt to consider only the value of the own contribution of the economic entity analyzed and to remove (to avoid including) the advantages or disadvantages on the market. We underline that all the symbols used in such equations may, of course, represent also negative values. Through these conceptual delimitations, we want to preserve only the value created strictly (exclusively) by the economic entity itself, trying to eliminate the gains made on the market .on the accounts of suppliers and beneficiaries. As a limit of such calculations, we must notice that these incomes are determined by the prices as opposed to the minimum prices of selling (for the corresponding output goods and services) and as compared to the maximum prices for goods consumed or used (for input). But we do not exclude using the average prices on the market (for sales and purchases, respectively) as a procedure instead of the minimum or maximum ones that we have considered in this approach. We propose such variants to carry out research for the future.

Based on these formulas for servicity transfers, income (R) or net income (π) equations can be immediately set. This may result in equations that can be used for simulations and optimizations that can fundamentally contribute to economic analysis (including productivity). Such approaches allow conceptualization of applied (empirical) research, in a broader horizon than the most common approaches.

6. Final Conclusions

In the present research (for this paper) we limited the operationalization to the indicators concerning the servicity of the nature of revenues induced by the economic companies, by employing personnel (as social effects). Namely, we referred and limited the scope of the paper to money earnings and chances for wages in general, occasioned by the employment made by the companies; particularly we considered only separately (strictly) the employment in other than the most developed countries.

For further developments in research, we are proposing to include in the relevant analysis also other collateral effects when large companies let enter their business in "frontier" or emerging countries (effects such as business opportunities in the area where the investments were made, as a chance for other incomes, in this case from new business undertaken in these countries, local economic growth in general, aspects concerning environmental protection, social issues – requiring more in-depth studies –, with the design of certain appropriate indicators and that can be computed with existing data in statistical databases); widening analyses may include other aspects too.

The complex market picture suggests also equations that permit imagining value transfers between business partners – partners that are usually very different one from the other, in that what concerns the power in getting more or less advantageous prices in negotiations on the market (section 5).

In conclusion, our analysis consists in unorthodox ways of assessing the economic activity of economic entities. In a purely theoretical approach, we assumed to make presentation and conceive certain proposals, rather than to focus on only one idea and apply it on numerical data. In the previous sub-sections, we had not the intention to set well completed or final models, neither to give, at all costs, some final touches to such approaches, nor to apply them on particular real numbers from the economic practice; moreover, certain of the ideas we described represent primary drafts. But the contribution brought consists in the openings and the necessary widening for assessing productivity. Our proposals may be all detailed and made adequate to real economic life and data, and stay as fundamental for future empirical research.

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CARAȘ-SEVERIN COUNTY – A GREAT CANVAS FOR ENTREPRENEURIAL DEVELOPMENT IN THE FIELD OF TOURISM

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Abstract: *The county of Caraș Severin, as well as the region of Mountainous Banat as a whole, presents a major development potential in all fields of activity, with many entrepreneurial perspectives. Much of this still remains untapped, although at least one field – the tourism area is particularly remarkable, and some of the tourist attractions, both natural and anthropic, are of great value, being recognized at national level. However, the managerial weaknesses as well as the very low level of investments made in recent years have contributed to the stagnation or even regression in terms of development from this point of view. From a geographic point of view, Caraș Severin County is on the third place as an area in the hierarchy of counties, the relief forms being numerous and various, both plains, reservoirs, as well as balneoclimatic and mountain resorts, the Danube Gorge. Anthropoc objectives join the natural ones, with a number of Geto-Dacian or medieval vestiges, churches, monasteries, museums. However, the situation of tourism at the county level is not exceptional, with a number of deficiencies of several types. In order to analyze this, it is necessary first to observe the situation at national level. A closer analysis regarding the Romanian business environment indicates a general deterioration, partly due to the effects of the fiscal environment (as presented by the EY Barometer, 2013). And in terms of the number of enterprises and the period of their presence on the market, we can see that both the urban environment and the rural environment need to be given a much more serious level of attention, taking into account the fact that the process of transition to the market economy has generated mostly at rural level, multiple economic and social problems in almost all areas of activity. There is a need for actions in the process of identification of solutions in order to solve the problems of the Romanian business environment and the training of specialists in areas where there are gaps in development. We will continue to focus on the tourism and entrepreneurial potential in the area of Caraș Severin County, but we are initially looking at a brief overview of the analysis of the general business potential in rural areas in the region, as presented through statistical data (INSSE, 2016) referring to the tourism in Caras Severin.*

Keywords: *entrepreneurship; business; urban area; rural area; development.*

JEL Classification: *L26; Z32.*

1. The analysis of business potential in the rural area in the county of Caraș - Severin

The development of rural areas continues to be precarious in most counties, largely due to migration from the village to the city, and the poor support of specific activities. The economy is still not stable enough to support a positive development, while the

downward trend in the ratio between price increases for agricultural products and those of industrial products bought by farmers amplifies general imbalances and leads to low productivity.

"Historical transition, by a major complexity, in which Romania has committed itself as a central axis transition from a socialist economy characterized by 1989 to aberrant bureaucracy, a market economy" (Cojocaru). The fact that there have been more than ten years since Romania joined the European Union failed to improve the situation on all the plans and in all the areas of activity, and the rural areas do not excel in development. Cities are often considered a "haven" compared to village failures, but as a reverse, many individuals often seek relaxation even in quiet rural areas, which directly transform them into potentially underutilized or even unexploited potential.

However, in order to be able to develop all areas at an appropriate level, in order to generate interest and attractiveness for potential tourists, infrastructure investments are the basis for drawing the future development co-ordinates. But we should not forget that in 2016, there were still areas where utilities were not easily accessible, only 47% of the rural population was connected to the public water supply system, i.e. 6.3% to the sewerage system, which influences to a great extent both the quality of life as a whole and the possibility to develop commercial and touristic activities.

On the other hand, one of the major problems faced by Caraș Severin County is the lack of entrepreneurial initiative, which is due to a much wider complex of factors. International labor migration is not at all encouraging for local development, with statistics becoming increasingly bleak in this respect. Often from a psychological point of view, the prospect of a much higher level of wage earned outside the country determines individuals to temporarily or permanently emigrate, young people showing a very low level of interest in establishing a company in rural areas (Popescu et al., 2016).

A top of the domains and companies in Caraș Severin indicates that the most popular areas of activity in the county are wholesale and retail trade, repair of motor vehicles, manufacturing industry, respectively, but the number of registered companies is small, the only counties with lower results in this respect being Mehedinți, Botoșani, Covasna, Ialomița and Giurgiu. "Although about 50 percent of Romanians want to start a new business, more than half of those states that they do not have the financial resources needed to do this" (Tocan, 2015).

As for rural areas, even if the situation is in some areas much less good than in the urban environment, one can see the prevalence of family-type businesses, especially in agriculture, but also in apiculture or fish farming. Cultivation of vegetables and fruits is still the main branch of activity in this field. For some of them, farmers can get support from the European Union (Dan, Popescu, 2017), which is a very good opportunity for agricultural development of villages.

Other types of business set up, which can be mentioned in terms of resistance on the local market are small repair shops or carpentry, furniture or transport production. A major advantage in this respect is the high potential of forest areas that can provide the raw material necessary for business development, but from this point of view it is necessary to consider the criterion of sustainability, as the resource used is renewable only with human help.

The touristic potential, as mentioned at the beginning of the present paper, is very large, with a significant number of tourist accommodation units. Most of these are guest houses / bed and breakfast, some of which are agro-touristic type. However,

success in this area is conditioned by a wide variety of factors (Nutu et al, 2016), both internal and external ones. Thus, we can summarize by saying that at the county level, the general infrastructure in the field of tourism is a bad one, which influences to a great extent the opinions of the potential and current tourists. The roads are mainly those that have a negative impact on the flow of tourists, as long as the accommodation infrastructure is one that in time has adapted to the demands exerted by consumers. On the other hand, the level of investment in the county was quite small during certain time periods, the situation gradually recovering, along with the increase of the absorption capacity of the European funds.

A great addition is represented by the beauty of the landscape and of places in general, but also by the many tourist places and objectives that can be visited along the county. Some of them can be mentioned in a few words: Baile Herculane, Sasca Montana, Danube boilers, the Danube - Coronini area, Poiana Mărului, Semenic Mountain, Muntele Mic, Beiusnita cascade and many more.

All these can be promoted through a large marketing campaign, can be popularized and made known to potential tourists, an activity that a few years ago was done quite shy and with little impact. But the existence of a very complex guide to Mountainous Banat region, written by Professor Gheorghe Popovici represents a great step forward in popularizing the beauties of this area.

One of the main factors that can contribute decisively to the development of a business in this field is represented by the efficiency of the practiced management, which again can be considered to be in the process of improvement, given that there are many possibilities for business initiators to take courses in the field and also to study by enrolling in a higher education institution, considering that there is also such an institution nearby, the University "Eftimie Murgu" of Resita.

Certainly, there is always a need to exploit even more the potential of the region, therefore a series of seemingly smaller activities may be initiated and financed, and for which the clients are numerous: veterinary practices, hairdressers - hairdressing, and others. The first, located in rural areas, may become a business with a very good exploitation potential, which can generate rather high incomes, considering the number of livestock found in households. For both, the initial investment is not very high, but will attract a significant number of customers, still there is a need for qualified personnel in the respective areas.

There is still a generally negative perception of the quality of life in rural areas, an idea amplified largely by the veracity of the data (INS; 2016), which identifies a below average quality level of the road maintenance, according to the National Institute of Statistics, more than 70% of rural roads being covered "in stones and dirt" while "less than 10% have been upgraded" over the past two years, generating negative consequences both from the economic and social point of view (Kupiszewski, et al. 1997), because it greatly limits access to certain areas, and on the other hand, poorly maintained roads can cause material damage to vehicles moving in those areas. The perception of tourists is also very important from this point of view, because although accommodation, food and leisure services contribute positively to shaping a favourable image of a location, transport infrastructure can create much larger and longer-term image deficiencies.

The development of an area is also closely related to the human capital of the region, so the level of literacy and education / training can become the determinants of social progress. Although communication has become much easier with the widening of signal coverage areas through mobile and Internet companies, business

development can be greatly affected by the skills, competences or abilities of those directly involved in the business management. The number of young people in rural areas who have graduated or are enrolled in a higher education system, although rising from one year to the next, is still quite low, one of the main challenges facing rural areas in Romania being early school abandon, which in the long run has significant effects.

At present, rural businesses still provide few jobs and social infrastructure is not sufficiently developed. All of these observations can be correlated with an increasing trend towards migration to urban centers, the shortage of staff employed in the primary sector becoming more and more widespread, with an ever greater degree of attractiveness of urban areas compared to rural areas.

Improving the quality of tourism infrastructure and services in these areas could, however, make a major contribution to a proper capitalization of the overall potential and the development of the whole region.

The literature in the field (Popovici, 2011) identifies at the level of Caraș Severin County five main touristic areas:

1. the Semenici touristic area
2. the touristic area Aurora Banatului
3. the touristic area Poiana Mărului
4. the touristic area Baile Herculane
5. the touristic area of the Danube.

Also, the forms of tourism identified in the county are various (Popovici, 2011): mountain tourism, balneary tourism, weekend tourism, rural tourism and agritourism, speotourism, ecotourism, hunting tourism and sport fishing, adventure tourism, religious tourism, cultural tourism. Rural areas can provide a framework in which several of the above can be combined.

2. Analysis of the statistical data regarding turistic reception structures in Caraș-Severin County

In the course of time, the general evolution of the tourist accommodation capacity in Caraș-Severin County was a positive one. Using data provided by the National Institute of Statistics, we can concentrate the main information in the form of the table below, which presents information on the number of existing annual existing places, the number of arrivals, the number of overnight stays, and the net capacity utilization indices.

Analyzing these data in Table 1, we find that, compared to the basis year 2005, we currently have an increase in the total number of existing places at the county level, the increase being constant, which indicates first of all a tendency to increase the number of accommodation structures, but on the other hand, this would only be justified by a similar evolution of the total number of tourists. The number of places added over time is a significant one, totalling from 7113 in 2005 to 9316 in 2016.

The number of arrivals was similar, even doubling over the course of a decade but decreasing the total number of overnight stays, in relation to 2005. From this point of view, we observe a fluctuating evolution, with no constant trend of growth or decrease.

Table 1: Evolution of the touristic accommodation capacity in Caraş Severin

Caraş-Severin County	2005	2010	2011	2012	2013	2014	2015	2016
Existing accommodation capacity								
Number of places	7113	7139	7071	7566	7993	7998	9159	9316
In operation	1674,3	1525,1	1583,2	1818,0	1856,8	1898,6	2040,2	2173,0
Arrivals	95,7	92,8	106,9	109,9	119,1	122,8	171,6	181,2
Overnight stays	745,0	471,0	545,7	497,6	536,4	515,1	711,0	688,3
New capacity utilization indicators (%)	44,5	30,9	34,5	27,4	28,9	27,1	34,8	31,7

Source: <http://www.carasseverin.insse.ro>

The distribution of the touristic accommodation structures by groups is presented in Table 2:

Table 2: Distribution of the touristic accommodation structures

Caraş-Severin County	2005	2010	2011	2012	2013	2014	2015	2016
Total	102	143	149	181	186	188	231	235
Hotels and motels	24	29	33	32	34	34	36	36
Touristic cabins	7	7	6	7	9	9	20	22
Camping and cottage	2	1	2	1	1	1	5	5
Touristic villas and bungalows	15	8	9	11	10	9	13	11
Children camps	7	4	4	4	4	3	4	1
Touristic guest-houses	24	46	48	64	63	62	68	66
Agrotouristic guesthouses	16	36	35	52	55	57	71	79
Hostels	2	5	5	5	5	8	9	10
Tourist stops	4	6	6	5	5	5	5	5

Source: <http://www.carasseverin.insse.ro>

The overall number of accommodation establishments increased from one year to the next throughout the analyzed period, reaching from 102 in 2005 to 235 in 2016, so we notice more than a doubling. Among them are: hotels and motels, tourist cottages, camping, villas, student camps, hostels, tourist stops. The most frequented establishments are generally hotels and guest houses, which is reflected in an increase in their total number. In the case of hotels there is an increase from 24 units in 2005 to 36 in a period of a decade.

Guesthouses are more numerous, and we are noticing an increase in the total number, from 24 in 2005 to 66 in 2016, with small fluctuations in way. Agrotourist pensions, on the other hand, existed only 15 at the beginning of the analyzed period, reaching 79 in a decade, which is the most significant increase in this respect, with a predisposition to the development of rural tourism and rural areas in general, from

this point of view. We therefore have a proactive, positive attitude towards the development of entrepreneurship in tourism in rural areas.

3. Direct research regarding the attitude of citizens from Reșița on the development of entrepreneurial activity in Caraș - Severin County

To determine the main aspects regarding the attitude of citizens of Resita regarding the general development of the entrepreneurial activity in Caraș - Severin County, and to study the degree of satisfaction of the population in this county regarding the tourism activity in the region, a direct research was carried out between the 1st and 30th of November 2017. The purpose of the research was to identify prospects and opportunities in the tourism activity in Caraș - Severin, related to the objectives and the tourist areas analyzed.

In order to obtain better results, there have been set the following objectives:

Main objective: To determine the extent to which the Caraș - Severin touristic objectives are promoted among the population of Resita.

Secondary Objectives:

1. Determining the degree of satisfaction or dissatisfaction that citizens have regarding the existing touristic objectives in Caras-Severin.
2. Determining the level of knowledge about the touristic objectives in Caraș-Severin by residents.
3. Determining the actions needed to better promote the touristic objectives in Caras-Severin.
4. Determining the unfavourable issues to business development in the region
5. Determining the respondents' attitudes regarding the prices practiced for touristic activities in Caraș - Severin County
6. Identification of the price-quality ratio practiced by the touristic units in Caraș-Severin.
7. Identification of the development potential of tourism in Caraș-Severin County through European funds.

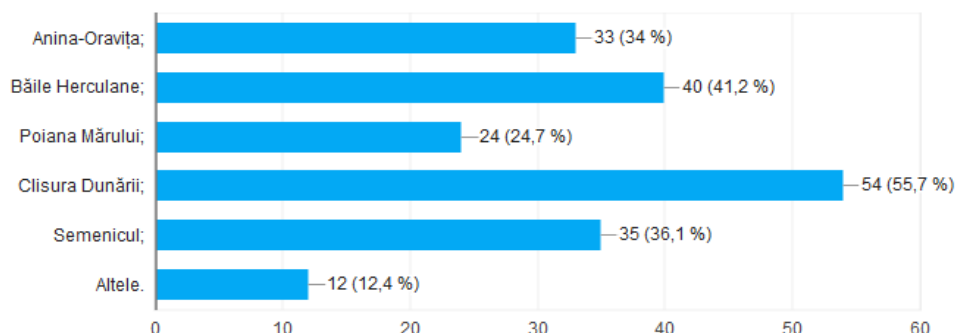
Next, a questionnaire was administered to a sample of 97 randomly chosen residents from Resita, the age, gender and occupational structure being presented in Table 3. The questionnaire contained 14 questions, of which 11 content questions and 3 questions to identify the person. All questions were closed, with variants of responses.

Table 3: The sample structure

Age (years)		Sex		Occupation	
under 18	11,3%	Male	56,7%	Highschool students	13,4%
18 – 24	54,9%	Female	43,3%	Students	51,5%
25 – 34	15,5%			Employees	25,8%
35 – 44	3,1%			Freelancers	7,2%
45 – 54	1%			Entrepreneurs	4,1%
over 55	4,1%			Unemployed	2,1%
				Household	1%
				Retired	3,1%

Conclusions of the study

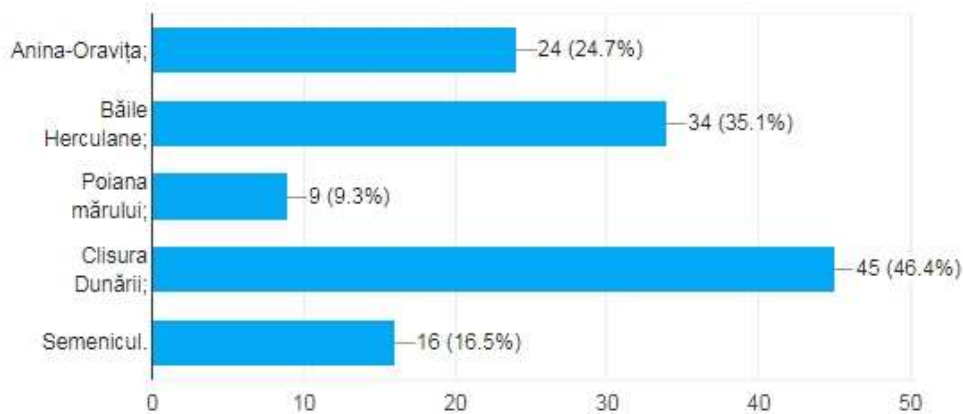
The respondents were asked to indicate which of the tourist attractions they consider to offer opportunities for tourism development in Caraș - Severin. The responses can be represented as follows:



Thus, the Danube Clise is regarded by the respondents as the one with the greatest potential for development, given the multiple possibilities of recreation, the possibility to organize trips and cruises on the Danube, the proximity of the Serbian bank, the existence of numerous accommodation structures, guest houses and villas. Băile Herculane are also regarded as one of the main attraction points with a touristic potential that can be developed, contributing to the centuries-old tradition of the resort and the history of emblematic figures.

As regards the possibility of development in Caraș Severin County through entrepreneurship, the respondents were asked to answer affirmatively or negatively this question. An overwhelming majority - over 95% believes in the possibility of capitalizing the tourism potential through entrepreneurial activities.

In order to express their opinion on the area that is most promoted within the county, the respondents indicated the following ranking:



Thus, according to the respondents, the Danube region has the best promotion, which, according to previous questions, is reflected in a larger number of tourists. The least promoted is the Poiana Mărului area where, although some cultural events are organized regularly, insufficient activities of popularization are initiated, although the positive attributes of the area predominate.

Respondents recommend advertising activities (51.5%), websites (41.2%), the capitalization of the tourist information centers in the county (28.9%), the design of a specialized guide (27.8%), etc.

Nevertheless, there are still insufficiently exploited tourist areas from an entrepreneurial point of view. In this regard, the people surveyed recall: Nera area, Oravița, Forotic, Bigar waterfall, Anina - Oravița railway, Rudaria water mills, Semenic area, Gărbăna and Trei Ape, with significant potential, which can attract through time a large number of tourists.

The majority of respondents believe that the quality-price ratio of accommodation units is good (62.9%), but there are also negative opinions (30.9%).

Accessing European funds is also considered an opportunity to finance entrepreneurship development projects, 75.3% of respondents consider this possibility as a future one.

The strengths, compared to other international tourist areas, are mentioned: the diversity of the forms of tourism encountered, the hospitality of the population in the area, the traditional food, the accessibility of the tourist destinations. However, there is a slight emphasis on 67% of respondents, namely the quality of the infrastructure, which leads to the loss of a significant number of tourists.

In terms of the future development of the county, tourism is seen by 80.4% of the respondents as a significant opportunity of development, but other businesses could be developed in areas such as industry, mentioned by 40.2% of the respondents, also trade / services – fields mentioned by 39.2% of the persons surveyed.

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ENTREPRENEURSHIP: A CRITICAL INSIDER VIEW FROM THE INTELLECTUAL CAPITAL PERSPECTIVE

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Abstract: *The overoptimistic and often ideology-laden utilization of entrepreneurship-related “solutions” sharply contrast with their low average success rate. This is true for many countries, regions and otherwise defined sociotopes. Probably, the superficial impression of success of entrepreneurial start-ups vastly exaggerates the true success rate in even the most developed countries. There may also be a tendency to deliberately avoid clearly posing and critically analyzing the problem. The reason for this is that a multitude of entrepreneurship-boosting programs, which are profitable for some societal players, do not necessarily lead to an authentic, self-sustaining entrepreneurship culture. While the present authors are by no means opposed to the formation of a long term genuine entrepreneurial culture, we chose here to shed light on the drawdown of naively investing into entrepreneurship programs. This is discussed along different dimensions and from different socio-economic perspectives. The paper is mainly theoretical and conceptual in nature although it also draws on long experience with different aspects of organizing and running entrepreneurial training projects. We finally propose to reposition entrepreneurship in terms of evasive and requisite actions, both in a social and in a technological sense. We point to the prolific nature of using regional Intellectual Capital as a guide and proxy concerning the formation of a long term entrepreneurial culture.*

Keywords: *Entrepreneurship; Blended Learning; Intellectual Capital; Social Costs; Innovation.*

JEL Classification: *D26; D83; L28; O23; P17.*

1. Introduction and Motivation

Entrepreneurship and its manifestation as small and medium sized firms (SME) is widely considered to be an important contributor to economic value production, to innovation and especially to employment in advanced economies. For instance, in the typical case of Germany, numbers like 40% national production by value and 70% of employment being accounted for by SME are regularly traded (The Economist, 2014). With the press, the public and with most policy-makers this tends to go down without much critical discussion: Being a convenient and not very rigorous “key” for stating development aims, of organizing a multitude of popular events and of distributing and receiving funds and favours. However, the economic “folklore” of the effectiveness of free-lance, independent entrepreneurship magically solving all types of techno-economic challenges by using small teams with minimal administrative interference (as would bigger organizations imply) can be put into question. Informally, this may be illustrated by two real world observations: (a) The success of entrepreneurially-minded SME from long tradition industrialized countries

is very hard to reproduce elsewhere (e.g. in Eastern Europe). (b) Many techno-economic challenges can be resolved by “starting-up small scale”: some of them simply require heavy long term investment and/or big teams. Concerning (a) we put forward as explaining factor the presence and strength of regional Intellectual Capital (IC) and concerning (b) we remind that much of actual entrepreneurial effort is directed into “marginal” products and innovation which do not have any important techno-economic “knock-on” effects. Even if such entrepreneurial activity is within high-tech sectors like IT, it tends to be “shallow” as will be explained in later sections. In the remaining paper we discuss important reasons leading to dysfunctional entrepreneurship and we propose some formative conditions and examples connected to the formation of regional IC which hopefully may lead to more authentic entrepreneurial activity.

2. IC and the culture of cooperation within a competitive environment

Intellectual Capital (IC) as a concept is a composed entity acted upon by intangibles like explicit, implicit and tacit types of knowledge, procedures and beliefs. Since long time it is recognized that, in many cases, financial capital is just a partial and unsatisfactory predictor of company success and should be complemented by IC (Polanyi, 1966; Edvinsson and Malone, 1997). In many ways IC transcends entrepreneurship being a driving force for a multitude of organisational and technology-related processes. In analogy to financial capital, IC forms and accumulates in time and is subject to atrophy – albeit according to other, more involved dynamic rules. There has been substantial effort in finding proxies in order to measure IC (Andriessen, 2004; Nonaka and Takeuchi, 1995; Viedma and Rosario Cabrita, 2012).

However, the most inaccessible of the intangibles which are related to organisational capital and belief systems, which are expressed by Brătianu (2017) as being inputs to nonlinear integrators, are not exclusively functioning for the private sphere of individual firms. Inevitably they will show up in different collective dimensions as well. These include cross-company group knowledge, know-how and the readiness to cooperate in a basically competitive environments. Such cooperation draws heavily on the existence of hidden complementarities between different products and services as offered by different firms, hence on the deeper contents of a domain. This is in sharp contradistinction to a type of short term cooperation, which aims at overcoming critical situations or are power-plays that aim at undermining competition. Name the former *content-driven* cooperation and the latter *political* cooperation, for short. Regional IC as a collective cultural asset of entrepreneurs enables *content-driven* cooperation. This may be illustrated by the economic phenomenon of “Hidden Champions” (Venohr and Meyer, 2007; Simon, 2009) sociotopes of similar minded successful entrepreneurs to be found in different regions of Western Europe (for instance in Southwest Germany) and elsewhere in heavily industrialized countries.

Proposition: Try to find *content-driven* cooperation, possibly in shape of (more involved) multilateral cooperation arrangements; participate in and sustain platforms for many-sided markets and polycentric (power) structures. Higher levels of regional IC would “naturally” favour such options.

3. The choice between (un-)employment and entrepreneurship

Within the labour markets of emerging (including East European) economies there may be a very pronounced mismatch between demand and supply. This is in part due to a deep qualification profiles mismatch and partly due to underdeveloped or deteriorated industrial structure. Unable to produce a range of striking world class products there is no credible incentive for substantial wage increase or foreign investment (which would otherwise equilibrate the mismatch in time). Hence such economies tend to be trapped in a kind of “inferior” behavioural equilibrium.

In principle turning structural unemployment into entrepreneurship would help to mitigate the problem. Hence for persons trapped in labour market mismatch there results the choice between (a) finding convenient employment or, alternatively, (b) entrepreneurial activity. From a recent study (Schebesch and Blaga, 2015) conducted to inquire attitudes and motives of young people concerning employment from the point of view of students and employers from a region in Western Romania, major discrepancies result. It is at least questionable if these diverging characteristics can be sensibly reduced by “soft forcing” young people into entrepreneurship by means of initially attractive programs which come with (conditionally redeemable) funding.

Proposition: Effective, growth oriented entrepreneurship (Wiklund and Shepherd, 2005; Tracy, 2011) should be directed towards innovating into the needs of paying clients. It should be used less so for being an instrument to bridge the social impasse created by (imported or self-inflicted) techno-economic disruption and unemployment. The latter should be served by other instruments.

4. The case of poor access to more informed financial capital

In countries without long industrial tradition financial capital may be readily available but much less so for investing into domains which are considered unconventional and / or medium to long term. Non-standard procedures in startup finance seem adequate here. More recently, entrepreneurs have started to rely on the internet to directly seek financial help from the general public (the crowd) instead of approaching financial investors such as business angels, banks or venture capital funds (Schebesch, Pribac and Blaga, 2016).

Crowdfunding enables to seek capital for project-specific investments as well as for starting up new ventures. Crowdfunding became very popular within the last ten years. Factors influencing the effective use of crowdfunding are:

- lack of pre-existing resources but also investment amounts required
- organizational form of the firm and control preferences but also
- moral hazard and information asymmetry (as threats).

As enabling factor for crowdfunding the *wisdom of the crowd* argument is put forward (Schwienbacher and Larralde, 2010).

Venture capitalists are specialized, well connected firms acting as consultants and manage money of individuals or institutions. They are very selective when it comes to investment and they are looking for innovative technology with growth potential and already well developed business models. Hence, their “natural” playgrounds are regions with high levels of existing IC.

Proposition: The situation in emerging (including East European) economies may be slowly improving. Attracting Venture Capital may be closely connected to the existence / formation of distinguishable regional IC. The problems and the success of crowdfunding (Agrawal et al., 2013) is highly dependent on the engagement of the crowd, which seems to be unlikely to exist at any notable level in many emerging countries (including Eastern Europe). Hence participation in crowdfunding should be made more attractive by culturally well-targeted, IT-backed campaigns.

5. Restricted spectrum of feasible technology and business domains

Owing to the stage of development or the scale of a region from an emerging economy, home-grown entrepreneurship may be faced with severe restrictions as to what technologies and, hence, product types, may be reasonably (or, in expectation profitably) pursued. Economists use to call this more neutrally “high barriers of entry”; however, rather than taking this as “given” more explanation along the lines of Schebesch (2017) and Cavallini (2016) seems to be here in order.

Even successful cases of entrepreneurship-fostering efforts may be extremely deceptive. The reason is that the resulting firms can be of very different category with fundamentally different economic implications. A useful distinction into such firm categories is:

Table 1: Five categories of new firms and their interaction with regional IC

Type, main characteristic	Growth potential	New Problem Solving	Depends on regional IC	Contribution to IC formation
1 Deep hi-tech	Medium	Strongly	Strongly	High
2 Shallow hi-tech	High	Moderately	Moderately	Medium
3 New business model	High	Weakly	Weakly	Low
4 Marginal low tech	Medium	Non	no	no
5 Unemployment countermeasure	Low	Non (“mimetic”) ²	no	no

Source: own material; Categories partially inspired by Schebesch (2017).

Table 1 lists the five categories of newly formed firms in descending order according to their difficulty of implementation. The latter is highly associated with the degree to which cooperative (multi-party) arrangements are important. Especially category 1 and 2 firms heavily depend on, and do foster in return, regional IC. All categories of new firms exist and are pursued world-wide for different reasons. One may note that countries with long industrial tradition do constantly produce category 2 and 3 firms and sometimes category 1 by entrepreneurial spirit alone. In contradistinction, emerging countries all too often restrict themselves to category 3 and 4, which offer growth potential but also tend to shut these economies out from a dynamic IC formation cycle.

² Even from this low value category an authentic entrepreneurial outcome cannot be totally excluded

In later stages, for single firms, some restricted mobility between the named categories is possible. However this not driven by entrepreneurship anymore but rather a problem of strategic investment and of industrial economic policy.

Proposition: The described situation seems to be locked-in as most entrepreneurship-fostering programmes (see section 7) do avoid working with content based firm categories. They may even disregard these categories as they may be interpreted to imply “micromanagement” and “industrial policy”. A strong culture based on regional IC seems therefore essential for more upward mobility within the categories.

6. What are the social cost of entrepreneurship-related activity?

Riding the wave of exploiting all facets of entrepreneurship fostering programs, academic research tends to avoid talking about the (social) cost associated with such programs and their participants. Yet independent sources appear occasionally which discuss about topics like “No one is talking about the implicit costs of entrepreneurship” by HSC1 (2013) or “The High Costs of Entrepreneurship” by HSC2 (2015) to name a few. The folklore that “everybody can be an entrepreneur” does not imply high chances of success for a person with any given psycho-social profile and / or professional or educational background. Failing to adequately select recipients for e.g. start-up funds by entrepreneurship program organizers, means that the numbers of cases which incur damage are multiplying. Such damage ranges from misallocating huge chunks of time for activities running against a persons’ characteristics and talents, loss of personal reputation, self-esteem and of own funds³ up to actual health damage, e.g. by inducing serious issues of mental health -- the damage may resemble that inflicted by unemployment (Barra, Miller and Ubeda, 2016). If societies would demand cost internalization (as is increasingly practised for environmental damage incurred by industrial activity or traffic) many entrepreneurship fostering programs would likely have to be phased out. In analogy to the case of environmental damage cost evaluation the social cost of “forced” entrepreneurship programs are difficult to measure directly. More research along the lines of Shane (2009) is certainly needed.

Proposition: The social costs of entrepreneurship-related activities that occur in the event of failure are grossly underestimated or ignored. The consequences of ignoring are at best that trust in entrepreneurship programs is decreasing. Even more likely there will be harm in general economic terms: (a) sinking substantial funds in mimetic entrepreneurship interest groups, (b) hindering the formation of regional IC and (c) producing distress for program candidates.

7. Learning and authentic entrepreneurship?

We explain the effects of learning and the possibility of resulting authentic entrepreneurship by means of a venerable initiative, namely Junior Achievement which acts nationwide and worldwide (JA Worldwide). As a non-profit youth organization it works with local businesses and organizations to deliver experiential

³ It is often argued that putting one's own funds at play changes the attitude and behavior of candidates in favor of market-leaned actions as it is partially supported by observing prediction markets.

programs on topics like financial literacy, work readiness, and entrepreneurship for teachers and students alike. It starts with actions aimed at the very young, through high school and universities. During 2014-2015, over 313,000 persons enrolled in the JA programs across 40 countries in Europe. Most of the programs are delivered through *Blended Learning* on topics such as motivation and ideation, organising teams, establishing a mini-company, and dealing with competing. Some caution concerning company success conditioned on learning (Dickson, Solomon and Weaver, 2008) seems nevertheless in order.

In the following we will be briefly describe some of the best known teacher's training programs supporting entrepreneurial learning, developed by JA: (1) *The STEP Model workshops* - focused on entrepreneurial attitudes; the workshops provide teachers with knowledge as well as with procedures about how to create a good entrepreneurial learning environment (STEP 2018).

(2) *Teacherpreneur* was developed by Junior Achievement Italy and means LAB activities to "learn and practice" entrepreneurship education; the implementation of the LAB needs to be done by HUB's schools in collaboration with JA, divided into: plenary session and parallel workshops that involved practical activities about creativity, decision making, business models and so on (TEACH 2018).

Upon analyzing the JA teacher programs their *positive effects* are:

- (1) development of attitudes and teaching practices, by increasing their knowledge, skills and networks which enable them to be more enterprising, more cooperative;
- (2) better support the students in acquiring those competences needed in the labour market;
- (3) instruments providing inspiration and valuable learning for those tasked with entrepreneurship activities;
- (4) different formats of entrepreneurial education - teachers and teacher trainees receive practical information about how to organize the activities, evaluate and coach within an entrepreneurial learning environment and
- (5) entrepreneurship education becomes a "school matter" and not just a "business matter".

The principal *challenges* of JA's teacher training are: (1) the community is not sufficiently receptive; (2) not all the teachers feel confident in being entrepreneurial; (3) teachers and schools leaders need guidance about how to be more effective entrepreneurially; (4) local business tends to see the situation too much from their own perspective only; (5) teachers are afraid to start teaching entrepreneurship-related matters and (6) too often, entrepreneurship teachers are "lonely souls" as their community does not understand the benefits of bringing entrepreneurship, in all its different forms, into the classroom.

In the following, we will briefly present the main programs developed by JA for students (TOOLS 2018):

- (1) *JA Company* - provides teachers with a series of learning by doing business, economics and entrepreneurship activities for students aged 15-19, challenging the students to solve a problem in their community through a business venture;
- (2) *JA Start-Up* - enables post-secondary students (aged 18 to 30) to run their own company, giving them an insight into how their specific talents could be used calling on support and guidance of business mentors.

(3) *Innovation Camp* is a 24-hour event that challenges teams of 4-6 students to come up with ideas and solutions to specific business or social challenges. JA offices across Europe run Innovation Camps in different fields (digital entrepreneurship and coding, social entrepreneurship etc.).

The *positive* effects JA programs have generated in learning entrepreneurship are: (1) build important bridges between education and the business world and making sure that students are evaluated also on skills, knowledge and ambitions appreciated in the world of work; (2) activities are hands-on and student-centred; (3) bring in the real-world perspective and use practical entrepreneurship experience to build confidence, change attitudes and behaviors; (4) improves the students "soft" skills self-confidence and creativity, their ability to work in teams, of taking responsibility and exercising perseverance. and also their "*hard*" *competences* like defining new products, critical thinking, interpreting data, time management, as well as diverse problem-solving skills; (5) young people will go on with business experience, hence they are not "lost" for business; (6) educators have access to a skills-based learning tool based on the *blended learning* approach; (7) extend the benefits of "learning by doing"; (8) involvement of the local companies in the learning process; (9) a better understanding of "how the real world works"; and, (10), most importantly, explain the "inner working culture" and tacit professional tricks.

The *problems encountered* with the implementation of JA programs in learning entrepreneurship are: (1) encountering some difficult age-groups (aged 8 to 19) and lack of good teaching; (2) programs pressure students early to think about their future education choices and careers; (3) teachers lack training in learning-by-doing entrepreneurial methods; (4) entrepreneurs' lack of time or willingness for longer involvement in entrepreneurship education; (5) access to business volunteers and business mentors is non-uniform and scarce; (6) limited possibilities to provide students with feedback by relevant stakeholders; (7) companies may not have the chance to showcase their opportunities available for young talents; and (8) young people cannot see the link between their education and potential job opportunities.

The academic environment, is also subject to a change of attitude regarding the capitalization and commercialization of research, the licensing of technologies, the creation of university spin-offs, the introduction of entrepreneurship and related programs (the structural and cohesion funds provided by the European Union in financial programming 2014-2020) and expanding the relationship between the university and the economic environment. As an example, take *HEInnovate* an initiative of the European Commission and the OECD LEED Forum, and supported by a panel of six independent experts (HEInno 2018). It is a free self-assessment tool for all types of higher education institution (Universities, University Colleges, Polytechnics, etc.), and it assesses Higher Education Institutions (HEI) according to their entrepreneurial activities, including leadership, staffing, and business links. HEInnovate covers seven areas for self-assessment: (1) Leadership and Governance; (2) Organisational Capacity; (3) Funding; (4) People and Incentives; (5) Entrepreneurial Teaching and Learning; (6) Preparing and (7) Supporting Entrepreneurs; Knowledge Exchange and Collaboration ..

Proposition: Learning and training programs, as described, calibrated at multiple institutional and regional levels, and aimed at developing entrepreneurial skills seem to foster authentic as opposed to mimetic and marginal entrepreneurship. However, there are some important caveats. The resulting innovations seem to concentrate on bringing up surprising new

business models as opposed to bringing to market any substantial problem solving. Furthermore, it is very difficult if not effectively impossible to benchmark these programs against alternatives.

8. Experiments for entrepreneurial risk attitude revelation

While there are methodological attempts for estimating the success of a business Maniov et al. (2017), few attempts seem to have been made in order to assess the probable success of a budding entrepreneur. Since at that stage there is no way of measuring real business success, we propose a laboratory experiment which determines the entrepreneurial attitude of the test subject. One would start with general risk attitude revelation. For analyzing more specific behaviour under risk in an entrepreneurial context we require a procedure of mapping this context into a setting of choice or reaction under uncertainty. We further note that this cannot be realised by collecting “given” empirical data; it rather means that we need to produce this data by using some appropriate variety of “gaming and mental simulation”. To this end, a version of blended learning using risk attitude revealing games for evaluation seems appropriate. Such procedure would be based on evaluating the formation of regional IC (Viedma and Rosario Cabrita, 2012) on testing the ability of participants to come up with new products (Schebesch, Pop and Pelău, 2010) on avoiding early bankruptcy (Bradley, and Cowdey, 2004) but it would also have to verify constraints, especially those concerning privacy protection (Schebesch and Stecking, 2014).

Proposition: When applied in conjunction with blended learning the proposed evaluation techniques can rectify some of the caveats from the propositions of the previous section. The risk revealing games may be designed towards manipulating more realistic situations, especially concerning concrete, technologically relevant alternatives. However, participation of product oriented domain experts (complementary to coaches for generic entrepreneurship) is necessary. The chance of finding domain experts willing to creatively contribute to such experimental games increases if a strong community identity grounded on IC already exists within the region.

9. Conclusions and outlook

Is there any benchmarking for entrepreneurially driven problem solving behaviour associated with eventual market success? There is an abundance of training approaches centred on vague concepts like “creativity”, “leadership” or “team building” and innumerable events are celebrating successful entrepreneurship cases. However, this may all miss the point of fostering authentic entrepreneurship in regions without long industrial tradition or without substantial levels of IC.

We attempted to show the multidimensional dependence of authentic entrepreneurship on the existence of (and the feedback into) regional IC. The key question resulting then is: Are there “fast tracks” for regional IC formation? Possibly enhanced by new ways of knowledge sharing (Gravili, 2016)? From the historical perspective this seems to be rather contradictory. In more technical terms, the question may be restated as: can a traditionally long sequential process be transformed into a highly parallel set of (intercommunicating) distributed processes? As is known from abstract cybernetic systems, this is not always possible. Hence, future work will concentrate on shedding light on this question.

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INDUSTRY 4.0 APPLICATIONS AND DIGITILIZATION OF LEAN PRODUCTION LINES

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Abstract: *European economy faces two main problems in manufacturing sector: inefficient production with high costs and long time to supply new products to market. With these obstacles, economies cannot compete with other developing countries like China. In order to overcome these problems, leading firms works on new paradigms like lean production, digitilization and industry 4.0. Firms could simplify production lines by dealing with all the wastes, delays, faults etc. through the workplace. So they can shorten the production cycle times, data entry time, waiting semi-finished products, faults and scraps in the production lines. Industry 4.0 applications helps lean manufacturing lines to realize more efficient and quality production systems. Because, these applications will make the European economy grow increasing productivity and added value of the products. In today's industry digitization is vital for manufacturing processes. Especially in automotive supplier industry getting data from the machines and production lines by digital panels and monitors is vital for efficient production. Rim industry is one of the suppliers of automotive manufacturers. In order to provide quality and high performance products in time, rim producers try to apply lean manufacturing systems and industry 4.0 applications to their production lines. Jantsa is one of the biggest rim producer of Turkey with 200 different sizes and over 3,000 different designs and models. The factory is located on 95,000 square meters area with the production capacity of nearly 1,900,000 wheels annually. They export 75 % of these wheels to over 80 countries worldwide. The digitilization project realized in Jantsa aims to get information about the rim production lines and make necessary improvements in order to increase efficiency. The name of the project is Production Data Collection and Barcoded Product Tracking Automation. OEE (Overall Equipment Effectiveness) calculation method is used in order to digitalise production lines in lean systems for improving processes. According to test data we have three factors effecting OEE calculation: availability, performance and quality. When we make the calculation the test results of OEE is 93.1%. It is fairly high according to international production standards. The focus should be on increasing the performance of machines and equipment used in the operation.*

Keywords: *Lean production; Industry 4.0; OEE; performance; rim.*

JEL Classification: *L62; M11.*

1. Lean Production and Industry 4.0: Review

Firms could simplify production lines by dealing with all the wastes, delays, faults etc. through the workplace. So they can shorten the production cycle times, data entry time, waiting semi-finished products, faults and scraps in the production lines.

Industry 4.0 applications helps lean manufacturing lines to realize more efficient and quality production systems.

Lean production is an integrated socio-technical system and it aims to eliminate waste by reducing or minimizing supplier, customer, and internal variability (Shah ve Ward, 2007:791). Therefore, main task of lean production is to eliminate wasting in every part of the production from the first customer contact, through all supply networks, the production process itself to the dispatch of the finished product to the customer (Daneshjo, Pajerská, Klimek, Danishjoo, 2018:34). In order to simplify production lines we should deal with all the wastes, delays, faults etc. through the workplace.

For improvement in efficiency, speed of response and flexibility in production at many industrial enterprises, lean production techniques provide significant benefits by waste elimination. Lean management also allowed enterprises to put forward a various range of products, with minimum cost and high productivity, speed of delivery, minimum inventory levels and optimum quality (Arbos, 2002:169). The basic approach is a continuous improvement of production by an integration of the following principles: Kaizen, Just-in-Time (JIT), Jidoka, Heijunka, standardization, takt time, pull flow, man-machine separation, people and teamwork and Waste reduction. (Wagner, Herrman and Thiede, 2017: 127)

According to Mrugalska and Wyrwicka (2017:471), lean production is superior to the mass production practices with its good quality products aimed at customers' satisfaction. Every activity that does not add value to the product is accepted to be waste. Production systems can be flexible for complex products by lean production. It will be helpful to integrate IT (information technology) solutions with customers and suppliers by CPS (Cyber Physical Systems) and it is called "Industry 4.0".

New possibilities from information and communication technologies are matching with lean production environments. The other study shows that Industry 4.0 applications can stabilize and support lean principles. Furthermore approaches to integrate sustainability into Lean Production Systems are available and should be extended by an integration of Industry 4.0 technologies (Wagner, Herrman and Thiede, 2017: 130-131).

In order to strengthen the competitiveness in the field of digital technologies and to ensure that every European industry can fully benefit from digital innovations, European industry digitalization pretends to benefit from all the advantages of a digital single market (Luque, Peralta, Heras and Cordoba, 2017:1200).

Industry 4.0 became an important concept for researchers and companies at the same time. Germany is the country that put forth the idea of a digitization of manufacturing that is called fourth industrial revolution which is supported by smart technologies (Paravizo, Chaim, Braatz, Muschard and Rozenfeld, 2018: 439). The term Industry 4.0 was coined to describe a system that evolved from a computer controlled automated facility into a system that gathers and analyses data from the floor to make intelligent decisions in an automated manner (Garza and Kurfess, 2018:1). 'Industry 4.0' was first coined at the Hannover Fair in 2011, and it has drawn great attention from academics, practitioners, governmental officials, and politicians all over the world (Sung, 2017:1).

Industry 4.0 is an emerging paradigm for the increasing digitisation and automation of the manufacturing environment. It is also important for the creation of a digital value chain to enable the communication between products and their environment and business partners (Scurati, Gattulo, Fiorento, Ferrise, Bordegoni and Uva,

2018:68). Information and communication technologies can be innovatively into the industry by Industry 4.0, so firms can encourage the intelligent networking of different products and processes through the value chain. Therefore, the organizational processes can be used more efficiently. (Barreto, Amaral and Pereira, 2017:1246). The Industry 4.0 is used for three, mutually interconnected factors: 1) Digitization and integration of any simple technical–economical relation to complex technical–economical complex networks 2) Digitization of products and services offer 3) New market models (Zezulka, Marcon, Vesely and Sajdl, 2016:8).

The Industry 4.0 Working Group believes that action is needed in the following eight key areas (Kagermann, Wahlster and Helbig, 2013:6-7):

- Standardisation and reference structure
- Complex systems management
- A comprehensive broadband infrastructure
- Safety and security
- Work design and organisation
- Training and continuing professional development
- Regulatory framework
- Efficiency of resources

The literature review identified four key components of Industry 4.0: Cyber Physical Systems, Internet of Things, Internet of Services, and Smart Factory (Hermann, Pentek and Otto, 2015:8) Cyber-physical systems, refer to technical systems that are embedded into larger systems such as devices, buildings, infrastructures, and production facilities. (Xu, Liu and Zhang, 2018:382).

A Smart Factory is a manufacturing solution that provides such flexible and adaptive production processes that will solve problems arising on a production facility with dynamic and rapidly changing boundary conditions in a world of increasing complexity (Raswizon, Bilberg, Bogers and Madsen, 2014:1187).

Industry 4.0 has five main objectives: (Santos, Loures, Piechnicki and Canciglieri, 2017:1359)

- 1) The low, medium and high demand structure is important to apply to production needs by varying the product type,
- 2) Intelligent machines can track and self-recognize of parts and products,
- 3) Human Machine Interface (HMI) should be in better interaction,
- 4) Internet tools of Things (IoT) communication must be optimized by production based,
- 5) The business model that contributes to change is changed radically in the forms of interaction with the value chain.

Industry 4.0 combines embedded production system technologies with intelligent production processes, so it builds a new way for a new technological age that will fundamentally transform industry value chains, production value chains, and business models (Zhong, Xu, Klotz and Newman, 2017:616). Industry 4.0 tries to improve competitiveness by minimizing costs and increasing firm's flexibility. It offers customized products for satisfying the customer markets. So, in order to stay competitive, firms should reach high productivity (Meissner, Ilsen and Aurich, 2017:165).

2. Methodology of the Research

The digitization project is realized in a rim company in automotive supplier industry in Aydin province. The aim of the project is to get information about the rim production lines and make necessary improvements in order to increase efficiency. The name of the project is Production Data Collection and Barcoded Product Tracking Automation. OEE (Overall Equipment Effectiveness) calculation method is used in order to digitalise production lines in lean systems for improving processes. OEE is simply how we use time efficiently to produce quality products. It is a measurement technique that shows how an operator can benefit from a machine, counter or equipment. The following parameters shall be taken into account when calculating the OEE:

- a) Equipment availability rate = $(\text{Planned production time} - \text{unplanned stops}) / \text{Planned production time}$
- b) Performance rate = $(\text{standard cycle time} \times \text{production rate}) / (\text{Planned production time} - \text{unplanned stops})$
- c) Quality rate = $\text{correct product rate} / \text{total production rate}$

$$\text{OEE} = \text{Availability} \times \text{Performance} \times \text{Quality}$$

Manufacturing execution and monitoring system (MAS) used in the firm is a computer aided system that gathers and integrates all the methods and equipments in the production online. In order to calculate OEE of the firm we need planned and unplanned stops of the machines, fault times, cycle time, best cycle time, machine performance, set up time, alteration and scrap rates and production rates. For real-time monitoring and productivity tracking, the data from the production site of the enterprise are collected. Firm aims more efficient production planning, less production cost, easy to use and flexible interface between machine, operator and ERP systems, identification of bottlenecks, monitoring productivity and OEE values instantly, and process improvement by managing processes in a simple, efficient and traceable structure.

3. Application of the Research

JANTSA is Turkey's one of the largest rim manufacturers. It was established in 1977 where it has produced its first three-piece dimensioned 5.50-16 SDC Commercial Vehicle Wheel. After a decade JANTSA offered a product range of 200 sizes with 3,000 different designs and models. The firm expanded its area of 95,000 square meters. Its production capacity is 1,900,000 wheels annually and it exports 75 % of it to 81 countries worldwide.

Before applying MAS in production system, firm is testing a pilot study in some levels of the production line. Data used in this research is test data before the pilot study and process improvement continues in a controlled manner. The aims of the project are tracking performance data of production lines by data collected in real time from the workplace, collecting information like production rate, period, machine stop times, scraps and failures, reporting at every level in order to make planning and take action, building infrastructure for efficiency improvement, cost reduction works, and creating Microsoft Dynamics NAV production records. Scope of the project is to

track production data and performances of 300 machines/lines. It also aims to build real-time OEE follow-up infrastructure and provide at least 10% improve in the total equipment efficiency.

Figure 1 shows the synoptic of production control of Colouring (Dying) section of the rim production line.

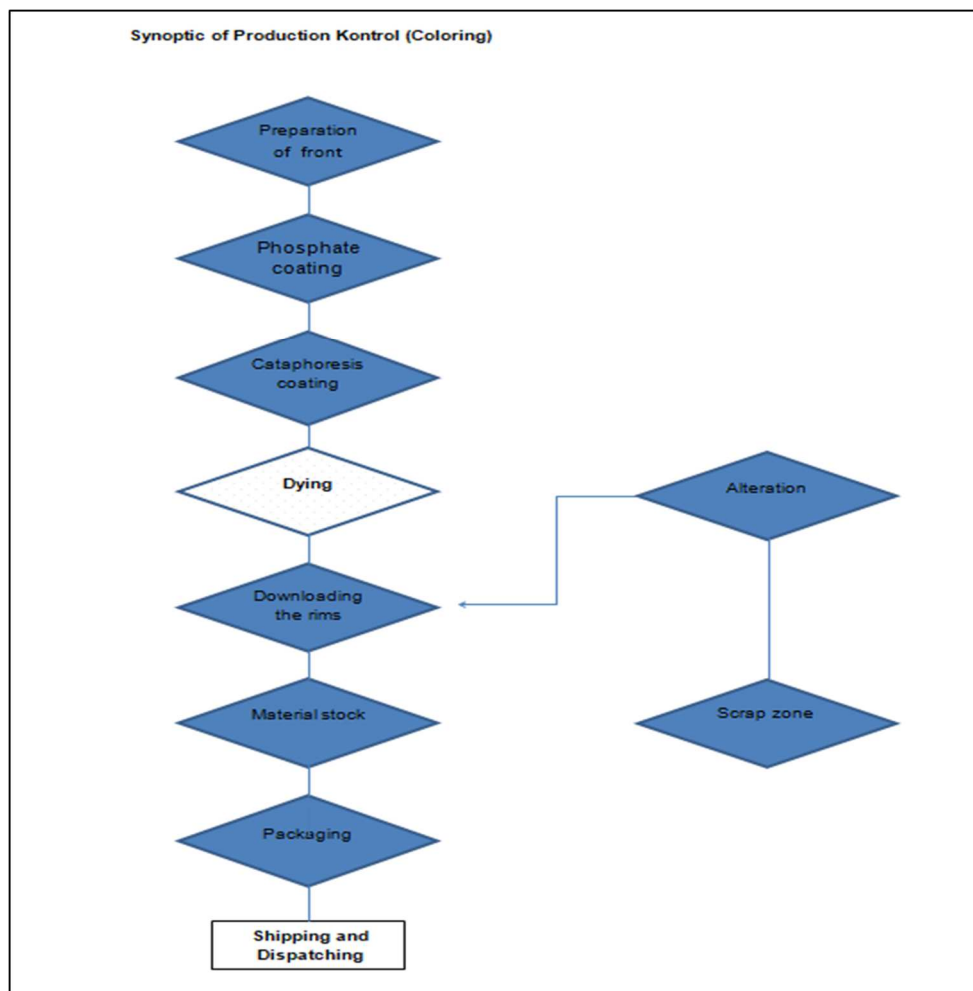


Figure 1: Synoptic of production control

According to test data we have three factors effecting OEE calculation: availability, performance and quality. Equipment availability rate is used to calculate the production time of the machine, that is the real used time of this machine during the day. For example, a machine is ready for 24 hours (1440 minutes) a day. However, as for the test data of dying stage it is really used only 16.896 hours for production. So available time for this machine is 70.4% (16.896/24). The lost 7.104 hours was spent for reasons like machine maintenance, eating break and machine malfunction or firm could decide not to run the machine during 7.104 hours. While calculating

availability we should consider meal breaks, planned maintenance, machine malfunction, cleaning, change over, machine stops, quality problems. This lags can be planned or planned, compulsory or preventable.

Performance or productivity is the rate between production amount of the machine during given time and maximum production amount. According to the test data machine is working with 132.2% (60/45.38) performance.

Quality is the rate between error free parts and faulty parts. As there is no faulty parts and scrap piece number is zero, quality rate is 100%.

If we put these calculations in the OEE formula;

$$OEE = 70.4\% \times 132,2\% \times 100\% = 93,06\% \approx 93,1\%$$

This 93.1% OEE rate is fairly high according to international production standards. For consistently getting the best results, the machines must produce quality products every minute within the given period. Figure 2 shows the OEE data of the production line in Jantsa.



Figure 2: OEE calculations of MAS system in Jantsa

4. Conclusion

In order to compete with developing economies and digitized producers, firms apply lean production, digitalization and industry 4.0 systems in their production lines. One of the biggest rim firms in Turkey, Jantsa, also applies digital systems in its lean production lines in order to get data from the machines. Before applying MAS in production system, firm is testing a pilot study in some levels of the production line. According to OEE calculations of dying stage, firm increases its efficiency. 93.1% OEE rate is fairly high according to international production standards. For consistently getting the best results, the machines must produce quality products every minute within the given period. The focus should be on increasing the performance of machines and equipment used in the operation. This performance

and efficiency increase will force manufacturing firms to apply lean production systems with industry 4.0 digitization applications to their production lines. It is vital for academicians and firms to study and realize applications of new paradigms like lean systems and industry 4.0 much more intensively.

Acknowledgements

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WHO DESTROYS OUR SPIRITUAL CHRISTMAS?

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Abstract: *One of the greatest religious celebrations of the Christian world is Christmas whose significance is so well-known. In recent years, Christmas preparations have begun to take place long before the great holiday, even in October. In order to maximize their turnovers and profits, manufacturers and retailers aim to attract more and more customers during winter holidays. In order to convince them, retailers use a new type of marketing - sensory marketing - based on senses. Sensory marketing stimulates consumerism which is felt more intensely during winter holidays. Yet, it negatively influences the perception of Christmas. Because of the stress and the pressure generated by certain habits, many Christians no longer feel that specific joy they used to sometime in the past. The explanation is the removal of Christians from the essence of the celebration, and the strong link with Santa Claus, a character found in all advertisements, malls and shops. What we have pursued in this paper is to bring some consumerist aspects of Christmas to attention, using some statistical data in this respect. Actually, the latter have revealed an expected situation, namely: total retail sales are the highest in December; the amounts in absolute sizes spent at Christmas are much higher in developed countries, whereas the share of amounts spent at Christmas in total monthly incomes is high both in developed countries and in other countries with a lower development level. It should also be noted that there is a certain connection between the level of Christmas spending and the global index of religiousness in certain countries. Differences among countries relating Christmas spending are determined by a number of factors such as: countries' level of economic development, populations' standards of living, cultural differences on traditions and customs, the mimesis of western consumers' behaviours etc. The market for Christmas decorations and ornaments is world-dominated by China.*

Keywords: *Christmas; consumerism; sensory marketing; Christmas spending.*

JEL Classification: *E21; L81; M31; Z12.*

Introduction

Christmas is one of the most beautiful and popular periods of the year for the entire Christian world. It is a feast of joy and peace of mind when "all roads lead home". On that day, Christian families come together under the sign of love, happiness, generosity and tolerance; miracles do happen; peace, happiness, and understanding slowly come; the world "contracts" and the notions of time and space disappear. Since to many adults Christmas means reliving the past, more beautiful times, to the little ones, however, Christmas is the most anticipated day of the year due to the abundance of presents.

Lately, however, many Christians have claimed that the old magic of Christmas has vanished, having been destroyed by the "crazy unwanted race" imposed by the current society: the modern/consumer society. It makes people feel the Christmas "fever" of preparations much more intensely, tiring them much too early, thus reducing the old joy specific to this holiday. The pressure created by the "chase" for gifts and shopping turns the Christmas period into a frustrating, tiring and stressful one. In fact, Christmas being a source of stress for many people is scientifically demonstrated by a number of specialists (Holmes & Rahe; Kasser & Sheldon, Hairon; etc.).

Actually nowadays, Christmas along with other great religious holidays is increasingly moving away from its significance, from Christian spirituality in general. Due to consumerism - regarded as a global phenomenon which has given rise to a new "relaxation" way for people and with the "pilgrimages" through supermarkets that have replaced the walks in the parks - one forgets about what Christmas really means: the birth of Jesus Christ. Spiritual emotion is most often replaced by sensations. Yet, the latter is a wrong way of living since the disappearance of stimuli (Santa, lights, globes, Christmas trees, food, presents, etc.) leads to the immediate disappearance of joy. All the more so, in Christmas offers, the importance of Christ is lowered until it totally disappears (www.crestinortodox.ro). Christmas has thus become the climax of the year, when consumer materialism is in contrast to Christian values (Belk, 1995). Many people perceive the period prior to Christmas as a time of increased social pressures and demands, especially when presents are bought (Miyazaki, 1993).

Without the belief of having reached all the economic issues of the celebration, this paper attempts to bring to attention only some of these, especially regarded via consumerism. Objective reasons related to the size of this work have limited our research. Nevertheless, in order to capture the important issues, we have resorted to a series of relevant statistical data published on some sites in the field, as well as a series of information in the online press.

About Consumerist Christmas

The notion of consumer society was first used in the 1920's and was then widely used in the sixth to eighth decades of the last century. It is characterized by an exaggerated consumption of goods generated by pleasure or emotion, and where "hunting for items" is replaced by "hunting for brand names". In many cases, consumption in such a society is "dictated" by impulse, not by necessity, in the end meeting not only the needs of consumers, but also the needs of producers through a new type of marketing, sensory marketing, also called "shopping experience" (www.strategic.ro). The latter is based on the emotional relationship between a consumer and a product and involves the senses of customers, thus affecting their behaviours (Krishna, 2010, p. 2).

Sensory marketing "is trying hard to improve the sensitive, tactile and visual, sound and olfactory features of products and sales areas. Sensitivity and emotion have become objects of marketing research designed on one hand to differentiate brands within a hypercompetitive universe, and on the other hand to promise a "sensitive, emotional adventure" to the hyper consumer in search of varied sensations and sensory comfort" (Lipovetski, 2007, p.37).

In fact, in order to ensure customer satisfaction and attract customer loyalty, most companies and retailers offer a real customer experience where senses play a major role (Pine & Gilmore, 1999). In the name of consumer loyalty, currently there is, as Lipovetsky says, a certain "inflation for what is new". In the ongoing competition to market new products or models, this inflation is actually generated by the deliberate "obsolescence" of products by manufacturers. Therefore, there is an acceleration of the process of launching new products via fashion. In fact, novelty produces pleasure, and pleasure maintains consumption, thus forming that "snowball" with every pleasure felt by the consumption of what is new.

And when does consumerism become more evident if not during the great religious celebrations, especially Christmas, when every buyer is "forced or stressed" to consume more than they need? Under such circumstances, could we not include the Christmas celebration in the category of holidays (which Lipovetsky spoke about in his work *"Paradoxical Happiness: an Essay on Hyperconsumption Society"*) which no longer mean evoking the past, but hedonising the present? The current pattern of consumer behaviour tends to support such a statement.

Nowadays, entering the Christmas atmosphere takes place much earlier, in October, as a result of special offers promoted by retailers or televisions. For instance, advertisements are designed to inspire people the idea that the road to happiness is just the consumption of goods. From this point of view, Christmas has become a shopping feast, slowly forgetting that it actually means the Birth of Christ. People no longer look forward to going to church, but to malls to be opened for a new shopping frenzy (www.infocs.ro). Malls and general stores gain strength and stand out as the most favourable place to celebrate Christmas, even more than church itself, which suggests the degree of materialism and secularism (Schmidt, 1991, p. 18). In fact, material accumulation becomes even more obvious during holidays, when shops become the place of living, of meeting, and pleasures for most people (Liiceanu, 2005). As the Archbishop of Canterbury, the head of the Anglican Church (Reverend Justin Welby) says, consumerism ends up destroying the spirit of Christmas (www.ziare.com).

Consumerist Christmas is therefore the creation of marketing and advertisements. In such advertisements, the celebration is linked to Santa Claus (dressed in red and white) and not to Jesus Christ. The link dates back to the interwar period as a result of Coca-Cola's advertising efforts to boost sales during winter time. The image of Santa Claus (the 1931 creation of artist Haddon Sundblom for Coca-Cola) has significantly increased the profits of many producers. Among them there have been film and music producers who have used the Santa Claus character and its symbolic image. Basically, at present, Santa Claus sells almost anything, anywhere and for anyone, being a lay representation of Christmas (wikipedia.org). We actually refer to, as Patriarch Daniel says, a secularized and commercial Santa Claus, a symbol of consumerism and individualistic materialism. Advertising agencies and inventors of products associated with it use the plump old man up to exhaustion to increase their profits. Santa Claus is now a trademark and a commodity (www.gandul.info). Via commercialism, films and music, Christmas has become an indicator of the American culture (russiarobinson.wordpress.com) that has "spoiled" other countries as well. Christmas time is a key element to the US economy, as about 1/6 of the total retail sales is reached then (Kasser & Sheldon, 2002, p. 314).

Consumerist perception of Christmas exists in many countries, not only in the US. This is also highlighted by a study by the British market research company YouGov

in 2016, in several western countries. The results of the study reveal that, although all westerners enjoy Christmas, family reunions and friends, Christmas meals and presents, still their attitudes are different. Thus, 81% of the Spanish and 77% of the British believe that the Christmas celebration has become too materialistic, being a consumerism exercise. The same is true for 66% of the French. However, compared to the French (42%), the Germans (68%) seem to be the most eager to celebrate the day (www.cotidianul.ro).

Nevertheless, what exactly contributes in the unaltered preservation of the joy and happiness of this holiday for certain Christians? The study carried out by Kasser & Sheldon (2002) highlights that family and faith greatly contribute in people's well-being during Christmas, while the secular materialistic issues of the celebration contribute to a lesser extent in the joy of Christmas, actually being associated with less happiness, more stress and unpleasant emotions. The same results were obtained by Mutz by the study carried out in eleven European countries and published in 2016. He states that reducing life satisfaction during Christmas is the result of financial concerns that reflect materialistic activities during the period. Mutz also claims that Christian religious affiliation moderates the way Christmas is experienced. According to him, Christian practitioners do not suffer from reduced life satisfaction before Christmas (Mutz, 2016, p. 1352).

How much is spent at Christmas?

In most Christian religion countries, there is a significant increase in the volume of products sold at this time of the year. From this perspective, it is enough to note the status of total sales of Romania's retail sales (see Figure 1). According to the chart, with few exceptions (including for the year 2017 for which there were no official data about the last two months at the time of writing this paper), it is noted that the highest level of turnover indices is reported in December.

Of course, from the perspective of sales specific to the Christmas season, there may be more or less significant differences among countries. These differences can largely be attributed to the level of countries' development, living standards and cultural differences. In this respect, the status of total sales at European Christmas markets is eloquent, regarded as the charm of winter holidays and the most visited tourist attractions in this period (see Table 1). According to Table 1, Germany clearly outranks the other countries, with total sales of over 2 billion Pounds due to the large number of Christmas markets (2234), some of them with traditions of hundreds of years old, as well as to the large number of visitors (270 million). Then, there is France with total sales of over 690 million Pounds and 78 million visitors in 273 markets. Ranking third is the UK with 342.5 million Pounds and only 30 Christmas markets, but with 24 million visitors. Switzerland, though, raking third by the number of Christmas markets, however, only ranks 8th in terms of the total money cashed and 11th in terms of the number of people who have visited the Christmas markets. The last two ranking positions are held by the Czech Republic and Sweden, both in terms of total revenues, number of organized markets and number of visitors. It must be said that many of the Christmas markets organized in Europe have traditions of hundreds of years old.

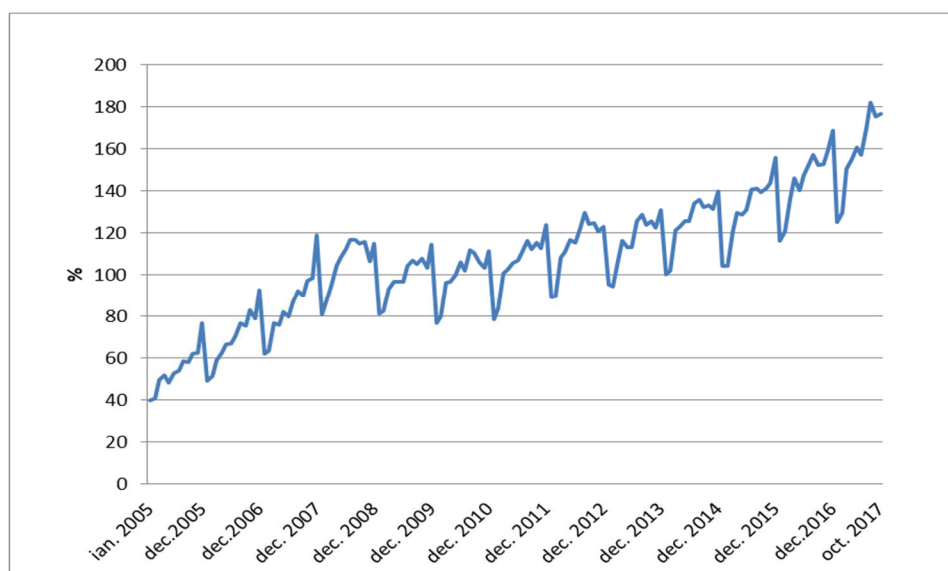


Figure 1: Value indices of turnover in total wholesale trade (reference year 2010)

Source: prepared by the author based on INSSE TEMPO-ONLINE

Table 1: Christmas markets: number, sales, visitors, by countries, 2014

Country	Sales (million Pounds)	Markets		Visitors	
		Number	Ranking	Number (million)	Ranking
Germany	2,092.9	2,234	1	270	1
France	697.9	273	2	78	2
UK	324.5	30	5	24	3
Austria	250.9	49	4	21	4
Belgium	148.7	20	7	12	6
Netherlands	139.9	9	11	9.9	7
Italy	128.4	27	6	13	5
Switzerland	108.0	56	3	8.2	11
Ireland (Republic)	93.7	14	9	8.9	8
Denmark	90.6	8	12	8.3	10
Finland	76.0	8	12	7.5	12
Norway	73.0	7	14	7.1	14
Poland	71.4	11	10	8.5	9
Spain	62.7	15	8	7.3	13
Czech Republic	50.7	6	15	5.6	15
Sweden	41.1	5	16	4.4	16

Source: www.statista.com

Over time, a series of studies have been made on the level of spending typical of the Christmas period, and the results reveal a somewhat expected situation with Christian people in western developed countries allocating a much more consistent budget in the absolute amount for this holiday compared to Christian families in less

developed countries. Moreover, where faith is stronger and traditions and customs are followed more, usually the budget for Christmas is higher in total monthly incomes. Thus, according to the ING special report called "Christmas Spending League" performed for 2015, the planned Christmas spending (in absolute and relative sizes) was:

Table 2: Average Christmas spending, absolute and relative sizes

Country	Average amount spent (Euros)	Percentage of net average monthly income	Net average monthly income (Euros)	Undecided about how much to spend at Christmas
UK	420	15 %	2,810	42 %
Luxembourg	300	9 %	3,188	45 %
Austria	250	11 %	2,320	38 %
France	250	11 %	2,224	42 %
Germany	200	9 %	2,315	37 %
Italy	200	12 %	1,736	40 %
Spain	200	12 %	1,679	46 %
Czech Republic	180	25 %	726	39 %
Belgium	150	7 %	2,233	50 %
Romania	110	32 %	346	40 %
Poland	70	11 %	634	50 %
Netherlands	40	1 %	2,794	41 %
USA	360	15 %	2,361	33 %
Australia	200	7 %	2,920	44 %

Source: <http://www.revistabiz.ro/romanii-in-top-ul-cheltuielilor-de-craciun/>

According to the above table, whereas 60% of the surveyed Romanians stated the allocated budget (110 Euros), Romania reported a sum of approximately 4 times lower than that in the UK - at the top of the list. This is not surprising if we take into account the Romanians' average monthly incomes of only 346 Euros, based on which Romania ranked last. The share in total revenues, however, ranked our country first. The explanation is easy considering another ranking of Romania (25th in the world) in the top of the most faithful peoples in the world (a 77% global index of religiousness). This last ranking was conducted in 2014 by WIN-Gallup International in the "Global Index of Religiosity and Atheism" survey (www.washingtonpost.com).

According to the share of Christmas spending in monthly incomes, Romania was followed by the Czech Republic with a 25% share, the United Kingdom and the US with 15% each, the latter having an absolute amount of 360 Euros. The Netherlands, with a higher level of development than other central or eastern European countries (the Czech Republic, Romania, Poland), but with a Global Religiosity Index (GRI) of only 26% (for 2014) ranked last. However, the Czech Republic surprisingly ranked second in terms of the share, although according to WIN-Gallup International, the index of religiosity was rather low, of only 23%. Similarly, the UK also ranked ahead of countries with a higher index. In contrast, Poland, with a 86% global index of religiosity for 2014, ranked according to the table above, after countries such as Italy

(GRI-74%), the UK (GRI-30%), the USA (GRI-56%), Spain (GRI-37%) and the Czech Republic. The Italians were also willing to allocate less for the Christmas budget compared to the British and the Americans, although Italy's GRI was higher. What can be said is that the link between the index of religiosity and the share of Christmas spending in monthly incomes is generally confirmed, but there are exceptions, too. On the other hand, the standard of living could also explain a certain connection with the level and share of Christmas spending. Additionally, there may be other psychological explanations (material shortages throughout the year, the desire to buy more during the holiday season, the pleasure of Christmas shopping, etc.). And there are also (more or less strong) traditions or even cultural differences. Another recent international study emphasizes some changes in the share of Christmas spending in total monthly earnings. Thus, according to the "Ferratum 2017 International Christmas Barometer", Mexico ranks first with 34.6% (that is 17.1% more than the average of all countries surveyed). It was closely followed by Romania with 31.9% (about 280 Euros). Ranking next, with percentages above the average of 17.5%, were in order: Spain (29.6%), Brazil (28.2%), Bulgaria (24%), New Zealand (23.6%), Australia (22.4%), the UK (22.1%), Poland (21.2%), the Czech Republic (20.2%) and Canada (18.4%). Under the average of the participating countries there were Estonia (17.3%), Latvia (17%), Sweden (14.6%), Croatia (14.4%), Norway (13.4%), Finland (12.3%), and last, Germany, Denmark and the Netherlands, all with the same percentage (11.9%). If we refer to the categories of goods that money is spent on during this time of the year, then clothes, toys, sweets and delicacies are on top, with 17.5%, 13.7% and 12%, respectively. On the opposite side were wellness & spa services (2.8%), as well as music accessories (1.1%) (www.click.ro). From the comparison of data about the countries participating in the two studies mentioned above, we notice important changes in countries such as: the UK, Australia, Spain, Poland, the Netherlands. These countries reported higher figures last year compared to 2015.

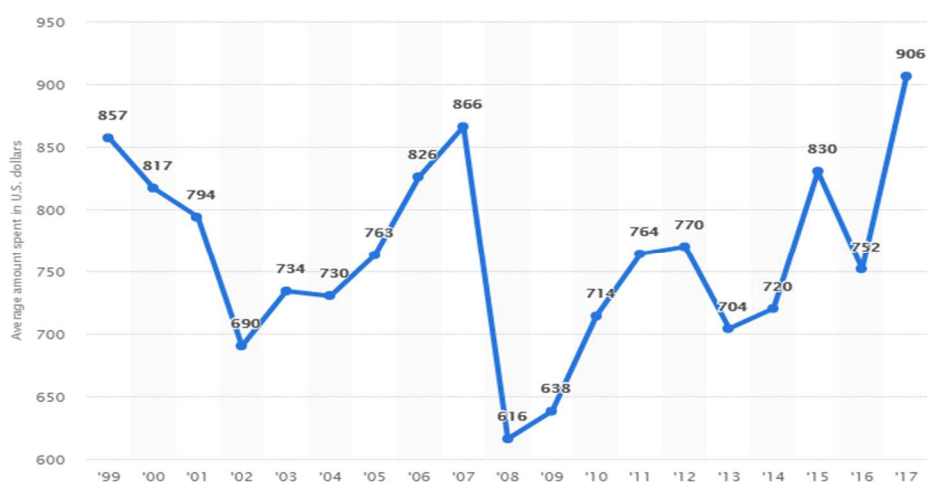


Figure 2: Evolution of amounts allocated for buying presents – the USA

Source: www.statista.com

Let us not forget that Christmas presents cannot be missing on the shopping list. A statistic of the development of the amounts allocated to buying Christmas presents for the US population reveals a certain fluctuation for the period 1999-2017. As expected, 2008 is characterized by the lowest budget level allocated by the Americans to buying presents (Figure 2).

As to Romania, according to some studies ("*Holiday Shopping*"), conducted in several consecutive years by the MEDNET Marketing Research Center in the urban area, the Lei progress of the budget for Christmas presents was according to Figure 3.

The situation reflects a natural evolution of the surveyed period, with a decrease in the spending for 2009-2011 (when the economic and financial crisis was strongly felt).

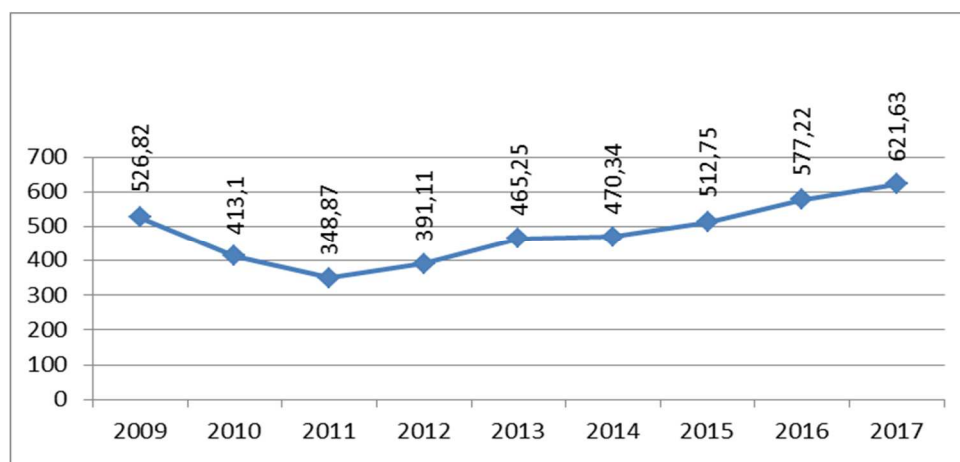


Figure 3: Evolution of amounts allocated for buying Christmas presents – the urban area

Source: MEDNET Marketing Research Center

Who provides Christmas decorations and ornaments?

Once Christmas has become commercial, the industry of Christmas decorations and ornaments too has increased. Worldwide, paradoxically, though not predominantly of Christian religion, the Chinese still manage to dominate the market with about 60% of world production. It is about 600 producers in Yiwu (China), a town 300 km away from Shanghai. They offer a wide assortment range, ranging from artificial trees to the well-known Santa Claus hats. The city also hosts the Yiwu International Fair, regarded by the United Nations as the world's largest wholesale area (spread over an area of 4 million square meters), where about 400,000 Christmas products can be seen, ranging from toy reindeer, shiny bells, inflatable toys and other objects that then end up in the homes of the Americans and Europeans (www.totb.ro). 30% of the orders received by the Chinese producers come from the US (abcnews.go.com).

In Romania, there are currently few producers who make Christmas ornaments and decorations, and this is due to the invasion of Chinese products with more attractive

prices. It is also the case of Christmas globes that are abundantly replaced by the Chinese plastic ones, more resistant and cheaper than those made of glass. In the country, there are only few factories that produce handmade glass globes. They produce more for the foreign market and less for the domestic market. Romanian artists are world-renowned for their talent because they make special silver and platinum plated glass globes that are mostly used to decorate the fir trees in Germany, Switzerland, Sweden, France and the USA. The patterns and colours are in harmony with the preferences of each foreign market segment. For example, the Prodiglob Clasic factory in Cluj makes more vivid and colourful designs for the US market, while for the European market, globes must have classic designs, with pictures of reindeer, Santa Claus and snowmen, and the colours must be purple, blue, white, red or green. There are also small Christmas-themed orders that the factory makes for various US collectors (www.mediafax.ro).

Conclusions

The materialistic and hedonistic sides of Christmas are becoming more and more obvious today. Current consumerism makes Christmas felt more at the sensory level, less spiritually. Preparations are usually made on behalf of Santa Claus (the main character supporting consumerism) and not Christ, often forgetting the essence of the holiday. For these reasons, Christmas is the reason for the largest retail sales, significant amounts are allocated to Christmas shopping. There are, however, more or less significant differences from one country to another, explained by the standard of living, traditions, habits, the power of faith, cultural and psychological differences, etc. Worldwide, the industry of Christmas decorations and ornaments is dominated by producers of a non-Christian country.

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SECTION: *FINANCE, BANKING, ACCOUNTING AND AUDIT*

A MANAGERIAL PERSPECTIVE ON THE ROMANIAN MERGER PROJECTS: WHICH ARE THE TRIGGERS THAT LEAD TO A BUSINESS CONCENTRATION?

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Abstract: *In the current economic environment, synergy has become a trend in business management, making it necessary to explore ways to evaluate it. In this context, three reasons for mergers and acquisitions are to be considered: the search for synergy, the management system and hubris. The mergers are strategic operations which have, as starting point, motivations which usually are related to the management of the involved companies. These motivations cover a wide range, from personal prestige to the expansion of the acquiring company. During our research, we identified a series of motivations, as following: the performance improvement of the target company; consolidation to eliminate de excess supply in a specific industry; accelerating market access to products/services offered/provided by the target company; getting skills or resources faster or cheaper than if they were created/produced; exploitation of an industry's expansion capacity; choosing an early-stage development company or a niche market. The sample for the study consists of 571 Romanian companies, involved in 245 mergers (2 mergers by consolidation and 243 mergers by absorption). For this, we will discuss the major triggers that led to mergers, in Romania, in year 2016, taking into account the two major theories: the value maximization theory and the managerial theory. In this context, we want to draw attention on the fact that the most mergers in Romania are motivated by the access to new markets and new resources, which appertain to the first theory. Also, we analyse the aforementioned sample taking into account the period of time between the incorporation of the companies and the date they decide to participate to a concentration and the type of merger they are involved in: horizontal (the entities have the same NACE code), vertical (the acquiring entities merged with a target in order to optimize the supply chain or to access a new distribution market) or conglomerate (the NACE codes of the two entities are different).*

Keywords: *agency theory; mergers and acquisitions; motives; performance; synergy.*

JEL Classification: G30; G34; M11.

1. Introduction

The consequences of mergers and acquisitions on the performance of entities involved in these transformation processes have been and still represent a key point of interest for both practitioners and economics researchers. There are many approaches that explain why a merger or acquisition takes place. In the literature, in

most cases, the management motivation of the acquiring company and the shareholders of the target company are the only considered parties, the implications on other stakeholders being little taken into account. This could be explained by the fact that the decision to enter a concentration process such as mergers and acquisitions depends on the management of the two companies but also on the investors of the target company.

2. Reasons for participating to mergers and acquisitions

Choosing a target company is a strategic selection process that primarily considers the value creation criterion, given the large number of mergers and acquisitions that failed to meet the purpose for which they were concluded (Kuperman, 2009; Zhu and Zhu, 2016). The economic theory offers two major motivations for a company's decision to engage in mergers or acquisitions (Kumar *et al.*, 2015):

- the **value maximization theory** - starts from the premise that mergers and acquisitions are value-creating processes, and managers set as their primary goal the achievement of the maximum value of investors' wealth by achieving synergies;
- the **managerial theory** - considered as the theory of non-maximization of value, since managers initiate merger and acquisition operations for reasons of personal interest, aiming at increasing wealth or personal prestige (*hubris theory*).

According to Wang and Moini (2016), mergers and acquisitions are conducted for the benefit of managers, contrary to the expectations of stockholders (agency problems), or out of irrational considerations (imitation or hubris). These opinions, which are not actually based on performance targets, are sustained by studies made on mergers and acquisitions which highlight the fact that, post-merger, the value creation is evident especially in the case of target companies, the shareholders of the acquiring entities remaining, in the best case, in the situation they were in the pre-merger period (Canina *et al.*, 2010; Jensen and Ruback, 1983; Andrade *et al.*, 2001). In the opinion of some authors (Andrade *et al.*, 2001), the most well-known reasons for concluding mergers and acquisitions in economic theory include: *efficiency reasons* that most often concern economies of scale or other synergy targets; *reaching a certain market share*, which may lead to extreme situations of monopoly or oligopoly (this is the case of the horizontal mergers, which are combinations between entities with the same core activity); *market discipline*, which has the effect of eliminating competitors with non-efficient management; *the desire of the management of the acquiring company to over-expand*, which must be correlated with the theory of agency; *the purpose of diversifying the activity* (in this case we can have both vertical or conglomerate mergers, depending if the acquirer wants to optimize its supply chain or to access new distribution markets or, in the second case, to completely try a new market).

In 1976, Jensen and Meckling defined the agency relationship as a contract in which one or more people delegate other persons (agents) to make decisions or perform tasks (Jensen and Meckling, 1976). Agency relationships can arise between investors and managers, between the economic entity and the creditors, between decision-makers and minority shareholders, between stakeholders and auditors, which is why the agreements established between these parties must clearly

establish the rights and obligations of each party (Berheci, 2010: 220). In this context, emphasis is placed on identifying conflicts and opportunities for connecting the interests of each party, taking into account the organizational structure of the company, the remuneration policies, the monitoring of activities, the inventory of policies and accounting methods applicable within the company, the attitude towards risk, all these in the context of *informational asymmetry*, *moral hazard* and *adverse selection* that characterize the agency relationships.

The most famous agency relationship is that between owners of a company and its managers. In the "investor-manager" relationship, the principal (the investor) will entrust his wealth to an agent (the manager), to be managed in accordance with his interests. Each of the two parties has an interest in creating a bond and concluding a contract because the shareholders need the human capital that the managers have, and the latter need the financial capital held by the shareholders (Hill and Jones, 1992). In the case of mergers and acquisitions, the "agent" - "principal" relationship can be seen in several stages: 1) the manager recommends a target company to the principal; 2) the principal has to decide whether or not the management of the two companies will join or continue as independent; 3) the principal sets incentives for management that are related to the post-merger / acquisition performance (Kräkel and Müller, 2015). In this context, it is necessary to focus attention on some motivations that we synthesize in the following:

1. *The performance improvement for the target company.* This motivation is one of the most common strategies for creating value. Considering that one of the major levers of value creation is the capital, according to Goedhart *et.al* (2017), it is simpler to improve the performance of a company that reports a low return on investment, rather than a high level of this ratio. For example, if a company has a ROI of 4%, an increase of 50% to 6% implies a cost reduction of 2.08% or an increase in revenue by 2%.

$$ROI = \frac{\text{Gross income}}{\text{Invested capital}} \times 100 = \frac{100-96}{100} \times 100 = 4\% \quad (1)$$

Given the 2-unit revenue change (2% increase), we have a return of 6%:

$$ROI = \frac{\text{Gross income}}{\text{Invested capital}} \times 100 = \frac{102-96}{100} \times 100 = 6\% \quad (2)$$

Cost savings of 2 units (a decrease of 2,08%) leads to the same result:

$$ROI = \frac{\text{Gross income}}{\text{Invested capital}} \times 100 = \frac{100-94}{100} \times 100 = 6\% \quad (3)$$

On the other hand, if a target company has a return of 20%, its 50% increase to 30% implies, using the same reasoning as above, a 12,5% decrease in costs or a 10% increase revenue, which is more difficult to achieve.

2. *Consolidation to eliminate the excess supply from a specific industry.* If, in one area of activity/industry, the supply exceeds the demand, companies call for

acquisitions and mergers because it is easier for them to close out workstations in the resulting entity (which is bigger) than to close their own workstation (resulting in a smaller entity). However, this approach also has a weak point, namely that, from this approach, the market competitors also benefit, without making any effort (*the free-rider problem*).

3. *Accelerating market access to products/services offered/provided by the target company.* This is the case of small companies with innovative products, which meet difficulties reaching the maximum market potential. The acquiring company provides their own distribution system, thus substantially increasing their revenue.

4. *Getting skills or resources faster or cheaper than if they were created/produced.* When acquiring a target company, the bidder intends to have access to target's resources (human, material, or research and development). The IT&C companies are merging or acquiring companies that have the technologies they need to improve their own products. In this way, they can acquire technology faster than they can produce it. Of course, a cost-benefit analysis is needed, in which it is necessary to balance, on one hand, the production costs, the cost of patent registration and any other related costs, and, on the other hand, the amount to be paid to acquire a company that already has a specific asset. For example, in August 2011, Google acquired, for 12,5 billion \$, Motorola Mobility, which, just seven months before, was divided from Motorola. The company produced smart phones with Android operating system, developed by Google. The latter announced its acquisition intention, motivating the desire to control Motorola's patent portfolio, thus being able to protect other Android vendors from possible lawsuits. Under the leadership of Google, Motorola produced the first Android-based smartwatch and launched the Ara Project, a platform for modular mobile phones with interchangeable components. Google's ownership lasted almost three years, the company announcing, in January 2014, that it sold Motorola Mobility to the Chinese company Lenovo, less 2.000 patents and the Ara Project.

5. *Exploitation of an industry's expansion capacity.* Keeping fixed costs at a constant level, in the conditions of increased production, allows economies of scale to be achieved. Fixed costs are those costs that remain unchanged over a certain period of time, regardless of the level of production. In contrast, variable costs are those that evolve in proportion to the volume of production. Economies of scale occur when a reduction in the average cost is recorded as the production output increases. The graphic representation of scale economies is found in Figure 1. Regarding the average unit cost, it can be seen that it decreases to an optimal level, as the size of the firm increases. After that, any increase in the volume of activity of the economic entity will lead to the loss of the benefits of the economies of scale, determining the increase of the unit cost.

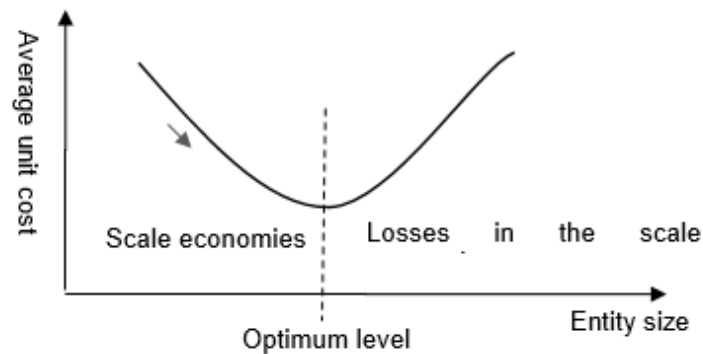


Figure 1 Graphic representation of scale economy
Source: own projection

An economic entity that holds a high percentage of fixed costs in total costs will achieve a higher profit than one that has a lower share of fixed costs in total costs (DePamphilis, 2010). In this case, we have two companies with annual revenues of 1 million lei and a profit of 50 thousand lei, obtained from the sale of 1.000 produced units. Fixed costs of the first company account for 100% of total costs, but, in the case of the second company, fixed costs represent only half of the total costs. If both companies decide to produce and sell 50 extra units, the former will record a unit cost of 904,76 lei/unit and an increase in operating income up to 100.000 lei, precisely because the total costs are fixed costs. For the second company, the unit cost amounts to 927,38 lei/piece and the operating income will grow to 76.250 lei, due to the fact that a part of the value of the increased revenues (23.750 lei) will cover the increase in variable costs.

6. *Choosing an early-stage development company or a niche market.* In this case, the acquiring company must recognize the potential of a start-up or a new company before its competitors.

From a different perspective, the motivations that may lead to merger operations are diverse, but we consider two opposite, but, in the same time, complementary categories: *offensive motivations* (increasing market share, accessing other markets, accessing specific resources), and *defensive motivations* (reaching a critical dimension, limiting inputs on a specific market, adhering to technological evolution, taking over a competitor, reducing costs).

Despite the importance of this practice, another concept on how synergy should be analyzed is based on the premise that the synergy effect should not be retained as the initial motivation of the concentration. In other words, economic entities are not merging from the desire to achieve synergies. Meier and Schier (2012: 34) are of the opinion that this choice is mainly explained by the fact that synergies, including operational ones (consolidating functions, divestitures, reducing labor force, standardizing practices, etc.) are often the justification for the economic logic of the transaction, rather than its initial objectives. A bidding company will often have to prove to investors that the high premium paid for the acquisition of the entity will be compensated by a drastic reduction in costs.

3. Research design and methodology

Using a descriptive analysis, we study the Romanian merger operations, for the year 2016, aiming at identifying and presenting the managerial perspective of the companies involved. The mergers that are taken into consideration were published in the Official Gazette of Romania, part IV, and involved the unlisted companies at Bucharest Stock Exchange. The sample analyzed for 2016 consists of 245 domestic merger projects involving 591 companies. This number, relative to the total number of 105.982 active companies (NTRO, 2016), registered with the National Trade Register Office, represents a weight of 0,56%. In order to achieve the research objective, we will use the documentary analysis, especially of the accounting and legal documents (merger projects, financial statements, articles of incorporation, decisions of the General Meetings of Shareholders).

For the data collection, we used the observation method, considered useful to understand the motivation behind the mergers between the 591 participating companies.

4. The results of the research

We delimited the participating entities in two groups as follows: *entities subject to merger operations* and *entities resulting from merger operations*, assuming that the merger can take place between at least two commercial entities. In Table 1, we present the number of entities involved in merger projects as well as the total number of entities which resulted from the merger operations.

Table 1. Number and categories of entities participating to merger operations

No. of participating entities per project	Participating entities	Resulting entities
2	398	199
3	84	28
4	28	7
5	30	6
6	24	4
7	7	1
Total	571	245

The decision to participate in a merger or to choose a specific target company is related to the specificity of the target entity's activity as well as the development strategy of the acquiring company. This disclosure criterion leads to the most well-known classification of mergers (horizontal, vertical, conglomerate). Given the fact that we had access to the Official Gazette of Romania, part IV, we were able to identify, for 555 entities, their NACE code. Based on this, we could establish the type of mergers for 238 merger projects (less 7 projects for which the information on the NACE classification for the acquirer was not available).

Table 2 contains the number of horizontal, vertical and conglomerate mergers for 2016, including the number of participating entities for each case, grouped by the number of entities per project.

Table 2. Number of mergers and of entities by type of merger

No. of entities per project	Horizontal mergers		Vertical mergers		Conglomerate mergers		Not available	
2	78	156	56	112	60	120	5	10
3	7	21	17	51	2	6	2	6
4	3	12	-	-	4	16	-	-
5	1	5	4	20	1	5	-	-
6	1	6	3	18	-	-	-	-
7	-	-	-	-	1	7	-	-
Total	90	200	80	201	68	154	7	16

As we can notice in Table 2, in the case of Romanian merger projects, for 2016, the numbers of vertical and horizontal mergers are very close (90 projects – 36,73%, involving 200 entities, respectively 80 projects – 32,64%, with a number of 201 entities). The number of conglomerate mergers is 68, representing 27,75% of the total of 245 projects. In this situation, we cannot say that Romanian investors prefer a specific form of merger.

As mentioned above, mergers are strategic alliances, used by the *investors* in order to achieve business development or a certain level of efficiency for the merging companies, or by *managers*, to achieve their goals or for reasons of self-esteem. The decision of choosing a certain target company is dictated by the interest of the acquiring company. Thus, the preference for a type of merger must be correlated with the motivation behind the merger. In the case of Romanian merger projects, the main reasons for the mergers are presented in Figure 1.

By analyzing the merger projects, as reflected in Figure 1, we have found that most merger operations (a share of 65,71%) took place for reasons of cost reduction, which is assimilated to operational synergy. This can lead to greater efficiency and streamlining of the execution process by simplifying the decision-making process. The merger can increase the bargaining power and, ultimately, cut red tape, simplify accounting and financial reporting procedures, and manage funds more efficiently. The next identified reasons are referring to increasing market share (17,96%), which is directly related to horizontal mergers, and to accessing specific resources (8,57%), which belong to the target company and the bidder company needs in order to develop its own activity. According to our graphic representation, accessing other markets is next on the list of motivations, with a percentage of 6,12%. Of course, reaching a critical dimension and adhering to technological resources could not miss from the identified motivations, both with a percentage of 0,82%, especially in the case of IT companies.

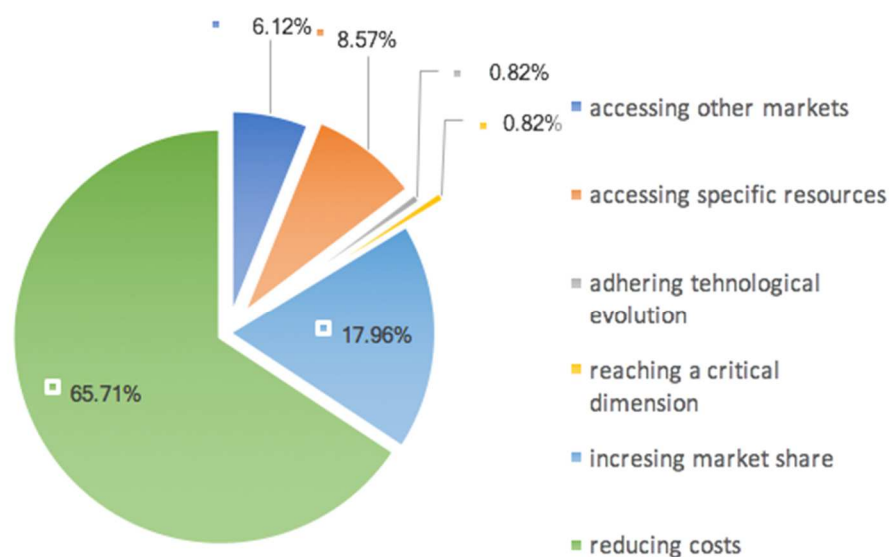


Figure 1. The motivations behind the mergers

The following figure presents a distribution of the merging entities, as acquiring and acquired companies, in terms of the number of years that have elapsed between the time of formation and the actual participation in the merger.

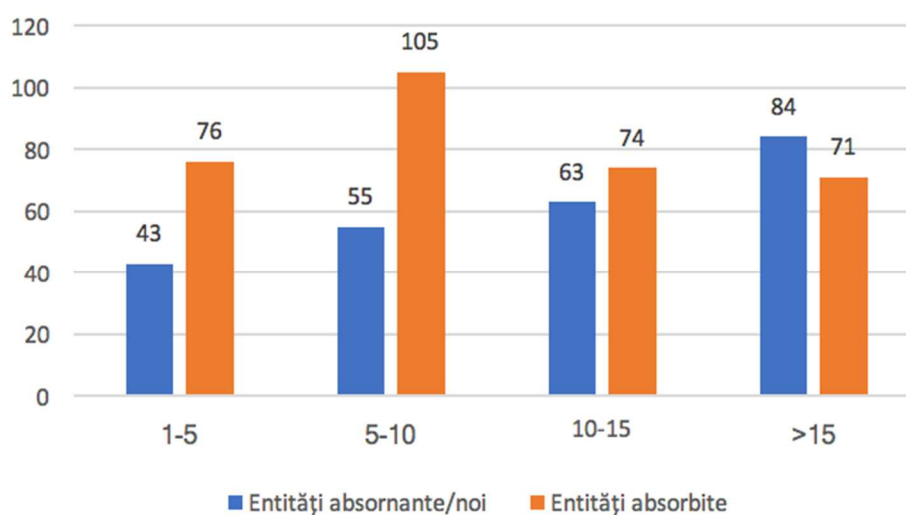


Figure 2. Distribution of entities according to the number of years that have elapsed since the incorporation until the merger

In figure 2, an upward trend in the number of years that has elapsed since the incorporation of the bidder entities until the merger can be identified. In the 1-5 years period, also called *the development phase of the life cycle of the entities*, a share of 17,55% of the total acquiring entities participated in merger operations. For the 5-10 years period, the share of participating entities to merger projects is 22,45%, and for 10-15 years, 25,71%. Most of the bidder companies participating in merger operations belong to the period over 15 years, 34,29%. If in the case of the acquiring entities we are talking about a growing trend, in the case of the target entities, most of them belong to the interval 5-10 years, 32,21%. Thus, *the critical point* in which an entity decides to participate in a merger as a target entity is the 5-10 years from the incorporation. Of the total number of acquired entities taken into account, 23,31% were involved in a merger in the first five years since their incorporation, 22,70% in the range of 10-15 years, respectively 21,78% over 15 years.

5. Conclusions

In this paper, we identified the reasons why economic entities decide to venture into the rather complex world of mergers. Thus, in 2016, 571 Romanian entities were involved in 245 domestic merger projects. The most merger projects have as main motivation the costs reduction (65,71%), creating an opportunity for the realization of the operational synergy. Usually, the first cause of the cost reduction is eliminating the duplicate positions in the two companies (management, research and development, etc.), followed by simplified procedures and unitary reporting. Also, we noticed that there are 24,08% of the companies which were oriented towards increasing market share or accessing new markets, as a result of participating in horizontal mergers. Regarding the distribution of mergers by type, we can affirm that there is a proportionate distribution between horizontal, vertical and conglomerate mergers in Romania in 2016 (36,73%, 32,64%, respectively 27,75%). In future research, we will compare the reasons by years, establishing if there is a shift in the way Romanian entrepreneurs and managers see the changes that mergers can do in their economic evolution.

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CUSTOMER SATISFACTION WITH BANK SERVICES

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Abstract: *In order to be successful on the market, banks must continually focus their efforts on understanding and meeting the needs and expectations of all their current and potential clients. Moreover, in order to maintain competitive position on the market, banks adopt and demonstrate a clear customer and quality orientation, notably by continually assessing customer satisfaction, but also by constantly assessing their performance. At the same time, banks should identify appropriate methods and tools for assessing customer satisfaction and ensuring the loyalty of the most important, as well as improving the internal and external relational system and establishing partnership relationships with loyal customers. Ensuring and monitoring customer satisfaction is a prerequisite for rational marketing. Ensuring customer satisfaction starts from identifying their requirements and configuring products to meet these requirements. Customer satisfaction is considered the basis of their loyalty and the guarantee of meeting the bank's objectives. Customer satisfaction is the core element of quality management standards. To be successful on the domestic and external markets, banks need to focus their efforts on understanding and meeting the needs and expectations of current and potential clients. Customers' needs and expectations may include, for example, product compliance, performance, delivery, post-delivery activities, costs and exploitation costs, product safety, product liability, environmental impact, etc. The main purpose of this study is to examine the relationship between customer satisfaction and service quality in service sectors with respect to the service quality dimensions.*

Keywords: *Performance; satisfaction; quality; SERVQUAL; GAP.*

JEL Classification: *G21; M31.*

1. Introduction

Satisfaction is the status of a customer that comes from comparing the quality of a product / service with its expectations. Satisfaction depends on the gap between reality and desire and is assessed by the quality level of the products or services offered.

Such comparisons may result in the following situations:

- Dissatisfied performance (dissatisfaction);
- Performance is indifferent
- Performance meets expectations (satisfaction);
- Performance is over expectations (enthusiasm - customer becomes faithful).

In the process of developing customer relationships and assessing their satisfaction, two aspects are important:

a) Communication with customers

b) Customer loyalty

In defining the customer communication system, it is necessary to consider the contacts established with the client, whether it is a formalization of a contract or for solving complaints. All customer communication activities are essential in determining customer satisfaction. Customer relationship development must be based on trust and mutual respect, and the organization's leadership needs to know how to communicate its value-creation strategy to the client.

2. Analysing banking services quality and customer satisfaction

The main objective of this study is to estimate the level of quality of services offered by Bancpost Bank by using a suitable adapted tool consisting of the SERVQUAL method.

This study consisted of an ample process, carried out on several stages of work, namely:

- elaborating the questionnaire addressed to the clients of the banking company;
- the choice of the banking company to be analysed, namely Bancpost;
- establishing the approach of the clients of the banking company;
- collecting questionnaire-based data on a sample of clients of the bank;
- centralizing and processing data;
- interpreting the results.

The questionnaire contains 22 statements grouped on 5 dimensions, each dimension containing a series of 4 or 5 statements. The five categories of service quality are:

- Visual image (tangibles): physical facilities, equipment, personnel and advertising materials;
- The ability to provide the service correctly, safely and always at the promised performance level;
- Responsiveness: the desire to help customers and to provide them with prompt service;
- Assurance: the ability to inspire safety and trust in customers, as well as the competence and honesty of employees;
- Empathy (empathy): treating each client with due attention, ease of contact and communication with the client

3. Applying the SERVQUAL method. Case study: Bancpost Oradea

SERVQUAL was the first method developed and applied to assess the quality of services and was the subject of a very large number of experiments reported in specialized publications. The method has also been applied and experienced in the field of electronic services (Balog, 2004; Bressolles and Nantel, 2004; Iwaarden and van der Wiele, 2003).

The SERVQUAL method was developed by Parasuraman, Zeithaml and Barry in 1994-1995 based on the GAPS model of service quality. SERVQUAL is the most

widely used method for assessing service quality and has been experienced in a variety of specific contexts.

The questions from the questionnaires used by reviewers are grouped by service quality dimensions in total SERVQUAL contains 22 questions that are adjusted according to the type of service evaluated. When completing the questionnaire client should consider the extent to which the service should meet specified quality attributes, respectively, to appreciate what it means for that service quality based on its own experience as a user of the service. The answers reflect customer expectations and perceptions of Bancpost –Oradea service quality.

Table 1. Gap score for Tangibles Dimension

Statement	Expectation Score	Perception Score	GAP Score
Tangibles	Average for Dimension		0,615
Question 1			
Question 2	5,14	5,80	0,66
Question 3	5,22	6,00	0,78
Question 4	5,74	6,46	0,72
	4,92	5,22	0,3

Source: Processed by author

Analysing the average score of 5,1509 and perceptions of 5,6481, it can be seen that all five indicators achieved a score of between 4.58 and 5.74 at expectations and 4.98 and 6.46 to the perceptions, from which it can be deduced that the bank has a high level of quality of its services, as perceived by the executives questioned before and after becoming Bancpost's customers. It can be deduced that the bank meets the expectations of its customers:

Analysing the expectations column, the highest score was obtained in the visual image, namely 3. The bank's employees have a neat look. (5.74), followed by 17. Bank employees have the necessary knowledge to answer customer questions. (5.62), within the safety indicator, and 15. The bank's clients will feel confident in the transactions. (5,14) within the same indicator. At the end of the list we find the smallest 4 points, namely 21. The focus of the bank is the client's interests. (4.58) in empathy, followed by 13. Bank employees are never too busy to respond to customer requests. (4.92) and 4. Promotional materials associated with the bank are attractive. (4.92) within visual indicator 19.

The bank has a convenient program for all categories of clients. (4,8), within empathy, the Bank through its employees gives special attention to each client (empathy - 5,16) and 9.Bank (trust) with the same score of 5,28. As an average of expectations on the indicators, the highest value is found on the safety - 5.32, and the lowest average is found within the empathy of 4.99.

Table 2. Gap score for Reliability Dimension

Reliability	Average Dimension		for 0,48
Question 5	5,08	5,48	0,4
Question 6	5,10	5,54	0,44
Question 7	4,96	5,48	0,52
Question 8	5,02	5,38	0,36
Question 9	5,28	5,96	0,68

Source: Processed by author

Table 3. Gap score for Responsiveness Dimension

Responsiveness	Average Dimension		for 0,335
Question10	5,28	5,56	0,28
Question11	5,14	5,58	0,44
Question12	5,28	5,58	0,3
Question13	4,92	5,24	0,32

Source: Processed by author

By studying the perceptions column, the highest value is found in the visual image. 3. Employees of the bank have a neat look. (6.46), followed by 17. The bank's employees have the necessary knowledge to answer customer questions. (6,14), also under safety, and 2. The bank is arranged in a welcoming way. (6.00) within the visual image. The smallest values of the perceptions scores are found in 21. The customer's interests lie in the focus of the bank. (4.98) under empathy followed by 19. The bank has a convenient program for all categories of clients (5.14) 4. The promotional materials associated with the bank are attractive and (5.22), within the visual image, followed (5.24 - responsiveness) and 8. The bank provides the service at the promised moment (5.38 -trust).

As an average of customer perceptions, the highest value is equal to 5.87 in visual safety and visual, and the lowest in receptivity -5.49.

Table 4. Gap score for Assurance Dimension

Assurance	Average Dimension		for 0,55
Question 14	5,20	5,8	0,6
Question 15	5,36	5,98	0,62
Question 16	5,10	5,56	0,46
Question 17	5,62	6,14	0,52

Source: Processed by author

GAP analysis succeeds in highlighting different aspects of the insurance company's services, a negative GAP is an unfavourable aspect of the insurance company being

analysed, as it can be inferred that there are higher expectations regarding the services offered by the insurance company insurance than what it offers. The existence of a negative GAP should send an alarm signal to the insurance company and take action as soon as possible. Examining the data obtained from the questionnaires, we find that at Bancpost we do not have negative Gaps.

Table 5. Gap score for Empathy Dimension

	Empathy	Average	for	0,508
		Dimension		
Question 18	5,28	5,92		0,64
Question 19	4,8	5,14		0,34
Question 20	5,16	5,82		0,66
Question 21	4,58	4,98		0,4
Question 22	5,14	5,64		0,5

Source: Processed by author

As an average of GAPs, it is noted that the highest value is found on the visual image indicator with a value of 0.78, followed by the same category as 0.72. The lowest Gap value is seen in the visual image and responsiveness by 0.3.

Table 6. Calculations to obtain unweighted servqual score

1. Average Tangible SERVQUAL score	0,615
2. Average Reliability SERVQUAL score	0,48
3. Average Responsiveness SERVQUAL score	0,335
4. Average Assurance SERVQUAL score	0,55
5. Average Empathy SERVQUAL score	0,508
TOTAL	2,488
AVERAGE (= Total / 5) UNWEIGHTED SERVQUAL SCORE	0,4976

Source: Processed by author

Table 7. The importance given to each dimension

Features	Percentage
1. Tangibles	6%
2. Reliability	6%
3. Responsiveness	60%
4. Assurance	24%
5. Empathy	4%

Source: Processed by author

As a result of the analysis of the sample, it is noticed that the main dimension is the security offered by the customer bank in 60%, followed by 24% confidence, the

receptivity and empathy and the visual impression representing only a total of 16% of the total number of people questioned.

It can be seen from tables above that all GAPs have a value between 0-1 indicating a rather small difference between expectations and perceptions. This is a very good thing for Bancpost because it shows us that overall customer perceptions are higher than expectations.

4. Conclusion

With regards to Bancpost – Oradea, most of the respondents are aged between 18-25 years and 26-35 years, representing 60% of the sample, most of whom work as employees and have monthly incomes between 800-2800 lei.

Most people 36%, consult their family before entering into a contract with a bank, and 22% seek advice from a specialist or research the market.

Even before entering into a contract, most people are interested in the security that the bank offers 60% and the trust they provide 24%.

The bank is considered by its clients as a bank that is employed in a neat look and that the bank employees have the necessary knowledge to answer customer questions.

After analysing the questionnaires, we can deduce that the most used type of bank product is the individual / student / salary / pension account of 47 persons out of the 1000 questioned holding it, followed by the deposit, which are owned by 16 persons of the total.

The bank has problems in terms of customer receptivity, in particular as regards the fact that bank employees accurately inform customers of when the services will be performed. Between the expectations and perceptions of the bank's clients, it is necessary to take measures to strengthen the customer's receptivity to the customers.

If we take into account the environments on each dimension, it is noticeable that the visual image is the strength of the bank, with a score of 5.74 in terms of customer expectations and 6.46 perceptions.

At the same time, the interviewed clients voiced their discontent regarding the work program of the insurance company - 5.14 (perceptions), as well as the fact that the client is at the center of the bank's interests - 4.98.

GAP analysis can highlight a multitude of aspects of the services offered. A negative GAP highlights the unfavourable aspects of the bank's services and alerts the company. A positive GAP is a favourable aspect for the bank. Thus, following the analysis of the questionnaires, it appears that all Bancpost Bank's GAPs are positive, which is a beneficial fact for this. However, a higher GAP value shows the size that best matches and even exceeds customer expectations, namely the first impression (0.615), followed by safety (0.55) and empathy (0.508). The smallest GAP was found within the responsiveness (0.335).

We propose to the bank to take action regarding the availability of its employees to answer their clients and not to be too busy with other tasks and to be friendly with them.

Another recommendation for the bank would be the extension of the work program, even if all this will generate expenses on the company, in the long run it will lead to an increase in the satisfaction of its clients. The study is obviously in need of improvement because it was done on a rather limited sample, a limited period of time, a lack of comparison with the results that could have been obtained for other banks, which could actually surprise in a much broader level of quality of services offered on the banking market.

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FINANCIAL RESOURCES - LOANS

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Abstract: *During the establishment and operation of companies, several decisions shall be made. The fundamental viewpoint of a decision concerning the funding is where the source is originating from: from inside i.e. from the functioning of a company or else external operators shall temporarily or definitively provide a company with the source. The classical form is the funding from own sources but it is increasingly common that external investors are involved, EU support is utilized and bank loan is borrowed. During the analysis, the authors examine the conditions of borrowing such as the effect of following: the length of term, the frequency of payment and the composition of instalment. Also, it is examined how the amount of interest payable and unpaid principal changes in single cases. Before the borrowing, the financial manager should consider whether the cash flows arising in the future will be able to cover the continuous production and whether the repayment of borrowed capital and interest will be ensured. The financial controller has an important role during the evaluation of accounting information; by choosing the appropriate source of funding, he/she can help to preserve the corporate liquidity in the long term. Among the financial controlling tasks, it shall be considered as highly important that the companies have to act responsibly during the planning, analysis of funding and realization of goals because the decision made will affect the company's operation, survival and development in the long term.*

Keywords: *sources of funding; repayment of principal; instalment; interest; financial controlling.*

JEL Classification: *E43; G30.*

Introduction

Today, sooner or later, every company already needs loan to fund its activity, whether it is new or existing, micro-, small- or medium sized enterprise. There is a constantly returning question how the improvement of the enterprise should be realized: from own existing source or some external source, loan, grant or possibly by involving an external investor. There are arguments for and against both of them.

1. Internal funding

Before reviewing the funding sources, it is expedient to examine those properties whose sale does not jeopardize the functionality of a company but involves

temporary capital liberation. A method of the self-funding can be the liberation of capital committed in the company by rationalization (Katits, 2010); it requires a prudential decision.

1.1. Liberation of corporate capital

Funding from liberation is carried out by sale of properties and rationalization measures. Liberation of capital committed in fixed assets is carried out, particularly and primarily, by sale and lease of properties which are not necessary for the functioning (for instance, land, building, machinery etc.). Insofar as a property is sold which is necessary for the functioning, the enterprise can lease the property back in the form "sale and lease back"; this is already a customary procedure nowadays. Liberation of capital committed in current assets can be realized by, for instance, smaller stocks and sale of customer receivables (Darabos et al, 2017a). By means of rationalization measures, the time of fixed capital can be shortened and thus the invested financial resources will return sooner (Vollmer, 2008).

1.2. Funding from own sources

The generally accepted ways of obtaining the necessary resources are as follows: from inside the enterprise, by after-tax profit as well as depreciation.

The required sources can be obtained within the enterprise via retaining the after-tax profit as well as from the retention charge. At such a time, the authors are talking about internal funding also known as self-financing (Gyulai, 2011). A major attention should always be paid to the internal funding since the enterprise can make independent itself of the investors' conditions by means of this kind of funding (Kondorosiné, 2003).

There is big advantage of funding from own source that it is cheaper and it is not needed to pay interests and other costs. In addition, the company does not risk its own money. If the development fails, the enterprise will not have to pay principal payment and interests. However, in the initial period, it can happen with even a successful investment that the instalments can just barely be paid from the income. Insofar as the own sources were committed previously, it would be costly to withdraw them and it would mean a lack of income resulting from the sources. In case of a development from own sources, the decision-makers should take care not to withdraw money from such an area where this measure adversely affects or endangers the company operation. It is also important that enough money should be available for advertisement and promotion of the product because the lack of them would also be a disadvantage in the long term but enough sources should be remained for e.g. purchasing the basic materials and the stock, for paying the wages etc. Keeping the liquidity of enterprise at an appropriate level is a very important decision-making viewpoint in every case. Leaders of the company and the financial controllers play an important role in area of measuring and managing the risk. (Fenyves et al, 2014; Kalmár et al, 2015).

2. External funding

There are several forms of the external funding in practice, for instance, recourse to support, increase in equity by existing shareholders or involvement of new owners (increase in capital stock by public shares issuance or venture capital raising *Private Equity*), foreign capital raising by bond issuance or bank borrowing. Katits classifies the loan provided by a company's owners (member loan) as external funding which is a commonly used form among the enterprises (Katits, 2002). According to literature sources, the leasing as a form of asset financing can be also classified here (Walter, 2014; Darabos et al., 2017b)

2.1. Funding from grant

Basically, it has two forms: repayable grant and non- repayable grant. Insofar as there are no enough free own sources, the costly borrowing can be chosen just as a final solution, such an activity is performed which is supported by the current economic policy then the grant source may be the best solution for financing the development. It is cheap because there is no need to pay interest for it and there are no related costs. There are numerous difficulties of winning the tender grant, it is required to meet predetermined conditions and a predetermined performance shall be reached in the future such as sales revenues or increasing the number of employees. Another difficulty of the funding from tender sources is that the period of submission, judgment, obtaining and exercise is long and complex process. Most of the tenders are ex-post funded i.e. a part of the costs have to be pre-financed, occasionally beyond providing the own contribution.

2.2. Funding by involving external investor

Generally, by involving an external investor, a financial or professional investor enters the company. The financial investor does not interfere in the daily management, daily work but he is more interested in when his investment will be refunded and how much the profit will be. The professional investor usually has long term thinking, his objective may include the market gaining, cost savings, efficiency increasing etc. Beyond the positive effects of investor, there can be negative ones, for example, he can fundamentally reorganize the company or he can also terminate it over time.

A venture capital investor is not interested in maximizing the dividend yield but in the fastest development of a company and in the growth of company's value. An investor contributes to the capital stock ("equity") as a co-owner, *however, does not play just a financing role but also participates in the company's management* (with the aim of helping the company's development) in most cases. Leaving the company is not carried out by capital withdrawal but sale of principal.

Involving an appropriate investor is a time-consuming process, even it may be a risky decision as well.

2.3. Leasing

Nowadays, leasing is a well-known and usual form of finance among companies, budgetary institutions and private individuals. In Hungary, leasing became widespread in the '90s; the role thereof initially increased by leaps and bounds in the development of tools. More and more types of leasing products and services related to the leasing appeared in the area of funding. Since their widespread emergence, their roles in the long-term equipment development and completion of the investments have depended on the economic cycle and, not least, the then-existing tax and accounting rules (Walter, 2014).

If an enterprise decides to use leasing for asset financing then the long-term leasing agreement will be similar to the insurance lending contract. If a company frequently improves in the form of leasing and leases a lot then attention should be taken to the amount of credits and loans recognised in the balance sheet. Because the investors realize that the leasing as an off-balance sheet item is capable of replacing loan capital. [Bélyász, 2007]

2.4. Funding from Loan

There is an argument for the development and investment from loan that own sources remain, with providing the necessary own contribution, and these ones can be used for another targets. Thus, the liquidity is ensured, the already developed operation can be financed further. Disadvantage of the development from loan is that it may be more expensive and more hazardous than the utilization of equity. At the time of borrowing, the costs immediately emerge (e.g. appraisal, notarial fee, disbursement fee etc.) as well as the handling charges and interests shall be paid during the whole term. There can be risky if, after the funding from loan, the cash flows of revenue emerge only later or to a smaller extent than it has been planned it and it would be required to meet the liabilities. Occasionally, the company is forced to finance the repayment partly or totally from cash flows of the former business operation. Before borrowing, at choosing the period and frequency of the expected repayments the decision-makers have to calculate with the later cash flows flowing in and out, they have to think whether they will have enough revenue for ensuring the production costs as well as the payment of instalment, the interest of which will presumably burden the result of enterprise significantly. (Rózsa et al, 2005) The extent of interest is an important viewpoint when selecting among the credit facilities. Beyond the loans with market interest, there is an opportunity to borrow a subsidised loan as well. Availability and conditions of subsidised loans often change, the current possibilities should be followed with attention.

Aim of financial controlling is to determine and reach the corporate financial goals and to establish the financial decisions leading to the goals. From the set of corporate financial goals, the stable liquidity and solvency, the need of money and the cash collateral, keeping the cash sources and cash utilizations in consonance are ones of the most important things (Sinkovics, 2002).

Next, by means of model calculation, the authors examine if the company does not have own sources being enough for the development planned then what decision-making and considering tasks the managers have in case of selection among the

credit facilities. Can they borrow a loan with equal or variable instalment, for short or long term?

3. Scheduling the repayment of instalments

A loan schedule is made during the presentation of application for credit when the financial manager can face in what intervals and in what amount the debt shall be repaid. The company can choose from two opportunities. In one respect, he/she can choose that the amount of loan will be paid in equal intervals with equal payment of principal but the amount of interest will change in every date of payment. On the other hand, he/she can decide that the loan will be paid with equal instalment in every credit paying period. At the same time, it shall make a decision about paying the debt in short or long term. Advantages and disadvantages of these two types will be outlined in the following.

3.1. Borrowing for short term

At determining the conditions, the authors have tried to take the current market conditions into consideration. Smaller or greater differences have been experienced in case of the credit facilities, loan packages, terms and conditions announced by the financial institutions. At determining the conditions, the authors have dispensed with the following questions. What activity does the enterprise perform? Which target group is affected by the given loan package? Is the loan for current assets or investments? Does the funding need small or big amount? Is the loan fixed interest or variable interest? For the sake of simplicity, the development of amount of instalment as well as the development of rate of interest and principal payment are examined in case of borrowing HUF 20 million HUF for 2- and 10-year term with 6.6% APR (annual percentage rate). For the sake of easier clarity, the payment is performed quarterly in the first case and it is performed annually in case of the 10-year term.

In case of both forms, the interest is composed of several factors. In one respect, it is based on the terms and conditions of interests announced by the banks which is about 3-5% now. And it is modified by BUBOR which is not other than Budapest interbank borrowing offered rate. Its extent is 1.8% per month considering the state of September in 2017. The handling charges can be demanded from the customer in two ways. In one respect, in one instalment which means that the customer pays an amount determined by the Bank before the payment in full at time of disbursement which means a source withdrawal at starting the investment. On the other hand, it can be performed in such way that the handling charge is part of the amount of bank interest. During the calculation, the authors have built the interest, handling and other bank charges in the instalment, these ones are present as fees charging the loan during the whole term. During the analysis, these one are not separated, are handled jointly thus the annual percentage rate (APR) is 6.6%. Program Microsoft Excel 2010 was used for the model calculations. Table 1 contains the schedule of loan with equal repayment of principal but quarterly different instalment.

Table 1: Schedule of loan with equal repayment of principal (T HUF)

Quarter	Balance of principal	Repayment of principal	Interest repayment	Instalment
1.	20 000	2 500	330	2 830
2.	17 500	2 500	289	2 789
3.	15 000	2 500	248	2 748
4.	12 500	2 500	206	2 706
5.	10 000	2 500	165	2 665
6.	7 500	2 500	124	2 624
7.	5 000	2 500	83	2 583
8.	2 500	2 500	41	2 541
Total	20 000		1 485	21 485

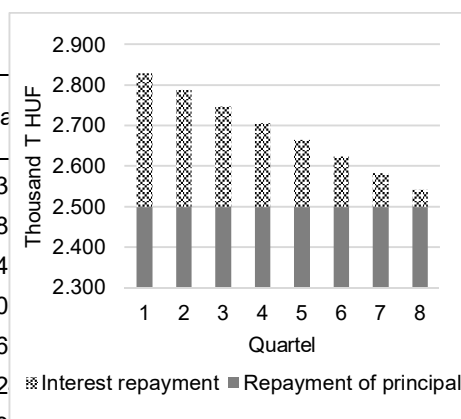


Figure 1: Composition of instalment in case of equal payment of principal

The authors also examined the other possibility when the enterprise has to pay the loan borrowed and its interest undertaken with equal instalment quarterly. They have stated the equal amount of instalment by time value calculation and determining the present value of annuity. Annuity ensures cash flow in equal amount, in equal intervals during a period determined. Considering its direction, the authors distinguish the present value and future value of annuity. The equal amount of instalment is determined by the present value of annuity, the relation of which is:

$$PVAN = \frac{C}{r} - \frac{C}{r} \frac{1}{(1+r)^n} = C \left[\frac{1}{r} - \frac{1}{r(1+r)^n} \right]$$

Where:

PVAN = present value of annuity

C = equal amount of cash flows payable

r = interest rate

n = interest rate time (year, month, day)

A special case of annuity is when the cash flows are repeated in equal intervals. Calculation of instalment of loans is most often performed by means of it. By the method of annuity, the interest and principal content of instalment and their changes can be determined.

Within instalment, the value of interest- and principal payment changes by intervals. Based on data of Table 2, it can be seen that the amount of instalment is thousand HUF 2 689 in every quarter, in which the value of principal payment continuously increases. This reduces the balance of principal so the due interest payment liability decreases from period to period.

Table 2: Schedule of loan with equal instalment (T HUF)

Quarter	Principal outstanding	Interest repayment	Payment of principal	A in
1	20 000	330	2 359	2
2	17 641	291	2 398	2
3	15 243	252	2 438	2
4	12 805	211	2 478	2
5	10 327	170	2 519	2
6	7 808	129	2 560	2
7	5 248	87	2 603	2
8	2 646	44	2 646	2
Total		1 513	20000	21 513

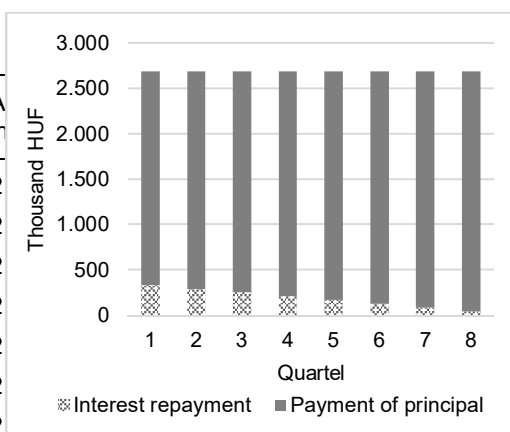


Figure 2. Development of amount of principal and interest repayments in case of equal instalment

The highest amount of interest and the lowest amount of principal payment are in the first year. From year to year, the amount of interest as well as its ratio will decrease within the instalment because the payment of principal will continuously reduce the amount of credit outstanding. In this case, the total interest payable is thousand HUF 1513 which is almost thousand HUF 28 more than in the previous case. This difference results from the dissimilar composition of instalment. In case of equal repayment, Figure 2 demonstrates the development of amount and rate of the principal payment and interest.

3.2. Borrowing for long term

Next, the repayment is carried out yearly during a 10-year term, the authors have not calculated with grace period and APR is 6.6% per year according to the above. Table 4 shows the conditions of loan having 10-year term.

First, the authors examine the development of equal payment of principal if the payment is performed once a year. Based on data Table 3, it can be seen that the annual repayment of principal is HUF 2 million per annum due to the increase of term and payment regularity. The liability of interest payment decreases from year to year because the amount of principal continuously decreases as well. However, the amount of interest to be paid during 10 years is much higher, thousand HUF 7 260, than in case of a 2-year term. In this case, the authors have calculated the amount of interest with an annual 6.6% while, in case of a 2-year quarterly repayment, only a 1.65-percent time-proportion interest rate has been determined.

Table 3 illustrates well that the interest payment liability continuously decreases in case of equal principal payment, this is only HUF 132 thousand in the last year. The instalment decreases from HUF 1.66 million of the first year to HUF 3 320 thousand by the 10th year. The payment is a big burden for the company furring the first years but it decreases from year to year and thus sources can be released which can be

used in other areas and can contribute to the improvement of financial and income position of the company.

Table 3: Schedule of long-term loan in case of equal payment of principal (Thousand HUF)

Years	Balance of principal	Repayment of principal	Interest repayment	Instalment
1.	20 000	2 000	1 320	3 320
2.	18 000	2 000	1 188	3 188
3.	16 000	2 000	1 056	3 056
4.	14 000	2 000	924	2 924
5.	12 000	2 000	792	2 792
6.	10 000	2 000	660	2 660
7.	8 000	2 000	528	2 528
8.	6 000	2 000	396	2 396
9.	4 000	2 000	264	2 264
10.	2 000	2 000	132	2 132
Total	20 000	20 000	7 260	27 260

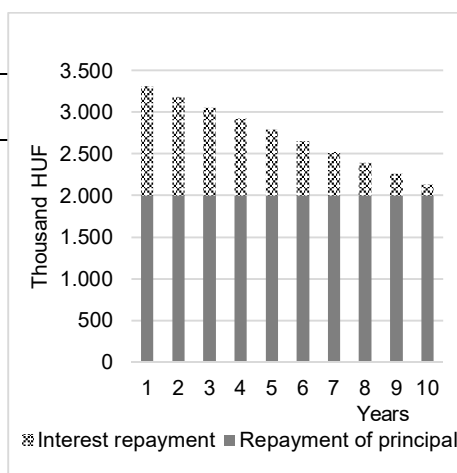


Figure 3: Composition of instalment in case of equal payment of principal

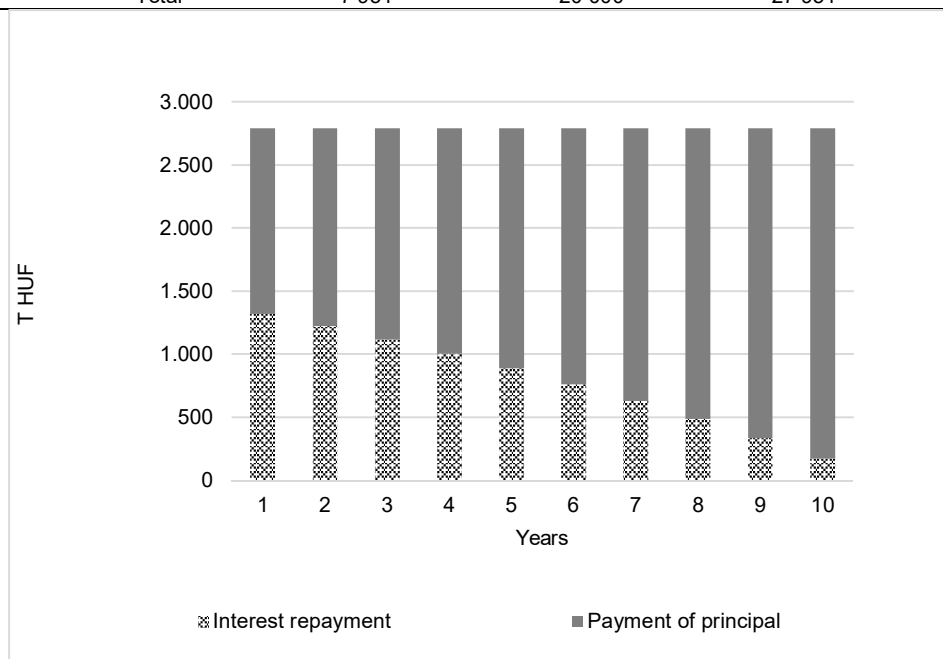
Insofar as the equal instalment is chosen, the payment liability will be initially lower, almost HUF 2.8 thousand, but more interests will be paid in total. The total interest payment liability is almost HUF 7 951 thousand (Table 4). During the years, this means a significant withdrawal of sources for the company, the enterprise has to solve it from the operating profit, and this principal cannot be spent on development in other areas. Already in the planning phase of borrowing, the financial controller has to consider whether he will be able to keep the demand for liquid assets, cash flow in balance with the expected sources for the long term.

Based on Figure 4, it can be stated that the amount and rate of interest- and principal payment move oppositely during the term. One of the characteristics of the long term loan is that the instalment consists of interests mostly during the initial period. They say that only the interest is paid, the balance of principal slowly diminishes. Attention shall be paid to that, in one respect, the external sources do not causes liquidity problems for the company during the long term. On the other hand, the natural endeavour of investor is that his/her sources will be refunded through the investment (Bélyácz, 2009)

At determining the conditions, the authors have calculated with a 6.6-percent APR value in all cases. People live in information society, decisions should be made with caution because there would occasionally be significant differences between the interest rates announced by the financial institutions. They have to strive to involve the cheapest external source, taking the improvement of profitability and liquidity of the company into consideration.

Table 4: Schedule of long term in case of equal amount of instalment (T HUF)

Years	Balance of principal	Interest repayment	Payment of principal	Annual instalment
1	20 000	1 320	1 475	2 795
2	18 525	1 223	1 572	2 795
3	16 952	1 119	1 676	2 795
4	15 276	1 008	1 787	2 795
5	13 489	890	1 905	2 795
6	11 584	765	2 031	2 795
7	9 554	631	2 165	2 795
8	7 389	488	2 307	2 795
9	5 082	335	2 460	2 795
10	2 622	173	2 622	2 795
Total		7 951	20 000	27 951

**Figure 4:** Development of amount of principal and interest repayments in case of equal instalment

Summary

When starting and operating the business, an enterprise needs money to purchase machinery, equipment, materials and other assets in order to produce. The financial resources necessary for investment and development may come from own resources, national or EU grant funds, other external resources and combination of these ones. If there are not sufficient own resources available, loan can be requested from one or other credit institutions. However, an indispensable condition of obtaining the loan is that the borrower shall be creditworthy and shall meet the criteria of debtor's credit rating. But it can also happen that an enterprise possesses the money necessary for purchasing an asset and yet decides to choose another funding form because its cost is lower than the cost which can be achieved elsewhere in case of equity investment.

Above, the authors have presented only few possibilities for applying external sources but it is required to know that the abilities and opportunities are different. Therefore, by considering the external (social, economic, geographical) and internal influencing factors (size of company, scope of activity, technology, corporate organization etc.), the controlling system shall be elaborated and customized and, by means of it, such information should be provided for the management that, in case of a high-profile decision, such as borrowing, the risk and uncertainty will be minimized (Hanyecz, 2011).

Both types of loan payment have advantages and disadvantages. Insofar as the loan is paid back with equal principal payment then the instalment is relatively higher at the beginning of the period and it decreases continuously during the period after the development when the production and capacity utilization are still low. In this case, the repayment is a bigger burden for the enterprise. However, it belongs to the advantages when the production and capacity utilization already materialize to a greater extent than the enterprise shall spent much less on the instalment, the cash resulting from revenue can be used in other areas.

In case of an equal instalment, it would mean equal burden for the enterprise in every period. In this case, the interest load means a much higher cash outflow but the balance of principal decreases from year to year. However, its disadvantage is that the rate of interest within the instalment is high in the initial periods and it damages the corporate profitability in the long term.

During the financing of developmental decisions, the leaders of company shall keep in mind that the loan borrowed and its interests should be refunded from the net cash flows of investment.

Evaluating the financial position of enterprise is an important task for the internal stakeholders because their present and future position is largely limited by their load bearing capacity. Essential task of the liquidity management, also of the financial controller, is to avoid the corporate insolvency. The effective liquidity management ensures the continuous operation of company but it simultaneously allows of earning larger profitability with smaller expenses. Conclusion of Tarnóczy was that the corporate capital structure i.e. the extent of availing external capital is subject to the income situation of enterprise. Generally, it is worth availing external capital if, by using it, such a yield on assets can be reached which is larger than its cost (Tarnóczy et al, 2010)

Short term or long term loans can be chosen but, before choosing, it should be examined whether the cash flows originating from the normal business operation and development are sources enough for keeping the production at an appropriate level and, indeed for increasing it and, simultaneously, whether the company is able to fulfil the due payment liabilities. If yes then a good decision has been made, the financial manager serves the growth and increment of company.

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ANALYSIS OF THE NOTES ON THE ACCOUNTS OF COMPANIES CARRYING OUT INFORMATION TECHNOLOGY SERVICES

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Abstract: *In the globalized and accelerated world of our time, competition amongst enterprises has become much more intense. In this world, information, knowledge and promptness are of paramount importance for decision-making. This means that challenges can only be met by companies that possess the necessary information and are able to convert it rapidly into organisational knowledge. Annual accounting statements are an important source of information within business relations amongst companies. However, it should be noted that due to their aggregate nature, the necessary information and through that, the necessary knowledge can only be obtained from the two fundamental parts of the annual statements (balance sheet and profit and loss account,) if the third part of the statement (the notes on the account) contains the textual and qualitative information that contributes to the more comprehensive interpretation of the other two parts of the annual statement. Without notes on the accounts, which possess adequate information, effective utilisation of the balance sheet and profit and loss account might be problematic. It is also to be pointed out decision-making based on inadequate knowledge further increases economic risks that are already high. However, annual statements should help reduce risks through more established decision-making. In our research, we examine whether the notes on the accounts of companies include the information, which could help obtain necessary financial knowledge concerning the partner companies. For the analyses, we used the notes on the accounts of companies, which have information-technology services (Hungarian NACE No. 62) as their main line of business. The analyses were carried out by means of various packages of the R statistical system. By means of text mining, we analyse the extent to which the notes on the accounts provide the necessary information that would be indispensable for the proper interpretation of the balance sheet and the profit and loss account. The scope of this information is also regulated by the Accounting Act. In present study, the notes on the accounts of 8,226 companies are analysed. The content of the notes on the accounts is analysed for each type of company and annual statement, looking for correlation between the two aspects and the notes on the accounts.*

Keywords: *information-technology; text mining; information; annual statement.*

JEL Classification: M41.

1. Introduction

In the globalized and accelerated world of our time, competition amongst enterprises has become much more intense. In this world, information, knowledge and promptness are of paramount importance for decision-making. Being well informed is a fundamental requirement for a company to function successfully. This means that challenges can only be met by companies that possess the necessary information and are able to convert it rapidly into organisational knowledge. In order for companies to be informed and to be well assessed and evaluated, a reliable and unified information system is required for both the given business and its environment. This requirement is met by the accounting system of companies, which is stipulated by the Act C of 2000 on Accounting. Accounting approached from one side is an internal information system, while observing it from another perspective its main task is to provide information towards external environment in accordance with the legal requirements (Kerezsi, 2017). The Accounting Act defines bookkeeping and reporting obligations of entities to which it applies, the principles to be obligatory enforced during bookkeeping and the assembly of annual accounts, the rules that are built upon these principles, and obligations regarding publication, disclosure and auditing (Böcskei, 2014). These ensure that market participants are provided with reliable information that reflects a realistic image about the wealth situation, assets and liabilities and their changes, financial and profitability situation, and plans of the company. (Musinszki, 2016). It can be seen that the annual accounting statement is an important source of information in business relations between companies. However, it should be noted that due to their aggregate nature, the necessary information and through that the necessary knowledge can only be obtained from the two fundamental parts of the annual statements (balance sheet and profit and loss account) if the third part of the statement (the notes on the account) contains the textual and qualitative information that contributes to the more comprehensive interpretation of the other two part of the annual statement. Without notes on the accounts, which possess adequate information, effective utilisation of the balance sheet and profit and loss account might be problematic. In his study, Kántor (2016) discusses that there are still businesses which introduce certain values of the balance sheet and profit and loss account inadequately (if they do at all), because they are afraid that their competitors might find out certain facts and information about their activity and efforts. However, according to the effective legal provisions, preparation of the notes on the accounts – aside from certain components – is compulsory, and its content in terms of data and information is regulated. Therefore, sufficient time and energy should be dedicated to its elaboration and the publication of relevant information by both the management and the expert(s) carrying out bookkeeping tasks.

The notes on the accounts does not have a legally stipulated structure, similar to that of the balance sheet and profit and loss account, therefore the same structure and content is rather rare to come across. However, it consists of three major parts in every case (Filyó, 2014):

- In the scope of the general part, legal environment (basic data of the entrepreneur: primary activity, company seat, company premises, owners, management, representatives, registered accountant, selected auditor), and major characteristics of the accounting policy (aim and type of the statement,

accounting date, business year, chosen type of balance sheet and profit and loss account; applied appreciation procedures, exchange rate, accounting currency) are introduced.

- The specific part includes indexes describing the wealth, financial and profitability situation (distribution and dynamic ratios), investment chart, details of the changes of own equity, introduction of the occurrence of accruals, and the deduction of the base of corporate income tax.
- The informative part includes the number of employees, the total amount of remuneration payable for the financial year to the executive officers, members of the board of directors and the supervisory board, the amount of advances and loans disbursed, the guarantees given on their behalf, and the total pension liability for the former executive officers, members of the board of directors and supervisory board. This part also includes the situation of possible lawsuits, amount of repurchased stocks and shares, and incomparable data (e.g. if the balance sheet is prepared in different variations in two consecutive business years) and the change of the assessment of assets and liabilities.

It is also to be pointed out that decision-making based on inadequate knowledge further increases economic risks that are already high. However, annual statements should help reduce risks through more established decision-making. In our research, we examine – through the analysis of an economic sector – to what extent the notes on the accounts of companies provide the information, which are absolutely indispensable for the satisfactory interpretation of the balance sheet and profit and loss account.

2. Materials and method

For the analyses, we used the notes on the accounts of companies, which have information-technology services (Hungarian NACE No. 62) as their main line of business. The database includes enterprises, which published an annual statement concerning the year of 2016. This means that the survey involved 11,476 companies, 8,858 of which had notes on the accounts (the rest of the organizations either did not prepare notes on the accounts or were obliged to prepare a statement of micro-enterprises, where notes on the account is not relevant). We managed to process the notes on the accounts of 8,226 (92.87%) of the above companies. The analyses were carried out by means of various packages of the R statistical system. By means of text mining, we analyse the extent to which the notes on the accounts provide the necessary information that would be indispensable for the proper interpretation of the balance sheet and the profit and loss account.

Over the past two decades, text mining has gained more and more interest in both academic areas and in business intelligence applications. Text mining means the ability to acquire useful and novel knowledge, which could influence decision-making of the involved parties through processing large amounts of unstructured text. There is another definition, according to which, text mining is a processing procedure in the course of which a suitable insight into the text can be obtained (Kwartler, 2017). More and more text-like databases are created in computer readable formats that require rapid processing. Text mining is an interdisciplinary research field that utilizes various tools of computer science, linguistics and statistics (Feinerer, 2008).

Every quantitative research, such as science fields dealing with business area, uses statistical methods, which require the gathering of structured information (Munzert et al., 2014). The 'tm' software package of the R statistical system provides an infrastructure that allows users to work efficiently with texts, the related metadata, and to transform texts into structured representations where the necessary statistical methods can finally be applied (Feinerer et al., 2008). The 'tm' package also allows users to process texts of different formats (txt, doc, pdf, csv, etc.). Analysis of the texts intended for examination requires the execution of tasks that may influence the accuracy, validity and findings of the text analysis procedure, as well as the techniques used for the analysis (Welbers et al., 2017).

3. Results

Notes of the accounts of the involved 8,226 enterprises were analysed from the aspect of their type of business and annual statement (Table 1). According to the analysis by business type, it can be established that 195 enterprises did not indicate their type of business in their notes on the accounts, while 70.86% of the involved companies are limited liability companies (Ltd.), 26% are limited partnerships (Lp.) and 7.53% are public limited companies (Plc.) within the sample. In terms of the type of annual statement, 1,056 business entities (12.8%) did not indicate in their notes on the accounts what type of statement they prepared, while 6,432 companies (78.2%) prepared simplified annual statements and 738 companies (9%) prepared normal annual accounts during the analysed period.

Table 1: Number of the analysed notes on the accounts by business type and type of annual statement (unit: pcs.)

Business type	Type of annual statement			
	Not specified	Simplified annual statement	Annual statement	Total
Not specified	45	128	22	195
Lp.	271	1 696	173	2 140
Ltd.	736	4 563	530	5 829
Plc.	4	45	13	62
Total	1 056	6 432	738	8 226

Source: own calculation

Act C of 2000 on Accounting stipulates the notes on the account shall include numeric data and textual information which

- is stipulated by the Accounting Act,
- are required – beyond the information contained by the balance sheet and the profit and loss account – for the reliable and real presentation of the business results of the enterprise in its financial and wealth situation towards the owners, investors and creditors.

The Accounting Act includes but does not classify the information, which must be introduced in the scope of the notes on the accounts. Information regarding the

desired information content of the notes on the accounts and related to certain parts of it are only loosely listed within the Accounting Act. In the case of the annual statement and for the sake of practical utilisation, this information are logical to be classified into three major parts. Thus, the following are distinguished:

- General part, which is mostly intended to serve the better understanding of the data included by the annual statement,
- Informative part, which can be linked to the operation of the enterprise and which supports the better comprehension of the situation of the company,
- Specific part, where the relevant information is linked to the numerical data represented by the balance sheet and profit and loss account and introduces their details and explanations (KÁNTOR, 2016).

Present study deals with demonstrating the appearance of the information belonging to the general part within the notes on the account, in the case of companies, which have information technology services as their primary line of business (Table 2) in total and broken down by the type of annual statement. As mentioned above, The Accounting Act does not compulsorily stipulate for business entities to include a so-called "General part" in their notes on the accounts, but it does require them to include information, which serve the better understanding of data included by the annual statement. We examined how many of the analysed business entities still used the term "general part" in their notes on the accounts. Within the analysed sample, 66.95% did not include, and 33.05% (2719 pcs.) included separate general parts within the notes on the accounts. This is not necessarily a problem, since as discussed above, this is not a compulsory component of the notes on the accounts. Additional stipulations of the Accounting Act are as follows:

- The notes on the accounts shall include the name of the enterprise, the exact address and contact information of its company seat and website if the enterprise publishes its annual statement and the related business report online as well. 5,926 of 8,226 organizations indicated their exact company seat address, which is 72% of the sample. The name of the website was included in 298 notes on the accounts, but there is no information about the enterprises, which publish their annual statements through their website as well.
- The entrepreneur is required to introduce the actual wealth, financial and income situation of the company as well as the composition of assets and liabilities
 - Information regarding the wealth situation was indicated by 3,186 business entities in their notes on the accounts, which is 38.7% of the sample.
 - Information regarding the financial situation was presented by 4,209 enterprises in their notes on the accounts, which represents 51.16%.
 - The profitability situation was detailed by 4,583 enterprises, which is 55.71% of the sample.
- We found the composition of assets in 769, while that of liabilities in 858 notes on the accounts.

Table 2: Appearance of elements belonging to the general part within the analysed notes on the accounts (pcs.)

Searched term	Total		Type of statement					
			Not specified		Simplified annual statement		Annual statement	
Analysed companies	8 226	100%	1056	100%	6 432	100%	738	100%
General part	2 719	33%	145	14%	2 337	36%	237	32%
Company seat	5 926	72%	521	49%	4 889	76%	516	70%
Website	298	4%	8	0,8%	254	4%	36	5%
Wealth situation	3 186	39%	227	21%	2 732	42%	227	31%
Financial situation	4 209	51%	318	30%	3 467	54%	424	57%
Profitability situation	4 583	56%	422	40%	3 796	59%	365	49%
Composition of assets	769	9%	75	7%	608	9%	86	12%
Composition of liabilities	858	10%	73	7%	695	11%	90	12%

Source: own analysis

- Determining elements of the accounting policy and the changes, the effect of these changes on financial results (Table 3).
 - The term accounting policy appeared in the notes on the accounts of 5,848 business entities, which is 71% of the involved enterprises.
- It is compulsory for the entrepreneur to introduce the system of rules applied for the elaboration of the statement, its major properties, the applied appreciation procedures and method and frequency of depreciation determined in the scope of the accounting policy.
 - Appreciation procedures appeared in 2,328 notes on the accounts, which means a 28% share.
 - The method of depreciation was introduced by the business entities in 40% of the notes and only 6% declared the frequency of accounting depreciation at the company.
- The notes on the accounts shall introduce the recommendation of utilising after-tax profit, which can be found in 508 of the analysed 8,226 notes on the accounts; this is 6% of the sample.
- Cash-flow statement concerning the previous and current year and including the factors, which affect the change of financial assets (prepared according to the annex of the Accounting Act) (Table 4). According to the Accounting Act, a cash-flow statement shall be prepared only by business entities for which it is compulsory to prepare annual statements. As seen in the table, only 189 of the 8,226 notes on the accounts include a cash-flow statement (2.3%). Table 1 indicated that 9% of the enterprises (738) prepared annual statements, which have cash-flow statement as a compulsory part. This means, that 6-7% of the business entities preparing

annual statements did not have a cash-flow statement, however it would have been compulsory for them.

Table 3: Appearance of the elements belonging to the general part in the case of the analysed notes on the accounts (pcs.)

Searched term	Total		Type of statement					
			Not specified		Simplified annual statement		Annual statement	
Analysed companies	8 226	100%	1 056	100%	6 432	100%	738	100%
Accounting policy	5 848	71%	644	61%	4 721	73%	483	65%
Appreciation procedures	2 328	28%	225	21%	1 926	30%	177	24%
Accounting of depreciation	3 294	40%	333	32%	2 648	41%	313	42%
Frequency of accounting depreciation	457	6%	99	9%	330	5%	28	4%
Utilisation of after-tax profit	508	6%	45	4%	416	6%	47	6%

Source: own analysis

Table 4: Appearance of the cash-flow statement in the analysed notes on the accounts (pcs.)

Type of statement	Cash flow statement		
	Yes	No	Total
Not specified	1 044	12	1 056
Simplified annual statement	6 331	101	6 432
Annual statement	662	76	738
Total	8 037	189	8 226

Source: own analysis

4. Conclusions

As Act C of 2000 on Accounting specifies, „It is indispensable for the functioning of market economy, that objective information is available about the wealth, financial and income situation of enterprises, non-profit organizations and other business entities in order to support the decision-making of market actors.” The notes on the accounts being a part of the annual statement, serves this purpose. According to the above, it can be established that the information content of the notes on the accounts would be crucial for the complex understanding of the annual statements for different market players and stakeholders as its users. For the successful operation of a business entity, awareness is a key factor, while information, knowledge and rapidity are also important in terms of decision-making. Decision-making based on

inadequate knowledge further increases economic risks that are already high. However, annual statements should help reduce risks through more established decision-making, because notes on the accounts, which are equipped with the required information, would ensure the proper level of familiarity of market players. In the case of the analysed 8,226 notes on the accounts, it can be established that there were deficiencies in terms of the legal requirements concerning of their general parts. General information indicated by the analysed business entities are not entirely in conformity with the stipulations of the Accounting Act, therefore the obligation of information transfer related to the reliable and realistic image of their operation is not fulfilled in their case.

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NEW DIMENSIONS OF MANAGERIAL ACCOUNTING AND ITS INFLUENCES IN AN UNSTABLE ENVIRONMENT

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Abstract: *The industrial products market comprises a complex area with high dynamics in terms of technology evolution along with market requirements. Thus, the success of economic activities depends on the capacity of adaptation of the technological process to the needs of the market, being conditioned by both the quality of the products obtained and their diversity. Because of this, it is very important to organize a very efficient accounting and control system and costing that can be considered as a useful decision-making tool and to allow effective management of the economic entity. Accounting is a language of an economic activity such as the process of identifying, measuring and communicating economic information to enable its users to make judgments and make informed decisions. The role of an entity's accounting is to reflect financial information on economic and financial activity for use by internal information users, i.e. managers, so that they can make accurate decisions about future activities. Financial accounting provides information to external users and is subject to standards and norms of the current legislation. Therefore, according to the information presented by the financial accounting, it relates to the past, relying mainly on accounting estimates. A supplementary accounting component is management (or managerial) accounting, which mainly addresses internal financial information users and contains detailed information on the determination of the outcome of the financial year, both at the level of a production process and at the whole activity of the entity.). Due to this fact, the purpose of this article is to highlight the role of managerial accounting, which, as defined in the literature of accounting, i.e. internal or analytical, is increasingly approaching performance measurement, thus finding answers for the future and what will happen due to the tools for controlling the microeconomic processes in the economic entities. The article analyses the evolution of managerial accounting from traditional costing information, which no longer provided relevant information in relation to managers' information requirements, to new guidelines (ABC method, BSC, etc.) after 1987, when the issue of managing performance and creating added value is a milestone in its evolution. Therefore, the changes in management accounting influenced managerial decisions in improving performance management methods and identifying mutations that occurred in an unstable environment in all areas of economic life, diversification being dictated by permanent changes responding to the structure of the population's needs in line with its needs, its degree of civilization and culture, with the aim of exploring cost-based information and applying integrated methods of strategic managerial accounting. There is no doubt a need in this area. Taking into account the research theme "New Dimensions of*

Management Accounting and Impacts on Performance in an Unstable Environment", in this case the research focused on a theoretical and empirical approach.

Keywords: *financial accounting; managerial accounting; innovations of managerial accounting; lighting industry.*

JEL Classification: *M41.*

Introduction:

"Managing an entity means, on the one hand, knowing the current activity and intervening with operative decisions in its direction, and on the other hand, prefigure the future evolution and elaborate prognoses that outline the prospective development directions of that entities "(Briciu S., Managerial Accounting, Theoretical and Practical Aspects, Economic Publishing House, Bucharest 2006, p.9). "Today, most policy decisions contain a scientific and technological dimension. Therefore, they must be based on transparent and accountable opinions, based on ethical research. In this framework, it is necessary to strengthen the ethical bases of scientific and technological research, to assess the risks inherent to progress and to manage it responsibly in the light of the lessons of history "(Niculescu M., Epistemology, Interdisciplinary Perspective, Bibliotheca Publishing House, Târgoviște, p.25) "Scientific epistemology is considered by Piaget as the theory of scientific knowledge. This refers to the systematic study of investigation and knowledge processes inherent in scientific thinking, yet without dissociating itself from the philosophical theory of knowledge in general. Forming a truly scientific approach requires putting issues in such a way that they can be solved by different teams of researchers, regardless of their personal philosophy "(Niculescu M., Op. Cit., P. 38).

1. Research methodology

The research normally consists of four parts: reviewing the literature; the development of theories; testing theories and reflecting and integrating notions. The research normally consists of four parts: reviewing the literature; the development of theories; testing theories and reflecting and integrating notions. Taking into consideration the topic we approached, the research was aimed at a theoretical approach, it aimed at presenting a synthesis of the specialized literature existing in the field. In the first stage, the research aimed at presenting a synthesis of the existing literature in the field, and in this respect we focused our research work on documentation on the past, the present and the perspectives of managerial accounting in the world and in our country. Initially, we wanted to approach a strictly qualitative research, but we came to the conclusion that such research would limit the relevance and validity of research approaches and results, and expanded research methods and quantitative methods to exemplify the phenomena they had place in managerial accounting starting from history and analyzing the causes and effect of these phenomena.

2. Revision of the specialized literature

Analyzing the literature, the existence of a cost accounting in ancient Egypt, the year 3000 BC, in order to determine the taxes on the crops, thus the industrial phenomena regarding the management methods, was preceded by the large agricultural holdings. According to the writings of P. Garner (1947) and M. Chatfield (1971), the Medici family, who were industrialists holding a textile enterprise, first noted the importance of costs (Garner, P., (1947), Historical Development of Cost Accounting, www.acct.tamu.edu/giroux/history.html) Significant cost accounting was made in England when the first industrial communities were formed, when trying to distribute their products, it creates an increase in competition. Another example relevant to highlighting cost elements was highlighted in 1577, when the Fugger family had evidence of the costs of one of the mines held in an account called "Mine and Melting Mill", which kept records of material expenses, salaries, and the other expenditures are separately highlighted [(P. Garner (1947) and M. Chatfield (1971)] (Chatfield M., (1971), The Origins of Cost Accounting, Management Accounting). between 1760 and 1800 there was an attempt to reflect costs more accurately without explaining their calculation techniques, only the elements that were included in the cost, and for the first time indirect costs were shown in the cost, meaning that in each product part of the administrative and sales outlay was included. The first budget was also drawn up by the Crown of Spain, contracting a credit, to highlight whether they could continue doing business under these conditions. With this exception, we can conclude that costing was primary. (Pietro-Moreno, Begona, M., (2001), Cost accounting in eighteen century Spain: The Rozal Textile factory of Ezcaray, Accounting History). The first modern form that required internal accounting information to make decisions and exercise control was recorded around 1800 in the UK and US companies whose technology had been mechanized. Then, for the first time, direct cost accounts for wage highlighting began to appear, and indirect cost accounts needed to convert raw material into finished products, as Thom Sohns (1981, p.511) (Chirata C., Dumitrana M., Coordinators, Management Accounting & Management Control, 2nd Edition, University Publishing House, Bucharest, 2008. pg.15). The general cost concept is a relatively recent date, it has emerged in the practice of economic entities and in the nineteenth-century accounting work as a result of the industrial revolution, but it has been used in a relatively narrower manner since the 17th century. Not only the industrial revolution led to the generation of this concept but also the competition between the economic entities led to its development in a significant manner. After 1880, the term "scientific management" was introduced by G. Giroux, when standards are already being studied for the quantity of materials and the way they work. Lucia Paciolo, after more than half a century, proposes separate records for each cost item involved in the production process. P. Garner (1947) describes the first step in Littleton's opinion (1933, p. 32) (Fleischman, R, Tyson, Th., (1993), Cost Accounting during the Industrial Revolution: Economic History Review,) "accounting is one of the many consequences of the industrial revolution." More recent studies have attempted to demonstrate the existence of previous management accounts following the analysis of enterprise archives at international level, such as Fleischman and Parker (2001), Gutierrez (2005) (Gutierrez, F., (2005), Cost and Management Accounting in the Pre-Industrial Revolution of Spain, Accounting Historians Journal). In the case of

Romania, the research is based exclusively on the analysis of the specialized literature; in our science we have not studied the archives of the economic entities whose results are to be published.

3. Evolution of Managerial Accounting: past to present and perspectives

As mentioned in the previous paragraph, research has been conducted internationally based on both the theoretical documentation on various costing methodologies and the information stored in the archives of economic entities. The existence of managerial accounting from ancient Egypt, 3000 BC, appears to be able to determine agricultural taxes, so the industrial phenomena in terms of costing were preceded by large farm holdings. P. Garner (1947) describes that the first significant step in cost accounting was made in England when the first industrial communities were formed. In 1577, when the Fugger family had evidence of the costs incurred in one of the mines held, in an account called "Mine and Melting Mill", which kept records of material expenses, salary expenses, and the other expenses were separately recorded [(P. Garner (1947) and M. Chatfield (1971)]. On the study of the archives it was found that between 1760 and 1800 there was an attempt to reflect more accurately the costs without explaining their calculation techniques, only the elements that were included in the cost, and for the first time indirect costs were highlighted in the cost, in the sense that each product included parts of the value of the administrative and selling expenses, with the exception that we could conclude that the cost was primary evidence, the first modern form requiring accounting information of internal nature for decision-making and exercise of control was recorded in the year 1800 in the companies of England and the USA, once with mechanization. The general cost concept is a relatively recent date, it has emerged in the practice of economic entities and in the 19th century accounting work as a result of industrial revolution. Not only the industrial revolution led to the generation of this concept but also the competition between the economic entities led to its development in a significant manner. After 1880, the term "scientific management" was introduced by G. Giroux, when standards are already being studied for the quantity of materials and the way they work. Since 1903, decision-making has emerged through the introduction of the ROI (Rate of Return) indicator to measure performance. In 1910, Alexander Hamilton Church publishes the paper "Cost Factors in Production Costing," which introduces notions of loss, directing costs and the THM method, thus integrating accounting into management dynamics. According to the IFAC, the period before the first managerial accounting revolution is known as the "classical" period and ended around the 1950s. Robles and Robles noted that accounting contributions during this period (especially from 1820 to 1885) were minor. Several managerial accounting practices have developed as a result of pioneering by Du Pont (1903) and General Motors (1920). Managerial accounting priority has moved to provide information for planning and control purposes between the 1950s and 1980s. In Table 1 we will present the managerial accounting innovations in the period 1950-1980:

Developments in accounting management practices (Tabara N., Modernization of accounting and management control, TipoMoldova Publishing House, Iași, 2006, p. 38) took place as the development of commodity production and competitive market economy. In the beginning, the market was exclusive of the producer and the role of management accounting is limited to costing. Over time, competition has intensified

due to changes in market position, increased economic power, and technical progress, all of which have influenced the evolution of accounting systems by focusing on the level and cost structure and operational control of them.

Table no.1. Innovations of Managerial Accounting in between 1950 and 1980

1950	1960	1970	1980
<ul style="list-style-type: none"> - Updating cash flows - Total Quality Management (TQM) - Establish an optimal transfer pricing model 	<ul style="list-style-type: none"> - development of information technology - budgeting opportunity costs - budgeting with base zero budget - the decision tree - planning critical steps - objective management 	<ul style="list-style-type: none"> - the information economy - JIT method - portfolio management - planning of material resources - diversification - organizational matrix - repositioning the product 	<ul style="list-style-type: none"> - Cost-per-Activity Method (ABC) - Target Costing Method - Value Added Management - Constraint theory - Vertical integration - Benchmarking technique

Source: Ioan Dan Topor, *New dimensions of the cost information related to the decision making process in the winemaking industry*, University Publishing House, Bucharest, 2014, page 16

According to Table 2, Managerial Accounting encompasses four successive stages:

Table no.2. Evolution of Managerial Accounting and its practices

	Until 1950	1950-1965	1965-1985	1985-1995	După 1995
	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
Period	Determination of full costs and financial control	"Information techniques for planning Decision Analysis and Responsibility Centers "	Reducing resources by applying management techniques	Creating value through efficient and effective use of resources	Organizational innovation by integrating all management positions (turning the national economy into a KBE knowledge base)

Source: own systematization

3.1. Several benchmarks on the emergence of management accounting in Romania

Regarding the emergence and evolution of management accounting in Romania, we will continue to mention two reference periods for this: the evolution of the management accounting before 1949, and the period 1949-1989, when the accounting plan was marked by the socialist mechanism, which generated changes in both the objective and the subjective management accounting. At present, the accounting is managed according to the Accounting Law 82/1991. For management accounting, this aspect is not regulated, and its organization remains at the discretion of each economic entity in accordance with Order 94/2001, which translates into a concealed conception of the full cost concept. The first specialized literature in Romania appeared in 1837 with *Commercial Pravila*, a German translation of *EINEchifor*, and until the twentieth century no descriptions were found regarding the calculation of costs, all the accounting books up then they only presented transaction accounting techniques. Later, *ENEvian* (1947, p. 62) *Evian, IN, (1947), Industrial Accounting, Bucharest*) explains that the capital investment in the enterprise has come to competition and, together with that, this being a reduction in production costs that were only possible with the budget for rational leadership. Also noteworthy is the fact that in Romania, since the first half of the 20th century, both the theoretical and the practical level of delimitation of costs in the antecalculus and postcalculus recorded between estimates and achievements, and the differences were recorded in the accounts Differences by Adding On the basis of the internationally evolved developments in costing, *ENEvian* (1947) presents for the first time in his work entitled "Industrial Accounting" the double account system and the algorithm of budgets.

3.2 Milestones of current accounting

Changes in the political and economic plan since December 1989 were also highlighted in the accounting plan. Thus, Accounting Law 82/1991 appears, and major innovations have been made in the management accounting over the last 20 years. Thus, traditional accounting systems that were oriented towards the past were replaced by forward-looking advanced systems; from the goal of achieving internal efficiency we now focus on efficiency and effectiveness; if in the past managerial accounting has a controlling role and is reported, its role today is to drive, influence decisions and define new strategies; forward management accounting has an internal goal of gaining efficiency, now has an internal and external efficiency goal; In the past, management accounts relate to management at a higher level and are currently being rationalized for teams; management accountants have a style that is formatted according to rules and technical qualities, and they are currently very flexible from an informational point of view. As innovations in management accounting, we refer to ABC, ABM, AM management, Life Cycle Costing (LCC), Cost Method TC, Balanced BS Scorecard and Strategic Managerial Accounting as an integral part of management accounting, and its function in looking for and identifying the possibilities to create value.

4. Cost - as the main tool in assisting managerial decisions

From the previous analysis, both costs and costs are economic indicators with which we can quantify the preparation of management decision-making in an economic entity. Cost is defined as the portion of the sale price of an economic asset that offsets the expenses incurred by it for the production and sale of the good. According to OMFP 1826/2003 it is necessary to determine only three categories of costs related to the business activity of economic entities, namely: at the supply-purchase stage, and sale. The characteristics of the cost concept are: resource consumption, link to achievements, cash-valuation. As we can see, cost and expense concepts are often used together, but it is imperative to be delimited from the perspective of management accounting and managerial accounting. In the economic sciences, we find various definitions of the cost concept: in the specialty literature of Managerial Accounting operating expenses represent the consumption in money expression of the factors of production (labor, money and capital) (Oprea C., Cârstea G. (2003) Management Accounting and Costing, Atlas Press Publishing House, Bucharest). According to the IASB (General Framework of IASB for the Preparation and Presentation of Financial Statements) for the presentation and presentation of financial statements, expenses are decreases in the economic benefits resulting from the increase of a debt or the decrease of an asset under different forms of reimbursement of the owners. From the point of view of the time at which a cost is incurred to achieve a goal, it is highlighted as expense, influencing the determination of the financial result within a certain management interval (Banc MM (2006), Delimitation - Methodological Aspects between Concepts cost and expense, *Oeconomica*, no. 8, vol. 1, pp. 2-6). Costs are only highlighted in production activities, and spending is highlighted in all activities carried out within an economic entity, hence their influence on cash flows. The cost can also be defined in relation to the selling price, being the lower limit of the price without entering the area of losses (Băluță, AV (2005), Management Accounting, Fundamental notions, Romanian Tomorrow Foundation, Bucharest) Considering the previous analysis, we can conclude that all expenses are costs, but not all costs represent expenses, and the notion of expenditure belongs to the area of financial accounting and the notion of cost is found in the sphere of managerial accounting.

5. The importance of the informational system in making managerial decisions

In view of these considerations, it should be noted that managerial accounting uses more advanced techniques than cost calculations, thus covering a far more advanced sphere of action, but in order to meet these requirements, a very solid information system, and a system capable of providing well-grounded data. Thus, it is important to note that both managerial accounting in its entirety and the cost information system are meant to provide in-depth information to support planning and control in order to substantiate decisions, focusing on the cost products and all its activities and functions (Dorina Budugan, Iuliana Georgescu, Cost-Based Decisions in Uncertainty, Scientific Analyzes of Alexandru Ioan Cuza University of Iasi Tom LII / LIII, Economic Sciences 2005/2006). Emery FE (1969) believes that the information produced must meet three criteria (Carmen Veronica Zefinescu, Performance, cost and value decision making, Pro Universitaria Copyright, 2015, p.

9): information is valuable to the manager if it contributes to reduce the uncertainty of the future; additional information is valuable if it can affect that decision; information is valuable if it contributes to a "sensitive" change in the consequences of a decision. From a conceptual point of view, management is different from cost management because it focuses on losses. (Johnson HT, Professors, Customers and Value: Bringing a Global Perspective to Management Accounting Education, Proceedings of the Third Annual Management Accounting Symposium Accounting Association, 1989), and this distinction makes the difference between cost management and management of activities. Analyzing the literature, we found that Bouquin (2004) is of the opinion that the role of managerial accounting is to supplement financial accounting, motivating in this respect that both contribute to the economic functioning of organizations.

6. Managing accounting practices at national and European level

Following the analysis of the specialized literature according to the Order of the Ministry of Public Finance no. 1826/2003, cost calculation is all the work done in an organized form in order to obtain information on the cost of goods, works, services, activities or other objects of calculation. The Anglo-Saxon literature uses the notion of a costing system. Another concept focuses on the processes and techniques used to aggregate and process the costs in order to determine the level and cost structure as accurately as possible, in which case "cost calculation methods" are discussed. This concept prevailed in centralized and super-centralized market economies where "cost and cost calculation" were imposed as distinct scientific discipline (Epuran M., Babaita V., Grosu C., Accounting and Management Control, Economic Publishing House, Bucharest, 1999, p. 175). In fact, most costing techniques have the role of presenting the data in a clear and explicit form in order to control and reduce them in order to develop the various types of decisions.

6.1. Traditional costing systems

There are two main costing method methods: the cost-per-order method and the cost-per-process method. Both methods are found in literature as the cost system on orders and the process bends system. The costing method for orders (MCC) is specific to all economic production entities, where production is based on specific orders issued by customers. The order can be individualized, so it defines a broader set of concepts such as: the product, the product unit, the batch of products, the order size order, the project in which the individualized products are part, any other cost items that can identify the material resources involved and the services used in their production. The ultimate carrier is the product, and the command is the form of scripted organization of the different categories of cost carriers and costs. Batch cost method. The method of calculating batch costs is similar to the cost of orders, the difference in batch production is determined by its size or volume. It is obvious that in this case also indirect costs increase, the cost of production is inversely proportional to the manufactured product. In this case, it is the question of determining the optimum quantity to be manufactured using the Economical Batch Quantity and calculated according to the formula:

$$Q_{ol} = \sqrt{\frac{2AS}{C}}$$

A = the annual quantity required to manufacture the product
S = the parity cost per batch
C = the annual transport cost

Cost method on contract. It is a method that adapts or expands the product cost method used in all contract-based economic entities in order to determine the costs and profit resulting from the implementation of the contract (e.g. the CEH lamp repair contract). The Cost Method by process (MCP) is used in industrial branches with continuous production process in which the outputs of a production process become inputs for the next production process.

6.2 .New methods used in managerial accounting.

Due to the need to support new and increasingly demanding new technology and management processes, with increasing demands, new methods and guidelines of managerial accounting emerged. The emergence of advanced managerial accounting systems was due to the inability of classical systems to respond to the evolution of technological change due to the phenomenon of globalization, which gave new dimensions to the economy and implicitly to business. In the 1960s managerial accounting systems were considered useful for resource efficiency. , Management Control Systems, Homewood, Irwin). Since 1987, systems of modern methods such as ABC, Activity Based Management (ABM), Life Cycle Costs (LCC) cost strategic management (SMC) systems, customer analysis and marketing systems (SMC), MPM-Multiple Performance Measures, Just-in-Time (JTI) and Balanced Scorecard. Due to the emphasis that management accounting places on the quality of customer service, these methods are essential for economic entities to maintain their market position and performance. To be competitive, economic entities need to implement an EMS system that tracks both financial and non-financial indicators. The organizational environment has had to introduce the new information systems, only in this way they can adapt to new technologies, and can transmit effective information to decision-makers. In a decentralized system, the role of the decision-maker is transferred by the person with the necessary knowledge (Matejka M., De Waegenaere A (2000), Organization for Economic Research, Tiburg University, Netherlands).

7. Conclusions.

Efficient approach to a target market and successful market success, whether local, regional, national or international, can be effectively achieved only on the basis of a realistic and well-founded management strategy. For economic entities, the pricing principle behind the strategy is maximizing profits and achieving a higher return on equity, aiming at the best use of capital and attracting the highest possible profit. Achieving a higher market share is possible by attracting as many customers as possible, through competitive prices compared to competitors, and a cost-effective price ratio for the customer. It is obvious that to achieve these goals within economic entities and entities in the production of lighting equipment, it must improve performance by addressing a modern costing system because traditional methods cannot identify the causes of their growth. In order to know the cost of a long trench, we need, in addition to knowing the costs and thinking, to achieve the cost-value torque. Target-Costing Target-Costing allows benefits to be gained through past costing, and most importantly, management accounts by studying profitability and

market positioning. And the ABC method, like all costing methods, has its limits because it deals with the nature of the information, and makes the link between information and decision difficult. Applying the ABC method to performance management provides useful indicators for engaging all the quality of products and services if we ignore its limits. Thus, accounting for economic entities will see major changes, making changes to old costing methods imperative.

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ENTREPRENEURIAL PERFORMANCE ACCOUNTING AND APPROPRIATION OF ENTREPRENEURIAL ABILITY EVALUATION IN FRENCH TRADING SME/VSE.

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Abstract: *The entrepreneur is characterized by the capacity to identify opportunities and entrepreneurship supposes an ability to undertake entrepreneurial activity. This ability is a solution to optimize the evaluation of a company and the skills of the entrepreneur. The issue is to use an operational and yet simple model, accessible to all and that is relevant to all actors susceptible to participate in the funding of companies. Hence, how can the entrepreneur's entrepreneurial ability (EA) be registered in the books of the company in order to guarantee access to funding? Setting up a management or performance audit in SME/VSE depends on important contingent factors. This paper discusses the evaluation of entrepreneurial ability and its integration within trading SME/VSE in France.*

Keywords: *Entrepreneurial Ability; Entrepreneurial Performance Accounting; Management Tool; Appropriation; French; SME/VSE.*

JEL Classification: *M4.*

Introduction

SME/VSE financial statement goals were already under scrutiny more than 30 years ago (Lavigne, 1996; Lacombe & Saboly, 1994; Chapelier, 1994). These papers and ones from the past decade (Page, 1984) demonstrate that the main users of financial statements are owner-managers. In 2002, Lavigne shows that the main objectives of these statements are to: establish or correct goals, decide whether or not to invest, and manage cash flow. The company manager – and his team – will try to arrange results of accounting periods or consider a fiscal optimization through routine handling of inventory, provisions and impairment. Prospective financial statements as found in business plans start from aimed results and are then adapted. On the one hand the manager tries to get funding and the other hand the financier tries to get endorsement by its hierarchy.

From the 80's to the early 2000's corresponds to the time period when SME/VSE were computerized. Large companies' management tools became accessible thanks to computers and management/accounting software packages. From 2010, software used in SME/VSE became more user-friendly; the use of this computerized tool has become mainstream. With management/accounting software packages (PGI in French), data is automated and pre-parametered; financial statements are almost instantaneously available. However, the main trend is still to produce these statements solely for the manager (Carraher & Van Auken, 2013). Even if financial statements are more and more edited, the manager will not necessarily use them.

Resorting to external consulting is the rule of thumb to establish financial statements presented during high-staked bargains (Sian & Roberts, 2009)

The entrepreneur is characterized by an ability to identify opportunities; and entrepreneurship supposes an ability to undertake entrepreneurial activities. Hence, this ability represents a solution to better evaluate the value of a company and the skills of the entrepreneur. The entrepreneurial ability could be an asset that could be monopolized in order to set a guarantee when the value of the asset composing the work tool is weak. Even though SME/VSE provide numerous local employment opportunities, they have a hard time finding long-term funding solutions when they are in their entrepreneurial phase. The manager's personal guarantee is often the unblocking element to access funding. However financial statements exist, balance sheet, income statement, etc. In addition, extra-financial data from the entrepreneur is required. Yet, when SME partners are interviewed, it is typically their instinct, the interaction with the entrepreneur, or simply the bank's commercial policy that predominate (Lopez and al., 2017). The issue is to create a simple and reliable tool for stakeholders to help determine the entrepreneurial ability of SME entrepreneurs. Therefore, the first part of this article focuses on reviewing the literature about performance accounting in SME/VSE (I) and secondly it discusses the entrepreneurial ability (EA) tool, the opportunity to propose it and its integration in French trading SME/VSE (II).

1. Management, performance and fair value auditing for SME/VSE

1.1. Management and performance auditing for SME/VSE

According to Emsfors and Holmberg (2015), small company managers try to progressively build up confidence in themselves instead of in their companies. The original idea was to know how managers deal with their environmental uncertainties without any real management tools. External information is preferred such as the suppliers or wholesalers' read of the market.

Information given by management systems is supported by external data coming from managers' personal networks (Laitinen, 2009; Hanna and Walsh, 2008; Shaw, 2006). This is all the more accurate where competition is stronger or high risk-taking behavior more present. Hence, it could be questioned whether or not SME/VSE have a comprehensive management tool, or if they are able to use it. Chapellier (1997) verified this hypothesis with 113 companies. Managers older in age who have a wealth management mind-set tend to use less management tools than new ambitious managers with fast-growing companies. In this case, experience replaces the tool.

If SME managers need external help for his management audit, the natural partner would be certified accountants who generally offers a method used on a company of the same type (Eggrickx, 2012). Certified accountants are not perceived as capable of conceiving the most relevant tool. The tendency is to imitate what is commonly done in a specific sector of activity. One could accept to follow or not, or accept partially. SME managers prefer referring to chambers of commerce, professional unions, etc. (Bernard & Culié, 2016). Input from certified accountants is taken into account in terms of the use or configuration of management tools. To have a successful setup, Nobre & Zawadzki (2013) recommend to also work with a Chief Financial Officer.

Contingent elements such as the size of the company or its life cycle influence the way management/performance auditing is conducted in SME/VSE, despite the goals and characteristics of managers (Condor, 2012). Start-ups who have a high level of investment tend to require an important amount of management data. This is also the case with stakeholders during the transmission of family-run businesses. This category of company and closed businesses punctually need management/performance audits.

Their appropriation also depends on the design of management/performance tools. In SME/VSE, data can be made available behind schedule or partially; information given by the system is consequently not useful. Managers will then rely on their instinct once more to establish a strategy; and the analysis of the strategic performance will only be used in case of a crisis (Van Caillie and al., 2008). The setup of a management/performance audit in SME/VSE depends on contingent factors to take into consideration in order to create a tool relevant to all stakeholders. This tool will never be a unique reference tool. Each sector of activity will have to adapt the tool to their measured value. Van Caillie and al. (2008) highlight the idea that these tools should have an adaptive stability. For instance, the role of accounting software distributors/editors could be discussed in terms of the role they play in appropriation and conception of management tools. This software is becoming cheaper as well as their complementary training which is now relatively more accessible, and sometimes paid by OPCA.

Bourguignon (2017) emphasizes the fact that the word 'performance' is polysemous. The various definitions of performance are source of conflict (St-Pierre and Cadieux, 2011). It can be defined as social, economic, personal, durable, etc. Greenban (2001) has shown that 85% of SME owner-managers wish to only create an income that is sufficient for them and their families. Managers that solely engage in entrepreneurial behavior – aiming for growth or financial performance – are rather drawn towards innovation, expanding their distribution network or optimizing their marketing strategy (Smith & Miner, 1983; Kotey & Meredith, 1997; Sadler-Smith and al., 2003; O'Regan and Ghobadian, 2006). According to Székely & Knirsch (2005), St-Pierre & Cadieux (2011), entrepreneurial performance can be measured in its capacity to be durable, while respecting ethics, people and environment. Depending on the entrepreneurial profile, performance needs to be conceptualized differently.

1.2. Accounting, performance, fair value and entrepreneurial ability

The IASB (International Accounting Standard Board) specify that financial statements have to display the performance of companies. Escaffre (1999) studied how to present financial statements in a way that is relevant to stakeholders, and also how to measure the influence of the presentation. The author identified six informational needs for performance and concluded that drawing up a performance financial statement from current financial statements is impossible; they are rigidly or conventionally structured and lose their financial legitimacy. Porter & Lavergne (1986) indicated the relevance of value creation by the company when measuring performance. This assessment can be made by evaluating managers' decision-making and their impact on value creation. Processes that generate performance and need further studying are relevant to the field of strategy (Lorino & Tarondeau, 2006).

Escaffre, building on Cohen & Perez (2009), specifies that the evaluation of cash-flow or of a financial result is not enough to display truthfully the value creation

process. Performance would be a subjective concept that could not be represented based on financial statements. Performance evaluation internal to the company differs from the one presented to stakeholders; accounting fills in the company's environment with company's situation. Escaffre proposes a normative and integrative framework which would be capable of rendering the different dimensions of performance; financial, marketing, internal, innovation capacity, durability, etc. In France, Bernheim and al. (1999) question the format and presentation of accounts. From a sample of 83 SME/VSE, Germain (2004) confirmed hypotheses claiming that the larger a company was and the more its environment was complex and uncertain, the more balanced the performance evaluation would be. St-Pierre and al. (2005) mention that the majority of intangible investments, for example employee training, are registered as expenses. Therefore, they evaluate performance with indicators that do not originate from financial statements. The correlation between the level of results drawn from financial statements and the level of results not drawn from financial statements was not proven in a study conducted by the same authors on 370 SME/VSE. Poincelot & Wegmann (2005) acknowledge the limits financial information has when determining performance. They also highlight the difficulty to aggregate non-financial indicators when identifying value creation. Hence, they suggest studying convergence points in value creation between indicators used for contractual motives and those used for cognitive motives.

The concept of fair value brings us to rethink accounting by questioning the principle of historic costs. Furthermore, we note that some of these principles can be contradictory as is the relative importance principle. According to this principle, some negligible elements cannot be considered within accounting whereas other more important elements can. This assumes that what is important or negligible is accurately defined in order to stay as relevant as possible.

In addition, the true and fair view principle also raises questions. Information in accounting documents has to be sufficient and of significant value to allow readers to fully understand results. This supposes the integration of non-financial indicators. In accounting it means to register and display in financial statements the operations done by the entity in accordance with their financial and economic reality. One could thus consider staff training as in investment instead of an expense.

To refer to fair value, as some accounting standards propose should bring about change in the logic behind performance evaluation. Giordano-Spring & Lacroix (2007) note the ambiguity of international standards and underpin the dependency between the result measure and the weighting of equity by measuring tools. And, for these authors, no evaluation model can satisfy all stakeholders. They even go as far as to formulate a hypothesis where CSR reporting would be useful to hide excessive financing. Casta (2003) attempts to understand if fair value accounting better represents a company by mobilizing the historic costs method. The necessary information requirement by stakeholders to grant resources should bring the manager to think about for who and based on what decisions should he/she produce information about his/her fair value.

According to Lopez & Méreaux (2016), getting a fair view of a company's financial situation supposes knowledge of historic costs and value creation elements. Furthermore, the value of the SME owner-manager equals the one of its SME. An evaluation can be done based on assets (and the ability of the entrepreneur to mobilize them), what is measured annually and transcribed in the balance sheet.

The income statement enables to verify if the operation value has increased between N and N+1; If there was value creation or not during x number of operating cycles within the year X $C_{ex} = VA$. $VA = f(C, T)$ where added value creation results from the use of capital (C) and labor (T).

$$x C_{ex} = VA \rightarrow \sum_{N+1}^N C_{ex} = \sum_{N+1}^N VA \rightarrow \sum_{N+1}^N (C + T)$$

If the Σ [Field] x of the fiscal year is a function of the entrepreneur's ability, this ability influences the valuation of labor and capital of the company. Thus, the entrepreneur exercises control over the assets of his company in order to increase or decrease its value. Investment is profitable as long as the value of the firm increases above its cost.

Therefore, the entrepreneur indirectly is in self-control, he/she controls equity and value creation. The entrepreneurial ability is implemented to influence operating cycles according to the necessary adaptation of the moment by initiating more cycles (rapidity), preserving the number of cycles and by "inflating" them (solidity), and diversifying with cycles of different natures (variety). Motivations to behave as an entrepreneur can be the introduction of more responsible practices (well-being of all, employment in a region, etc.). If the entrepreneur chooses to undertake CSR, his value creation cycles must be CSR. CSR entrepreneurial ability evaluation involves measuring the number of operating cycles carried out taking into account CSR practices, measuring their importance relative to other cycles, and the ability of the entrepreneur to diversify them. While it remains to empirically test this EA model "speed-solidity-variety" of the operating cycles, it is necessary beforehand to question the appropriation of EA as a performance management tool.

2. The appropriation of EA as a performance management tool

2.1. First lessons from French trading SME/VSE

Zawadzki (2011) questions the evolution of an SME/VSE operation when introducing management control tools. For this author, several factors block the appropriation process, and the most intense are the roles of internal responsibility and the strong influence of the certified accountant in an SME/VSE. The EA as proposed by the Lopez & Méreaux model (2016) to stakeholders is by analogy a thermometer capable of measuring the EA of SME/VSE entrepreneurs who own the majority of their business. Depending on the evaluation of entrepreneurial intensity of an SME/VSE, the comparison by sector would be possible; the aim being a reliable decision-making aid for stakeholders. SME/VSE partners may want to know the level of entrepreneurial ability necessary to ensure that the activity in question generates an expected result. Most SME/VSE partners report that they rely more on their impression and experience than on current management tools (Lopez & Méreaux, 2016). The tables used in SME/VSE are oriented towards financial performance and only complement informal control mechanisms (Germain, 2006).

The EA evaluation proposal involves collecting data from a detailed profit and loss account and / or the management tool, which is defined by typology of the company's operating cycles. To verify whether current management/accounting software packages allow this measure, we asked the certified accountants of two SME/VSE of similar size (a dozen employees, between 1.5M and 2M of sales): a stationery store and a large sportswear brand retailer. They confirmed the possibility of setting up the existing software, and even a beginning of parameterization per exploitable

operating cycle, because entrepreneurs were curious about this. In these interviews, for example, it was about measuring the entrepreneurial activity of the store manager in order to give him products to sell according to his EA. Some products require a higher EA to be sold depending on the time and location. The stores' floor surfaces could also be distributed according to department heads' EA. Other possibilities for adopting the tool have been mentioned by Lopez and al. (2016), for instance the CSR activity. The primary goal of the tool is to build trust for stakeholders in the entrepreneurial activity by a reliable evaluation.

Evaluating the EA questions an evaluation of human performance with numbers (Mevellec, 1995). This question led Ghaffari and al. (2013) to think about the uses and appropriation of these performance assessment tools by organizations. The accounting representation of the EA is the demonstration of the intensity of entrepreneurial human capital required to run a business. If the quality of an accounting representation of the performance is to be planned (Escaffre, 1997; Méreaux and al., 2012), it is even more the case with EA. The SME/VSE entrepreneur is looking for performance; its partners often only look for results. In the specific case of highlighting the EA, the word "performance" seems more appropriate than "results" as suggested by the IASB. To satisfy partners, the appeal to produce the expected result is great. The manipulation of accounting results would be frequent (Breton & Schatt, 2003).

Over the last 10 years, several authors have raised the question of ownership of management tools by organizations (Grimand, 2006; Alcouffe and al., 2008). They describe the logics of appropriation and differentiate conformation and appropriation. Using a tool by mimicry is different from adopting a tool to better manage one's business in particular. The appropriation of accounting tools is relatively standardized and conventional. Chalayer-Rouchon and al. (2006) demonstrated that companies take ownership of conventional tools specific to their sector of activity, regardless of their location, size, etc., which leaves them little room to operate since they must remain in the generally used normative context.

Di Maggio & Powell (1991) speak of institutional isomorphism. Organizations adopt the practices that appear to them to be most socially accepted, without paying attention to their real financial efficiency. The habit, the established rules and even the knowledge and skills of the SME/VSE certified accountant make the use of certain tools (often more conventional) respectable. Quemener & Fimbel (2012) go as far as to speak of the theory of social regulation when it is a question of a company taking ownership of a management tool. They point out that there is a logic of normative management that effectively restricts the use of available management tools. And what about the countries where accounting and taxation are closely linked? Rossignol (1999) talks about motivation to manipulate accounting for tax optimization purposes, especially in SME/VSE and VSEs where the manager is the main shareholder, which is the framework of our study.

Management and evaluation performance indicators (whether CSR or not) are often imposed on SME/VSE by partners. It would be interesting to question the credibility that an SME/VSE entrepreneur would have to present his own indicator. The partners of the SME are often bigger, e.g. customers, suppliers, wholesalers, etc. Their influence to impose their own measuring or management instruments is strong. The SME/VSE must shape itself according to the request. The appropriation and acceptance of the use of the indicator is carried out under constraint, in particular that of losing customers.

2.2. How to use entrepreneurial performance accounting?

Accounting is negatively received because it is perceived as a tool imposed by the State. In addition, the manager must ensure that the balance sheet and the income statement are acceptable to partners, often the main suppliers and the financiers. Financial statements must be restated, reviewed, supported by surveys or questioning by the manager to be credible.

Accounting can be creative, using the imagination of the manager and partners. Barthès de Ruyter & Gélard (1992) point out that circumvention of accounting rules is sometimes the objective; they can be considered as penalizing for the manager. The idea of the EA of Lopez & Méreaux (2016) is based on an imaginative accounting and would also limit accounting manipulation. These authors propose to measure the entrepreneurial ability from the results of operating cycles managed by the entrepreneur. We propose that the entrepreneurial ability of the entrepreneur who owns the SME/VSE appears in the accounts of the company as a weighting of equity, without distorting the balance sheet to highlight the specific and strategic human capital that the SME/VSE entrepreneur is.

Lopez and al. (2016) propose to measure the nature of operating cycles run by the manager to responsibly verify the entrepreneurial ability. However, it is possible to set up the management software to create categories and sub-categories of customers, staff, purchased and sold products, banks, etc. The most used brands in SME/VSE are equipped with configurable statements. And if an effort is to be made at the start to set up, the accounting software is then supplied with data by the management software. Thus, it would be possible to sort socially impacting operations; and the others by giving the same accounting suffix to this category. We could measure whether CSR operations are increasing in volume, are more frequent, or if new CSR operations are attempted by the manager.

The appropriation and use of management information and the evaluation of performance through financial statements is often done when discovering the management/accounting software package. During training often scheduled during the setup, or by individual searches in the menus of the software. The discovery of a possible evaluation makes the user curious about this result. Then, if he finds the relevant idea, he adopts the tool. It may even require customization of this tool.

A management tool able to measure general or specific EA to be integrated into current software would allow SME/VSE to have a standardized tool to make their entrepreneurial actions credible and visible. This standardization is the condition for understanding between all stakeholders in SME/VSE, it would make it possible to limit the biases due to the decision of one's experience or feeling. The decision maker of a resource allocation could compare the measure obtained for this SME/VSE of the same size, or even the same geographical area, or even another sector.

Current companies are almost all equipped with management software. Lawmakers and authorities ask for dematerialized documents in case of an inspection. Often, SME/VSE partners also request this form of documentation. The use of management software has almost become the norm. The costs are reasonable; it is also possible to subscribe online to publishers. Accounting is often offered as an option. The transfer of data from management to accounting is done in real time from management or during a transfer operation. Management/accounting software packages already include many pre-parameterized states (GIS, statistics), or

analytical modes of operation by type of occupation: industry, agriculture, trade etc. The possibility of accessing these reports is a commercial argument for the software publisher who, by proposing a different management statement, gains a competitive advantage.

In order to set up the software package to obtain an EA statement, the data entered must be grouped by operating cycle. For instance, if a clothing store exploits a ground surface for three sections, woman, man, child. The products bought, sold, the salaries paid to staff according to their usefulness in these cycles, operating costs, lighting, pro rata rent on the surface used by families of cycles (woman, man, child) will have to be differentiated during data input. We will find them in the detailed income statement with a suffix specific to each cycle. Ex: buy man: 6070022, the suffix 22 being attributed to all operations of this cycle, sale man 7070022 etc. Thus we will verify how Added Value (VA) is created in this SME. If the manager continues to use EA then he/she will try to perform new cycles, or increase cycles in volume or then make more cycles over the period or all at once. The manager will use the resources ($K + T$) to create more important, more innovative VA faster which is characteristic of an entrepreneur.

The software thus parameterized will allow an EA evaluation which would then be comparable to the companies in the same sector. Each sector will have a different index because it is easier to increase the volume of an operating cycle for trading than for a heavy industry requiring important research or testing before launching a product. Measuring EA can also be used by a sector of activity. Statisticians would thus have an idea of the level of entrepreneurial behavior necessary to succeed in a particular sector. This measurement tool can be made available to public authorities wishing to promote entrepreneurship, which is for example a way of fighting unemployment.

The support behind new entrepreneurs is often fairly well organized by consular authorities or states; incentives, incubators, tutoring, tax exemptions. What about the entrepreneur deciding, not to risk his personal inheritance in the entrepreneurial adventure, but his business? We have to convince financiers, investors and often there is no help available to support this category of entrepreneurs. In order to benefit from these aids for entrepreneurship, it is often necessary to create another SME. Some of the new entrepreneurs, once the business is carried out, become managers, by choice, or by necessity. If the authorities decided to persuade them to continue to do so, since they already had been successful, then the EAC measurement tool could be a guarantee that the sums, the means made available to the entrepreneur would be used within an entrepreneurial concept.

Conclusion

According to St-Pierre & Cadieux (2011), financial measurement cannot be the only evaluation of performance. This measure is valid only in the short term, and that is assuming that financial performance is the goal. St-Pierre & Cadieux (2011) also point out that management tools that measure financial performance are incapable of considering the action of the various components of SME/VSE, since financial results are not always the goal. According to their promoters, the strength of management tools is the normalization of behaviors for the purpose of easier analysis. This habit goes against the reality of the management of an SME/VSE on a daily basis, and against the heterogeneity of SME/VSE.

It is for this reason that measuring the EA and putting it on the balance sheet makes it possible to solve the problem of appropriation, since this measure would have become standardized while remaining at the disposal of the stakeholders in order to assist them in decision-making. Appropriation would be facilitated by upstream parameterization of management and accounting software packages. The mass of data thus created would be left to each stakeholder according to their desired use. A tool that measures only EA by analyzing operating cycles in quantity, diversity and speed of execution does not use financial measurements. This thermometer role should facilitate the appropriation of the tool by the SME/VSE. To each one to use this measure to make choices that interests him; here one does not confuse the temperature with the disease.

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TIMING OF DIVIDEND INITIATIONS OF POLISH IPOS. DOES THE ORIGINAL SHAREHOLDERS STRUCTURE MATTER?

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Abstract: *This study provides empirical Polish-sample evidence for how pre-IPO ownership structure affects the subsequent decision on the first dividend pay-out for stock market investors over the period 2009–2016. Using a sample of 104 companies conducting initial public offerings we investigate the issue of relations between the share of original shareholders in the total number of votes at the general meeting of shareholders of pre-IPO companies and the moment of their dividend initiations. Considering the pre-listing ownership structure of companies, we are particularly interested in role of managers, the largest shareholder, State Treasury and private equity funds in the original ownership structure. We conduct the research employing survival analysis. The results of our study indicate that different types of original shareholders may affect the timing of initial dividend. The crucial conclusion from our analysis is that state ownership of the company before the first listing have a significant impact on the time of first dividend pay-out. We observed that along with the higher number of votes belonging to State Treasury before IPO, initial dividend of public company occurs faster. Our research seems to be valuable due to the lack of academic research on the impact of pre-IPO ownership structure on the time of initial dividend pay-out.*

Keywords: *Initial dividend; Initial public offering; IPO; Dividend policy; Shareholder structure.*

JEL Classification: G11; G23; G32; G35.

1. Introduction

A dividend policy is the policy implemented by a company to decide how much of earnings will be paid out to shareholders in the form of dividend and how much will be left in the company in the form of retained earnings, which will be reinvested or used to pay debt. The implementation of dividend policy is one of the most important strategic decisions made in a publicly traded company. This decision is crucial for both the company and stock market investors, since dividend policy affects not only investment opportunities, but also market value of the company and shareholder value (Miller and Modigliani, 1961; Lintner, 1962; Lacin and Zhang, 2008). The essential issue of dividend policy is making decision about the dividend initiation. An initial dividend is the first regular cash dividend payment made after company has gone public (Lipson et. al., 1998: 38). Dividend initiations conducted by Initial Public Offerings (IPOs) ought to be treated as one of the strategic financial decisions of company. The stock market investors may treat the first dividend pay-out as a signal

of subsequent earnings (Chen and Kao, 2014) and as a declaration regarding the regular dividend payments in the future (Hobbs and Schneller, 2012).

The literature indicates many reasons for dividend initiations. Among them are these related to the signalling theory and information asymmetry? According to them, dividend can be understood as a financial tool used by managers to inform the capital market about the good financial standing of company (Eije and Megginson, 2008; Denis and Osobov, 2008) and affect its market value. Most of scientific research confirms the positive impact of initial dividend on the market value of company (McCaffrey and Hamill, 2000; How et. al., 2011; Hobbs and Schneller, 2012; Kale et. al., 2012). Furthermore, dividend initiations may be related to the theory of the corporate life cycle. As surveys show, dividend initiators are usually large companies having relatively high profitability and low growth opportunities (Bulan et. al., 2007). Along with the maturation of companies follows the separation of ownership from management and agency costs appear. Agency conflicts increase in those companies in which free cash flows exceed investment needs and the possibility of ineffective cash allocation increases. Dividend payment makes the free cash flows decrease and, in this way, help to reduce the agency costs (Grullon et. al., 2005). According to the agency theory, also ownership structure can affect (minimize or exacerbate) the conflicts between shareholders and managers. Agency costs are believed to be minimized in case of the managerial ownership. Being the major shareholder, manager bears the same risk and is rewarded as other shareholders. In such case, the goals of managers and shareholders starts to be consistent and managers can be in favour of dividend (Lace et. al., 2013; Smith et. al., 2017). On the other hand, those managers can be still interested solely in increasing market value of the company and, therefore, may be against dividend neglecting the interest of other shareholders and causing agency conflict (Short et. al., 2002). The agency costs may also be affected by the institutional and state ownership. As studies show, institutional investors and state strive to achieve the highest investment income and therefore decide to initiate dividends (2010; Lace et. al., 2013; Liljeblom and Maury, 2016; Smith et. al., 2017). With dividend payment, the agency costs decrease, which is a result of the alternative use of earnings in case of lower level of investment opportunities.

Research concerning the global markets focuses mainly on the impact of the ownership structure on the propensity to pay dividend and pay-out size. However, there are no academic research regarding the impact of pre-IPO ownership structure on the time of initial dividend payment. We noticed, therefore, a research gap that prompted us to carry out scientific research in this area.

The main aim of this study is to investigate the importance of the pre-IPO ownership structure for the time to the first dividend pay-out after the first listing of company's shares on the stock exchange. This research goal is important in terms of impact of the ownership structure on the ability to implement the dividend policy by public companies, create market value of the company and increase shareholder value. Therefore, it is crucial to address the research question of how original shareholders influence the moment of dividend initiations.

The influence of the ownership structure on the dividend payment is the subject of many studies. However, those studies do not confirm unambiguously the direction of relationships between managerial ownership and dividend pay-out. Most authors indicate a negative correlation between them (Short et al., 2002) arguing that insiders strive to invest free cash to develop the company and increase its market

value. In turn, some studies prove the positive links between managerial ownership and dividend payment (Lace et. al., 2013; Geiler and Rannebook, 2016), which are explained by researchers as a way to eliminate free cash flow problems and mitigate agency conflicts (La Porta et. al., 2000). Thus, we posit the following hypothesis:

H1: Companies with greater pre-IPO managerial ownership have a longer time to the dividend initiation.

In research on dividend payment the ownership concentration is also considered. Some authors prove that increase in the ownership concentration results in higher probability of the dividend payment. This is because the dominant shareholders have strong impact on the decision making process in the company, and acting in their own best interest, exert their power to benefit themselves (Mancinelli and Ozkan, 2006). Contrary to this, Gugler and Yurtoglu (2003) found the negative relationship between the largest shareholder and dividend pay-out. In this case, earnings are usually used to improve firm performance. Basing on the above, we posit the following hypothesis:

H2: Companies with greater pre-IPO ownership concentration have a shorter time to the dividend initiation.

Dividend policy can be also affected by the institutional ownership. The literature indicates that institutional investors are characterized by the high capital involvement, so they have greater ability to monitor management activities and influence on decisions about dividend initiations. Therefore, a positive relationship between the institutional ownership and dividend payment is observed (Short et. al., 2002). One can treat State Treasury as institutional investor. Having large capital needs, state will strive to receive dividend (Liljeblom and Maury, 2016). Taking into consideration the special role of state in the implementation of privatization programs in Poland and its share in the original shareholder structure of Polish IPOs, we posit the following hypothesis:

H3: Companies with greater pre-IPO state ownership have a shorter time to the dividend initiation.

A special role in pre-IPO companies play private equity funds (Ortgiese, 2007), for which the first listing of portfolio company is an attractive way of divestment (Povaly, 2007; Wall and Smith, 1997: 8). Considering the original structure of pre-IPO companies and the crucial role of private equity funds in creating the value of portfolio companies (Hochberg and Ljungqvist, 2007), we posit the following hypothesis:

H4: Companies with greater pre-IPO private equity ownership have a longer time to the dividend initiation.

2. Sample and research design

Our study sample consists of 104 new listings of Polish companies on the main market of the Warsaw Stock Exchange (WSE). We collect our data from new publicly traded companies 2009-2016. Our sample starts from 2009 because we want to limit the impact of the economic crisis on our results. We analyse offerings that include the sale of primary or secondary shares. Following the IPO literature we do not include companies previously publicly listed on alternative trading systems, as well as banks and insurance companies. Then, we also require all necessary data to be available.

In order to investigate the link between the pre-IPO shareholder structure and the time to the first dividend pay-out for stock investors we employ survival analysis,

which is a set of statistical procedures, where the depend variable is the time of occurrence of a specific event (Collet, 2003: 1). We decided to use this method because, in contrast to regression analysis or logistic models, its primary benefit lies in its ability to investigate for both event occurrence and time to event (Gounopoulos and Pham, 2018: 226). What is more, this method makes it possible to include so-called censored observations, i.e. the study also includes those companies that have not paid dividends since their IPO.

The subject of the study is the length of time from the first listing of company shares on the WSE to the decision of the general meeting of shareholders on payment of dividend. First, we use the survival function $S(t)$, which gives the probability that the decision on the initial dividend will not be made to a particular time, i.e. the analysed economic process will take longer than the specified time t (Klein and Moeschberger, 1997: 23). We estimate the $S(t)$ using the Kaplan-Meier estimator (Stevenson, 2009: 7), which is calculated as the following:

$$\hat{S}(t) = \prod_{t_i \leq t} \left(1 - \frac{d_i}{r_i} \right)$$

where d_i is the number of initial dividends pay-out at time t_i and r_i denotes the number of companies at risk at time t_i .

Then, we use the semi-parametric Cox-proportional hazard model to study the impact of various ownership characteristics on the time to the first dividend. In order to investigate such links and test research hypotheses our main model setup of hazard function $h_i(t)$ is specified as the following (Collet, 2003: 59-60):

$$h_i(t) = h_0(t) \exp[\beta_1 \text{MANAG} + \beta_2 \text{1SHARE} + \beta_3 \text{STATE} + \beta_4 \text{PE} + \beta_5 \text{ROA} + \beta_6 \ln(\text{SALES}) + \beta_7 \text{DR} + \beta_8 \text{SECON} + \beta_9 \text{PRIM}]$$

where $h_0(t)$ denotes baseline hazard function and shows the probability of occurrence of an initial dividend if all explanatory variables equal zero and β_i assign the variable represent the individual contribution of each factor to the hazard which is a resultant effect of the presence or absence of the individual components of the model (Fendler et. al., 2011: 97). Thus, coefficients capture the potential impacts of independent variables on time to the first dividend after IPO. As far as the dependent variable indicates the first dividend occurrence, a positive (negative) coefficient suggests that pay-out is more (less) likely to happen and the duration to the dividend date time is shorter (longer).

We employ two sets of independent variables. First group is a proxy of pre-IPO ownership structure and consists of MANAG which indicates share of managers in the total number of votes at the general meeting of shareholders, 1SHARE shows the share of the largest shareholder as a characteristic of the ownership concentration, STATE and PE go from the share of State Treasury or private equity fund in the ownership of company, respectively. Then, we consider five variables to control for various firm and offering characteristics that are suggested by prior literature as determinants of initial dividend (Bulan et. al, 2007; Liljeblom et. al., 2016; Adjaout and Hermassi, 2017). ROA is return on assets as more profitable companies are more likely to pay dividends. SALES is a total sales of company to account for the positive effects of firm size. DR is debt-to-assets ratio to control the effect of the company's debt on dividend policy. In turn, variables SECON and PRIM refer to the motives of conducting the IPO. SECON is the ratio of number of secondary shares sold in the IPO by original shareholders relative to the total number of shares before

the IPO and reflects the divestment motive in IPO. PRIM shows the wish to raise additional capital by the company and it is the ratio of number of the new issued shares relative to the total number of shares before the IPO.

Due to lack of a comprehensive electronic database of financial and ownership data of new stock companies in Poland, the data was hand collected from several sources. The primary source of data on the pre-IPO ownership structure is the prospectus. The website <http://gpwinfstrefa.pl> is the source used for the information on the time of dividend initiation. The financial data are from the Notoria Service database.

3. Research results

Empirical research on the initial dividend policy of new stock companies on the WSE indicates that the first dividend pay-out proceeds with diverse dynamics.

Figure 1 shows the survival function.

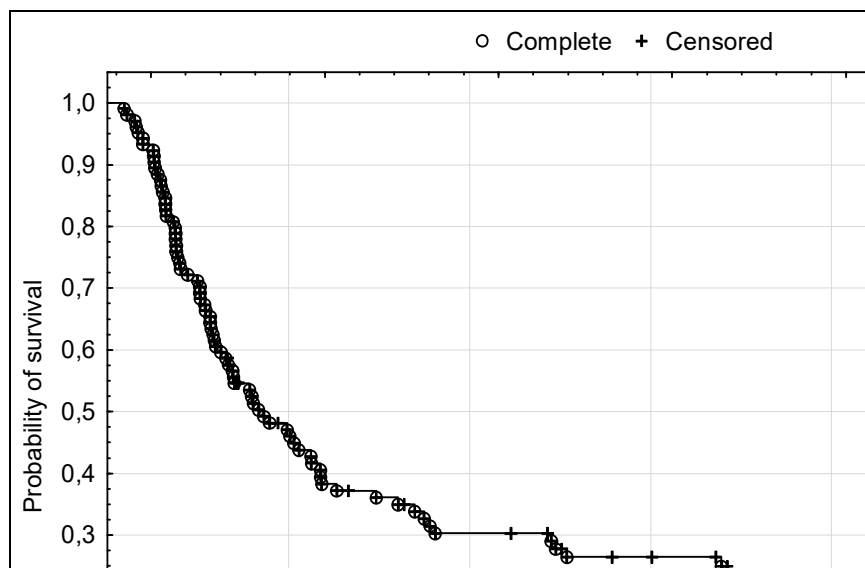


Figure 1: Survival function of dividend payments by IPO firms - Kaplan-Meier estimation

Source: own study.

One can see that the probability of the dividend non-payment to a specific point on the timeline decreases after the first listing of the company's shares at a relatively constant rate to approximately 2 years. The likelihood that a company will not initiate dividend thereafter stands at approximately 38%. Then, until the end of the third year you can see a little reduction in the dynamics of the survival function decline, which means that the dividend becomes less and less likely over time. Next, this tendency intensifies, which means that the probability of first dividend paying decreases.

Table 1 presents descriptive statistics on explanatory variables applied in our Cox-proportional hazard model and provides some insight into the ownership structure and other characteristics of companies seeking to be listed on WSE.

Table 1: Descriptive statistics.

N=104	Mean	S.D.	Quantiles				
			Min	.25	Median	.75	Max
MANAG	0.3268	0.3756	0.0000	0.0000	0.1740	0.5214	1.0000
1SHARE	0.6458	0.2824	0.1158	0.4525	0.5967	0.9506	1.0000
STATE	0.0601	0.2289	0.0000	0.0000	0.0000	0.0000	1.0000
PE	0.1315	0.2823	0.0000	0.0000	0.0000	0.0000	1.0000
ROA	0.1386	0.1617	-0.0857	0.0445	0.0903	0.1826	0.9155
SALES	647242	2435878	12	46756	128906	258418	19408706
DR	0.4815	0.2410	0.0092	0.3196	0.4772	0.6620	1.5753
PRIM	0.2079	0.2277	0.0000	0.0515	0.1563	0.2949	1.5050
SECON	0.1351	0.2133	0.0000	0.0000	0.0000	0.2123	1.0000

Source: own study.

The figures in Table 1 relating to the companies' ownership structure prior to the IPO show the presence of some diversity among the sample. The average level of managerial ownership amounts to 32.68%, with a relatively high standard deviation. Referring to the ownership concentration it can be noted that the majority of companies is made up of firms with the dominant shareholder. The level of *1SHARE* variable is significantly varied and ranges from 11.58% to 100.00%, with the median of 59.67%. There should be some caution when analysing the results for *STATE* and *PE*. Although, according to descriptive statistics, private equity funds and the State Treasury cannot be considered as significant players in the shareholding structure, additional analysis show that in about 25% of sample there is a private equity fund among the original shareholders, and more than 8% of companies have gone public in connection with the processes of privatization made by the State Treasury. What is more, the State Treasury and private equity funds are generally majority shareholders and have a decisive vote at the general meeting of shareholders⁴.

The vast majority of companies in the sample have generated a positive financial result at the end of the year preceding the IPO. The average (median) return on assets is 13.86% (9.03%). The average value of the company's sales in the pre-IPO year amounts to 647.24 million PLN, with relatively very high standard deviation. All companies use debt for financing of their assets. The debt ratio ranges from 0.0092 to 1.5753, with a median of 0.4772. The vast majority of analysed offerings are associated with the issuance of new shares. The average (median) number of primary shares sold to the public amounts to 20.79% (15.63%) of the shares outstanding pre-IPO. The portion of shares sold by original shareholders in the IPO is considerably lower and its average size amounts to 0.3151. Offerings connected with the sale of shares from the portfolio of original shareholders on the Polish stock market are generally less popular.

Table 2 presents the results of the correlation matrix reporting pairwise correlation coefficients between the independent variables.

Although significant correlations exist between some independent variables, multicollinearity does not appear to be a problem (see Fooladi, 2012) and we decided to include all of the variables in our models, as the observed correlations may be an

⁴ The additional analyzes are available on request.

obvious effect of company's development and economic phenomena (Ujunwa et. al., 2012: 220-221).

Table 2: Pearson correlation matrix.

N=104	MANAGE	1SHARE	STATE	PE	ROA	SALES	DR	PRIM
MANAGE	1.000							
1SHARE	-0.132	1.000						
STATE	-0.230**	0.261*	1.000					
PE	-0.288*	0.052	-0.123	1.000				
ROA	0.081	-0.034	-0.134	0.088	1.000			
SALES	-0.063	0.283*	0.346*	-0.097	-0.102	1.000		
DR	-0.018	0.056	-0.117	0.057	-0.324*	0.340*	1.000	
PRIM	0.195**	-0.048	-0.092	-0.209**	-0.190***	-0.108	0.091	1.000
SEC	-0.269*	0.231**	0.068	0.167***	0.035	0.192	0.080	-0.361*

Superscripts *, **, *** represent statistical significance at the 10%, 5% and 1% levels, respectively.

Source: own study.

Next, in order to recognize, which of the characteristics used as explanatory variables in the study affect the chance for the dividend initiation we estimate the Cox proportional hazard regression models using the backward elimination of variables in the selection process of characteristics significantly affecting the likelihood of initial dividend occurrence (Asselain and Mould, 2010: 408). Initially, the model takes into account all the specified variables and then these one with the smallest statistical significance are subsequently removed by excluding in each next step the variable with the highest p-value. Next, the model is re-estimated. Table 3 presents the results of the procedure.

Table 3: Estimation of Cox proportional hazards model of probability of dividend.

Variable	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7
MANAGE	-0.1061 (0.7642)	-0.1093 (0.7574)					
1SHARE	0.5338 (0.2413)	0.5186 (0.2489)	0.5112 (0.2562)	0.5288 (0.2392)	0.4570 (0.2870)	0.5256 (0.2103)	0.5212 (0.2144)
STATE	0.7623 (0.2049)	0.8032 (0.1560)	0.8558 (0.1140)	0.9618 (0.0505)	0.9670 (0.0494)	0.8915 (0.0634)	0.9815 (0.0375)
PE	-0.6260 (0.1789)	-0.6383 (0.1668)	-0.6013 (0.1786)	-0.6291 (0.1568)	-0.6258 (0.1589)	-0.5991 (0.1752)	-0.5187 (0.2311)
ROA	-0.1758 (0.8415)						
SALES	0.0399 (0.5846)	0.0369 (0.6073)	0.0335 (0.6382)				
DR	0.2517 (0.6753)	0.3058 (0.5680)	0.3137 (0.5573)	0.4043 (0.4148)	0.3636 (0.4576)		
SECON	-0.3487 (0.5384)	-0.3484 (0.5405)	-0.3081 (0.5800)	-0.2853 (0.6050)			
PRIM	-0.6868 (0.2603)	-0.6710 (0.2676)	-0.6897 (0.2590)	-0.7057 (0.2458)	-0.5909 (0.2832)	-0.5503 (0.3086)	
Chi-square	10.6101	10.5697	10.4739	10.2441	9.9666	9.4233	8.2708
Chi-square test probability	0.3034	0.2273	0.1633	0.1148	0.0762	0.0514	0.0408
N	104	104	104	104	104	104	104

The p-value for Wald test statistics are shown in parentheses below coefficient estimates

Source: own study.

In the first step, which takes into account all the mentioned above characteristics, all variables turn out to lack statistical significance. Then, based on the level of p-value for individual predictors, the variables *ROA* and *MANAGE* have been sequentially eliminated. According to the results of Step 4, ownership of the State Treasury is statistically significant at the level of p-value lower than 0.1. However, because of the Chi-square test probability the subsequent models have been estimated. Among all next estimations the model received in Step 7 has the lowest Chi-square statistic together with corresponding p-value at the acceptable level below 5% and fits the empirical data the best.

The analysis of coefficients for the model from Step 7 allows us to conclude that the increase of the State Treasury share in the shareholding structure before the IPO may positively affect the probability of earlier dividend initiation. As the coefficient for *STATE* is positive and statistically significant this finding is in line with Hypothesis H3, which posit that State Treasury ownership contribute for shortening the time to pay out the first dividend on the public security market. Although the coefficients for other two variables, i.e. *1SHARE* and *PE*, also fit to our expectations we express in the hypotheses H2 and H4, our results are not statistically significant. However, it is worth noting, that this result does not necessarily indicate lack of impact of these factors on the likelihood of a dividend initiations but simply their effect may be too small to be detected in a study with a given number of observations (Asselain and Mould, 2010: 407).

4. Final remarks

Our study provides an additional insight into the links between the pre-IPO ownership structure of companies seeking to be listed and the subsequent pay-out policy. Particularly, we address the research question of how ownership preceding the IPO influence firms' decision on the initial dividend timing.

Overall, our empirical findings demonstrate that a higher share of State Treasury in the total number of votes at the general meeting of shareholders before the IPO brings the moment of first dividend closer for stock investors. The research results allow us to presume that a short time between the moment when the company goes public and dividend initiation results from high capital needs of State Treasury (resulting from, for example, social programs that cause high costs), which can be at least partially met by participation in the company's earnings.

Notwithstanding the above, the present study suffers from limitations. Therefore, it provides some tips for future research directions. First, it should be noted that, given the number of companies in our sample, the results we obtained have to be interpreted with caution. Thus, there is a need for more research on the role of the ownership structure in pay-out policy creation for listed companies, which includes various types of dividends model as well as repurchasing shares. Second, as our results suggest that type of shareholder may affect the dividend timing, another avenue for future research is to explore the diversity of ownership structure. The inspiring field for further research is also the importance of shareholder reputation effect on the pay-out strategies during the transformation from private to public

ownership. This would allow researchers to see more clearly how the stock market perceives different shareholders at the time of an IPO.

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PERFORMANCE OF LEADING FAMILY BUSINESSES IN THE GROUP OF EMERGING COMPANIES IN HUNGARY

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Abstract: *The main purpose of the study is to analyze the significance of family businesses within the group of emerging companies. The research into the success factors, potential growth and internationalization of family businesses has recently come into the focus of international interest. This study analyses family businesses that have been admitted to Hungary's group of emerging companies in the past two years, on the basis of their official annual reports. The elements of the sample were taken from the specialized database of the Hungarian subsidiary of Bisnode, international data service company. On the one hand, we have studied if these businesses are able to produce risk premium over the risk-free rate (owner's excess earnings). On the other hand, we are examining what capital structure they use to manage their successful business. Is it possible to conclude that family businesses with high return on equity (and positive risk premium) accomplish their successes with safe (relatively low risk) capital structure? Or does it work vice versa: the majority of leading family businesses with high return on equity are characterized by risk exposure related to their capital structure (rate of indebtedness over 60%, i.e. leverage over 1.5). Our studies have been conducted in the past 3 years, in the time period of 2014–2016, on the basis of publicly accessible and verifiable data of the annual report. In order to set the foundation for our analysis, we provide an overview on the major international literature focusing on the significance of family businesses, as well as the key Hungarian publications on this issue. For the selection of the sample and the justification of its relevance, we are providing an overview on Hungary's leading company rankings. The analyses are concluded via the statistical study of the time sequence data of financial indicators.*

Keywords: *family businesses; equity risk premium; capital structure.*

JEL Classification: *M10; L26; G39.*

1. Introduction and Research Question

Leading companies in Hungary – general overview

The leading Hungarian enterprises have been monitored by both the professional press (Heti Világgazdaság [Weekly Review of World Economy] and Figyelő [Observer] journals) and the research sector for years. In the period following the economic crisis, this entrepreneurial segment gained particular significance. GDP growth, employment, the ratio of foreign and domestic ownership, export share and

internationalization are the key terms that lead the main direction of studies (Halpern-Muraközy, 2010; Ábel-Czakó, 2013; Reszegi-Juhász, 2014; Czakó-Juhász-Reszegi, 2016). In addition to these issues, the enterprise size-based distribution, the share of different sectors, as well as the regional location of enterprises are also important aspects (Némethné, 2010).

There are two major media outlets within the specialized press which deals with this issue. Every year, *Heti Világgazdaság* publishes the ranking of Top 500 sales revenues and profits in Hungary, which is also a list of the most successful companies. This analysis includes sector-based distribution, as well as regional breakdown. The data and the analysis are collected and prepared by the Hungarian subsidiary of Creditreform Kft. international data service and analyst company. The relevance and accuracy of the data sets can be verified against the database of the Hungarian Central Statistical Office (KSH), the www.e-beszamolo.im.gov.hu website and with the use of the interface of the Opten company information portal. *Figyelő* journal publishes the ranking of the Top 200 Hungarian sales revenues on a yearly basis, according to two different aspects: ranking and analysis of companies having the highest sales revenues, as well as ranking and analysis of emerging companies. The latter ranking includes those companies in the Hungarian SME (small and medium-sized enterprise) sector that achieved the best performance in the past year considering the combination of employee headcount, sales revenues and profit. The data sets and supervision of methodology of *Figyelő* journal are managed by Bisnode Kft. international business information service company. The analyses are conducted by associates of Hungarian universities (Corvinus, Budapest Business School).

From among the general results presented by the academic sector in relation to leading Hungarian companies, the analyses studying the entrepreneurial growth factors (Bélyácz, 2015; Balla-Mundaca, 2015; Katits-Szalka, 2015), and the researches focusing on the entrepreneurial performance determining factors and the potential effects of internationalization (Halpern-Muraközy, 2010; Reszegi-Juhász, 2014, 2016) are highlighted. Ábel and Czakó (2013) summarize the theoretical explanations for internationalization and export performance, present the Hungarian research results on exporting companies, and formulate the crucial success factors of export on the basis of conclusions drawn from 10 case studies. The responding companies are medium-sized companies with Hungarian majority ownership, were founded after 1990, are involved in high-volume export activities and have over 50 employees. Additionally, Reszegi and Juhász (2014) analyze in details the double duality of owner clusters and the total factor productivity in the selected Hungarian entrepreneurial sample of about 5000 elements. In the sample, for enterprises with 20–49 employees, the value of the number of sample units / total number of companies in the national economy is 22%, whereas the corresponding value in the case of enterprises engaging 50–249 employees is 48%, and the share of large companies is 61%. Therefore, in the case of medium-sized and large companies, the examined sample certainly includes half of the existing enterprises (Reszegi-Juhász, 2014, p. 73.). However, it should be highlighted that from among the entire SME sector, the sample covers 70% of the total number of Hungarian SMEs (with 20–249 employees).

The specialized research focus of our study is aimed at the most successful family businesses, which – in most of the cases – still belong to the SME sector or have met the criteria for large companies following their long-term standing as SMEs.

Below, we provide a summary on the role of family businesses as reflected in the international literature.

Definition, role of family businesses

Family businesses comprise a determinant segment of the business environment worldwide. There are several international studies that confirm the significance of family businesses within the national economy on the basis of their GDP contribution, as well their position in employment. The international economic power and prospective strengthening of family businesses in the future are suggested by the fact that while in 2005 15% of the Fortune TOP 500 companies were family-owned companies, in 2014 their share came to be 19% (Makó et al., 2016). According to the Eurofound annual report 2015, family businesses within the small and medium-sized enterprise (SME) sector represent a share of over 85%, and nearly two thirds of the employees – almost 60 million people on European level – are engaged by family businesses. The increased activity observed in the field of research on family businesses in recent years has focused on the issues relating to succession. According to researchers, however, the peculiar characteristic of family businesses – which manifest itself in the characteristics of the ownership system, the issue of succession, as well as management methods – has an influence on both strategic and operative thinking, and therefore – in addition to succession – there are several research fields of interest in connection with family businesses.

Family businesses represent a relatively heterogeneous group, and researchers have not reached consensus in relation to their definitions (Miller et al., 2007), as it is challenging to specify such a comprehensive and exact definition that meets the academic demand, and at the same time allows a summary of the peculiar characteristics of family businesses regardless of their size. Beyond the aforementioned, the variety of definitions is also proven by a study that was conducted in 2008 on commission by the Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs of the European Commission (then called Directorate-General Enterprise and Industry), which analyzed the national use of definitions in 33 countries (EU 27, Iceland, Norway, Lichtenstein, Turkey, Croatia and Macedonia), and searched for the shared elements in the definitions, which can potentially result in a uniform European definition. Based on the 90 definitions explored, Mandl (2008) did not find such a standard and universal definition for the “family business” category that was widely and exclusively used in all the possible fields, such as public and political debates, legal regulations, statistical data services, as well as in the area of socio-economic researches. This article interprets the concept of family businesses as per a definition proposed by an expert group, according to which:

“An enterprise can be considered a family business if the majority of the decision rights are held by the natural person(s) who have founded the company, or such natural person(s) who have acquired ownership in the company, as well as their spouses, parents, children of the aforementioned person(s), or the direct offspring of their children. The decision rights can be indirect or direct; at least one representative of the family or relatives formally participates in the management of the company, or in the case of companies listed at the stock exchange if at least 25% of the voting shares are owned by the founder (or buyer) of the company, or the family or offspring thereof.” (Mandl, 2008, p. 48)

Research history related to the financial performance and capital structure of family businesses

A significant proportion of literature on family businesses makes mention of the performance of family businesses (Chrisman et al., 2003), and the majority of the studies researches into the difference between the performance of family and non-family businesses. In the past decade, several such empirical studies have been published – enriching the associated international literature – that examined the relationship between performance and ownership structure.

According to the overview of research materials focusing on European family and non-family businesses, in the light of ROE indicators the results are rather controversial. On the basis of an Italian sample, Culasso et al. (2012) concluded that non-family businesses proved to have better return on equity, while Kowalewski et al. (2010), Maury (2006), and Sraer-Thesmar (2007) reached an opposite conclusion in view of Polish, Western-European and French stock exchange companies respectively.

One of the branches of studies focusing on the leverage of family businesses is represented by studies according to which family businesses have lower leverage than non-family businesses (Villalonga & Amit, 2006). This partly responds to opinions that emphasize the conservative and risk-avoiding behaviour of family businesses in terms of finances, which attitude may stem from the entanglement of family and company finances, and their aversion to damage to reputation resulting from incorrect investment-related decisions (Voordeckers & Steijvers, 2006).

There is a debate among researchers about the capital structure of family businesses, as there are results according to which family businesses operate with significantly lower amounts of debt and leverage. If considering the outcomes of European history researches, the results of Psillaki (2010) and Ampenberger et al. (2011) – concluded in relation to French companies and 600 German companies respectively – unanimously reflect lower leverage in the case of family-run businesses, such as in the studies of Gottardo & Moisello (2014) covering 3004 medium-sized and large Italian companies, the analysis of Burgstaller & Wagner (2015) conducted with 470 small and medium-sized Austrian companies.

According to research results, classical financing theories may serve as baseline for the evaluation of family businesses' financial decisions, however, the particular characteristic, the goal and value system (i.e. the so-called socio-emotional features), the pace of growth, life cycle, profitability, extent of internationalization of the family businesses, as well as the typical characteristics of the sector and the financial, cultural features of the specific country are to be also taken into consideration.

2. Sample Selection and Methodology

Sample selection

The database of our study, the list of Top 200 Emerging companies have been compiled by Bisnode – one of Europe's leading business information service provider – on the basis of its database covering the entire Hungarian business world. This is the source of the financial statements of the companies, which can be publicly accessed and verified at the official website of the government: www.e-beszamolo.im.gov.hu. Admission and membership in this entrepreneurial group is bound to strict criteria. Parameters of admission: headcount of medium-sized

company category, values of net sales revenues and/or balance sheet total. Criteria of membership: the headcount cannot be reduced, the sales revenues may not decrease, the result cannot be negative. As per the official criteria of 2015, a company is regarded as a medium-sized enterprise if its headcount is between 50 and 249, its net sales revenues is EUR 10–50 million (HUF 3.131–15.656 billion), while its balance sheet total amounts to EUR 10–43 million (HUF 3.131–13.464 billion). The list focuses on the non-financial sector: companies with governmental or municipal majority shareholding, players belonging to the financial sector, non-profit and public benefit companies are not included. The ranking of the list has been established on the basis of three indicators: ROIC, the per capita added value and growth rate in combination with the headcount (and sales revenues).

According to the 2016 list of Top 200 Emerging companies, 41.5% of the most dynamic medium-sized companies (83 companies) are in Hungarian ownership. From among the emerging companies of Hungarian owners, this year we have identified 50 family businesses. According to the sectoral classification, it can be concluded that the most successful companies include mainly carrier and forwarding companies, enterprises working on major governmental orders in road construction, companies in the processing industry – primarily those specialized in metalworking –, as well as commercial companies.

In 2016, family businesses performed well, as half of the elite group consisting of the 10 most dynamic companies, and furthermore one fourth of the 50 most successful medium-sized companies were represented by family businesses. The most successful family company – the one that ranked 2nd on the list of Top 200 Emerging companies – is 77 Elektronika Műszeripari Kft, which is known and recognized worldwide, and was awarded the Grand Prize for Innovation in 2016.

From among the 50 family businesses that were added to the list of Top 200 Emerging companies in 2016, 30 companies had not yet been present on the list in 2015. Therefore, there are 20 such family businesses that have come into our focus also with respect to data series encompassing several years. This group of companies will be analyzed below. The companies are indicated with their abbreviated names. The following table shows the key financial parameters of the sample elements in the studied interval (Table 1).

These 20 companies take dominant roles even beyond the group of Top 200 Emerging companies. Some of them are companies that are listed among the Hungarian Top 500, too. As compared to the sales revenues list of Top 500 for the time period of 2014–2016, the characteristics of our sample are summarized in Table 2. In terms of sales revenues, there are 2 outstanding companies. By 2016 both companies were added to the Top 500 ranking of sales revenues.

Table 1. Key data of the most successful Hungarian family businesses 2014–2016

Name/Year	Sales revenues (million HUF)			Profit (million HUF)		
	2014	2015	2016	2014	2015	2016
77 Elektronika	14,492	16,821	24,486	2,224	4,607	3,566
KRAVTEX	2,690	3,920	8,278	321	3,284	3,102
ECSERI Term	7,665	11,137	11,530	763	4,293	6,568
Dominó Trans	4,016	4,550	4,780	451	687	581
Kallos Cosmetics	4,153	5,236	5,740	854	327	377
Terrán Tetőcserép	4,668	5,866	7,136	320	1,446	1,415
TARR Építő	7,320	7,834	8,502	1,041	599	624

Name/Year	Sales revenues (million HUF)			Profit (million HUF)		
	2014	2015	2016	2014	2015	2016
JÁSZ-PLASZTIK Autóc	13,871	18,314	23,936	306	2,196	3,974
AUTÓCENTRUM	6,435	9,883	12,353	228	2,121	3,394
MATERIAL-PLAST	3,187	4,016	4,944	318	1,546	2,369
PROPHYL	1,699	2,047	2,196	459	982	875
FERZOL Lemez	4,851	5,752	6,884	866	1,187	786
HE-DO Útép	9,342	9,959	10,228	1,199	1,213	4,161
BAKI-TRANS Szállítm	3,625	4,022	4,632	366	1,121	884
MIXVILL Ker	4,380	5,184	5,815	666	356	284
BI-KA Logiszt	5,286	5,881	6,144	107	1,795	1,608
Budapest Bortársaság	5,029	5,751	6,212	346	1,957	1,813
BA-HA-MA'S Élelm	5,295	6,180	7,088	116	969	1,046
Keskeny és Társai	4,640	5,391	5,967	836	2,054	2,667
Secret Control	2,269	2,461	2,787	1,080	710	213

Source: own compilation on the basis of Bisnode's data sets and the annual reports (2014, 2015, 2016)

Table 2. The most successful Hungarian family businesses in the Top 500 ranking of sales revenues

Top 500, sales revenues	Criteria (500) (million HUF)	Best in sample (million HUF)	Name (rank)	2 nd rank in sample (million HUF)	Name (rank)
2014	18,250	14,491	77 E	13,870	Jász Pl. Autoc.
2015	19,716	18,314	Jász Pl. Autoc	16,821	77 E
2016	20,292	24,486	77 E (425)	23,936	Jász Pl. Autoc. (430)

Source: own compilation on the basis of the annual rankings (2014, 2015, 2016) of HVG and Figyelő journals (Sales revenues: million HUF)

As compared to the profit list of Top 500 for the time period of 2014–2016, the characteristics of our sample are summarized in Table 3.

Table 3. The most successful Hungarian family businesses in the Top 500 ranking of profit

Top 500, profit after taxes	Criteria (500.)	Sample 1 st position	Name (rank)	Sample 2 nd position	Name (rank)	Sample 3 rd position	Name (rank)
2014	927	2,224	77 E (217)	1199	He-Do (409)	1080	Secret (445)
2015	1112	2036	77 E (279)	1466	Ecseri (371)	1313	Secret (418)
2016	1171	4376	77 E (142)	2269	Kravtex (210)	1682	Ecseri (335)

Source: own compilation on the basis of the annual rankings (2014, 2015, 2016) of HVG and Figyelő journals (Profit after taxes: million HUF)

Taken out from the sample, the most profitable companies prove to have the following tendency in the studied interval (Figure 1).

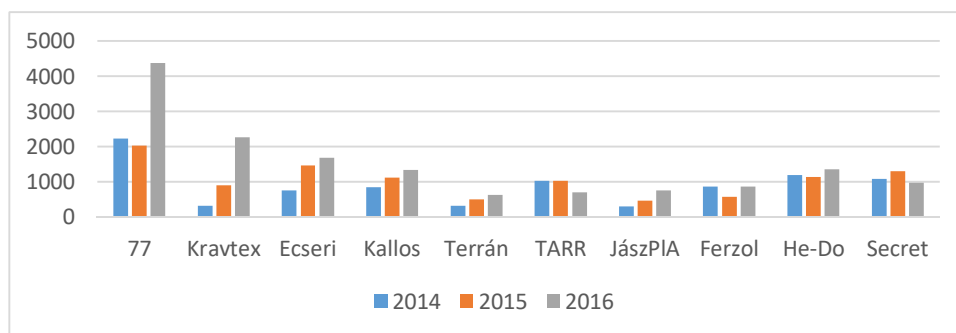


Figure 1. Profit after taxes in the most successful family businesses (Data: million HUF)

Source: own compilation on the basis of the annual rankings (2014, 2015, 2016) of HVG and Figyelő journals

It is apparent that the companies of the sample were successful not only in boosting their sales revenues, but for half of the sample profit levels are also high, and show upward tendencies.

Consequently, the two focal points of our analysis: review of the equity risk premium and analysis of the capital structure.

Methodology

The research questions have been formulated in relation to the sample consisting of the above 20 companies, and the analyses have been conducted on this sample. We have studied whether the sample companies have been able to produce risk premium over the risk-free rate (owner's excess earnings) in the recent period. Furthermore, we are examining whether they use risky capital structure to manage their successful business. This study also facilitates the analysis of DuPont's correlation (Virág-Fiáth, 2010; Bélyácz, 2015; Katits-Szalka, 2015; Zulficar et al., 2016).

We use the trends of the prime interest rate of the Hungarian National Bank and the methodology of the international ROE researches (Hermann, 2008; Culasso et al., 2012; Droj, 2012, 2015; Spicka, 2015; Gergely-Rózsa, 2018) to estimate the risk premium. Our research is primarily of descriptive nature, and the analysis of trends in the equity risk premium is also completed with the examination of quartile values, mean and standard deviation values (Tarnóczy-Fenyves, 2017).

DuPont' correlation aggregates the effects of the key functional subfields of companies on the return on equity (Virág-Fiáth, 2010). Based on the foregoing, high profit on equity can originate from a high value of returns on sales, which suggests excellent selling and marketing activities, or improving cost management, or the combination of these two. ROE growth may be generated by the increase in the efficiency of asset use. At the same time, ROE value also grows if the financing risk, i.e. leverage (liabilities / equity ratio) increases. (Katits-Szalka, 2015). It is therefore justified to conduct a detailed analysis on the capital structure risk (Balla-Mundaca, 2015; Herczeg, 2014). In the case of capital structure, a time sequence study is performed on the leverage rates, with the examination of quartile values, mean and

standard deviation values. Thereafter, we explore the internal composition of the capital structure, and analyze the proportion of short-term credits. We presume that positive equity premium will be detected in the studied interval. Furthermore, it is suggested that in certain cases it can be accomplished by assuming financing risk (leverage over 1).

3. Research Results

Results of the ROE review

For the risk premium calculation, the time sequence trend of the prime interest rate of the National Bank is needed. For this purpose, we downloaded the available data from the official site of the National Bank of Hungary, and every year we calculated the annual risk-free rate values by using time-proportionate weighted averages.

Table 4. Data set of the prime interest rates of the National Bank of Hungary

2009	2010	2011	2012	2013	2014	2015	2016
8.71%	5.48%	6.10%	6.69%	4.19%	2.40%	1.66%	1.05%

Source: Website of the National Bank of Hungary and own calculations

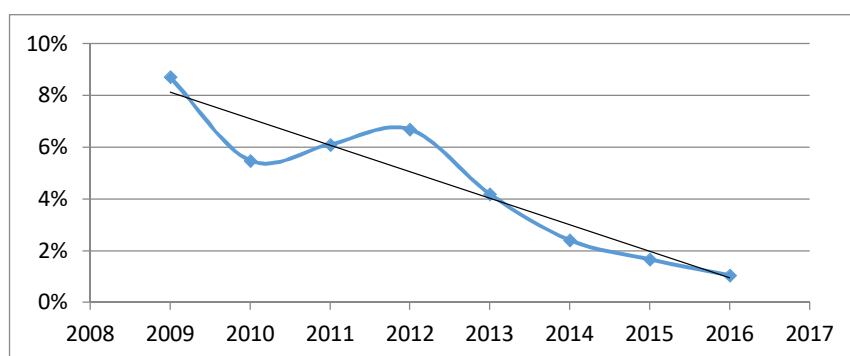


Figure 2. Data set for the prime interest rates of the National Bank of Hungary with trend function

Source: Website of the National Bank of Hungary and own calculations

Since the end of the crisis, Hungary's monetary policy has been characterized by the continuous and intense decrease of the prime interest rates of the National Bank. In the period after the crisis, the value of the risk-free rate was around 6–7%, which dropped to 2.4% by 2014, and then it sank below 1% by 2017. The decreasing sequence of prime interest rates may generate a phenomenon that allows enterprises to produce positive and increasing risk premiums for their owners even with decreasing returns on equity. We have examined if this phenomenon is relevant to our sample of companies.

During the analysis of ROE values, we calculated the value sequence of the sample quartiles. Thereafter, we calculated the average without the distorting values of the upper and lower quartile (average ROE of 10 companies - average1), and then we calculated the average again by excluding the upper quartile only that has positive distorting effect (average ROE of 15 companies - average2). The results are summarized in Table 5.

Table 5. ROE and risk premium data sets trends

	2014	2015	2016
<i>Lower quartile</i>	17.2%	17.5%	16.8%
Median	26.1%	24.2%	26.0%
<i>Upper quartile</i>	42.8%	29.3%	33.2%
Average1	27.4%	23.7%	25.6%
Average2	34.1%	30.6%	32.8%
Risk pr1	25.0%	22.0%	24.5%
Risk pr2	31.7%	29.0%	31.7%

Source: Own calculations on the basis of the company database

The sample can be described by high and steady equity risk premiums. Even the 5 companies in the lower quartile have relatively high ROE values around 17%, and the median shows a firm value of 26%. Regardless of the extremely high values of the upper quartile, the ROE values of the sample section consisting of the rest 15 companies would vary between 30% and 34%, and this is accompanied by robust and high excess earnings over the risk-free rate, the value of which is 31%. High, but slightly decreasing profits on equity, combined with low and decreasing prime rate level result in excellent equity risk premium.

Results of the capital structure review

The capital structure review was started with the calculation of leverage (liabilities / equity) values. Similarly, the quartile values were analyzed first. The capital structure is characterized by very low leverage, and the values are increasingly advantageous in the period under review. By ignoring the companies in the lower and upper quartiles, the average of the remaining 10 companies (average1) drops from 83% to 62%. Disregarding only the slightly less favourable values of the upper quartile, the average of the remaining 15 companies (average2) decreases from 93% to 65%. Consequently, the leverage values clearly show a safe financing policy of very low risk (Table 6).

Table 6. Leverage data sets trends in the sample

	2014	2015	2016
<i>Lower quartile</i>	43.2%	27.7%	26.8%
Median	66.3%	56.5%	45.3%
<i>Upper quartile</i>	153.7%	97.0%	134.1%
Average1	83.2%	63.4%	62.1%
Average2	93.2%	63.2%	64.7%

Source: Own calculations on the basis of the company database

Thereafter, we also looked into the internal composition of the capital structure. It was found that 7 companies do not have any long-term liabilities, and in the case of 4 other companies the average value of the long-term liabilities / total liabilities is below 10%. In the entire sample, the average of the proportion of long-term liabilities is 18% with a standard deviation value of 22%. The sample, therefore, is not characterized by long-term indebtedness.

Within short-term liabilities, the proportion of short-term credits and loans was analyzed. As a result, the secure capital structure was confirmed from other aspects,

as well. The average proportion was 11% with a low standard deviation value of 14%. Less than half of the companies have short-term credits over 4%.

Results of the review of DuPont's correlation

Considering the two types of averages calculated with the sample, high risk premium values are accompanied by safe capital structure in the studied interval. In consequence, the question arises: how does the value sequence of the return on sales (ROS) influence, determine the favourable value sequence of ROE? Our analyses have led to the following conclusions (Table 7).

Table 7. Trends of ROE and ROS data in the sample

	2014	2015	2016
ROE data sets			
<i>Lower quartile</i>	17.2%	17.5%	16.8%
Median	26.1%	24.2%	26.0%
<i>Upper quartile</i>	42.8%	29.3%	33.2%
ROS data sets			
<i>Lower quartile</i>	6.9%	7.1%	7.6%
Median	11.6%	10.8%	11.0%
<i>Upper quartile</i>	16.0%	17.1%	18.7%

Source: Own calculations on the basis of the company database

Based on the data in Table 7, it can be concluded that the favourable trends of ROE are generated by the stable and high ROS values. It is only the upper quartile where there is a small, rather insignificant deviation in the tendencies. Compared to the low and decreasing leverage, this process indicates that the efficiency of asset management (asset turnover rate) in the sample of companies is also advantageous, its average value is over 2.

Table 8. Export rate trends in the sample

	2014	2015	2016
<i>Lower quartile</i>	0.3%	2.0%	1.9%
Median	12.6%	18.6%	23.5%
<i>Upper quartile</i>	39.8%	37.6%	37.4%
Average	21.0%	24.9%	26.4%
Standard deviation	23.3%	25.0%	26.0%

Source: Own calculations on the basis of the company database

On the basis of the high ROS values, we performed further research in association with the export rate characterizing the sample. We wanted to know what proportion of the return on sales is generated by export. In the case of 3 companies, there is no export at all, while in the case of another 3 companies, the average export rate is below 1%. The rest of the companies, however, clearly show an increasing share of exports within sales revenues (Table 8).

Based on the results, the sample (regardless of the companies in the lower quartile) can be considered to perform high-volume export activities. As an additional result, the companies are characterized by expanding export operations in the studied interval.

4. Conclusions

In our study, we analyzed the performance of the most successful family businesses within the group of emerging Hungarian companies in the time period of 2014–2016. In the general introduction, we dealt with the rankings of leading companies and the key results of the research sector. Thereafter, we offered an overview on the role and performance of family businesses based on the associated international literature. Our sample consisted of 20 Hungarian family businesses that had been firmly present for 2 years on the list of Top 200 Emerging companies of the Hungarian economic journal titled *Figyelő*. This group of companies was analyzed in view of their returns on equity, equity risk premiums and capital structures.

We presumed that positive equity premium would be detected in the studied interval, and in some cases it could be achieved by assuming financing risks (leverage over 1).

The results confirmed our first presumption. The companies achieved a high and firm risk premium in the studied interval. In the case of the sample excluding the upper quartile (15 companies) the average ROE value varied between 30% and 34% in the analyzed period. Comparing it with the decreasing prime interest rates of the National Bank, the group of companies proves to be characterized by a steady risk premium level of 31%, which is a conservative estimate.

Our second presumption about the capital structure has not yet been confirmed. In the reviewed sample of companies, the leverage exceeds 1 (i.e. 100%) only in the upper quartile. The average value of the leverage indicator of the sample without the upper quartile fell from 93% to 65%, and therefore the sample is characterized by a safe and increasingly favourable capital structure. Another proof for the safe (low risk) capital structure is the fact that less than half of the companies have long-term liabilities (it may be a drawback for developments though). Furthermore, the rate of short-term credits and loans within the short-term liabilities is steadily low (around 10% on the average).

Another result is that based on DuPont's correlation it can be concluded that the main reason for ROE trends was the variation of ROS values. Following the ROS analysis, we looked into the share of export within the sales revenues. Regardless of some exceptions (3 companies are not involved in export operations at all, in the case of 3 other companies the share of exports is below 4%), we found that the sample could be considered to pursue high-volume export operations: 21%–25%–26% average values, respectively, in the years under review, however with high standard deviation.

Our study focused on an interesting, yet unstudied group of companies, primarily by way of exploratory, descriptive analysis. In our opinion, this group of companies has significant growth potential, which is also supported by high risk premiums and steadily low risk capital structures. Another advantage of our study is that it can serve as the foundation for the comparative analyses of similar samples of companies in Central and Eastern Europe.

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THE COORDINATION OF FISCAL AND MONETARY POLICIES IN DEVELOPING COUNTRIES. THE CASE OF ROMANIA

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Abstract: *The coordination of fiscal and monetary policies plays an important role in achieving sustainable growth and macroeconomic stability. Although monetary and fiscal policies are considered to be independent, they have the same objectives. There is no agreement in the literature on the hierarchy of the two policies, so their coordination remains in the responsibility of each country. Moreover the economic, political and social situation of each country dictates the mix of the two policies. From a doctrinal point of view, the Keynesians find fiscal policy more effective, while the monetarists conclude that monetary policy has priority. The present paper explores the level of coordination between fiscal and monetary policies in Romania during 2004-2016 using the Set Theoretic Approach (STA). Following the established typologies of the nature of research, this study combines elements from both, the theoretical and empirical sides. In its turn, the empirical research has a qualitative nature combined with quantitative elements. The quantitative nature is given by the analysis of times series on the following macroeconomic variables: budget deficit (percentage of GDP), money supply (percentage of GDP), annual inflation rate and annual GDP. To determine the correlation between the two policies, the GDP, inflation, money supply and the budget deficit are analysed. The econometric methodologies used were applied in RStudio program using time series for the selected indicators. In the first phase, ADF, PP and the KPSS root unit tests were made on the indicators, establishing if the data is stationary. Further on, using the Granger Causality Test, the relationship between the budget deficit and the money supply is discussed. The main findings, according to the STA methodology, generally indicate a weak level of policy coordination estimated to be 30%. A cause for poor coordination of fiscal and monetary, for Romania's case, could be the lack of institutions to ensure good communication and collaboration between authorities. It is worth underlining that in the current context of Romania, solutions must come from a healthy economic vision, based on responsible economic governance. Also, strengthening confidence in public institutions and economic policies are the bases for further development.*

Keywords: *Monetary policy; fiscal policy; policy coordination; governance.*

JEL Classification: *E52; E62.*

1. Literature review

Monetary and fiscal policies as part of macroeconomic policy are subordinated to the fulfilment of its objectives, e.g. economic growth, full employment, price stability, and should support, even indirectly and undeclared, the long term development of a country.

Although fiscal and monetary policies are considered to be independent, they have the same purposes. Decision-makers have at their disposal instruments that can shape and influence these policies toward achieving the stated goals. The manner in which policies interlink is known as coordination. The coordination of monetary and fiscal policies has a long history and is based on well-known economic theories. According to Sargent and Wallace (1981) the above policies interact as a whole. Further on, Sargent (1987) argues that the best way to study the interactions between fiscal and monetary policy is to involve the central bank and authorities in a standard “chicken game”, in which there can be only one winner. Regarding the models used for macroeconomic policy-making, the most important is Mundell-Fleming (1963). This macroeconomic model can be applied in a democratic state with a market economy and is a generalization of the classic-Keynesian model developed by J. Hicks (1937).

There is no agreement in the literature on the hierarchy of the two policies, so their coordination remains in the responsibility of each country. Moreover the economic, political and social situation of each state dictates the mix of the two policies. From a doctrinal point of view, the Keynesians find fiscal policy more effective, while the monetarists conclude that monetary policy takes precedence.

Given the importance of fiscal and monetary policies for the long term economic development, it is necessary to quantify the level of coordination between the two policies. *The hypothesis of the present paper is to measure the coordination degree between monetary and fiscal policies for Romania's case in the period 2004-2016.* This hypothesis is based on three essential questions: Firstly, which of the two authorities responsible for policy making has the privilege of the first step? Secondly, what is Romania's situation regarding the coordination of the two policies? And thirdly, what is the solution if the two policies pursue the same objectives but in a different way?

Considering the purpose of this paper and the three questions that derived from it, it is necessary to review the evolution of fiscal and monetary policies in Romania in the first part and to measure the level of coordination of these policies, in the second part.

Following the established typologies of the nature of research, this study combines elements of a theoretical and empirical nature. In its turn, empirical research has a qualitative nature combined with quantitative elements. The quantitative elements are given by the analysis of statistical data, time series, on the following macroeconomic variables: budget deficit (percentage of GDP), money supply (percentage of GDP), annual inflation rate and annual GDP. The database used in this study contains annual statistical surveys for the period 1995-2016, for the case of Romania. The source of data on the indicators used is the Eurostat database, National Bank of Romania, World Bank and the National Institute of Statistics.

The research methodology is based on the Set Theoretic Approach (STA) model. To support the hypothesis of the present paper the STA (Set Theoretical Approach) model was used. Despite the importance of the analysed topic, in providing macroeconomic balance, the available literature indicates only a few studies to determine the degree of policy coordination in Romania.

Caraiani (2012) in his study on macroeconomic policy coordination finds, a weak degree of interactions between fiscal and monetary policies.

Cazacu (2015) highlights in his research the importance of monetary and fiscal policy mix. In the analysis, the author integrates the monetary and budget shocks into a

self-regressive model of structural vectors (SVAR) for Romania's economy. The mix between the policies, as well as their impact on the production gap and inflation, is analysed through simultaneous and on the long-term. The results for the period 2000-2014 do not provide clear evidence of strategic interaction between monetary and fiscal authorities.

Following the literature review concerning the coordination of the fiscal and monetary policies, we have identified that most of the studies are carried out using autoregressive vectors (VAR). However, applying the same VAR model, with the same variables, can produce conflicting results. For this reason, the Set Theoretical Approach (STA) approach is used by Arby and Hanif (2010), Oboh (2017) and Englama et al. (2013) in their studies, in which they measure policy coordination in countries such as Nigeria and Pakistan.

These empirical evidence found in the literature, supports the present study, although analysed by different methods, the results are similar.

2. The evolution of monetary and fiscal policy in Romania

Monetary policy is coordinated by central banks and is achieved through the influence of monetary variables (e.g. monetary aggregates, interest rate, exchange rate) on economic ones (e.g. price level, gross domestic product, unemployment rate).

During the last decades, among academics and practitioners (central banks), there is a consensus that price stability is favourable to both emerging and developed economies and this responsibility falls on the authorities in charge of monetary policy.

Romania is part of the open emerging economies category and therefore the challenges of monetary policy in ensuring the objective of price stability is a difficult task. Price stability is achieved through inflation targeting. This strategy (inflation targeting) was implemented in Romania in 2005, and this decision was based on the need to weaken the relationship between monetary aggregates and inflation. Isărescu (2005) emphasized the need to calibrate monetary policy according to inflation, rather than through an intermediate target, in the context of the capital account liberalization.

Between 2009 and 2016, the NBR (National Bank of Romania) had implemented monetary policy decisions based on the disinflationary expectations of demand and the extension of the economic program agreed by Romania with the international financial institutions. Also the NBR constantly reduced the interest rate in this period determining a low inflation. These tendencies can be seen in Figure 1, below, that represents the Annual inflation rate (%) and the monetary policy interest rate (%) in Romania between 2000 and 2016. On the other hand, the low and negative (2015-2016) inflation indicator was a result of fiscal consolidation measures implemented by the government during the mentioned period (reduction of the VAT).

The inflation rose, and in 2017 had a positive slope. Despite all these events, inflation remained within the range of variation throughout the period.

The analysis of monetary policy reveals the strong impact of fiscal measures over the goal of price stability (inflation) assumed by the NBR. We can conclude that there are notable interdependencies between government actions and measures adopted by the NBR Board.

The *fiscal policy* is conducted by government authorities through public revenue and spending. This is an important governmental leverage for managing the economy and having the capacity to influence the evolution of GDP.

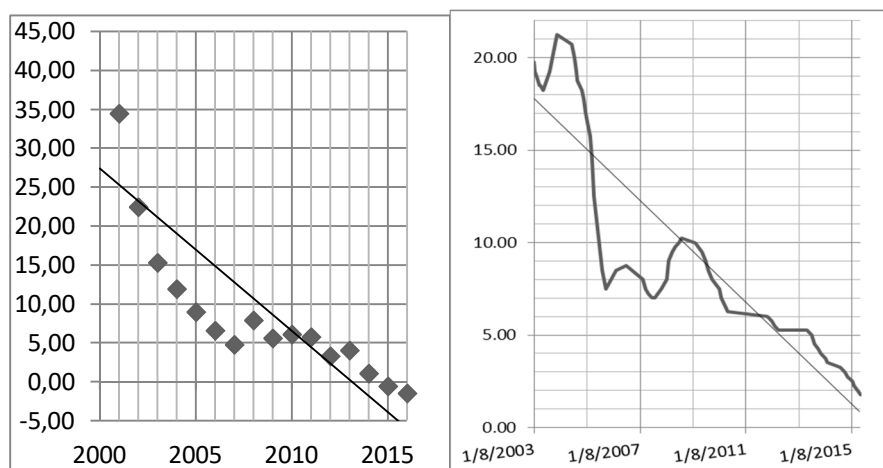


Figure 1: Annual inflation rate and the monetary policy interest rate (%) in Romania
Source: Graphic representation based on data obtained from NBR

The fiscal policy on the economic growth phase in Romania before the crisis was an expansionist one and contributed to the strong imbalance of the whole system. Unfortunately, Romania missed the opportunity to create reserves on the boom phases as a measure of protection against a possible economic slowdown. Due to the fact that the fiscal-budgetary measures for the whole pre-crisis period did not concern the creation of a fiscal space, we can argue that Romania's fiscal position was relatively weak compared to other countries, such as Poland. Romania's weak fiscal position is rooted in the many inconsistencies in political decisions and frequent fiscal changes. A repercussion of this style has led to increased fiscal pressure on the business environment, so the private sector has suffered.

From the presented research it is possible to synthesize the following idea, regarding the macroeconomic decisions in Romania, the fiscal policy (influenced by the political factor) adopts a series of measures (some strongly criticized) and the NBR has to adapt to achieve the primary objective (price stability), but also for economic stability, a classic example of a "chicken game", explained in theory by Sargent (1987).

3. Results and discussions

3.1. Descriptive statistics

Implementing the STA model requires first of all, the use of descriptive statistics for two of the variables money supply and budget deficit. The descriptive statistics tests provide an overview over the distribution of time series data used.

The first indicator being analysed is the monetary indicator. The numerical method for descriptive statistical tests is as follows: the average is 36.58 percent of GDP, registering a maximum of 41.25 percent of GDP in 2016 and a minimum of 31.9 percent of GDP in 2006. The D'Agostino skewness test has a value of -0.20, which

is less than 0, resulting that the distribution is approximately symmetric. The Anscombe-Glynn Kurtosis test has a value of 1.81 which is less than 3, and would show a platykurtic distribution (but not excessive). Given that the differences are not very high between the results and the recommended values, we can say that the data has a normal distribution. Below we can see the distribution of statistical observations on the money supply and the evolution over time. The data on money supply shows an upward trend (Figure 2).

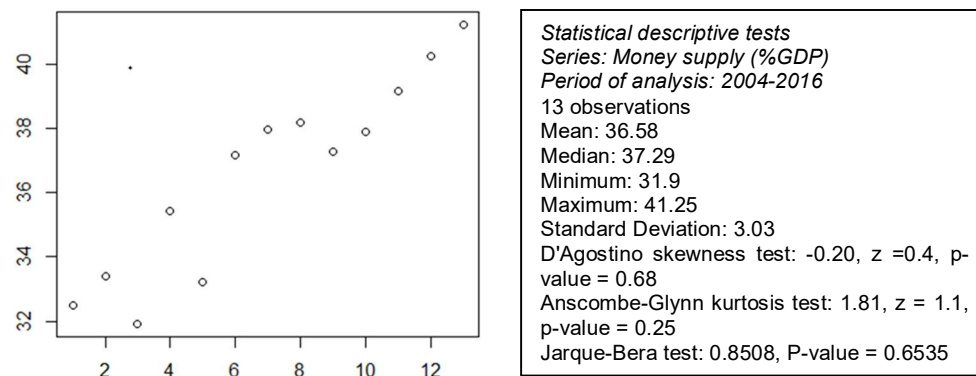


Figure 2: Distribution of statistical observations and descriptive statistics of the money supply

Source: Interpretation of data obtained from World Bank in the Rstudio program

It can be noticed that in Romania, the highest frequency of the budget deficit is between -2, -4. This is positive given that Romania, through the Maastricht Treaty, has committed itself to the budget deficit not exceeding 3 percent of GDP.

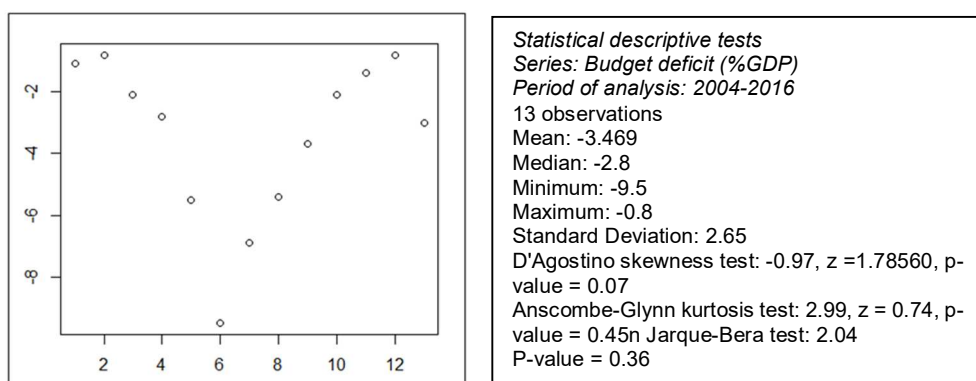


Figure 3: Distribution of statistical observations and descriptive statistics on budget deficit

Source: Interpretation of data obtained from Eurostat in the Rstudio program

In addition to the graphical method, we also applied the numerical method for descriptive analysis of statistical data. The minimum value of the budget deficit is

recorded at -9.5 in 2009, which coincides with the peak of the economic crisis, and the maximum value is registered in 2015 by -0.8. The standard deviation is 2.65. The D'Agostino skewness test has a value of -0.97, which is less than 0, resulting in the distribution being tilted to the right, containing more extreme values to the left. The Anscombe-Glynn Kurtosis test has a value of 2.99, which is less than 3 and involves a platykurtic distribution, sharper than a normal distribution.

3.2. Unit root tests

After we have applied the descriptive statistics tests, in this second stage, we apply the unit root tests. To conduct research through causality tests, we first need to perform unit root tests on data on budget deficit and money supply. Applying these tests is one of the key requirements for using time series. For this purpose, we applied the following tests: The Augmented Dicker Fuller (ADF), Philips-Perron test and the KPSS test, developed by Kwiatkowski, Phillips, Schmidt and Shin. The results of the ADF, PP and KPSS test are presented in Table 1. All the data series are stationary in the first difference.

Table 1: Augmented Dickey Fuller, Philips Perron and KPSS stationary test results

Tests	ADF (t-statistic)		PP (z-statistic)		KPSS (t-critic)	
	Original series	First difference	Original series	First difference	Original series	First difference
Budget deficit	-2.17	-1.77*	-4.13	-8.78*	0.26*	0.212*
Money supply	-2.05	-1.07*	-14.94	-17.73**	1.14***	0.035*

"Note: *, ** and *** denote significance at 1%, 5% and 1% levels of probability."

3.3. Causality tests

Taking into account the results of unit root tests, the next step is to apply the Granger causality test between the two variables are: budget deficit and money supply. For the STA model, a preliminary analysis is needed to determine the operational independence of fiscal and monetary policies. The Granger causality test assumes that if the past values of a variable y contribute significantly to determining the current and future values of the variable x, then it is said that y is a Granger cause of x. The Pair Granger causality test is intended to determine whether there is a causal relationship between the money supply and the budget deficit. As shown in Table 4, the money supply does not contribute to a budget deficit, and the budget deficit does not lead to changes in the monetary mass, therefore the null hypothesis is accepted.

Table 2: Granger Causality Pair Tests

Null hypothesis	F-statistic	Probability
Money supply does not cause any changes to the budget deficit	0.1163	0.7409
The budget deficit does not cause future changes to the money supply	0.3384	0.7257

Sample: 2004-2016; Nr. Observations = 13; Lags = 2.

As a result of the tests carried out, it can be established that the indicators for the monetary and fiscal policies analysed in the study are independent. Taking this matter into account we can determine the coordination of the two policies.

3.4. The Set Theoretical Approach model

The Set Theoretical Approach (STA) adopts set theory to model explicit coordination. In order to determine the degree of coordination of the fiscal and monetary, two matrices are built.

The first is the matrix of the macroeconomic situation, while the second is the matrix on the responses of fiscal and monetary policies. As policies are expected to cause a substantial change in output and inflation growth, the impact on economic growth is measured as real GDP deviations from the average sample. Similarly, an inflation shock is any value of this indicator that exceeds the target range variation assumed for each year of analysis.

The monetary policy variable is a change in the money supply, while the fiscal policy variable is a change in the annual budget deficit. A change or a positive value indicates an expansionist policy, while a change or negative value indicates a restrictive policy. By comparing the matrix of the macroeconomic situation with the matrix of fiscal and monetary policy responses, we identify the number of years in which shocks occur (Arby and Hanif, 2010)

Table 3 presents the macroeconomic environment matrix for Romania, identifying the shocks on inflation and economic growth.

The method of interpreting or classifying the years in the "positive" or "negative" category is as follows the year is in the "positive" category when inflation in one year exceeded the range of variation and the year is in the "negative" category when the inflation values remain within the range of variation.

Regarding the shocks in growth (fiscal policy target) the classification is as follows: the year is classified as "positive" when GDP is above the average of the years surveyed and the year is in the "negative" category when the GDP is below the average of the years surveyed.

The "PP" cell indicates the years in which the deviations from the average values of the indicators studied are positive. Similarly, the "NN" cell indicates the years in which GDP and inflation diverge negatively from the average and threshold values. The "PN" cell shows the years when the real GDP growth was higher than the average and the inflation was lower than the threshold. Finally, the "NP" cell represents the years when the macroeconomic situation in Romania was characterized by a decrease in GDP and an increase in inflation.

Table 3: The macroeconomic for Romania (2004-2016)

Shocks to growth (GDP) (Fiscal Policy Target)		Shocks to inflation (Monetary Policy target)	
		Pozitive (P)	Negative (N)
	Pozitive (P)	PP: 2008, 2010, 2011, 2013	PN:2012, 2014, 2015, 2016
	Negative (N)	NP: 2004, 2005, 2006, 2009	NN: 2007

Table 4 contains the macroeconomic policy response matrix for Romania (2004-2016). The "CC" cell contains the years in which both the budget deficit and the

money supply declined, implying the response of both policies to the positive macroeconomic shock. In the same vein, the "EE" cell indicates years in which both the budget deficit and the money supply have increased, indicating that fiscal and monetary authorities have begun to adopt an expansionist policy in response to negative shocks. The "CE" cell shows the years when the budget deficit figures have fallen and the monetary values have risen. The "EC" cell shows the years when the situation was the reverse of the "CE" cell. Then, the degree of coordination between monetary and fiscal policies is calculated based on the distribution of the years, as shown in Table 5.

Table 4: Macroeconomic Policy Response for Romania (2004-2016)

Policy response			Monetary Policy Response	
			Contraction (C)	Expansion (E)
Fiscal Policy Response	Contraction (C)		CC: 2004, 2012	CE: 2005, 2010, 2011, 2013, 2014, 2015
	Expansion (E)		EC: 2006, 2008,	EE: 2007, 2009, 2016

The level of coordination for each of the four economic environments is calculated as follows:

$$p = n(PN \cap CC) + n(PN \cap CE) + n(NP \cap EC) + n(NN \cap EE) = 0 + 2 + 1 + 1 = 4. \quad (1)$$

$$C = p/\tau = 4/13 = 0.3 \text{ or } 30\% \quad (2)$$

τ = number of years in the study.

From the calculation the coordination between the two policies is 30%.

Table 5. Years of Coordination and Non-Coordination

Years of coordination of monetary and fiscal policies 2006, 2007, 2014, 2015
Years of non-coordination of monetary and fiscal policies 2004, 2005, 2008, 2009, 2010, 2011, 2012, 2013, 2016

According to the results, the degree of coordination between fiscal and monetary policies, measured by changing policy indicators in response to economic shocks for the study period, is 0.30. Therefore, the degree of coordination during the analysed period can be considered weak. If the index was higher than 0.5 there would have been an average coordination.

4. Conclusions

The study quantifies the degree of coordination of fiscal and monetary policies in Romania, using the STA approach with time series data covering the years 2004 and 2016. The empirical analysis shows a low level of coordination between the two policies. After the implementation of the measurements through the changes in policy indicators in response to economic shocks, the extent of policy coordination for the study period was estimated at 30%. The data is annual, resulting in a maximum of 13 observations for each variable. In the first stage, root unit tests were used to test the two variables. Based on the results obtained in the first phase of the

analysis, in which we tested the existence of unit root for the variables with the ADF, PP and KPSS tests, we can state that between 2004 and 2016 variables $I(1)$ are stationary. Further on the Granger causality test shows a probability of 74% for no causality between the money supply and the deficit was found and 72% probability for no causality between the deficit and the money supply. With these probabilities the null hypothesis is accepted, according to which the two variables are not influenced in future values.

The fact that we have applied the root tests at a relatively small amount of time can influence the accuracy of the tests. However, we have opted for annual data, to the detriment of quarterly ones, which would have increased the number of observations in the time series as they tend to imply certain constraints over the time period. So we chose a baseline with fewer observations, but more relevant to the subject of the study.

The study showed that no coordination was taking place during periods of high GDP growth and inflation. The years in which the two policies were coordinated in Romania were 2006, 2007, 2014 and 2015.

A cause for poor coordination of monetary and fiscal policies, for Romania's case, could be the lack of institutions to ensure good communication between authorities. In this regard, the National Committee for Macroprudential Supervision was formed. The aim of this committee is to ensure first of all coordination in the field of macroprudential supervision at national level. In particular, a correlation between monetary and fiscal policies is desirable. This deduction is based on the fact that macroprudential oversight pursues financial stability by implementing suitable instruments. Coordinating the monetary and the fiscal policies for ensuring financial stability is a first economic step towards Romania's long term development. Following the empirical study and assuming that coordination of fiscal and monetary policies leads to sustainable growth, we can conclude that Romania still has many goals to achieve, such as: adopting legislative frameworks, educating the population, steady economic growth, maintaining budgetary deficits within the Maastricht convergence criteria, contribute to the medium and long term in achieving sustainable development.

It is worth underlining that in the current context of Romania, solutions must come from a healthy economic vision, based on responsible economic governance. Strengthening confidence in public institutions and economic policies are the bases for further development. Deciding authorities need to implement a long-term strategy that goes beyond the short term and the quantitative side in favour of qualitative approaches with a longer time perspective for the economic development of Romania.

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THE EVOLUTION OF THE FINANCIAL SUSTAINABILITY OF THE CHILD PROTECTION SYSTEM AT THE TERRITORIAL LEVEL IN BIHOR COUNTY BETWEEN 2010-2016

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Abstract: *The development of the child protection system is part of the strategic policies of the Romanian Government and takes into account the financing of services and of complementary activities, as well as of the specific social services at the level of national and local authorities through involving the entire society. The aim of the present paper is to present the system of social protection for children at the regional level in Bihor county by looking at its development in the period between the years 2010-2016 and also by looking at the specific characteristics which deal with the wide range of the provided social services, as well as the resources allocated for such services. The paper also discusses the social effects of the social protection system and the possibilities of improving the effectiveness of its financing.*

Keywords: *Child protection; social services; resources; financing; Bihor County.*

JEL Classification: *H30; G18.*

1. Introduction

Ensuring the measures of social protection provided for in the Constitution of Romania is a permanent task of both legislative and executive forums. The governmental strategy proposes that by the year of 2020 they will realize investments in child development and welfare, based on a holistic and integrated approach that should be accepted by all competent state institutions and authorities, which have as their main purpose the concrete and full exercising of children's rights, meeting the child's needs in a universal and non-restrictive way.

The principles laid down in the strategy aim at promoting and respecting the child's supreme interests, without discrimination, ensuring equal opportunities and the involvement of the entire society in child development and welfare, but the essential responsibility belongs to the parents, and then, at a secondary level, to the state authorities as well as to the civil society. State authorities have the obligation to contribute to the ensuring of the necessary resources for the promotion and protection of the rights of the child through the proactive approach of family supporting measures in order to prevent the separation of the child from his/her family where her/his rights can be exercised. Ensuring the promotion of children's rights, of their rights of development, participation and protection is one of the main responsibilities of the Parliament and the Government.

The central bodies of power, in consensus with international regulations, are drawing up normative acts in the fields of defending and promoting children's rights as well as regarding the system of organization and functioning of the state authorities designed to provide and carry out the measures for their protection. Moreover, these also regulate the range of granted social benefits, the levels of such benefits, as well as the requirements for the accreditation and licensing of social services at the level

of the mandatory minimum quality standards, together with the incurred standard costs.

At the same time, they establish and provide the predominant means and sources of funding both for the entire system of child protection and for the system of facilities and benefits granted to those involved – families, private providers of social services, employers.

Also, the central authorities regulate the criteria of admission into certain categories of beneficiaries of social benefits and special social intervention services.

At the level of local authorities, public services of social assistance have the role and the mission of preventing child protection measures, of establishing plans of services and of carrying out individual protection projects, of granting benefits and facilities to those involved, and they also have the role of informing the competent institutions whenever the laws regarding children's rights are broken.

The established measures as well as the efforts made in the system of child protection have the purpose of preventing the separation of children from their parents, of reintegrating children into their own families, or in foster families in accordance with all protection measures.

Exercising the rights of the child can be realized primarily through the involvement of the parents and of the extended family, as a legal obligation, and, alternatively, through the involvement of state authorities and of the civil society, through providing support in preventing the separation of the child from its parents, as well as regarding the child's participation in the educational process and healthcare. In cases of vulnerability and abuse, as well as neglect, exploitation, and other special situations, children benefit, by default, from special protection measures, as a matter of urgency, and they also benefit from legal representation of their interests by persons appointed by the law. In such cases parental rights are suspended. The Chapter of Introduction should refer to the context of the research.

2. Social services provided

As a result of the protection measures taken by the competent authorities, the child benefits from specialized social services in a residential system or in day-care centers, according to her/his needs. Parents can benefit from information and counselling services, as well as from parental training. The purpose of child protection measures is children's social and professional reintegration into the community, and, implicitly, in society.

Ensuring the basic social services is one of the main responsibilities of the Government. Contracting out services to non-profit agencies is adequate when it is the service and not the profit that is viewed as the ultimate objective (Colby 1990). At the same time, the private market is a means of increasing the quality of services. A market of social services that allows many private providers to offer such services, not only would reduce the costs of such services, but would also contribute to the increase of their quality levels. In the recent decades, communities have developed programs that proved to be not only innovative, but were also able to mobilize local and community resources to a large extent.

It is not a coincidence that the research regarding public-private partnerships and NGOs has rapidly increased, and some approaches became important themes of social innovation (Arpinte et al., 2006). An analysis of the institutions requires an

integrated approach of all elements, all existing regulations in society, of all values, principles, of promoted rules and routines (Onica-Chipea 2007).

Based on the aforementioned considerations, the objective of this study is to investigate the ways of optimizing child protection services in Bihor County, in the context of the available resources. The results of the research show that the conditions of granting services to children in need of placement are significantly different in the different time periods. The analysis has identified the dimensions according to which children benefit from an improvement of the services' quality through the increase of financial resources, and also through attracting a wider range of participants in the system of child protection.

Social solidarity, subsidiarity, and decentralization require the involvement of the fundamental factors of society, such as: the family, the state – through its central and local structures, civil society – which, by their organizational ability to mobilize and attract resources, define the administrative capacity of the child protection system.

The scientific field, the benevolent and voluntary participation of private persons in order to achieve child protection, the complementarity of other institutions – all of these influence in a decisive way the institutional capacity of child protection in Romania, as well as the performance and the strengthening of the system's strategic and tactical approach at the regional level.

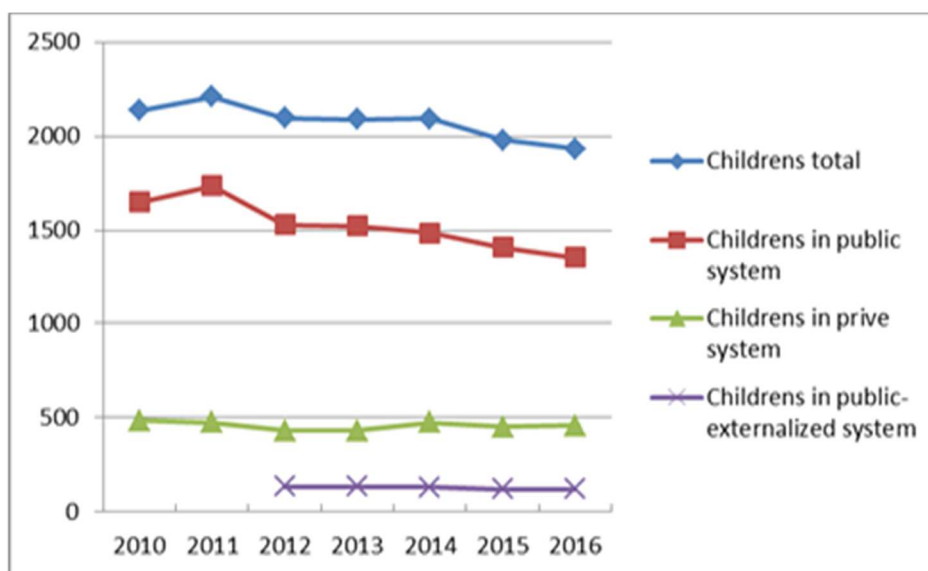


Figure 1. The number of children benefitting from the system of protection in Bihor County, between 2010- 2016

Source: *Activity Report General Directorate for Social Assistance and Child Protection Bihor*

In the period between 2010-2016 the evolution of the number of beneficiaries in the system of child protection in the county of Bihor knows a significant decrease of about 9% compared to 2010 and of 11,45 from 2011 (from 2209 to 1933 children), that is, a decrease of 276 persons of the average annual enrolments of approximately 250 children. This situation demonstrates that, in every year, around

300-526 children have left the child protection system, so that they have been reintegrated either in their natural, or in foster families, thus have been reintegrated into society.

Analyzing the tendencies regarding the structure of the providers of social services one shall observe a significant decrease of the number of children in the public system, of 18% (1650 to 1355 children), but still there is a slight oscillation in the evolution of the number of children from the system of protection granted by private providers (NGOs), between 430 and 480 children, with slight tendencies of growth over the last two years.

Measures of outsourcing, subcontracting of services for child protection from the public to private providers since 2012 have resulted in a decrease in the number of beneficiaries of the policies of protection in both the public and private sectors.

The number of children in the externalized special protection presents a relative stagnation which determined, together with the relative stability of the private system, a more accentuated decrease of the beneficiaries in the public system – an aspect that can be appreciated as being positive, since it allowed the realization in the public system of quality standards and, implicitly, the obtaining of operating licenses for all the organizational structures.

In this context one has to mention the savings in the public budget through entirely alternative financing, and, respectively, the overwhelming proportion of costs by the private providers of social services, as well as the consistency of the additional providers of externalized social services which have been undertaken by contracts.

Regarding the partnerships concluded with private providers of social services for children it has to be noted that they use an important alternative resource in order to overcome the budgetary constraints in the public system, that is, the use of volunteering, attracting donors, sponsors, etc. Also by the relations of cooperation as well as through the contractual arrangements, private partners bring a contribution to the development of professionalism in the system and new perspectives in the formation of the market of social services.

3. The regional context in the development of social services

The strategy for the years 2012-2016 established by the General Directorate of Social Assistance and Child Protection of Bihor (DGASPC), approved by the Decision of the County Council of Bihor no. 290/21.12.2012, considered the establishment of guidelines and a coherent institutional framework in order to create, at the level of Bihor County, a system of social services capable of ensuring social inclusion for all vulnerable groups, as well as capable of contributing to the improvement of the quality of life (Strategia DGASPC Bihor 2012-2014). The main objective is to permanently improve the quality of social services and the level of cost effectiveness of such services in the context of the private sector. In the development of implementing public-private partnerships in the social field, we can observe an increase of the formulas of social contracting. (Lambru and Mărgineanu 2004)

Analyzing the operating expenditure of social services offered in residential centers for children and adults, one has to note the failure to comply with the cost standards approved by the law H.G.R. no. 23/2010 and Decision no. 978/2015 regarding the approval of minimum standards of costs for social services. The administration of social services being undertaken by a private social service provider has also brought about the fact that staff costs will be supported by the private supplier at the

price set in the contract. Moreover, cost standards represent the minimum cost of the annual expenditure needed for providing social services, calculated for beneficiary per type of social service, according to the minimum quality standards or to the criteria laid down by the law, and they also represent one of the basic criteria according to which public suppliers outsource social services to private suppliers.

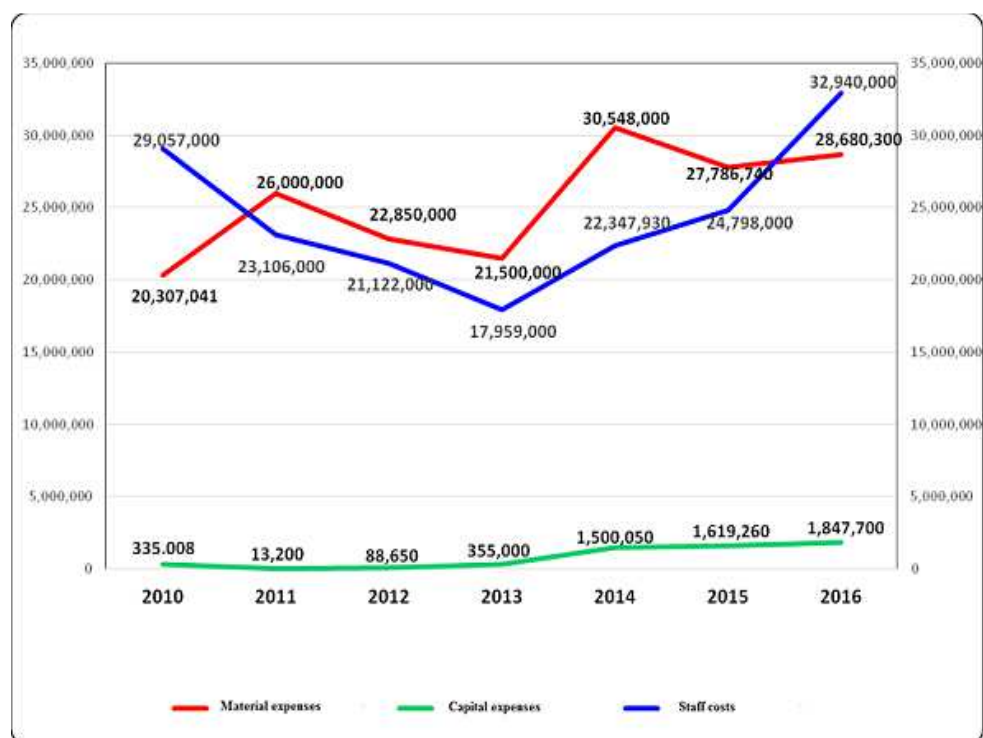


Figure 2. The costs of social services 2010-2016

Source: *Activity Report General Directorate for Social Assistance and Child Protection Bihor*

As a result of outsourcing social services both the public administration and the private sector of service providers gain advantages. Such potential advantages of the public sector are the following:

- reducing costs for the public sector in phases of implementation and maintenance of a public service;
- risk-sharing – such risks could include: increase of the costs of social services, the inability of meeting the deadlines of service delivery, the insufficient coverage of production costs as well as the costs of providing some services
- increasing or maintaining the level of providing services – the private sector can introduce new methods of providing a certain service, and this can lead to the decrease of costs and/or the improvement of the quality of the public service;

- revenue-increasing – partnerships offer the possibility of using some extra-budgetary sources that would not have been available in case of production and service delivery by the public administration;
- efficiency in implementation – as bureaucracy becomes reduced one can use more flexible forms of contracting and acquisition, the approval for the use of capital is faster, decision making is more flexible and simplified.

Law no.292/2011 (the Law of Social Assistance) sets out the objectives that have to be achieved through contracting activities with private providers of social services, both in order to outsource the service that are, at a certain point, in the administration of DGASPC, and in order to offer quality services to the beneficiaries in the framework of an effective and efficient management.

By analyzing the statement of expenditure in the budget during 2010-2016 according to Figure 3, one can find a permanent decrease of costs in the first four years, while the situation becomes worse in 2011 due to the budgetary constraints, when the number of beneficiaries presented an increase from 2135 to 2209 children and the budget appropriations decreased by 7.927 thousand lei.

A serious problem of social protection, frequently mentioned in the studies of the specialized literature, is the shortage of specialists, insufficient human resources, and the low percentage of qualified personnel both at the levels of primary services and of specialized services. Florin Lazăr and Vlad Grigoraș argued that over 60% of the personnel who should carry out prevention programs have not acquired studies in the field of specialty (Lazăr and Grigoraș 2013).

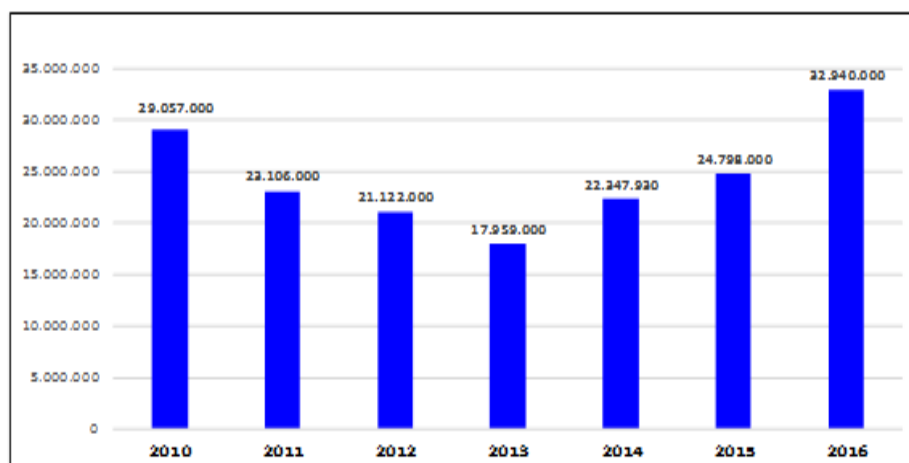


Figure 3. Staff costs 2010-2016

Source: Activity Report General Directorate for Social Assistance and Child Protection Bihor

In the past decades, programs of community development have demonstrated not only innovative approaches, but also an incredible capacity of mobilizing local and community resources. "It is no coincidence that the public-private partnerships and the subject of NGO became quickly and widely spread, since these are among the most important approaches in the field of social innovation" (Zamfir 2009, p.18).

The solution of externalizing and the maintaining the partnerships with NGOs regarding the granting of social services has produced significant savings to the budgetary expenditure in the recent period.

By analyzing the structure of expenditure from the public system of child protection according to Figure 4, one can find that up to the middle of the period there was a drastic decrease of staff costs, of about 40%, especially on the basis of staff reduction and frozen vacancies, which has led to the loss of several specialists already trained in the system. The issue of human resources in the system of social protection should be given more attention, in terms of professionalism, through increasing the employment of specialists and through the continuous training of staff, but also through avoiding overloading the staff with tasks (Marc and Oşvat 2013).

From 2013 until the end of 2016 one can observe an increase of staff costs of about 83%, a situation which was created by new employments as well as by the increases of earnings – work has been better rewarded also as recognition of the importance and of the value of the particular job. One can observe the growth of staff costs due to the relative reduction of material expenses.

The material expenses according to the charts show oscillations, the lowest values appearing at the beginning of the period, then one can see a significant increase of about 42% in 2014 as opposed to 2013. In the next period one can see values that stand for the recovery of some arrears in the provision of some necessary equipment and of functioning among the adequate parameters in terms of social services.

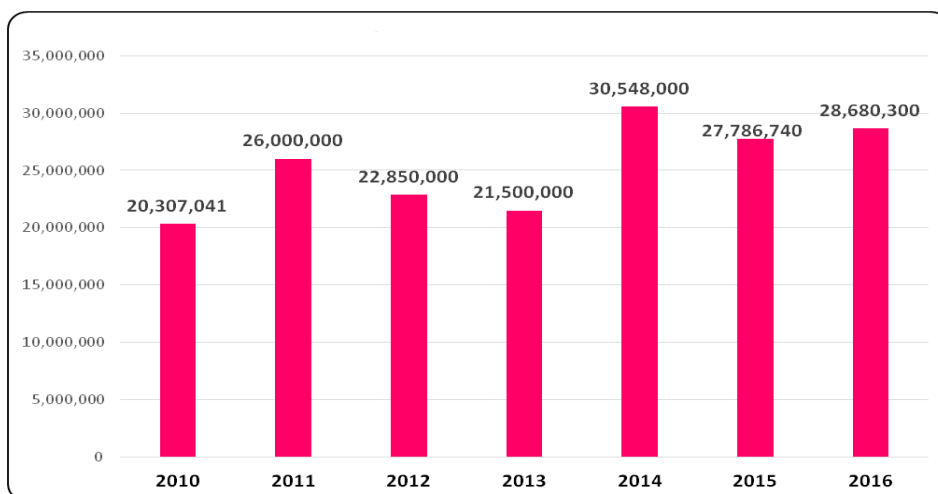


Figure 4. Material expenses 2010-2016

Source: The strategy developed by the General Directorate for Social Assistance and Child Protection Bihor

A significant role in the implementation and development of social services is played by capital expenditure, Figure 5, which in addition to the improvement of the living conditions of the beneficiaries has as its aim to reduce the current operating costs. As one can see in the charts provided, there is a significant increase in the capital expenditure which provides a more efficient perspective of development of the child protection system at the regional level.

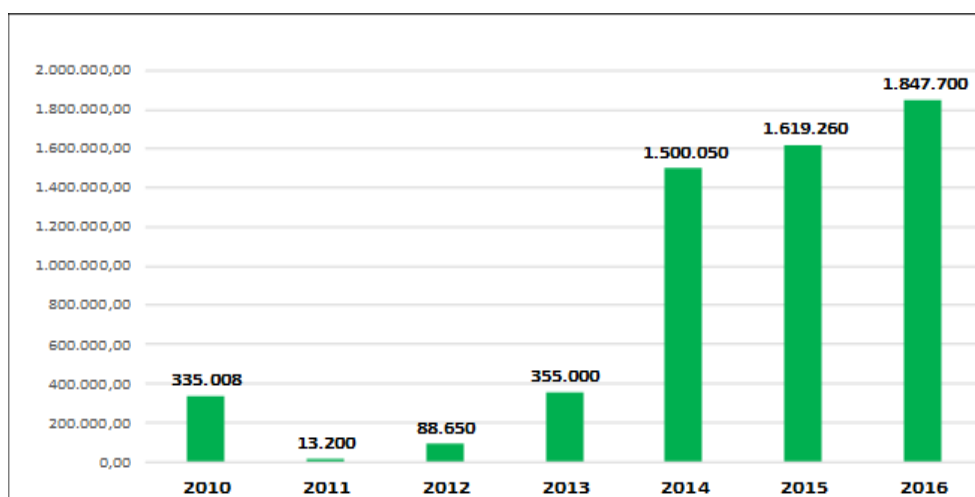


Figure 5. Capital expenses

Source: DGASPC Bihor - The strategy developed by the General Directorate for Social Assistance and Child Protection Bihor

The financial sustainability of the public system of child protection is largely ensured by financing realized both at the central level and that of the county council's level, as well as by the complementary participation of civil society which has led to the fulfilment of minimum standards of quality and the continual obtaining of the licenses for the functioning of the structures for providing social services destined for the promotion and protection of children's rights at the level of the DGASPC Bihor.

As the result of the research shows, based on the annual progress reports of the DGASPC Bihor, one can conclude that the national strategy on child protection in the period of 2014 - 2020 is in the process of deployment with appreciable positive results.

In the near future, the problems awaiting support and solutions in the promotion and protection of the rights of the child are those concerning: behavioural disorders, addiction, abandonment in hospitals, school abandonment, neglect, abuse, domestic violence, poor development of parenting skills in many natural families.

The general desire, and, at the same time, the ultimate objective of social protection of the child is the socio-professional integration which is currently facing difficulties also taking in consideration the new challenges and the hierarchy of priorities, so I consider that there is a need for the development of the services of child protection in terms of providing specialized services which are currently missing, such as: the development of skills for independent living, services that would prepare persons for entering the labor market, services for preventing and treating addiction, for children who commit criminal deeds and cannot be held responsible, services for juvenile mothers, for developing parenting skills, and, last but not least, granting services of coordination and monitoring of the activities of the public services of social assistance

Conclusions

The contribution of professionals in the field and the access to the sources of financing by the interested parties, by the NGOs and by the local authorities that are important providers of services for children and families, could influence the change of attitude in the field, and could even formulate a new paradigm regarding the identification of needs, preventive measures, as well as granting social services.

I argue that the child protection system is still insufficiently developed regarding that type of support which attempts to keep the child in a family environment, to ensure her/him normal conditions of life, the development of skills for independent living and children's socio-economic integration. Therefore, there is a need for more efficient mobilization of political forces, of the specialized institutions at both central and local levels, of the civil and scientific society according to the following principles:

- Establishing a more stable and more stimulating legislation from a social point of view as well as allocating possible resources;
- Improving the educational system and the vocational training;
- Developing therapeutic as well as vocational services and activities, and ensuring preparation for an independent life and family life;
- Stability and professionalism of the staff, that is, creating a motivational system for specialists in the field;
- The involvement and exploitation of the potential of professional organizations, of the social environment and of the scientific domain, as well as of the positive experiences in the field both at international and national levels.

In the end, I believe, however, that the principles of subsidiarity and decentralization, the way the child protection system is conceived should ensure the real identification of the needs of child welfare at the level of local communities, and should offer the possibility of fulfilling the child's needs. The development of the systems by the institutions being competent in promoting the rights and in the protection of children, of systems based on inter-institutional, as well as national and international relations, is realized through various projects and brings about the prerequisites of a scientific basis in the field, as well as the strengthening of the strategic and tactical approaches.

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 17. Figure 4. Material expenses 2010-2016.
 18. Figure 5. Capital expenses. www.dgaspcbihor.ro

**SECTION: *INTERNATIONAL BUSINESS,
EUROPEAN INTEGRATION, FOREIGN LANGUAGES
AND BUSINESS ENVIRONMENT***

LEGAL PROBLEMATICS CONCERNING WITH THE NATIONALITY OF MNCS

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Abstract: *The subject of nationality of Multinational Enterprises (MNEs) has a great importance scientifically and practically. This subject is considered as an innovative subject. Its scientific significance shows from that multinational enterprises are considering as new phenomenon and representing great economic force that enjoy advanced material and technical capabilities. In the practical sense, discussion the subject of the legal problems concerning with the Nationality of MNEs contributes to organize the activity of MNEs within a specific legal framework. Studying the nationality of MNEs raises with legal problems. The jurisprudence differed about the definition of the nationality of MNEs, as well as the possibility of the company enjoying nationality. The main aim of the current research is to discuss the Legal problematics concerning with the nationality of MNCs. The study concluded that multinational corporations (MNC) have a specific nationality, although one side of the jurists has denied this matter. It is a fact that cannot be denied. This nationality aims to determine the country to which the company belongs and which operates on its territory, determines the extent to which it enjoys rights under its law and the extent to which it complies with the obligations imposed by this law. As well as, it is clear that both parties (deniers and supporters) agree on the need to link morale to a particular state, because of the legal and political significance of this link, which shows its status, its legal system and its rights. The difference between the two views is limited to the conformity and the appropriate of using the nationality term for this association. It is more appropriate term for the natural person, and perhaps the term 'political submission of the state' is more accurate for the moral person. But as long as the term of nationality is common and used and is intended to be clear, there is no objection to using it in the field of the moral person as well. The researcher recommends conducting further studies regarding the subject of the current study, such as studying the criteria by which the nationality of the multinational companies (MNCs) can be determined in an attempt to clarify the subject further.*

Keywords: *Multinational companies (MNCs); nationality; and jurisprudence.*

JEL Classification: *F23; J53; H19.*

1. Introduction

The change and development that has emerged in the international economic system, the openness of countries to international trade, the flourishing of foreign direct and indirect investments and the great technological development in the means of production, transport and communication have led to the emergence of modern legal and economic concepts that were not common in the past⁵. One of

⁵ A.M.Rugman, *The End of Globalization*, London 2000; Pankaj Ghemawat, "Semiglobalization and International Business Strategy," *Journal of International Business Studies* 34 (2003); Jan Wouters and Anna-Luise Chané, *Multinational Corporations in International Law*. Leuven Center for Global Governance Studies. Working. Paper No. 129 – December 2013, p. 4.

these concepts is the emergence of a corporate pattern that differs from traditional companies whose activities are not limited to the international borders of a country⁶. This type of company is characterized by its economic strength and its activity which extends beyond the borders of a given country to several countries at the same time⁷. It is difficult to find a specific legal organization for multinational enterprises, as the idea is still alien to most modern laws that may ignore them or take them into account only within very narrow limits with limited legal consequences⁸. Multinational companies (MNCs) have become the hands of developed countries to develop their economies beyond their borders⁹. The growth and prosperity of these companies in developing countries is one of the most difficult aspects, due to legal, social, economic and political reasons¹⁰. These reasons prompted developing countries to demand the establishment of international covenants and rules governing the activity of these companies¹¹. In contrast, multinationals have sought to evade national laws in the countries where they operate and have sought to get international legal personality¹².

The term used for this type of company (multinational companies) leads to the search for whether these giant entities enjoy the nationality of a particular country at the international level¹³. The opinions differed about the standard adopted to determine this nationality, which is considered as a tool to bring the company into a given state which enjoys its diplomatic protection and subject to its national law in its inception and conduct, and therefore can acquire rights.

The subject of nationality of MNCs has a great importance scientifically and practically. This subject is considered as an innovative subject. Its scientific significance shows from that multinational enterprises are considering as new phenomenon and representing great economic force that enjoy advanced material and technical capabilities. In the practical sense, discussion the subject of the legal problems concerning with the Nationality of MNCs contributes to organize the activity of MNCs within a specific legal framework. Studying the nationality of MNCs raises with legal problems. The jurisprudence differed about the definition of the nationality

⁶ Fahd Al-Ghaloud, the impact of multinational companies on the new international economic order after the events of September 11, 2012. Master of Political Science, University of Jordan, 2012, p. 24.

⁷ M. Wilkins, The Emergence of Multinational Enterprise, Cambridge, Mass. 1970; M. Wilkins, The Maturing of Multinational Enterprise, Cambridge, Mass. 1974; EVREN KÖKSAL, THE IMPACT OF MULTINATIONAL CORPORATIONS ON INTERNATIONAL RELATIONS -A STUDY OF AMERICAN MULTINATIONALS. A thesis SUBMITTED TO THE GRADUATE SCHOOL OF SOCIAL SCIENCES OF MIDDLE EAST TECHNICAL UNIVERSITY, 2006, 17.

⁸ Geoffrey G. Jones, Nationality and Multinationals in Historical Perspective. Harvard Business School, 2005, p. 4.

⁹ Geoffrey G. Jones, Nationality and Multinationals in Historical Perspective, 2005. Available at: <http://www.hbs.edu/faculty/Publication%20Files/06-052.pdf>, p. 4.

¹⁰ Jan Wouters and Anna-Luise Chané, Multinational Corporations in International Law, Op cit, p. 23.

¹¹ See; Agnidipto Tarafder, The Legal Status of Trans-National Corporations in International Law. Available at: <http://www.publicinternationallaw.in/system/files/essayfiles/legalstatusoftranscorp-may2014-adipto.pdf>, 2014; Galiya Kulubekova, SCUOLA DI DOTTORATO DI RICERCA IN: DIRITTO INTERNAZIONALE E DIRITTO PRIVATO E DEL LAVORO. Sede di co-tutela: Università degli Studi di Padova (Italia), 2016; Surender Munjal, Pawan Budhwar and Vijay Pereira, A perspective on multinational enterprise's national identity dilemma, Journal for the Study of Race, Nation and Culture, 2017.

¹² Mogili Malika, Multinational corporations and their impact on the rule of law. Master of Laws, Business Administration, 2014, p.30.

¹³ Robin F. Hansen, The International Legal Personality of the Multinational Enterprise and the Governance Gap Problem. Degree of Master of Laws Faculty of Law McGill University, Montréal, 2009, p. 5.

of MNCs, as well as the possibility of the company enjoying nationality. The main aim of the current research is to discuss the Legal problematics concerning with the nationality of MNEs.

2. Definition of multinational companies MNCs

MNCs are those companies operating in several countries, consisting of a mother company in the origin country and have many branches in the host countries¹⁴. MNC defined as the company which operates its business in two or more countries¹⁵. It is also can be defined as an organization whose annual sales volume exceeds \$ 100 million and has facilities or production branches in six or more foreign countries¹⁶. Multinational enterprises are defined as regional or geographical transnational corporations, and have production units distributed to a number of foreign countries, enabling them to operate without any national control¹⁷. It is also known as the company that manages and owns investment projects in more than one foreign country¹⁸.

MNEs are large in size and have a variety of activities¹⁹. This means that their business is not limited to produce of one major commodity, but rather they have multiple products²⁰. The main motivation and desire of this diversity is the desire of the senior management to reduce the probability of loss. If the company loses in one activity; then it can succeed in other activities²¹.

¹⁴ Ruth Aguilera, Ki Noh, Jin Kim, and Xiaowei Yaorui, 'Technical Note: Globalization, Globaloney, Semi-Globalization, and the Multinational Enterprise', 2014. Available at: <https://web.northeastern.edu/ruthaguilera/wp-content/uploads/2017/03/Technical-Note-Globaloney.pdf>. p. 1.

¹⁵ Andrea Ascani, Aspects of Multinational Enterprises in the Global Economy: Location, Organisation and Impact. A thesis submitted to the Department of Geography & Environment of the London School of Economics for the degree of Doctor of Philosophy, London, July 2015, p. 15.

¹⁶ EVREN KÖKSAL, THE IMPACT OF MULTINATIONAL CORPORATIONS ON INTERNATIONAL RELATIONS -A STUDY OF AMERICAN MULTINATIONALS. Op cit, p. 7.

¹⁷ Eva Knutsen, Multinationals and Emerging Markets. Copenhagen Business School, 2012, p. 1.

¹⁸ Mogili Malika, Multinational corporations and their impact on the rule of law. Master of Laws, Op cit, p.15.

Also see; Cook, W.N. Multinationals, globalization and industrial relations", in Morley, Michael J., Gunnigle, P. & Collings, D.G., Global Industrial Relations, Oxon: Routledge, 2006; Ozoigbo, B.I., & Chukuezi, C.O., The Impact of Multinational Corporations on the Nigerian Economy, European Journal of Social Sciences, 19(3), 2011; Bulus, H., & Ango, N.A. Multinational Corporations: Corporate Social Responsibility Performance in Lagos State, Nigeria: A qualitative analysis, European Journal of Globalization and Development Research, 5(1), 2012; Osibanjo, A. O.; Oyewunmi, A. E. & Salau, O. P., Globalization and Multinational Corporations: The Nigerian Business Environment in Perspective. IOSR Journal of Business and Management (IOSR-JBM). 8. Volume 16, Issue 11. Ver. III (Nov. 2014).

¹⁹ Fahd Al-Ghaloud, the impact of multinational companies on the new international economic order after the events of September 11, Op cit, p. 25.

See; Rajneesh Narula, Globalisation of Innovation: The Role of Multinational Enterprises. f International Economics & Management, Copenhagen Business School, Howitzvej 60 2000 Frederiksberg, Denmark, 2003; Rajneesh Narula and José Guimón, THE CONTRIBUTION OF MULTINATIONAL ENTERPRISES TO THE UPGRADING OF NATIONAL INNOVATION SYSTEMS IN THE EU NEW MEMBER STATES: POLICY IMPLICATION. OECD Global Forum on International Investment, 2009.

²⁰ Jan Wouters and Anna-Luise Chané, Multinational Corporations in International Law, Op cit, p. 5.

²¹ Geoffrey G. Jones, Nationality and Multinationals in Historical Perspective, Op cit, 6.

3. Definition of the nationality of multinational corporations

There has been controversy among jurists over the possibility of granting nationality to a multinational company²². Part of the jurists indicated to the possibility of enjoying the company with nationality, and some of them rejected this. Regarding the definition of the nationality of MNEs, jurists differed on giving a certain definition to these enterprises. In general, nationality can be defined as a political and legal association that binds the individual to the state²³. Nationality is a necessary means necessitated by the imperatives of the current international system for the distribution of the population to States. Nationality has been defined as the criterion by which the legal distribution of individuals in the international community is determined²⁴. The International Court of Justice defined nationality as a legal relationship in which an original and solidarity association was established in terms of living, interests and sentiments²⁵.

The jurists differed in defining the nationality. Some of the jurists focused on their definition of nationality on the legal side, where they dealt with mutual obligations between individuals and the state. A number of jurists focused on the political side, explaining the political implications of domestic law and international law. Other jurists focused on their definition of nationality on social ties as nationality represents a spiritual feeling and social integration. Other jurists considered that nationality represents a political and legal bond between the individual and the State.²⁶

The nationality of the company is the legal association that binds the company to a particular state, through which the company is engaged in the national economy of the state, which results in the subordination of these companies to the sovereignty of the state concerned and benefit from its protection. In other words, the nationality of companies is the legal relationship existing between a company and a particular country, through which the company is integrated into the national economy of the state associated with it, subject to its sovereignty and enjoys its protection.²⁷

French jurisprudence introduces the concept of the nationality of a commercial company, but the French legislator did not explicitly refer to the nationality of the company, nor was it mentioned in the general principles of law. Hence the scholars have difficulty in controlling this concept, since nationality in the strict sense is the subjection of a person to the law of a particular state. By applying this definition to a business, it can be concluded that the nationality of a company is the subjection of a particular company in all its aspects to the law of a specific State.²⁸

²² Montenegro, A. "The Development of Pirelli as an Italian Multinational 1872- 1992," in G. Jones and H. G. Schröter (eds.), *The Rise of Multinationals in Continental Europe*, Aldershot 1993.

²³ Talaat Al Hadidi. *International Legal position for Multinational Enterprises*. Dar Al-Hamed for Publishing and Distribution, First Printing, Amman, 2008, p.194

²⁴ Tayeb Zeruti. *Mediator to explain Algerian nationality*. Al Kahnah Press, Algiers, 2002, p.18

²⁵ Adly Abdel Karim. *Legal system of contracts between foreign countries and persons*. PhD thesis, Faculty of Law and Political Science. University of Abu Bakr Talsman, 2011, 98.

²⁶ Tayeb Zeruti. *Mediator to explain Algerian nationality*, Op cit, p. 19.

²⁷ Hisham Khaled, *Nationality of the Company*, University Thought House, Alexandria, 2000, 70.

²⁸ Michel de Juglart, Benjamin Ippolito, *cours de droit commercial : les sociétés commerciales*, 2^{VOL}, 10^{édition}, Montchrestien, Paris 1999, P 94.

4. The discrimination of the nationality of multinational corporations (MNCs) on the personality of natural persons

The nationality of a multinational company is distinguished from the nationality of natural persons by a set of characteristics. If we clarify the relationship between the individual and the State, it will be noted that it is specific as a spiritual bond based on a sense of allegiance to the State, and this sense is not available in the moral person. Also, the nature of the moral person also contravenes the obligation of some national duties such as the performance of military service. In this section, the most important differences between the nationality of the company as a moral person and the nationality of natural persons will be highlighted.

First: the relationship of nationality is a real association involving a social meaning between the individual and the state. It also involves a relationship between flesh and blood. This relationship is based on moral and psychological principles that apply to human beings because they have bodies and a spirits. Other than moral persons represent legal entities, their importance is limited only to their economic value. The purpose of their recognition is to determine their legal scope and subordination.²⁹

Second: The importance of nationality for the natural person is reflected in the fact that it is a means of determining the people's component in the state, and moral persons do not enter the general census of citizens.³⁰

Third: The basis for determining the nationality of the natural persons and the implications of granting the nationality to them is not available in the moral person.³¹

Fourth: The legal means used to determine the nationality of the natural person are different from the means of determining the subordination of the moral person. In the first case, the state defines its citizens according to the legislation of its nationality. In the second case, the legal rules are double. These are controls from which the state chooses the appropriate ones, such as the headquarters officer.³²

Fifthly, a natural person is usually associated with one state, whatever its place of work, and it cannot be imagined in two places at the same time, while the place of the moral person, which is characterized by the power of international proliferation, is likely to be associated with several countries and may become a relationship with the first State to which it belonged weak and does not reflect the fact of the nationality union. Transnational corporations or multinational corporations are an example of that. They are as global economic groups that are not in fact linked to the traditional standards of any country, although they are categorically fragmented in independent and focused legal units but in fact belong to a single group that shares and monopolizes the sectors of activity without the State being able to control and to suppress the mechanisms of such illegal operations.³³

²⁹ Tayeb Zeruti. Mediator to explain Algerian nationality, Op cit, p. 83.

³⁰ Meta Hussein. Nationality of multinational corporations. Master's degree in Law Division, Specializes in International Private Relations Law, 2016, p. 7.

³¹ Tayeb Zeruti. Mediator to explain Algerian nationality, Op cit, p. 84.

³² Meta Hussein. Nationality of multinational corporations, Opcit, p.6.

³³ Ibid, p. 7.

5. The nationality of multinational corporations (MNCs) from the perspective of international jurists

The recognition of the moral person in contemporary law has become a constant fact. This person is considered as an influential legal entity in social and economic life, and imposed itself despite the controversy over the jurisprudence because of its available material possibilities, its spread strength and its life length compared to the natural person with limited possibilities and means.³⁴

Nationality has a particular importance to a commercial company as a legal entity, where the company's acquisition of a specific nationality means its entitlement to protect the state which granting nationality, in addition to enjoying the privileges determined by the legislation of that state³⁵. Therefore, the company must abide by the laws of that state while maintaining its public order³⁶. Despite the importance acquired by the nationality of the company as an independent legal entity; however, its approval was not a consensus among jurists, and there was a dispute between them in granting the nationality to the moral person. Jurists were divided into deniers and supporters to grant nationality to the moral person³⁷.

5.1 The deniers side to enjoy the company with the nationality

Many jurists of private international law have denied that moral persons have the same nationality as a natural person. In their opinion, the nationality is a legal and political link between the State and its constituent individuals, in which the element of the people in the State is determined, which makes it limited only to natural persons. On the other hand, nationality builds emotional and psychological bonds between individuals and the state, and these emotions do not exist for people who have no body that bears pain or a spirit of hope.³⁸

First: The arguments underlying this view

Nationality is by nature a social and political bond between individuals and the state to which they belong, where nationality develops a sense of loyalty from individuals towards their state. This is unimaginable for the moral person, which is only a legal unit that has no effect on the number of people of the state.³⁹

Nationality is also based on the existence of a blood link between individuals and the State, which cannot be applied to moral persons. In addition, rights and duties of a political nature, such as the right to vote, to stand for election to public elections, to engage in public service, and military service are restricted to natural persons without moral persons.⁴⁰

The owners of this opinion also show that nationality is not binding to perform the company (as a moral person) for its functions, since the determination of the law to which the company is subject to perform its functions is due to the standard of the

³⁴ Tayeb Zeruti. Mediator to explain Algerian nationality, Op cit, P. 83.

³⁵ Salami Saed. Implications for the Moral Personality of a Trading Company. Research submitted to obtain a master's degree. Faculty of Law and Political Science, University of Abu Bakr Belqayd, Talsman, 2012, p 79.

³⁶ I bid, p. 79.

³⁷ Meta Hussein. Nationality of multinational corporations. Op cit, p. 9.

³⁸ Mohammed Farid Al - Arini. Commercial Companies, New University House, Alexandria, 2003, p 58.

³⁹ Salami Saed. Implications for the Moral Personality of a Trading Company, Op cit, p. 80.

⁴⁰ Meta Hussein. Nationality of multinational corporations, Op cit, p. 9.

main management center. The laws applicable to this company are based on the laws and control systems in the company.⁴¹

Second: The criticisms of this view

The first argument shows that there is confusion between the concept of nationality as a legal system in the sense of the affiliation of a person to certain states, and the nationality as a social content. The sense of political and spiritual loyalty to the nationality is not a legal pillar for its existence. Some individuals do not have this feeling, such as the children who do not have the ability to discriminate, as well as the crazy people.⁴²

Moreover, the absence of a moral person within the constituent component of the state does not mean that the state does not recognize it. The strength of the state is not measured by the number of its people, but is measured by its economic strength, and the moral persons belonging to the state contribute a great deal in this field.⁴³

On the other hand, for deniers who show that the association of nationality is in the blood association, the supporters point out that this argument is incorrect. Supporters show that the nationality of natural persons is not based on a single bond of blood; it is possible to acquire nationality on the basis of the law of nationality or by naturalization. In addition, the Algerian legislator stated in article 50 of the Algerian Civil Code that "... companies whose main position is abroad and has an activity in Algeria are considered to have their status under the domestic law of Algeria ..."⁴⁴. According to this text, it is possible to say that the home of companies operating outside Algeria is Algeria. As the nationality of the company is determined by the domicile in most cases, the nationality of these companies is Algerian nationality. Consequently, this method can be considered one of the naturalization methods of moral persons including the MNCs.⁴⁵

With regard to the argument that moral persons are unable to enjoy the rights and duties of a natural person; the supporters assert that such companies have a major role, both politically and economically. In particular with regard to the actions exercised by large corporations in all systems, and thus determine the fate of these states politically.⁴⁶

And for the opinion of the latter argument that shows that the recognition of the nationality of the company is not necessary to carry out its activity or achieve its purpose is also incorrect. The determination and the recognition of the nationality of the company determine its belonging to a state concerned and therefore recognize the applicable law, and its rights and duties are determined in the direction of that state.⁴⁷

5.2 The supporters side to enjoy the company with the nationality

These jurists see that the nationality of a moral person is not the same as that of a natural person, but it is rather a fantasy and a method of legal drafting. However, the existence of an interdependence between the moral person and the State is a real

⁴¹ Salami Saed. Implications for the Moral Personality of a Trading Company, Op cit, p. 80.

⁴² Tayeb Zeruti. Mediator to explain Algerian nationality, Op cit, P. 85.

⁴³ I bid, P. 85.

⁴⁴ Article 50 of the Algerian Civil Code.

⁴⁵ Meta Hussein. Nationality of multinational corporations, Op cit, p. 10.

⁴⁶ I bid, p. 10-11.

⁴⁷ Salami Saed. Implications for the Moral Personality of a Trading Company, Op cit, p. 81.

necessity that cannot be condoned as long as this company is recognized as a moral personality and its legal activity exceeds the boundaries of the State, thus, this company must be linked to a particular State to determine its status in terms of the extent of its rights (national or foreign)⁴⁸. The problem of the use of rights should also be resolved through the designation of the relevant law in the event of conflict (conflict of laws and conflict of international judicial jurisdiction). The status of moral person differed if he is a national or a foreigner, exactly like the natural person⁴⁹. The identification of the nationality of the company is necessary in many respects, as it aims to achieve the following:

1. To know the amount of rights enjoyed by the moral person and which the state is restricted to its citizens only. Particularly in the area of trafficking, such as the right to tax exemption and the right to receive subsidies.
2. To know the State which has the right to protect this moral person because of it's belonging to it.
3. Determining the legal system that is subject to it at the time of its establishment and at its administrations, applying the tax system to it, etc.

First: The arguments underlying this view

Nationality is considered as a legal system based on belonging to the state or its subordination, which is achieved for the company as a moral person as well as for natural person.⁵⁰

On the other hand, the restriction of certain rights and obligations to natural persons without moral persons does not exclude the idea of nationality from the company as a moral person, where the non-enjoyment of moral person with these rights may occur in some cases for the natural persons through the abstention of natural persons from the application of these rights, however, nationality cannot be denied from these natural persons.⁵¹

There is also a great similarity between natural persons and moral persons in terms of the effects of the enjoyment of nationality as a system that the law provides for both the natural person and the moral person such as the right to own and conduct economic activities, which necessitates the need to determine the nationality of the moral person⁵². This is mainly due to the need to know the extent to which the moral person has the right to enjoy the prescribed rights such as the privileges granted by States to their nationals, such as tax exemption, access to subsidies, the extent to which the State protects its nationals and moral persons. In addition to the knowledge of the legal system that the company is subject to when it is established and managed or when its work is terminated, or in terms of providing the protection to the company in the international field, especially in exceptional circumstances such as war, where the state provides the necessary protection to its national companies at the international level as one of its nationals, to enable them to compete with foreign companies⁵³.

⁴⁸ Tayeb Zeruti. Mediator to explain Algerian nationality, Op cit, P. 84.

⁴⁹ Nadia Fadil. The provisions of the company in accordance with the Algerian commercial law. Dar Houma for Printing, Publishing and Distribution, 6th edition, Algeria, 2006, p. 64.

⁵⁰ Meta Hussein. Nationality of multinational corporations, Op cit, p. 10.

⁵¹ Meta Hussein. Nationality of multinational corporations, Op cit, p. 11.

⁵² I bid, p. 12.

⁵³ I bid, p. 12.

Second: Supporting the company's enjoyment of nationality according to the judiciary Judgments

At the end of the 19th century and the beginning of the twentieth century, the judiciary settled on the idea of corporate nationality. It ruled that every commercial company is considered a moral person. As well as, Nationality as it is from the requirements for natural persons is also considered a requirement of moral persons. Every commercial company has a nationality that defines its legal status, and this nationality is defined by law⁵⁴. In 16/4/1983, the 'Nancy court' stated that "the commercial company is a distinct moral person from the personality of its members, and therefore has a very special nationality and has a special financial obligation independent of their obligation." In 21/5/1957, the Paris Court of Appeal ruled that the company, which has only a part of its activity but whose head office is located in Paris, where the General Assembly and the Board of Directors are located and where the members of senior management and oversight are located, has French nationality⁵⁵.

The French Court of Cassation also applied the rules of nationality to moral persons, as regards companies of persons. These companies were considered French regardless of the nationality of their members as long as they were established in France and in accordance with the conditions established by French law. In 20/10/1953, the French Court of Cassation ruled that the nationality of the French companies is determined by the place of the head office.⁵⁶

6. Conclusion

It is clear that multinational companies have become one of the most influential entities in the economic field on the international scene, because of its enormous material and human resources that extend to various countries of the world. MNCs seek to transform the world into a single economic arena with the aim of extending its influence and tightening its control over the business sectors of the world, bypassing the territorial boundaries of States.

Multinational corporations have a specific nationality, although one side of the jurists has denied this matter. It is a fact that cannot be denied. This nationality aims to determine the country to which the company belongs and which operates on its territory, determines the extent to which it enjoys rights under its law and the extent to which it complies with the obligations imposed by this law.

As a conclusion to the above it is clear that both parties (deniers and supporters) agree on the need to link morale to a particular state, because of the legal and political significance of this link, which shows its status, its legal system and its rights. The difference between the two views is limited to the conformity and the appropriateness of using the nationality term for this association. It is more appropriate term for the natural person, and perhaps the term 'political submission of the state' is more accurate for the moral person. But as long as the term of nationality is common and used and is intended to be clear, there is no objection to using it in the field of the moral person as well, where it is clear through this term that:

⁵⁴ Salami Saed. Implications for the Moral Personality of a Trading Company, Op cit, p. 83.

⁵⁵ Meta Hussein. Nationality of multinational corporations, Op cit, p. 12.

⁵⁶ Salami Saed. Implications for the Moral Personality of a Trading Company, Op cit, p. 85.

1. The law applicable to the moral person because it arises only under a legal regime that governs and determines its activity.
2. To determine the status of the company in a particular country and to indicate the rights and obligations it enjoys by appointing a status whether it is a national or a foreigner, and this is what has been decided by the most correct opinion, in terms of jurisprudence, judicial and legislative, and what I support.

The researcher recommends conducting further studies regarding the subject of the current study, such as studying the criteria by which the nationality of the multinational companies (MNCs) can be determined in an attempt to clarify the subject further.

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WATER AND FOOD INSECURITY

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Abstract: *Water and food are – along air – the most important things for human life. Even human health depends in a crucial manner on air, water and food. Since ancient times, philosophers analyzed the importance of these elements; Aristotle recalled that cities must have access to fresh air and clean water, in order to have a healthy population. Furthermore, they are interconnected; reduced water availability means poorer harvests. In this century humankind will face very complex phenomena, all reflecting their effects upon water and food. Climate changes, coupled with rising world population and urbanization, would amplify the vulnerability of many countries in the world. Haushofer recalled that a high urbanization degree brings a high geopolitical risk from military point of view; and the world of the future will have to handle all this complex issues with the greatest proportion of urbanized population in history. In this context, the first part of the paper is focused on problems menacing the world and their possible evolution, while the second is dedicated on possible solutions, mentioning the Romania's capacity to become an agricultural power and a political stabilizer in region due to her potential for food production. As climate changes – overlapping rising population's number, rising urbanization concentration and changing lifestyles in developing countries – will make humankind more vulnerable to extreme weather events, water, food and energy will come close to the center of domestic political agenda; anyway all these three elements are interrelated. A water crisis is an energy crisis because all types of energy are based directly or indirectly on water, while an energy crisis metamorphoses instantly in a food crises. These three elements are already moving towards central position in numerous countries' foreign policy agenda. I call here only the case of South Korean state, which is in searching for access to land (and water) in Madagascar, at a very large scale. In this context, Romania's food potential, doubled by its good position in water resources availability, could transform it in a regional stabilizer, changing its current second-rank position towards a more pivotal role. The exploitation in a sustainable manner of Romania's potential for self-sufficiency in water and food areas will bring welfare for its citizens and stability in its geographical region, transforming it in a state with a better position in international relations.*

Keywords: *agriculture; climate change; geopolitics; population; Romania; welfare*

JEL Classification: *H0; I3; R0.*

Introduction

Life is impossible without water. Furthermore, health cannot be separated by water's quality. Since ancient times it has been reckoned that water, together with food and air, are the most important elements which influences human well-being and health. Aristotle mentioned that it is of crucial importance for a community to have access to

healthy water and fresh air (Aristotel, 2001). Things which we use most influence in the greatest measure our health; and air, food and water fit perfectly this category. The paper intends to signal the problems humankind confronts with, and especially what menaces will come upon in a not very distant future. Water is connected to everything. In this perspective, rising population, industrialization, modern agriculture and sewages, contribute all, to a fast paced water degradation; as a matter of fact, this has brought to half of the aquatic ecosystems biodiversity's disappearance since 1975, as mentioned in 2005 in the Millennium Ecosystem Assessment.

Furthermore, during the 20-th century the world faced a dramatic rise in global population, industrialization, and urbanization. These put pressure upon water resources *directly*, since agricultural output and food industry have required more and more water, and *indirectly*, because urbanization and industrialization coupled with a modern lifestyle, depend on more energy and electricity. Yet, humankind faces the most complex problem in its history, climate change, which will create more pressure on already scarce resources: water and arable land. The flow of the rivers serving as life columns for the most populous countries is already falling, due to global warming; their rising population, coupled with poorer vital resources could trigger major geopolitical shifts, with global implications, especially if they come together with water migrants.

Already in 2008 the UN Secretary-General Ban Ki-moon warned at the World Economic Forum, in Davos, that stress on water resources was a destabilizing factor around the world, from Darfur to the USA, Columbia to South Korea.

As water is connected to everything, and food is about survival, the objective of paper is to highlight the menaces lurking humankind, due to food and water crisis in a world which stands to have some 9 billion people three decades from now. The scope of paper has to do with water and food crisis largely, but it hints upon a more close reality Romania faces, too.

Romania's present situation is a vulnerable one, due to its food import dependence; while water availability is not a problem inside the Carpathian range and in the Moldavian hills, outside these areas water could become a problem in a not a very distant future, and as a consequence – in climate changes context – agricultural land there could reduce its productivity.

Taking account of these, the main objective of paper is to militate for a renaissance of Romanian peasantry, in a modern context, which could be a solution for a national revival, and for transforming Romania in a net food exporter using its well-known natural potential. And this is inevitably connected to a greater internal stability, a key aspect for the possibility of playing active and positive roles on international arena by the Romanian *state*. A stronger and rational agriculture based on natural capital conservation, could be a sustainable solution for both Romania, and for other countries which will confront food crises in the future. Its stabilizing role will be easy identified in this situation.

Water and food insecurity

When I first heard about Haushofer and how urbanization coupled with water contamination or stopping its running into a city can bring total collapse of that city, it was in the context of geopolitical studies which I had started 15 years ago; in his book "*De la geopolitique*" the geographer Haushofer (1986) cites a warning published in "*Journal du Geneve*" (17/10/1939), presenting in a logical manner the

way Warsaw suffered because of its numerous population and water's flowing interruption into it, by German aviation. In a wider geopolitical analysis, I focused my researches upon the role big dams could play in regional geopolitics and water transportation, connected to water management of an international river; here the case study centred upon Iron Gate System on Danube. My researches went further to include hydro-politics and water conflicts, with Elhance's book as a cornerstone presenting 6 international rivers systems with their peculiarities (Elhance, 1999). Climate change brings with it higher complexity to my research framework; this coupled with rising global population and urbanization, as presented by Goldstone in CFR's (*Foreign Affairs*, 2011: 31-43) doubled by modern lifestyle spreading across much of present day developing countries, will put water availability under great stress. Water paucity could bring intrastate civil strife or even interstate conflicts, as presented by Chellaney (2013). Water, even if we regard it as a calm natural resource, has been in fact involved in 367 conflicts, between 3000 BC and 2015, as mentioned by Pacific Institute's site, coordinated by the world reputed scientist, Peter Gleick. Furthermore, Shiva (2016) puts water, food and citizens' interests face to face with those of multinational corporations, underscoring problems which a score of developing countries – especially India, Bangladesh, South American countries – have faced due to land and water overexploitation by private interests. Yet Solomon (2010) is for marketing of water, arguing that in this "age of scarcity" is important to trust the market efficiency; anyway such a standing hardly stands if we regard water as a common, and not as a marketable commodity.

But let numbers speak alone: nowadays some one billion people still lack access to minimally safe drinking water, and over 2.6 billion live without proper sanitation, a critical element for children's survival (Nickum, 2010). This is connected to the fact that during the 20-th century the world faced a dramatic rise in global population by a factor of 3.8 times, in water use by 9, in irrigated area by 6.8, in fertilizers use by 342 (Chellaney, 2013). A key signal of impending water crisis is that global water consumption has grown with more than double the rate of population growth in the last hundred years; from some 770 billion cubic meters/year (1900) to 3840 billion cubic meters/year (2000), it is expected to hit the dangerous threshold of 5000 billion cubic meters/year in 2025 (Chellaney 2013).

Connecting water with food, the world's growing middle class is orienting toward consuming food that requires more water: it is noteworthy to be mentioned that it takes up to 75 times as much water to produce one kg of beef as it does to produce one of wheat. Nowadays, a rapidly expanding middle class eats more meat, while seeking high water consuming devices for home comfort. And it takes 2400 liters of water to produce just one hamburger patty (Chellaney 2013) while for feeding an adult with a purely vegetarian diet, it would be enough just 712 liters of water/day/adult to produce the needed food (Chellaney 2013).

Changing lifestyle could be a viable solution in this context, as meat consumption means more water needed for food production, while lower quantity of meat would contribute to water stress' amelioration.

In this point there could be mentioned that water stress is defined as per capita availability below 1700 cubic meters/year, while water scarcity is found where the number goes below 1000 cubic meters/yearly per capita. When water availability goes under 2000 cubic meters/yearly per capita, this fact could act as a constraint upon wide socio-economic development, and environmental protection. Countries filling this category are South Korea, Belgium, South Africa, and India; while the

constraints are very severe upon countries which enter below the 1000 cubic meters/capita/yearly threshold (Algeria, Tunisia, Jordan, Cyprus, Kenya, Maldives, and Rwanda).

Food and agriculture depend directly and in a crucial manner upon access to fresh water. Some 70% of water which humankind takes from lakes, rivers, and underground reservoirs is used for irrigating crops. Already, few months, each year, up to 25% of the quantity water of the greatest rivers on Earth doesn't arrive at sea, because of over-exploitation of fresh water resources used for food production. Some 7000 cubic kilometres of fresh water are used each year for food production, and rising population's number will demand even more food, and consequently water (Wijkman and Rockstrom, 2013). Put in just a few words, *modern agriculture is the biggest fresh water consumer*. And despite all modern works and engineering activities connected to water since 1950s', over half of the countries are classified by the United Nations as lacking sufficient water resources needed for a rapid expansion of agricultural and industrial development, in a sustainable manner (Chellaney, 2013).

Industrial agriculture has determined food production to use methods which diminishes the soils moisture, and as a direct consequence, the demand for water has steady increased (Shiva, 2016). More, industrial farming and agriculture harm seas and rivers, impairing groundwater aquifers, too (Shiva, 2016). Soil erosion is another direct consequence connected to bad irrigation management. Salt accumulation due to over-irrigation doubled with inadequate drainage create soils salinity, which translates in reduced yields in irrigated farms, while sodic soils becoming uncultivable. Each year there are abandoned about 10 million hectares of cropland due to soil erosion (Pimentel, 2006).

Furthermore, a lot of water is lost in irrigation; following FAO's estimations, this inefficiency of irrigation system translates in a global average of only 45% of water withdrawn reaching crops' roots; and the number is smaller in peculiar geographical areas such Central Asia.

In this context it is noteworthy to be mentioned that watercourses often cross over states' boundaries: there are 276 *transnational* river and lake basins crossing through the territories of 148 countries, together representing 60% of all river flows in the world (Sadoff and Grey, 2005). Close to half of dry surface of the Earth is covered by transnational river's basins while in sub-Saharan Africa almost all surface water flow is transnational.

As was already noted, already humankind faces water shortages, and to lessen them, a solution can be given by *dam reservoirs* built with the aim to store water during wet season and release it during dry periods. As the water footprint is already 1385 cubic meters/year/capita (Chellaney, 2013), the prospects of the year 2025 remember us that almost 70% of world population will live in water stress. And world population is rising with 1% yearly while natural capital is receding with 1% yearly (Georgescu, 2012), while 2/3 of the world ecosystems are utilized in an unsustainable manner.

Putting together all these, there could be easily observed that rising temperature, weather patterns volatility, longer and more severe droughts, and massive rainfall – due to climate changes – and water diminishing quality and quantity due to human lifestyle connected to industrialization, urbanization, rising population, unsustainable irrigation, doubled by regional and global environmental changing, coupled with deforestation, desertification or losing nutritive qualities of the land due to irrational

farming, will bring great stress in a world which already registered in the last decade rising food prices, and fresh water availability is receding. The poorest societies will be hit the hardest. And the spillover effects will be connected to massive social movements, civil strife, migration, interstate tensions, even wars. If we look at these things, and on Arab Spring, or Syrian war, the violent events which have taken place in this area have to do in some way with food prices and water stress (especially in Syria and Sudan). Taking account of the possible evolution of humankind, this scenario could be multiplied in the future in other parts of the world; which means that our future could be far from the much desired tranquillity. The character of possible future wars induced by scarce water and food resources could contain irrational elements, being generated not only by conquering motivations, but involving survival; as a result, they could be harder to be contained, and to be solved. The biggest attention should be paid to resources upon which the survival of poorest people is dependent: water, forests, and fisheries. Water nationalism coupled with dams racing especially in international river basins is a very possible scenario, with all tensions they could generate; furthermore, environmental problems could create social effects which would augment the risks of violent conflicts.

In this global challenging environment, there are peculiar geographical areas which, due to their location and peculiarities, could play a stabilizing role in a more populated, and more waterless world. There are global players such as Canada, Russian Federation and Brazil which have plenty of water resources and vast arable landmass, but there could be mentioned smaller players, which could play an active and beneficial regional role, too.

Romania *could* fit this category, but its past and present situation is far from its real potential. Even Romania belongs to developed countries' club, it has great security vulnerabilities brought by dependence on foreign imported food; as Georgescu (2012) cites from the Japanese Bank Nomura's data, which places Romania on the 12-th place in the world regarding the danger of famine, there is no doubt that this is a matter of national security! Having one of the best soils in Europe, it imports 80% of agricultural products, some of them having a dubious quality, with hidden dangers; in this bad example, food security and safety become unfortunately, interconnected. But this weakness could be transformed in advantage: sustainable agriculture, better water management and a more enlightened administration of forests could become the pillars for Romania's future sustainable development, as mentioned by Hera and Giurgiu (in Malița and Georgescu, 2010: 81-108).

Even Romania's natural resources – especially forests – have been savagely exploited in the last two decades, her natural potential still lays underexploited. Few European countries have wild forests as Romania still has; and this is a key element for Romania in playing the role of genetic multiplier for other countries which had already lost their biodiversity due to chemical fertilizers, pesticides, insecticides, and modern lifestyle. Later in this paper there could be seen the ways Romania could explore in order to gain a better regional position.

Water and agriculture are directly menaced by irrational and greedy deforestation; and as forests, water conservation, and bio-food are connected, their sustainable exploitation could be one important element for resurrecting Romania's economy and self-esteem.

As over 2/5 of Romania population lives in countryside, with a big part of it leaving close to subsistence economy, while agriculture contribution to national production is lower than 10%, this appears as a weakness.

Yet exactly this weakness could be transformed in a chance. Even peasantry represented the most exploited group during history, and peasant could be regarded by some people as a downtrodden man, a more detailed analysis can prove that in Romania's case he could become the pillar for a sustainable development. Romanians' history and their resilience have directly been connected and have been influenced by village, as it is monumentally presented by Blaga (2011) in Mioritic Space, while Motru (1998) praised Romanian peasant's perseverance in agricultural work; taking account of this spectacular dowry and of the fact that a great part of Romanian city dwellers have *direct* connections or relatives in villages, it is imperative that Romanian peasantry be channelized towards agricultural productive work, as it is demanded by a modern state necessities. Modernization and traditions could go hand in hand. Economic revival, based on a better social role of peasantry – conscious about its inheritance – could become a stable stone for a healthy democracy.

In a world which hasn't yet overcome the global financial crisis, and which in future, would be hunted by vital resources crises, Romania could play a stabilizing role regionally; but only *if it does* make well its job domestically. This has to do with sustainable development, forests, water, and land conservation, aiming at transforming it from a food importing country into a healthy agricultural leader and a net food exporter in a hungrier and thirstier world. All what is needed is a decisive leap moving the agriculture from its subsistence peculiarities toward a sustainable perspective. Weak part of Romanian society could promote its base for future development, for its food independence, and more, for moving it from a marginal position toward a more important one on the food market, and as a result, on the international political arena.

This challenging action would involve the change of the state's role in the private/public equation. It should come from the market's margins into a more central position. I want to be clear: I do not mean at all a more authoritarian position for state vis-à-vis market and society, but a state invested with higher authority. Romanian state must become responsible, and for this to happen, it must be representative. If a waterless state such as Singapore does it well, why Romania could not?

If successful in sustainable agricultural development, land, water, and biodiversity conservation, coupled with better energy efficiency, Romania's experience could bring for it a stabilizing role in region. From a marginal European country it could gain a more central position, which will overlap politically with its geographical location, Romania being a country where great commercial arteries intersect. From a vulnerable and weak EU member, it could become a regional stabilizer; even if this could sound unrealistic in nowadays capital dominated world, and given moral and social decay it has been steady facing, Romania's history witnesses that this possibility has to do with its past real experience; it is not a very known fact that Romania has valuable experience in conciliation. There were the cases of middleman played by Bucharest in Vietnam War, Israel-Arab relations, and especially Washington-Beijing historical reconciliation process (Malița and Mehedințu, 2016). Furthermore, it actively and successfully involved in negotiations which facilitated cooperation during the Cold War, on the split river of Danube, among Eastern Warsaw Pact countries, Austria and FRG (belonging to Western camp) and Tito's Yugoslavia (belonging to the non-aligned movement), ending with Iron Gate System's construction, which brought navigation conditions' improvement, and direct benefits in green energy and energy security areas for two riparian

countries: Romania and ex-Yugoslavia. And this experience could be used in situations where other countries share the waters of an international river, whose water they want to share for different purposes, helping them in finding sustainable solutions in negotiations carried on with the aim of dams' construction.

Conclusions

In a world haunted by scarce resource fears and with steady population's rising, humankind should be aware of the fact that nature can do well without man, while other way around is impossible. Already fresh water is a global problem; and it is expected that in 2025 48 countries, reuniting close to 3 billion people will face fresh water stress. Water stress means not only a barrier to further economic development, but food crises and energy crises, too as iterated by Hera (in Malița and Georgescu, 2010: 87). Urbanization rate is expected to rise, too. In this context, the paper wants to point to main risks induced by climate changes in the fields of water and food shortages looming over a more populated world, such as social riots, civil clashes, international migration, and even military conflicts, all having great geopolitical implications. But there are hopes in this gloomy scenario; there are countries which can provide hope. Countries with bad exploited or underexploited agricultural land could head toward sustainable agricultural development, helping themselves and others. Romania is a good example for such a case. From a weak part of economy, Romanian agriculture could metamorphose into a locomotive of national sustainable development. Romanian people could live in a better, greener, and *healthier* society, while Romania state's importance on international arena would change for a better position. Based on a healthy and green agriculture, Romanian industry and innovation would register a good evolution. Romania's past experience and expertise is a proof that it can be done.

There is needed an *educated* population for this to become reality; if each Romanian understands Romania's potential for healthy food production, and regards water as a very precious resource, and use it accordingly, a sustainable economic development in this country will become reality. Education has to do with town dwellers, too: if they become conscious about consuming organic food produced in Romanian villages, their well-being would be improved, helping in the same time domestic food producers. This economic national network would make stronger the Romanian social network, bringing with it a more sustainable political framework. There is needed a new attitude having as central element love for natural capital and care for its sustainable exploitation. Greed or irrational exploitation of natural capital should be changed with rationality and equilibrium. This cultural resuscitation will bring life-style changes, for the better of all Romanians, and for other countries which are not so lucky in having such a natural capital, and which will suffer more than now from thirsty and famine in a not a very distant future.

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SUSTAINABLE COMPETITIVENESS OF HUNGARY - FOCUSING ON THE YEARS 2013-2017

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Abstract: *By the change of regime in the late 1980s and early 1990s, the entire population of Hungary was expecting the transformation of the economy and society and hoped to catch up with the Western European standard of living. More than 25 years have passed since then, but Hungary is still lagging far behind, not only in the West, but also in some areas in the Central and Eastern European Union. Following the joining to the European Union in 2004, Hungary has failed to use Community resources over the past 20 years to boost the economy and put it in the path of sustainable development and competitiveness. The concept of competitiveness and its types changing by time. Looking at a country, competitiveness means being able to provide an attractive and sustainable environment for businesses and residents to settle, operate or work. Regarding job creation, the role of SMEs remains to be prioritized in the Union. Given that the world economy is in a major transformation, which is primarily driven by digitalization and robotization, it is worth examining the digital competitiveness of each country as well. But where does Hungary stand in this competition within the community, or compared to the neighbouring countries? This study seeks to answer the above question, based on the annuals of OECD and IMD, and the yearly SBA reports of the European Union. The analysis leads to the conclusion that the former key factors underlying the attractiveness of the Hungarian economy, are increasingly starting to wear out. Now concerning renewal, no progressive signs can be seen. In order that the long-term sustainable economy of the country is built on a good foundation, much stronger social cohesion and solidarity should be implemented, than ever. To establish these, principally the existing (and unfortunately increasingly widening) income and wealth gap between social groups, should be mitigated, by catching up wages and pensions. Furthermore it is essential to improve the quality and transparency of public administration, to make the regulatory system predictable, and to prevent corruption at all levels. Moreover it is necessary to increase awareness of the need to preserve the natural resources, and of the importance and indispensability of expertise. It is also substantial, that there is no sustainable competitiveness without an innovative society. This means competitiveness does not at all, only depend on the technological advances or the organization and operation of the economy, but basically is a function of social behaviour. Only the open, flexible, satisfied, consecutively adaptable, whilst also cooperative and solidarity-based societies are capable to provide a sustainable foundation for economic and technical competitiveness.*

Keywords: *Hungary; sustainable competitiveness; knowledge; technology; SME.*

JEL Classification: O52.

1. Introduction

Developed countries are currently being transformed from industrial societies to knowledge-based societies. The majority of OECD (Organisation for Economic Co-operation and Development) countries are concurrently facing the new wave of technological change, strengthening international dependence and cohesion problems of their societies. Science and technology are increasingly considered the most important source and most dynamic element of the long-term growth, which play an equally important role in the structural economic changes, increasing productivity, job creation and improving the quality of life. These global trends accelerate the development processes, in the same time they increase the formation of innovation deficient areas, thus induce the disparity of crisis regions. The aim of the study is to briefly introduce the conceptual change of competitiveness, to outline the competitiveness performance of Hungary within the Central Eastern European region, to compare it with that of the neighbouring countries, and to make findings and prospective, supporting proposals. In addition to studying a broad range of relevant literature, I also used the data of the Hungarian Central Bureau for Statistics, OECD and IMD annuals, and the yearly reports of the European Union on small and medium-sized enterprises.

2. Conceptual development of competitiveness from 1980 to present day

In the USA in the middle of the 1980's, Krugman and Porter considered it pointless to measure competitiveness by countries, but in their later works they use the term of competitiveness not only at enterprise level, but also regarding national economies (Krugman, 1994; Porter, 1998). The OECD established the definition of the so-called uniform competitiveness already in 1994, that is: *„The ability of companies, industries, regions, nations or supranational regions to generate, while being and remaining exposed to international competition, relatively high factor income and factor employment levels on a sustainable basis.”* (OECD, 1994:23) The particularity of this definition is that it gives priority to high-level employment, as a factor of competitiveness. Points out that for the increase of social well-being, beyond producing income, their broadest possible distribution, thus the relatively high and sustainable level of employment and – in this context – income is required. It is also important to highlight the requirement for sustainability appearing in the definition. In the turn of the millennium competitiveness was regarded as a development criteria. Now the ability to create a social and economic environment, which enhances the performance of the economic operators, is mentioned as the criteria of a competitive nation. I consider the definition of researchers of the Competitiveness Research Centre at the Corvinus University of Budapest, for the term of economic competitiveness, as the succinct phrasing: *„Competitiveness of a national economy is the ability of a national economy, among conditions of global competition, to produce, utilize and sell goods and services, whilst sustainably increasing the proceeds of their factors of production, and at the same time, the well-being of their citizens. This competitiveness depends on the promotion of productivity growth of the resources, by continuously maintaining the conditions to facilitate the improvement of the efficiency of the companies and other institutions.”* (Czakó-Chikán, 2007:3) The current understanding of the competitiveness in the

European Union, is mainly substantiated by the Delor's report of 1993, which states, that improving competitiveness is not an end in itself, but a tool to raise the well-being and standard of living. By the beginning of the 2000's, United States became the main competitor of the European Union, thus in the Lisbon Agenda the objective to catch-up with the USA, is conceptualised besides completion of the traditional European values (job creation, social cohesion). (Némethné, 2009) The understanding of the competitiveness outlined from the above documents, is supplemented by one more significant element in a 2004 document of the EU Competitiveness Council, established in 2003, which conveys the following definition for competitiveness: „*Competitiveness is derived from the increase of the productivity and high level of employment, which is equally reflected in the success of the European companies on the global markets, and the increase of the real income, providing high living standards for everyone.*” (CC, 2004:2) This definition is important because it links the approach of competitiveness accepted in the United States with the so-called “European Model” perspective. Based on the documents of the US Competitiveness Council, the essence of the American approach is that the national competitiveness is based on that of the companies, thus the task of the government policy is to provide an environment facilitating company competitiveness. By the “European Model” of competitiveness, *the source of long-term sustainable competitiveness is the motivated, well educated, healthy workforce.* This statement is confirmed by Simionescu and others in their study (2017), by referencing an article of Cieřlik (2014), in which he states, that the connection between globalisation and human development – investigating the years 1971-2010, concerning the V4 countries and Romania – does exist, and is positive and significant (in the case of unconditional regression). The Swiss IMD competitiveness research centre formulates as follows: „*The ability of a country to facilitate the environment, where the enterprises create sustainable values*” (IMD, 2015:2). Under sustainable value creation, the long-term income-generation capacity of companies, the entire job creation are meant, whilst minimising the environmental impact of their operation. In my opinion the above sufficiently support the assumption, that the competitiveness of a country or a group of countries, cannot be distinctly derived from the economic success of the transnational companies, operating in their area. *Economic growth is only accompanied by greater prosperity, if the largest possible share of population benefit from the generated income, namely not primarily by means of income centralization (taxation) and redistribution (social allowances), but by high level of employment, and thus the earned income.* Therefore what defines competitiveness?

I consider the ability to compete is fundamentally defined by inputs. Thus the internal and external advantages, like the structure and quality of owned and created property (material goods), and the quality of institutional background and political environment (immaterial goods), respectively. These input factors (capacities) together, define the strategy and room for manoeuvre of the national economy. Competitiveness is the efficient, productive utilisation of these assets and immaterial goods, which then yields in the well-being. The latter *is achieved through the mixture of incomes, standard of living and living conditions.* We can consider that the definition of competitiveness is constantly evolving, according to the drivers of the economy. Until the beginning of the millennium, only three well-known categories of competitiveness, were distinguished: income, trade and investment

competitiveness. Over and above these aspects, the appearance of new competitiveness dimensions can be detected:

- technological competitiveness: active participation in technology diffusion processes. It is the dissemination and delivery to the users, of the new, modern knowledge and skills (which are suitable to meet practical needs by presenting in a form of products, devices, technologies, information, etc.), which cover the whole system of structured accumulation, accessibility and constructive application of this useful knowledge (innovation).
- digital competitiveness: Digital competitiveness is the ability of the economy to accept and explore those digital technologies, which lead to the transformation of governmental practice, business models and in general, the society.
- sustainable competitiveness: sustainability here includes not only the competitiveness of the economy, which, even today, is erroneously measured in the development of the GDP alone, but also contains the sustainability of society and environment.

3. Competitiveness of Hungary within the region

If we agree with the statement that competitiveness depends on knowledge and its application, then we shall examine, how much Hungary spent/spends on these. Following the systemic changes, the R&D sector has incurred greater losses than it would be justified by the general recession. The rate of total national R&D expenditures, compared to GDP, started to decline rapidly and steadily from the 1.61% of 1990 (Table 1), reaching a low peak of 0.63% in 1996. (At this time the OECD countries' average of this rate was above 2%). In the beginning of the 90's, due to the decreasing contractual orders and lessening of governmental contributions, the erosion of the knowledge base also begun. In the R&D sector, in terms of outstanding professionals, the lack of social appreciation negatively affected both the retention capability and the education of the next generation. Involuntary career change was significant. As a result of all this, by 1996 the actual number of research and development personnel decreased by more than 20,000. Among those continuing their activities, the fact of ageing was observed, since 1/3 of the whole headcount were above 50.

Table 1: Research and Development data

Research and Development	1990	2013	2016
Number of places	1,256	3,159	2,727
Actual headcount of personnel	59,723	58,237	54,636
Expenditures in % of GDP, from this	1.61	1.39	1.22
- governmental	-	0.5	0.32
- company	-	0.65	0.69
- other domestic and foreign	-	0.24	0.21

Source: Own editing based on HCSO data for 2017

Following the change of political system, the international relations system of the Hungarian R&D, developed dynamically. The elite of the Hungarian R&D organically integrated to the world science and international R&D networks. Signs of growth

were appreciable until 2013, since then unfortunately the signs of decline can be observed again. Expenditures in % of GDP were 1.22% in 2016 (in 2015 that of the EU-28 was 1.9%, OECD 2.3%, USA 2.8%, Israel 4.25%). (OECD, 2016) In three years, the headcount of R&D personnel, decreased by almost 3,000. The decreasing number of research jobs also contributed to this, and the involuntary career change of young and middle-aged researchers, caused by the lack of ethical and material appreciation, can be observed as well. But where are we today?

Hungarian wages are competitive, since they are among the lowest, compared to the countries of the region – ten years ago we exceeded the Polish and Slovakian level, let alone the Baltic-Romanian one. At first glance there is no problem with the euro or dollar value of export either, since export increases, and the external current account balance remains in significant surplus. In a traditional view it all suggests that there is nothing wrong with the competitiveness, the economy moves on the right track. However, the international comparisons made in the recent years by different forums and organizations, convey contradicting findings. These clearly indicate the deteriorating competitiveness of the Hungarian economy. The reports of the World Economic Forum (WEF), IMD, OECD, World Bank (Doing Business), the Bertelsmann Foundation and the European Union independently came to the same conclusion. Pursuant to the “Entrepreneurship 2020 Action Plan” of the European Union, published in 2013 (hereinafter “Action Plan”), SME’s represent the backbone of the European economy, since they play a key role in the creation of new jobs. The European Commission prepares a study on the development of SME’s and the improvement of their competitiveness for each member states, in the form of annual reports (SME Performance Review). The basic data, concerning SME’s (Table 2) contribute indirectly to the improvement of competitiveness. It is appropriate to inspect Hungarian indicators in context with that of the neighbouring countries, or even EU-28, since then the lagging behind becomes visible. The table shows that only Slovakia was able to reach positive changes concerning all three indicators. The greatest improvement is reached in Slovakia concerning value added (+2.2 percent), which was most certainly supported by the significant increase of the employment rate of SME’s. Similar processes took place in Czech, since the rate of employment in micro enterprises also increased, but this growth was not large enough to drive an increase at the total SME level. However, it should be stressed here that their middle-sized enterprises were able to increase their rate of added value within the inspected time frame, whilst their rate of employment decreased. At the time of joining the Union, Poland placed last within the Visegrád Group as far as competitiveness is concerned. In the recent years, decade they were able to change this unfavourable situation so that concerning the global competitiveness index, they are now second within the group of countries (Molendowski, 2017). This positive change is visible in the total employment rate of SME’s (+0.9 percent), which is definitely generated by small enterprises, and which resulted in an increase of added value in this group (by +6.3 percent). Romania is in a unique position. Despite both the rate of SME’s and their employment rate decreased between 2010 and 2016, they still were able to increase the proportion of the added value they created (52.8%).

Table 2: SME's basic data for years 2010, 2016

Designation		Micro business		Small business		Medium size business		SME's total		Large enterprises	
		2010	2016	2010	2016	2010	2016	2010	2016	2010	2016
Distribution of enterprises by size (%)	Hungarian	94.2	94.1	4.8	4.9	0.8	0.8	99.9	99.8	0.1	0.2
	Polish	96.1	95.3	2.7	3.6	1.0	0.9	99.8	99.8	0.2	0.2
	Romanian	88.5	88.5	9.4	9.4	1.8	1.7	99.7	99.6	0.3	0.4
	Czech	95.5	96.0	3.6	3.1	0.8	0.7	99.8	99.8	0.2	0.2
	Slovakian	71.0	96.8	25.4	2.6	2.9	0.5	99.2	99.9	0.8	0.1
	EU-28	92.1	93.0	6.6	5.8	1.1	0.9	99.8	99.8	0.2	0.2
Proportion of employees (%)	Hungarian	35.6	33.9	19.4	18.9	16.7	15.7	71.7	68.5	28.3	31.5
	Polish	38.1	36.8	10.9	13.9	18.4	17.8	67.5	68.4	32.5	31.5
	Romanian	24.4	23.1	21.8	22.4	21.9	21.0	68.1	66.4	31.9	33.6
	Czech	28.8	31.0	18.5	17.2	20.4	18.6	67.7	66.8	32.3	33.2
	Slovakian	13.9	41.8	22.6	14.8	20.6	15.5	57.2	72.1	42.8	27.9
	EU-28	29.8	29.8	20.4	20.0	16.8	17.0	66.9	66.6	33.1	33.4
Proportion of value added (%)	Hungarian	18.0	18.0	16.5	16.7	20.0	18.2	54.6	52.9	45.4	47.1
	Polish	21.1	20.9	11.5	17.8	21.4	18.2	54.0	56.8	46.0	43.2
	Romanian	12.7	17.9	14.8	16.9	18.2	18.0	45.7	52.8	54.3	47.2
	Czech	19.6	19.6	16.5	14.4	19.6	20.5	55.7	54.5	44.3	45.5
	Slovakian	16.1	22.8	18.8	14.2	17.1	17.4	52.0	54.4	48.0	45.0
	EU-28	21.6	20.9	18.9	17.8	17.9	18.2	58.4	56.8	41.6	43.2

Source: EC, 2011a; EC, 2011b; EC, 2011c; EC, 2011d; EC, 2011e; EC, 2011f; EC, 2017a; EC, 2017b; EC, 2017c; EC, 2017d; EC, 2017e, EC, 2017f

As far as the basic indicators, Hungary has not reached a positive change, from the intermediate results only the rate of small enterprises can be highlighted, but the resulting positive moves could not outbalance the results of the micro and medium-sized enterprises. While in 2016 the added value of the Hungarian employees was 16,176 euros/SME employee, the average of the EU-28 was almost three times higher, 43,313 euros/SME employee. It is true both at international and national level, that the capital intensity of larger enterprises is higher, their employees and managers are better educated, they implement innovations more often, they spend more on research and development, they have better access to outside financial resources, and they have better specific scorecards. This concludes that all important characteristics of competitiveness are positively correlated to the size of the enterprise. It follows that the *condition for the further development of the Hungarian SME sector is the transformation of their size structure! Not that they have to be transformed to large enterprises, but the average enterprise size has to be increased.* The growth potential of the SME sector is best if it happens together with and supplementing the growth of large companies. For the relation of competitiveness and employment, most commonly a positive context is assumed. According to Bielík – Rajcaniova (2008) an important precondition of the economic growth and competitiveness of a country is a well-functioning labour market. This

statement is certainly true, but it has to be added, that continuous improvement of the productivity is a condition to achieve and maintain competitiveness, which has the important consequence of the employment level getting lower. Therefore the improvement of competitiveness is working against the increase of employment (Kállay, 2010). According to Professor Arturo Bris, Director of the IMD World Competitiveness Center, the countries improving their competitiveness best in recent years, were those which achieved considerable results in the fields of governmental and business efficiency and productivity, respectively (IMD, 2017). According to the latest IMD survey, competitiveness of Hungary deteriorated significantly, since we were unable to reach the position from four years ago (Figure 1).

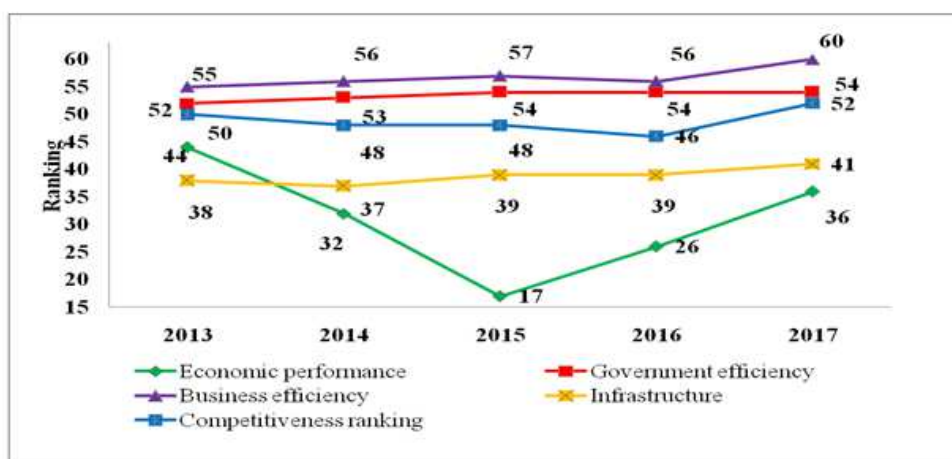


Figure 1: Competitiveness and factor ranking of Hungary 2013-2017

Source: IMD, 2013, 2014, 2015, 2016, 2017

In 2017 we fell back to position 52 (out of 63). Virtually Hungary performs worst among the Eastern and Central European member states of the EU. IMD investigated four main factors:

- *Economic performance*: in the case of Hungary, signs of deterioration can be observed since 2015. This could result from the performance of the economy being not sufficiently diversified, being next to last in the field of international investments, while incoming direct investments compared to GDP were in the last place in 2017. This suggests that uncertainty persists in the socio-economic life, which can refrain investors.
- *Government efficiency*: currently shows the signs of stagnation, however the level of efficient, long term strategy driven utilization of public finance is low, presence of corruption is high, while still unsolved problems of the taxation policy, question of future funding for the pension system, lack of providing equal opportunities necessary for economic development, impoverishment, and low level of social cohesion still generate serious problems.
- *Business efficiency*: this area suffered a decline. The overwhelming majority of managers consider the areas of productivity and efficiency, as well as the prevailing management practices, increasingly problematic. Several

indicators of the labour market also warn of the worsening situation: labour market relations are deteriorating, attracting and retaining talent is difficult because of the low wage level, which is further worsened by the unfavourable status of health care (quality of health care is a basic factor for prosperity), access to highly skilled foreign workforce, including managers with international experience, becomes more and more difficult.

- *Infrastructure*: in this field the position also worsened. In the era of the fourth industrial revolution and digital economy it is expressly adverse, that in Hungary the level of digital and technology skills is very low (61), furthermore language proficiency and status of language skills are also exceptionally poor (60). This not only sets back the development of the culture of collaboration, but we cannot keep up with the digital switch-over either (rank 57).

Table 3: Digital competitiveness ranking of Hungary

Factors	2013	2015	2017
<i>Knowledge</i>	42	44	48
- Talent	39	46	46
- Training & education	39	46	43
- Scientific concentration	47	48	46
<i>Technology</i>	33	39	38
- Regulatory framework	25	32	29
- Capital	45	49	44
- Technological framework	27	44	45
<i>Future readiness</i>	42	47	55
- Adaptive attitudes	40	51	57
- Business agility	50	51	58
- IT integration	35	36	38
OVERALL	35	44	44

Source: IMD, 2013, 2015, 2017

So far the “Hungarian Way” does not show obvious signs of a future oriented and consistent competitiveness strategy, rather it amplifies the impression that the country drifts further and further away from the basic principles and practice of the so-called competitive economy. Globally the governments invest in scientific and technological infrastructure – involving high-level education, providing R&D&I besides high quality basic health care – in order to keep up with the opportunities of the digital economy and to improve the welfare of their citizens. While the technological development is a necessary condition of the future welfare of the economy, it is not in itself sufficient to increase value creation. It is not enough to utilize digital technology, but it has to improve the efficiency of production, the scope and quality of services need to be increased. Measuring the existence of the necessary competences for the digital competitiveness of Hungary along three main factors (knowledge, technology, future readiness) it is ascertainable that the signs of deterioration can also be observed (Table 3).

The most unfavourable values are seen in the area of future readiness factors (rank 55 out of 63), since the attitudes toward accepting globalisation processes, opportunities and threats concerning business agility, electronic economy, agility of companies, cyber security, use of big data and analytics are the areas, where the country ranks among the weakest ones. These factors have to be improved swiftly in order to develop a society which is receptive and adaptive. Indeed, in the recent years it became apparent in the economic policy and technology policy of the developed countries, that economically, only the knowledge accessible for the economic operators, reaching them and accepted by them, is considered useful.

4. Conclusions

Considering the current competitiveness situation of Hungary it is ascertainable, that the former factors providing the key attraction of her economy, are increasingly starting to wear out. Now concerning renewal, no progressive signs can be seen. In order that the long-term sustainable economy of the country is built on a good foundation, it is necessary to strengthen the SME sector, as well as much stronger social cohesion and solidarity should be implemented, than ever. One of the key factors is the existing (and unfortunately increasingly widening) income and wealth gap between social groups, which should be mitigated as soon as possible, by catching up wages and pensions. Furthermore it is essential to improve the quality and transparency of public administration, to make the regulatory system predictable, and to prevent corruption at all levels. Moreover it is necessary to increase awareness of the need to preserve the natural resources, and of the importance and indispensability of supporting expertise. Of the latter one, the three classic elements are education (at all levels), research and development, and health care. It is also substantial, that there is no sustainable competitiveness without an innovative society. This means competitiveness does not at all, only depend on the technological advances or the organization and operation of the economy, but basically is a function of social behaviour. Only the open, flexible, satisfied, consecutively adaptable, whilst also cooperative and solidarity-based societies are capable to provide a sustainable foundation for economic and technical competitiveness. What this means is investing in the innovative society.

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ICSID CASES in which damages were awarded BASED ON MARKET APPROACH

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Abstract: *The foreign direct investments had encountered the need of a special organism to protect the investors and their rights. This organism was founded by the World Bank and it is called The International Centre for Settlement of Investment Disputes – ICSID. After the recognition of ICSID by the states, the foreign investment flow grew and the number of disputes start growing as well. If the host state is in breach of the Bilateral Investment Treaty, it will have to pay damages to the investor. In order to determine the quantum of the damages, a business valuation is needed. Enterprise valuation has become particularly important with business development, especially as a result of the development of stock market transactions. Business development has, among other things, led to the diversification of funding sources, so stock listing has become essential for many firms that require capital for their underlying investment projects. Besides the role of attracting capital for business development, the stock exchange is also the place for the creation, development and diversification of the investment portfolio of the various investors and, at the same time, the "playground" of the speculators. None of these roles could be successfully accomplished in the absence of documented business reviews. Around these assessments, three main approaches were outlined: asset, revenue and market approach. Each of these approaches is based on a fundamental concept from which it proposes a mathematical computation method that results in an informative sum representing the estimated value of the evaluated business. These three methods are also the methods accepted by ICSID in establishing the damages that will be awarded in the judged cases. There are some conditions that have to be met in order to use one method instead of other. Usually the selection of the method it is done by the evaluator, but the arbitrators that are judging the case can reject one method and select another one, based on their professional judgement.*

Keywords: *ICSID; damages; foreign direct investment; international disputes.*

JEL Classification: *F510; F370; K220.*

1. General Introduction

After the recognition of ICSID by the states, the foreign investment flow grew and the number of disputes start growing as well. If the host state is in breach of the Bilateral Investment Treaty, it will have to pay damages to the investor. In order to determine the quantum of the damages, a business valuation is needed. Three main approaches were outlined: asset, revenue and market approach.

The market approach is a straight forward method: the evaluator should search on the free market, other similar intangible asset and use his price.

For example, a company developing a new software, in order to evaluate this intangible, they will search on the market a similar featured software and calculate the cost that the company will incurred with the acquisition and use of that specific software: acquisition cost, implementation cost and training. The value of the internal developed software will equal the amount obtain

2. Cases presentation

2.1 Ioannis Kardassopoulos and Ron Fuchs_v_Georgia

On March 3, 1992, TrameX and SakNavtobi signed a GTI joint venture: 50-50%, with a 25-year license for petroleum exploitation, with the extension clause of 25 years. The export license owned by GTI was for 5 years and was issued only to their benefit as sole oil exporters in Georgia.

On April 28, 1993, Transneft signed the concession for Georgia's pipeline to GTI for 30 years.

On November 11, 1995, GIOC, a state oil company, was set up.

On February 20, 1996, Georgia issued a decree cancelling all rights granted to other parties. The President told TrameX in May 1996 that he would look for a possibility to include them in the new project, and if not, he would pay them compensation.

On August 26, 1996, TrameX sent a letter to the President of Georgia requesting to resolve the legal issue and compensation. On 5 November 2000 Mr Fuchs requested compensation in the amount of 24.040.904 USD. Georgia accepts that it has to pay a certain amount and appoints a commission to deal with the investigation of the amounts. Meanwhile, Georgian presidents and the government have changed and the issue has been postponed.

Deloitte submitted a report to the Ministry of Fuel and Energy on February 5, 2004, setting TrameX shares in GTI at \$ 64 million, spending \$ 12.1 million and \$ 30.2 million interest. In total a loss of 106.3 million at December 31, 2013. By a letter to the Prime Minister dated July 22, 2004, TrameX asked for this amount to be paid.

On October 9, 2004, the Georgian government set up a new commission to deal with TrameX's requests. On November 15, 2004, the commission announced that there is no legal reason why Georgia should pay compensation to TrameX.

TrameX requests arbitration. The Tribunal decides that the government of Georgia expropriated TrameX by the decree of February 20, 1996, and furthermore decides that Georgia's intention to expropriate it has been clear since the founding of the state-owned GIOC. Thus, Georgia is

As to how TrameX was treated for compensation, the tribunal decides that the standard of fair and equitable treatment has been breached.

TrameX presented the calculation of damages by two alternative options:

- 25% of the GTI on 10 December 1995 plus profits lost from that date to the date of the judgment
- 25% of the value of the rights held by GTI through the signed agreement and concession

For determining the current value of money on 10 November 1995, the complainant proposes to use the discounted cash flow method and compare it with the market value method. The value of these valuations was USD 30.2 million.

According to the complainant's expert, this assessment should take into account the construction and operating costs of the GIOC. In this way it was determined that 50% of the GTI would be worth 36,517,031 USD.

Georgie rejects both the market value method and the revenue-based method, considering them to be too speculative.

The calculation made by them on the basis of the expenses starts from GTI's financial statements, which show that they spent between 5.5 million USD and 6.2 million USD, of which 3.2 million USD directly related to the pipeline project. But of this amount they found payment documents for just \$ 981,425.

The Court considers that the approach to determining the value of money on 10 November 1995 is appropriate and also considers that the condition for repaying the investor as far as possible in the same financial position as if he had not been expropriated is to be met.

The Court considers that the market-based method is appropriate. Maintains the discount rate used and thus decides that each of the two claimants receive \$ 15.1 million.

The Court decides to grant interest at a rate equal to LIBOR + 4%, composed twice a year, from 20 February 1996 until the date of the judgment.

Also, after the award date, the interest will be calculated at the same level until the full payment of the established amounts.

All costs of arbitrariness of the claimant will be borne by Georgia, amounting to US \$ 6,235,429, and will also be refunded by Georgia and Arbitration payments related to \$ 1,706,868.

2.2 Quasar_Russia

The complainants were passive shareholders in Yukos, they claim they have been the victims of political measures whereby Yukos's assets were confiscated and transferred to a state-owned company by imposing very large illegal charges and then by opening bankruptcy proceedings against Yukos.

Since December 2003, 6 weeks after Mikhail Khodorovsky's arrest, the Ministry has audited and re-audited Yukos for the period 2000-2001. There was another audit eight months ago that found no irregularity for the same years.

Yukos obtained concessions from taxation in the Republic of Moldova and registered companies in Moldova. Russia claims that by doing so, they have escaped tax evasion by tax evasion.

There is a tension between state and regional authority over regulation and legislation. Poorer regions did not impose a profit tax to attract investment. This relocates the investments in regions with high taxes in tax free regions, with the central budget being affected.

Exports were eligible for VAT reimbursement, amounting to more than \$ 13.5 billion. The Russian authorities disavowed the deliveries and thus refused the reimbursement.

Unpaid charges have seized assets of Yukos, worth more than \$ 15 billion, for \$ 3.5 billion in fees. Although Yukos proposed other methods to pay their taxes, they were refused to confiscate their assets and sell to a state-owned company. Three days after winning the tender for the purchase of Yukos assets by an unknown company for \$ 9.3 billion, this company was bought by Rosneft, a state-owned company.

After the auction, Yukos could still produce oil, but the Russian state has started bankruptcy. Another 17 auctions were organized, of which 9 were won by Rosneft. In the end, Rosneft remained with 84% of Yukos's assets.

The value of Yukos on November 23, 2007, before the expropriation, was \$ 83 billion and had 2.2 billion shares. The applicants had 73000 shares valued at USD 2,625,810, value determined using the market value method, comparing the price per share with four other Russian gas and oil companies.

The Court considers that an adjustment of value is necessary by reducing it by 23% without explaining this coefficient by means of economic calculations. This amounts to \$ 2,026,480 in damages.

As regards costs, for the costs of representation, the applicants claimed USD 14,572,671.57 and the State requested USD 9,412,260.73, the court ruled that each of them would have to bear on its own. As far as administrative expenses are concerned, USD 977,529, of which USD 837,665 were paid by the applicants and USD 139,874 by the State.

The Court grants interest of 6.43%.

2.3 Rosinvest_v_Russia

Rosinvest had 7 million shares in Yukos, but the difference between the two cases is mainly due to the acquisition of shares. Rosinvest bought the shares in November-deception 2007, after the problems had begun and paid for \$ 0.5. Although they claimed damages of \$ 232.7 million, they were granted \$ 3.5 million, an amount that the tribunal considered as the price paid for shares. The Tribunal sets the interest rate at the LIBOR level.

2.4 Waguih Elie George Siag and Clorinda Vecchi_v_Egypt

Waguih Elie George Siag and his mother Clorinda Vecchi, Italian citizens, have invested in tourism in Egypt through SIAG. In 1989 they bought land from the tourism ministry.

The applicants claim that, through several acts and omissions, the Egyptian government after 1995 expropriated them.

The applicants wanted to build a resort with a capacity of 1560 people. Between 1990 and 1994 construction began. On August 23, 1994, they signed an agreement with an Israeli company for financing. Also, in 1994, an Egyptian authority, the Tourism Development Agency, the TDA issued a resolution to stop the project.

On May 29, 1995, the TDA sent a letter to Siag asking for the property to be returned to the government.

On May 23, 1996, the tourism ministry revoked the contract. Mr. Siag was announced on June 2, 1996 that the police would take over the property, opposed and arrested.

Egypt has asked the court to reject the case first on the grounds that Mr Siag was in bankruptcy, which could not be substantiated, and later challenging the Lebanese nationality of Mr Siag. The tribunal rejects all Egyptian objections.

Currently, a gas company in Egypt has built some pipelines on the ground. The applicants argue that this is not in the public interest, especially as these pipelines could be located on the neighbouring land owned by the gas company and only passed on a small portion of the land belonging to the applicants. The expropriation took place in 1996 and the first use of the land in 2003, for this reason, the tribunal

considers that there was no public interest or compensation, so it is illegal expropriation.

The applicants claimed damages worth 230 million USD plus compound interest and all costs incurred by Egypt.

Estimation of damages was done by three methods:

- Comparable sales value - \$ 181,350,000
- The residual value of the land - 191,357,357 USD
- Lost opportunity - discounted cash flow - 195,800,000 USD - in the end it was requested.

The complainants presented two reports made by LECG and CB Richard Ellis (CBRE).

LECG included a projection of the discounted cash flow between 1996-2008, discounted by 12.8%, the weighted average cost of capital. The initial report was \$ 204.7 million. Later it increased to US \$ 223.8 million and at hearings it reduced to 195.8 million USD. The causes are not specified. The court rejected this approach.

Richard Ellis presented two models:

- Comparable sales value - based on the prices of land sold in close periods,
- The residual value of the land - which is based both on the LECG's calculation data from which it deducted the development and construction costs and then added the residual value of the land, calculated by the other method.

The calculations for the comparable sales value were made by Mr Fleetwood Bird, who is considered to be a senior figure in the field, the amount obtained was \$ 181,350,000. The expert said the margin of error for his calculations could be 10%, the court modified the margin to 20%, reducing the amount calculated to 145,080,000 USD. The applicants did not own 100% of the property but only 95.27%, the amount was adjusted by that percentage and then, according to the sales contract, the applicants were to retain 50% of the final value, so the court granted them: 69.108.858 USD for the land value.

Mr. Fleetwood Bird estimated total construction costs at \$ 9,325,000, the court applied the same adjustments to \$ 4,441,936.75 for construction.

The claimants also claimed salaries, other benefits and travel expenses that the court rejected because they had no conclusive evidence. With regard to financing costs, interest and penalty payments for the project, the court ruled that in the case of the sale of the property, this credit would have been reimbursed from the price received, therefore did not consider that it had to pay damages for these requests, to bear from the amount already granted as property and construction damage.

In total, the tribunal grants \$ 74.55 million in damages, 6-month interest rate LIBOR and Egypt have to pay \$ 6 million in costs to the complainant.

2.5 Unglabe_v_Costa Rica

The applicants have several properties in Costa Rica near the beach. In 1991, Costa Rica issued a decree establishing a National Park for the protection of Leatherback turtles in the area. This project included a 75-meter façade of property complainants, but the state has not taken any action. After 4 years, he reiterates that he will go further with building the Park by giving in 1995 the Law of the National Park that includes the controversial term: from the sea. Again, no action is taken until 2003.

In 2003, owners oppose expropriation, especially as the Costa Rican law provides that expropriated property for the public interest can only be used for that purpose for 10 years, and after that period, the old owners may request it back.

The Tribunal observes that the expropriation started on 22 July 2003 and that Costa Rica did not take any steps to compensate the applicants.

The complainant considers the most appropriate valuation method to be the capitalized income method.

The best use of this land, from the complainant's point of view, would be the realization of 32 lots for one family (5 facing the beach and 27 in the interior). This property is estimated to have a property value of \$ 8.8 million, of which \$ 5.19 million for the 75-meter facade and \$ 3.69 million for the land difference.

Costa Rica says it did not violate the law and the amount it should pay to the complainant is the value of the land it estimates at USD 300,000 plus the interest of USD 63,118 until 1992 or USD 1,021,562 until 1988.

The Court considers it more appropriate to relate to the prices at which land was sold in that area on 1 January 2006, reaching a value of USD 3.1 million.

Interest calculated by the court is based on the rate of government securities issued for five years, compiled on a half-yearly basis. The total amount of interest is USD 950,900.33. The same rate will also apply after the date of the notice until the full payment of the damages.

Following receipt of the damages, the complainant will surrender 75 meters to Costa Rica.

Each party must bear its own costs.

2.6 *Swisslion DOO Skopje_v_Macedonia*

On 30 March 2006, Swisslion bought 4180 shares from Agroplod and on April 13, 2006, it bought 820 shares.

On May 7, 2006, it bought 788 shares, holding over 25%.

More than 25% of Agroplod shares were auctioned on June 1, 2006. On June 7, 2006 a favourable opinion was given on Swisslion's bid (it was the only bidder). On June 23, 2006, the shares were paid and transferred to Swisslion.

Mr Kitinov challenged the acquisition of shares by Swisslion without effect. On March 2, 2007 he sent a letter to the Ministry of Economy asking him to inspect the investment made in Agroplod. On 12 March 2007 the Ministry of Economy asked the Finance Ministry to do this inspection.

On October 30, 2007, the finance ministry wrote to the public prosecutor that he had completed the audit but did not have the competence to assess whether or not the engagement was respected.

On 5 November 2007, the General Prosecutor asked the SEC for a statement of the Agroplod capital structure before the June 2006 auction. On 26 May 2006, Swisslion held 24,901% of the shares, and 588 shares were added to 27,834%. On 20-22 February 2008 the ministry concludes that Swisslion was not entitled to bid.

While the auction process is still being judged, the SEC has forbidden Swisslion to exercise its rights from previously purchased shares.

In the first instance, the lawsuit filed by the SEC is dismissed, they go to the Supreme Court, which decides in favour of SEG.

Mr Kitinov continues the pressures against Swisslion, on December 20, 2010, calls on the Prosecutor General to prosecute Swisslion representatives at Agroplod.

Given that the tribunal did not consider expropriation to be a violation of the fair and just principle of fairness, it decided that it was sufficient to pay damages of EUR 350,000 as compensation for the reduction in sales and another EUR 350,000

equivalent in part of the arbitration costs, at which interest is compounded half-yearly at the LIBOR rate.

2.7 Československá obchodní banka A.S. v. Slovak Republic (ICSID Case No. ARB / 97/4)

On December 17, 1993, an agreement was signed between the Czech Finance Ministry, the Slovak Finance Ministry and the CSOB. According to the agreement, CSOB claims that Slovakia had to pay the losses registered by the Slovak Collection Company. Slovakia did not cover these losses and CSOB initiated arbitration in order to recover the damages suffered.

Privatization was to take place in three stages. By the end of 1993, CSOB had to achieve a return on capital of 6.25%. To do so, uncertainties were to be transferred to the Collection Company, which would transfer the money to CSOB. Greater claims have been transferred, so at the end of 1993, the return on equity was 6.49%.

Total claims transferred by ČSOB amounted to SKK 6,521,108,081.91 by the end of 1993, decreased by SKK 51,668,195 on 16 August 1994 and increased by SKK 86,948,277.04 on 31 May 1995.

The Slovakia Republic considers that it should only pay SKK 1,011,426,185 as principal damages and SKK 2,057,071,675 interest.

CSOB claimed 10,647,236,411.30 SKK, after the court's adjustments it reached SKK 8,686,280,324 to which it applied interest to SKK 13,364,616,692.

The Court of First Instance rejected the method of calculation based on lost profits, even though it considered it appropriate to report on the profitability of banks in the Slovak market. Instead, the court calculates the three-month BRIBOR interest in the amount of SKK 11,618,154,309, then the full payment of the damages, the interest was set at the rate of 5%.

CSOB asked Slovakia to pay all costs in the amount of 16,351,846 USD. Slovakia has asked for CSOB to bear all costs in the amount of 14,314,236.17 USD. The Tribunal decides that Slovakia will bear its own costs and \$ 10,000,000 of CSOB costs.

3. In conclusion

The development of international arbitration is based on the development of economic relations between different states. Investors in some countries are attracted by different opportunities to invest their capital available in other states. To protect the investments of these foreign investors it was necessary to sign bilateral investment agreements. Most of these agreements provide for a clause to resolve any disputes that may arise between the foreign investor and the host state through international arbitration, in particular within the International Centre for the Settlement of Investment Disputes.

By making an easy transition to the damages awarded in the international conflicts between foreign investors and host states, we presented some cases where the damages awarded were calculated by using the market value method.

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MEASURING THE ECONOMIC GROWTH USING EMPLOYMENT QUALITY PARAMETERS – AN ECONOMETRIC APPROACH

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Abstract: *The classic model of economic growth is described by GDP, employment rate for working-age individuals, unemployment rate and the labour cost index. This paper aims to present a changing of the paradigm to measure the effect on the economic growth of only the classical factors (indicators) with elements of employment quality. For this purpose will be used an econometric analysis – Vector Autoregressive model. The quarterly data used for Romania is provided by official statistics. The software used for the analysis is R Project, with the package vars. The classic model could be replaced by a new model which includes GDP, employment rate for people aged 15 and more, social productivity, NEETs rate, and rate of early leavers from education and training for individuals aged 15-24. Hence, the proposed model encloses new components, mainly the youth's performance in employment and their interest in education and employment and the active ageing. The need for such a model is based on some statistical insights of Active Ageing Index, NEETs rates and early leavers from education and training rates. The proposed model is multivariate; therefore, all the variables are addressed simultaneously, and is meant to explain the behaviour of a variable based on its past and other variables. Based on the results, the study will underline some important policy that could be implemented.*

Keywords: *Economic growth; Employment; GDP; Vector Autoregressive model; NEETs; Active ageing.*

JEL Classification: C51; E24; J21; O47.

1. Background

This study follows the idea that the economic growth paradigm is changing. Therefore, the classic model described by GDP, employment rate for working-age individuals, labour cost index and unemployment rate could be replaced by the new model which includes GDP, employment rate for people aged 15 and more, social productivity, NEETs rate, and rate of early leavers from education and training for individuals aged 15-24.

In the new approach, the labour cost index is replaced by the social productivity and the unemployment rate is substituted by the NEET and early school leavers rates.

The proposed model encloses two new components. Firstly, the employment rate extends its coverage in the new model, from 15-64 years to 15 years or more, in order to include also the active ageing. Secondly, the new paradigm provides the idea that the performance in employment (Social productivity) and the interest of

youth in education and employment (NEETs rate and rate of early school leavers) have strong impact on GDP, therefore on economic growth.

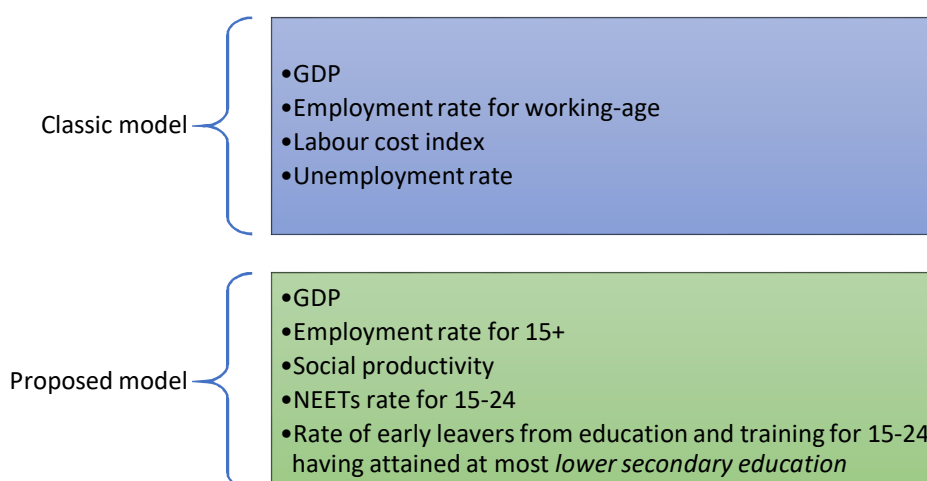


Figure 1: Classic model and proposed model for economic growth
Source: Authors' concept

Active ageing is among the interests in the new economic and social policies among Europe. One initiative of the European Commission and UNECE is Active Ageing Index, established in 2012. This index measures the potential of older people for active and healthy ageing and is constructed from 22 individual indicators that are grouped into four domains: a) employment; b) participation in the society; c) independent, healthy and secure living and d) capacity and enabling environment for active ageing. The domain Employment is related to only one type of indicator, i.e. the employment rate for various age groups: 55-59, 60-64, 65-69 and 70-74.

The preliminary data for 2018 show that Romania ranks 15th position among EU member states, with an index valuing 28.9, compared with European level of 31.1, for the employment component. For the overall Active Ageing Index, Romania ranks the 26th position (the value of the index is 30.4), compared with the EU's average of 35.7. For the overall period 2010-2018, we can conclude that Romania faces a divergence of this index, as exposed in the Table 1.

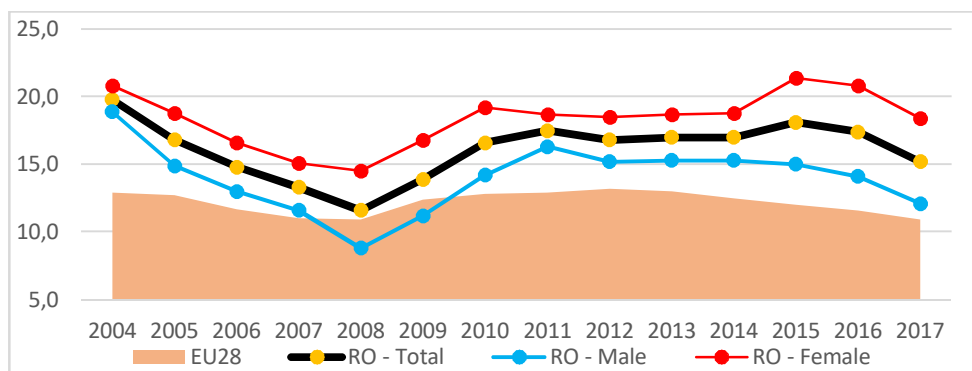
For young people the situation has widely complex. Employment and unemployment rates do not capture the situation of all young people. Many of the remaining youth may still be enrolled in formal or non-formal education. It is beneficial for young people to remain in education, continuing to invest in their own human capital, which can lead to better jobs, higher salaries and productivity. The ones who find themselves out of education and training at an early age are becoming vulnerable, since they face disadvantages in labour market (European Training Foundation, 2015). The concept of NEET refers to the youth currently not employed and not enrolled in any form of education. The emergence of the NEET concept is linked to the growing complexity of youth transitions and changes in labour markets and the availability of jobs.

Table 1: Active Ageing Index in Romania and EU-28, 2010-2018

Year	Country	Value	Rank	Ratio RO/EU-28 (times)
2010	Romania	29.4	21	0.92
	EU-28	32.0		
2012	Romania	29.4	23	0.88
	EU-28	33.4		
2014	Romania	29.6	24	0.87
	EU-28	33.9		
2016	Romania	30.4	24	0.87
	EU-28	34.8		
2018 (preliminary data)	Romania	30.4	26	0.85
	EU-28	35.7		

Source: European Commission and UNECE, Active Ageing Index

Romania has higher NEET rates than the EU's average between 2004 and 2017. Data proves that in 2008 the rates were the lowest in all the period, even with the males' rate being under the EU's average.

**Figure 2:** NEET rates for 15-24 years old, in Romania and EU-28, 2004-2017

Source: Eurostat database, edat_lfse_18

The interest of youth in education and employment is measured by the early leavers from education and training. Moreover, reducing school drop-out rates to less than 10% is one of the targets of Europe 2020 Strategy. The data provided by Eurostat show that, for Romania, the rate of early leavers from initial education who were unemployed was higher than the rate for employed ones in 2011, 2015 and 2016. In addition, the rate of early leavers that would like to work has outbalanced the rate of early leavers that are not interested in employment in all period, except the period after 2015.

At EU level, the situation is different. The rate of early leavers from initial education who were unemployed was lower than the rate for employed ones until 2008. The school drop-out rates for the individuals that would like to work is higher than the rates for individuals that do not want to work in all the period.



Figure 3: Early leavers from education and training rates for 18-24 years old, in Romania and EU-28, 2005-2017

Source: Eurostat database, *edat_lfse_14*

Therefore, we can conclude that in Romania there is a tendency of youth which are leaving the education in getting away also from employment, therefore in becoming NEETs.

These aspects are important in order to understand the impact that these indicators could possibly have on the economic growth, i.e. GDP.

2. Methodology of the VAR model

For analysing the new proposed model of economic growth based on youth and active ageing contribution in Romania, the present paper aims to test a multivariate Vector Autoregressive Model (VAR).

The model includes the following variables: GDP, employment rate for people aged 15 and more, social productivity, NEETs rate for individuals aged 15-24, and rate of early leavers from education and training for individuals aged 15-24.

The software used for the analysis is R Project, with the package *vars* (Pfaff, 2008), which is specific for the VAR, SVAR and SVEC analyses. The statistical software R shows the advantages of an open source system: costs related only with the training of users, easy customization of the applied methodology, technical support provided by a large community of users and experts, continuous upgrade and linkage with the way statisticians think and work (Dobre et. al, 2013).

The quarterly data used in the analysis is provided by official statistics (NIS of Romania and Eurostat) and comprise the period 2005 Q1 – 2017 Q2. The variables included in the model are explained below.

1. GDP – Gross domestic product, expressed in national currency (Romanian Lei).

2. EMP - Employment rate for people aged 15 and more - the share of employed people aged 15 or more in the total population of the same age group.
3. PROD - Social productivity – the ratio between GDP and civil economically active population.
4. NEET - NEETs rate for individuals aged 15-24 - percentage of the youth aged 15-24 who is not employed and not involved in education or training.
5. ESL - Rate of early leavers from education and training for individuals aged 15-24 - percentage of the people aged 15 to 24 who has completed at most lower secondary education and is not involved in further education or training, out of the total population aged 15 to 24.

The proposed model is multivariate; therefore, all the variables listed above are addressed simultaneously, and is meant to explain the behaviour of a variable based on its past and other variables.

The applied VAR model suppose that a vector of state variables follows a first-order VAR, i.e. every state variable in period $t+1$ can be explained by a linear combination of the state variables in the previous period (t) and a constant deterministic regressor. All variables were converted into natural logarithms, as the use of log-transformed data has become a good practice in macroeconomic forecasting with VAR models (Mayr, Ulbricht, 2007).

A preliminary step in the development process of VAR models is the application of unit root test ADF (Augmented Dickey-Fuller). This tests the unit root against a trend stationary alternative. In R software, the Augmented Dickey-Fuller test is implemented by the function `ur.df()`, included in the package `urca`. The stationarity of the series implied in the models was tested in two different ways.

Firstly, it was considered that the natural logarithms of the series follow a stochastic process autoregressive of order 1, type "trend". Secondly, it was tested if the series follow a stochastic process AR (1) autoregressive of order 1, type "drift".

Table 2. Critical values of 1%, 5% and 10%

Type	Critical values 99%	Critical values 95%	Critical values 90%
Trend	-4.15	-3.50	-3.18
	7.02	5.13	4.31
	9.31	6.73	5.61
Drift	-3.58	-2.93	-2.60
	7.06	4.86	3.94

The ADF test results were compared with the critical values for the various thresholds of significance. In both cases – trend and drift - the test results are higher than the critical values of 1%, 5% and 10% in the Table 2, therefore the null hypothesis of the presence of unit root in the series could not be rejected. This means that the series are not stationary.

Table 3: Augmented Dickey Fuller Test-statistic values for variables included in the model

Time series	Type	ADF Value
GDP	Trend	-2.5853
		4.9491
		4.6062
	Drift	-3.6214
		6.5627
EMP	Trend	-1.7433
		1.0439
		1.5451
	Drift	-15.6285
		122.3807
PROD	Trend	-1.8219
		9.0674
		6.1064
	Drift	-6.5492
		21.5
NEETS	Trend	-2.2177
		1.7484
		2.4596
	Drift	-5.8096
		17.0465
ESL	Trend	-2.3838
		3.3067
		4.3789
	Drift	-8.737
		38.1812

Source: R output on ADF Tests

3. Results of the VAR model and comments

In the next step, an optimal lag length was determined for an unrestricted VAR for a maximal lag length of four (general accepted lag for quarterly data). According to VARselect() procedure in R, the optimal lag for models is 4, considering Akaike (AIC), Schwarz (SC) and FPE (Final Prediction Error) Criterion.

Since the minimum values for AIC and SC criteria have the order 4, a VAR (4) model will be conducted. VAR()function performs the VAR model for each of the five equations by using least squares method. By default, it will consider the minimum value of Akaike criterion. Further, by applying the summary() function, more details on equation "GDP" will be presented. A summary on these details is exposed in the Table 4.

Table 4: Estimation results for equation GDP

Variable	Estimate	Std. Error	t value	Pr(> t)
GDP.I1	-8.5170884	2.9666429	-2.871	0.00841 **
EMP.I1	10.2516934	2.9194474	3.512	0.00179 **
PROD.I1	8.7736664	2.9295739	2.995	0.00628 **
NEETS.I1	0.1653621	0.0988330	1.673	0.10729
ESL.I1	-0.2102843	0.1472272	-1.428	0.16609
GDP.I2	-7.2289153	3.7306835	-1.938	0.06451 .
EMP.I2	8.8198111	3.7430783	2.356	0.02696 *
PROD.I2	7.1810147	3.7531775	1.913	0.06771 .
NEETS.I2	0.4040847	0.1180939	3.422	0.00223 **
ESL.I2	-0.4625923	0.1574375	-2.938	0.00718 **
GDP.I3	0.1166351	2.9271657	0.040	0.96855
EMP.I3	0.3111179	2.8768631	0.108	0.91478
PROD.I3	0.2011913	2.9357864	0.069	0.94593
NEETS.I3	0.1689971	0.1028929	1.642	0.11354
ESL.I3	0.1652273	0.1617102	1.022	0.31709
GDP.I4	7.9324392	2.5689273	3.088	0.00503 **
EMP.I4	-7.1264436	2.5270860	-2.820	0.00948 *
PROD.I4	-8.1467966	2.5250055	-3.226	0.00360 **
NEETS.I4	-0.1459936	0.1251538	-1.167	0.25487
ESL.I4	-0.1042758	0.1461219	-0.714	0.48234
const	14.17701	5.2352748	2.708	0.01228 *
trend	0.00081	0.0008768	0.927	0.36333

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.009125 on 24 degrees of freedom

Multiple R-Squared: 0.9951, Adjusted R-squared: 0.9909

F-statistic: 233.3 on 21 and 24 DF, p-value: < 2.2e-16

Source: R output on VAR model

The output of the VAR model outlines some figures. GDP is explained only by its own past and by the past of employment rate and social productivity. Also, it is strongly influenced by employment rate in t , $t+1$ and $t+3$, by social productivity in t and $t+3$, by NEETS rate in $t+1$, and by rate of early school leavers in $t+1$. In period t , the influence is high among GDP, employment rate and social productivity. Therefore, we can conclude with some remarks:

- The effects of employment rate (15+) on the economic growth is strong across all the lags, except the 3rd one;
- The social productivity is influencing the GDP in the first and third lags;
- The NEETs effects on the economic growth are visible upon two lags;
- The drop-out rates influence on the GDP is observed after two lags.

For future research, another version of this model could be the one in which we substitute the social productivity with the wage-led productivity. This approach could be motivated by the specific levels of wages for active ageing and youth on the labour market. Considering the wage-led growth arises from the idea that real wage growth restraint reduces productivity growth more than output growth – thus creating higher employment. Moreover, as stated in the literature, a one-percentage point step-up

in real wage growth raises productivity growth by 0.38 percentage points (ILO, 2013, p. 109).

4. Conclusions

The study proposes a new approach of analysing economic growth by means of an econometric model – Vector Auto Regressive.

The results showed the influence of employment rate for people aged 15 and more, social productivity of labour, NEETs rate, and rate of early leavers from education and training for individuals aged 15-24 having attained at most lower secondary education, on GDP.

The effects of NEETs and dropout rates on the economic growth are not immediate observed on the economy. The situation is similar with the investments. Their effects do not appear instantly, they have to be validated by some economic cycles.

Moreover, the importance of the indicator dropout rate of individuals having attained at most lower secondary education is important, considering that the Romanian economy is mostly composed of workers with this level of education.

Strong policy measures concerning the active ageing and the employment and education of youth shall be considered in Romania. On one hand, the evidence generated is raising awareness of the challenges and opportunities for older people to seek ways to develop their full potential, thereby contributing to improving the future sustainability of welfare systems and their own well-being. On the other hand, the policy makers shall be able to forecast the needs in the labour market and shall coordinate the education system towards the accomplishment of the quality of employment, mainly for the youth. The youth is a vulnerable group on the labour market, so it has special needs. Improving the efficiency of education and training systems at national level is essential to avoid the waste of human capital and financial resources, increase employability and reduce inequalities. All these proposed policy measures would lead to economic growth:

- Focusing on reducing school drop-out in secondary education (specific for Romania);
- Increasing the rate of transition to higher education, with specialization in technical domains (according to the reindustrialization) and digital fields (the fourth industrial revolution);
- Assuring a sustainable employment by linking productivity and wages;
- Measures for the active ageing are beneficial. Regarding this, for future research, we could consider the analysis of active ageing rate versus NEETs rate.

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Appendix. Data used for the model VAR, converted into natural logarithms

Year	Quarter	GDP	EMP	PROD	NEETS	ESL
2005	Q1	4.8287	1.7042	0.8779	1.2897	1.3363
2005	Q2	4.8474	1.7251	0.8758	1.2171	1.3357
2005	Q3	4.8703	1.7168	0.9068	1.2633	1.3348
2005	Q4	4.8842	1.711	0.9268	1.2554	1.3207
2006	Q1	4.9068	1.7067	0.9524	1.2426	1.2983
2006	Q2	4.9239	1.7316	0.9451	1.1578	1.308
2006	Q3	4.9415	1.7388	0.957	1.2038	1.3041
2006	Q4	4.9671	1.7135	1.0075	1.1936	1.2927
2007	Q1	4.9842	1.716	1.0235	1.1967	1.2807
2007	Q2	5.0048	1.7316	1.0286	1.1219	1.2904
2007	Q3	5.0201	1.7427	1.0365	1.157	1.2887
2007	Q4	5.0525	1.7218	1.0898	1.1591	1.2771
2008	Q1	5.0874	1.7168	1.1334	1.1334	1.271
2008	Q2	5.1098	1.7348	1.1382	1.0374	1.2661
2008	Q3	5.1275	1.7412	1.1497	1.0931	1.2554
2008	Q4	5.1339	1.7259	1.1713	1.1066	1.2528
2009	Q1	5.0889	1.7118	1.1413	1.154	1.2838
2009	Q2	5.1023	1.7275	1.1387	1.1005	1.2667
2009	Q3	5.1007	1.7275	1.1387	1.1791	1.2482
2009	Q4	5.1237	1.6998	1.1898	1.2163	1.2453
2010	Q1	5.1163	1.6928	1.1904	1.2327	1.2915
2010	Q2	5.1241	1.721	1.1705	1.1773	1.3126
2010	Q3	5.1215	1.7202	1.1696	1.2232	1.277
2010	Q4	5.136	1.6972	1.2076	1.245	1.2559
2011	Q1	5.1429	1.6955	1.2166	1.2572	1.2885
2011	Q2	5.1441	1.7042	1.2093	1.2201	1.2646
2011	Q3	5.1538	1.7067	1.2173	1.2451	1.2444
2011	Q4	5.1561	1.6964	1.2303	1.246	1.2345

Year	Quarter	GDP	EMP	PROD	NEETS	ESL
2012	Q1	5.1563	1.6946	1.2335	1.2497	1.2408
2012	Q2	5.1746	1.7118	1.2347	1.2038	1.263
2012	Q3	5.1759	1.716	1.2321	1.2217	1.2526
2012	Q4	5.1791	1.7042	1.2468	1.2254	1.2411
2013	Q1	5.1851	1.6937	1.264	1.2359	1.2357
2013	Q2	5.1973	1.7093	1.2605	1.2036	1.249
2013	Q3	5.2058	1.7135	1.2657	1.2385	1.2431
2013	Q4	5.2145	1.7024	1.2852	1.2389	1.2269
2014	Q1	5.2128	1.6981	1.2885	1.2278	1.2377
2014	Q2	5.2205	1.7118	1.2821	1.2005	1.2596
2014	Q3	5.224	1.7193	1.2784	1.2415	1.2674
2014	Q4	5.229	1.7059	1.2968	1.2521	1.2681
2015	Q1	5.248	1.6902	1.3322	1.3051	1.2551
2015	Q2	5.2381	1.7118	1.3004	1.2318	1.2896
2015	Q3	5.2552	1.7177	1.3128	1.2356	1.2962
2015	Q4	5.259	1.7042	1.3304	1.2519	1.2784
2016	Q1	5.216	1.692	1.2996	1.2639	1.2831
2016	Q2	5.2289	1.7067	1.2982	1.2018	1.2666
2016	Q3	5.2342	1.7135	1.2984	1.2185	1.2429
2016	Q4	5.249	1.7016	1.325	1.2724	1.2778
2017	Q1	5.2648	1.699	1.3445	1.2453	1.2811
2017	Q2	5.2788	1.7316	1.3262	1.0886	1.2612

Source: Eurostat and NIS of Romania databases

INDEX OF SATISFACTION OF ROMANIA'S INTEGRATION IN THE EUROPEAN UNION. STATISTICAL RESEARCH ON FIVE TARGET GROUPS IN THE WESTERN AREA OF ROMANIA

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Abstract: *In our statistical research we have proposed to make an assessment of the satisfaction of the population from the time of accession to the European Union. We mention that we considered five target groups, namely: students from West University of Timisoara; students from the University of Medicine and Pharmacy Timisoara; resident doctors; top management and employees from companies in the western area of the country. Consequently, an interpretation of the conclusions of our research at national level should be made with caution. As regards the integration and future of Europe, there is a diversity of opinions. Some insist on promoting unity in diversity, contending that "the European community cannot be conceived beyond strict objectives, the realization of which is the very reason of being its existence" (Manolache, 1995). There are two extremes: (a) The Union is a federation of nation-states, and therefore the construction cannot overlap with a federal ideal (Kahn, 2008); (b) federalization is the Union's perspective because "federalism now seems the only form of social organization that can guarantee the preservation of national and regional identity in harmony with the requirements of independence and globalization" (Sidjanski, 2010). We note that some consider federalism to be an idealistic goal (Kahn, Rosamond), others consider federalism to be a necessity (Sidjanski), and others appreciate that "federalism represents the philosophy, functionalism is the stage method" (Ion, 2013). There are opinions that proclaim the end of the West and of United Europe. "The European Union is a grandiose and debilitating project at the same time. Compared to well-defined national identities, European identity is very diffuse" (Boia, 2013). As far as we are concerned, we believe that the European Union's integration process must continue, an opinion stemming from our previous research (Duță, 2017). Starting from the hypothesis that the population's perception of European integration is a signal that the theoretical assumptions cannot discard, we have proposed a statistical survey on five target groups in the western area, limiting only one criterion, the satisfaction of integration. The methodology used was presented in our paper "The European Index. Statistical survey on five target groups"(Duță, 2017). Key words: the perception of decisions taken in Brussels; the perception of the bureaucracy of European Union legislation; the perception of discrimination of less developed countries within the European Union; index of integration satisfaction; identity of a European citizen.*

Keywords: *index of EU integration; EU; European Union; Romania; Statistics; Research; perception.*

JEL Classification: *F02.*

1. Introduction

The objectives of research: the perception of decisions taken in Brussels; the perception of the bureaucracy of European Union law; perception of discrimination of less developed countries within the European Union. Of course there are several criteria and therefore the conclusions of our statistical research must be interpreted in the strict register of those listed.

Sample Structure: A total of 1000 questionnaires were distributed, validated were 800, 80%, which we consider to be good. The profile of the statistic population with valid answers is the one in table number 1.

Table no. 1. Sample's structure

Total respondents	UMF Students	UVT Students	Resident doctors	Top-management	Employees
800	200	210	56	70	264

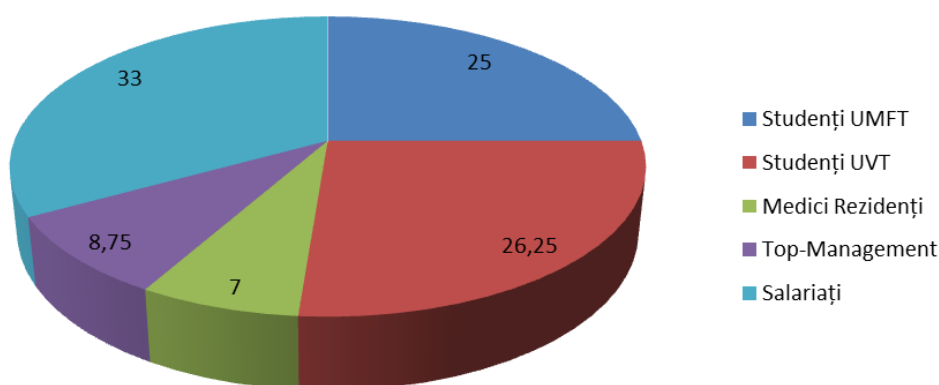


Figure no. 1. Sample's representativeness

Calculation relation used is:

$$n = \frac{t^2 \times p \times q}{e^2} = \frac{t^2 \times p(1-p)}{e^2} - \text{extracting the sample with 95\% probability,}$$

where:

n – the size of the sample;

t - statistical coefficient corresponding to the confidence level considered (t = 1,96 corresponding to a confidence level of 0,95 in the statistical tables);

p - the frequency of occurrence of the phenomenon studied in the sample (we consider p = 0.50 for a dispersion with the maximum possible value);

q = 1 - p = 1 - 0.50 = 0.50

e - allowed tolerance margin. For an error margin of ± 5% we have

e = ± 0,05.

In our case

$$n = \frac{1,96^2 \times 0,5 \times (1-0,5)}{0,05^2} = 384,16 \text{ respondents.}$$

Therefore our sample is statistically representative.

2. The conclusions of the research

Conclusion 1: The population perceives decisions taken in Brussels to a low level.

Table no. 2. The perceptions of the decisions taken in Bruxelles

Respondent category	Awarded mark					Scoring
	1	2	3	4	5	
1.UMFT Students	40	100	60	-	-	420
2.UVT Students	30	110	50	20	-	480
3.Resident doctors	-	20	30	6	-	154
4.Top-management	10	20	40	-	-	170
5.Employees	-	60	154	50	-	782
Total	80	310	334	76	-	2006
						800

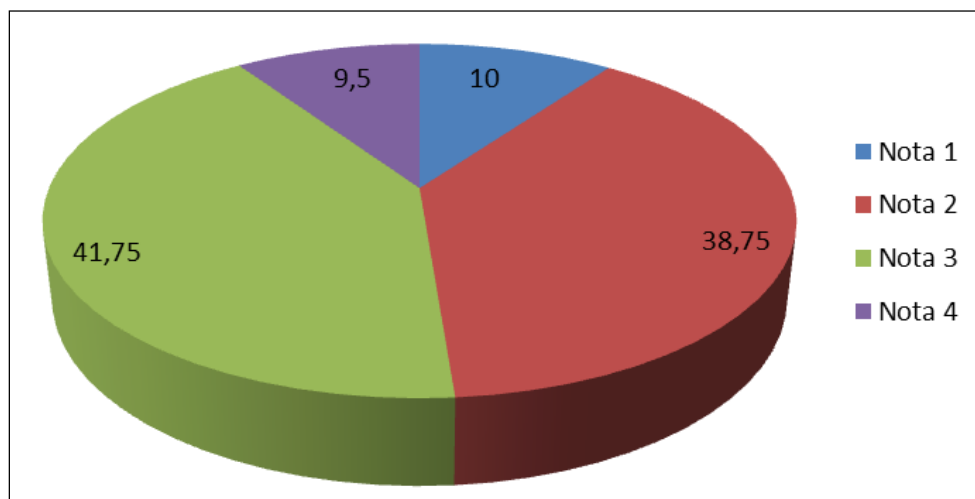


Figure no. 2. The perceptions of the decisions taken in Bruxelles

Table no. 3. Statistical indicators

Indicators	\bar{m}	σ	v
Value	2,132	0,855	40%

Table no. 4. The level of average value on our sample structure

Total	UMFT Students	UVT Students	Resident doctors	Top-management	Employees
2,132	2,10	2,285	2,75	2,42	2,204

The answers to the question how are perceived the decisions from Brussels by studied sample of population are more scattered (proof of variation coefficient, $v = 40\%$), but they are below average. The perception is that decisions taken in Brussels do not always seem to be favourable to Romania. Perhaps this perception is generated by political disputes.

The average of 2,132 is close to the minimum quarter, which means a "reserve" to the objectivity of the decisions in Brussels.

Since all target groups are on the lowest quarter, we tend to believe that the population is dissatisfied with some "behaviors" of decision-makers in Brussels. It is the poorest indicator.

Conclusion 2: The population perceives bureaucracy of EU legislation to a low to very low level.

Table no. 5. The perception of the bureaucracy of EU legislation

Respondent category	Awarded mark					Scoring
	1	2	3	4	5	
1.UMFT Students	50	120	60	-	-	380
2.UVT Students	60	140	50	-	-	370
3.Resident doctors	-	30	30	6	-	144
4.Top-management	20	30	40	-	-	140
5.Employees	-	100	154	64	10	776
Total	130	420	334	70	10	1810
						800

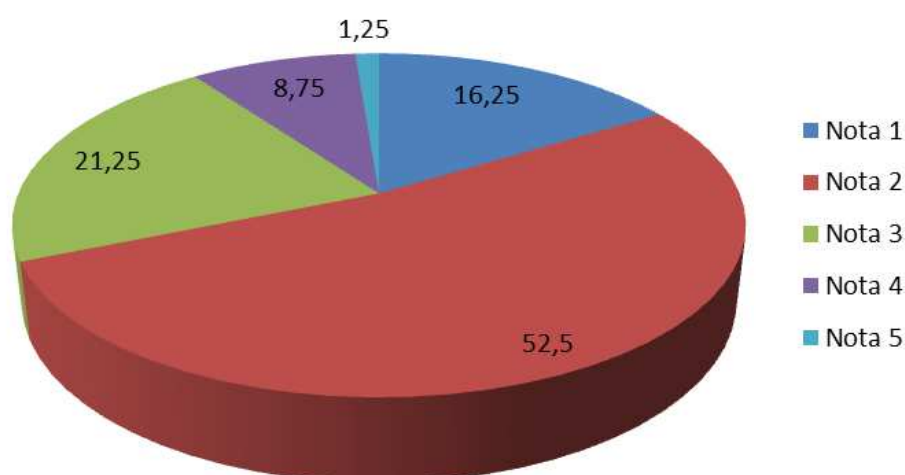


Figure no. 3. The perception of the bureaucracy of EU legislation

Table no. 6. Statistical indicators

Indicators	\bar{m}	σ	v
Value	2,26	0,876	38,7%

Table no. 7. The level of average value on our sample structure

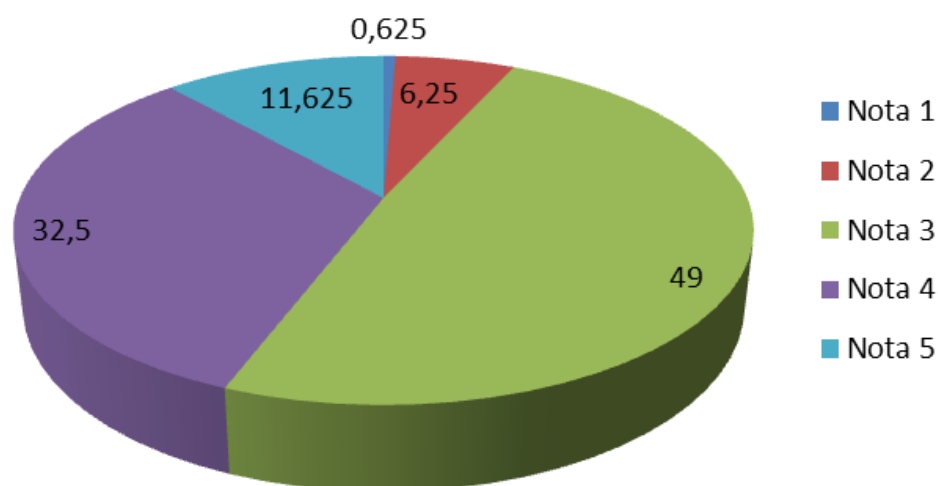
Total	UMFT Students	UVT Students	Resident doctors	Top-management	Employees
2,26	1,900	1,761	2,57	2,00	2,93

The perception of bureaucracy correlates positively with the perception of decisions, which makes us believe that this is reality.

Conclusion 3: Population perceives discrimination at an average level.

Table no. 8. Perception of discrimination of less developed countries

Respondent category	Awarded mark					Scoring
	1	2	3	4	5	
1.UMFT Students	-	10	80	100	10	710
2.UVT Students	-	20	100	70	20	720
3.Resident doctors	5	10	41	-	-	148
4.Top-management	-	10	50	10	-	210
5.Employees	-	-	121	80	63	998
Total	5	50	392	260	93	2786
						800

**Figure no. 4.** Perception of discrimination of less developed countries**Table no. 9.** Statistical indicators

Indicators	\bar{m}	σ	v
Value	3,482	0,802	23%

Table no. 10. The level of average value on our sample structure

Total	Students UMFT	Students UVT	Medicine residents	Top-management	Salaried
3,482	3,55	3,428	2,64	3,00	3,78

The variation coefficient of 23% confirms the homogeneity of the sample and the statistical validation.

The average of 3,482 places us in the medium quarter for the better. This means that at least the sample surveyed by us does not consider that the less developed countries are discriminated.

If we correlate the overall average with the average of the structures, we notice a certain concentration of responses. Exceptions are made by resident doctors who, naturally, feel injured

3. Conclusion

The general conclusion is that the satisfaction perception index of Romania's integration into the European Union is 2,624, slightly higher than the average.

$$I = (2.132 + 2.26 + 3.482) / 3 = 2.624$$

Compared to the Eurobarometer of specialized institutions, the results of our research fall within the margin of error. An appreciation above the average of satisfaction of integration, we believe, reflects the profile of the five target groups studied by us.

Compared to the index of the perception of the opportunity of Romania's accession to the European Union, the satisfaction index is lower, 2,624 versus 4,60. (7). The cause consists in the fact that the majority consider the population adherent, but the satisfaction of the accession diminished over time. As a general appreciation, compared to the perception of the population from other European countries, the perception of the five target groups we consider is above average in the quarter, which means that the European Union remains an option for most Romanians.

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ROMANIA'S EXTERNAL TRADE, FROM THE GREAT UNION TO THE INTEGRATION INTO EUROPEAN UNION

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Abstract: International trade has fundamentally changed the world we live in, over the past century, under the influence of both geo-political factors and unprecedented technological developments in transport, information and communications. Starting from this assertion, the present paper attempted to capture the essential characteristics of Romania's trade, from the Great Union, in 1918, to the integration into European Union, analyzing the historical stages, defined by the political, economic or social events that happened during these one hundred years. The first period under analyze is the interwar period, 1919-1938. The destructions that were brought by the World War I were strongly felt at the beginning of this period, so all efforts were focused on the restoration and consolidation of the economic development of the country. The gradual recovery of agricultural and industrial production has given a moderate economic development in the 1924-1928 years, abruptly disrupted by the great economic depression, a strong global crisis which affected most countries of the world, in the period 1929-1933. The Romanian economy resumed its development in 1934, especially under the influence of the revival of national industry, strongly supported by state reforms and trade policy, until 1938, when economic growth per capita reached the highest level that has ever been recorded until then. The outburst of the World War II in 1939 has stopped the economic upturn of Romania, both industry and agriculture being affected by the lack of imported raw materials and available labor force. The post-war period also contains several milestones, of which the most important, from our analysis point of view, are the Stalinization and consolidation of communist power (1945-1964) and the socialist period (1965-1989). After 1990, Romania's economy evolved under the impact of some factors as: the trade liberalization, the transition to the market economy and the steps taken towards obtaining the status of EU member state (in effect since 1st of January 2007). Currently, Romania is in the post-accession stage and on the way to its integration into the EU, trying, through economic and social policies, to provide the premises for healthy economic growth, development and modernization, in order to reduce the existing gaps as against the more developed EU Member States.

Keywords: external trade; export; import; Great Union; European Union; economic crisis.

JEL Classification: F10; F15; F31.

Introduction

Romania's participation in World War I, between 1916 and 1918, led to the country's union with the territories inhabited by the Romanians in Austria-Hungary (Transylvania and Bukovina) and in Russia (Bessarabia), union which received international recognition at the Congress of Paris, during 1919-1920. Almost one hundred years have passed since the Great Union of the Romanian Principalities, a period with many important economic and political events, which have definitely had an impact on the evolution of Romania's external trade: 1919-1938 interwar period, 1945-1964 communist period, 1965-1989 socialist period and 1990-2017 period. The political, economic and social events that have accompanied these periods have definitely influenced the evolution of Romania's foreign trade in the last century, whose main features are highlighted in this paper.

The analysis of the evolution of exports and imports of goods in this period is based on lengthy statistical series, comparable, as much as possible, and detailed on different product structures and partner countries.

1. Literature review

The unanimous opinion of the economists, and beyond, is that the last century has made incredible changes in almost every field of activity, and external trade is not an exception, as businesses around the world are now running faster and more efficient than ever. O'Brien has identified four major ways in which international trade has changed over the past one hundred years: improving domestic and international transport; progress in communications, logistics and supply chain technologies; improving geo-political relations and boosting the opening of trade; the increased ability to maximize the global potential of a company. (O'Brien, 2015)

The rapid advances in communications and transport technologies have facilitated major innovations in many areas, generating increased productivity and leading to stronger commercial and financial links. The last one hundred years have foreseen profound changes in the volume, direction and nature of international trade: world trade in goods and services has grown rapidly, helped by the liberalization of trade policies around the world. Intra-regional trade flows have also become more prominent in the proliferation of regional trade agreements. Intermediate goods trade has grown rapidly and led to cross-border supply chains, companies can now be positioned at different stages of the production process in several countries. (Kose & Ozturk, 2014)

From a historical perspective, external trade has experienced remarkable transformations in the last century, especially after the World War II, and in recent decades the expansion of trade has been faster than ever, the sum of exports and imports between nations being more than 50% of the world production (Ortiz-Ospina & Roser, 2018).

According to Ivanov, the development of Romania in the interwar period was influenced, on the one hand, by the immediate consequences of the World War II and by the major changes it has caused for a long time and, on the other hand, the new foundation of the national state, with greater resources and able to produce better economic policies than before the war. (Ivanov, 2013).

Beyond the national history, Romania's trade has, in most cases, been framed in the context of world trade.

2. Historical stages of the trade evolution between 1918 and 2017

The increase of Romania's external trade in the interwar period is a consequence of the openness of the newly created state towards the rest of the world and of a worldwide eagerness favouring the reconstruction and cooperation among the countries (Gogoneata, et al., 2008).

The four stages of the interwar period analyzed in the current paper are presented in the Figure 1. Romania's basic exports consisted mainly of agricultural products, wood, mineral fuels and oil. The imports envisaged industrial products, semi-finished products, machinery, installations and raw materials hard to be found at a national level. Predominantly in all stages were imports of vegetable textiles (with weights between 32.4% in the first stage and 22.4% in the last stage), metals, metalwork and mining products (15.5% in the first stage to 17.1% in the fourth stage), wool, blankets and similar articles (9.6% to 6.1%), machinery, engines (6% to 1.6%).

Among the four stages of the interwar period, the trade balance had a negative sold only during 1919-1923, due to the large imports of goods needed to recover the national economy immediately after the war. Between 1919 and 1923, about half of the exports were cereals and derivatives, while at the end of the interwar period oil and petroleum products accounted for an average of 45% of total exports. In 1936, Romania exported about 6.9 million tons of oil products in over 40 countries from all continents, the most important quantities being exported to Germany (1072.4 thousand tons), France (866.3 thousand tons), England (846.3 thousand tons), Italy (655.1 thousand tons) and Egypt (300.9 thousand tons).

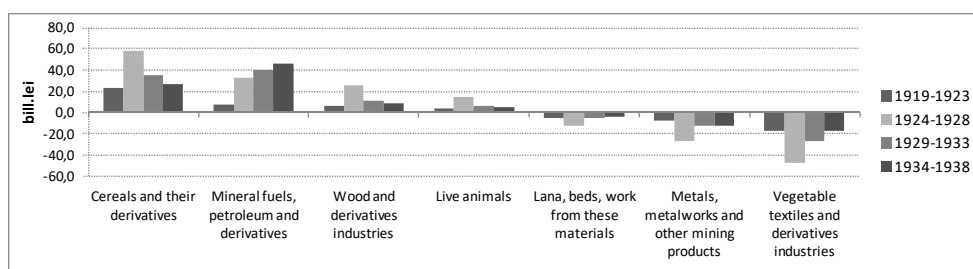


Figure 1. Top of the positive and negative trade balance of the main product groups in the interwar period –over 4 billion lei per stage

Source: own calculations based on data from the *Romanian Statistical Yearbook, 1939 edition*

The beginning of the World War II in 1939 stopped export growth, in close correlation with the impossibility of importing the raw materials needed for production. Agriculture has also been marked by the start of the war, which has reduced the labor force availability and has led to a decline in exports of cereals and other agricultural products since 1939.

The geographical orientation of trade has changed a lot over the interwar period. If in 1919 the main export partner country was Czechoslovakia (21.3% from total export), in 1938 exports went mainly to Germany (26.5% - fuels, cereals, live

animals, wood) and England (11.1% - fuels, cereals and animal food). In the case of imports, about 73% of Romania's total imports came from Italy, USA, England, France and Greece in 1919 while, in 1938, Germany (36.8%) and Czechoslovakia (13.1%) were the main import partners.

In 1938, Romania's export to Russia accounted for only 19.9% of the total export volume. After the war, in the years 1945-1946, the period of Stalinization and consolidation of the communist power has started as characterized by important changes in the geographical orientation of Romania's exports. As a result of the country's entry into the USSR's sphere of influence, about 95% of Romania's exports went to Soviet neighbours in these years. Since 1949, with the founding of Council for Mutual Economic Assistance (CMEA), Romania's main trading partner remained the USSR, followed by Czechoslovakia and the German Democratic Republic.

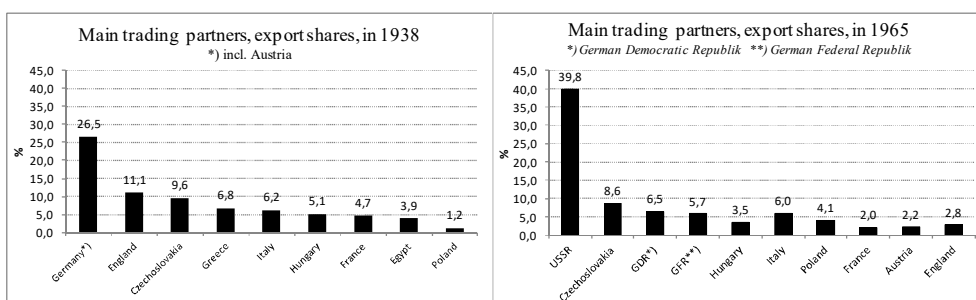


Figure 2. Geographical orientations of exports in 1965, as against 1938

Source: *Romanian Statistical Yearbook, editions 1939 and 1990*

By the end of the first communist period, in 1965, the share of exports to the USSR diminished to about 40% of total exports, as did the share of imports from the USSR, which reached 37% in 1965, compared to over 60% in 1946. The orientation imposed by the USSR on the line of self-isolation of the socialist countries from the rest of the world, aggravated by the blockade and commercial discrimination policies developed by the capitalist countries towards the socialist countries, has delayed the economic recovery process of Romania as well as of the other countries in Eastern Europe.

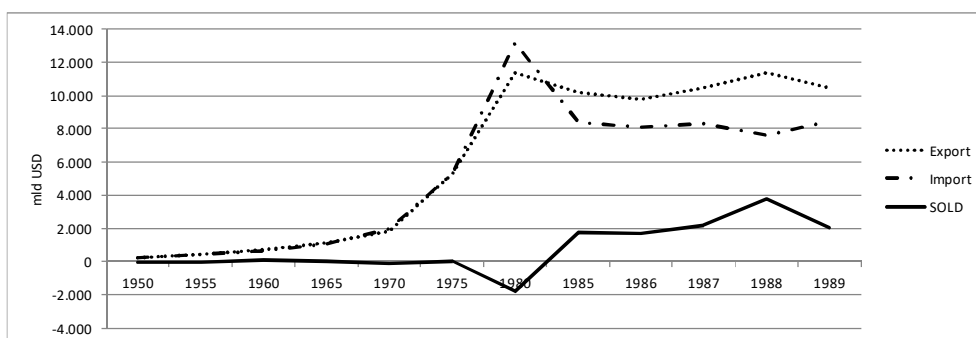


Figure 3. Evolution of exports, imports and trade balance, between 1950 and 1989

Source: *own calculations based on data from the Romanian Statistical Yearbook, 1939 and 1990*

Since 1950, when the level of pre-war economic development has been reached, the evolution of the exports, imports and trade balance of Romania is presented in Figure 3. Analyzed along a 40 years period, the evolution of the external trade of Romania shows that in 1989, compared to 1950, the export increased almost 50 times, while the import increased about 32 times. This indicates firstly the fact that, between 1950 and 1989, the export potential of Romania was better capitalized, especially after 1965, when the second communist period or the socialist stage of the country began.

By decades, over the period 1950-1989, Romania's export and import dynamics outlines a similar growth rate of both trade flows in the 50s, 60s and 70s. In the 1980s, the export growth rate was higher than that of imports, given the export-forcing policy intended for external debt payment. Romania's trade balance from 1950 to 1980 was generally negative, while from 1981 to 1989 the trade balance was positive, with an average surplus of about 2 billion USD per year.

Geographical distribution of Romania's trade during the period 1950-1989, illustrate that, between 1960 and 1980, the CMEA member countries, as the main trading partners of our country, constantly reduce their weight from 88,1% in 1950, 65.6% in 1960 and 38.3% in 1980. After 1980, alongside with the decrease in trade with the CMEA countries, trade with the countries of the European Economic Community (EEC, formed in 1958 in Belgium, France, Italy, Luxembourg and the Netherlands, Denmark, Ireland, England in 1973, Greece in 1981, Portugal and Spain in 1986) started to become more and more attractive.

Table 4. Trade of Romania by groups of partner countries

	in % as against total export / total import							
	1950	1960	1965	1970	1975	1980	1985	1989
Total export	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total import	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
from which								
Economic Council of Mutual Assistance (CMEA)								
export	88.1	65.6	63.7	50.3	38.6	38.3	38.1	39.9
import	77.9	67.8	56.4	48.1	37.0	31.0	44.9	54.8
European Economic Community (EEC)								
export	1.9	13.1	14.7	20.2	21.2	22.9	25.0	25.2
import	5.6	14.5	21.0	22.0	24.9	16.0	10.1	5.6
European Free Trade Agreement (EFTA)								
export	2.9	6.8	7.0	8.1	6.8	4.2	2.9	3.3
import	8.8	6.8	8.9	12.0	9.8	4.1	2.0	1.3
Organisation of Petroleum Exporting Countries (OPEC)								
export	0	0.3	1.0	3.5	8.4	6.3	8.4	6.3
import	0	*	0.3	1.5	6.9	21.3	12.2	21.0

Source: *Statistical Yearbook of Romania*, editions 1976, 1981, 1990;

Note: data for the year 1950 were reconstituted in the case of EEC and EFTA, for comparability.

During the analyzed period, the share of trade with the CMEA, EEC, and OPEC countries had a downward trend, from over 92% in 1950 to 85% in the 1960-1965 to an average of 65% in 1989. Between 1965 and 1980 the strong growth of the Romanian industry intensified trade with the EEC countries, exports to EEC registering a 12 times increase in 1980 compared to 1965. All these changes in Romania's external trade relations, in short time period of several decades, explain the instability of the geographical orientation of our country's export and import. The oscillations in the volume of its external trade, the negative trade balance and the

poor efficiency of Romania's trade, are revealed by the high share of relations with countries whose level of development was much higher.

The progress made in the post-war economic development of the country, the intense development of industry, especially branches such as machine building, chemistry, metallurgy, construction materials, etc., resulted in an increase in industrial production (which in 1989 was 30 times higher than in 1950), with an impact on the structure of exports and imports. In 1990, industry provided 99% of Romania's exports.

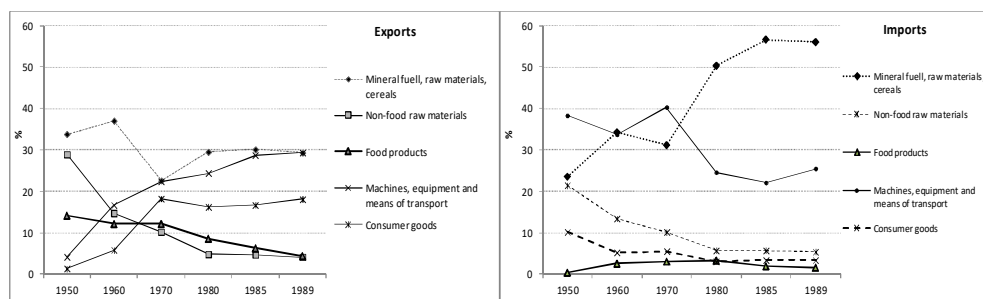


Figure 4. Structure of exports and imports, by product group (%)

Source: *Statistical Yearbook of Romania, editions 1976, 1981, 1990*

The volume of exports grew-up 42 times in 1980 compared to 1950 as a result of the increase in exports of machinery, equipment, means of transport (239 times), chemicals (236 times), consumer goods (486 times). This has led to an increase in the share of products with a high degree of processing and higher foreign currency input, consequently to 57% of exports in 1989 compared to 7.2% in 1950. The most exported such products were locomotives, bearings, electric transformers, trucks and cars, chemicals, aluminium, TVs, refrigerators, radio sets, etc.

Romania's imports in the post-war period were aimed at the rapid development of the national industry, endowing the newly created enterprises or upgrading the old technologies. At the same time, the raw materials needed for industrial production (iron ore, manganese, coke, coal, etc.), petroleum, natural gas, needed for petroleum, chemical and energy industries were imported. In fact, the imports of the fuel, mineral, raw materials, cereals group increased from 23.5% in 1950 to 56% in 1989. The evolutions recorded by the two groups - machinery, equipment, means of transport and fuels, minerals, raw materials, cereals have increased their cumulated export share from 62% in 1950 to 82% in 1989.

On the other hand, the development of domestic production but also the policy of excessive constraint on imports of agro-food and consumer goods in order to save freely convertible foreign currency to pay external debt, especially in the 1980s, reduced the cumulative weight of these goods from 31.6% in 1950 to 8.8% in 1989.

External trade in the period 1990-2017

If, in recent years of centralized economy, external trade policy was geared towards maintaining exports at the highest level and drastically reducing imports, with severe consequences on the quality of life of the population, the situation has changed radically since 1990. The last year of the centralized communist economy - 1989, was also the last year in which the trade balance was surplus, after which imports,

steadily and increasingly, exceeded exports. The evolution of the balance of trade balance was influenced by the loss of traditional markets, by the abolition of CMEA in 1991, the dismantling of the USSR and the abandonment of the barter system as of 1 January 1991. The steps taken for the decentralization and liberalization of exports made them considerably reduced in the first four years of the transition economy (in particular agro-food and consumer goods), reaching in 1993 only 55% of 1989 levels. Hardly, in 2001, exports exceeded the level of 1989. With regard to imports, after a 9% increase in 1990 compared to 1989 (as a result of massive acquisitions of agro-food products and consumer goods), they decreased in the following years. The level of 1989 is to be overtaken again in 1995, when Romania became an active member of the WTO and preparations for the EU association stage begin.

Romania's economic evolution has been different over the four periods of post-socialist history. The pre-association and association periods were marked by the severe economic downturn, recorded in GDP evolution in 1990-1993 and 1997-1999. However, exports and imports have increased slightly, although GDP has exceeded the 1990 level only in 2001. The higher dynamics of imports and exports compared to GDP created the premises for a gradual openness of Romania to the world economic circuit. If, in 1990, exports of goods amounted to 4.3 billion euro, by the end of 2016, they rose more than 13 times to about 57.4 billion euro. In fact, in 2016, the monthly value of Romania's exports is equivalent with the value of yearly average export in the pre-accession period to the EU.

Although the growth rate of the exports was higher than that of the imports, the volume of imports exceed the exports one and, as a result, the coverage of imports through exports is unfavourable to the economy, meaning that Romania does not compensate for imports through export activity.

Table 5. Evolution of Romania's exports and imports, by main groups of partner countries, until the accession to the European Union

Partner country group	EXPORT						IMPORT					
	billion euro			Weight in total export (%)			billion euro			Weight in total import (%)		
	1990-1995	1996-2000	2001-2006	1990-1995	1996-2000	2001-2006	1990-1995	1996-2000	2001-2006	1990-1995	1996-2000	2001-2006
Total	23.1	40.6	110.1	100.0	100.0	100.0	39.3	53.8	157.1	100.0	100.0	100.0
from which												
Europe	20.0	30.1	94.3	86.7	74.2	85.7	25.7	46.1	144.3	65.3	85.8	91.8
from which												
EU	11.7	24.8	75.5	50.6	61.0	68.6	14.4	29.2	105.8	36.6	54.4	67.4
EFTA	0.5	0.4	1.4	2.0	1.1	1.3	0.8	0.8	2.2	2.1	1.5	1.4
CEFTA	1.4	2.5	6.0	5.9	6.2	5.5	2.3	4.3	8.3	6.0	8.0	5.3
Africa and Middle East	4.0	3.1	5.5	17.2	7.6	5.0	6.3	1.7	2.4	16.1	3.2	1.5
Asia and Oceania	2.9	2.4	6.4	12.5	5.8	5.8	2.3	4.4	16.3	5.9	8.2	10.4
America	1.6	2.2	4.7	6.8	5.3	4.3	2.8	3.5	9.2	7.1	6.4	5.8

Source: own calculations based on data from the National Institute of Statistics - Tempo database, Romanian Statistical Yearbook - time series. Notes: EU12 between 1990 and 1994, EU15 between 1995-2003, EU25 between 2004 and 2006; CEFTA - 1990-2003 Poland, Hungary, Czech Republic and Slovakia, Romania, Slovenia; 2004-2006 Romania, Bulgaria and Croatia, 2006 including Macedonia

After 1990, the geographic orientation of Romania's imports prevailed in the European countries (Table 2). The trend of intensified trade with the EU was manifested with the submission of Romania's application for EU accession in 1995. Adapting trade policy and legislation to the requirements and conditions imposed by the EU under the impact of the adoption of a new import customs tariff, gradual

reduction of customs duties on industrial products and quantitative restrictions on the exchange of goods subject to processing, partial liberalization of trade in agricultural products was part of the Romania's road to EU membership.

At the same time, trade with the countries of Africa and the Middle East had a pronounced downward trend due to political tensions and economic problems in these areas, while trade relations with Asian countries were marked by increased imports after 2000, when China joined the WTO (China being today Romania's largest non-EU partner on import).

The strong dependence of the intra-EU trade, especially the Euro zone, is a vulnerability of the Romanian economy, but in the last years a higher geographic diversification degree is observed, exports to non-EU countries being slightly increasing. The average share of exports to the EU increased from 50.2% in the pre-association period to 73.7% in the pre-accession period, with the share dropping to 71.9% after joining the EU, in the period 2007-2016. Unlike exports, the share of EU imports increased continuously, from 47.9% in the period 1990-1995 to 75.9% in the post-accession period.

3. Characteristics of the decade 2007-2016; integration into the European Union, the impact of the global economic crisis and the resilience of exports

The evolution of Romania's international trade after 1990 has occurred in the context of efforts for accession and integration into EU, under the influence of both advantages and costs. Unfortunately, the impact of the global economic and financial crisis since late 2008 has overlapped on the effects of joining the EU on 1 January 2007, combining these two events making it particularly difficult (if not impossible) to delimit their individual influence on the evolution of external trade, starting with 2009. The way in which the Romanian external trade has responded to the factors of influence can be appreciated on the basis of criteria such as: the evolution of the specific statistical indicators in the year 2016 as compared to 2007; the magnitude of the economic downturn in 2009 and 2010 as a result of the negative impact of the crisis; the speed of resilience of exports; economic sectors which during the crisis did not fall, i.e. they resisted the crisis. (Zaman, 2016).

Excluding the mineral fuels, lubricants and related materials group, which recorded decreases in the volume value in 2016 compared to 2007, the other export categories registered increases, of which 6 times the group of food stuffs and live animals, more than 4 times in the beverage group, tobacco, about 3 times in transport machinery and equipment, etc.

In the 2009 and 2010 crisis years, there were no decreases in exports to live animals, food, beverages and tobacco, transport means and equipment. These exports proved to be resilient to the shocks of the crisis, most of them being raw materials and semi-finished products offering importers the possibility of further processing and emerging from the crisis more quickly. For example, the means and transports group recorded increases in exports of +3% in 2009 compared to 2008, +26% in 2010 compared to 2009, which is explained by a favourable conjuncture for the respective markets.

The crisis impact on imports was far more strongly than on exports, in case of all groups of goods, which also had a favourable effect in reducing the very large trade deficit in 2007 and 2008.

With regard to recovering the decline caused by the economic and financial crisis, exports have fallen much faster than imports. Thus, in 14 of the 21 CN2 groups, the export level in 2010 was higher than in the 2008 pre-crisis year, and in textile, shoes needed two years to recover from the crisis.

Conclusions

Current reality proves that the evolution of trade between 1918 and today is circumscribed to the international context, Romania being today fully integrated into the world economic circuit although the gaps towards some developed states persist and are not easily to be overcome.

Romania's accession to the EU meant a higher negative trade balance, from -47.0 billion euro in the pre-accession period to -114.1 billion euro in the post-accession period (2007-2016). The largest negative balance of Romania's trade balance registered in 2008 when it reached the level of -23.5 billion euro, and then it decreased to -5.8 billion euro in 2013 and returned to the upward trend, to -10 billion euro in 2016.

In the post-accession period, compared to the pre-accession period, Romania's negative annual trade balance doubled, deterioration being due to the low competitiveness of Romanian exports on the EU market as well as the impact of the financial crisis that diminished the export demand of partner countries of Romania. Romania's high degree of dependence on the EU (over 70%) must be taken into account when it comes to diversifying national exports. The problem that can be raised in the current context concerns the relationship between the intra-EU and non-EU trade of Romania and it is based on a strategy for estimating the maximum limit (optimal level) up to which the share of EU countries in the exports and imports of Romania could reach, given the fact that globalization offers opportunities to take comparative and competitive advantages in relations with non-EU countries. Theoretically, arguments could be put forward to support a higher share of trade with EU Member States, given the rather extensive complementarity and the benefits of free movement of labor force, goods, services and capital.

However, the explanation of the factors that determine different proportions of the intra-EU and extra-EU trade, in time, implies a complex, multi-factorial approach that rather impresses the possibilities of capitalizing on the competitive advantages of some countries or regions, depending on the particularities and the conditions of exchange offered by each partner.

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TRUST AND E-COMMERCE, CASE STUDY ON JUMIA COMPANY

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Abstract: *In the recent past, E-commerce has been growing rapidly, tremendous growth of online companies mushrooming everywhere. This has created many business opportunities for different segment of business in Kenya. Business to Business, Business to Consumers, Consumers to Consumers, However we will concentrate on the Business to Consumers form of business. Therefore, this paper will do research reviews on issues of security, privacy and trust surrounding e-commerce in Kenya to ensure that the consumers gain trust in these online companies. The purpose of the study will be to provide solutions facing e-commerce in terms of trust, security, and privacy. Consumer distrust is a major concern, mainly regarded as the protection of private information and the fear of the risk of being exposed to online fraudulent activities. This has been a main obstacle to e-commerce in Kenya. With all the benefits that online business present to the companies and consumers, it is the best interest of the companies to increase its trustworthiness to its users. Some of the online crimes will be analysed and solutions provided with practical guidelines to achieve confidence in online business environment. The research will be significant to scholars, government, academicians and other stakeholders in the implementation of policy and laws that can govern E-commerce in Kenya. This will be made possible by analysis of the Jumia company which has been operating in Kenya for the last for the last five years with the tremendous growth and been preferred by most of the consumers in the country. It will demonstrate how different reviews conducted previously were of additional value to the current research. The research shows the challenges faced by e-commerce and also provides the possible solutions for the challenges. In the conclusion it recommends what the government, online companies and consumers should do to embrace online business and reap the full benefits of e-commerce.*

Keywords: *E-commerce; trust; security; privacy; Kenya.*

JEL Classification: O31, O33, O3

1. Introduction

Internet is the third revolution after agricultural and industrial revolution and it has become an essential platform for selling and buying of goods and services, this happens between organizations and consumers and vice versa. This has brought e-commerce to an entirely new level of doing business from the traditional methods (Barnes et al., 2001a). It is Important to mention that as much as e-commerce is growing at a faster rate, there are challenges that consumers experience with e-commerce that cannot be left unanswered. Therefore this paper will discuss on trust, privacy and security of a consumer on vendors' websites for better business

relationships on e-commerce in Kenya previously cited as challenges (Kinuthia, 2014). Also it will subsequently propose measures to address challenges.

Several research have been done on this area, though has left a gap of not addressing the issues on the part of the online business, as well as the consumers, how they could measure up to these challenges and remain viable in the business. For this reason a case study is done on Jumia online company how it has addressed the above concern. Therefore this paper will do a review on these issues to ascertain available information on these critical areas and address them, showing how Jumia has been able to overcome the challenges and manifested success on online business. Internet can help company establish and build better relationships with its customers to benefit of both companies and the clients (Almeida, 2013).

Customers are offered an improved service while the companies can achieve better targets in the marketing communications by applying global ethical relationships standards in e-commerce. E-commerce is the second most widely used by big number of individuals who do buy goods online. E-commerce is a concept that goes beyond just buying online but a holistic strategy of redefining business models with the aid of technology, in order to gain benefits for the consumers and maximum profits for the company. Companies taking concept of familiarity of trust with their clients also boost e-commerce (Gefen, 2003). According to Jarvenpaa et al., (2000) e-commerce was created with aim of creating a fair environment between large scale and small scale retailers. New start up online business would require to build trust with their customers to be able to prevail in e-commerce which highlights the importance of relational ethics as cited by (Creed, 2009); (Kennedy, 2001). Jumia an online market company has a good return policy and independent products reviews by previous consumers that also refer other buyers for the same product which increase confidence with this online mall.

1.1. The purpose of the study

The purpose of this study is to carry out a review on the current and future position of e-commerce on trust, security and privacy of consumers in online businesses in Kenya.

1.2. Research objectives

- To determine what is the relationship of e-commerce and trust on online business?
- To determine how security affects e-commerce in online business?
- To determine when the privacy of consumers is affected on e-commerce in online business?

2. Literature review

Electronic commerce can be defined as the transmission of funds via internet for buying and selling goods and services. Laudon et al., (2008) defined e-commerce as the exchange of information, buying and selling of goods, transportation and other management activities across electronic computer networks within an organization, between businesses (B2B), between businesses and consumers (B2C), or between public and private sectors (B2G) whether paid or unpaid. Stefansson (2006) stated e-commerce as, all economic activity of buying and selling of goods and services are offered or provided remotely or by electronic means. There is no limit to services

such as providing, online information, commercial communications, research work or tools, access of data, retrieval, dissemination and communication of such information for commercial purposes. (Laudon et. al (2008) also defines electronic commerce as use of electronic and technology to conduct commerce which includes sales, purchases, transfer, exchange and information in the scope within business interactions. According to Laudon-Traver (2008), e-commerce is the use of internet in a formal way which can be either the transfer of information or doing business on the website between companies and consumers. Rosen (2002) stated that E-commerce would mean carrying various activities over the internet for commercial purposes or gain between the interested parties, which can be large or small, international or local instead of visiting the actual shops. Similarly E-commerce can also be termed as a way of exchange of copy rights from one organization to other or from individual to organization making the payment by internet means. Walczuch (2004) stated E-commerce involves the undertaking business transactions of buying and selling of goods online, which can be dissemination of information, logistics, processing and ensuring consumers are most satisfied in the long run by gain trust needed. Recently the CEO of Jumia was interviewed said that, "most people in abroad buy products from US and UK, and hold them in some place waiting to get a friend who will be traveling back to Kenya to be able to bring them but Jumia being in place now there is no need to wait that long, a consumer can contact Jumia company which will do the logistics to their customers in any part of Kenya". Featherman et al., (2010) states, Business to Consumers is where the big organizations are involved in the production of goods and sell to consumers directly without involving middlemen. In return will reduce the prices of goods which leading to increase of sales. A major benefit to the company and less cost to the buyer. E-commerce growth is relative to market size as it is depicted by Alibaba's exponential growth in the greater Asia in China (Trappey, 2001). Most of the SME's in Kenya do not embrace e-commerce due to lack of trust. Similarly small medium enterprises may not have the ability to do their logistics and therefore they engage other companies doing logistics to do on their behave to reduce cost of operations (Song, 2000). Online business have to build trust especially within their consumers and other online companies to create a conducive environment to foster proper business relationships (Tan, 2002). When the consumers accept and put trust on e-commerce in online business, it means that the merchants are taking care of the issues of trust, privacy and security into good consideration (Pavlou, 2002).

2.1 E-Commerce Business Models

E-commerce can be divided into six categories but here will discuss a few. Business to Business is the business conducted between businesses, such as between a manufacturers, wholesaler and between wholesale and retailers, by selling and buying of goods and services through the use of internet. Global Business to Business comprises of the largest percent of all electronic commerce (Frynas, 2002). An example is big chain stores. In the economies of scale, Business to Business in e-commerce is of great importance, whereby companies are able to produce of goods and services at minimal costs and sell the same to the consumers at a low price. Business to Consumers- is business conducted between a business and a consumer. This is where the business is selling goods and services to consumers or general public directly, business sale in wholesale to consumers (Gefen et al., (2003). Consumers to Consumers is business conducted between a consumer and

consumer. It is an opportunity to carry out business activity for two different individuals in different locations connected via internet. For instance a musician who puts his music in the internet and his fans download at a fee to listen (Ochola, 2013).

2.2 E-Commerce on Consumers and Vendors

E-commerce offers benefits to both businesses and consumers. With the growth of e-commerce, a lot of benefits come in hand to the business owners and consumers. Compared to the past, nowadays one can shop online any hour of the day, week and in any season of the year. Convenience and easiness is guaranteed as consumers do this at the comfort of their zone place or at home, on their laptop or even on a mobile phone. Online shopping gives good experience by having internet and availability of different websites that a consumer would have the opportunity to compare prices before doing the actual purchase with no pressure for the sellers. With wide variety of selection of goods from the internet, any time of the day or night. This can lead consumers to save a lot of their time and money in searching for products in traditional shops relative to online shopping.

Product datasheet - most of the online companies do put description of the products on catalogue. It is very important for the customers to get this information enhancing them to make quick decisions and build more trust on the products (Mutua et al., 2013). On the side of vendors, they are able to decrease the cost of managing and storage of inventories by the use of the automated inventory management system web based. At the same time tracking the consumer buying habits and can get instant feedback of the new preferences of the consumers and tailor made to suit their requirements (Wanjau, 2012).

2.3 E-Commerce in Kenya

Online shopping in Kenya is 53% currently compared to 48% last year and 32% on 2014. This is due to internet subscription and penetration in Kenya. Jumia Company in Kenya being the biggest online mall, will be used to illustrate the online business operation and networking in the country.

Table 1: Internet usage and population growth.

Year	Users	Population	Penetration %	Source
2000	200000	30339770	0.70%	ITU
2008	3000000	39002772	7.90%	ITU
2009	3359600	41070934	8.60%	ITU
2010	3995500	41925301	9.70%	ITU
2015	31985048	45925301	69.60%	CAK
2017	43329434	48466928	89.90%	CAK

Source: Created by author according to Jumia company reports.

It can be seeing clearly that Jumia has established a network in every part of the country and the main towns, therefore reach even the interior locations. Jumia is a typical online enterprise. It sells products and services directly to the consumers, via internet and qualified staff that have a functional, operational and managerial competencies (Haddad, 2017b). Jumia do logistics on how to deliver goods to the consumers by use of motor vehicles and motorbikes depending on the size of the

product (Figure 1) shows the sectors that Jumia company deals with during 2015-2016

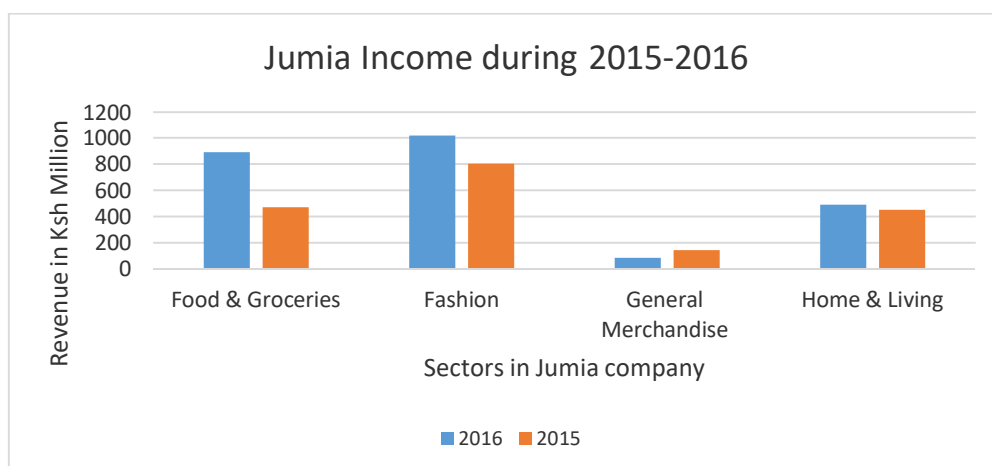


Figure 1: Jumia income report.

Source: Created by author according to Jumia company reports.

There is so much experience in Kenya with an example of Jumia online-store, selling from electronics, fashion clothes, shoes, food, travel agency for online tickets, houses, motor vehicles and providing logistics for their own deliveries to their consumers.

This ensures goods have been delivered to the customers within their stipulated time with no delay. Jumia is in 23 countries within Africa, launched in Kenya 2012, is an online company within the marketplaces and classified websites. Jumia generates about \$ 234 million revenue which stands for 265% growth from 2014. As from 2016 Jumia is doing 90% of African GDP and about 50% million customers. Jumia has become the continent first icon being valued over 1 billion USD, as of 2017.

According to Kenya communication Authority, e-commerce is experiencing tremendous growth, by the study carried out on 2015, more than half of Kenya population are doing online shopping. Kenya being one of the developing countries in Africa continent, Jumia has shown how best to resolve the issues of trust, privacy, security and logistics. Therefore leading to our review. Looking back at the policy implementation in Kenya for E-commerce, it is lacking, since ICT master plan does not describe plans put in place to counteract the threats that consumers on e-commerce are facing (Souter et al., 2012). Therefore recommendations are put into place by Jumia, business community has been pushing the government to review the policy to benefit in e-commerce. It is difficult to protect the trust, security and privacy of the consumers. Internet is the thing to do business everywhere without barrier of geographical location and therefore for Kenya to tap and nurture these opportunities. Ghossein (2013) states that, the emerge of e-commerce has brought with it great opportunities, however as much as this growth of e-commerce, adaption and usage of internet has also led to huge challenges such a trust, privacy, security for the both e-commerce business for both, vendors and consumers.

3. Methodology

The purpose of this paper will be to understand the current and future position of the e-commerce, benefits, and challenges and suggest solutions to avert the challenges on the online business. Like Haddad (2017a) a research review will be used and secondary data collected, analyzed from the websites of different online businesses. Other information has been collected from periodicals, different articles published in different journals and thus is limited to the information provided through various online platforms.

4. Analysis

4.1 Trust in E-Commerce

Trust is an important aspect that cannot be ignored in the area of e-commerce especially in order to be successful, therefore its use underpins the value of new technology incorporation into the policy of Kenya, to assure consumers are safe from the fraudster and cybercrime activities (Ochola, 2013). Trust is the biggest challenge, we would like to identify how it affects online business and how it can be addressed to ensure there is continuity of e-commerce. Flavian et al., (2006), argued that trust is a critical factor in e-commerce and lack of it will leave both the consumers and businesses in a trench rather difficult to operate in. Online business companies that practice trust on the daily activities on their website will result to increase loyalty to their customers doing business with. This will command a great response and better relationship on both sides. Companies that ensure upholding of trust hence investing to their websites show a sign of goodwill and can be a gesture of good relationship with the consumers. According to Koufaris (2004) business lacking to build on trust on the consumers, online business will slow down resulting a great impediment in flourishing of e-commerce. Therefore there is great need of cultivating trust in both parties in online business, otherwise consumers will withheld their information and not able to transact (Pavlou, 2002)

Analysts are of the view that online consumers are having difficulty to put their trust on these business ventures in Kenya. Where websites have not put measures in place to protect them. Many Kenyans would like to shop online since most have no time to go to the traditional shops but again every time doing shopping online, fear Crips in the body (Marie, 2007). A recent research done on interview on e-commerce, found out that Kenya have low levels of trust in the online business and services (Pavlou, 2002). The e-commerce chamber interviewed reported that Kenyan consumers are constantly inquiring about the existence of security of their information. Pointing lack of trust in e-commerce. To address this concern, the CCK has directed the relevant department, Information Communication Authority to put in place the various policies that will protect the consumers while doing online business. This will enable the consumers to verify the authenticity of the vendors' websites. According to communications commission of Kenya (CCK), the project is part of the Key Public Infrastructure (KPI) information security architecture aimed at boosting the level of Kenya confidence and trust on e-commerce by securing internet. Further the parties trading online should have documents that they can produce to prove authenticity. This will see integrity to transform online business and at the same time consumer will have no fear sharing their financial information with the companies

(Ochola, 2013). This will not only translate to transformation of e-commerce but also be a game change in the business world. Consumers can shop around the world with the belief that no one is working schemes to steal the financial information. Almeida (2013), pointed out once the consumers gain the confidence and trust dealing with online business, it will open more opportunities and such business boom very fast. This will be the success of online businesses.

4.2 Privacy in Online Business

Privacy is the protection of personal information, whether in business or in private affairs. In other terms is the whether customer has ability to restrict his information from use. An important aspect is that whether the customer is given free will to decide what information can be used or not. Culnan (2000) stated that, it is when the consumer will be in position to determine the acquisition and use of his information only with his consent. This means if a consumer's personal information, credit card and address is used without their knowledge then this is a violation of rights. Privacy in e-commerce is stated as the ability of the online companies be able to protect the information of the consumers while doing online transactions (Laudon, 2008). E-commerce privacy protection has gained considerable visibility as all stakeholders are advocates for the protection of the information of the parties to ensure privacy is provided throughout the process and only the disclosure is done with the consent of both parties involved. Companies discuss on the best ways to protect consumers' privacy while ensuring the rights of all stakeholders are protected (Culnan, 2004). One of the important issue is how to get this information secure on online transactions, in particular financial information, personal information (Magutu, 2009). The biggest problem is the breaches of security protocol, that the information of a consumer would be used without his knowledge or lack of internal controls mechanisms that can protect the use of the consumer information without their consent. In the research conducted by Jumia company (2014) found that some companies use the information provided by the consumers in a different purposes than the originally intended plan. This was established when a consumer was doing online shopping and the company that is doing the transaction with, may end up saying that it does not need consumer provide again their information since it's stored in their database once it's recorded from the first time. It is therefore argued that companies should be restricted from collecting and use of data but should address the issue of security and privacy of their online business. Similarly online ventures should not take advantage on consumers by putting statements with full of jargons, that the consumer cannot understand. Instead make them clear, readable and understood to everyone before signing. Companies should put statement policy of terms and conditions on their websites and at the same time provide contacts that consumers can use to call the legal department of the company to ask for clarification where necessary. This way the consumer will be guaranteed of privacy and protection as it is the case for Jumia company. For example, the African Union (AU) has established an institutional framework that for the protection of personal data (Flavian, 2006). In addition to this companies should invest in new technologies that are available in the market to protect their own consumers. This will create confidence among the parties.

4.3 Security

This is a matter of concern for every online business and consumer. Even though people confuse security and privacy, there is a clear distinction between the two, although they are interrelated. Privacy as seen in the above discussion is associated to law enforcement. Security is defined as ensuring that consumer and company information is safe guarded by protecting it from access by unauthorized individuals (Roman, 2007). Studies done before indicate that security is the most important ethical factor in the online context (Gefen, 2003). Without dealing with the security issue, it will be pointless to have e-commerce application that enables online business to have private e-mail, purchasing, transmission of payment information and work flow automation (Flavian, 2006). However security breaches are occurring every day in online transactions, giving a lot of worry to the consumers. As a result security continues to be a major threat to the online businesses providing services on e-marketing platform. This issue of security must be evaluated and resolved to reduce the risks that online business and consumers are facing. Otherwise it will be a waste of time to safeguard only the business website and not the consumer.

Companies can guarantee security to consumers by protecting their information by use of encryptions and firewalls. Management should employ technical personnel that are acquainted with the knowledge and technical capabilities on handling consumer protection on security. In the technical part the organization should also include measures like encryption in the transmission, storage of data in a secure place, under lock and key safes and the use of username and password that will keep audit trail record on who accessed information and what it was used for. Security will be achieved if the information sent will reach the other party without alteration, distortion or manipulation.

In Kenya, cyber security is a major concern, as the recent reports indicate that the country is losing into a sum of more than 2million USD annually to cybercrime activities in online ventures. This necessitates the need to come up with better measures, appropriate policies and laws to govern balance between individual rights to privacy and the collective, good of the economy and its citizens. The government should intervene by directing the department of ICT to address the security issue (Litondo, 2013). The government through the Communication Commission of Kenya has established a responsive unit that is to monitor all the online business transactions, part funded by International Telecommunication Union, that puts together the government agencies like of Central Bank of Kenya, and others to ensure security on data from cyber-attacks is eliminated as to and when they occur (Souter et al., 2012). Research shows that for lack of proper policies, legislation and by laws, the criminals who perpetuate these cybercrimes go scot free. This will give assurance to the online business are safeguarded. Finally, government of Kenya has taken up a legal approach and established amendments in the constitution act 2014 to give the authority to Communication commission of Kenya that will work in respect to the industry of trade and commerce to enforce and deal with matters relating to cyber-crime and security issues. Specifically this mandate entails promoting and facilitating efficient management of critical internet resources and development of framework for carrying out investigations and prosecution cybercrime in Kenya (Communication Commission of Kenya, 2014).

5. Conclusion

Internet revolution and penetration in Kenya has seen online business grow rapidly. Change in technology has brought more business opportunities despite of the challenges discussed. This is attributed by both the consumer and companies not able to resolve the issues of trust, privacy, and security amicably. Trust is a major factor to be considered by any consumer, who would want to trade online. These are the issues that consumers want the online enterprises to guarantee and therefore it will be of great importance if they set up measures to address trust, security and privacy of online consumers. E-commerce has been widely accepted in the world but researchers have found the above variable being a big down fall of e-commerce, especially with developing countries like Kenya. Therefore with increase in the development of technology at the same cybercrimes are increasing at alarming rate. Continuous research should be carried out to curb the challenges. In order for the companies to ensure trust, security and privacy to the online business, has to work with the government to enact policies and regulations that support e-commerce. Consumers will need protection against fraudulent, misleading and unfair business malpractices and when things go wrong there should be a mechanism to be able to get redress. Equally it will be of importance to periodically review the regulatory framework put in place by the government as the technology keeps changing, to tighten up, any loop hole. Companies also will need to adapt international standards to protect consumer privacy, as a way of supplementing the legal framework.

6. Recommendations

Kenya, having rapid growth and spread of internet everywhere the business structure is changing from the traditional online shopping. In the interest of this research, the following recommendations are made for the development and growth of e-commerce. The importance of addressing trust, security and privacy of online business. Government of Kenya to direct CCK to enact polies that will protect consumers on issues of trust, security, privacy in online shopping. Moreover, online companies to apply the international standards to curb on beaches of ethics on security. Also, Government to prosecute the cyber-crime activities in court.

The government should support the Communication Commission of Kenya infrastructure and put up a framework that will ensure safety. Furthermore, online malls to work together with the government in support of e-commerce by facilitating continuous research as technology keep changing. Lastly, online business can adopt the cash on delivery payment as Jumia does to a certain trust on consumers.

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NEW IMPLICATIONS OF THE ECONOMIC GOVERNANCE PROCESS ACROSS THE EUROPEAN UNION MEMBER STATES

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Abstract: *The debate concerning the triggering factors of economic growth and development process across economies have been at the centre of interest of the economic studies. The literature in the field divides the determinants of growth into a wide range of categories from economic to non-economic factors. The recent events across the European Union Member States, including the Brexit, the threat generated by immigration and terrorism moved the centre of interest from the financial crisis to the risks associated with the instabilities from the political sector. The economic risk that the European Union Member States had to face during the last years was replaced by the political one. The correct management of this category of risks is attributed to the institutions of the European Union, that are responsible for taking decisions that target the interest of all the Member States. A decisive component in this process is the economic governance. The main purpose of this article is to detail the meaning and implications of the concept of economic governance and at the same time to highlight the channels of transmission between this process and the economic output.*

Keywords: *European Union; Economic governance indicators; Sustainable convergence; Economic disparities; Macroeconomic policies.*

JEL Classification: *H11; O38; O41.*

1. Introduction

The concept of governance has been in the centre of debates regarding the triggering factors and determinants of economic growth from the last years. The adjustment capacity of the national institutions to the multitude of external shocks is considered by the experts in the field to be a strong indicator in favour of what they generally appreciate as „good governance”. Prior to understand the impact that „good governance” has upon the European Union economies, we should focus on defining what governance means. Although a disputed concept, governance can be analysed from a multitude of perspectives and during time a series of institutions, international organizations, policy makers, academics and economists tried to elaborate the most comprehensive interpretations of this term. In 1997 the United Nation Development Programme referred to the concept of governance as “any organization, including a nation, is run. It includes all the processes, systems, and controls that are used to safeguard and grow assets”. The essence of this definition consists in the fact that governance cannot be perceived as an isolated process, requiring joints efforts between various components of the economy, and the success of the outcomes is strictly dictated by the interconnected actions.

The USAID, Office of Democracy & Governance considers that there are certain conditions that must be fulfilled in order for the governance process to be

characterized as an efficient one:" *in governance, citizens are rightly concerned with a government's responsiveness to their needs and protection of their rights. In general, governance issues pertain to the ability of government to develop an efficient, effective, and accountable public management process that is open to citizen participation and that strengthens rather than weakens a democratic system of government*". This definitions highlights the fact that governance should respond to the needs of a society and more importantly to assure citizens of a country the protection of their rights. At the same time the governmental policy goals should be aligned to the goals of the society and the common interests of the citizens should have precedence upon the individual interest of the members of the governmental bodies.

Acemologu (2008), includes the economic performance as an explanatory variable for the concept of governance "*as a part of a 'broad cluster of institutions' – political institutions in his typology*". Performance in terms of governance is commonly associated with strategic development and implementation of policies as well as the continuous monitoring of the obtained results.

When adding the "*good*" dimension to the governance process, the complexity of the phenomenon is even more accentuated. In a report from 1992, entitled "Governance and Development", the World Bank established the key determinants of what good governance implies, namely "*the manner in which power is exercised in the management of a country's economic and social resources for development*". The World Bank's involvement in the area of good economic governance resides from its main objective of promoting a sustainable economic development across worldwide nations. This objective is closely related to the reduction of the extreme poverty rates across developing and under-developed countries and requires the exclusive participation of the economic governance components namely: the managements of the public sector, transparency or accountability.

The multitude of challenges faced by the Member States of the European Union since the beginning of the 21st century, including immigration, terrorism, the economic financial crisis followed by the debt crisis, confronted its governance framework to a series of problems, its founders didn't anticipate.

The main purpose of this article is to detail the meaning and implications of the concept of economic governance across the European Union Members States, and also to determine whether the EU institutions are concentrating all their efforts in maintaining the European integration at its highest level.

The structure of the paper is detailed as follows: section 2 describes the implications of the good governance for the case of the European Union, section 3 analysis the instruments used in order to quantify the dimension of good governance across the EU as well as highlighting the differences in levels across the Member States and section 4 present the main conclusions and policy implications of this study.

2. Good economic governance in the European Union

Good economic governance is a key area on the European Union agenda due to the fact that it contributes to the economic growth of the Member States, stimulates foreign direct investments, may create a favourable environment for the creation of new jobs and reduces the poverty rates. The pillars of the European economic governance are not different than the ones established by any other international institution with focus on this topic, including elements such as rule of law,

transparency, accountability or efficiency and equity. Therefore, economic governance is a necessary and mandatory condition for the correct functioning of both the private and the public sector.

When analysing the good governance implications on the performance of the Member States, there are two different dimensions that should be taken under consideration. Firstly, as we already mentioned in the section before, governance as an interconnected process that implies a strong partnership between the main institutions of the EU and the Member States, the benefit by a large number of programs supported through the common European budget. This budget allocates a high percentage for the cohesion and convergence component, as key objectives of this structure. Secondly, the correct assessment of the quality of governance may be a precondition required when allocating certain amounts of financial resources that have the purpose to stimulate the economic growth across these countries.

In a study from 2016, Papajoannou states that *"in the countries of the European core (e.g., Germany, Netherlands, Austria), legal institutions are well-functioning, adequately protecting investors from managerial fraud; property rights are well-defined; public bureaucracies are professional and public goods-provision is decent; red tape and corruption, while not absent, are not huge issues. In contrast, in the European periphery (Greece, Italy, Portugal, and Spain), legal protection of shareholders and creditors is weak, both because laws are conflicting, ill-designed and not-well-thought-out, and because courts are slow, inefficient, and often produce conflicting rulings. Public administration and national bureaucracies are largely inefficient, characterized by political interference, graft, and lack of professionalism. And states' fiscal capacity is not particularly strong, as tax evasion is sizable and it is challenging for the government to enforce its decision"*.

Therefore despite the core objective of the European Union established by the Treaty of Maastricht and aiming at achieving high levels of convergence across the Member States, continuing divergences arise in the area of governance. When it comes to identify the main causes that explain these divergent trends, factors such as differences in national legal institutions, the ineffectiveness in the public administration or poor quality of the national programs are seen as the most common ones.

Ritzen and Haas (2016), concluded that one of the major threats for the cohesion of the European Union Member States is the decrease registered in respect to the rule of law and the control of corruption. *"The present institutional structure of the EU has failed to bring about an upward spiral in governance throughout the EU member states"*.

Grzeszczak, R. (2015) attributes to the capacity of the good governance to fulfil the social needs of the EU individuals a primary role. *"Good governance and the quality of public administration is a key aspect in ensuring a country's long-term competitiveness and well-being"*.

Another interesting discussion regarding the process of governance across the European Union Members States is concerning the efficiency or inefficiency of it.

The first use of the concept of efficient economic governance was in an official document of the European Union Council in 1991 that focused on the implication of the Union in the support of the emerging economies.

The developed economies of the European Union such as Luxembourg or Germany, the founder states of this community, incorporated within their national development policies elements such as the protection of human rights, democracy or rule of law

even since 1989. On the other hand, the emerging economies from the Central and Eastern Europe were facing a series of vicissitudes regarding these issues. One explanation for this delay can also be found in the political regimes these two groups of countries were experiencing. Due to these divergent paths across the countries and awareness of the importance of this area, the European Union decided to include them within the Copenhagen criteria for accessing the EU. The elements related to the framework of economic governance are detailed in two sections of the Treaty, namely the political criterion and the criterion on the compliance of the *acquis-communautaire*.

The structure of the governance profile of the European Union includes nine main components, each of it targeting specific elements. The components are: 1) Political/democratic governance; 2) Rule of law; 3) Control of corruption; 4) Governmental effectiveness; 5) Economic governance; 6) Internal or external security; 7) Social governance; 8) International and regional context; 9) The quality of partnership. Only the last three ones are novelty instruments developed by the members of the European Commission, the first six ones being previously included in the structure of other international institutions, mainly the World Bank.

These indicators are taking into consideration both the political component of the governance process as well as the progress level in the development of the emerging economies. More importantly, there is much consideration for the existence of legal instruments, a required condition for the implementation of different economic and social policies.

3. Measuring good economic governance in the European Union

Taking into consideration the fact that the concept of governance is a multidimensional one, the set of index used to measure it include data regarding the control of corruption, government effectiveness, rule of law, political freedom or economic and political risks. If we perform an overall analyse of the literature in the field, we can identify a wide range on indicators that are used by different international organizations to measure and capture all the characteristics of what the process of good governance implies. Regarding the correct evaluation of the concept of „goodness”, Gerring's (1999) identifies eight different criteria that should be used in the formation of the social indicators: 1) Familiarity; 2) Resonance; 3) Parsimony; 4) Coherence; 5) Differentiation; 6) Depth; 7) Theoretical Utility – 8) Field Utility.

If we were to mention some of the most common measures of governance, it should be brought into attention the World Bank's Worldwide Governance Indicators (WGI) developed by Kaufmann et al., The Freedom House Index, The Social Justice Index, The Competitiveness Index published by World Economic Forum or the indicators published by Transparency International.

By performing a broad examination of the structure of these indicators, we may identify one frequent component in the assessment of the governance process considered to be relevant by the vast majority of them, and namely the corruption issue.

Corruption is defined by the OECD as *"the abuse of public office for private (economic) gain". This excludes corrupt practices that occur exclusively among private sector agents, and purely "political" corruption, which focuses on the allocation of political power, rather than economic resources (although in practice the two frequently overlap.)*

The European Commission defines corruption as *"the abuse of power for private gain. Corruption takes many forms, such as bribery, trading in influence, abuse of functions, but can also hide behind nepotism, conflicts of interest, or revolving doors between the public and the private sectors"*.

The use of *"abusive"* practices is in both of the cases assimilated with the corruption aspect, and political corruption is at the heart of the interpretation.

The control of corruption and the anti-corruption measures were at the centre of the dialogue on economic governance between the EU and national authorities. The European Semester country report incorporates a comprehensive investigation of the corruption risks and the recommendations each country should undertake in order to face the challenges addressed by this phenomenon.

According to the latest data provided by the European Semester country report (2018), economies like Belgium, Luxembourg, Germany or Netherlands received no recommendations for improving their anti-corruption policies and the corruption issues are not considered to be a problematic issue that threatens the economic development of these countries. In contrast, Member States like Romania, Bulgaria or Italy experience severe downturns in the fight against corruption. Furthermore, corruption remains an important obstacle when it comes to the business environment. As detailed by the data published by the World Economic Forum corruption along with the governance issues, remains strong matters of concerns for the business environment in Romania. In 2017, the topic of corruption and patronage or nepotism were identified as major obstacles by approx. 85% of the interviewed citizens, while the EU average sets around 37%. Bribery is appreciated by 86% as one of the most used way to obtain certain public advantages, while 70 % consider that the success of their business is strictly correlated to their political connection. The interpretation of this data reveal the fact that, in Romania the private sector is heavily affected by the high rates of the political corruption, and investors from the business environment include this risks at the top of the list when evaluating the opportunity to state a new business within this country.

In Bulgaria 62 % of the people from the business environment agreed that corruption is an explanatory factor for the reduced performances of their companies, and police and customs are the most corrupt public institutions.

Although, Italy managed to improve its score concerning the control of corruption indicators, this country remains on the top of the rank when we discuss about favouritism (95 %, compared to the EU average of 74 %).

The control of corruption indicator composed by the World Bank captures *"the perceptions of the extent to which public power is exercised for private gain"*. The control of corruption is perceived by the World Bank as one of the major challenges in achieving their goals related to the issue of poverty. One paradox identified by the World Bank experts within their empirical studies is that citizens from poor and developing countries are more willing to pay bribes, in comparison to individuals from rich economies. One explanation to this phenomenon may be the difference experienced by these group of countries in terms of education or cultural background.

According to the latest data published by this institution, the best performances in terms of the corruption control are experienced by countries like Denmark, Luxembourg, Sweden, Finland and Netherlands both in terms of estimated results as in terms of ranks. At the opposite pole there are situated countries like Italy,

Romania, Greece and Bulgaria, the last two countries being the only ones that registered negative values for the year 2016.

These countries have a long history of weak governance and weak control of the corruption indicators, therefore the national authorities should establish clearer benchmarks and fix targets when dealing with these aspects. Moreover, understanding the causes of poor governance may lead to strong improvements in this sector. Also reducing the opportunities for corruption in these countries by promoting transparency, fair competition among economic agents and avoiding complex financial structures may constitute a firm response in the fight against corruption.

Table 1: The Worlds Bank control of corruption indicator in EU Members States (2016)

No.	Country	Estimate	Rank	No.	Country	Estimate	Rank
1	Belgium	1,60	92,31	15	Hungary	0,08	61,06
2	Bulgaria	-0,16	51,44	16	Italy	0,05	59,62
3	Cyprus	0,82	77,88	17	Lithuania	0,67	73,08
4	Czech Republic	0,51	67,79	18	Luxembourg	2,08	97,60
5	Germany	1,83	93,75	19	Latvia	0,49	67,31
6	Denmark	2,24	99,04	20	Netherlands	1,95	94,71
7	Spain	0,52	68,75	21	Poland	0,75	76,44
8	Estonia	1,21	84,62	22	Romania	0,00	58,17
9	Finland	2,28	99,52	23	Slovak Republic	0,24	63,46
10	France	1,37	90,38	24	Slovenia	0,80	77,40
11	United Kingdom	1,88	94,23	25	Malta	0,72	75,96
12	Greece	-0,05	56,73	26	Portugal	0,96	80,77
13	Sweden	2,22	98,56	27	Ireland	1,63	92,79
14	Croatia	0,19	62,50	28	Austria	1,54	91,35

Source: World Bank, Worldwide governance indicators, retrieve from <http://info.worldbank.org/governance/wgi/#home>. Legend: Estimate of governance ranges from approximately -2.5 (weak) to 2.5 (strong) governance performance; Rank - Percentile rank among all countries (ranges from 0 (lowest) to 100 (highest) rank), accessed at 11.04.2018.

The Corruption perception index (CPI) is published by the Transparency International Agency since 1995, the primary objective of this agency being the fight against corruption. This index is calculated for a number of 180 worldwide economies, at the values associated to it range between 0 (the highest perceived value of corruption) and 100 (the lowest perceived value of corruption).

Table 2 incorporates the data for the perceived levels of corruption in all the 28 Member States of the European Union. From the analysis of the index, we may conclude that there is a low perceived level of corruption in countries like Denmark, Finland, Netherlands or Luxembourg, these countries being at the same time the

countries with the best values for this indicator in the global ranking. On the other side, in countries like Romania, Bulgaria, Greece or Hungary the corruption is perceived as a common phenomenon, being situated below the regional score of the area. The data obtained by the Transparency International agency are consistent with the ones delivered by the World Bank or included in the European Semester country report. If we look at the evolution of other indicators we notice the fact that across these countries (Denmark, Finland, Netherlands or Luxembourg) there is a high level of the GDP/capita, high labour productivity, high rates of tertiary gross enrolment and the percentage of the GDP that the national government allocates to research and development is situated far above the EU average.

Table 2: Corruption perception index published by Transparency International 2017

No.	Country	CPI 2017	Rank 2017	No.	Country	CPI 2017	Rank 2017
1	Denmark	88	2	15	Poland	60	36
2	Finland	85	3	16	Lithuania	59	38
3	Sweden	84	6	17	Latvia	58	40
4	Luxembourg	82	8	18	Cyprus	57	42
5	Netherlands	82	8	19	Czech Republic	57	42
6	United Kingdom	82	8	20	Spain	57	42
7	Germany	81	12	21	Malta	56	46
8	Austria	75	16	22	Italy	50	54
9	Belgium	75	16	23	Slovakia	50	54
10	Ireland	74	19	24	Croatia	49	57
11	Estonia	71	21	25	Greece	48	59
12	France	70	23	26	Romania	48	59
13	Portugal	63	29	27	Hungary	45	66
14	Slovenia	61	34	28	Bulgaria	43	71
	Regional score	64,64					

Source: Transparency International, retrieve from: https://www.transparency.org/news/feature/corruption_perceptions_index_2017, accessed at 11.04.2018.

The obtained results are driven by the fact that individuals from these countries believe that their national institutions are failing to deliver sound policies that are based on pillars such as prosperity and equal opportunities and therefore the level of confidence in the ability of this institutions to succeed is considerably low.

Conclusions and policy implications

Whether we talk in terms of economic growth rates, productivity or level of investments, the assumption that there is a gap between the European Union Member States is highly confirmed by the official statistical data. The institutional gap confirms even with more strong arguments the assumed hypothesis. If we were to summarize the main research question of the present study, it can be summarized as: *What trends in terms of governance define the European Union Members States paths in the current economic and political context?* As the study details thought its content, the factors that are responsible for these divergent trends can be found in the historical and cultural background. These existing difference are not the only objective explanation we may identify and going further into the topic, the fact that these countries adopted heterogeneous models of economic and institutional development are considered to be strong evidence in recognizing the divergent trends.

There is a wide range of literature in the field that support with empirical evidence that there is a direct and positive link between the quality of the governance process and the general output of an economy. As we detailed in this study, governance may be quantified in numerous way, but one common measure used by the institutions preoccupied with this aspect is the corruption variable. Data revealed that corruption is perceived and experienced differently between the Member States. While in countries like Denmark, Finland or Netherlands corruption is not a major obstacle for achieving high rates of economic growth, in countries like Romania, Bulgaria or Greece the problem of corruption and the solutions that the governments developed to counteract the effects of it, are seen ineffective by the citizens. Moreover, bribery and political connections are seen by the citizens of these last countries as the easiest method to obtain public gains. Specialist in the field agreed that there is a strong correlation between the level of democracy and rule of law and the risk of corruption.

A mechanism to assess the efforts undertaken by the authorities of the Member States to improve the corruption shortcomings in their countries was established by the European Commission since June 2011.

The general recommendations designed by the institutional framework of the European Union and directed to the Member States, relate to the area of transparency and the standards each country attributes to it and also the strengthen of the control used mechanisms. Since corruption affects at a different degree all the members of a country, whether they work in the business environment or the public sector, raising the awareness about the preventions tools and mechanisms, may be seen as a long term commitment in the fight against

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THE IDENTITY, ORIGINALITY AND CREATIVITY OF A COMPANY - BUILDING A STRONG BRAND IMAGE / IDENTITÉ, ORIGINALITÉ ET CRÉATIVITÉ DE L'ENTREPRISE – POUR LA CONSTRUCTION D'UNE IMAGE DE MARQUE FORTE

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Abstract: In this paper we describe how the brand name, brand signature (slogan) or institutional slogan create emotions and spread the values, vision, mission, personality, promises of a brand. The name and brand name are elements of the company's identity, but at the same time they can be real trade guns. We analyse the names and signatures of several Romanian bakery and pastry brands, from the linguistic perspective, using a corpus based on their web sites. The common point of the thematic building strategies used is the promise that those who choose and consume the products will live longer, healthier, in harmony with nature. Some companies put the respect for tradition on the forefront, others on the contrary, opt for the idea of living a modern, "in style" life. In general, the name and signature of the trademark are created from the name of the founder, a geographical name, an expression, a neologism, the year of its establishment, but may sometimes result in the use of foreign language names, relying on the desire of the clients to adopt and identify themselves with the values of the respective culture and civilization (French, Italian, German, American).

Keywords: *brand name; brand signature; discourse analysis; organizational identity; web site.*

JEL Classification: Z19.

1. Introduction

Pour faire connaître l'organisation, ses objectifs, ses intentions, ses valeurs, ses produits et pour se différencier de la concurrence, l'entreprise produit un discours qu'elle véhicule à l'aide de supports tels que la télévision, la radio, la presse écrite, l'Internet, le print et se forge une image de marque dans l'espoir de générer un échange et d'influencer les choix des consommateurs. Ces dernières années, les sites web, les blogs, les réseaux sociaux sont devenus les canaux privilégiés de communication pour les entreprises, car le simple fait d'être présent sur Internet est un indice d'autorité, de sérieux, de crédibilité.

Nous allons analyser la manière dont l'organisation met en scène son discours identitaire, crée des émotions et essaie d'impliquer les consommateurs dans son projet d'entreprise. Il s'agit d'un discours empreint de subjectivité, qui fait souvent appel à des savoirs partagés et des croyances collectives, car, comme affirmait Lindstrom (2011 : 43), un brand qui parvient à créer un lien émotionnel réussira à commercialiser un nouveau produit sur le marché.

En utilisant un corpus créé à partir de sites web de boulangeries et de pâtisseries exerçant leur activité en Roumanie, nous allons examiner les noms de marques et les signatures de marques (devises ou slogans institutionnels), à savoir les éléments qui englobent la vision et la personnalité de l'entreprise. Notre analyse fait partie d'un projet plus ample portant sur le discours que l'entreprise produit sur le support du site web dans l'effort de se présenter au public, de capter l'attention du potentiel client, de faire connaître ses réalisations et ses performances.

Les noms de marques « jouent un rôle privilégié dans l'univers de la communication médiatique » (Maingueneau, 2005 : 183) et sont associés « à un ensemble mouvant de représentations sédimentées au fil du temps, une "image de marque" sur laquelle l'entreprise doit agir constamment » (Maingueneau, 2005 : 188).

La signature de marque (appelée *tagline* aux États-Unis et *baseline* au Royaume-Uni) « synthétise la stratégie économique ou la promesse » de la marque, étant « l'endroit privilégié pour la présentation institutionnelle » (Palma, 2005 : 256).

Nous avons choisi de former notre corpus en consultant les sites web des entreprises car il ne s'agit pas d'une simple modalité de communication, mais d'un « instrument stratégique de marketing » (Popescu, 2008).

En outre, si le pain est un produit emblématique ou un symbole pour les Roumains, faisant partie de leur tradition, de leur culture et de leur civilisation, nous allons montrer que l'on oscille actuellement entre le besoin de s'ancrer dans l'héritage d'un passé dont les principales valeurs étaient la vie simple, la nature, la famille et le désir d'évoluer vers la pâtisserie « haute couture », qui inculque chez le consommateur l'idée de vivre selon les valeurs de l'élite, voire l'ambition d'adopter les styles de vie français, allemand, américain.

2. Mise en scène de soi

L'entreprise s'efforce à créer une image positive en développant des stratégies de marque et en faisant des campagnes de publicité.

Le discours de présentation véhiculé sur les sites web contient beaucoup d'informations, organisées et hiérarchisées d'une manière attrayante. Nous remarquons le rôle primordial assigné à l'image et à l'imaginaire, le recours massif à des éléments ayant une visée de captation (logos, slogans, photographies, vidéos), les nombreux hyperliens qui facilitent la lecture non linéaire et le passage rapide à d'autres pages.

Les textes sont empreints d'indices de subjectivité : les déictiques, les adjectifs « affectifs », « évaluatifs », « modalisateurs » (Kerbrat-Orecchioni, 1980), les mots-clés persuasifs. On utilise un ton chaleureux, convivial et enthousiaste, un vocabulaire positif et un lexique affectif et on essaie d'impliquer le visiteur dans le discours.

2.1 Le discours identitaire

Le discours identitaire a suscité l'intérêt de nombreux chercheurs des domaines les plus divers (marketing, communication, sociologie, psychologie, linguistique).

La plupart des études sur le discours de la marque appartiennent à des spécialistes en marketing, qui focalisent d'une part la difficulté de construire une identité organisationnelle et d'autre part les stratégies de vente des entreprises, les besoins et les intentions d'achat des consommateurs.

Dans l'ouvrage *Buyology*, Lindstrom (2011) montre que le neuro-marketing peut apporter lui aussi des informations importantes sur la modalité dont le discours des marques agit sur le cerveau humain, sur les motivations les plus cachées de nos pensées, sur la prédominance de l'émotif sur le cognitif. Les compagnies misent sur des « symbolisants », à savoir des éléments qui ont la capacité d'évoquer des associations très fortes avec la santé, la fraîcheur, la qualité, etc. Elles vendent « de l'espérance sous plusieurs formes » (Lindstrom, 2013), par conséquent les produits qui promettent de rendre la vie meilleure auront du succès.

Les psychologues se penchent plutôt sur le rôle des émotions, sur les motivations des acheteurs et sur le processus de prise de décisions.

Le discours de la marque fascine également les spécialistes de la communication, qui s'intéressent aux aspects concernant la conception de noms de marques, de logos et de signatures, l'analyse de slogans d'entreprises, la création de sites.

Les sciences du langage, notamment la rhétorique, la linguistique et l'analyse du discours, ont un apport important en ce qui concerne l'effort de trouver des critères de définition et de classification des noms de marque et des slogans (Maingueneau 2005).

2.2 Le discours publicitaire

Les spécialistes des sciences du langage et de la communication ont analysé le discours publicitaire comme genre discursif (Adam 1997, 1999, Roventă-Frumușani 2005) caractérisé par une densité intertextuelle particulière (Roventă-Frumușani, 2005 : 155) et une orientation argumentative (Adam 1997), ont étudié la puissance et l'impact du message publicitaire – générateur de slogans, clichés, intertexte de l'époque (Roventă-Frumușani, 2005 : 151), ont essayé de définir, de classer les slogans, d'établir leurs rôles et fonctions (Maingueneau 2005, Roventă-Frumușani 2005, Navarro Domínguez 2005), en ont inventorié les « jeux de langage » forgés dans l'espoir de capter l'attention du public.

Soulage considère que la publicité ne se réduit pas à des mots et des figures, étant plus qu'une "parole injonctive" : « derrière ces "jeux de langage" les messages publicitaires se réfèrent simultanément à des pratiques et à des représentations sociales, voire mythologiques et ce sont bien ces composantes qui innervent la dynamique interprétative des publics et qui expliquent l'impact de la performance publicitaire » ; on devrait parler plutôt d'un « vaste répertoire », d'une « matrice » de « naturalisation des discours et des valeurs circulant dans une collectivité donnée » (Soulage, 2013 : 3).

2.3 Noms et signatures de marques – éléments de l'identité organisationnelle

Si le slogan a été l'un des objets d'étude préférés des chercheurs en communication et des linguistes, il y a peu d'études dédiées aux noms et aux signatures de marques.

Dans l'ouvrage *Analyser les textes de communication*, Maingueneau (2005) consacre un chapitre aux noms de marque et de produits, qui seraient les « responsables des énoncés publicitaires » (2005 : 183). On a affaire à un type de nom propre qui désigne un agent collectif ayant le pouvoir d'orienter les consommateurs vers certaines valeurs, par exemple le travail artisanal (2005 : 184). Selon Maingueneau, il y a trois types de noms de marques :

- les sigles (IBM),
- les noms humains – réels ou fictifs (Peugeot)

- les noms évocateurs – désignations néologiques (Yoplait) ou désignations détournées (Clinique).

Quant aux signatures de marques, nous pouvons signaler l'article de Palma (2005), qui décrit les caractéristiques de la communication bancaire à travers l'analyse linguistique des slogans institutionnels.

Les slogans institutionnels ou signatures de marques et les slogans publicitaires sont des phrases courtes à grands effets, construites avec méthode et créativité. N'étant pas liés à un produit ou service, les slogans institutionnels se distinguent par leur contenu générique, leur distanciation relative et leur aspect duratif.

Palma remarque que les slogans des institutions bancaires sont très récents, les premiers datant de 1985-87. Ils peuvent être centrés sur l'émetteur (la banque), sur le récepteur (le client) ou sur les deux protagonistes de la communication (la banque et le client). En ce qui concerne leur contenu thématique, les arguments privilégiés sont la singularité, la puissance, l'assistance, l'accueil humain, la proximité, la compétence, l'intérêt, la franchise, le bonheur. Palma esquisse également une comparaison avec les slogans des banques d'autres pays.

2.4 Noms et signatures de marques – la « vitrine » de l'entreprise

Nous considérons que les noms de marques et les signatures institutionnelles sont des éléments importants de la construction thématique du discours identitaire. Ils ont une place privilégiée sur le site web de l'entreprise : soit ils apparaissent dans la page d'accueil, à côté du logo, soit ils sont présents sur chacune des pages du site. En étudiant leur structure linguistique et leur contenu thématique, nous allons mettre en évidence la manière dont ils réussissent à créer des états émotionnels et à s'insinuer dans la mémoire du public.

Le locuteur collectif (direction de l'entreprise, équipe de spécialistes de la communication et du marketing, créateur du site web) conçoit une « scénographie », crée de la fiction en s'appuyant sur des croyances et des valeurs communes. Le discours que la marque produit sur elle-même et sur ses produits « doit être en harmonie avec son nom » (Maingueneau 2005 : 188).

En outre, si le nom est une présence constante, la signature ne l'est pas toujours. Nous allons examiner les cas où la signature est absente du discours de la marque.

3. Noms de boulangeries-pâtisseries roumaines

En ce qui concerne les noms des boulangeries et des pâtisseries de notre corpus, on remarque l'absence des sigles, l'utilisation du prénom du fondateur avec la mention de la catégorie d'entreprise ou de produit : *Brutăria Iohan* (Boulangerie Iohan), *Ana Pan* et la prédilection pour les noms évocateurs : *Brutăria cu maia* (La Boulangerie où l'on fabrique du pain au levain), *Brutăria din Sat* (Boulangerie du Village), *Boutique du Pain*, *Bread & Spices*, *Brot Manufactur*, *Mons Mellis*.

L'utilisation du prénom du fondateur crée un lien d'intimité, de familiarité, voire d'amitié entre l'entreprise et les clients. Ceux-ci deviennent les membres d'une famille ou d'un groupe d'amis. C'est une des stratégies que l'entreprise adopte pour attirer et fidéliser la clientèle. Ainsi, le fondateur d'une boulangerie roumaine, appelé *Iohan* par ses amis allemands, a choisi pour la boulangerie qu'il a ouverte au début des années 1990 la dénomination *Brutăria Iohan*. De cette manière, il a élargi le cercle de ses amis en y intégrant ses clients. En même temps, le nom allemand suggère le penchant des propriétaires pour les valeurs de la culture et de la

civilisation allemande (ordre, discipline, respect des règles, propreté, rigueur, précision).

Dans le cas de la boulangerie *Ana Pan*, on remonte à l'histoire du peuple roumain et à ses traditions latines en associant le prénom de la fondatrice et le nom latin *pane* (*pâine* - pain - *pane*).

Le fondateur peut être une personne célèbre, un boulanger/pâtissier ayant une formation auprès d'écoles de cuisine prestigieuses. Si l'on prend en compte d'autres espaces culturels, par exemple la France, on remarque que souvent le nom de l'entreprise coïncide avec le nom d'un boulanger/pâtissier célèbre. Dans ce cas, on utilise le prénom et le nom de la personnalité en cause (Dominique Saibron, Gontran Cherrier), devenue elle aussi un brand, suivis de la mention : « Artisan Boulanger ». Dans l'espace culturel roumain, la catégorie des noms évocateurs est la mieux représentée. Nous avons affaire à des dénominations qui font appel aux sentiments : *Dorbob*. On associe le nom d'un élément de base de la matière première (*bob* - grain) et le mot (*dor* - nostalgie).

D'autres dénominations rappellent les périodes du début du métier, faisant allusion au travail artisanal, aux produits faits maison, aux ingrédients traditionnels, à l'idée d'authentique (*Brutăria cu maia*, *Vatra Pan*). Il y a des noms qui font songer à la période de l'enfance, aux vacances à la campagne, à une vie idyllique, aux êtres chers (les grands-parents, les cousins, etc.), à une étape de la vie où les soucis n'existaient pas, où les valeurs les plus importantes étaient la nature, la pureté, le travail à la main (*Brutăria din Sat*). D'ailleurs, ces dernières années les campagnes publicitaires pour les produits alimentaires ont misé massivement sur le désir de la population de vivre plus longtemps, d'être en bonne santé, d'éviter la consommation de produits trop industrialisés.

D'autres noms évoquent plutôt des valeurs telles que le luxe, la qualité, le style, l'unicité. Dans ce cas, il y a une certaine prédilection pour les dénominations en langue étrangère :

- *Boutique du Pain* est un bistrot-pâtisserie : pour les Roumains, la boutique est un magasin de dimensions réduites où l'on vend un grand nombre d'articles très divers à des prix convenables. Le terme a également la signification du mot français dont il dérive, à savoir un magasin de luxe, qui propose des articles fabriqués en série limitée. La dénomination du local fait allusion au luxe, à la singularité, à des produits exceptionnels, proposés quand même à des prix abordables.
- *Pain Plaisir* est une boulangerie ouverte à Bucarest par trois associés. L'un d'eux est anglais, mais après avoir travaillé en France a décidé d'apporter en Roumanie le pain réalisé selon les recettes de la tradition française. La dénomination contient l'association entre le produit principal (le pain) et une sensation agréable (*le plaisir*). D'ailleurs, Lindstrom (2013) a constaté que les compagnies créent fréquemment des associations entre certains états émotionnels positifs et leurs produits.
- *Le Grenier à Pain* est à la fois boulangerie, pâtisserie et restaurant. Le mot *grenier* (région très fertile en céréales) évoque la richesse, l'abondance, la variété.
- *Brot Manufactur* est une entreprise familiale créée à Bucarest par un artisan allemand provenant de la Franconie, une région du centre-sud de l'Allemagne. Le boulanger apporte dans le paysage gastronomique roumain le pain de tradition allemande et un modèle culturel particulier. En

fait, en gardant le nom allemand, on évoque sans les nommer des valeurs qui restent au niveau de l'implicite, à savoir la rigueur, l'exigence, le travail bien fait, la qualité, des valeurs associées généralement au peuple allemand.

- *La Casa* propose des produits réalisés selon des recettes traditionnelles roumaines aussi bien que des produits de la boulangerie et de la pâtisserie internationales. La dénomination *La Casa* (La Maison), suivie de la mention (toujours en italien) *Pane. Dolce* (Pain. Gâteaux) attirera sûrement les clients qui aiment la cuisine italienne, les clients pour lesquels les valeurs de la famille et les produits faits maison sont primordiaux.
- *Bread & Spices* offre une gamme très variée de produits de tout le monde, d'où la dénomination anglaise choisie.

Nous pouvons signaler également le cas de la boulangerie *Mons Mellis* (*Muntele mierii* – Le mont du miel), dont le siège se trouve à Hărman (département de Braşov). *Mons Mellis* a été la première dénomination de cette commune. On fait allusion à l'histoire de la localité et de la région, mais aussi aux origines latines de la langue roumaine et aux coutumes anciennes. Cette dénomination attire, car les gens développent des attachements émotionnels plus intenses pour des marques qui évoquent certains rituels (Lindstrom, 2013). Pour désambiguïser la dénomination de la boulangerie, on a ajouté la mention *Artisan Bakery* (Boulangerie Artisanale).

En général, les noms de marque de notre corpus sont créés en focalisant :

- le type d'entreprise (boulangerie, pâtisserie) ;
- le lieu d'implantation (noms de localités) ;
- le type de travail (artisanal) ;
- le nom des propriétaires ou les fondateurs ;
- le produit principal (le pain) ;
- les ingrédients (le levain) ;
- le nom du boulanger ayant bénéficié d'une haute formation ;
- diverses sensations (plaisir, nostalgie).

Chaque entreprise se met en scène selon une « scénographie » particulière :

- projection dans un cadre idyllique avec des personnages, des métiers, des valeurs particulières ;
- valorisation de la vie à la campagne : travail artisanal, secrets de fabrication transmis par les membres de la famille ;
- voyage dans le temps et dans l'histoire : respect pour les ancêtres ;
- description d'un lieu unique, avec des produits originaux ;
- mise en place d'un atelier de luxe – l'équivalent des maisons de haute couture – avec des produits d'exception ;
- voyage imaginaire dans des pays étrangers (boulangerie à la française, à l'italienne etc.) ;
- voyage imaginaire autour du monde.

4. Signatures de boulangeries-pâtisseries roumaines

En consultant les sites des boulangeries et des pâtisseries roumaines, nous avons remarqué l'intérêt pour la création de signatures de marques.

Pour réussir à capter l'attention du public, les signatures doivent être brèves, concises, claires, originales, frappantes et faciles à retenir. Elles émanent de

l'organisation même si elles ne sont pas signées et représentent l'idéal ou la promesse de l'organisation. Ce ne sont pas des formules autonomes du point de vue linguistique : elles accompagnent en général le nom de marque et le logo. Le nom et la signature sont en accord avec l'isotopie créée par les textes publiés sur les sites web.

Dans les rares cas où la signature manque, on a affaire à des noms de marque évocateurs (*Boutique du Pain, Mons Mellis*).

En ce qui concerne leur contenu thématique, nous avons observé que les signatures offrent des informations complémentaires, qualifient la marque, fournissent une motivation ou une explication. Leur visée de captation l'emporte généralement sur leur visée d'information.

Ainsi, presque toutes les signatures de marques font explicitement appel à l'émotion. Le sentiment le plus évoqué est la passion. Il y a des boulangers qui pratiquent le métier de père en fils (c'est surtout le cas de l'Italie, où environ 90% des entreprises sont familiales). La famille transmet aux fils les secrets du métier, des recettes originales, ainsi que la passion, le sentiment de fierté, la volonté de léguer à leur tour tout ce patrimoine aux successeurs. Par conséquent, la figure du boulanger est celle d'un professionnel qui exerce son métier avec amour et passion. À la *Boulangerie Iohan* on travaille en famille : les parents ont transmis à leur fille la passion pour l'art de faire du pain et les secrets de la gestion d'une entreprise à succès :

Brutăria Iohan ... o adevărată pasiune (Boulangerie Iohan ... une vraie passion)

Parfois la signature de marque fournit une explication pour le nom de la boulangerie. Dans le cas suivant on évoque l'histoire et ses figures légendaires : *Vel Pitar* a été le nom d'un dignitaire de la Cour qui a vécu à la fin du XIV-ième siècle et qui avait le rôle de surveiller les boulangers et d'approvisionner le Palais et le Seigneur. Ainsi, le boulanger est un personnage important, qui détient les secrets du pain bien fait et qui peut satisfaire les goûts des personnes les plus prétentieuses :

Vel Pitar – Cel dintâi brutar (Vel Pitar – Le premier boulanger)

On fait souvent appel à la personnification : le pain et le lieu de fabrication ou de vente acquièrent les attributs d'une personne :

Panemar – Pâine cu suflet (Panemar – Pain ayant de l'âme)

La Casa – Brutărie cu caracter (La Casa – Boulangerie ayant du caractère / de la personnalité)

En général, les signatures qualifient :

- soit l'entreprise :

Le Grenier à Pain. Une autre boulangerie

- soit les produits :

Dorbob – Proaspăt și bun (Dorbob – Frais et bon)

Brutăria cu maia. Tradițional, gustos și sănătos (Brutăria cu maia - Traditionnel, délicieux et bon pour la santé)

Brutăria Lujiza – Pâine curată (Boulangerie Lujiza – Pain propre / sans additifs)

Vatra Pan – O pâine sănătoasă (Vatra Pan – Pain bon pour la santé)

Il y a des cas où l'on fait allusion à l'origine des ingrédients. Dans l'exemple suivant, le nom de marque (*Agropan* < *agro* - agriculture + *pane* - pain) est accompagné d'une signature rappelant que les ingrédients utilisés pour la fabrication du pain représentent un don de la nature, étant le fruit de la terre. Les boulangers utilisent donc des ingrédients simples, frais et naturels :

Agropan – Din darul pământului ... (Agropan – Le don de la terre)

Les signatures de marques peuvent être :

- centrées sur le locuteur :

Bread & Spices – O FACEM pentru că ne place (Bread & Spices – NOUS FAISONS DU PAIN parce que nous aimons le pain / parce que nous aimons faire du pain)

Boromir împarte bucurii (Boromir distribue de la joie)

- centrées sur l'interlocuteur :

Amra – Mereu pe gustul tău (Amra - Toujours à ton goût)

Cidor – Când de pâine îți e dor (Cidor - Quand tu as la nostalgie du pain)

- centrées sur les deux partenaires de la communication :

Vikpan - Dacă-ți iubești sănătatea, consumi pâinea noastră. (Vikpan – Si tu tiens à ta santé, tu consommes le pain que nous produisons.)

Sal Pan – Pâine Salonta, o rază de soare pe masa ta (Sal Pan – Du pain de Salonta, un rayon de soleil sur ta table)

La structure linguistique du slogan « échappe toujours à la temporalité et se rapporte en quelque sorte à la phrase analytique » (Navarro Domínguez, 2005 : 279). En général, entre le nom et la signature il y a une relation de qualification :

Le Grenier à Pain [est] une autre boulangerie

Vel Pitar [a été] le premier boulanger

Amra [est/produit du pain qui est] toujours à ton goût

Dorbob [fabrique du pain] frais et bon

Presque toutes les structures sont brèves et elliptiques :

Ana Pan [détient] la recette du bon goût

Dans de rares cas, la signature est une phrase complète :

Si tu tiens à ta santé, tu consommes le pain que nous produisons.

Le nom de la boulangerie peut être le sujet de la signature de marque :

Boromir împarte bucurii (Boromir distribue de la joie)

En bref, les devises ou les signatures de marque ont une valeur laudative, en qualifiant l'entreprise, le lieu de fabrication, les personnes qui y travaillent, les produits et sont liées au nom de marque. Elles ont un pouvoir d'incitation incontestable et un haut degré de subjectivité. Nous remarquons l'utilisation massive de l'adjectif « bon », qui est intrinsèquement axiologique, la présence des substantifs ayant une connotation axiologique (« caractère », « personnalité »), l'utilisation des verbes de sentiment (« aimer »).

5. Conclusion

En analysant les sites web des boulangeries et des pâtisseries roumaines nous avons constaté une préoccupation évidente pour la création d'une image de marque forte, un discours empreint de subjectivité, un effort constant de présenter les informations d'une manière attrayante et originale.

Nous avons examiné les noms et les signatures de marque, à savoir les éléments qui jouissent d'une place privilégiée sur le site web et qui ont principalement une visée de captation. Ils sont, avec les logos et les images, les premiers à attirer l'attention du visiteur. Il s'agit d'énoncés brefs à grands effets. Alors que les noms peuvent être autonomes, les signatures accompagnent les noms et/ou les logos. Entre le nom et la signature il y a une relation de qualification.

En outre, le nom et la signature sont en accord avec toute la « scénographie » du discours présent sur le site web (voyage dans le temps et dans l'histoire, voyage dans des pays étrangers, voyage autour du monde). Il s'agit d'un discours qui a un grand impact émotionnel et persuasif et qui fait appel aux coutumes, aux traditions, aux croyances et aux valeurs de la communauté à laquelle il s'adresse.

Nous avons remarqué la préférence pour les noms évocateurs et la présence presque constante des signatures de marque.

En ce qui concerne le vocabulaire, nous devons signaler la profusion de termes positifs et de termes ayant une connotation axiologique, l'utilisation d'adjectifs affectifs et évaluatifs, le recours aux verbes de sentiment. De plus, beaucoup de boulangeries et de pâtisseries exerçant leur activité en Roumanie ont des noms et des signatures en anglais, français, allemand ou italien. On essaie d'orienter les consommateurs vers les valeurs d'autres peuples, de faire connaître les coutumes et les traditions d'autres civilisations et d'apporter dans l'espace culturel et gastronomique roumain de nouveaux produits.

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MODERN METHODS AND TECHNIQUES OF RESEARCH

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Abstract: *The paper presents the modern methods and techniques in the philological research. Scientific research involves not only an individual activity, based on the information and data collection or the formulation of some innovative theses. It also involves communicating the results to a differentiated audience. One should find a purpose for the data collected: it should be taken over by their recipients in an accessible form. In other words, there must be a balance between the content of a research on the one hand, and the shape of the wording on the other. Being familiar with the steps to make in a research endeavour, and observing the rules developed to complete the research in the form of a scientific paper, are both secret ingredients of a successful endeavour. Scientific research involves, besides specialized knowledge, the mastery of appropriate working techniques. To be considered a scientific paper, a text must meet two fundamental prerequisites, namely: to bring something new and/ or to be useful. Between these extremely general boundaries, the scientific works take a wide variety of shapes, using a combination of several classification criteria. Depending on the fundamental approaching method, one may distinguish the analytical method from the synthetic method. Size of the text is rather a more practical classification criterion than a scientific one. It influences the structure of the paper work only to a certain point. The modality of conveying the research paper influences the structure of the text only in the case of written - oral communication conflict. The paper presents in the end aspects about references, word processing typing and plagiarism.*

Keywords: *modern methods; modern techniques; research; philology.*

JEL Classification: *I20.*

1. Introduction

In the research activity, it is very important for the researcher to prove high academic standards. To this end, and before writing a research paper, the author should be familiar with certain working techniques. Scientific research involves not only an individual activity, based on the information and data collection or the formulation of some innovative theses. It also involves communicating the results to a differentiated audience. One should find a purpose for the data collected: it should be taken over by their recipients in an accessible form. In other words, there must be a balance between the content of a research on the one hand, and the shape of the wording on the other. Being familiar with the steps to make in a research endeavour, and observing the rules developed to complete the research in the form of a scientific paper, are both secret ingredients of a successful endeavour.

What should we understand by the concept "scientific paper"? Umberto Eco sets out the prerequisites for a work to be considered a scientific one or not. The requirements to be met by a scientific work are as follows:

- To raise a red flag on an subject recognizable by others;
- To say about the subject under scrutiny things that have not been said before or to reinterpret what has already been discovered;
- To prove useful to others;
- To put into circulation the elements needed to check the formulated working assumptions.

The concept of scientific research is worthwhile too.

Scientific research involves "carefully examining facts, phenomena or processes, observing their characteristic features, the relationship between the explanation of the causes that led to the occurrence of phenomena or processes, the discovery of new facts, phenomena, and laws, unknown yet, sketching the development lines of studied phenomena or the mechanism of functioning of the studied structures".

Thus, the first requirement of the scientific activity is the documentation work, getting familiar with the results of the previous researches devoted to the subject in question, knowing the state of play of contemporary research addressing the same theme.

A researcher must be endowed with a series of skills that allow him to achieve his intended purpose. He must prove a great curiosity, hard work, tenacity in the pursuit of the goal, imagination, the capacity to overcome possible setbacks, a great love for science, and sufficient modesty (a great ability to reason, to get him/herself away from preconceived ideas, a dose of imagination yet under the censorship of reason). Scientific research involves, besides specialized knowledge, the mastery of appropriate working techniques. Knowing and applying these techniques are necessary for the researcher for several reasons, because they:

- ensure an effective and efficient conduct of the research work itself;
- allow the presentation of the results obtained in an easily accessible form for the specialists;
- provide to a text what we used to call an *academic tenure*, the formal but important aspect if we look at it from the point of view of the recipient: the scientific writing.

2. Types of scientific papers

To be considered a scientific paper, a text must meet two fundamental prerequisites, namely: to bring something new and/ or to be useful. Between these extremely general boundaries, the scientific works take a wide variety of shapes, using a combination of several classification criteria.

Based on the type of material on which they rely, there are primary and secondary research works.

Primary research work is based on a factual material collected or extracted by the author. It can only report a new discovery (for example, a writer's new manuscript), it can review and classify a whole set of data (for example, establishing a new type of subordinate), or it can bring a new interpretation of some data already known, for example, etymological disputes).

Also in the category of primary research works one can include the critical editions of various texts.

Secondary research work is substantiated by published papers, which are recorded and presented in various degrees of detail, including bibliographies, reviews, and essays.

According to the goal pursued by the author, subject to the target public, scientific paper works may have a teaching purpose or pursue popularizing scientific knowledge.

Depending on the fundamental approaching method, one may distinguish the analytical method from the synthetic method. The former is limited to researching a phenomenon, a particular aspect, while the latter focuses on the assembly, on the whole system. The two essential methods are not mutually exclusive: the synthesis *relies* on the results of the analysis, and the analysis is more relevant in relation to the assembly.

Size of the text is rather a more practical classification criterion than a scientific one. It influences the structure of the paper work only to a certain point. The practical use has established certain correlations between the type name of a scientific text, and its extension, respectively. Under no circumstances, the length of a scientific contribution determines its intrinsic value.

The modality of conveying the research paper influences the structure of the text only in the case of written - oral communication conflict. The way of publishing the text influences the technique of further quoting the text.

As mentioned above, secondary research records, presents or comments on scientific papers that already exist. In order to identify these works, the author must provide a bibliographic description for the works in question.

The *bibliographic description* represents a minimum of mandatory data relating to a paper / document, some additional information, all set in a strictly regulated order. The description serves as the basis for the library catalogues and indexes, being included the category of secondary documents. The bibliographic description is at the same time a way of analytical and synthetic processing of documents, being the "identity document" of a scientific paper. It is always placed after the book's inside cover, softcover or home page. The next examples present the standard order of information.

Examples:

Books (or other separate publications)

1. *Author's last name* 2. *Author's first name* (reproduced in the form provided by the publication in question); 3. *Book's title and subtitle* (it is written in the language of the book, the name of the publisher, the name of translator, as well as any other element which identifies the publication should be mentioned); 4. *Edition number* (in Arabic numerals); 5. *Volume number* (in the case of a multi-volume publication) or the part of the volume (in Arabic or Roman numerals, as it may be the case in the publication); 6. *Series and collection*; 7. *Publishing house*; 8. *Place of publication*; 9. *Year of publication*; 10. *Number of pages* (or the indication of the chart, map, illustration, CD).

3. Articles in periodicals

1. *Author's last name*; 2. *Author's first name* (the same rules apply as for books); 3. *Title and subtitle of the article*; 4. *Periodical's title*; 5. *Place of publication* (to distinguish between homonymous titles); 6. *Year of publication* or *volume's number*

in Arabic numerals; 7. *Serial number* of the periodical number; 8. *Number's date*; 9. *Page quoted*.

If one talk about collective papers (dictionaries, treaties, etc.) or study collections, the bibliographic description differs: the author's role is taken over by the institution and the authors are mentioned only if their names appear on the inside cover after the work title.

The secondary research includes the *bibliographic note*. This is a brief presentation of a book or a collection of scientific papers without comments or appraisals. It consists of the bibliographic description and a succinct summary of the book (there are mentioned only headings of the chapters, if they are sufficient for presenting the content). In such a bibliographic reference, the name of the reviewer is noted at the end of the text.

Umberto Eco believes that the notes should be used to:

- indicate sources of quotes;
- add other bibliographic references to support a subject discussed in the text;
- make external and internal references;
- insert a quotation to reinforce a point of view expressed in the text;
- make clear the statements in the text;
- correct some of the statements in the text,
- pay debts.

Eco states that a correct quotation in the bibliographic notes must:

- ensure the distinction between books and chapters, and between the chapters of the same book;
- unequivocally identify the author's name and book's title;
- identify the publishing place, the publisher, and the edition,
- identify the size of the book.
- records for the documents posted on the Internet

We should make use of the first two blocks of information in the case of books. The most important differences are in the case of the third block. In the case of text data, it is useful to note, besides the title, other useful information such as: the website on which the text is posted, the nature of the text. Some documents posted on the Internet are genuine electronic books, others are like traditional articles, while others are simple notes. The borders between different types of documents published on the Internet are labile; therefore, these data should be recorded as an annotation not subject to formal constraints

If the Internet address has an error or has changed we also consider the usefulness of this data in the case of a search. When publishing facts, we keep the Internet address. We record, if we find, the date when the document was published on the Internet. In this case it could be a time span. Documents on the Internet are often rewritten on the go, therefore they have a dynamic nature. The old concept of "pas for press" does not apply here but very rarely. We should consider the date when we saw the document on the Internet. The recommendations made for books, studies and documents posted on the Internet are far from covering all possible cases. However, one may say that they fit into most of the sources of a paper work.

The *review* is the following secondary research. The critical and actual nature is the characteristic of the review. It consists of the bibliographic description, content summary and critical appraisals. The name of the reviewer is mentioned at the end.

The essay relies on bibliographic information and its structure is an exercise for an independent scientific research. The value of an essay is measured by the pertinence of the new opinions, the richness and the degree of systematization of the information it presents. The critical appraisal of the opinions previously presented and putting forward some new original solutions concerning the subject in question are welcome.

As regards the technique of elaborating a scientific paper, the scientific research means the analysis of some facts, phenomena or processes, the observation of the specific peculiarities thereof, the determination of the existing relations between them, the explanation of the causes for the occurrence of the phenomena in question, the elaboration of new laws, and the presentation of the development trends of the phenomena in question. The modalities and methods of scientific research vary depending on the field of research. Stages of scientific research are common to both the natural sciences and the humanities.

The first stage of scientific work is *documentation*. It is extremely important to be familiar with the results of previous research works in a certain field and the state of play of the current research work on the issue. Without making use of existing and verified data, the researcher can draw conclusions which could be identical to the opinions and results of another author's research. More seriously, the author may make serious mistakes in terms of interpretation or understanding of the issues addressed, which may lead to the misguided orientation of his/her entire research work and to jeopardising his/her reputation and statute of scientific researcher. The credibility of such a researcher is broken after making such errors.

The documentation activity is facilitated nowadays by the existence of bibliographies, - general or specific, current or retrospective, primary or secondary, descriptive or annotated, as well as of bibliographic indexes. It is recommended that the selection of the literature be done in a certain sequence: first one should make use of the bibliographies accompanying the journal articles or books, then it is recommended to study the encyclopaedias, then to pass to the bibliographic catalogues, and finally to consult the bibliographic indexes.

The way a researcher follows the literature for documentation is of great importance for the way in which his own research work is carried out. The scientific content of the material needs to be studied with great care, "with the pencil in hand", in order to write down some data and ideas as the researcher passes through the text. The reading must be reflexive in order to follow the reasoning of the author and to discover any questionable or wrong parts in the original text in order to prevent them from occurring in the new scientific paper.

The next stage of the documentation is the researcher's *own research*, which consists in gathering factual raw material, a thorough analysis thereof, organizing it and providing the interpretation of the facts under review. Gathering the raw material for research requires hard work, time, sense of observation, while the interpretation thereof requires a sound reasoning, the detachment of certain preconceived ideas, and an imagination censored by reasoning. The researcher must have these qualities in order to achieve his/her goals. S/he must have great curiosity, a great capacity for hard work, tenacity in order to achieve his/her goal, initiative and imagination.

Once the theme of the work was set, the researcher must launch him/herself in this quest for knowledge by starting with reading the dedicated literature. He needs an index of the studies, articles and materials s/he will consider, assuming a thorough

knowledge of the sources in which s/he will find everything written in the field in question.

A first source of documentation is the public library book fund. Library catalogues guide readers through the documentation material available in a particular library.

There are several classification criteria for the library catalogues, but we are only interested in the classification following the grouping of references. According to this, there are *alphabetical, systematic and topic or subject library catalogues*.

In the *alphabetical catalogues*, the references to the publications are grouped by the name of the author or institution in which the work was written, in strictly alphabetical order, in the case of collective works or reference works (bibliographies, encyclopaedias, dictionaries), the bibliographic records are ordered after the first letter of the first initial of the paper title. The records showing the works of the same author are placed either in chronological order (by year of publication) or in the alphabetical order of the titles.

To ensure the selection of the literature items by its content, there are *systematic and topics catalogues*: in the systematic catalogue, the references of the printed publications are grouped on the fields of science to which their content is bound. Within the respective branch, the references are grouped first on classes, then in each class on subclasses, in the subject catalogue, the sciences and disciplines are grouped in accordance with the international decimal classification in ten classes, each class having ten subdivisions and so on. In the subjects catalogue the researcher will find all publications dedicated to the topic in question grouped together.

The bibliographies are the second most important source of information. Bibliographies are those works that contain repertoires of studies, articles, books, magazines, collections, documents, manuscripts of interest for a particular branch of science or culture, belonging to a certain age, or representing the work of a particular author. They can be classified according to their themes in: *general bibliographies* (which include works from all fields of knowledge), *special or personal bibliographies* (which record all the writings of a person, as well as the studies or articles that have been written about the author and its works). Bibliographies can be independent papers (books or brochures), periodicals for current bibliographic information (newsletters, reference journals or reviews), bibliographic lists attached to magazine issues (the last issue in one year, stating the articles or studies published in the pages of the journal in the respective calendar year), and bibliographies accompanying the specialized works.

Starting with 1928, the publishers of psychology journals in the United States of America put forward a standard method for preparing manuscripts, and then published a manual with precise rules for the presentation of scientific studies: *Publication Manual of the American Psychological Association*. Based on the aforementioned manual, Marc A. Provost, Michel Alain, Yvan Leroux, and Yvan Lussier from the University of Quebec set out a *Guide de presentation d'un rapport de recherche* (1993/1997).

In the introduction of the aforementioned guide it is stated that official rules must be adapted to respect the particularities of the language. Thus, it is almost unanimously accepted that the organization of the material for publication should follow a *standard pattern*: an introduction which presents the current stage of knowledge of the subject in question, the review of the literature dedicated to the subject aforementioned, description of the research design and implementation, including all useful

information to check the consistency of the results through a new research, the presentation of the data and the methods that led to conducting the research, a discussion on the relevant research data, and the theoretical interpretation of the results. The abstract, although written last, it precedes the study itself in the scientific articles however in the PhD or BA works, it is not advisable to submit an abstract. The abstract is a short text about the content of the scientific article or the research report. Like the title, the abstract provides information on the research and serves to index the scientific paper as well as to archive data. A good abstract must be accurate, written with attentively, accurately and to reflect the content of the study, and must not include information which is not found in the text. Although concise, the abstract should be comprehensive enough, containing the necessary terms for indexing, the theses, results, conclusions and implications of the study. It should be written clearly, using verbs in active diathesis and at the present tense, the abstract must be coherent and legible.

Publication Manual (1994, 9) sets the length of an abstract for a study at 960 typographic symbols, that is about 120 words. For the summary of an empirical research report, there are recommended 100-120 words, and for a theoretical article 75-100 words. For the PhD theses, a more comprehensive summary of approximately two pages i.e. about 500 words is recommended, covering the following: the study's subject, the objectives or working assumptions, the methodology, the results, and the main conclusions of the study (Provost, 1993 / 1997, 40).

The drafting style of a research project addresses the following aspects: the organization by chapters, the handling of bibliography, and the editing form. The subject of a research project can be presented in one or more chapters. These, in turn, are organized on paragraphs. However, the number of paragraphs should not be exaggerated, and the division of the paper into paragraphs and sub-paragraphs should not be well organized. The introductory chapter and the final chapter should be a synthesis of the paper work. In the bibliography, the sources of reference must be either written in the alphabetical order of the authors' names or in a different order, recommended by the scientific co-ordinator or according to the literature guidelines. The works included in the bibliography must be quoted at least once in the research project paper. If the author of a scientific text wishes to draw attention to a term or phrase in a quoted text, s/he can highlight the term, expression or phrase in italic fonts and specify, in brackets, the "s.n." formula. If the quote is extracted from a well-known literary work, the quoted word is written italic, but the comment "s.n." is not added anymore, since the commentator's intervention is obvious.

The word processing typing should use the font Times New Roman 12 or Bookman Old Style 11, at 1.5 spacing, and observing the page setup margins setting of 2.5 cm top and bottom, and 2.5 cm left and right. Generally, documents are written using a single font, from the beginning to the end. This is a traditionally established academic practice. Different fonts are used for contrastive purposes. However, this tradition has neither a rational basis nor an aesthetic one. This tradition is the direct result of some technical inconveniences that would have been required some cumbersome and complicated operations when using the inventory of the moulds in the printing houses. Now, thanks to performance in the field of computers and word processing, this tradition of is being "violated" more and more often.

The trend to abandon this taboo is international. Whenever we use graphic contrasts, a general principle should be taken into consideration: in order to highlight a word or

phrase in a text, this word/phrase will be distinguished graphically by a single element from the rest of the text, namely its writing in ITALIC or BOLD. A 1.5 cm header can be used to show like a technical documentation (title of the chapter), and a footer that will enclose at least the pagination in Arabic letters. The paper work, as a whole, will include the cover page, the home page, the contents, the index of notes and abbreviations, the actual content with the chapters that follow in the pre-established order.

Chapters and subchapters shall be highlighted with fonts in bold. This aspect regarding the writing of a paper work does not require the restrictive enforcement of some drafting norms, but provides, as a guideline and support. Each text editor can choose, within certain limits, the style of writing, font type and font size. The choice generally takes into account the nature of the published document, the destination thereof, the observance of certain printing traditions, the author's personal desire, the editorial exigencies, and the aesthetic taste of the author.

4. Plagiarism

Quoting accurately, therefore making use of using footnotes protects us from plagiarism. Plagiarism means to steal somebody else' ideas, texts (fully or partially), other people' works, without quoting them". Plagiarism is a "problem of professional ethics.

"Traditional" plagiarism has expanded with the emergence of the "on line" plagiarism (or the digital or Internet based plagiarism). To avoid it, we will comply with the electronic citing rules. There is also a "decent" form of plagiarism, which is involuntary plagiarism. Obviously, one should avoid the latter too. This type of plagiarism is "practiced" by those who do not mention who are the real owners of the written ideas, treating the latter as "common good". Septimiu Chelcea recommends some rules for avoiding involuntary plagiarism, valid for both typing and electronic quoting:

- Using brackets for any quote that belongs to others;
- Mentioning the name, the title of the paper work, the place of publication, the publishing house, the year, the page;
- Paying attention to the distinction between the common knowledge that has entered into the patrimony of science and information falling under the scope of intellectual property law;
- Using our words to reproduce the core ideas of a text, mentioning accurately the author and the work that inspired us;
- Abbreviating the original text, expressing in our own way the basic ideas of the cited work;
- Learning to take "intelligent notes", not by copying sentences and phrases from our professors' lectures;
- Getting used to working with reading sheets and records to synthesize the ideas of the authors, not just to reproduce them in brackets.

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GLOBAL COMPETITION INDEX AND TURKEY; A COMPARISON WITH THE MOST COMPETITIVE COUNTRIES

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Abstract: *The World Economic Forum periodically publishes 137 countries' international indices of competition in 12 main areas. These areas from economy to health and infrastructure to innovation are the most important dynamic indicators of a country. It is usual for the most developed countries of the world to be at the forefront of global competition. Although Turkey has shown great success in several key areas in recent years, it did not reach the desired level in the global competitiveness ranking. Since more than half of the production and trade in the world in one year is carried out by a small number of industrialized countries, to stay on the global market is so difficult and destructive for developing countries. Therefore, innovation, technology and radical reforms to be realized in social and political fields became the basic conditions of development, competition and growth. In this study, Turkey's strengths and weaknesses in 12 main areas will be investigated by using the global index report issued by the World Economic Forum. To accomplish this, Turkey will be compared with the BRICS countries and the countries which rank in the top rankings of world competition index. Finally, information is given about the sustainability of Turkey's competitiveness in international markets and suggestions are made. This research has some concrete conclusion on Turkey's competitiveness. Turkey was ranked 53rd in the area of competition in 2017 among the countries which are taken into consideration in this paper. Turkey rose to the 43rd place in 2012 which was the best performing year. Turkey's best-performing area is market size criteria which ranked 14th. The worst performance is 127th in the labor activity market. Turkey located in 60th in basic needs in the economy category. It is in the 51st place in the category of productivity boosting factors. The worst performance among the main categories is in the area of innovation and diversity enhancing factors. When BRICS countries and Turkey compared, in the overall standings Turkey is located above South Africa and Brazil and left behind China, India and Russia. It is above only Brazil in the area of innovation and diversity.*

Keywords: *Global Competition; Global Competitiveness Index; R&D; Foreign Trade.*

JEL Classification: *F1; O3; O5.*

1. Introduction

Rapidly developing technology has increased the speed of obtaining economic gains and losses. Even small firms can reach huge budget and size by following market conditions very quickly in 21st century. On the contrary, some of the global companies which fail international competition can be swept away from the market in a very short period of time. Trade and prosperity required many years when the

development of technology was limited to horse carriages or similar means of transport. The development of transport and the change of production technologies have enabled products to reach consumers quickly over the time. The momentum in production and consumption is causing too many firms to enter and exit the market. This emergence has enabled the growth of companies that produce fast, affordable, inexpensive, customized and quality production. It also leads to the rapid collapse of companies that cannot meet these requirements. The increase in technological development has increased both economic and political competition around the world.

The last quarter of the 20th century and the 21st century are the times of globalization. The change of needs has also led to the development of production and transport systems. Foreign trade has become inevitable. The world is getting smaller and production can be delivered easily to the world in a very fast way. All these developments have led countries to give up their closed economic systems and begin to fight in global markets. Foreign trade has undoubtedly been one of the crucial economic growth paths of the last fifty years. So developing globally marketable products has become more important than ever. As Turkey is a developing country, investigation of its global competitiveness is crucial to determine its path of development in foreign trade.

This study will examine the Turkey's competitiveness after the theoretical and conceptual framework of the global competitiveness index are outlined. Also in this study, Turkey will be compared with developed countries and policies will be proposed to increase competitiveness. Therefore, Turkey's infrastructure indicators, macroeconomic indicators, education and basic health indicators will be compared with most competitive countries. In the first part of this study, the concept of competition and the criterion of the measurement of competitiveness of the World Economic Forum are summarized. In the second part of the study, Turkey's existing global competitiveness ranking is determined and then a comparison is made between Turkey and developed countries.

2. Global Competition Concept and the Measurement of Competitiveness of the World Economic Forum

One of the most important consequences of the globalization process is the need for "interdependence". With the development of the industry and the rise of technology, the condition of innovation has revealed the importance of countries' competition power (Turkish Ministry of Science Industry and Technology, (Gümrük ve Ticaret Bakanlığı) 2018). The outward-closed economic system is considered to be one of the obstacles against development and competition so the concept of competition, which is the most popular concept in recent years, is becoming more important (Eşiyok, 2001: 2). Competitiveness refers to the ability to meet total demand and needs in free market economies. When the world is regarded as a whole economy, international competitiveness is the ability to respond quickly and customized to the international demand. Competition is a fairly wide process, ranging from personal competition to firms and from states to economic integrations, resulting in increased prosperity and income (Turkish Ministry of Customs and Trade (Gümrük ve Ticaret Bakanlığı), 2015:1). The 21st century's understanding of competitiveness includes concepts of innovation, technological innovation and total factor productivity. Added value and production efficiency are very high in the competitive countries. The

innovation from the human capital to the production method similarly creates a situation where the gains are multiplied and therefore international competition is strong (Çivi et al., 2008: 3-4). Another definition of global competition is the ability to make free economic decisions in the trade of goods and services in an economy. Therefore the competition is the power of the entrepreneurs operating in the economy to act ethically in free market conditions and to maintain their existence and profitability (Competition Authority, (Rekabet Kurumu). 2014: 164).

The World Economic Forum publishes the global competition index report, which covers approximately 140 countries, over 30 years. The report includes countries' 12 core areas and 119 sub areas. The index is calculated as follows; at first, the basic components are added consecutively and then the arithmetic mean of the subcomponents is calculated. There are three main headings determined in the report when competitiveness ranking is calculated.

Table 1: Global Competitiveness Index Classification of WEF Report

Factor Based Economies	Productivity Based Economies	Innovation Based Economies
Basic Requirements	Productivity Boosting Factors	Innovation and Diversity Factors
Institutions	Higher Education and Vocational Education	Business Market Development
Infrastructure	Commodity Market Efficiency	Innovation
Macro-Economic Environment	Labor Market Efficiency	
Health and Basic Education	Development of Financial Markets	
	Technological Preparation	
	The size of the market	

Source: WEF, The Global Competitiveness Report 2017-2018

Table 1 shows the key factors which creates world competition index prepared by World Economic Forum. The heading of basic requirements covers the essential needs of each country. This section contains the status of the existing institutions of the country, macroeconomic indicators and finally the basic health and basic education sub-items. The second main component, the productivity boosting factors consists of the main six sub-areas. These are the titles that show countries' detailed competitive analysis and increase competitive power. The sub-areas which are higher education and vocational training, the effectiveness of goods and labor markets, the development of financial markets, the size of technological preparation and the market are the areas that increase the efficiency of countries. Finally, innovation and diversity factors consist development of the labor market and innovation sub-titles. The report is divided into categories according to the development and economic growth status of the countries.

- First Stage: Factor-Driven Economies Category
- Transition from First to Second Stage Economies
- Second Stage: Activity-Driven Economies Category
- Transition from Second to Third Stage Economies
- Third Stage: Innovation-Driven Economies Category

As long as the countries' level of development increase their competitiveness will increase so the countries first move from factor-driven economies category to activity-driven economies category and then to innovation driven category. Economic classification and categorization of countries in the WEF report was made by using the gross domestic product value per capita. Countries in the first stage can compete on a factor-based basis due to unskilled labor and natural resources. Production consists of low added value and simple products. Underdeveloped countries take place in this category. The economy and social structure in the second stage are better than the first stage. The wages and profits have increased and the productivity-based activity has taken place. The added value of higher education has increased, labor and commodity markets have strengthened and financial markets have improved. In the final stage, modern and high-tech products are produced and competed by using the production processes that are realized by innovation. The final phase involves more global companies in developed countries. Global competition is concentrated in this area thanks to products and outputs that are both high value-added and highly competitive.

Table 2: Determination of Development Level and Weighted Average of Main Factors

	Factor-Driven Economies Phase (1st stage)	Transition from First to Second Stage	Activity-Driven Economies Phase (2nd stage)	Transition from Second to Third Stage	Innovation Driven Economies Phase (3rd stage)
GDP per Capita (US Dollars)	0-1999	2000-2999	3000-8999	9000-17000	17000 Üstü
Weight of Basic Requirement Factors	%60	%40-%60	%40	%20-%40	%20
Weight of Productivity Boosting Factors	%35	%35-%50	%50	%50	%50
Weight of Innovation and Diversity Factors	%5	%5-%10	%10	%10-%30	%30

Source: WEF, *The Global Competitiveness Report 2017-2018*

Table 2 shows the weighted average of the three main factors in the countries classified by GDP per capita. Accordingly, countries with income per capita below \$ 2,000 are the first-stage factor-driven economies. The basic essential factors in countries in this category are 60% on weighted average. Productivity enhancing factors weigh 35% and innovation and diversity factors weigh only 5%. The competitiveness of these countries is very low and production is far from high technology and innovation. It is more labor intensive production activity. The weight of essential factors is reduced and is between 40% and 60% in countries with income per capita ranging from \$ 2,000 to \$ 2,999. The productivity enhancing factors and the weight of the innovation-diversity factors in the transition from the first stage to

the second stage were slightly higher than in the first stage. Countries with income ranging from \$ 3,000 to \$ 8,999 per capita are included in the second phase of the activity-driven economy category. In this second phase, the weight of essential factors decreased to 40% on average. The weight of the productivity enhancing factors has increased to 50%. The weight of innovation and diversity factors has increased to 10%. The transition category from the second stage to the third stage consists of countries with GDP per capita ranging from \$ 9,000 to \$ 17,000. While the weight of the essential factors decreases, the weight of the other factors increases at this stage. Countries with a GDP per capita valued at more than \$ 17,000 dollars represent third-stage countries. In the third stage, investment in technology-innovation and production is quite high, so labour-intensive production is low. At this level, more capital intensive production is being made and the weight of the essential factors is reduced to 20%, the productivity-enhancing factors increased to 50% while the innovation-diversity factors increased to 30%.

3. Turkey's Global Competitiveness

According to the report of World Economic Forum, the international classification of Turkey is located in the transition from second stage to third stage and is located between Activity-Driven Economies Phase and Innovation Driven Economies Phase. Turkey's growth rate in recent years shows a fairly good performance compared to the world average. But this situation is not reflected adequately in the growth rate of Turkey's global competitiveness rankings.

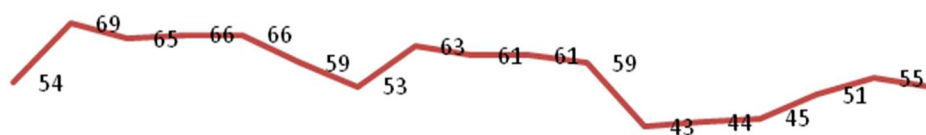
Table 3: Turkey's Global Competitiveness Ranking

Years	World Ranking
2001	54
2002	69
2003	65
2004	66
2005	66
2006	59
2007	53
2008	63
2009	61
2010	61
2011	59
2012	43
2013	44
2014	45
2015	51
2016	55
2017	53

Source: World Economic Forum, "The Global Competitiveness Report".

Table 3 shows Turkey's competitiveness ranking. Before the 2001 crisis, Turkey's competitiveness ranking was 54th in the world, and immediately after the crisis in 2002 it decreased to 69th. Turkey's competitiveness ranking has started to increase after the effects of the crisis began to disappear. In 2007, it rose to the 53rd place, but in 2008 it fell to 63rd place due to the global crisis. After the end of the crisis,

Turkey has given the best performance in 2012. The ranking among 140 countries has increased to 43 within this year. After 2013, because of both global and national political and economic shocks Turkey's global competitiveness ranking has declined by down to 55.



2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017
Figure 1: Change in Turkey's Global Competitiveness Ranking
Source: World Economic Forum, "The Global Competitiveness Report".

Figure 1 shows the change of Turkey's global competitiveness ranking in the period of 2001-2017. The figure shows that the average of Turkey's ranking remained quite stable in long term. Turkey's competitiveness ranking is highly sensitive to the crisis, political and economic cyclical fluctuations. Turkey's competitiveness ranking is followed by a bumpy course because of being a developing country, its current account deficit and high interest rates and the effects of fluctuations in foreign exchange rates on imports.

Table 4: Global Competitiveness Ranking of Top 10 Countries and Turkey

Countries	2017-2018 Competitiveness Index		2016-2017 Competitiveness Index	
	Rank in 137 Countries	Score (1-7)	Rank in 137 Countries	Score (1-7)
Sweden	1	5.86	1	5.81
USA	2	5.85	3	5.70
Singapore	3	5.71	2	5.72
Netherlands	4	5.66	4	5.57
Germany	5	5.65	5	5.57
Hong Kong	6	5.53	9	5.48
Swedish	7	5.52	6	5.53
Britain	8	5.51	7	5.49
Japan	9	5.49	8	5.48
Finland	10	5.49	10	5.44
Turkey	53	4.42	55	4.39

Source: World Economic Forum, "2017-2018 The Global Competitiveness Report".

Table 4 shows the ranks of the top ten countries and Turkey according to global World Competitiveness Report- WEF. The report sets a score by subtracting an

average by scoring between 1 and 7 in 12 basic areas. Global competitiveness ranking is determined by this scorecard. The countries in the top 10 in the last two years didn't change. World's most developed and highest purchasing power countries have a high ranking of global competition. As seen in Table 4, Asian countries such as Japan, Singapore and Hong Kong competing with Western societies in terms of income per capita, have a high ranking of global competition. Switzerland ranks first in the world as the strongest country in terms of competition. Turkey, as stated above, due to both economic and political reasons, geographical location and regional issues was at 53rd ranks with 4.42 points in 2017.

Table 5: Turkey's Global Competitiveness Index in 12 Key Areas

Main Categories	Rank in 2017-2018	12 Key Areas	Rank in 2017-2018	Score
Basic Requirements	60	Institutions	71	3.5
		Infrastructure	53	4.5
		Macroeconomic Environment	50	5.1
		Health and Basic Education	84	5.6
Productivity Boosting Factors	51	Higher Education and Work Education	48	4.8
		Efficiency in Commodity Markets	53	4.5
		Efficiency in Labor Markets	127	3.4
		Development of Financial Markets	80	3.8
		Technological Preparation	62	4.4
		Market Size	14	5.5
Innovation and Diversity Factors	66	Business Development	67	4.0
		Innovation	69	3.3

Source: World Economic Forum, "2017-2018 The Global Competitiveness Report"

Table 5 shows Turkey's competitiveness index in main categories and 12 key areas. When the rank of major categories investigated, Turkey ranks at 60th place in the basic requirements. Turkey ranks 51st in productivity-enhancing factors, 66th place in innovation and diversity factors. When examining Table 5, Turkey's competitiveness index score in 12 key areas vary considerably. Turkey ranks 71 of 137 countries with its 3,5 points in Institutions Area. When the table is examined, it is understood that the worst case is the 127th row in the Efficiency in Labor Markets. Turkey's best score is in Market Size Category with 5,5 points and 12th row. Turkey has carried out best performance in terms of competitiveness index in 2012. In particular, 12 basic areas in Turkey cannot be improved sufficiently due to the facts that the R&D expenditures are below the world average, the current deficit is high, and the exchange rates are continuously rising. Turkey is an advantageous country in the labor market with its young population. However, the unemployment rate is not sufficiently reduced and the quality of the workforce is not enough to compete with the competitive advantage of the labor market.

Table 6 shows the proportional distribution of Turkey's main problem. Among the most important factors adversely affecting the competitiveness of Turkey is political

instability with 13,7%. Political instability is affecting the continuation and proportion of investments in the negative direction.

Table 6: The Basic Share of the Most Problematic Factors in Doing Business in Turkey (%)

Factors	Basic Share (%)
Political instability	13.7
Financing Access	11.8
Inadequate Educated Workforce	11.7
Exchange	9.1
Inefficient Government Bureaucracy	8.9
Inflation	7.9
Tax Rates	7.4
The instability of the state	7.3
Inadequacy of Infrastructure	6.2
Inability to Innovate	5.3
Tax Regulations	4.0
Weak Business Ethics in the National Workforce	2.9
Restrictive Labor Law	2.4
Weak Public Health	0.8
Crime and Theft	0.3
Malpractice	0.3

Source: World Economic Forum, "2017-2018 The Global Competitiveness Report"

Another important issue is Turkey's foundation in finance. One of the main problems of Turkey is inadequately educated workforce with 11,7% share. Other main problems of Turkey are inflation, imbalance in exchange rates, distribution in tax rates, bureaucratic obstacles in state administration.

Table 7: Comparison of BRICS countries and Turkey in Global Competitiveness Perspective

	Brazil		Russia		India		China		South Africa		Turkey	
	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score
Total	80	4.1	38	4.6	40	4.6	27	5.0	61	4.3	53	4.4
Key Factors	104	4.1	48	4.9	63	4.7	31	5.3	92	4.3	60	4.8
Productivity Boosting Factors	60	4.3	38	4.6	42	4.5	28	4.9	52	4.4	51	4.4
Innovation and Diversity Factors	65	3.7	57	3.8	30	4.3	29	4.3	39	4.1	66	3.7

Source: World Economic Forum, "2017-2018 The Global Competitiveness Report"

Table 7 shows BRICS countries' and Turkey's global competitiveness index in main categories in 2017. China is the best performing among 6 countries. China has made very big changes and economic revolutions and become second largest economy in the world in 21st century. China has entered all the markets, from the financial sector

to the real sector, from technology to R & D, from industrial to agricultural. As a result, many countries around the world are experiencing serious difficulties in terms of competition with China. According to the global competition report of 2017-2018, China has a score of 5.0 and ranked 27th in 137 countries. In terms of global competition, the second place after China among the 6 countries belongs to Russia with a rank of 38th, and a score of 4.62. Russia's best performance is in productivity enhancing factors. Russia's major investments in arms and space technology bring this country to a strong position in the world in economic mean. On the other hand, Russia has some difficulties in adapting to the global market due to its socialist past. India's competition index is 4.6 and the overall ranking is 40. In recent years, India has increased its investments in information and R & D activities. India's best performance is in innovation and diversity factors. More over 1 billion inhabitants, a social structure in which income distribution is highly distorted, millions of populations who are still unable to meet their basic needs weaken India's performance in key areas.

The best performance of South Africa is in innovation and diversity factors. South Africa takes over Turkey with its 39th rank. Brazil is in the 80th place with 4.1 points. Brazil, one of the countries with the highest growth rates in the developing countries in recent years, faces major problems in terms of economic and technological investments as well as social and institutional problems.

Turkey is at the 4th place among the six countries. Turkey's weakest performance is in innovation and diversity factors. The technology and R & D development efforts in Turkey have increased in recent years but it is not enough. Turkey is ahead of India and South Africa and Brazil in the main factors category. India is ahead of Turkey in Productivity Boosting Factors. Turkey remaining behind BRICS countries in innovation and diversity factors with 66th rank and 3,7 points.

The most important problem in doing business in BRICS countries is corruption. For example, the first and the biggest problem in doing business is corruption and bribe in South Africa, India and Russia. This situation complicates countries to sufficiently improve their management and social structures, institutions and business life. The biggest problems in Brazil are tax rates and corruption. The problem of corruption has become the 5th problem with an 8% rate in China. Financial difficulties are one of the main problems in doing business in China. Due to the political problems in local and international area in Turkey in recent years, political instability is one of the main problems in doing business. Although there is a corruption problem in Turkey, according to the WEF's latest report, corruption took place at the end of the problems encountered in Turkey.

4. Conclusion

Since more than half of the production and trade in the world in one year is carried out by a small number of industrialized countries, global competition to stay on the market is so difficult and destructive for developing countries. Therefore, innovation, technology and radical reforms to be realized in social and political fields became the basic conditions of development, competition and growth.

In this study, Turkey's competitiveness and general issues related on competition were discussed based on the global competition index report, which includes approximately 140 countries published annually by the World Economic Forum. Turkey was ranked 53 in the area of competition in 2017. Turkey rose to the 43rd

place in 2012 which was the best performing year. On the other side, due to the national and international political and economic problems, the ascension has settled down after this year. Basic issues considering the Turkish economy could be count as follows; the political issues, high inflation, lack of funding and the negative impact of foreign exchange rates on the TL. So, it is essential to dissolve the political and social conflict in Turkey rapidly, to focus especially on the key issues and to resolve inflation, interest rates and current account deficit problems in the economy.

Countries ranked in the top 10 in the global competition index are generally composed of western societies. In addition, developed countries such as Japan and Singapore which are two of the most developed Asian countries always ranks in top 10 in terms of global competition. These countries which continue to develop in industrial and technological terms, are able to produce easier, faster and lasting solutions compared to developing countries in social and political matters. However, political conflicts of interest, insufficient sectoral specialization, corruption and social problems are major obstacles against development in developing countries. Turkey has become the focus for world companies because of being a developing country, increased consumption and investments, being a gate opens from Europe to Asia, and its young and educated population and market size. Thus, according to the global competitiveness index report Turkey's best-performing area is market size criteria which ranked 14th. The worst performance is 127th in the labor activity market. Turkey located in 60th in basic needs in the economy category. It is in the 51st place in the category of productivity boosting factors. The worst performance among the main categories is in the area of innovation and diversity enhancing factors. When BRICS countries and Turkey compared, in the overall standings Turkey is located above South Africa and Brazil and left behind China, India and Russia. It is above only Brazil in the area of innovation and diversity.

According to the findings, first of all Turkey must focus on the main problems in order to achieve a global competitive advantage. Later, in order to extract brands on a global scale, it is necessary to develop the manufacturing industry which carries out advanced technology and innovative production. Increasing Turkey's market share in the globalizing world depends on the development of information and technology infrastructure. The ability to produce high value added products, to increase the number of national firms operating globally which can withstand international competition will affect Turkey's competitiveness index in a positive way. The share of R&D expenditure in GDP in Turkey remains far below the world average. Therefore, it is necessary to increase the investment in innovation and R&D in order to produce technological and high value added products.

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A CULTURAL ANALYSIS OF FINANCIAL SLOGANS. THE CASE OF US BANKS AND CREDIT UNIONS

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Abstract: *The aim of this paper is to conduct a cultural analysis of financial slogans based on the theoretical framework of Geert Hofstede. We chose to focus on the case of the United States of America and the sample includes slogans from two types of financial institutions offering similar services: banks and (federal) credit unions, further divided into "local" and "national" according to their reach, i.e. the number of US states where they have branches, thus making direct interaction with customers possible. The methodology relies on empirical research and content analysis. First, the choice of the sample is explained, as well as the way it is organized. The paper then proceeds to demonstrate the need to adapt the Hofstede model to the nature of the sample by focusing only on the appropriate cultural dimensions. The actual analysis begins with a brief cultural overview of the U.S.A., as this is the background against which the approach of US bank and (federal) credit union slogans should be set. The findings are first presented in column charts and the cultural aspects are quantified based on their number of occurrences in the sampled slogans. We then proceed to identify and map the underlying values that slogans convey according to the cultural aspect illustrated. Several things emerge at this point: from a general perspective – although the sample is limited in this respect – the cultural values represented by the slogans of national financial institutions fit the national pattern (high individualism, masculinity). Local banks and credit unions, however, generally value the opposite cultural aspects i.e., primarily, collectivism and femininity, as their physical presence is limited, most of the time, to a single US state, which in turn creates the need to appeal to a smaller target audience regarded as a community. Some interesting findings also emerge at this point, such as unconventional slogans and the concept of "unbanking" preferred by credit unions. The whole approach leads to the conclusion that the size, type and reach of the financial institutions have a direct impact on the cultural values portrayed, and implicitly on the rhetoric and cultural encoding of their slogans.*

Keywords: *slogan; cultural dimensions; cultural values; banks; credit unions.*

JEL Classification: *G21; M37; Y80.*

1. General Introduction and Methodology

The purpose of this paper is to provide a cultural analysis of the financial slogans of US banks and (federal) credit unions based on the Hofstede model. We chose this approach to identify potential patterns of how cultural values permeate, in a financial context, what has been defined as "a particular discourse type, characterized by the syncretism of semiotic codes, by a dense intertextuality [...] and by a variety of discourse interactions" (Dumitru, 2009: 47-48). If language is an expression of culture (de Mooij, 2010), the slogan, as the quintessential form of advertising, with

its stereotype and predictable character (Dumitru, 2009) becomes fertile ground for an analysis of how Hofstede's cultural dimensions are reflected, against the backdrop of US cultural patterns in general.

Our sample is based on "The Biggest List of Financial Slogans Ever" (Pilcher, 2008) as well as on Wikipedia (List of credit unions in the United States, 2018), and contains a balanced number of both types of financial institutions, divided into "local" (having branches in no more than three US states) and "national" (having branches in more than three US states). Our list contains the slogans of 149 banks (132 local and 17 national) and 147 credit unions (144 local and 3 national). However, several issues had to be addressed. "The Biggest List of Financial Slogans Ever" is not limited to the US and has not been updated since 2008. Since then, some banks have changed their slogans, have closed, been acquired by or merged with others. Therefore, it was necessary to ensure that our list would be up-to-date by visiting the website of each financial institution.

We chose to focus on banks and credit unions because of several factors. First, both generally offer the same services and financial products. Given the size of the country, most of them are local, hence the above discrepancy in numbers. Second, there are distinctive elements that set them apart, with a direct impact on the results of our analysis. "The biggest difference is that banks function to generate profits for their shareholders, while credit unions operate as not-for-profit organizations designed to serve their members, who also are de facto owners." (Investopedia, 2018). Regardless of the amount of money in their accounts, credit union members participate in the union's affairs: they enjoy voting ability and can determine the board of directors and other decisions. A second difference is that credit unions are much smaller than most banks, operate from considerably fewer brick-and-mortar locations and mostly serve the interests of a region or group. Consequently, the rhetoric of their slogans often insists on the customers' importance, power and rights. We should also mention that our list includes credit unions as well as *federal* credit unions, the main difference being how each is insured and regulated.

Our analysis is based on Geert Hofstede's model, from which we deemed appropriate to keep only four cultural dimensions: Individualism (IDV) versus Collectivism (COL), Masculinity (MAS) versus Femininity (FEM), Strong Uncertainty Avoidance (SUA) versus Weak Uncertainty Avoidance (WUA) and Long-Term Orientation (LTO) versus Short-Term Orientation (STO). According to de Mooij & Hofstede (2010), "for appeals and motives reflected in advertising, generally the product category defines the most relevant dimensions" and it is our opinion that, for the specific case of financial slogans at least, Power Distance and Indulgence versus Restraint are not representative enough. Several reasons can be adduced to support this point of view. First, banks and (federal) credit unions are particular types of businesses due to the fact that their customers are both suppliers and users of resources. Given this form of "symbiosis", the idea of inequality or unequally distributed power has no relevance. Instead, many slogans convey a message of "empowerment" which increases individual importance, when not insisting on the "strength" of the financial institutions themselves, which can be associated with masculinity. Then, as financial services and products are immaterial (Paviot, 1995), unexciting, with vague attributes and of intangible quality, they "are usually not associated with high levels of consumer involvement, excitement, symbolism, or emotions" (Stevenson, 2012). Instead, financial slogans rely on human values, customer service and competence in an effort to humanize the banker: "La

communication bancaire doit axer son message sur le savoir-faire et prouver que l'on peut faire confiance aux banquiers. Elle doit procurer des symboles tangibles: faire que le service soit compris, avoir de la continuité et promettre ce qui est possible." / "Banking communication must focus on the know-how and prove that bankers can be trusted. It must provide tangible symbols: to make sure that the service is understood, to have continuity and to promise what is possible." (Paviot, 1995: 104)

2. Analysis and Results

A cultural analysis of US bank and (federal) credit union slogans should be set against the cultural characteristics of the country itself based on Hofstede's scores: IDV 91, MAS 62, UAI 46, LTO 26. The Institute for Training in Intercultural Management recommends that market be organized into "Six Culture Clusters", i.e. "groups of countries which share specific cultural characteristics based on Hofstede's 5-D Model" (Wursten & Fadrhonc, 2012). The U.S.A., together with the rest of the Anglo-Saxon countries, would belong to the "Contest Cluster", defined by low scores for power distance, uncertainty avoidance and long-term orientation, and by high scores for individualism and masculinity. The consequences are numerous and illustrative of the above-mentioned scores: competition, winning, success and risk-taking are positive. Believing overtly to be "the best" is not seen as bragging and comparative advertising is not avoided (Wursten & Fadrhonc, 2012). Other relevant characteristics for our research include: hype, persuasive rhetoric, obsession with change (new, better or different) (de Mooij, 2010: 86-87). But are the results of our analysis (shown in Figure 1) a match for this pattern?

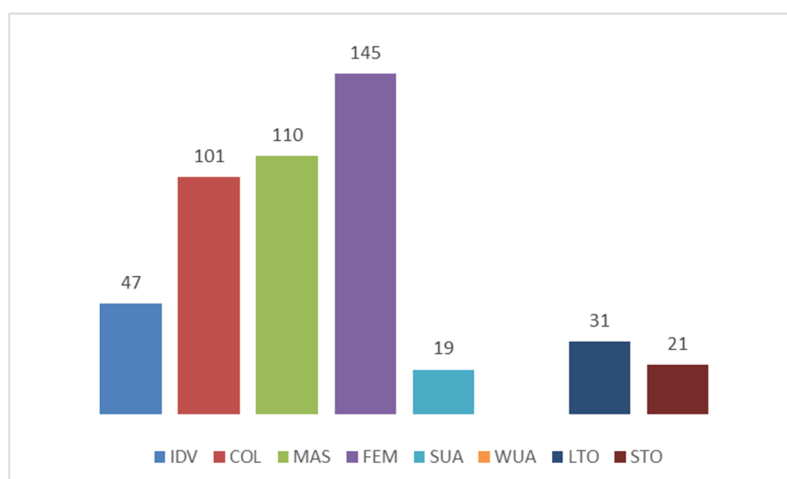


Figure 1. Distribution of cultural dimensions illustrated by the sampled slogans

It is obvious that our results contradict Hofstede's country scores, especially for those cultural dimensions that are clearly defined, i.e. individualism and masculinity. There are 101 appeals pertaining to collectivism, and only 47 pertaining to individualism (roughly 68% versus 32%). Illustrated by 110 appeals (~43%), masculinity clearly falls behind femininity, with 145 appeals (~57%). Moreover, while the country's UAI

score is relatively low (46), we were not able to identify any appeals that suggested weak uncertainty avoidance but could find 19 implying strong uncertainty avoidance. As for long-term orientation, it was identified in 31 slogans (~60%), while short-term orientation in 21 (~40%). The obvious pattern at this point is that the two cultural dimensions with the highest score are best represented, while the last two are least represented. However, the analysis of these results is best performed on a chart that distinguishes between “local” and “national” US banks and FCUs, as shown in Figure 2.

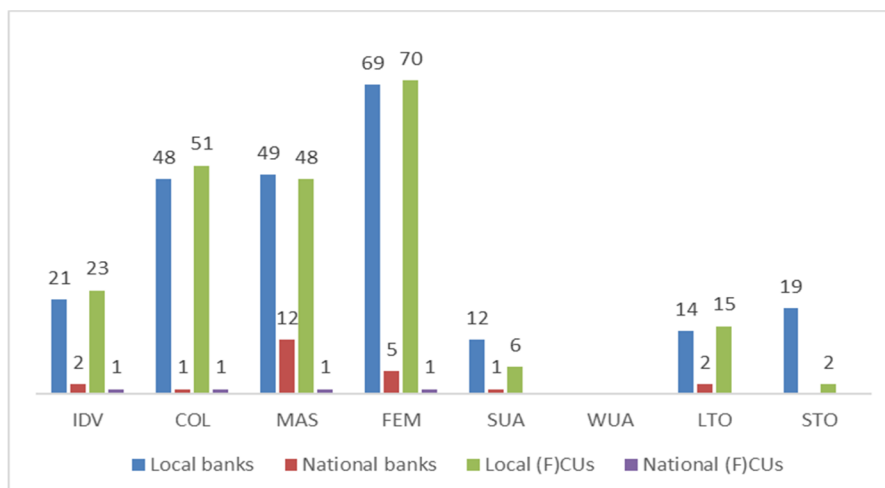


Figure 2. Distribution of cultural dimensions illustrated by the sampled slogans according to the type of financial institution

Given that (federal) credit unions are significantly smaller than banks, their presence at national level through branches is greatly limited (though some expand their reach through a national ATM network). We could not identify more than three national (F)CUs, versus seventeen national banks, and even so, the number is too small to be of serious consequence for the present study. Nevertheless, it is obvious from the chart that national banks follow the national cultural pattern: individualism is reflected by two slogans, whereas collectivism by one, and masculinity is more than twice as present as femininity. There are too few results for the other two cultural dimensions and it would be irrelevant to interpret them as “divergent”. As for national (F)CUs, only the first two cultural dimensions are represented in a balanced but statistically irrelevant manner.

However, the slogans of local banks and (F)CUs yield interesting results. Individualism and masculinity are, as expected, reasonably well represented, as many financial institutions “bank on” placing the customer first and appealing to his dreams of accomplishments and expectations of financial success, when not insisting on their own superiority and strength as opposed to the competition. However, the number of slogans that reflect their opposites surpasses these instances, as collectivism is reflected by ~70% of the slogans and femininity by ~60% for both types of financial institutions. The explanation for this lies in their limited reach. Being local, they serve an area limited – most of the time – to a single US state. This means interaction limited to, mostly, local customers, hence the idea of

familiarity, of loyalty and service to the community or of a mutually beneficial partnership, which create a special bond between the involved parties. As for strong uncertainty avoidance, it is suggested primarily because small local financial institutions might seem more vulnerable than the well-established main US banks ("Strong. Stable. Local. Personal." (1st Source Bank)). Long- and short-term orientation in slogans serve the same purpose, i.e. to increase consumer confidence, whether by hinting at lifetime service and a prosperous future or at a deep-rooted tradition by mentioning the year when the financial institution was founded: "The Bank that's Built to Last" (Pinnacle Bank); "Today. Tomorrow. For a lifetime." (Meridian Trust FCU); "Proudly Serving Nebraska since 1882" (Cornerstone Bank). We will now examine in-depth how the retained cultural dimensions are represented, by focusing on each of their two poles at a time, and on its combinations with others. Based on content analysis, our approach will also incorporate de Mooij's (2010: 221) categorization of advertising appeals according to the suggested dimension, as well as the findings of Saleem et. al. (2016: 227).

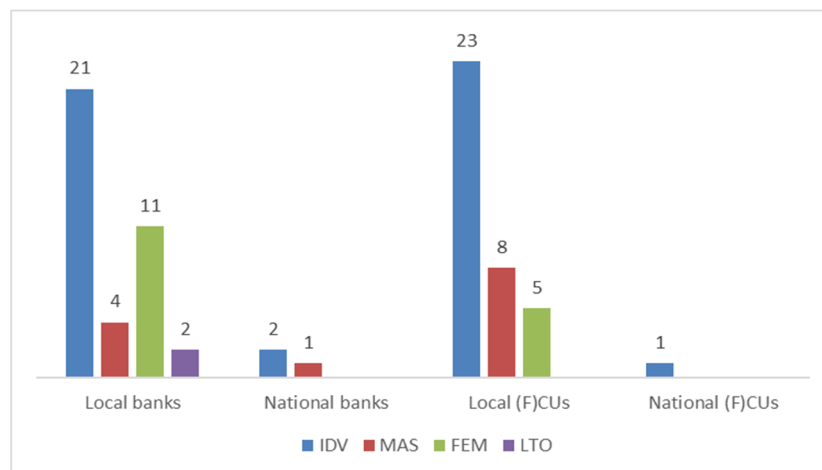


Figure 3. Representation of individualism in the sampled slogans

Although poorly represented by the slogans of national banks and overshadowed by collectivism, individualism is present in a balanced way in the slogans of local banks and (F)CUs. At a basic level, it is reflected by the direct manner in which the customer is addressed (*you/your*), and the message conveyed is that of *individual importance*, which in almost half the cases is enough without the presence of other cultural dimensions: "The Bank of You" (North Shore Bank); "LIVING UP TO YOU" (Webster Bank). Financial institutions then promise a consumer-centric experience, be it straightforwardly: "Our interest is *you*" (West Gate Bank); "Banking with one focus. You." (Citadel FCU), or indirectly: "It's not really about us." (Missouri Credit Union). Another effect is a fictitious transfer of ownership to the consumer, often presented as a lifetime privilege (LTO), and not only in the case of (F)CUs, where this is mostly true: "Your bank. For life." (Old National Bank); "...It's my bank." (Dean Bank); "We belong to you." (WESTconsin Credit Union). Slogans with individualistic and masculine characteristics appeal to the customers' dreams, desire for success and (financial) achievements: "What's Your Dream?" (Bank of Bartlett); "Your success is our bottom line." (Mission FCU); "Reach new heights" (AltaOne FCU); "Be Your Best

You" (Allegacy FCU). Sometimes, the idea of possession reinforces the customer's sense of power and self: "My card. My Life." (American Express), "Your time. Your money. Your future." (IBMSECU). More often, however, individualism combines with femininity, as local financial institutions are affiliation-oriented and aim to humanize their services: "Quality Banking With A... Personal Touch" (American Nation Bank). They purposely adopt a self-effacing position to put the customer first: "We Make Banking About You" (Abby Bank); "Everything We Do, We Do For You" (Dallas Credit Union). As such, the more masculine "centeredness" and "focus" now become "investment", "attentiveness" and "supportiveness": "Invested in you." (Exchange Bank); "Get the attention you deserve" (Bank of Westport), while "individual importance" turns to *personal worth*: "Where you matter" (Atlantic Financial FCU).

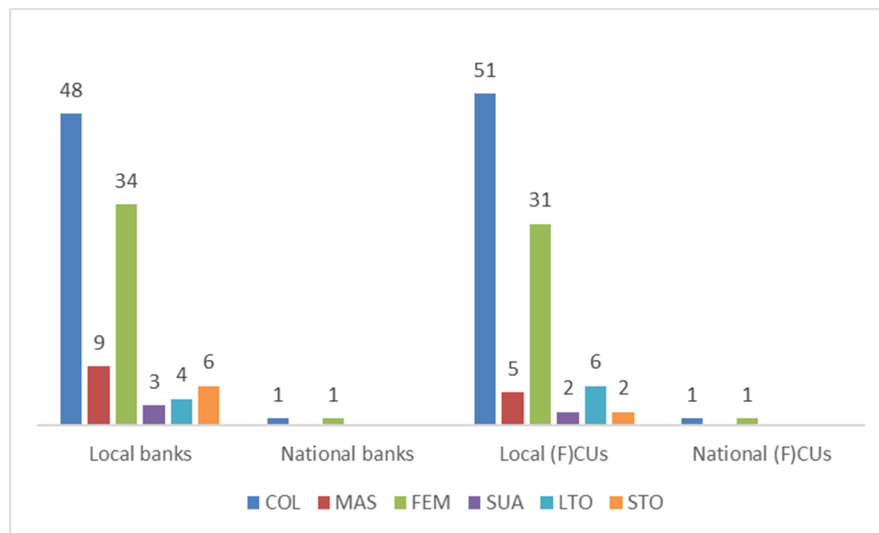


Figure 4. Representation of collectivism in the sampled slogans

The collectivist side of Hofstede's second cultural dimension is suggested by a little over one third of all sampled slogans. Given that most financial institutions are local, this is not surprising. Moreover, banks and (F)CUs alike share an almost equal number of appeals based on collectivist values. Most of the time, however, this is not the only cultural dimension present. Generally, the slogan aims to induce the ideas of *local presence*, *community*, *familiarity* or *partnership* – sometimes by mentioning the city or state served – and frequently employs the personal pronoun *we/us* to achieve a *sense of availability*: "Passionately Local Banking" (Call Federal Credit Union); "Come Home to NBC" (Nebraska Bank of Commerce); "Experience the power of Us" (Arizona Federal Credit Union); "The Power of WE." (Nusenda Credit Union). Very often, in (F)CU slogans, the idea of community is rendered via *membership*: "Membership Makes a Difference." (Mile High FCU); "Member banking is better banking" (TruMark Financial Credit Union). A subtle attempt to make customers join the "financial community" is to present it as open to all and sundry, as every member is treated equally and has the same privileges. The subliminal message is that such a financial institution is not elitist: "Banking for Everyone" (BELLCO CU & Schools Financial Credit Union); "Not just for firefighters"

(Firefighters Community Credit Union) but made up of individuals sharing a common goal by pooling their resources, hence the idea of *oneness*: "One State of Mind" (Arizona State Credit Union).

When collectivism and masculinity meet, the idea of *partnership* supersedes that of *community*, as the collaboration between the customer and the financial institution brings about *growth* and (*financial*) *success* regardless of the potential problems, for which *solutions* are found: "Strength in Partnership" (BBCN Bank); "Together. Let's Grow." (Hamilton Bank); "Partnering for Financial Success" (Price George's Community CU); "We'll Find A Way!" (Community First Credit Union).

As expected, though, most of the combinations include collectivism – now centered on the *community* or on the *home* instead of the *partnership* – and femininity, as the latter reinforces the human element. This is achieved through several strategies. At a lexical level, words like "community", "home", "(home)town", "members", "family", "people" are very frequent: "Community Minded. Just like you!" (Central Coast FCU); "Serving The Community We Call Home" (Security National Bank); "In town. In touch." (1st State Bank); "Making a Difference in Our Members' Lives" (American United FCU); "We Treat You Like Family" (Adams Community Bank); "Real People. Real Conversations." (Nicolet Bank). At a deeper level, this implies *reliability* and *trust*, *care* and *help/support*, *closeness* and *belonging*: "Everyone needs an anchor" (Camden National Bank); "With You at Every Phase" (Scient FCU); "Navigating Life. Together." (Maps Credit Union); "Belonging Never Felt Better" (Coast Central Credit Union). Apart from these aspects, there are others that make this combination of cultural dimensions particularly enriching. Many financial slogans based on both collectivist and feminine values are centered on the particularities of the service provided within the community, for the community: "Personalized Service From People You Trust" (William Penn Bank); "Common goals, UNCOMMON SERVICE." (Commonwealth Credit Union). Moreover, to humanize the financial institution, several slogans insist on the relationship forged between banker and customer: "Relationships beyond Banking" (Charter Oak Credit Union); "People Powered Banking" (SCE Federal Credit Union). Another way of achieving that is to subordinate the financial aspect to feminine values like "care" and "family": "We care about what you care about" (Bethpage FCU); "Your Financial Family" (SafeAmerica Credit Union).

As we have already discussed the slogans in which masculinity is secondary, we are now going to focus on the more numerous instances when it is the only one suggested. According to Hofstede's model, a predominantly masculine society or country, such as the USA, is ego oriented and displays a preference for money, things, success, achievements and conflict-solving through force or supremacy. These values reflect themselves abundantly in our list of slogans.

Figure 5 shows clearly that masculinity-based appeals are preferred by all types of financial institutions that are better represented: most national banks (12 out of 17), 37% of local banks and 33% of local (F)CUs. The patterns are easily discernible: the financial references are numerous, and words like "bank" and "banking" are the main vehicles for that. Then, one can quickly notice the preference for power words meant to induce the perception of supremacy, such as "better": "Leading the way with better banking" (Adams Bank & Trust); "Simply Better Banking" (Bank of Nebraska); "The Better Way to Bank" (1st Financial Federal Credit Union). Since all these financial institutions basically offer the same services, another strategy to achieve that is by attempting to stand out through the idea of "difference" or "uniqueness": "Bank

Different" (1st Security Bank); "Making a Real Difference" (Bay Federal Credit Union); "A unique concept in financial services" (Credit Union 1); "What a bank should be" (American State Bank). Other than these, there is a plethora of other attributes meant to reinforce the position of the financial institutions advertised. Many slogans do not shy away from using hyperbole, by presenting the banking experience as out of the ordinary and the bank as vastly superior to others: "Banking unusual" (Peoples Bank); "Uncommonly Good Banking" (San Francisco FCU); "Experience Banking in HyperDrive" (Hyperion Bank); "Twice the Bank" (Bank2). This goal is also achieved by reassuring customers as to their choice, almost always a "smart" one and, therefore, a hallmark of superiority: "The Smart Choice in Banking" (Carolina Bank); "A Smart Place to Bank" (Peach State FCU). Another tendency is to appeal to the customers' dreams, expectations and ambition to aim higher, either emotionally, by hinting that success is within the realms of possibility, or by vouching for it: "think possible" (NorStates Bank); "welcome to *what if*" (Westbury Bank); "Keep climbing" (Bank of Sierra); "Reach your peak!" (Wasatch Peaks Credit Union); "We got this." (Guaranty Bank).

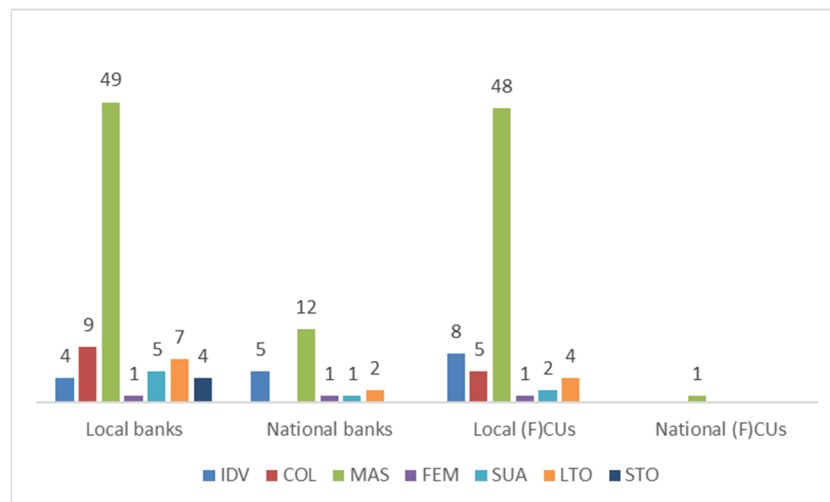


Figure 5. Representation of masculinity in the sampled slogans

As shown in Figure 6, femininity is the best represented cultural aspect, illustrated in 145 slogans. Apart from the combinations with individualism and especially collectivism, femininity is also represented independently. The values suggested revolve around *life*, *relationships*, *health* and *well-being*, to humanize the banking experience and to overshadow the financial aspect. First of all, the experience is meant to be perceived as "personal" instead of "transactional": "For Them it's Business. For Us it's Personal." (F&A FCU); "It's not just business. It's personal." (EH National Bank). In such an equation, the customers are prompted to look beyond finance: "There's More to Banking Than Money." (First Reliance Bank). Money is implicitly regarded as a simple means and life takes precedence over it: "Bank less. Life more." (Amplify Federal Credit Union); "Making Life Great" (Great Western Bank); "Live Brighter" (Redstone Federal Credit Union). Sometimes, this is implicit in surprising slogans such as "Got a Favorite Color?" (Norway Savings Bank). Some

slogans even associate a certain degree of healthiness with the options available, and potential customers are prompted to find “The healthy way to bank” (HealthCare Associates Credit Union) or to “Bank Healthier. Live Happier.” (Alive Credit Union). The financial institution is there to make things easy for them, hence the frequent idea of “simplicity”: “We’re simplifying banking.” (Lakeland Bank); “Life. Simplified.” (First Credit Union). There is a high level of commitment, measurable through outstanding service and care: “Service That Soars!” (Day Air Credit Union); “Big enough to serve, small enough to care.” (First US Community Credit Union); “The Bank That Cares” (Starbank).

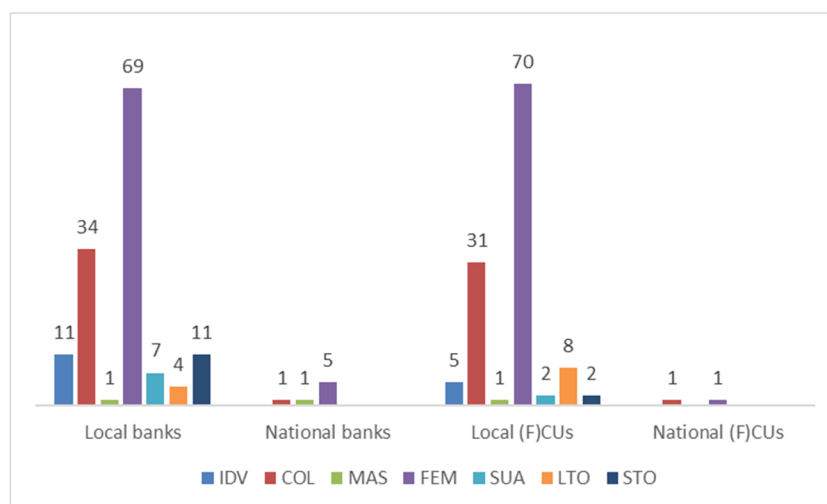


Figure 6. Representation of femininity in the sampled slogans

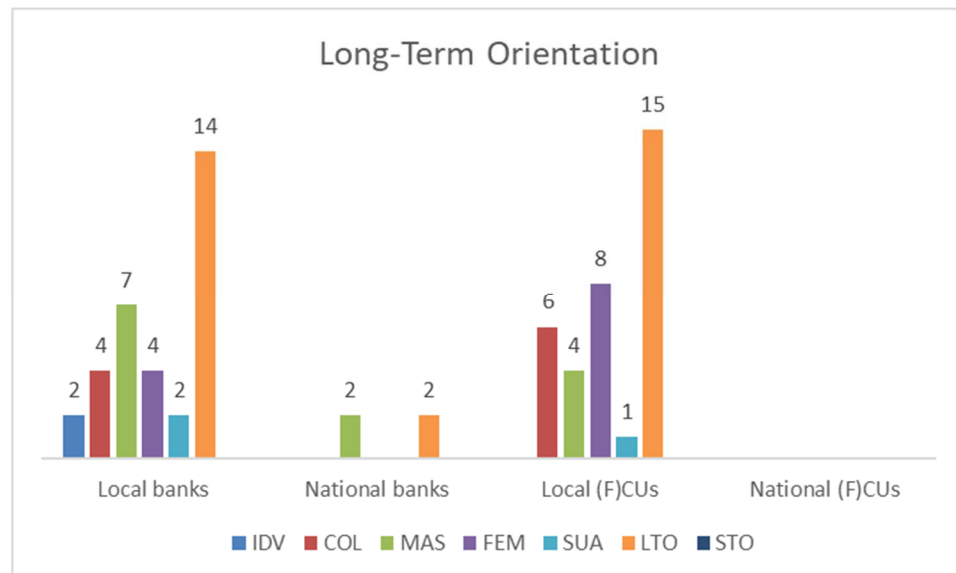
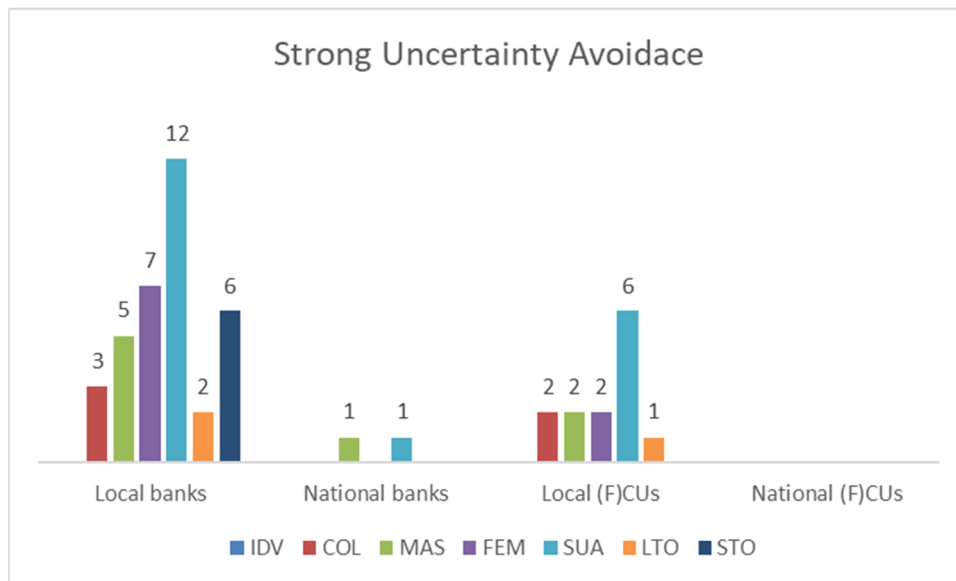
The most intriguing concept that can be related to femininity is that of “unbanking”. Used by (F)CUs, it “isn’t necessarily the opposite of “banking.” It’s a philosophical rejection of those (frustrating) things that often plague consumers’ banking experiences.” (Pilcher, 2010) Its purpose is therefore to present (F)CUs as uncomplicated, friendly and customer-oriented: “Unbank Yourself” (SkyOne FCU); “UNBANK with us” (Connex Credit Union); “HAPPY UN-BANKING” (People’s Trust FCU); “Have you unbanked today?” (PeoplesChoice Credit Union). However femininity is portrayed, the ultimate goal is to “Feel good about your bank” (Chelsea Groton) and even to “Love where you bank” (Marquette Bank).

We chose to group the last three cultural aspects because they have limited representation and can be covered in no more than a paragraph each.

In our list of slogans, strong uncertainty avoidance is never represented independently, but combines with all others, excepted individualism. It is implied in appeals focused on pointing out the financial institution’s strength and reliability, with no danger for the customers’ expectations: “Know your money will grow” (Beal Bank); “Strong Roots. Strong Branches.” (Southern Bank); “Safe & Sound & Ready to Serve” (Air Force FCU).

Long-term orientation combines with other aspects as well. It suggests mainly a future-oriented successful endeavor. The words used to support it are “future”, “tomorrow”, “lifetime”: “Where Your Future Shines” (Community Bank of Pleasant

Hill); “Tomorrow Starts Today” (BankMutual); “Your Lifetime Financial Partner” (CommonWealth One FCU); “Long Live Your Money” (Bank of Oklahoma).



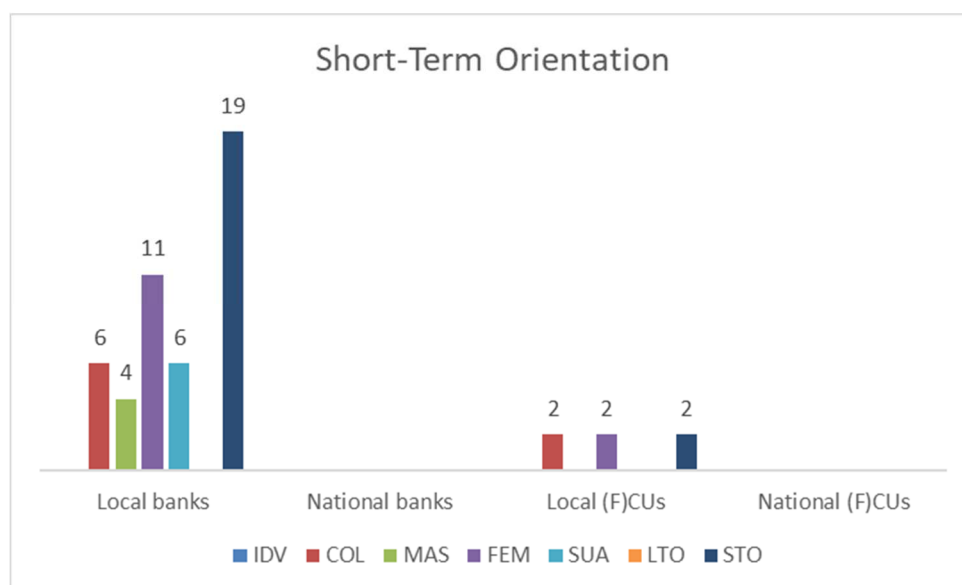


Figure 7. Representation of strong uncertainty avoidance, long- and short-term orientation in the sampled slogans

As for short-term orientation, as mentioned before, it focuses on tradition and insistence on the many years of service of the financial institution. As such, “tradition” is a frequently used word, together with the mention of the year of establishment: “A Tradition You Can Count On” (Farmers Bank); “Tradition you can trust” (The Cattle National Bank & Trust Co.); “Your bank since 1875” (Bank of Maine). Sometimes, the latter is the only one present: “Est. 1888” (1st Bank of Sea Isle City); “Since 1887” (Farmers National Bank).

3. In conclusion

The cultural analysis of the sampled slogans based on the Hofstede model yields interesting results. On the one hand it makes it possible to observe how cultural values represented by the retained dimensions permeate slogans in order to make the appeals more effective based on the target audience and the context of the financial institution (local versus national). The major cultural dimensions or aspects stand out clearly, as well as the way they combine with each other. On the other hand, the results show that the cultural patterns often contradict those of the country as a whole, albeit for identifiable reasons. It becomes obvious that the type, size and reach of the financial institution play a key role in how the slogan is culturally encoded.

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**SECTION: *MANAGEMENT, MARKETING,
ECONOMIC INFORMATICS AND CYBERNETICS***

BUSINESS STUDENTS' ATTITUDES TOWARD CORPORATE SOCIAL RESPONSIBILITY

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Abstract: Nowadays, more and more companies recognise the importance of social responsibility. This activity is not simply a marketing trick, but a real tool to achieve a company's goals. In this way firms can meet the requirements of customers, society, owners, employees, suppliers and any other stakeholders, in order to stay competitive in the long run. Therefore, all managers have to deal with the issue of corporate social responsibility. Why are business students' attitudes towards corporate social responsibility important? The answer is simple: they will become employees of a company, and later on can become managers in a company, which is why they have to become acquainted with this issue. Many international empirical research studies have tried to analyse business students' social sensitivity, and their attitude to social responsibility. Some researchers deal with the opinions of students in relation to the role of ethics education in the business curriculum. The aim of this study is to examine the social attitudes of students at the University of Debrecen Faculty of Economics and Business. The respondents had to fill in one part of the Haski-Leventhal questionnaire. They had to rank companies' potential stakeholders according to their importance and to evaluate 18 statements in a Likert-scale format. According to our students, the three most important leadership tasks in CSR are: to achieve customer satisfaction, to ensure fair and ethical treatment of employees and to achieve fair trade with suppliers. The ranking of stakeholders in their view begins with consumers, followed by workers and owners, while the least important for them are the government, shareholders, members of society and trade unions. The majority of respondents agreed on the following statements: "Good ethics is often good business"; "The overall effectiveness of a business can be determined to a great extent by the degree to which it is ethical and socially responsible" and "Business has a social responsibility beyond making profits". In our study, we also present significant differences between the averages.

Keywords: corporate social responsibility; business students; ethical perception; ethical attitudes.

JEL Classification: M14; I23.

1. Introduction

In our study, we seek to find out how university students studying on economics courses view social responsibility, and what kind of approach characterizes them in this respect. Different aspects of corporate responsibility must increasingly be considered at business organisations, beyond a simple profit orientation. This contributes to the company's reputation and even may have financial benefits. Within

the company, this task is mostly done by top managers together with the active participation of employees. That is why we think it is important to develop the social sensitivity of almost every employee, especially of those who are involved in economics courses, since their first career step will probably be to become an employee, and later to become a manager. In this case this issue is particularly important.

In our paper we first give an overview of the notion of social responsibility, and then present some empirical research connected to social responsibility that examines the attitudes of university students participating in economics courses. In the second part of our article, we introduce our own empirical research, which was conducted among students at the University of Debrecen.

2. Theoretical Background

Corporate Social Responsibility (CSR) appeared first in public thinking in the mid-1900s, and we can state that although many theoretical models and much empirical research deal with this topic, there is as yet no unified definition. In addition, it is not only that the terminology which is used is not universal, but that different names are used in practice, for example: corporate responsibility, stakeholder responsibility, corporate citizenship, sustainable development, fair trade, ethical consumerism, and so on. In the following, we will present some of the possible definitions that can be found in the literature.

According to the World Business Council for Sustainable Development (WBCSD), "Corporate social responsibility is the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large." (WBCSD 1999:6).

It is "a commitment to improve community well-being through discretionary business practices and contributions of corporate resources" (Kotler and Lee, 2005:16).

Porter and Kramer (2011:10) no longer refer to CSR, but to Corporate Shared Value, which "can be defined as policies and operating practices that enhance the competitiveness of a company while simultaneously advancing the economic and social conditions in the communities in which it operates. Shared value creation focuses on identifying and expanding the connections between societal and economic progress".

In Bowen's understanding, corporate social responsibility "refers to the obligations of businessmen to pursue those policies, to make those decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society" (Bowen, 1953:6).

Elkington approached this question through the concept of the so-called "Triple Bottom Line", and argued that the TBL expresses the fact that companies and other organisations simultaneously create or destroy economic, social and environmental value (Elkington, 2006:523-529).

It is clear from the above concepts, that there are common points among these definitions: CSR is the voluntary activity of companies or organizations which are willing to invest resources for that purpose, and most frequently it is the workers, the closer and wider communities, and the natural environment which receive most attention from among the various stakeholders.

In the literature, Carroll's model is quoted almost everywhere. He is the creator of CSR pyramid, which can be seen in Figure 1. (Carroll 1979 and 1991). Carroll argued that total corporate social responsibility was based on economic, legal, ethical and philanthropic responsibilities. He argued that these four components are not necessarily mutually exclusive, but rather represent a continuum in which corporate social responsibility can be examined.

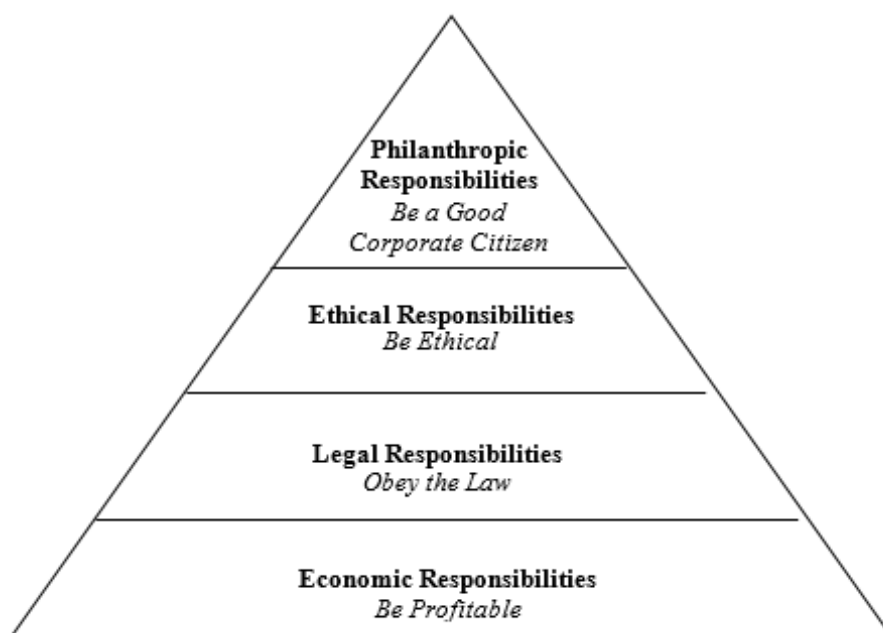


Figure 1: Carroll's CSR Pyramid

Source: Authors' own design based on Carroll (1975 and 1991)

Let us consider what the four levels mean (see also Figure 1):

An organization's economic responsibilities could include maximizing earnings per share, generating a high and consistent level of profitability, establishing and maintaining a strong competitive position and operating the firm at a high efficiency level (Carroll, 1991:40).

The legal responsibilities "are the laws and regulations that all firms are expected to abide by as they perform their daily functions. ... It is expected that the firm will be able to fulfil its economic responsibilities while following the legal requirements that have been established by society" (Carroll, 1991 in: Stanwick – Stanwick, 2009:51). Ethical responsibilities mean that the firm performs in a manner which meets or exceeds the expectations of both social and ethical norms. However, it is difficult to define ethical behaviour, while social and ethical norms change over time (Carroll, 1991 and Stanwick – Stanwick, 2009:52).

Philanthropic components of the pyramid could include ensuring that the firm performs in a manner that is consistent with the charitable and philanthropic expectations of society (for example: supporting cultural events, becoming involved in various charitable organizations through volunteering, providing financial and non-

financial assistance to educational institutions) (Carroll, 1991 in: Stanwick – Stanwick, 2009:52).

In addition to corporate social responsibility, it is worthwhile, and an interesting subject in itself, to deal with the ethical sensitivity of students participating in business courses, since when leaving their course they will work as employees or even executives of companies. Thus their social responsibility will be a relevant question. For this reason, we can find several international research studies that examine the ethical sensitivity of students attending business courses, as these results are likely to predict their ulterior ethical or unethical behaviour.

Let us now outline the results of some of these international empirical surveys.

3. Overview of International Empirical Research

In this chapter we discuss the empirical research which can be considered the antecedent of our own survey, which will be presented later.

Luthar and Karri (2005) asked 817 business students how they feel about the level of corporate social responsibility, and what they think about the ideal situation in this regard. In the respondents' opinion, there was a significant difference between the current and the desirable situation, with women expressing higher expectations in assessing the desirable situation, and school advancement improving the values of both the present and the desirable situations. At the same time, studying ethics previously did not affect the evaluation of the current situation, but increased sensitivity to the desirable situation. We must also highlight the finding of the study that ethical courses in education enhanced the ethical sensitivity of men to a greater extent than women.

Sleeper (2006) analysed students' opinions about what role knowledge about social responsibility in education. 851 economics students who were very interested in, and sensitized to, social responsibility participated in the research. For this reason, the authors suggested that decision makers should involve subjects related to this field of knowledge in the school curriculum.

Haski-Leventhal conducted two research studies to understand the attitudes towards socially responsibility of students on business courses, one in 2011 and another two years later. His research in 2013 focused on how the CSR pyramid drawn up by Carroll is built up among university students. Based on his research results, the pyramid can be represented from the bottom to the top, as follows: the ethical responsibility of the company, followed by the legal and then the economic responsibility, and finally the philanthropic responsibility at the top of the pyramid. We can see that the students' and Carroll's orders (importance) of responsibilities do not match. The respondents in this research also considered that it is necessary to teach "responsible management". We will revert to the research of Haski-Leventhal in later chapters, because our own empirical research is based on his work.

Kaifi et al. (2014) reviewed the opinions of 184 bachelor economics students, examining gender, cultural and generational differences. In the analysed sample the following significant differences were found: women's social sensitivity is stronger than men's; students from "high-context" cultures are more sensitive than those from other cultures; Y generation members are more sensitive than members of the X generation.

Alonso-Almeida and his team studied Spanish students (2015). Their research, conducted with 535 respondents, gave similar results: the sensitivity of women to social responsibility was stronger than that of men and first year students were more sensitive compared to second and third year students. After reviewing some of the research results, let us now present the methodology and results of our own research.

4. Methodology

After introducing the theoretical background and international empirical research, we will now discuss how we designed and conducted our own survey, a process which began in 2018. In this paper we will present the results of the statistical analysis carried out on the questionnaires we have received back so far.

Our examination is based on Haski-Leventhal's study (2013). We used one part of his questionnaire to assess the attitudes of students at the University of Debrecen Faculty of Economics and Business relating to social responsibility. Our research is still in progress, and the questionnaires are coming back continuously. At the moment we have a 35-element sample. We hope that we will be able to repeat this analysis later on a larger sample.

Participants in the study were asked to evaluate the statements - questions 20, 21 and 23 in the original Haski-Leventhal questionnaire - on a 6-grade Likert scale. These questions and statements are included in the tables in the results section.

The questionnaires were completed by students on the Bachelor's in Business Administration and Management programme and on the vocational course in tertiary education in the same field of study. The sample size is 35 persons, of which 13 are men (37%) and 22 women (63%). There are 8 individuals (23%) in the sample from the bachelor level and 25 from the vocational course level (71%). 2 students (6%) did not respond to this question. 16 (46%) of the respondents had not yet studied ethics, while 19 (54%) had.

The sample is too small and not representative, so our findings are not generalizable, but it is suitable for drawing attention to the shortcomings we have at this stage of the research. As a result, we will be able to correct these mistakes and define in which direction it is worth continuing our analysis.

Based on the available data, we analysed means and standard deviations, and tried to find significant differences, using independent two sample t-tests, between different variables (gender, year of studies, the existence or lack of previous ethical studies).

5. Results

Students' attitudes towards responsible management and CSR were evaluated with three questions. The results are presented in Tables 1, 2 and 3. Haski-Leventhal's research (2013), carried out among MBA students served as a model in our analysis. The first question was the following: "If you were in a position of power in a business organisation how important would the following issues be for you?" Students were given a list of 11 items and were asked to rate them on a 6-digit Likert scale (where 1 means "Not at all important" and 6 means "Very important"). Table 1 shows how students ranked each item according to its level of perceived importance. The last column contains means and standard deviations.

Table 1: Importance of aspects to business leaders (%)

Aspects	1	2	3	4	5	6	Mean (Std. Deviation)
Consumer satisfaction	0.0	0.0	0.0	5.7	20.0	74.3	5.69 (0.58)
Treating employees fairly and ethically	0.0	0.0	0.0	14.3	25.7	60.0	5.46 (0.74)
The economy and financial markets	0.0	0.0	2.9	14.3	45.7	34.3	5.15 (0.78)
Making a profit for shareholders	0.0	2.9	8.6	34.3	42.9	11.4	4.51 (0.92)
Trading fairly with suppliers	0.0	0.0	5.7	17.1	34.3	42.9	5.14 (0.91)
Engaging with various stakeholders	0.0	0.0	5.7	37.1	37.1	20.0	4.71 (0.86)
Developing the community we operate in	0.0	5.7	11.4	37.1	31.4	14.3	4.37 (1.06)
Local and national peace and the reduction of violence	2.9	5.7	11.4	25.7	34.3	17.1	4.38 (1.26)
Environmental concerns and climate change	0.0	0.0	17.1	25.7	37.1	20.0	4.6 (1.01)
Employer-supported volunteering and giving	0.0	8.6	17.1	28.6	37.1	8.6	4.2 (1.11)
Philanthropy and donating to charity	0.0	0.0	11.4	45.7	34.3	8.6	4.4 (0.81)

Source: Authors' own research results

Table 1 demonstrates that according to 74.3% of the respondents, "Consumer satisfaction" is very important for business leaders. This is the aspect where the mean of the responses is the highest, at 5.69. "Treating employees fairly and ethically" was considered very important by 60.0%. In the research by Haski-Leventhal (2013) these two elements also received the highest score, the first 74.8% and the second 73.8%. There was a difference between our and Haski-Leventhal's results in the third place in the ranking. "Fair Trade with the Suppliers" ranked third with 42.9% in our sample, but only 5th with 39.1% in Haski-Leventhal's research.

The second question asked students to evaluate the importance of 10 potential stakeholders for a business organization on a 6-digit Likert scale from 1 (Not at all important) to 6 (Absolutely essential). Table 2 shows how students ranked each item's perceived importance. The results show that the most important stakeholders for a company according to the students are "Consumers". Both the mean of the answers (5.57) and the ratio of students who considered this group of stakeholders "Absolutely important" (62.9%) are the highest. The second most important stakeholders are "Employees" (mean 54.3%, i.e. this group is absolutely important for 54.3%) followed by "Owners" (mean 40.0%) These results are in line with Haski-Leventhal's research results. In our research the least important stakeholders were – in terms of their means - "Unions" (3.51), "Governments" (3.66), and "Members of the general community" (3.89).

The third question included seven statements on social responsibility. Students were asked to indicate how strongly they agreed with them, from 1 (Strongly disagree) to 6 (Strongly agree). Table 3 shows the ratio of agreement at levels 5 and 6. In this

table we also present statements where we found significant differences between the responses of male and female students, between first and third year students and between students who had already studied ethics and those who had not.

Table 2: Stakeholder importance (%)

Stakeholders	1	2	3	4	5	6	Mean (Std. Deviation)
Consumers	0.0	0.0	0.0	5.7	31.4	62.9	5.57 (0.61)
Employees	0.0	0.0	0.0	0.0	45.7	54.3	5.54 (0.51)
Owners	0.0	0.0	0.0	8.6	51.4	40.0	5.31 (0.63)
Shareholders	0.0	2.9	14.3	34.3	42.9	5.7	4.34 (0.91)
Suppliers	0.0	0.0	2.9	40.0	40.0	14.3	4.68 (0.77)
The environment	0.0	2.9	11.4	22.9	40.0	22.9	4.69 (1.05)
Governments	2.9	14.3	25.7	34.3	17.1	5.7	3.66 (1.19)
Employees' families	0.0	0.0	17.1	48.6	17.1	17.1	4.34 (0.97)
Members of the general community	5.7	8.6	14.3	40.0	25.7	5.7	3.89 (1.23)
Unions	8.6	5.7	34.3	28.6	22.9	0.0	3.51 (1.17)

Source: Authors' own research results

The students who took part in this study agreed most with the statement that "Good ethics is often good business" (48% agree and strongly agree with this statement). 46% of respondents believe that "The overall effectiveness of a business can be determined to a great extent by the degree to which it is ethical and socially responsible", and 43% argue that "Business has a social responsibility beyond making profits". These results are much lower than those in Haski-Leventhal's (2013) research. Unlike MBA students, our students did not agree too strongly with the statements that "Social responsibility and profitability can be compatible", and that "Companies should do a lot more for society and the environment".

We found significant differences between male and female respondents, and between first and third year students at two different statements.

25% of the respondents who had previously participated in an ethics course agreed with the last statement ("The most important concern for a firm is making a profit, even if it means bending or breaking the rules") and significantly more (33%) agreed with it among those who had not taken an ethics course. 23% of men, and 32% of women agreed with the sentence that "Social responsibility and profitability can be compatible".

Table 3: CSR attitudes (% of agreement)

Statements	Agree	Strongly agree	Gender	Year of study	Ethical studies
Social responsibility and profitability can be compatible	23	6		**	
Good ethics is often good business	37	11			
Business has a social responsibility beyond making profits	37	6			
Business ethics and social responsibility are critical to the survival of a business enterprise	26	9			
Companies should do a lot more for society and the environment	11	17	*		
The overall effectiveness of a business can be determined to a great extent by the degree to which it is ethical and socially responsible	40	6			
The most important concern for a firm is making a profit, even if it means bending or breaking the rules	17	11			

N=35; * significant at the .05 level ** significant at the .10 level

Source: Authors' own research results

Reviewing the above analysis, we can conclude that our students, similar to foreign students, are interested in social responsibility. The difference between the opinions of the international and Hungarian students was most evident in the evaluation of the statements of Table 3: in Haski-Leventhal's sample 40% of the respondents agreed and 20-40% strongly agreed with all statements except the last one; however, in our sample these ratios are lower. Hungarian students were better divided by these statements and, based on their responses we can say that they do not consider the marked CSR approaches to be particularly important.

6. In conclusion

In this study, we revealed the interest and attitude of university students participating in economic and business courses towards social responsibility. Our results show that, similarly to the results of international studies, economics students in Debrecen are also interested in this topic, but they are less sensitive than their foreign counterparts. However, our research is still in its first stage, as is indicated by the small sample size. The collection of questionnaires is still continuing, so we hope that the expansion of the database will give more differentiated results. We are also planning further research on this topic, using a more detailed questionnaire and composing more complex questions in order to gain a more precise picture of student's social responsibility.

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CASE STUDY: SOCIAL RESPONSABILITY OF HYDRO-QUÉBEC

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Abstract: *This case study presents the social responsibility practices of the Canadian company Hydro Quebec. It is a state enterprise, working in the field of hydroelectricity production and distribution. Thanks to its substantial profit and its participation in the economy of the province of Quebec, this company represents one of the largest organizations in Canada. As presented in the text, it firstly demonstrates efficient management, its profits amounting to billions of dollars. She also acts philanthropically, supporting various causes, including cultural, environmental, socio-economic, scientific and educational ones. She is also concerned about ensuring a good climate and working conditions for her employees. Employee training is also a point of interest. Being governed by strict laws and regulations, Hydro-Québec has an ethic code whose compliance is closely followed. The case was funded by the UQAT University Pedagogy Fund and it address at business management students, enrolled in corporate social responsibility courses.*

Keywords: *corporation social responsibility; hydropower; philanthropy; efficient management; involvement and respect of the community.*

JEL Classification: M12.

1. The company history

Hydro-Québec is a State corporation, meaning that its sole shareholder is the Government of Quebec (Canada), so its profits benefit all Quebecers. The company specializes and stands out worldwide through the production, transmission and distribution of electricity. The production of this resource, now essential for everyday life, is done in a clean and renewable way through hydroelectricity (water energy). The company currently has four divisions: Hydro-Québec Production, Hydro-Québec TransÉnergie, Hydro-Québec Distribution and Hydro-Québec Equipments and Shared Services and the James Bay Energy Corporation. The parent company is located in Montreal and, since June 3, 2015, is chaired by Mr. Éric Martel. Approximately 20,000 employees are employed to operate this large institution in some 150 institutions. Hydro-Québec's mission is as follows:

"The purpose of the State Corporation, pursuant to the Hydro Quebec Act, is to provide energy and to work in the field of energy research and promotion, processing and energy economy, as well as in any related or energy related field. It must, in particular, ensure the provision of heritage electricity as established by the Act respecting the Régie de l'énergie and

which corresponds to a maximum annual reference volume of 165 TWh for the Québec market "(Hydro-Québec, 1996-2016).

Hydro-Québec has been supplying electricity to Quebec, but also to the province of Ontario and the north of the United States for more than 50 years. The company first appeared in 1944 as the Quebec government passed a new law requiring the three companies Montreal Light, Heat and Power Company Consolidated to sell their assets to the Hydroelectric Commission of Quebec (Hydro-Québec). In 1963, the second phase of nationalization of electricity took place when the Commission purchased almost all Quebec electricity distributors through a takeover bid (OPA). In these twenty years, this company becomes the most important in the field of electrical energy and is now an indispensable player in the Quebec economy. In 1975, as Hydro-Québec will have to live with various Aboriginal communities in some of its projects, the James Bay and Northern Quebec Agreement is signed. It "establishes the rights and obligations of the Cree and Inuit, and other parties involved, and the terms and conditions that must govern the development of the resources of the James Bay Territory" (Hydro-Québec, 1996-2016). It was in 2002 that the Peace of the Braves agreement was signed. This historic agreement is between the Government of Quebec and the Grand Council of the Cree and gives the green light to the development of Eastmain-1 and Eastmain-1-A to James Bay with partial diversion of the Rupert River. The Québec government is committed to involving the aboriginal communities in its projects and paying them a considerable sum of \$ 4 billion. As for them, the Crees have committed to abandoning any lawsuit against the Quebec government. Finally, 2012 is the beginning of a new shift towards electric vehicles when Hydro-Québec inaugurates its first network of public charging stations in the metropolitan areas of Quebec City and Montreal.

It is thanks to its numerous large-scale projects such as Gentilly 1 (1961), Gentilly 2, the complex La Grande (1971), Eastmain-1, Eastmain-1A (2012), Robert-Bourassa, Beauharnois and Manic-5 that the company is the largest producer of hydroelectricity in the world today. Hydro-Québec currently has 62 hydroelectric generating stations, but the installation of all these infrastructures was not without opposition and without compromise for the organization.

2. The context of the operations of the state corporation

Being governed by the Hydro-Québec Act, a document marking the operations of the State corporation, in addition to specifying the mission and rules of governance, Hydro-Québec is working in a highly regulated environment. From the outset, the number of directors who sit on the Board of Directors is set by the Act. They take action in eight different committees, including governance and ethics, an aspect on which the organization pays particular attention.

Article 18 of the Code of Ethics and Professional Conduct provides that a new officer, director or controller of the State Corporation has thirty days to transmit a statement containing the identification and various details concerning the companies in which he holds more than 10% of the capital. He must also identify the companies in which he may be involved or have a certain interest (debt, option, mortgage, financial or commercial advantage) and any other situation that could put him in a conflict of interest, real or apparent. Also, this is a recurring procedure, which must be

completed on January 31 of each year. In addition, a declaration of knowledge and understanding of the elements is provided according to the code.

Employees refer to the document Code of Conduct: Ethics at the Heart of Our Decisions. This document aims to frame and optimize the application of the ethical principles adopted by the company in 1988. The document proves to be visually interesting and easy to consult for an employee, despite the wide range of information found there. Thierry Vandal, the President and Chief Executive Officer at the time of its adoption, states in his signature:

"Our Code of Conduct is the cornerstone on which our behaviors and actions are based in all circumstances and reflects the commitment of each of us to our customers, suppliers and other partners. It is up to us to familiarize ourselves with its principles and rules and to take them personally into account in everything we do. » (Thierry Vandal)

The predominance of the code of conduct is therefore specified in the introduction to the company. Indeed, the content of the code of conduct turns out to prevail over any policy, directive or any form of supervision of the company. The expectation of respect for the principle of sound management in the absence of established rules is clarified, which helps to communicate the ethical practices and deep values of the state corporation to newcomers, or to remind them of long time. The individual responsibility of each employee to become aware of it and to ensure its application is also emphasized, which reinforces the credibility of the message that the company is trying to pass through its President and Chief Executive Officer.

3. Investments that benefit Quebecers

In order to ensure its constant development and to produce more for less, Hydro-Québec has invested more in many niches, some of which it has expertise and some not. During 2014, in order to further develop its niche expertise, the state company invested \$ 15.4 million in its technology innovation section, \$ 4.5 million in its technical support section and 0.6 million for technology watch. These amounts add up to \$ 20.6 million invested in research and development. It has invested close to \$ 776 million for network growth and \$ 826 million for the improvement of its distribution network, which totals \$ 1.6 billion. It has also invested 1.2 billion in the improvement and development of its production equipment. In order to constantly improve its service, the company has also invested an additional 915 million to improve its customer service in its distribution section. This last investment was made in addition to and outside of Hydro-Québec's overall energy efficiency plan.

These research and development efforts have enabled the company to offer electricity to citizens at a modest price. Montreal is the city with the lowest cost of electricity consumption per 1000 kW in North America.

4. A company involved in its community

From the outset, Hydro-Québec has adopted a policy to ensure its social role. This policy is called Our Social Role and complements the State Corporation's Donor and Sponsorship Policy. It provides that the company must participate in social and cultural dynamism and social well-being by supporting activities in various social

areas such as education, health and humanitarian actions. The company is also involved in cultural, environmental, socio-economic, scientific, educational and sports events. The budget allocated to the various community financing activities is evaluated each year during the preparation of the annual business plan. This budget is generally equivalent to 1% of the net profits on the continuing operations of the company.

On the cultural front, Hydro-Québec supports Quebec culture so that it continues and joins provincial cultural events. In 2014, the company donated \$ 140,000 to Culture pour tous to organize Culture Day, an event held in 350 communities across Quebec to awaken the public to local and provincial culture. The museum sector also receives support through specific exhibitions and school and family activities. Overall, the role of the State corporation is major for Quebec. In 2015, in all investment areas, Hydro-Québec supported nearly 1,000 organizations, including the Estuaire Symphonic Orchestra, the Université de Sherbrooke, the Dr Julien Foundation, the Québec Games and the Expo -Science in several regions, for a total of \$ 16.8 million.

Hydro-Québec is also involved in environmental matters. The company's major contribution to the environment is made through the Hydro-Québec Foundation for the Environment. The company is also involved in promoting activities and awareness-raising projects in relation to its development activities, as well as public awareness of taking action for the environment and sustainable development. The company regularly publishes documents indicating the actions taken in this direction. A good example of these actions took place in 2014. Indeed, the organization proceeded to the planting of trees and shrubs at the site of the old dam of Saint-Narcisse and returned to the original state the site of the old dam Baude, Mauricie, after its dismantling. Currently, a study on the impact of work on birds is underway. Hydro Quebec has also financed environmental organizations and financially offset the impacts of its projects. Among other things, Hydro-Québec paid \$ 10 million to the Nordic Development Fund. This contribution has been paid annually since 2012 and protects the northern territories of Quebec. In addition, the Hydro-Québec Foundation for the Environment (FHQE) paid \$ 393,000 to finance twelve projects. Hydro-Québec contributed \$ 800,000 to the Ouranos consortium, a group of 400 scientists and professionals of all kinds. The Hydro Quebec Foundation for the Environment contributed to the preservation of 12 floral and wildlife species that were considered threatened.

Finally, Hydro-Québec's mission in its policy on its social role is to encourage its employees to become involved in community or charity activities. This measure is a testament to the scope of the organization's implications that go far beyond fulfilling its duty, but which also encourages its employees to participate in the well-being of society.

5. The collaboration, an essential variable for Hydro-Québec projects

A good example of integration of the population into Hydro-Québec's projects is the public consultation that took place in 2015 for the Langlois-Vaudreuil Dorion project. Between 2001 and 2014, the Vaudreuil-Soulanges Regional County Municipality (RCM) experienced a 43% increase in electricity consumption. In addition, industrial and commercial development also experienced significant growth, forcing Hydro-Québec to review the sector's power grid. To meet the new requirements, a new 120

kV transmission line needs to be built, an existing line needs to be rebuilt to support greater capacity, and Ericsson needs to be powered through a new connection. The commissioning of these new lines is announced for 2017.

The project has three important sections. The first section connecting the Cedars substation to the Dorion substation is an extension of an existing line over a length of 7 km. This extension will have the advantage of grouping all the lines in the same corridor. This avoids the establishment of several corridors, which involves clearing and cutting wood. Nature will be less affected with this route.

The second section starts from the Dorion substation and connects it to the Vaudreuil-Soulanges substation. This line reuses the right of way of the existing corridor over the 8.5 km of the route. It is in fact the dismantling of the existing line, whose pylons are made of wood, and the rebuilding of a steel structure that improves the capacity of the circuit. Using the existing right-of-way allows the company to use the easement rights already in place. In addition, this measure once again makes it possible to avoid deforestation and excavation work.

The last segment is used to connect the Ericsson company to the distribution network. It is a 2.5 km line that will cross Highway 40 to the airfield post near the company's underground connection.

Hydro-Québec has set up an information program so that the project is better accepted and citizens find answers to their questions. State company officials worked with representatives of the affected municipalities to gather feedback and expectations on the project. Information meetings were organized with the citizens to inform them of the issues and implications of the new route. The exercise, held in spring 2015, helped improve the route so that it better meets the needs and demands of the population. Citizens even have the opportunity to contact the Info-projects line, where agents are inclined to answer any questions or concerns.

6. Training to keep the organization efficient

To enable employees to reach their full potential, the company has devoted resources to the development of its employees. In fact, Hydro-Québec spent 3% of its payroll on human resource development. This budget is used in training programs of all kinds. One of the very important aspects in the work of this company is the safety of the workers on the various places of intervention. In order to comply with the standards, the 6th edition of the Safety Code was presented to 13,649 employees in all trades and to technicians and contractors doing business with the state company.

Knowledge development is also a priority for maximizing the full potential of workers. They develop professionally through self-training during which they will learn by gaining experience in the field. Companion programs are also offered to employees who are less experienced in certain tasks in order to accelerate their learning period thanks to the contribution of an experienced colleague. Hydro-Québec also frequently conducts knowledge mapping to determine the level of training and specialization of its employees. To make life easier for employees, training is given in a location close to where they live and work, where possible.

To contribute to the well-being of employees, it is also essential for them to integrate well when they enter the company. Since 2011, 4,493 employees have retired, increasing the need for new talent at the heart of the organization. Hydro-Québec promotes learning and empowerment through action. Once again, the support of

apprentices by experienced and recognized employees in their field greatly accelerates the training speed and standardizes the application of the methods and standards put in place by the company. This, at the same time, saves costs associated with training and error correction caused by inexperienced workers.

With regard to working conditions, Hydro-Québec is committed to providing competitive, fair and competitive working conditions. These conditions must also allow the employee flexibility so that he can reconcile other aspects of his life with work to meet his needs and have a good quality of life.

A healthy work environment with no evidence of discrimination and violence, no abuse of power and no harassment is provided by the organization. Employees are made aware of the effects of this type of behavior and procedures have been put in place to avoid or denounce such misconduct, in particular through a confidential telephone line for complaints or internet service. An awareness campaign was conducted with 3,400 employees in 2014 to prevent them from harassment and to promote healthy relationships between workers.

7. Innovation: a priority

Hydro-Québec continues to innovate over the years in the implementation of its new projects. In 1985, the company set up the Integrated Enhancement Program (IVP) to work with municipalities affected by its hydroelectric transportation projects to offset residual impacts on their territory. This program aims to improve the living environment of citizens by investing 1% of the total cost of the project in municipal infrastructure. The investments made are based on a few conditions and criteria. First, the eligible population is a municipality, a borough, an RCM or a community affected by a hydroelectric project. Then, the improvement offered by Hydro-Québec must be of common interest for the inhabitants of the municipality, it must be carried out on public property and in no case be a nuisance for the community.

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To complete the case, the authors used a multitude of documents presented on the Hydro Quebec website, in Canadian newspapers and in other media. Also, they had access to information from employees working for this company.

THE ASPECTS OF CHANGING NATURE IN ORGANIZATION MANAGEMENT OF GERMAN CLASSIC PROFESSIONAL ORCHESTRAS

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Abstract: *The purpose of this paper is to present the specific aspects that characterize classic professional orchestras (symphony, chamber music, radio and opera orchestras) as performing art organizations, the sound organism and the organization per se. In a society of rapid changes, it is intriguing to find out how one of the oldest art performing organizations, like the classical professional orchestra, is managed in the contemporary world, which are the innovative management methods that ensure the classical orchestra's success, what are the elements that have an influence upon the performance of the orchestra, or upon the level of satisfaction of the multiple stakeholders. As part of an extended research, this empirical paper represents the first part of our research and it is based upon qualitative research methods, interviews and observation of the existing situation in German orchestras. Germany offers an impressive variety of examples, since the country holds the largest number of classical professional orchestras, namely 131 out of 560 worldwide. Consequently, the emphasis is upon German orchestras (Kulturochester), where the value of cultural heritage and the responsibility vis-à-vis the cultural musical heritage acquired in hundreds of years of musical creation play a very important role. We will include the type of symphony orchestras, radio, opera and chamber music orchestras, and we will exclude universities' orchestras, project orchestras and amateurs' orchestras. We will obtain our data through archival access, observation, interview and later in the study, throughout the survey research method. At first, we analyzed and investigated two orchestras: one chamber and one symphony orchestra. The second part will contain the analysis of a radio and an opera (theatre) orchestra. Does the volatile environment generate innovations in the systems of management, informational, recruiting, promotion and reward changes, and in its functions of planning, organizing, leading and controlling? What strategies and best management practices are used by orchestras' managers to maximize the satisfaction of multiple stakeholders?*

Keywords: organization; management; German orchestras; sound organism; change.

JEL Classification: L82; M10; L32.

1. Introduction

The classic orchestra is one of the oldest type of organizations. It represents a group of people motivated by their talent, inclination and love for music, united by the desire to express their work through sound and interpretation knowledge acquired in

dozens of years, thousands and thousands of hours of practice, characterized by perseverance and dedication (Adrians, 2017). The etymology of the word *orchestra* comes from Greek language, but over the time it has suffered various meaning changes. In ancient Greek language, it means the semi-circular space/place between the stage (where actors were performing) and the public/audience. The space was designed for choir. In Rome, the place of the choir and implicitly the space called by the Greeks "orchestra", was reserved for the audience of the high society. In the baroque times, the orchestra did not exceed 25 members, and was composed exclusively of string instruments plus harpsichord. The classic orchestra, close to its current version, was born in the second half of the eighteenth century, during the classical musical period. The definitive role in forming the orchestra belongs to Joseph Haydn. Over the last 200 years, instruments were added to enrich with their unique timbre, the sound of the orchestra, and to meet the requirements of the musical composition. A professional classic orchestra, plays complex music, liturgical and secular in character, from a printed score format, where the author (composer) is known, or at least its pseudonym, from early Renaissance (circa 1400) until today.

The professional classic orchestra (symphony, radio, opera or chamber orchestra) falls under the category of organizational fields that, "in the aggregate, constitute a recognized area of institutional life: key suppliers, resource and product consumers, regulatory agencies, and other organizations that produce similar services and products" (DiMaggio and Powell, 1983). The suppliers are the musicians and the management, the public is the service/product consumer, and the State is the regulatory agency.

"The organizational culture is the set of informal shared values, norms, standards of behavior, and expectations that influence the ways which individuals, teams, and groups interact with one another and cooperate to achieve company goals" (Dyck and Neubert, 2008). An art performing organization, such as the orchestra, has very distinguished characteristics that describe the organizational culture, starting with the goals, namely: high-quality musical service, to nurture the public's desire for culture, for music, to be ambassadors of and for their community, to preserve of musical heritage. Highly trained musicians, hours of productive individual and group practice in order to achieve technical and interpretative excellency, disciplined conduct and obedience to the conductor's indications, alongside with competent managers who can understand, support and promote the pool of talents that a symphony orchestra has to offer, and in the same time foster personal and group expectations, can contribute to the achievement of the organization's goals.

There are always 2 interdependent centers of power on stage (Khodyakow, 2014): the musicians and the conductor. Musicians are looking for artistic freedom, but due to the rigidity of the musical score and format, it is very hard to find it. Since the conductor represents the leader figure and determines the goal and the methods how to reach it (Boerner&Krause, 2001), the musicians find increased level of satisfaction if the conductor treats them with respect, empathy, trust, if they feel empowered, if they don't get stopped all the time, if they are allowed to correct themselves. The artistic performance of the orchestra is influenced by a good collaboration between the conductor and the musicians.

The organization's performance is the result of its management exercises through the organizational structure, and through the *sound organism*, the orchestra per se. Professional musicians, members of a classical orchestra, always face the challenge

of maintaining the balance between the legacy format of the artistic act, and its adaptation to the rapidly changing requirements and expectations of stakeholders in nowadays society (Heinrichs, 2006). “The soft-skills will elevate us above automation...and the place where humans excel and algorithms can’t duplicate” (Yang, 2017) is the case of an organization, like the professional classical orchestra. In a world where robots replace people’s work in many fields and areas and the competition for satisfying the leisure time is fierce, we consider that the artistic/cultural manifestations, as diverse and different as possible, need both, the artists’ professionalism and excellency, and management’s craftsmanship that lies behind the artistic act. The arguments being that it is not enough to have a large and well-trained orchestra (the “sound organism”), with talented musicians, to be successful and to satisfy all stakeholders, internal and external. It cannot be just about a “perpetuum-mobile” *composer-performer-audience*, without any interference (Rosu, 2014). Our assumptions are that it is requiring a good knowledge and awareness of all stakeholders’ needs and requirements and all the elements that play a key role in planning, organizing, leading and delivering the artistic event, while achieving planned goals. Does the volatile environment generate innovations in the systems of management, informational, recruiting, promotion and reward changes, and in its functions of planning, organizing, leading and controlling?

2. Literature review

“General acceptance of the notion regarding an orchestra involves a group of instrumentalists who play together, whose original and essential nucleus plays string instruments, while the others play on various instruments of brass and percussion” (Petrovici, 2010). A group of musicians who play together a variety of instruments, following a written and printed score, under the baton of a conductor, represent the “sound organism” (German term – Klangkorpus) of an organization who is providing a musical service.

The organization’s nucleus, the core of the organization is represented by the “*the sound organism*” – the orchestra with its musicians. “There is no other activity in which forty, eighty or one hundred twenty people are doing the same thing together, with a precision of a tenth of a second, starting and finishing together” (Turkov, 1998). The musicians, members of an orchestra, strictly adhere to the strategy represented by the repertoire, the score that was composed many years ago, even hundreds of years ago. Although the orchestra is a rigid structure in which all members are characterized by discipline and strictly follow a well-established scenario (musical score), creativity is the result of the unitary activity of the entire sound organism. “Inside this Klangkorpus (germ Klang = sound, Klangkorpus = sound-body) stretches a network of valences in all directions, through which only certain and specific qualities make navigation possible. The only one who preserves his importance and his place is the conductor, the instrumentalists being forced to plunge to the role the composer gives them, a role which constantly change” (Petrovici, 2010). Coordinating and conducting the musical interpretation of this sound organism named orchestra, is provided by the conductor. Facing the conductor, the orchestra is arranged in semicircle with the string instruments in the first rows, from left to right, behind them are the woodwinds and brass instruments, and in the last rows, the percussion and instruments with very strong and loud sound. The structure of the orchestra is a pyramidal one: at the pinnacle is the conductor,

then, next in line of authority and responsibility are the concertmaster and section-leaders (first-chair or principal players for each instrument), and the strict hierarchy disseminates to the rest of the orchestra members. Even when two musicians share a note stand, the lower ranked person always turns the pages to a higher ranked person (Flanagan, 2012).

“Professional (symphony) orchestras are defined as ensembles whose primary mission is public performance of those orchestral works generally considered to fall within the standard symphonic repertoire and whose members are compensated nontrivially for their services” (Allmendinger and Hackman, 1996). The mission of the professional symphony orchestra lies in the offering of high quality performance, high quality music service, systematically, during an entire season. Like the mission of an organization, which remains unchanged, this attribute is also reflected in the symphony orchestra’s mission, from its establishment to the present times.

How does innovation and best practices in today’s orchestra management reflect the stakeholders’ satisfaction? “We define innovation as the successful implementation of creative ideas within an organization” (Amabile, Conti, Coon, Lazenby, & Herron, 1996). If we refer to Germany, which has the largest number of professional orchestras, namely 131, there is a constant concern for innovation. The management department of German *Kulturorchester* embraces the awareness of a much-needed pro-active attitude for the organization’s success (Schneiderbraun, 2012). These include: permanently tracking the assertion of the role played by a symphony orchestra in nowadays life, aiming for the constant confirmation of its importance, its high quality and valuable service provided by the musicians, motivating the musicians by proving secure and long term jobs, stable incomes, strengthening the existence of the symphony orchestra in today’s society, reaffirming the role of close interdisciplinary relationship with the educational system, creating good working conditions, meeting the public’s expectations by hiring highly trained, virtuous, professional musicians, offering modern concert halls, best acoustic, for all categories of audience, to maximize the satisfaction of all stakeholders.

3. Methodology and Case Studies

The orchestra, as an entity, consists of front stage members, the employees who come in direct contact with the public, such as: the sound organism – the musicians, the manager (when he addresses to the audience, the musicians, the contractors, or the financiers), the ticket office personnel, the wardrobe personnel, etc., and the backstage office, such as accountants, stage engineers, librarians, archivists, etc.) Except musicians, members of the orchestra, other members of the organization do not create direct value. The direct performance value is the result of the orchestra’s performance. The input elements are: the human resources (the artistic staff of the symphony orchestra, the administrative and auxiliary staff), financial resources (financial support comes largely from the State, but also from private donors, individuals or organizations / foundations), material resources (scores, instruments, desks, sound systems, etc.). The service resulted, payed and consumed by the public represents the output element. The value of the musical service offered by a symphony orchestra to the public is given by: the talent, experience and professionalism of the musicians, a good team-work inside the ensemble, the quality of the conductor and the guest soloists, the quality of the musical repertoire selected,

the concert venue (the concert hall) and, last but not least, the quality of the management that lies behind the orchestra's performance.

The German orchestras' management structure varies, depending on the type of orchestra (theatre/opera, philharmonic, radio or chamber music orchestra), on the legal form and the partnership with concert halls/venues. If we refer to symphony orchestra, the complexity of the management depends on the size of the orchestra; it is different to manage an orchestra of 12 musicians, rather than 185 musicians, Gewandhausorchester Leipzig, the largest orchestra of the world. Commonly, managers have the same functions and attributions: planning the budget, the concerts, the tours, etc., organizing concerts, rehearsals, tours, recordings, deciding the hiring on long or short term working contract of a musician, or the invitation of a soloist/conductor, hiring musicians from other orchestras for a particular concert, networking, negotiation with guest conductors, guest soloists, agents, advertisers, local authorities, sponsors, donors, controlling the results obtained, the success or failure, the positive outcome, or the mistakes, correcting the decisions, etc.

According to Schmidt-Ott, the organizational structure of a German orchestra, the management is represented by the orchestra's manager and the artistic director in strong bond with public relation and press release office. The general music director, who is also the principal conductor is the chief of the orchestra, top of the artistic board, and it is assisted by the first chair violinist (concert maestro) and the section-leaders to whom the *tutti*s subordinate. The sales manager is responsible for subscriptions and tickets office. When an orchestra has its own concert hall, there is also a department of stage technicians: stage, sound, light engineers and driver. The orchestra's office and music secretary are responsible for finding/inviting guest musicians, "Aushilfen" (musicians who are hired for a particular concert), finding, borrowing or buying the music score, planning the rehearsals, buying and ensuring the instruments, etc. The administration board is responsible for the sound organism's human resources. The accounting/bookkeeping and the general administration office is subordinated to the administration board.

If the orchestra is part of an organization, such as an opera, it will be managed by an orchestra director. The overall responsibility for the orchestra belongs to the general manager (Intendant), the principal conductor and the general music director. The theatre orchestra besides opera, operetta, musicals, performs also a series of symphonic concerts in a season.

In case of symphony orchestras, the situation is clearer since it involves a certain activity and the orchestra has its own concert hall. The symphony orchestra's general manager (Intendant) shares the economic, organizational and artistic responsibility with the principal conductor or general music director. The next in line of authority are the concertmaster (first-chair), the section-leaders, orchestra's board, public relations, tutti - the orchestra musicians, administrative board with the human resources department, accounting, distribution, library, archives, stage engineer, sound engineer, light engineer, driver, etc. In Germany, not all orchestras have their own concert hall, and they must perform in various locations. If the orchestra has its own concert hall, such as the Berliner Philharmonic, besides managing the sound organism's activity, all the services and organizational structures of the concert hall, and/or rental to other partners, are added to the general manager's attributions. The orchestra with a concert hall has greater independence and greater opportunities for development: priority for planning its own series of concerts, booking dates before other orchestras, freedom to organize chamber music concerts or recitals, special

concerts, charities or concerts for attracting sponsors, possibility of organizing workshops, additional proceeds from rental and event organization, etc. In fact, this is considered an ideal situation for European orchestras, and it is valid for all large and medium concert orchestras in the United States of America.

Most German orchestras are directly integrated into the budget and the administration structures of the state as autonomous administrations. The general manager represents the head of organization, but with a relatively limited manoeuvring space. The so-called autonomous administration can open ways for its managers towards sovereignty and more flexible budget management. The legal forms of communal enterprise, Limited Liability Company and foundation lead to more space for manoeuvre, for action and organization. However, this depends on the concrete development of internal structures, the internal regulation, the influence of the supervisory committees, the long-term nature of subsidy contracts and, of course, the personal qualification of the persons involved (Mertens, 2010).

The radio orchestras (with the exception of the ROC Berlin and WR Big Band) are incorporated in the structures of their broadcasting stations. In many cases, the radio stations do not have a proper concert hall, and then the orchestra's activity is performed in rented concert halls. This negative aspect is blurred by the fact that the radio orchestras have their own source of advertising.

In this first part of our research, we have decided to analyze and investigate two different orchestras, one chamber and one symphony orchestra. On one hand, we have the structure of the chamber orchestra's organization according to its size: 12 musicians (two concert-maestros), one general manager, one deputy director with artistic director and press relations attributes, one principal conductor, one person for marketing department, one librarian, and an image counsellor. On the other hand, we have the symphony orchestra with a large number of musicians, namely 110, including 3 concert-maestros, 16 section-leaders, 13 soloists, and conducted by a principal conductor – *Chefdirigent*, who is also the general music director – *Generalmusikdirektor*. The structure of this organization is vaster: on top of the hierarchy is the general manager (Intendant) and the principal conductor, followed by manager assistant (1), administration director (1), orchestra manager (1), music secretary (1), artistic board (5), personnel representatives (3), administration board (3), public relations office (1), orchestra office (3), librarian (1), internship management students (3), concert pedagogy advisor (1).

First step was to attend the concerts performed by the two orchestras, then to require permission for face-to-face interviews. Two interviews were conducted: one in English, and one in German. Both interviews were open, non-structure, based on an open discussion. We were looking to find answers to the question: are there any changes/innovations in the leading function of management due to the changing environment?

There were more similarities than differences, although we were investigating two distinct types of orchestra: a small size chamber orchestra of 12 musicians without its own concert hall, and a large philharmonic orchestra of 110 musicians, with its own concert hall. Both orchestras share the same mission, like other professional classical orchestras: providing a high quality musical service/concert of a standard symphonic repertoire, in a high-quality performance to the client/public, systematically, during an entire season. The preoccupations are generally the same, disregard of the size, or typology of the orchestra: preserving, cultivating and

promoting the values of cultural-musical-historical heritage, and searching, identifying and capitalizing on new ways of presenting music.

Both managers shared the same concern regarding the future of the orchestra in times of changes, namely: "danger comes when a symphony orchestra thinks it is enough to play symphonic music well, but in our opinion, in the long run, it will not be enough...we must offer new reasons for being funded, showing our achievements from other perspectives", H. K. "We, as an orchestra, have to get out in the world and not to expect, like in the past, that people will come to us", M. G.

The challenge comes from the change of German society, which leads to finding innovative ways to face this unfamiliar environment. The two managers are aiming for getting the orchestra out of their "ivory towers", and "without pointing the finger, new roads, new paths and ways must be found to show and to present classical music", M. G. Older people are the loyal customers and subscribers. In the middle of Europe and being a country with great musical tradition that lasted over hundreds of years, the native Germans understand and feel in a certain way vis-à-vis the symphonic music. Lately, the decreasing of the interest for symphonic music which, of course, varies from one state to another, due to multiculturalism, is a fact. "Multiculturalism is not a phenomenon that can be stopped and is, in our case, seen as a threat, and not as an opportunity" H. K.

Finding new customers, new public, a new market, new stakeholders, attracting younger audience, can be considered a top priority on the manager's list. "If today we have a great successful night with a specific symphony program, maybe tomorrow the society will change so radical that it will no longer need us...or not in this format because the audience has changed. I care a lot about what we can do new! We always need to look for innovation because a new, successful product is generated by the innovation process. Stagnation leads to failure: success is the enemy of innovation" H. K.

There was an unanimously response from both managers regarding the musicians' reaction: "lack of flexibility among musicians, dormant attitude, especially from permanent members of a symphony orchestra, maybe because of the rigidity of the structure that characterizes the activity of a symphony orchestra", affirms M. G., on one hand. Their reaction towards innovative ways of presenting the service provided by the traditional symphony orchestra varies from one musician to another. The philharmonic orchestra manager noticed that: "the musicians from Eastern Europe who came to Germany and who had to make sacrifices, to prove their competence, to fight for their job, to be paid justly, are willing to adapt more easily, to be more spontaneous, more flexible".

The musicians' participation in the decision process is very important for both managers. New formats or new concepts of the musical act cannot be presented without orchestra members to agree. By their participation depends the success of the concert. There is less tolerance and acceptance when it comes to exiting their comfort zone, like playing in schools, for example, or concerts for families with very young children. School projects, for example, are not easy for orchestra members, they are not in their comfort zone, it is very noisy, they are worried and concerned about the safety of the instruments, but, as most of them have children, the musicians showed more tolerance.

According to the employment contract TVK (*Tarifvertrag für die Musiker in Kulturochester*) the permanent members of symphony orchestras are very well represented and protected. The managers don't have a lot of manoeuvre space. The

work contracts specify in a detailed and precise manner: how long the rehearsals should be, for example, without room for interpretation. If most members of the chamber orchestra have a second job, as teachers at the School of Music, or professors at the University of Arts, not the same can be said about the members of the philharmonic orchestra. Since the chamber orchestra is a small size orchestra, the management department adapts the rehearsal schedule according to the school schedule, to meet the expectations and needs of its musicians.

To answer to the questions: *what options I have with this orchestra, what do I want to achieve under the current conditions*, there is a different typology of manager, then it was 20 years ago. The management department needs to have endurance, to engage in long talks, to bring many arguments, to motivate the musicians' intention. The emphasis is on the stimulation of the musicians' creativity, fantasy, and imagination for a greater openness to such projects. "I think the most important thing for preparing a future manager of a symphony orchestra, is to acquire the knowledge about how I talk to musicians, or like a musician, to understand how musicians think, how to gain their trust, how to make them accept certain program. From the authoritarian and rigid reactions, indifferently to the wishes of the orchestra, the current situation is quite different. There are only a few who still share this attitude, very few who think so, and if as conductors you can still allow yourself to be authoritarian, as a manager, such inflexibility is incompatible with the position. The deputy manager of the chamber orchestra says that, although a certain distance between employer and employee must exist, so that everyone can do their job, "today's managers seek for an agreement between the two structures, and for the empowerment of the musicians, for increasing their work satisfaction: *"Denk doch mit"* (think with us) and if you have an idea, share it with us, and we will see how we can put it into practice" M. G. The management department aims to offer the musicians job satisfaction on one hand, and a safe future, on the other hand.

An important feature of today's managers is to have a good instinct for finding a business partner, for knowing or even anticipating what expectations he/she has, how you can work together, and regardless of the specialization written on the degree, to obtained very good results. Very important are the "skills acquired over the lifetime, especially in this position", affirms manager H. K.

"Commitment to the profession, rather than commitment to the organization, is expected to have the strongest effect on employee creativity" (Van Rossenberg, 2011). The musicians, members of a symphony orchestra, develop over the years of practicing an instrument how to be committed to the profession, even before becoming professional musicians. Without this kind of loyalty, it is impossible to build a career as a professional musician. How these innovations are communicated to the staff can contribute to the embracement or rejection of the new ideas. More ensembles within a large orchestra can be considered a new practice and a new concept in today's management. This practice raises the question: if we divide the orchestra into several ensembles would the orchestra become more effective than the standard organization? The Berlin Philharmonic Orchestra uses about 35 different ensembles, each with its own concerts inside and outside of the organization. The musicians are enjoying the freedom of artistic experimentation beyond the program of the standard concert season. The Berlin Philharmonic Orchestra is an organization based on democratic principles, in which every musician has a voice. We consider that we are dealing with an organizational innovation that is worth investigating it and finding out if this practice is used by other

German symphony orchestras. We intend to conduct our future field research to obtain results on this matter.

4. Conclusions

Although, in the German culture “music is the art of the German soul” (“Musik ist Kunst der deutsche Seele”), there is a constant concern for the find of innovative methods to ensure the organization’s positive performance. These include: permanently tracking the assertion of the role played by a professional orchestra in nowadays life, aiming for the constant confirmation of its importance, its high quality and valuable service provided by the musicians, motivating the musicians by proving secure and long term jobs, stable incomes, strengthening the existence of the symphony orchestra in today’s society, reaffirming the role of close interdisciplinary relationship with the educational system, creating good working conditions, meeting the public’s expectations by hiring highly trained, virtuous, professional musicians, offering modern concert halls, best acoustic, for all categories of audience, to maximize the satisfaction of all stakeholders.

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TOTAL QUALITY MANAGEMENT AND THE COLLABORATIVE ADHOCRACY

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Abstract: *The interest in quality improvement originally covered the field of production, later expanding on processes and to organizational management (TQM). This level distinguishes an active concern of integrating the human factor and interferes in the process of quality improvement. A strong participatory organizational culture (unambiguous and lacking theoretical discourse) enables the transfer of responsibility at every level and the implantation of qualitative approach to each active employee of the organization. Considering the current environmental conditions and the continuous process of change, organizational culture becomes the only possibility to ensure the tradition of teamwork and a constant transmission of quality-based mentality. An adhocracy oriented organizational culture, flexible and creative at the same time, is often used as a method of implementing TQM in the current context of economic and social dynamism. Simultaneously, the emphasis on collaboration allows interaction within the organization, coordination of activities and connection to the environment. The paper proposes a model of collaborative adhocracy that combines the advantages of the adhocracy oriented model developed by Mintzberg, with the one regarding collaborative leadership designed by Greiner. The suggested model uses a flagship type entity, through which adhocracy oriented social network transfers its knowledge, technology, solutions, engaging collaborative actions. There are listed the advantages of using such a model.*

Keywords: *TQM; organization; culture; collaborative adhocracy; change; flagship.*

JEL Classification: *D23; D21; L20; M14.*

1. Introduction

Large organizations are trying to build an intelligent framework on which basis thereafter to form a powerful and motivating quality system, from which to set their goals and strategies. It is a difficult step, since even the concept of quality is a complex and dynamic one, definitions usually revealing only one aspect of the problem, while the terminology seems to be poor in reflecting the comprehensive and also hardly describable meaning.

Switching focus from quality to total quality and then TQM, has distracted the attention of managers from technical issues, standards and quality norms, to the top level of management, in 1992 Kohler defining quality mainly as the "degree of the excellent". In this case, however, diffused definition creates some uncertainty, "perhaps even confusion, because this superlative is wanted to be analyzed based on specific criteria. However, these criteria can be very numerous, thus the concept starts to be understood as a continuous concern to succeed in economic terms, also to become known on the market, but equally to secure human dignity, respect, to

ensure what the concept of industrial democracy requires in an imperative manner" (Crevoisier, 1999).

In this regard, various authors begin to assess the quality taking into account the human factor. Warmotte (1991) expressed the importance of participatory quality, in which the entire organization and its organizational structures must be involved. Kelada (1991), on the other hand, points out that "the human aspect, emotions, psychology and philosophy are the first necessary aspect for the success of total quality". Soon, the organizational culture becomes a factor influencing the qualitative approach of the organization, clearly leaving its mark in how the organization intends to act, in order to implement quality in terms of economic efficiency. The essential characteristic of postmodern society – fragmentarism - which considers the harmony of the whole as being a tyranny and visualizing personal promotion as more important than discipline and order - slows the effort to strengthen organizational culture and creates new management challenges in the spirit of cultural adhesion and recognition of common goals.

On the other hand, the instability of the current environment enforces organizations to pursue continuous efforts and to apply flexible strategies for adapting to rapid, sometimes even convulsive changes in society, given that is desirable "to reach a level of excellence based on procedural performance" (Olaru et al, 2010). It becomes obvious that modifying the instruments or adding new methods are not sufficient to ensure appropriate quality. Research addressing quality through surveys and polls, usually describe the results as generating local effect and limitation in time, the findings failing to provide stable and definitive landmarks. This creates the need for new approaches in this demarche, in which the two previously mentioned aspects - organizational culture and change – to be properly understood and quality to be addressed according to what society wants and the organization can provide. Magne (1991) concluded that "if the objective of quality consists in a better adaptation to change, then the capitalization of human creativity and their active participation allows achieving this goal." Finding a model that allows a correct understanding of the qualitative approach in the postmodern period, where the human factor accepts and understands change, acting consistently, yet dynamically in this spirit, can lead to the achievement of clear results which would allow the organization to maintain a successful position on the market.

2. Organizational culture in the age of changes

2.1 The concept of organizational culture

Organizational culture has become an important topic for analyzing economic performance since the 80s of last century. Defining organizational culture was conducted from multiple perspectives.

Anthropological perspective defines organizational culture as "a set of beliefs and values" (Davis, 1984), "a system of postulates that a particular group invents" (Schein, 1984), a comprehensive ensemble, integrated into an original form of elements that belong to different cultural modules" (Lambert and Hainard, 1989) or "a successful residue" (Schein, 1985). Martin and Siehl (1983) consider the organizational culture as a "set of forces that keep the organization united through patterns of shared meanings", while Tichy (1982) defines organizational culture as a "a normative glue" and Gilmer (1964) considers the organizational characteristics that allow differentiation between organizations. Organizational culture is also

considered to be "a coherent and dominant set of shared values" (Peters and Waterman, 1982) or a "mental programming" (Hofstede), a "mood" (Nicolaescu, 2004) or a "container" (Jonson, Scholes, 1993) and "active life phenomenon" by which people create their life (Morgan, 1979). Deshpande and Wester (1989) define organizational culture as "a pattern of shared values and beliefs that helps individuals to understand the functioning of the organization". Later, in 1992, Schein reviewed the main elements proposed in previous definitions, claiming that an interdependence of them is essential.

Another perspective addresses the organizational culture in a close relationship with national and managerial elements. In this regard, Bollinger and Hofstede (1987) highlight the impact of national and even regional impact of culture upon organizational practices, even if globalization or market unification is increasingly prominent.

"Culture is a collective mental programming; it is a part of our conditioning, which we share with other members of our nation, of our region, of our group" (Bollinger and Hofstede, 1987). The authors continue the investigations also highlighting the role of management, namely the management style in developing organizational culture. Thus they detect four cultural dimensions, determined by the existing organizational management style: hierarchical distance, uncertainty control, individualism / collectivism and masculinity / femininity.

Addressing the role of management, Mintzberg (1979) listed seven basic configurations for the existing organizations: entrepreneurial (with a direct and centralized structure), mechanical (with well-established and standardized hierarchical structures and pronounced bureaucratic environment), professional (with decentralized hierarchical structures), divisional (a headquarter coordinates several secondary units), innovative (adhocracy, with a dynamic environment, adapted to changes, the power of decision focusing only in the required moments), missionary (in which case their management only supports the organizational culture of the organization with clearly defined rules).

On the other hand, Greiner announces 10 phases of evolution in the life of any organization, "which lead to behavioural changes and hence to different strategic planning for the organization. There are five ascending phases (creative, targeted, delegation, coordinated and collaborative) and five downward phases, specific for crisis (leadership, autonomy, control, bureaucracy, disbelief)" (Bretcu, 2012).

The market perspective grouped another large number of analyses regarding organizational culture. They are specific to the 90s, when the whole economy benefits from marketing knowledge and focuses on its vision about success. Thus, Narver and Slater (1990) define organizational culture as the one "that creates the most effective and efficient behavior needed for creation of higher values necessary for the client and therefore a continuous performance and superior business activity". Homburg and Ptlesse (2000), develop a model with four components: values, rules of orientation towards market, artefacts of orientation towards market and market-oriented behaviors, all of which determine the performance of the organization, with consequences for market dynamism.

Deshpande and Farley (1998) tried a measurement and evaluation of the impact generated by market-oriented organizational culture, while Jaworski and Kohli (1993) focus on the organizational performance deriving from this construct.

Another important category of analysis regarding organizational culture addresses the construct from procedural perspective. This aims an analysis of phases,

mechanisms and regularities that characterize the organizational culture. Thus, Marcoulides and Heck (1993) focus on the analysis of the way in which organizational culture deals with the concept of performance and optimizes it. For this, they define important dimensions in terms of the socio-cultural system, collective organizational values and beliefs, which, under the influence of variables such as work duties, organizational climate, or individual beliefs, manifest influence over the organizational performance.

Sainssulieu (1990) proposes a model that considers the nature of organizational culture. He examines three factors: *the culture transmitted* - norms, values, patterns of behavior, *the culture appropriated* - learning new practices, and *the culture stated* - the direction or path to be followed and which emerges in a clear and obvious way to everyone in the organization. The model emphasizes the idea that organizational culture cannot be changed just by a simple effort of will. "As far as the cultural consequences that occur are deep, the modernization effort of each enterprise undertakes specific cultural and institutional realities, new, in terms of training, staff representation, mission, management status, freedom of expression."

Denison (2005) recognizes 4 factors – mission, involvement, consistency and adaptability, while Hay Group (Flannery, Hofrichter and Platten, 1996) identifies 4 cultural - operational dimensions (technological, client-cantered, flexibility and validity) around which would be developed a number of 4 cultural prototypes (process, based on time, network and functional).

The model developed by Ritchie (2000) focuses on internalizing organizational culture, achieving congruence between organizational values and individual ones, respectively. While individual values take into account a person's behavior, organizational values include its expectations for the way individuals react and act in the organization. If these two issues interfere, the consequences are positive for both sides. It creates an attachment to the organization, it appears a sense of satisfaction at work, while individual skills are better capitalized.

One last approach to organizational culture introduces the concept of "relationship". It is specific for the last years of the latest century, highlighting characteristics of organizational culture in terms of its relationship with the technological, personnel, marketing environment, in the attempt to identify the operating principles of organizational culture. The approach opposes so-called corporate culture, according to which the individual is not considered an actor of the organizational culture constitution, but an entity manipulated by the environment that the organization has created under the attention to the management. "The management – employees dichotomy, as mentioned by Pages and al (1979) under the concept of *denunciation of alienation* is avoided by a relational approach, where both individuals and groups make a transfer of cultural norms and thus interfere in the creation, promotion and strengthening of the organizational culture" (Crevoisier, 1999).

It is an approach that partially coincides with the postmodern concept. This characterizes the present time by fragmentarism, consumerism and a strong deconstruction. In the context of uniqueness and originality accepted by this way of life, the human being has a system of norms and values that potentiate in a positive or negative way the organizational expansion, as congruence of attitudes through which it expresses itself and at the same time mobilize to create and satisfy society. Postmodernism is a phenomenon of interdisciplinary and interrelated interpretations, the order or discipline being replaced with personal opinion, reason why the analysis of results are often atomized and declared as simple potentialities.

Organizational culture is important through the functions that it develops: integration, clarifying the role at the organizational level, its protection opposite the environment, preserving the values and traditions and mobilizing competitive advantages (Gănescu, 2011). A strong organizational culture provides a genuine chance to withstand on the market in the current environment conditions, both turbulent and uncertain. For this reason, organizations act thereby as to adapt to change and hence to the cultural adaptation. The economic environment thus speaks about a "culture of changes" (Crevoisier, 1999).

2.2. The organizational culture and change

Change is defined by literature as "any modification, planned or unplanned, of the status-quo, that affects the structure, technology and human resources of the entire organization" (Owen, Anghelescu). It is "an unstable process, fluctuating, flexible and continuous, which can be planned or unplanned and that can cause another change or even a series of changes" (Doval, 2001). Change can be approached from many points of view, thus it can be planned or unplanned, of microlevel or macrolevel, temporary or permanent, radical or minor, etc. Drenan (1992) believes that changes in organizational culture require "vision, commitment and cancelation / ending of the resting condition in the organization" (Mateiu, 2014).

A change at the organizational level raises technical, psychological and cultural problems. The more turbulent the external environment is, the more the organization must correctly understand the social events (blurred and diffuse), in order to be able to adapt and to continue their activities. The present society is characterized by a rapid pace of changes in economic, social, environmental field or political stability, reason why organizations permanently consider strategies of change.

Literature explains several approaches when analyzing strategies regarding change (Doval, 2003):

- strategical planning in conditions of change, by setting specific objectives and methods of implementing them (Quin and Jonson);
- cultural change programs (Peters and Waterman, 1980);
- quality management (Smith, 1986);
- socio-technical approaches, in which case appears the idea of multidisciplinary analysis (Volvo, Shell);
- reengineering, as a method of complete process revision, both sharp and painful, with results significantly different from the previous situation, the organization making changes of processes, systems and skills (M. Hammer, 1990);
- a strategy of systemic intervention;
- organizational development.

Analyzing change, Bechard (Bechard cited in Duval, 2001) notes that it involves crossing a series of stages, as described: the current state (analysis which establishes a diagnosis); a future state (toward which the organization reaches), a transition stage (includes all actions taken by the management to reach the future state).

The transition condition can often be ambiguous, since individuals in the organization may not understand well and immediately what is expected from them, or not to master well enough the mechanisms of change. And therefore may appear different relief items, such as, for example, the Moorhead - Griffin model (1998), which

introduces the concept of *agent of change*, with the purpose to intervene actively in the process of change implementation.

Lewin (1997) believes that the change requires the completion of other phases: initial state, the thaw, the change, refreezing and the final state. Basically, Lewin examines in detail the transition state mentioned by Bechard, which he shares in 3 main stages: thaw, the phase of change itself and refreezing.

Indifferent of stages, all authors agree that a cultural change is a process of length, which implies the existence of a team in order to outline, energize and monitor the process of change, so that they happen as was expected and with the desired outcome.

3 The interaction between quality management and organizational culture

3.1 Quality management - concepts and evolution

People constantly interact with a wide variety of products and services, while companies are increasingly forced to take into account, in terms of quality, the "requirements and consumer expectations (...), who are increasingly well informed and trained" (Dinu, 2009), the market constantly demonstrating a high level of competitiveness (Al Jalahma, 2012, Dale et al, 2007), while consumers - an increased level of information held. As a result, quality acquired, across literature, multiple facets, being considered, on the one hand, to be of "fundamental" character and "absolute" at the same time (Pirsig, 1974), but also able to generate interpretations or judgments both objective and subjective, in the desire to implement the concept of total quality by adding the criteria of satisfying consumers, and value adding respectively (Mizuno, 1988). All these considering the fact that impression about human needs and desires is gained in actual contact with the product or service in question (Olson, 2004).

Approaches in literature regarding quality differ, the relationship with consumers and the necessity of adapting to their needs being mentioned in a variety of papers, by authors such as: Ishikawa, Shewhart, Feigenbaum, Braunstein (2000), Gustafsson, Johnson (1997), while others (Taguchi, Wu) insist on the cost of poor quality.

Gambi, Gerolamo and Carpinetti (2012) state that: "in the attempt to improve quality and performance, many companies have focused on quality management initiatives". The concept of TQM, however, is more complex than the original idea of "quality". The concept and then the whole philosophy of TQM was founded, debated and developed chronologically by: Feigenbaum (1957), Ishikawa (1976), Crosby (1979), Juran (1980), Deming (1982), Taguchi (1990) and Oakland (1993), theorists whose contribution can be briefly summed up thus by synthesizing previous approaches and concerns on three main directions:

1. a direction that consists maintaining, developing or improving the quality of working groups within an organization and also the organization as a whole (Al Jalahma, 2012) through cooperation in order to ensure an optimum level of satisfaction for the needs of consumers, in parallel with implementing continuous improvement and a management centered on people, an idea shared by Feigenbaum (1957), Kanji, Asher (1996), Dale et al (2007). These ideas put a major focus on the qualities and abilities of the human factor (Ishikawa, 1985, Juran and Frank, 1993) in the organization, identified by Deming (1986) as essential to be trained in "techniques of statistical quality", in order to identify and solve problems in an optimally way. Ishikawa transposed also as a supporter of these ideas, especially

through the idea that quality management means more than a product, being completed by the individual quality on the one hand, and the overall quality of the organization, but with the condition of continuous improvement, given that the fulfilment of consumer demands is possible through cooperation. Juran, on the other hand, expresses "management culture as a starting point" and the basis for improving the quality (Juran, 1993 in Al-Jalahma, 2012)

2. the second direction assumes creating an organizational system with major emphasis on the techniques and procedures used in increasing or improving the level of efficiency regarding processes within an organization, on the long term, to ensure competitiveness and excellence (Oakland, 2001) and success on all levels, idea enounced by Steingard, Fitzgibbons (1993), Ross (1993), Flynn et al (1994). The basic criteria mentioned are cooperation, partnership and learning, without thereby ignoring the importance of satisfying consumer needs, a vital element for the market survival of the organization.

3. a philosophy of change management (Vuppalapati et al (1995)), for "the implementation of continuous improvement (Kaynak, 2003) of the quality of products and processes, to customer demand satisfaction," stated originally by Crosby's proposal on implementing the DIRTFT principle - the proper conduct of the first time, with the inclusion of four core principles, namely - to adapt to the consumers' needs, obtaining quality by preventing defects, establishing the principle of "zero defects" as an objective for performance achievement, "measuring the quality by the price of non-compliances" (Ilieş, 2003), completed however through the program consisting in 14 steps proposed by Deming in order to determine the organizational change strategy and organizational culture improvement through quality, for achieving a "better level of productivity and competitive position" (Al-Jalahma, 2012).

Regardless of the direction addressed, however, continuous quality improvement is a common approach for the majority of specialized work, as well as the involvement of the human factor, respectively the practice of participative management.

3.2. The relationship between quality management and organizational culture

Prajogo and McDermott developed a series of surveys on the relationship between "quality management practices and organizational culture" (Gambi et al, 2012), in order to identify the specific type of culture that contribute to the implementation of appropriate quality management practices.

Both TQM and organizational culture are considered to be significant factors, with an essential role in ensuring a competitive advantage for the organization (Jancikova, Brychta, 2009), quality management being appointed as an agent of change, rather than a business objective, the way the organization responds to change and adjust to the external environment representing one of its most important skills. Continuous improvement and successful implementation of TQM however would require the involvement of the human factor in the organization and also the commitment of employees to actively participate in programs of change.

When approaching quality management, organizational culture, from the position of "a complex and multilayered phenomenon" (Jancikova, Brychta, 2009), reveals anthropological origins, Juran proposing the use of this concept, in order to create beneficial change in organizations. The culture of an organization evolves as its members face problems connected with external pressures and changes, or with a series of internal conflicts (Schein, 2004).

Literature provides a mutual relationship between the implementation of TQM and organizational culture (Gambi et al, 2012), considering that the content of the latter influences the dimensions of implementation of quality systems, while the success of this action materialize in influences on behavior, attitudes and the organizational culture as a whole. As a cultural phenomenon, TQM needs to be approached from two perspectives, first in terms of external adaptation, and secondary in terms of internal integration (Kujala, 2002), but still there are disputes in literature regarding whether there is a need for change of the organizational culture in order to achieve TQM or is it sufficient to use the one existing at the moment (Irani et al, 2004). According to the ideas promoted by Deming (Deming, 1986), one of the conditions for the correct implementation of the TQM philosophy consists in "the need to achieve a radically cultural change, from a traditional management to continuous improvement of the management style in the company", given that the concept of TQM itself involves the very notion of change by "targeting core values and beliefs of the organization" (Ngowi, 2000, Irani et al, 2004).

In order to implement TQM, it becomes vital the existence of a culture of quality, in addition to an infrastructure support (Jancikova, Brychta, 2009). It is also necessary for this to be adaptive, stimulating, progressive, while the core values that support the organization in implementing TQM (Cameron, Quinn, 1999) are the following: teamwork, the level of collaboration or involvement of employees in the organization, the existence of a flexible labor force, both adaptive and dedicated (Irani et al, 2004), together with the implementation of new standards, direction of orientation (towards consumers), the opportunity to detect errors in time, the level of customer satisfaction assessment, creativity development or partnerships extension (Gimenez-Espin, Jimenez, Costa Martinez, 2012). A periodic analysis regarding the relevance of values for the organization's environment is indispensable, TQM turning into a "coerced working structure of the company, documented in effective procedures" (Irani et al, 2004), integrated both in technical and managerial terms, to determine the satisfaction towards quality and ensuring the best conditions for guiding human action and processes of the organization.

Most scientific resources (Corbett, Rastrick, 2000) mention the tools of total quality as factors that may contribute to behavioural aspects, even without generating clear advantages, all these on the background of implementation of a "basic level of core values, assumptions and beliefs shared by members of the organization" (Irani et al, 2004) and in the context of an organizational culture representing a concrete set of collective rules, which govern the human factor behavior in the organization, directing the overall activity towards success or even excellence (Hofstede, 1991). Organizational culture is the one influencing people's behavior and also their actions or perception of quality, respectively, with direct impact on the quality of services provided. We infer that the implementation of TQM is not an easy activity, assuming primarily a direct and positive relationship between human factor involvement, perception of quality and the style of management and strategies implemented in the organization.

Overall quality can be improved only through a continuous process of change, which primarily involves the existence of an organizational culture directed towards obtaining performance. It should also be strong, dedicated, open and with a clear view of what is desired to be attained by promoting not only the encouragement of reaching high productivity, but also the achievement of the mission proposed by the organization, all amid a proactive (Irani et al, 2004) and at the same time adaptive

(Schein, 2004) practice, in which continuous improvement is applicable taking into account the individual characteristics of employees and also the management capacity to support a project of this scale, on the basis of an individual organizational profile (Caldwell et al, 1991). Considering this aspect, we note that also, the availability of the organization for taking calculated risks and the managerial capacity of motivating human factor, become essential from this point of view for a better future performance. For enabling this to be translated into positive results, is necessary to ensure a proper flow of information, along with implementing a tradition of teamwork and a mindset based on innovation and quality culture (Cheng, Liu, 2007), through an initial selection of a suitable type of organizational culture (Khalifa, Aspinwall, 2000).

The successful implementation of TQM in the organization depends largely on its ability to assess the need for change and to identify the right type of culture needed to be implemented. Kekale and Kekale (1995) explain the main cause of a potential failure of the implementation of TQM as being the lack of consistency between the existing organizational culture, namely the principles of implementation of TQM, which indicates either a rethinking of the organizational culture, whether a more careful analysis of the way of implementation of quality management.

4. TQM and the collaborative adhocracy

4.1. The need for a new organizational culture based on TQM in adhocracy

The necessity of implementing an organizational culture based on quality has attracted the attention of many authors in the field of management, while focusing on the need for change and performance (Bourini et al, 2013) idea explained also by the "inability to exist in isolation" (Al Farhan, 2003), the inability of ignoring the change process, especially since the concept of TQM is omnipresent. Caldwell, Chatman and O'Reilly mention the main elements contributing to the development of a cultural profile of the organization, expressed in terms of seven dimensions, namely (Caldwell et al, 1991): the innovative culture, a stable culture, a people-oriented culture, a result-oriented culture, a culture cantered on details, team-cantered culture, an aggressive culture.

Gambi, Gerolamo and Carpineti (2012) thus mention four cultural types, as a "juxtaposition" of the earlier mentioned pillars: the group culture, the culture-oriented towards development, a culture based on hierarchical-dimension, rationality-oriented culture. The first two focus on flexibility and adaptability to environmental conditions, also on the potential to achieve internal efficiency, while the last two recall efficiency, productivity and stability, based on uniformity and control. Interpretations in literature vary on the four types of culture, the one oriented towards development being associated to adhocracy (Gimenez-Espin et al, 2012).

According to research in the field (Khalifa, Aspinwall, 2000, Dellana, Houser, 1999, Cheng Liu, 2007), group-cantered culture and adhocracy are the most appropriate environment for implementing TQM, although "every organization is different, whether we speak in terms of its past and as a possibility of implementing TQM principles, but also as the attitude towards work, work environment or leadership style". This idea is shared by Jancikowa and Brychta (2009), who identify specific advantages of adhocratic culture: flexibility, orientation towards innovation, ability to develop individual and group creativity, adaptability. The role of organizational culture is reinforced by the implications in the organizational development process,

the more that adhocracy is generally accepted for implementing the quality management process, together with the idea of organizational change.

Neal, West and Patterson (2005) mention the benefits of an adhocratic culture, resulting in a higher level of motivation of the human factor and the possibility of professional development, loyalty strengthening, orientation to the consumer or a further development (Anderson et al, 1994), all of which being possible under the successful implementation of quality management strategies (Damanpour, 1991), especially of the concept of continuous improvement, customer orientation respectively (Gimenez-Espin et al, 2012).

Adhocracy is regarded as an "ideal cultural profile for supporting TQM" (Dellana, Hauser, 1999), showing the advantage from the flexibility point of view, manifesting a "low level of resistance to the implementation of TQM" and facilitating the adoption of a culture of trust towards the organization, encouraging creativity, diversity, risk-taking, the ability to develop a "vision of the future" (Cameron, Quinn, 2006).

Schein (1992) mentions the organizational culture as "a basic set of mutually consistent elements". Considering the idea that they form a compact structure, we can talk also about a culture oriented towards quality, based on the analysis oriented towards the objectives of the organization, decision-making process, the type of organization, all through a rational management approach (Kujala, Lillrank 2004), based on the formulation of a clear mission, informational independence, freedom in applying individual knowledge and skills.

4.2 The relationship between TQM and the collaborative adhocracy

The relationship between organizational culture and quality revealed, first in the field of high skills, later in other areas also, that teamwork has become an unavoidable reality, due to the complexity of technological systems, automation and computerization. This feature of work has caused, tough, a decentralization of competencies, followed by a narrow, but well qualified specialization. In this way, individuals have become relatively independent in the labor process, but collaboration is still inevitable and necessary. The best results therefore require, at organizational level, a decentralization of competencies, but a centralization of rules (Crevoisier, 1999). The centralization of rules and their efficient application can be possible through organizational culture. But this organizational culture has a particularity due to the fact that its effectiveness is conditioned by internalization. It cannot be just formal, thus confirming the model implemented by Ritchie (2000).

The analysis of the relationship between culture and quality reveals two issues to be carried out simultaneously (Crevoisier, 1999):

- Quality is an intrinsic part of the work process; it will be therefore the responsibility of everyone;
- Quality is one aspect of organizational culture; it must reflect the values, norms, its vision and their application by employees reveals an ending in the cultural homogeneity based on quality.

Starting from the features listed above, related to the relationship between organizational culture and quality, we distinguish a positive model that seems to solve the complex problem of qualitative approach. Therefore we speak about adhocracy, which Mintzberg judges to be in relationship with the objectives of an organization based on innovation, creativity and adaptment to the current environment.

In the context of an increasingly complex and dynamic society, change is closely linked to the organization's capacity for innovation, its creativity and power to develop and build innovative structures to enable competitive advantages on the market. Adhocracy proves to generate an effective management in this direction, as referred to in the literature from the perspective of the essential characteristic of innovative organizations.

Adhocracy is a term invented by Warren Bennis (1968) (from the Latin word "ad-hoc" -Special and the Greek "kratos" - power) and made public by Alvin Toffler in his famous book "The Shock of Future". Broadly, adhocracy represents a permissive management style, casual, opposite to the classic style, where each member has a specific role, well-defined and permanent, subjected to a formal authority. Mintzberg defines adhocracy as a structure "behaving in a less formalized manner, but with a high degree of horizontal specialization of positions, based on a rigorous training." He identifies two types of adhocracy: operational and administrative. Operational adhocracy considers the client on whose behalf is acting – it is a type of management appropriate for the units specialized in services. The administrative one acts for itself. Naisbitt, in his paper "Megatrends", shows how the company starts, based on objective reasons, determined by the present reality, to abandon the increasingly hierarchical structures in favour of horizontal ones, in which individuals make decisions at their job, without waiting for permission of someone, they accomplish activities on their own, pursuing efficiency, as well as a quick and professional reaction to external triggers. We speak about increasing the level of culture, together with the increase of professionalism of employees, but also the democratization of life, which determines the organization to adapt to the desire for inner freedom, the right to be different and to behave differently, as the fundamental concept of postmodern life. It is created thus the network-type organization, flexible and dynamical, while the individual is creative, mobile, associative and with a narrow specialization.

The main features of the adhocratic-type organization are:

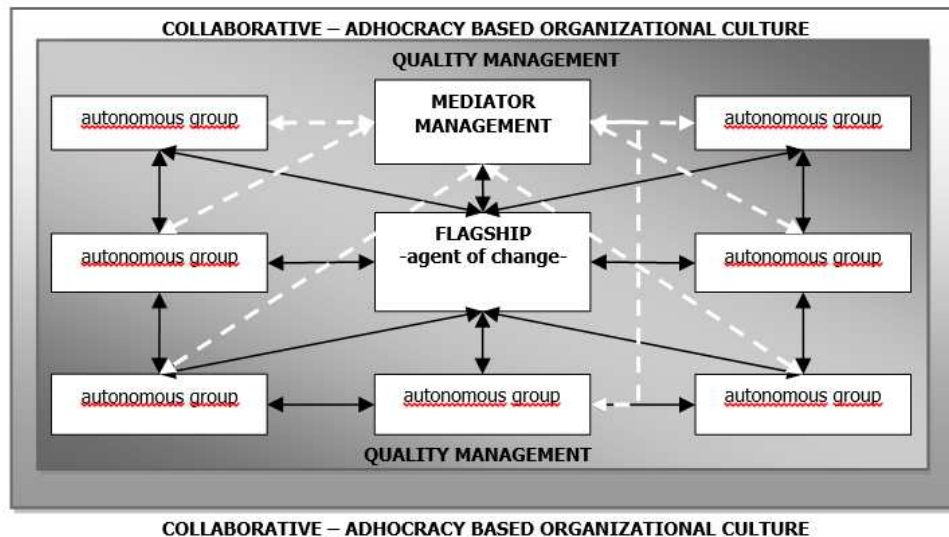
- A reduced standardization and bureaucracy, classical rigidity and formalism being replaced by organizational lightness;
- A decentralized organization, with a diluted decision making power, turned to functional teams, which carry out their work in their own style, without formality, with its own terms of reference;
- The responsibility belongs to the same operational teams;
- Discretion, encouragement of initiative and creation;
- Capacity and courage to respond quickly to volatile and sometimes unpredictable requirements of customers;
- Flexibility, the ability to adapt quickly to a new challenge;
- High and narrow specialization, which generates high quality;
- Creativity and a fractal mode of expression allowed the emergence of many forms of adhocracy: cluster type, matrix type, network type, pockets of good experiences type.

But this aspect of a narrow specialization may encourage a number of disadvantages, thus:

- When an organizational decision must be taken, the time for this may be extended and certain opportunities may be lost;

- It appears the possibility of identifying a high number of solutions and options (direct proportional to the number of individuals) so that problem solving can get into trouble;
- Sometimes, the line between strategic and operational decisions is difficult to detect;
- The overall organizational strategy is poorly received, long-term objectives being overshadowed by the present issues.
- Emphasis is given to resourcefulness, promptly, efficient reaction and problem solving, risking deviation of attention from the causes underlying the problems and their analyses.

Figure 1: TQM implementation model in a collaborative adhocracy



Source: processing made by authors

These disadvantages can be eliminated by the existence of an organizational culture which is capable of balancing long-term strategies with those of the moment, can detect opportunities and exploit them and especially to define the objectives of the organization and to bring them to the attention of employees in an efficient manner. This happens especially since the organization must adapt not only to changes in the external environment but also its environment internally, where competition, frequent organizational mergers, mutations and changes in organizational charts, the autonomy of business centers, causes behavioural changes, sometimes even the inability to quickly understand what is happening at work and loss of courage in fast decision making.

We speak about a collaborative culture, where adaptation can be achieved through a sustained social interaction, both between members of the organization and secondary between these and the external environment. It is an achievement of objectivity and discursive reflex that occurs both in the negotiation and sharing of meanings. In a collaborative company, the manager is a mediator of knowledge, indirectly obliging operative groups to connect to information or solutions of the

organizational teams. Issues addressed should be oriented towards the goals of the organization, so that it can be stimulated a proactive attitude towards these, and employees can coordinate their activities, understanding the reason to act of other operational groups.

In this context, proposing a collaborative adhocracy seems to remove the drawbacks mentioned above, combining the advantages of the adhocratic model developed by Mintzberg with the collaborative management of Greiner.

This is because, although divided into different levels of organization, the enterprise can identify some fundamental issues, the plurality of experiences and interpretations being correlated with an interpretative will, which will order in a clear and unequivocal sense all the information from a functional organizational reality and will contribute to the accomplishment of an original, strong and significant organizational culture. In this regard, collaborative adhocracy means:

- A creative conflict resolution - both internal (caused by competition between functional teams) and external; a problem which is based on achieving a volitional, somatic, cognitive and affective resonance. "The commissioning resonance" (Sandu, 2009) of the partners in conflict eases shortcomings, trying to find the solutions that satisfy all parties.
- Establishing a connection between the mindset of employees and organizational usual language. It is reached thus an improvement of communication, eliminating the dysfunctions caused by the interpretative grids of isolated employees or which act in small working groups.
- The use of modern communication technologies, the tendency attitudinal unification, the positioning of the organization in a context based on a technique of positive intent, where conflicts are mitigated in a constructive way;
- Adhocracy allows the existence of a turbulent environment, what Kotler called "haoticism" as a kind of normality (Kotler, Caslione, 2009); but a collaborative adhocracy will establish the fundamental truth that any activity is the result of negotiations, of an agreement between employees, so that a precise consistency in activities to transcend instability and organizational goals to make sense;
- Although the models of actions in the activity groups are not imposed and can be made in many forms, while the actions of each employee are not precisely formulated, leaving it up to everyone to interpret personally the reality and context in which it is developed, at organizational level there must be certain conventions and norms of behavior, directed by management. They should express organizational ideology, the abstract perspective through which although each person sees something in a certain way, it is solved in accordance with the tacitly or explicitly commitments or norms, trying to achieve the organizations admitted potentiality.
- Organizational communication is the most important way in which agreements or understandings reached can turn into beliefs, norms and values. These, in turn, will lead to changes in organizational practices. Starting from the definition enounced by Noica on communication (1970): "pooling, mixing, and uniting" through a collaborative activity can be achieved an adaptation and inter-influence, with beneficial consequences,

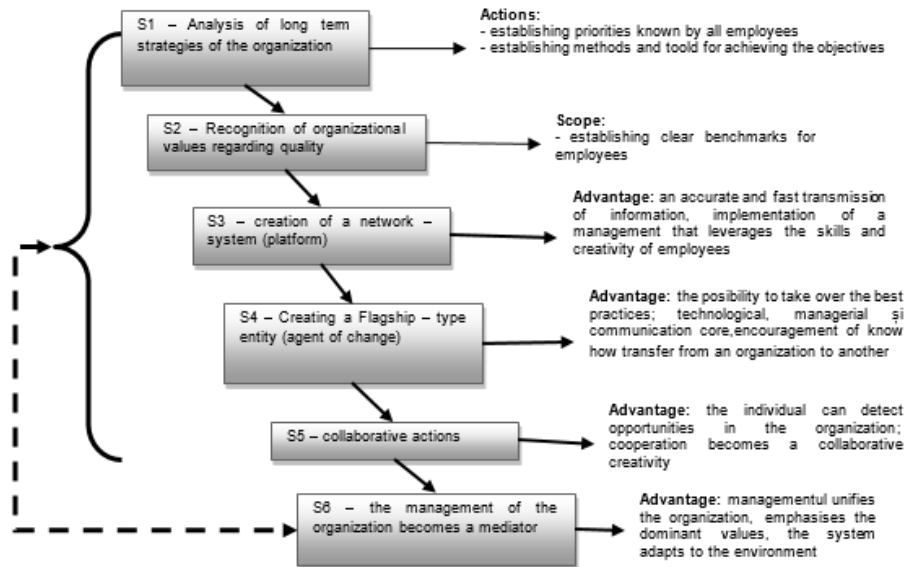
because it exceeds the feeling of isolation that the adhocratic environment makes it possible.

4.3. A model for the implementation of TQM using collaborative adhocracy

This model assumes the following aspects:

- The analysis of long or medium term strategies of the organization in terms of qualitative approach and setting priorities known by all employees; given the quality, there should be established methods, techniques and tools that make organizational goals possible to be achieved;
- Identification of corporate values regarding quality, which should become clear benchmarks for integrating each of the employees;
- Achieving a compromise between authority and trust, based on the creation of a network-system (or platform) through which information to flow quickly, correctly and to avoid informational entropy; To be called social network for example, will work within the organization, will generate attitudes, will raise issues and generate solutions and answers. The informational technology makes it possible to present this model. The consequence is to develop a type of management leveraging employee skills, their creativity, knowledge and skills they possess.
- Establishment of a flagship type entity, which would be what the Moorhead - Griffin (1998) model has called *agent of change*, allowing the organization to adopt the best practices, to understand the mechanisms of the collaborative-adhocracy model and to be able to implement quality management using these mechanisms; constituting itself into a core of technological, managerial and communicational competences, this entity will use the social network at the highest level, thereby rendering other working parties in this collaborative effort, encouraging the process of knowledge transfer and technology from an organizational group to another, while emphasizing the sense of belonging to the organization and its values.
- Addressing a series of collaborative actions in the spirit of “aspirations and results” (Sandu, 2009) by which an individual can detect opportunities in the organization, its ability to capitalize them, and how they it might have a correct reaction to the external environment, so that the result would be optimal from the quality point of view. The social network may take over the problem and similar to brainstorming, through cross-fertilization, could improve or retrieve in a personal manner, through contextualization and self-assessment, in accordance with its specific activity. Cooperation becomes thus collaborative creativity.
- The management of the organization becomes a mediator, it builds the context in which groups act, interact and create. It unifies the organization, under the fragmentation and atomization of the workplace, emphasizes the dominant values, adapts the system to the environment, and generates a technological, cognitive, relational framework, whereby it (the system) becomes coherent and effective both from economic and social point of view.

Figure 2: Steps of TQM implementation using collaborative adhocracy



Source: processing made by authors

Collaborative-adhocracy allows - through theoretical crossbreeding at least - on the one hand the existence of individual and group roles, and secondly the interaction and dynamics of individuals or groups, on a "rational background of knowledge" (Gergen, 2005), which is the organizational culture. This organizational culture is far from being static, whereas through collaboration, individuals "negotiate and share relevant meanings for the task of solving the problem in question" (Dillenbourg, 1999). While in adhocracy, individuals in the organization split the work, take their attributions and solve tasks according to skills, assembling in the end, the final results of their work, collaborative adhocracy involves individual work, but it is not reducible hopelessly to it, as the work of each is based on "practices of development of meaning, in the context of joint activity" (Suthers, 2005); therefore may appear "socially constructed properties of the interaction" (gerrystahl.net/cscl/CSCL_Romanian.pdf) which, manifested systematically, to lead to an update of organizational culture, or even to a complete change of it.

Conclusions

Every organization has a different working environment, and therefore the concept of TQM can adapt or implement in a personalized manner, noting, however, that for this to be possible, the first step consists in an awareness of the type of culture to which the organization belongs to (Cheng, Liu, 2007) and at the same time we need to understand how the type of culture and the TQM strategy implemented can be harmonized in order to obtain positive results on a long term, simultaneously with an efficient resource management. Cheng and Liu also mention the loyalty and dedication, as required for an optimal implementation of TQM.

Organizational change, as well as the implementation of a new organizational culture is based on a series of pillars, remembered in the literature by Cameron and Quinn (2006), Denison and Spreitzer (1991), as embodied on the one hand in a harmonization of the level of flexibility or control in the organization, and on the other hand - in a capitalization of internal potential and external opportunities.

Starting therefore from the principles of TQM and recalling as imperative – the ideology, the culture and vision of an organization (Kanji, Yui, 1997), we identify the adaptation to customer needs, the strategy of preventing nonconformities, teamwork, quality based on the contribution of the human factor, i.e. a continuous improvement, as pillars of development of a new organizational culture based on TQM.

We are heading right towards a model of TQM culture, expressed through social, economic and technological competitiveness, as well as concentration of resources towards continuous improvement, loyalty and dedication of staff, implementation of policies oriented towards internal and external customers, skills in using quality management tools, participative management, motivation, results manifesting on multiple levels, both financially and of behavioural changes, attitudes and organizational processes. When TQM is based on a collaborative adhocracy, the organization improves:

- Performance (by exposing positive experience, innovative solutions, unprecedented solutions);
- Detection of opportunities (it is revealed the unit specifics of the organization);
- Creativity (circulation of ideas, interaction that fertilizes imagination);
- Qualitative Uniformity (with the detachment of certain megatrends that are generalized by repetition);
- Quality of Innovation (multidisciplinary or transdisciplinary visions occur, with implications for technological innovation, economical ones and so on).

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THE EFFECTS OF MOODS AND EMOTIONS ON DECISION MAKING PROCESS – A QUALITATIVE STUDY

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Abstract: *The current study investigates the effects of moods and emotions on decision making process. For this purpose, we conducted a qualitative study by interviewing 12 managers working in large companies in Bihor County. Our findings point out the main effects the mood and emotions have on the decision making process. Of the themes that emerged from the analyzed interviews, three hold particular significance. First, moods and emotions are interfering with managers' ability to process information, specifically, negative moods and emotions diminishes the ability of the managers to process information, while positive moods and emotions lead to a greater ability to process information. Related with this issue, the second theme refers to the effects of moods and emotion to the making decision time. The main aspect we have pointed out here is that while negative emotions lead to increased decision-making time, positive emotions have a contrary effect. Third, positive moods and emotions lead the manager to make a decision being controlled by his/her heart not by t his/her mind. On the other hand, the decisions made by managers being influenced by negative moods and emotions are mostly controlled by their mind, not by their heart. We conclude that mood and emotions play a central role in managers' decision-making. That is why a manager should have a high emotional quotient (EQ) in order to correctly identify which events caused their emotions and manage them so that not to have negative effects on decision making process. We presented, on the one hand, a few ways to reduce the unwanted effects of emotions on decision making and, on the other hand, a few ways to develop and cultivate positive emotions. However, we underlined the idea that it is not a good thing a manager to make an important decision when he/she is deeply influenced by his/her moods and emotions.*

Keywords: *moods; emotions; integral emotions; incidental emotions; effects; job satisfaction; emotional intelligence.*

JEL Classification: *M10; M12; M14.*

1. Introduction

People's behavior is based on their perception of what reality is, not on reality itself, that is why, it is possible that two persons to see and interpret the same thing differently. That means they will make different decisions because of their moods and emotions. Generally, people are influenced by their feelings in everything they do, including their decisions. As people make decisions every day, we could say that our mood and emotions are very important in anyone's life, including the managers'. Some people could be confused about the differences between moods and emotions. The word "mood" is defined by Oxford dictionary as „a temporary state of mind or feeling”. The word has the origin in the German word „mut” that has the same

meaning. The same dictionary define the word „emotion” as being „a strong feeling deriving from one's circumstances, mood, or relationships with others”. This sense dates from the early 19th century, its origin being in Mid-16th century, signifying a public disturbance. Paul Ekman says that “moods can last for an extended period of time, say at least one or two days” while “emotions are things that tend to come and go quite quickly. They're also much more likely to be caused by immediate circumstances; something that someone just said, something that you witnessed or some memories that you had. Emotions are likely to be sharper than moods, and also more varied; while we can have a great range of exquisitely different emotions, we tend to have moods which are more generalised — a good mood, a bad mood. Small things we experience can change our emotions quickly.”

There are different types of emotions that differently influence the decision making process.

Integral emotions are related to the very decision we make at a certain moment, they “arise from the judgment or choice at hand” (Jennifer S. Lerner). Integral emotions can influence the process of making decisions (either positively or negatively) even if there are scientific information that lead to alternative courses of action. Integral emotions are many times so strong for the decider than they get over any rational course of action.

Incidental emotions are not related to the very decision we make at a certain moment, they have nothing to do with it. It is about the carryover effect; our previous emotions caused by anything else but the decisional process, trigger some reactions that usually appear without any awareness.

Emotional Intelligence (EQ) is defined by Daniel Goleman as the ability to identify, assess, and control one's own emotions, the emotions of others, and that of groups. The term „emotional intelligence” came to be known after Daniel Goleman published the book: *Emotional Intelligence: Why It Can Matter More than IQ* (1995), but he is not the inventor of this concept. He was allowed to use it by the academics John Mayer and Peter Salovey; they studied this concept long before Daniel Goleman's book appeared. The Mayer-Salovey-Caruso model proposes that there are four major branches or facets to the emotional intelligence concept:

- Perceiving emotions. Our facial expressions, tone of voice, gestures, some object (like works of art) transmit emotional messages. Perceiving emotions means to identify and understand them.
- Using emotions to facilitate thinking. Our emotions could change the way we think. Using Emotions to Facilitate Thinking means to use our emotions for solving the problems better, in a more effective, creative way.
- Understanding emotions. After noticing the existence of emotions, we must understand why we have them, where they are coming from, where could they lead us.
- Managing emotions. We cannot eliminate our emotions in order to make a rational decision. Knowing that, we have to learn control them. Managers high in EQ are capable to deal with their emotions and, moreover, help others to deal with their emotions, as well.

2. Managing the emotion at work

Emotions are complex and they could suddenly appear, change or disappear. They affect our judgment, our decisions, and our social interactions. Managers and

subordinates must identify, understand and deal with them. Robert Plutchik created a wheel of emotions consisting of 8 basic emotions and 8 advanced emotions each composed of 2 basic ones. He claims that “emotions are complex and move in various directions. Modelling emotional feelings and considering their behavioural implications are useful in preventing emotions from having a negative effect on the workplace”.

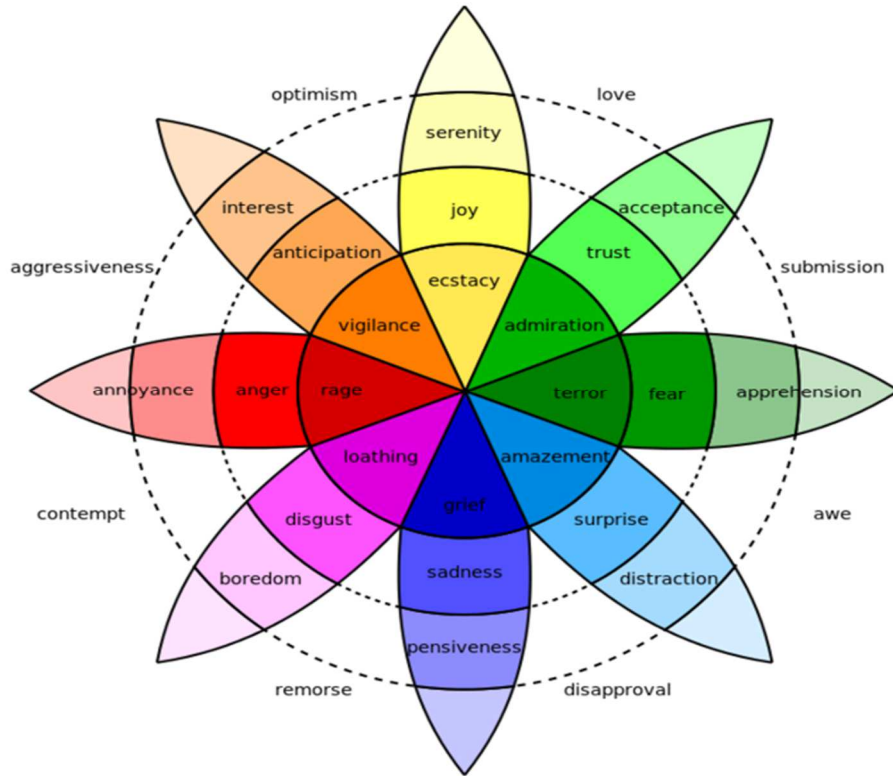


Figure 1: Wheel of emotions
Source: Robert Plutchik

An emotional intelligent employee, either manager or subordinate, will understand the implication of emotions for their behavior. They will identify the emotions that could influence their behavior and judgement; they will ensure that the effect of their emotions are either positive or neutral. Positive emotions could have a positive influence, but not necessarily. Both positive and negative emotions can denature the result of a decision. It is not a good thing for a manager to be either under-confident, when he/she is influenced by negative emotions, or overconfident, when he/she is influenced by positive emotions. Managers must monitor and control their own emotions, but at the same time they must deal with the emotional problems the employees have. They must ensure an emotional balance at work that lead to a mental well-being. The dark side is that the employees do not show their emotions

most of the time, so, the manager has a very difficult role. However, the bright side is that an emotional intelligent managers is both intuitive and strategic in ensuring a mental balance at work.

3. Research Methodology

Participants

10 base and middle-level managers, working in large companies in Bihor County were initially contacted by telephone. 7 out of 10 agreed to the interview process. At the end of each interview, the interviewees were asked if they could recommend similarly qualified and potentially interested persons for the same interview. This way, another 5 persons joined the group. So, using the snowball sampling technique we obtained a group of 12 persons who was interviewed.

Instrument

The qualitative study was performed conducting individual interviews using semi-structured questions with each consenting participant. The interviews were face-to-face, ranging from 45 to 60 minutes in length. All interviews used the same 8 questions. Firstly, the participants received a handout containing our definitions of mood and emotion (presented in the introduction), then they received step by step the questions listed below.

1. Do you agree with the definitions of mood and emotion described in the handout? How would you alter them?
 2. Do the employees bring their moods and emotions from work to home? Is their behavior at home influenced by these feelings? Could you give an example?
 3. Do the employees bring their moods and emotions from home to work? Is their behavior at work influenced by these feelings?
 4. Is a manager influenced by his/her feelings when he/she make a decision?
 5. Moods and emotions, in your opinion, influence the decision making process in a negligible, moderate or significant way? Could you describe your experience using examples?
 6. Which are, in your opinion, the effects of moods and emotions on decision making process? Let's suppose a manager is dominated by his/her positive or negative emotions. Which of the following statements you agree with in this situation? Could you distinguish between the effects of positive and negative emotions?
 - he/she does not want to make decisions
 - he/she does not want to make important decisions
 - he/she is always undecided
 - if he/she make a decision, he/she regrets it
 - the emotions diminish his/her ability to process information
 - the moods and emotions affect the necessary time for decision making process
 - he/she makes decision by their heart, not by their mind
 - he/she is non-cooperative
 - he/she does not take into account other people opinions
 7. What is your opinion regarding the way of reducing the unwanted effects of mood and emotions on decision making?
 8. How is possible, in your opinion, to cultivate positive emotions?
- After the interviews, there was a debriefing session. We sent copies of the transcribed interviews to each participant and asked for their feedback.

Data analyses

The data were analyzed in five steps. The first step consisted in reading of the transcribed interviews a few times in order the researcher to have an overall view. Each participant has received a number that was used further on in analyses instead of the name. The second step was identifying the key responses for each question. The third step involved creating a Microsoft Excel spreadsheet for each questions. The participants' numbers were entered vertically and the key responses, horizontally. The fourth step was the identifying of the emergent themes. For this purpose we counted the situations when the respondents had the same answer. When 7 out of 12 respondents had the same opinion related to a certain theme, we called that theme an emergent one. The fifth step supposed sending the themes results to the participants and asking for changes if necessary, but no change was necessary.

4. Results

Participants in this research are base or middle - level managers. They all claimed that a manager is influenced by his/her feelings when he/she make a decision. The majority of the participants claimed that the moods and emotions are interfering with managers' ability to process information, specifically, negative moods and emotions diminishes the ability of the managers to process information, while positive moods and emotions lead to a greater ability to process information.

Related to the effects of moods and emotion to the making decision time, the main aspect we have pointed out here is that while negative emotions lead to increased decision-making time, positive emotions have a contrary effect. Actually, positive emotions lead to increased decision-making time only when the importance of decision increase.

The respondents claimed that moods and emotions lead, generally, the manager to make a decision being controlled by his/her heart not by his/her mind. Many of the respondents distinguished between the effects of positive and negative emotions making it clear that the decisions made by managers being influenced by positive moods and emotions are mostly controlled by their heart, not by their mind, while the decisions made by managers being influenced by negative moods and emotions are mostly controlled by their mind, not by their heart.

5. Discussions

Moods and emotions' effects on decision making process are either harmful or helpful. While the helpful effects are always welcomed, the harmful ones are analysed in order to find ways to reduce/eliminate them. There is sure thing that we cannot eliminate our emotions; we bring them with us both from home to work and from work to home. On the one hand, we bring the emotions from home to work and they affect our work, decisions, behavior at workplace. On the other hand, the work environment has a strong influence on our mood and emotions and affects our private life at home.

Most of the adults spend more time at work than anyplace else. Even if mathematically, the adults could spend more time at home, much of their time is spent mostly sleeping. The effects of the moods and emotions come out both home

and at work. We want to reflect on emotions and moods in the workplace. Firstly, as this is the place where one spends most time of the week, the job satisfaction is really important; it is very important that we feel comfortable by what we do in our job. However, the emotions could appear and affect negatively our decisions even when we have a job we are satisfied with. So, the question is: How to reduce the unwanted effects of emotions on decision making? According to J.S. Lerner and co-authors (Emotions and decision maker, 2014), there are a few ways:

- *Time delay.* The emotions do not last so long, they are short – lived. So, the best thing we could do is to let time pass before making a decision. Most of the time the managers do not need to make a decision on the spot, so, they can wait till the effect of the emotions disappears, otherwise is more likely not to make the right decision. Even if this is a very simple way of reducing the unwanted effects of emotions, it is not use most of the time, just because the managers are dominated by their emotions and incapable of waiting for a neutral state to return.
- *Reappraisal.* The emotional response can be dissipated thinking about a situation differently to minimize the emotional impact. A manager who uses reappraisal says himself/herself: it is not such a big deal, it is just a simple situation, I can handle it. Reappraisal is about seeing the situation in another light.
- *The “two-state solution” (inducing a counteracting emotional state).* Theoretically another emotion could be induced in order to counteract the previous one. This way, an unwanted decision effect could be replaced by another opposite one.
- *Increasing cognitive effort through financial incentives.* The purpose of this way is to separate *the decision process from the emotion* by increasing a decider’s attention to the decision task. It is difficult but it is more likely the financial outcomes to determine the decider to put away the emotions and concentrate on the decisional situation.
- *Crowding out emotion.* The decision maker is crowded with information, cognitive facts about a particular decision, so that there is no place for emotion in his/her mind. So, there is about crowding out emotion by crowding the decider with cognitive issues.
- *Increasing awareness of misattribution.* The decision makers must become more cognitively aware of their decision-making process and its consequences.

6. Conclusions

The aspect we theoretically and practically analyzed in this paper have deep consequences on the mental balance at work.

The preponderance of participant-expressed views held that the moods and emotions are interfering with managers’ ability to process information. However, we came to the conclusion that the effects of the moods and emotions come out at work, where the employees spend most of their time, and influence not only their decisions, but their entire activity.

The participants also held that moods and emotion alter the making decision time, specifically, negative emotions lead to increased decision-making time, while positive emotions lead to decreased decision-making time.

We also underlined that the managers must rely on their mind, not on their heart when they make decisions. They must cope with their and employees' emotions. Furthermore, they must develop and cultivate positive emotions. Here are a few advantages for a company supporting positive emotions:

- a low rate of staff fluctuation;
- the employees are cheerful and optimistic;
- a healthy atmosphere at the workplace;
- the employees are more creative and innovative;
- the company has a higher productivity;
- an increased resilience of the employees;
- a better teamwork.

All these advantages lead to a healthy work environment that positively impacts our private life at home. Consequently, we should choose the right job for us, a job to meet our expectations and create the emotional stability we need.

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SUPPLY CHAIN MANAGEMENT AND PERFORMANCE: FRAMEWORK FOR STRATEGIC DECISION MAKING

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Abstract: *Fast paced technological innovation in the 21st century is continuously transforming the complex world of logistics, a performant strategy in the supply chain (SC) becoming a competitive advantage that all manufacturers strive to improve. Decision making to ensure the expected outcome is relying heavily on the SC with its associated partnerships and drivers. Customer service evolves at the same pace with technological innovation and it is backed up by qualitative and innovative SC processes, transferring the most important order winner criteria from the product itself to the product cycle from forecast to delivery. Manufacturers have to consider that integrating customers' needs in the design of their supply chain strategy (SCS) is going to become an order qualifier, rather than an order winner criterion. Internal and external integration foster progress and development in the organizational and financial performance of the company. This implies not only a financial investment in the subsequent infrastructure but also a tailored strategy that employs advantages derived from supply chain integration (SCI). The present paper proposes a structured framework that middle and top management can use to identify synergies for integration opportunities, exploitable competitive advantages and markers for improving decision making affected by and affecting financial performance. Supply chain management (SCM) strategy can be viewed as a revolving concept as it can be both a driver of performance as well as a consequence of performance. The first concept is at the centre of the paper as the authors strive to create a framework of operational and strategic factors that foster performance, assuming that levels of performance can conversely steer SCM strategies. Operational strategies, supply chain integration, management and strategies are leading the research field in the attempt to interlink SC and performance, mainly due to a surge in the attention paid to the connection and synergies in between.*

Keywords: Supply Chain Management; Performance; Supply Chain Integration.

JEL Classification: L25; M11.

1. Introduction

The evolution from Henry Ford's 20th century redesign of operations in the SC to the 21st century focalization on a customer driven change in the design of SCs has been a giant leap in the field. After having in place the technological progress that ensures productivity, even for the most innovative and rapid changing industries, SC professionals have been pushed towards the current global trend of customer oriented businesses. Therefore, most factors associated to having in place a productive and efficient SC structure when transforming raw material into a finite product have become order qualifiers rather than order winners. Companies such as Amazon or Zappos, globally known for their logistics success stories, have clearly

identified the untapped resource of SCM and their success is more often than not explained by their customer oriented business strategies. In order to achieve customer integration in their SC operations and strategy, companies must have a properly designed framework, accounting for perspectives of process, resource allocation, customer service or cost to name only a few, which is compatible with the long term strategy of top management.

The authors address in the present paper the issues arising when developing a framework for linking SC factors to financial performance of a company. Starting from a vast collection of most relevant publishing in the field, the authors propose in their case study a SCM framework that has potential for further testing and empiric validation. From the review of a comprehensive segment of literature directed towards SCM strategies, we have established as the cornerstone of our research the interconnected and integrated approach. In other words, SCI is the fundamental approach to our case study, aiming to create a synergetic framework interlinking the logistics factors and measurements that we build our model upon.

It is unanimously agreed upon in the literature reviewed that it is out of date to assess stand-alone factors of the SC when current degree of integration in the processes and participants clearly point towards a multi-level, cohesive structure. As a result, researches that have assessed the relationship of performance and singular SC factors have been frequently employed as part of an incorporated model for questionnaires, regressions or meta-analyses. Due to such outputs becoming available, the research field can devote effort to constructing adaptable frameworks that can be employed by SC managers and top managers in developing the company's strategy.

Given the differences across countries' industrial development, industries specificities, approaches to management and choice of lean and agile supply chain strategies (SCS) the presented framework intends to be an easily adaptable tool that can be employed in a wide array of scenarios. In addition to this, the compiled framework includes both directly and indirectly measurable logistics factors that could be performance drivers. Especially when discussing non-quantifiable factors derived from integration, being difficult to assign a financial value or assess impact on performance, the authors choose to include such factors as intermediate measurements could ensue.

The interest dedicated to the liaison between SCM and financial performance, mediated by SCI and SCS, has been thoroughly investigated in the literature as a consensus from the perspective that SCM impacts performance and few studies has looked at it conversely. The present framework also identifies how performance can drive strategy in the SC, as it becomes more apparent for researchers that the current levels of performance may be at the forefront of decision making. To give a short but revealing example, companies highly performant from a financial point of view, have a better prerequisite for enhancing SCI as more resources are available and can be directed in this direction which is not an immediately gratifying return on investment. Opposite, companies short of financial resources, are reluctant to back up in their decision making process initiatives that do not show a direct financial benefit, direct or indirect.

The distinct value added this paper brings is the output of an integrated framework of SC factors that allows for a better assessment of impact on financial performance and, consequently, for developing more efficient SCM strategies. The relevance of the paper lies both in the field of logistics and finance, as most factors and

infrastructure necessary for putting such SC framework into place impacts the monetary resources' flow of the company. On one hand, logistics wise it offers knowledge that can support an enterprise from establishing a Key Performance Indicators structure and measurements to reporting the results and employing them in the development of management strategies. On the other hand, financiers of the company benefit from a 'translated' glimpse into the resources allocated and can make informed decisions for future contracts, benchmarks settings and budgeting. The remainder of the paper is structured into two sections, literature review and case study, followed by conclusions of our research and the list of bibliographic references.

2. Literature review

The authors pursue in this chapter the goal of enlisting the present knowledge and most noteworthy contributions from the research field and identifying the potential for contributing valuably to the literature. We can split our literature review into two major segments, namely the studies that focus on the wide array of SC strategies and those that attempt to conceptualize and validate empirically the relationship between SCM factors and performance. Inspired by the idea of "choice architecture" put forward by Thaler R. and Sunstein C. (2009), we believe that in order for a performance evaluation based on SC elements to work, it is a prerequisite to have the appropriate design of tools. Starting from fundamental processes in the SC (e.g. production, inventory, order management etc.) to the top management view upon the SC strategies (e.g. balanced scorecard, SCOR model, management reports etc.), the design is a differentiating factor (e.g. for firm size, industry, business model, etc.). We believe that the custom architecture of SC frameworks – internal, supplier and customer oriented – yields a great potential contribution as an order winner criteria.

Research of Qi et al. (2017) focuses on the concept of integration in the SC, including strategic perspectives on operations and management, thus implying a full flow of the SCM with synergies, influencers and outcomes. The questionnaire methodology tests six hypotheses based on the theory of organizational capabilities, lean and agile operational strategies (OS), results showing the fitness of OSs in relation to firm goals and priorities. While leanness is adopted by cost driven firms prioritizing quality of product and its delivery, agile SCs are fit for flexible companies, whose adaptability to the requirements of the market is an order qualifier. SCI is an essential part of OS as both internal and external integration are drivers of performance and the market requirements show a tendency to better reward companies whose SC is designed best to keep up with product characteristics and customer service standards. The conclusions derived from the extensive literature analysed and the results of the applied questionnaire support the proposed flow: SC integration affects the design and output of OSs; further, OSs are a major influencer of SC strategies through organizational capabilities and subsequent decision-making; and last but not least, the corroboration of OS and SCS impacts performance measurements ranging from market share to cost and revenue indicators.

Qi et al. (2017) refer to developing economies as a potential niche for studying an atypical array of operational practices and strategies in the SC, as technological and managerial practices are relatively underdeveloped. The authors' study, using Chinese data, is developed under the assumption of an emerging market although

one may argue that recent progress shown both in the research field and production capabilities of China places it at the forefront of SCM evolution. Marinagi, Trivellas and Reklitis (2014) demonstrated the important role of sharing qualitative information in increasing performance by studying 61 Greek manufacturing companies. The premise is that information in SCM (inventory, cost, capital etc.) supports a strategic partnership with logistics suppliers and contributes to increasing LARG attributes of the SC. Therefore, we may consider the fact that a European emerging market can be positioned much behind China in the assessment of the potential to exploit SCM output of information and data.

An essential outlook of the SC is conceptualized by Beaumont, N. (2005) around the idea of a multi-level integrated process from raw material to the distribution of the finished product, which includes processes pertaining to manufacturers, suppliers, distributors and clients. All levels are exerting a certain degree of impact on a diversified array of financial performance indicators. The fairly restrained (data wise) case study in the paper of Frohlich and Westbrook (2001) has demonstrated that an increase in the degree of integration of this multi-level set up positively influences the evolution of such indicators. Considering the pertinence of the model employed and the well-rounded hypothesis, the paper can be undoubtedly classified as a starting point for future research. The meta-analysis of Chang et al. (2015) attempts to correlate SCI and degrees of intermediate (operational, relational and strategic) and financial performance of the company. The study eliminates selection bias in its collected data and accounts for generally neglected factors such as relationship quality and national culture considered in SCI context. The intermediate levels of performance ensure a better insight into the conclusion of SCI impact on financial performance. While results of the analysis prove that 'SCI enhances financial performance', the authors clarify that this is not a straight flow and mediate deviations through the intermediate performance levels. Therefore, although SCI can generate costs that do not contribute directly to return (e.g. supplier integration contributes to service level but negatively impacts cost) the authors show how attributing the gains from integration to intermediate targets of performance can 'generate superior customer value positional advantage'.

Findings of Ataseven and Nair (2017) place SCI at the core of a performant SC as a multitude of SCI and performance measurements are put together from the most relevant literature to date. The value added of the meta-analysis conducted consists, from a resource point of view, in putting together studies that have either singular or multiple measurements of SCI and performance for testing several hypotheses, with a larger degree of significance in the output. The authors gather in their study a vast theoretical background that establishes the conditions and implications of integration in the SC, proposing 7 hypotheses related to both internal and external integration. This paper incorporates the idea of an intermediate dimension positing cost, quality, delivery and flexibility as transitional dimensions to operational performance. In addition, it includes as well the unfixed and specific factors that favour integration in the first place: 'information sharing, collaboration in the design of processes and products, joint decision-making and coordination'. The results of the study demonstrate that supplier integration yields the widest impact on performance, followed by customer and internal integration. Importantly, the authors advise investing first and foremost in the internal infrastructure of SC integration as an internal clarification of processes and expected outcomes of strategies should be set first within the SC of the company.

Li et al (2006) examined the impact of SC factors on the overall performance of an organization and implied in their research a measurement for the degree to which they can be considered a competitive advantage. The factors that the study takes into account are, as follows: 'strategic supplier partnership, customer relationship, level of information sharing, quality of information sharing and postponement'. Organizational performance – a concept that includes a wide array of financial and market criteria (for example: market share, returns on investments or profitability) – and competitive advantage are both supported with empirical results. The authors' research has brought forward proof that the efficiency with which an enterprise forms strategic partnerships with its logistics suppliers and postponement are contributing most to generating a competitive advantage. A strategic approach considering these two factors can make a company surpass its competitors in terms of costs, flexibility, quality and time advantages.

Boonjing, Chanvarasuth and Lertwongsatien (2015) have centred their research on the purpose of revealing the potential relationship between eleven SC components and companies' performance. The authors classify these analysed components and the output is a set of details revealing the top five components, in terms of impact on performance, targeting the goal of formulating a theory that explains how they exert a positive influence on performance. The study accounts for the data of 241 companies, from five different production sectors. Such diversity which brings to attention a series of relevant factors that are oriented both towards financial and strategic goals, thus proving that qualitative measurements can exert similar influence as quantitative ones. The limitation of the study lies in the exclusion of SC variables accounting for the production process and movement patterns – industry or even product specific variables – which constitute a key point in having a flexible, adaptive and agile SC.

Maropoulos et al (2008) have acknowledged the evolution of performance from a purely deterministic cost measurements to an 'assessment of multilevel criteria at a global basis'. The paper includes a wide array of instruments and means to assess performance in the SC, with detailed attention towards measurements of impact of externalized processes. The proposed evaluation process therefore derives from SCM with definition of strategy and objectives, which are further translated into constructing the Key Performance Indicators system. An evaluation of results translates into reporting targeting process owners and decisions of strategy and objectives can be affected consequently.

Wagner S. et al (2012) have compiled a comprehensive literature review and case study with the purpose of reaching empirical proof that SC fit has a positive impact on financial performance of the enterprise. The authors define SC fit as 'the perfect strategic consistency between a product's supply and demand characteristics'. Significant contributions of the paper are the recognition of the importance of targeting financial performance measurements perceptible from SC perspective, the fact that the developed model includes the competitive priorities from which SC trade-offs originate (cost, quality, delivery and flexibility) and it controls several structural variables (such as country, firm age and size, industry effects etc.). Nevertheless, the data sample is insufficient and the variables' causality is mainly unconfirmed which leaves an unfulfilled potential for a more comprehensive and dynamic research to be carried out.

3. Framework

This section proposes, based on knowledge gathered from literature and practical examples from successful companies, a framework for interconnecting SCM factors and performance, focusing on both financial performance and SC performance. Starting from levels of SCI, we propose the most significant factors of impact, relevant SCM and steps in creating and updating business strategy in respect to SC. Indisputably, such a broad framework is not a custom-made model and businesses should adapt qualitative and quantitative influence factors to its specificities (e.g. national, industry, corporate culture etc.) in order to achieve the best outcome. We have selected as a starting point the three levels of SCI because we have considered the distinct value added brought by each of them to be the most suitable differentiator for the subsequent impact factors. Placing internal integration first is backed up by literature with the straightforward argument that a company cannot be supplier or customer oriented integration without starting from its own process map and SC design. Integrating an external party requires an established internal structure thus ensuring that choice of partner and customer offer is fit to SC capabilities.

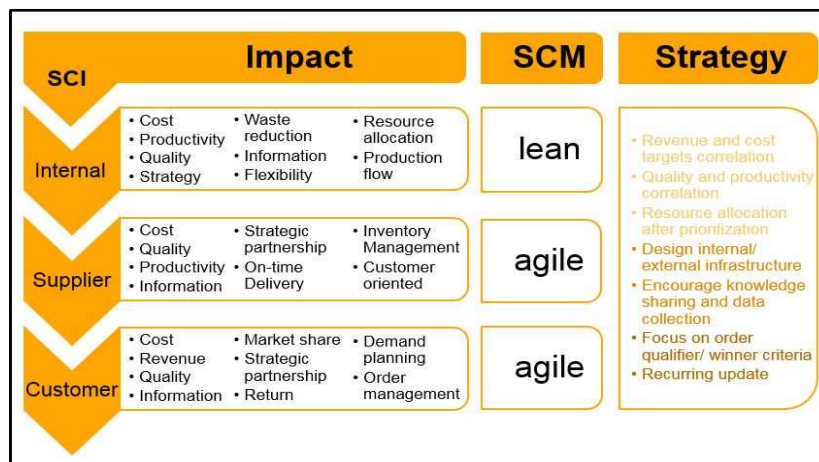


Figure 1: Framework for strategic decision-making

Moreover, SCM strategies – lean and agile – are correlated with SCI and impact factors and authors recognize that with a well-rounded strategy the two of them could intertwine. Lean strategies are fuelled, as Maropoulos et al (2008) acknowledged in their research, by ‘new performance evaluation matrices based on key criteria of cost – quality – delivery’ which are a direct outcome of customers and suppliers sharing information with the company. Agile SC rely just as heavily on input from suppliers and customers as it is the main guidance in having a rapid and on point response to change. ‘Leagility’ is frequently met in recent literature as a concept abridging the lean and agile strategies with a company being prepared to switch between the two as needs are signalled from suppliers and customers. Maropoulos et al (2008) assess that a constant interchange of lean and agile production is ‘the best way to provide products of value to the customer, at a globally competitive cost, within a flexible supply chain’.

Internal integration is the cornerstone of SCI and it's the most accessible one in terms of design, implementation and resources involved as it implies change within the company, without direct implication of external stakeholders. Although indirectly, internal integration has consequences on suppliers and customers, on the long term such efforts are most likely to bring improvements to the relationship with these stakeholders. A lean SC implies vast efforts and experience with internal integration since it requires clearly defined processes and optimized production flow. Thus, the implications of cost, resource allocation and waste reduction are at the centre of the management efforts. Product quality is standardized and implications of flexibility may bring difficulties since adaptability to new processes and volatilities in demand are harder to process for lean SCs. In a way, if we look at quality and production flow as the core effort, it would mean that cost, resource allocation and waste reductions could have differently set targets, transforming the SC into a 'leagile' one. As a result, strategy in internal integration can have a major impact on the ability of the company to process market volatility and customer demand changes.

Supplier integration may or may not be formally formulated by the company but, in our opinion, it is unavoidable. Regardless of the place of the supplier in the SC process (e.g. from raw materials supplier to delivery services supplier) all companies set up their relationships with suppliers so that performance and cost efficiency can be measured. Getting past these usually contractual terms of the relationship, an additional step in supplier integration would focus on actively involving the supplier in the areas of internal SC flow that can be directly affected by its actions. For example, a company can actively collaborate with its raw materials supplier in reaching a stable and efficient inventory management or collaborate with its delivery service supplier to ensure that the image of the company is properly represented to the customers. Such management and marketing efforts can be easily quantifiable if the partners collect data and provide constructive and valuable feedback.

Supplier integration is compatible to an agile SC as the partnership is most valuable as an active feed of updated information, as well as a back-up of efforts in continuously changing business landscapes. Given the fact that substantial knowledge rests on both sides of this partnership, an agile SC inquires constant updates that allow the company to face changes. Strategic partnership implies not only a long term maintenance of the contract, but also the selection and growth of the relationship in a sustainable way. As we previously mentioned, if efforts of supplier integration come after setting up internal integration, it is easier for the company to formulate a list of requirements and differentiators that it looks for in a logistics partner.

Customer integration completes our matrix and closes the gap between what and how the company plans to deliver its product and what it is expected from the product and its delivery. Correlation of cost and revenue is majorly affected by customer integration as it gives the company an insight into a clear, constantly updated information of the requests for its product becoming the order winner. Agile SCs draw their flexibility from timely collected information on what is the expected change in order to qualify for or lead the market. Regardless of the level of interaction with the customer, from a SC perspective, a company should target a process design that states what are the information, feedback and indicators that it wants to follow.

As a result, processes at the top of the SC flow – such as demand planning and order management – can be better estimated and fulfilled. A real-time feedback on the quality of the product is the most valuable source of information and customer

service can be set up to fit best to the expectations of the customer and be prepared to deal with a wide array of potential scenarios. As a consequence, reverse logistics – dealing with returns for all reasons (e.g. quality, late delivery etc.) – becomes a stable process with the status of a service offered by the company, rather than mediator of a wrongdoing. Forging a strategic partnership with customers is most often than not separated from SC, as it is usually seen as a marketing and branding effort. Nevertheless, the information and knowledge that SC can draw from this relationship should encourage management to connect the two with a better infrastructure and clearly set targets.

After considering the broader context created by SCI, SCM and the aspects exerting most significant influence, the authors have listed seven directions for updating and designing corporate strategy. Correlating cost and resources inquires that the company's strategy does not treat separately the impact factors and therefore it can be assessed which one exerts most influence. A balanced long term strategy can establish periods when cost dominates the strategy and when revenue is the driver of decisions. If the factors affecting the two are not treated independently, the risk of neglecting one of these two targets is greatly reduced. Correlating quality and productivity yields the same benefits as the first strategic direction, if the company focuses on their intermediate drivers. A 'leagile' SC has the capacity to oscillate between the targets of quality and productivity and reach an output that satisfies the needs of the customer. Resource allocation is a strategic direction that uses the input from the first two to make the best decisions for the status quo and prepare for the long term expectations. Designing the infrastructure for SCI consumes the allocated resources and keeps together the information and knowledge in its most usable form. A proper architecture of the SCI network encourages knowledge sharing and data collection, guaranteeing updated input for the production and the maintenance of historical data to support strategic decision making. The authors accentuate the importance of establishing what order qualifier are and what are order winner criteria, a clarification that defines the boundaries of the company's strategy. If these six strategic points are continuously updated, the company has designed and works with the best correlation between SCS and business strategy.

4. Conclusion

In conclusion, a strategic framework including SCI, SCM and business strategy can positively influence company performance. Employing internal and external synergies in formulating the business' strategy in report to SC affects performance measurements as well as the strategic partnership that the company forges. The value added of employing the proposed framework for designing a firm's business strategy lies in addressing the major drivers of performance in an aggregated manner and the intermediate influencers are purposefully approached.

Middle and top management can rely on the present framework, with proper adaptations to specificities, to build a strategy that, in turn, influences the architecture of the SC. Although we noted that internal integration is the starter of the process, the design and implications of it are influenced by supplier and customer integration and internal SC must succumb to these inquiries timely and properly. As a result, 'leagility' becomes easier to manage and suppliers and customers can see their efforts paid off and demands respected.

The present paper aims at constructing a general framework, based on extensive literature and case studies analyses that does not take into account the needs for assigning measure, indicator or significance weights to the factors involved. Therefore, limitations of the paper are rooted in the lack of measures and indicators assigned to the proposed factors. Moreover, empirical correlation between measures and performance indicators would mean that management can decide on the strategic priorities with better estimations of the results.

Directions for future research, that the authors will pursue as well, are testing the framework with relevant data from several manufacturing companies. By having a correlation and degree of significance for the impact factors and measures proposed, we can better prioritize the actions in our strategy and make more informed decisions. Moreover, historical data correlated with outcomes could point out strengths and weaknesses of the framework and predict potential outcomes of different scenarios of the framework.

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CHANGES IN THE GOVERNANCE OF FRENCH UNIVERSITIES

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Abstract: *The evolution of the student population, the generalization of the new public management and the process tend to modify the governance and the characteristic of the French university system. The Bologna processes are applicable to all countries of the European Union, please allow some degree of harmonization of degrees and courses, it does not directly affect the modes of governance of universities. The modes of governance are strongly dependent on the historical events that have little by little marked the university traditions and also by the laws and measures these last years within the framework of the new public management. A detailed historical approach makes it possible to better shape the particularities of the French university system, as well as researching the causes and consequences of current features of this system.*

Keywords: *universities governance; legislative reform; New Public Management; Bologna process; massification.*

JEL Classification: *N30; I28.*

Introduction

The introduction of new public management in the universities governance of in France, is part of the wave of modernization logic of the public service and a search for efficiency on the model of the Anglo-Saxon countries. We chose to adopt both a historical methodology and in-depth analysis of the governance profiles of academic institutions. This study is part of a context of national and international disruption of public governance systems. The diffusion of the concept of New Public Management at the university raises many questions. And this especially as French universities, still dominated by the state, have been assigned many objectives sometimes contradictory. Universities will have to choose between several strategies, in a context of international competition and strengthening of the knowledge economy and human capital

1. The major stages of the evolution of French universities from the Middle Age

1.1. From the Middle Age to 1968

The first universities appeared in Bologna, Paris and Oxford between 1180 and 1220. The term *universitas* meant a community of men united by an oath, and constituting a legal entity capable of bearing and defending its interests before the royal powers, ecclesiastical or urban. Before the twelfth century, the literate, who know Latin, are mainly monks. From the twelfth century, under the effect of an ecclesiastical reform, the masters and the student seek to emancipate themselves. The creation of a university stems from a quest for independence from episcopal authority, and also from secular power. On the other hand, it is thanks to the pontifical

support that the universities have been able to gain their independence. The popes wanted to ensure direct control over the formation of clerics (Favier J., 2017).

Table 1: The three major periods of the French university system
From the Middle Age to the 19th century

Middle Age	The university, one of the oldest public institutions in Europe. Concept of the homo academicus with a search for independence vis-à-vis the authority of the bishop and local authorities. Domains: scholastics, Hellenic studies, law, doctor, faculty of arts faculty of science. Creation of the university corporation (beginning of peer management), like the other corporations of the Middle Ages. Access to these corporations through degrees and exams.
1793 Convention	Closing of the universities, organized as a professional corporation, under the Revolution (Decree of the Convention of September 15, 1793) The French Revolution favours the schools (Normal Superior, Polytechnic, Central, etc.).
1806 Napoleon reopens the faculties	Objective: providing the imperial power with administrative and judicial frameworks. Faculties limited to purely professional teaching (law, medicine) are placed under the authority of rectors appointed by the political power. In all other developed countries the rector is elected by his peers and deals only with the university. From the 19th century onwards, academic disciplines, faculty and deans' empowerment, and collegial governance of faculties that will be regrouping at the end of the 19th century to form university institutions

The project of the k-to-12 school system formalized by the Companions of the New University since the 1930s (Garnier B., 2007), the reform project of Jean-Zay and the Langevin-Wallon plan after the Second World War seek to redistribute social positions according to merit (Derouet J.-L. & Normand R., 2011). In the same vein, in the 1950s, the French and English pedagogical left support the project of the "comprehensive school", condemning any early selection and advocating retention in the school environment for up to fifteen or sixteen years. The elite, from the grandes écoles, was strongly linked to the higher public administration.

Garnier B. (2007) considers that these new ideas concerning the role of education meet an economic necessity at the time: "Beyond the rhetoric of the democratization of the school and the lyricism of the reconstruction of the devastated house, the concern of the Companions of the new University is especially the broadening of the base of recruitment of the elite which the French economy needs after the Great War to direct the country and to implement the reforms which were imposing themselves in their eyes. The Companions seek the widest possible consensus around a project which aims above all at the economic and social efficiency of the school. "

Indeed, the application of these ideas could not prevent processes of circumvention of the equality of treatment (by the choice of options and sectors, the practice of a hidden selection in some universities ...). The elite, more attracted by positions of power and management in multinational firms, large international organizations rather than the national framework occupations within the state apparatus, favours: bilingual classes, twinned institutions, the international baccalaureate and / or the "World class". For the rich, schooling within long networks corresponding to

international trading systems. Conversely, the other social categories opt for a national curriculum and for short courses.

The twentieth century is marked by the development of mass education: the effects of this new conception of national education combined with the demographic dynamism of the 1950s and 1960s are rapidly felt in higher education in terms higher education, as shown in the following table.

Table 2: Evolution of enrolments' Students in higher education since 1960 (in thousands)

	1920	1930	1950	1960	1970	1980	1990	2000	2010	2013	2020 (forecast)
University				215	661	858	1 160	1 397	1 437	1 500	1 661
Other higher education institutions				66	130	215	293	454	560	591	592
Total	50	78	137	310	851	1 181	1 717	2 160	2 319	2 430	2 630
University share (in %)				69,3	77,7	72,7	67,5	64,7	62	61,7	63,2

Sources: Ministère de l'enseignement supérieur de la recherche et de l'innovation
https://publication.enseignementsup-recherche.gouv.fr/eesr/8/EESR8_ES_08-les_evolution_de_l_enseignement_superieur_depuis_50_ans_croissance_et_diversification.php

Prost Antoine, Cytermann Jean-Richard (2010), *Une histoire en chiffres de l'enseignement supérieur en France*, éd. La Découverte, coll. « Le Mouvement Social », 2010/4 n° 233 | pages 31 à 46

Theodor W. Schultz received the Nobel Prize in 1979 after publishing in the early 1960s work on the new concept of "human capital". The strengthening of the massification of students at the university would also stem from the growing importance given by theory to the human capital concept in explaining economic development, competitiveness and growth (Shultz TW, 1960, 1961a, 1961b, Lucas R., 1988).

1.2. The period 1968-2007

The 1968 crisis had a major impact on the evolution of university governance, in power games, particularly on the weight taken by some students' unions and teachers' unions. According to Prost A. (1989): "The National Union of Higher Education, through its active solidarity with students throughout the events, had gained from them real credibility and it had partly returned to teachers, as unionists, the audience they had lost as professors".

This union, by associating some famous academics' names, has been able to preserve the legitimacy of the university function, and has taken a considerable weight in the governance of the universities. Many meetings of discussions between teachers and students, and often between student unions, including UNEF, and teacher unions were held, and referring to two new joint reports between teachers and students. Thus, the radical and categorical Marxist ideology of students strongly involved in the movement has more legitimacy for individualities than the entire faculty, which has reinforced the crisis of power (Prost A., 1989).

Since then, students have opposed many legislative projects, notably those concerning the selection at university entry and the increase of registration fees (Devaquet bill of 1986). The law of higher education of January 26, 1984 (Savary Law) modifies the governance of universities by the creation of three councils elected by the university community of each institution (teachers-researchers, teachers, students, administrative staff); the board of directors, the board of studies and university life and the scientific council. The university president is now elected by the three councils assembled in assembly with the absolute majority of the members in exercise.

The impact of 1968 also had an impact on the evolution of university legislation. In particular, two laws were passed during this period:

Table 3: legislation from 1968 2007

law Edgar Faure (1968)	- reorganization of the university system after May 1968 - Universities become legal persons
law Savary (1984)	Extension des fonctions des universités Modification de la gouvernance des universités par la création de trois conseils

The still growing enrolments' in higher education has been reinforced by Jean-Pierre Chevènement's policy in 1985 of a minimum qualification at the end of compulsory schooling and the objective that 80% of an age class reach the baccalaureate level. The creation of vocational baccalaureates was intended to increase the level of qualifications of young people.

2. Dissemination of New Public Management in French Universities

In the last 30 years or so, and in practically all OECD countries, public management reforms aimed at making administrations more efficient and above all cheaper are trying to adapt certain private management rules context of the public service. The limitation and mastery of public deficits and public debt in parallel with the desire to better meet the expectations and demands of users-consumers, are the main objectives of all successive reforms, constituting what is usually calls the New Public Management (NMP).

According to Chappoz Y. and Pupion P.-C. (2012) the new public management does not constitute a stable and homogeneous set of principles and tools according to the country. However, it is characterized by common philosophy revealing some salient points:

- The separation between the strategic decision-making power of the political power and the operational, public management;
- A greater requirement on the quality of goods and services delivered by public administrations through:
 - New rules for resource allocation and orientation of public activities;
 - Decentralization of services and creation of autonomous regulatory agencies;
 - Greater transparency on the quality and cost of services;
 - Regular evaluation of public services by users.

- The use of market mechanisms for the supply of goods and services of general interest to achieve greater efficiency in the use of public funds by means of:
 - the privatization of certain administrative services;
 - the application of human resources management rules used by private companies (merit pay, abandonment of the status of civil servant and advancement to seniority, ...);
 - Increased competition between administrative services and the private sector.

From a neo-institutional perspective, the NPM, which corresponds to the new definition of administrative governance, aims to profoundly transform the steering systems and the historical values of the civil service (Boitier M. et alii, 2015). It gives a predominant role to evaluation, whether internal (agencies or evaluation mechanisms) or external (consultation of users-consumers), and considerably modifies the rules of resource allocation.

Boitier M. et al. (2015) identify several dimensions in the new control of the management of administrative systems, which: control by culture, administrative control, strategic control (planning), managerial control (with the system of rewards and remuneration).

From the beginning of the twenty-first century, the new public management began to be introduced in France with the adoption of the Law of Organization of the Finance Act (LOLF) in 2001. The following table summarizes the main and recent French legislation for the implementation of the new public management:

Table 4: Recent stages of the introduction of new public management in France

1st august 2001 LOLF	State expenditure: quantified objectives and results indicators (accountability). Distribution of powers
12 July 2005 Organic law	Law amending the LOLF Decrease in complexity of public operations and public-private partnerships
2007 Law RGPP	« Révision Générale des Politiques Publiques » (General Review of Public Policies): State reform, lower public expenditure, improved public policies
2012 Law of Modernization of Public Action	This new legislation aims to improve and replace the RGPP

In parallel and in a complementary way, to this diffusion of the new public management in the French public administrations. French universities are committed to setting up an evaluation system in line with the European recommendations and the decisions of the European ministers in the framework of the Bologna process. The main objectives of this process (site europa.ec) initiated by the Bologna Declaration in 1999 (site europa.ec) are as follows:

- Promote the mobility of students and job-seekers through the introduction of the three-cycle LMD system (Bachelor / Master / PhD), greater recognition of qualifications and periods of study between member countries and the

reinforcement of the compatibility of the different European education systems.

- Make European universities and colleges more competitive and attractive to the rest of the world;
- Modernize education and training systems to better meet the needs of a changing labor market in the context of the advent of the knowledge economy.

The last two points correspond well to the objectives of the new public management applied to universities and to the progressive evolution of the labor market which requires a higher qualification and a greater mobility of the labor force. LMD and the validation of prior learning has made it a priority to individualize learning paths, transnational mobility, and maintain an individual portfolio of skills from "cradle to grave".

The first point contributes to strengthening the construction of the European economic, educational and cultural area. The policy of lifelong learning enabled by the implementation of the system

The university crisis, reinforced in particular in the 20th century by massification, is another important explanatory factor for the need to reform the university system. The table below brings together the different elements of the university crisis, in the delivery of public services, as well as their main reasons, as denounced by the political actors and numerous authors (Derouet J.-L. and Normand R., 2011)

Table 5: The factors of the French university crisis

Elements of the French university's crisis	The reasons for the crisis
<ul style="list-style-type: none"> - Strong growth of students from the middle and lower classes in the first cycle - Decreased prospects for success - weakening in academic knowledge - Increase in school competition - Inflation of diplomas - relative downgrading of university degrees - Concern over the decline in the level - Strengthening social inequalities with the strengthening of selective sectors (Schools of Higher Education, technological university institutes) - Endogamic recruitment of preparatory classes for Schools of Higher Education 	<ul style="list-style-type: none"> - Higher population numbers at the end of secondary education - No selection at the entrance of the first cycles,
<ul style="list-style-type: none"> - Delegation of part of university equipment programs to local authorities. 	<ul style="list-style-type: none"> - Increase of the state budget deficits and decrease of the fiscal acceptance
<ul style="list-style-type: none"> - Low performance - Bureaucratization and administrative over-management - Increasing administrative burdens for teachers - Reserved relations between teachers 	<ul style="list-style-type: none"> - Absence of results duties, - Uninterrupted succession of reforms - Weaknesses of governance within the university
<ul style="list-style-type: none"> - Low link with the economic world 	<ul style="list-style-type: none"> - segmentation of academic disciplines

Elements of the French university's crisis	The reasons for the crisis
- Very low rank of French universities in international assessments	- Defence of the rights acquired by the unions and the perverse effects of the May 1968 thought

Table 6: Main legislative milestones of the French university reform

(2004) Law Allègre and law Goulard	Creation of SAIC (industrial activity service and private law) for contract management of research with companies (ADFAC) and European organizations and technology transfer
2007, creation of l'AERES	The Agency for Evaluation of Research and Higher Education (AERES) allows the establishment of a system of evaluations, according to the European recommendations and the decisions of the European ministers in the Bologna process framework
Extended Responsibilities and Competencies (RCE)	Modifications to the rules and methods of financial management and human resources of universities, as well as their steering device.
August 10, 2007 LRU	The Law on the Freedoms and Responsibility of Universities (LRU), or law of autonomy or law Pécresse, in phase, aims to: strengthen, improve the governance of universities in a more autonomous but supervised framework
March 9, 2013 Law Fioraso	establishes the process of grouping universities in the form of Communities of Universities and Institutions
July 22, 2013 Law ESR	The law Higher Education and Research (ESR), modifies and strengthens the LRU (student success, new ambitions for research and openness to the socio-economic environment, nationally and internationally)

Table 6 presents the different legislative milestones of the reform of the French university:

In parallel with this new legislation, France has many control and steering tools, such as:

- The National Agency for Research (ANR), which has become a member of the European Science Foundation, responsible for managing tenders and allocating grants to public institutions and laboratories;
- - The Agency for Evaluation of Research and Higher Education (AERES) promotes quality approaches in line with European standards.

The State has progressively introduced management control and steering tools (IGF-IGAENR, 2007), including:

- Budget allocation through a performance-based and activity-based allocation system (SYMPA),
- Budget forecasts and dashboards in LOLF mode,
- Sifac software, for analytical and accounting financial management, and Siham, for the management of human resources according to a scheme comparable to companies.

The budget allocated to universities by the state, local authorities or private actors (foundations, companies) now defines the strategy, management and resource allocation in many OECD countries (Boitier M. et al. , 2015). With regard to state

funding, the allocation of funding for research activity is based on these quantified performance indicators (rankings, number of publications or citation indexes). The amount of private funding depends on the willingness and efficiency of the universities (in valuing research, reputation, etc.) for the perception of such funding. With the multiplicity of their objectives: production and dissemination of knowledge, basic research and industrial innovation, training of future citizens, professional integration, animation of economic, social and cultural life at the local level, ... universities are now characterized by a multiplication of stakeholders: users, now treated as consumers that institutions must meet, the actors of local life: economic, social and cultural, the state. They also act within the framework of a competitiveness become international.

3. The evolution of the governance of French universities: different perspectives

The governance arrangements of universities in the past have progressively evolved according to significant historical events as we have seen in the first part. We can resume the typology of the different logics of governance described by Boitier M., Rivière A. (2016) at work concomitantly in the French university consider, in order to characterize the three major historical periods, as in the Table 7.

In France, debates on the governance of universities are fed upstream by numerous public reports from the administration (IGAENR reports) of the French republic's institutions (Cour des comptes, EESC) (Fréville report) or of the National Assembly (Claeys reports, Appeared report, the Déaut ... report) or even of national consultations (Berger Report) or of ad hoc committee (LRU follow-up report, CNE report, AERES report), as well as by the work of the European Commission, the European Parliament or the working groups set up under the Bologna Process. The teacher unions and student representations also took up this issue. Local authorities, in order to strengthen their strategy of attractiveness and the development of their action sphere) wish to be fully associated with the governance of universities.

Table 7: Profile of university governance prevailing according to the periods

from Middle Age to 1968 (dominant academic profile)	Autonomous Community of Researchers Production and transmission of universal knowledge Peer-defined standards
From 1968 to the end of the 1990s (dominant political profile)	Joint democratic arena Electoral process Representative of internal political balances Elected, Union or political affiliation
The period of The New University Management (dominant manager profile)	Actor of the knowledge economy: Promotion of intangible capital in the service of competitiveness Management control, evaluation and financing agencies, quantification and ranking

The development of a contractual policy with universities and the creation of a national evaluation committee were instituted using methods of establishing a new mode of public management and a power to the detriment of the ministry, and Peer management.

The current period actually looks like a transition period: confrontation between the three profiles, by taking up the typology established by Boitier M., Rivière A. (2016).

Table 8: Strategies related with each governance profile

	Dominant academic profile	Dominant political profile	Dominant manager profile
Characteristics	<ul style="list-style-type: none"> - University of intensive research - International Vision - Search for private financing - Definition of an internal evaluation logic - Link with the network of Schools of Higher Education 	<ul style="list-style-type: none"> - little used evaluation or variable geometry evaluation - Heterodox management system - little connection with the school of higher education 	<ul style="list-style-type: none"> - search for efficiency and productivity - Accountability to the supervisory authorities - Extern evaluation set by these authorities - only a few institutions will develop local structures of excellence
Governance	<ul style="list-style-type: none"> - Low unions' weight - Low power of local authorities 	<ul style="list-style-type: none"> - High union and policy weights - High bargaining power 	<ul style="list-style-type: none"> - Little autonomy - scrupulous respect of the rules advocated by the state and local authorities
Student management disposals	<ul style="list-style-type: none"> - Establishment of student selection systems - Favouring the upper classes and the most talented students 	<ul style="list-style-type: none"> - Risk of drastic decrease in student numbers 	<ul style="list-style-type: none"> - Training for the middle classes - Very large student population
Management of academic staff	Internationalization of careers	clan management (with risks of favouritism and clientelism) long-term risk of deteriorating the quality of research and teaching	National and weakly international careers

According to Boitier M. et alii (2015), the internal actors in each university can strongly influence the legitimacy of the control systems. The evolutions of control systems are the fruit of complex and processual interactions and conflicts of logic. The LRU, which facilitates external partnerships, also weakens faculty representation and the principle of peer management by giving more prerogatives to the university's president and board. Institutions are encouraged to create foundations and increase their participation and collaboration with private companies and other stakeholders.

Conclusion

Finally, the current reform tends to extend the device of the Schools of Higher Education to the most prestigious universities. It does not reduce inequalities but rather seems to increase them, as it increases regional disparities by favouring existing large university centers. However, it is likely to further increase the international visibility of the most highly rated universities.

The most important point concerns the strategies in the modes of governance: University governance focused on international competition will differ significantly from other types of universities. Some universities will either have to change their strategy and reconvert, either disappear or become short-term universities more or less in relation to major international universities and intensive research.

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IMPACT OF GLOBALIZATION ON THE HIGHER EDUCATION – CHALLENGES AND OPPORTUNITIES

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Abstract: As a consequence of the continuously evolving environmental impacts, most of the previous systems need to be improved. The Hungarian higher education system is no exception to this either; this system is mostly influenced by the local peculiarities, demographic changes and the globalization. The Hungarian education system takes on an express challenge that is caused by the fact according to which the number of schoolable students decreases as a consequence of the decreasing population which is nowadays perceptible in the field of higher education institutions as well. However, the development in economy does not take it account and the demand on the qualified employees is progressively increasing. This contrast results in the fact that the education system shall discover those opportunities which are suitable for managing this anomaly, even if not completely but approximately. Striving for internationalization is increasingly emerging in the domestic education system which can be interpreted as an alternative solution for the difficulty outlined. The continuous growth in the rate of foreign students in the Hungarian education system can help to manage the continuous demand on the employees with appropriate skills. It is therefore important to place emphasis on attracting and keeping the foreign students as well as recognizing their demands and, along this line, serving them as far as possible. Aims of the treatise are to expound the evolution of demographic situation in this context by means of analyzing related Hungarian and international surveys and to outline those possible solutions and approaches which can contribute to the elaboration of a future educational strategy. As a result of the research, it can be concretely determined what countries the largest percentage of students comes to Hungary from, what educational levels the foreign students most commonly learn at as well as the most popular universities and courses for the foreign students. Consequently, the awareness becomes predictable in view of attracting the foreign students by means of which the whole process can be made more effective. The final aim of this article is to summarize the challenges and opportunities of the higher education that need to be faced and managed.

Keywords: higher education strategy; university; foreign school enrolment; demography; education system; questionnaire.

JEL Classification: I24; I25.

1. Introduction

The higher education system has become mainstreamed in the social and political discourse over the past years. The spotlight, which has been – many times not too luckily – put on the universities and colleges, has sparked a broad debate. As a result, the rethink of social role and function of the higher education has begun; this process has not ended to the present day. The higher education-related developments are of prominent importance in the strategy of every country since the human capital is presented as a principal condition of competitiveness (Matkó – Szűcs, 2012) in the modern interpretations. Insofar as the educated human ratio of a country is unsatisfying then it may have an impact on the entire social and economic development. Taking the demographic changes into account, the continuously decreasing population ratio is not favourable to the economic circumstances in Hungary. Growth in the extent of labour shortage can be increasingly observed beside the decline in rate of participants in the higher education systems (Csehné et al., 2018) which is further enhanced by the drop-out of the students participating in training (Fenyves et al., 2017). By means of a purposeful and prepared action plan, the education system is able to counteract against the challenge. In that sense, the fact should be grasped as a potential opportunity according to which the presence of foreign students is progressively increasing in the Hungarian education system. Among the available opportunities, an approach to the situation from the point of view of internationalization can be forward-looking, along which Hungarian and international statistics will be now used in order to reveal the possible relations and from the point of view of collecting the optional solutions.

2. Statistical outlook – foreign students in Hungary

The Hungarian higher education will have to face up to extremely serious demographic challenges within a few years. Now, after different systems of the public education, the ever lower number of children born in the country will also adversely affect the higher education as a whole. According to the publication of data of the Hungarian Central Statistical Office, population of the country has been actually increasing since 1980 (KSH, 2017a). This fact is particularly worrying because a labour shortage can be explicitly experienced considering the current labour demand of economic. In many cases, it means not only quantitative but quality lack of those employees who are mentioned as talents in the private sector (Manpower, 2016). However, when examining the Hungarian higher education, it is interesting to consider the presence of foreign citizens as well.

Although the presence of foreign citizens cannot be described as outstanding in Hungary (1.6% of the country's current population) but, having regard to their increasing ratio (Oláh et al., 2017), they should be considered as a significant opportunity in relation to both the declining population and the number of students. In the publication of the Hungarian Central Statistical Office (KSH) in 2017, a detailed picture can be obtained about the number of foreign citizens living in Hungary and their data of origin. The overwhelming majority (65%) of foreigners living in the country come from Europe, in particular mainly from the surrounding countries, inter alia, from Romania (16%), Germany (12%), Slovakia (6.2%) and Ukraine (3.8%).

Their further 27% originate from Asia, Africa (3.9%) and the American continent (3.5%). Based on the age structure, the foreigners living in Hungary are younger than the native population – with regard to the women (44%) and men (56%) as well, headcount of the age group between 20 and 39 is determinative; their rate was 45% among the foreigners living here. Thinking about the strong presence of the age group between 20 and 39, it can be supposed that there is a relation between the foreign citizens living in Hungary and the foreign students coming to Hungary. Several competent bodies (for instance, the Hungarian Central Statistical Office, Educational Authority) are examining the presence of foreign citizens in Hungary in the field of education and preparing current surveys. The different organizations supposedly reach their conclusions by means of not exactly the same methods thus there is no full consistency with regard to the numbers but approximately the same results are obtained by means of which the tendencies are harmonizing in the order. Generally speaking, the expansion, which had started in the field of education in the 1990s, slowed down in 2004 and then has started to decline. And nowadays, the statistical data show that, although the total number of students is decreasing, the number of foreign students shows a continuous increasing within that (Figure 1) (KSH 2016).

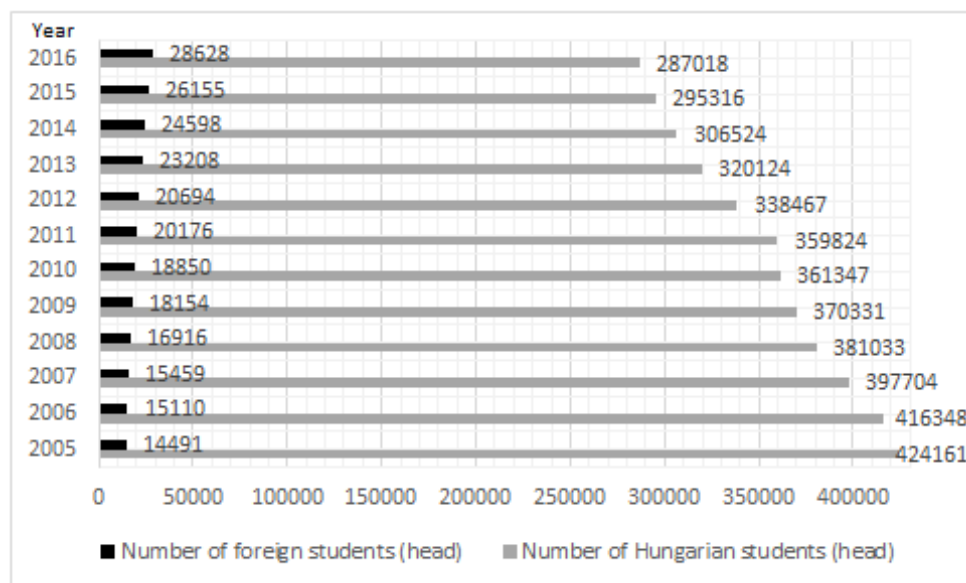


Figure 1: Participation of the Hungarian and foreign students in the higher education
Source: KSH (2016)

According to the publication of KSH in 2017, the number of foreign students increased by 10000 persons among the full-time students between 2010 and 2016; this fact is also evidenced by the Hungarian Educational Authority. Based on the data, it can be stated that a high degree of growth can be observed in the presence of foreign students in the education system. Based on the statistics prepared by the Educational Authority, it can be also established what form of training is the most popular for the foreign students. Distribution within the training fields shows an

unequivocal and considerable growth over the last 8 years in most areas. The high rate of persons undergoing undivided trainings leads to further conclusions with regard to the most interesting courses. Based on the statistics of the Educational Authority (2016), the courses of general practitioner, dentist and veterinarian are the most popular, together with the courses of pharmacist and architect which present themselves to a lesser extent but dominantly. And in relation to the universities, the most popular ones are Semmelweis University, University of Pécs, University of Debrecen as well as University of Szeged from the point of view of the foreign students. Based on the data of the Educational Authority in 2016, most of the students (more than 3000 persons) came from Germany but relatively a lot of Chinese, Slovakian, Serbian, Iranian, Norwegian and Nigerian people find their account in Hungary (Figure 2).

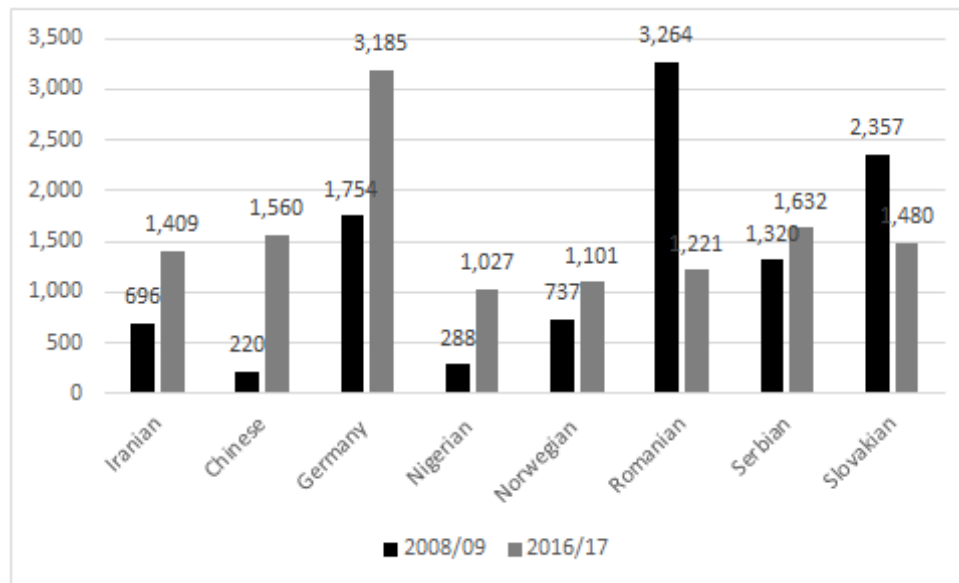


Figure 2: Distribution of foreign students coming in the largest number, by their nationality

Source: Educational Authority (2016)

Comparing the presence of foreign students participating in the school year 2016/2017 with the largest percentage (headcount above 1000) to the school year 2008/2009, it can be established that the rate of foreign students coming from the affected areas, with the exception of two countries, has grown in the Hungarian education system over the years. In case of two exception countries (Romania, Slovakia) in this ranking list, it may be interesting to examine the change in participation rate in the local education systems since the decline in number of students can be caused by the growing participation in the education system of the motherland.

3. Responses to reduction in the number of students – globalization in the higher education

Based on the statistical data, it can be stated that the total number of students in the Hungarian higher education is declining. This tendency opens up several opportunities for the higher education management and the higher education institutions. One of them is to improve the quality under a greater educator attention paid to a smaller number of students. Reappearance of the classic master-disciple relationship is a desirable goal and the higher education management also prefers to reach it (Changing degrees in the higher education, 2014:8). Of course, the improvement of quality cannot be accomplished without an appropriate quality assurance system, an adequate and objective control on the courses and training places based on described rules since this is the only way the candidates can make substantiated decisions when they choose courses or training places (Csiszár, 2013).

Other responses can be also provided to the decline in number of students, ideally in parallel with the improvement of quality. Although the developed western countries are further advanced in the field of internationalization, an enlargement in the rate of inward student mobility is not necessarily a national economic interest in their cases. In contrast, in Hungary, it can be regarded as a national economic interest anyway since the tuition fees paid by the students are significant income for the universities. In addition, the presence of the international students has an increasingly impact on the social and economic development, cultural life and vitality of the host cities of institutions thus the internationalization is also the interest of the city authorities in case of the big university cities (M. Császár et al. 2013).

The internationalization or internationalizing has more approaches and conditions which cannot be disregarded when exploring the topic. On the one hand, having regard to its aim, it can be stated that the claim linked to the internationalization in the higher education can be also resulted from financial reasons since the realization of modern researches in the universities are subject to material issues in many cases, for which the required financial resources are often not available through the central government budgetary. Consequence of this is that the higher education institutions are forced to increase their own revenues (Németh, 2012). However, it has further limitations because the natures of topics and study materials, i.e. the research areas, are further aspects of internationalizing. While the task can be easily solved in the natural sciences and medical sciences, this can be an insurmountable obstacle, in many cases, in the fields of humanities and social sciences due to the strong international character (Fézer, 2013). Social attitudes can be another viewpoint in the field of internationalization which applies to the admission of foreigners interested in new results and the acceptance of diversity (Changing degrees in the higher education, 2014:36). As well, in this context, there is a focus on that the output of competitive professionals also emerges as a central objective, not attaching the business sector (Berács, 2012).

However, strengthening the international character of the teaching activity is an unequivocal condition for the feasibility of internationalization since only those educators are able to hand over competitive and modern knowledge to their students who are actively linked to the international researchers' life. However, the realization of this condition requires such an extent of the general high-level terminological

knowledge which makes the representatives of the area suitable for an authentic teaching activity in foreign languages as well. In order to accomplish these internationalizing conditions, a target system has been formed in Hungary which supports the achievement of the aims outlined (Changing degrees in the higher education, 2014:48-49):

- Positioning the domestic institutions in the international competition.
- Enhancing the international mobility of students and educators-researchers.
- Strengthening the international relations with partner states of strategic importance at institutional level.

Insofar as the internationalization is overall approached from the staying of foreign students in Hungary, based on the treatise of Berács – Malota (2011), it can be said that Hungary was already attractive for foreign students in previous periods as well. And this attractiveness can be even enhanced further, especially in that case if the residence of students is supported by both the sending and host states (i.e. Hungary). Students come from more than 120 countries to our home country in order to pursue their education. In the school year 2009/2010, there were 27 countries from where more than 100 students came to Hungary.

4. Success of internationalization in Hungary based on the foreign students' assessment

In order to enhance the promotion of internationalization, Hungary should place great emphasis on attracting the foreign students which can be also interpreted as a kind of brand building. In order that this activity of the country can be assessed, a survey (Malota, 2017) has been prepared, commissioned by Tempus Public Foundation, about what the foreign students think of Hungary's image, how satisfied they are with the quality of the universities chosen and the student services as well as what experiences they have gained during their presence here.

In the questionnaires, the answers were given by 1566 foreign students originating from 72 different countries, studying at 27 domestic higher education institutions. Distribution of the respondents' gender was almost similar: 54% men and 46% women were interviewed. Their average age is 24.1 years, two-thirds of the persons questioned (73%) are aged between 19 and 25. This data is harmonising with the former data according to which 45% of the foreign citizens living in Hungary are in the age group 20-39 (KSH, 2017) – it is the group of foreigners living in Hungary consists of students participating in higher education, in a decisive proportion.

During the survey in 2017 (Malota), Hungary's general image was examined in the framework of open questions. The persons questioned had to answer to the question what were the first three *positive* and the first three *negative* words that came to their mind when they were thinking of Hungary and the Hungarians. Most of them associated the beauty, kindness and amicability with positive things. In addition, the following words were mentioned most frequently among the positive expressions: peaceful, helpful, cheap/affordable, Budapest, culture, secure, calm. It is encouraging that "negative aspects" was the most frequent answer to the question what were the first three negative words that came to the mind of persons questioned when thinking of our country and the Hungarians. Thereafter, the following negative words can be mentioned in order: language/language difficulties, homeless people, small country, unfriendly, poor, smoking, expensive, racist, cold, slow, rude, lazy, and pessimistic. It is striking that there are greater consensus and higher mentioning

percentages in case of positive words while the rates are lower in case of negative expressions but several kinds of words appear. This leads to the conclusion that the positive opinion yet presents itself more dominantly in the overall opinion although there are also negative characteristics which are linked to the country on the basis of foreign estimation.

With regard to the foreign students, it may be a particularly important information how they obtain information about the country beforehand. 85% of students hardly knew anything (55%) or had little previous knowledge (30%) about Hungary before they have begun their studies. Among the countries represented in large numbers, the Turkish students had more previous knowledge: 36% of them marked the answer "yes, I knew a lot" (this is 15% in the entire sample). Significantly in greater proportion, the Nigerian, Japanese and Algerian students had a very little knowledge about us. By examining the regional rates, it can be seen that the Eastern European and Western Balkan students had more knowledge than the students of other regions. However, the same cannot be said about the respondents originating from the EU; there were no significant differences in their cases. This information leads to the conclusion that the communication about the Hungarian education opportunities is not powerful enough in those countries from where the potentially interested parties come in large numbers – this could be improved by conscious development and, based on the study, the emphasis should be placed, using targeted instruments, on those countries from where Hungary accommodates students in large numbers. Further pronounced information is what decision-making factors play roles in choosing a Hungarian institution. The three most common reasons of making decision about the studies in a Hungarian higher education institution are as follows: education at high level (46%), desire to get to know another culture (46%) and affordable prices (43%). In addition, among the possible answers, students (15-20%) have frequently chosen that they came to Hungary to study because the country has a good reputation, because their friends suggested our country who had studied here previously, because it was easy to get in to the chosen institution, because there is a partner agreement between two universities as well as because the discrimination is low here, because the given student wanted to live here and because the chosen institution provides unique programmes. Among other reasons (mentioned by 5%), such special interests are reflected that e.g. a student likes the music of Franz Liszt and Bartók or a student can study nuclear electronics, maybe a student wanted to come due to a certain professor or a certain reputable laboratory. Data arriving from students' feedbacks serve as a headstone for building the brand; its conscious utilization can make the attraction of foreign students more effective.

The most popular information sources are the scholarship portals on the internet (with a 35-percent mentioning). Furthermore, a quarter of the respondents denoted that they had obtained information about the chosen university from their friends (26%). The family members, the homepage "Study in Hungary" and the embassies/cultural institutions are also at the beginning of the ranking order related to the collection of information, with 15-15-14 percent. Among the information materials of the chosen higher education institution, the online advertisements are more popular (10%); the offline sources have been forced back. The rate of students obtaining information from the mainland educators and departments is 11%.

Almost a level 4 satisfaction was peculiar to the general factors of the higher education institutions (academic program, selection of courses, scientific prestige). In case of these questions, rate of the medium-satisfied persons is between 33 and

50%; distribution of the discontented persons (who gave grade 1 and 2) is between 10 and 17%. This result leads to the conclusion that those who have chosen Hungary are satisfied with their decisions rather than dissatisfied.

An experience coming from outside the education system can be also decisive in relation to the estimation of a host country. It can be said that the students are nearly satisfied with the quality of those services that we asked about in connection with their cities. The students are mostly satisfied with the traffic conditions (average 4.26 measured on a 5-scale), 82% of them has given grade 4 or 5 for the quality of traffic. 69% of the respondents are very or quite satisfied with the shopping facilities – 13% of them asked that they were less satisfied than the medium. In case of the satisfaction indicators of the entertainment possibilities, it can be said that 63% of the respondents are more satisfied than the medium (marked grade 4 or 5) and 22% of them are medium-satisfied (ranked this factor with grade 3). The opportunities for accommodation and sporting are the most problematic among the possibilities listed. In case of the sports opportunities, 28% of the respondents have given grade 3 only, 57% of them have ranked with grade 4 or 5 and 15% with grade 1 or 2. One fifth of the respondents have ranked the accommodation opportunities with grade 1 or 2, other 17% are medium-satisfied only. Based on this information, the development guidelines can be established in the light of strategy to be evolved in the future.

The most favourable opinions are about the restaurants and shops, roughly half of the respondents (52 and 48% of them) have primarily experienced friendly treatment in this situation and only 6-7% of them have experienced inimical attitudes. The rate is almost similar in the traffic as well as on the streets: 37-38% of the persons questioned have met with helpful and 47-47% with indifferent behaviours but 10-12% with negative attitudes. Among the official situations, the attitudes experienced at the university administration have the most favourable adjudication. 63% of the respondents have met with positive and helpful behaviour, a quarter of them have experienced indifferent treatments. In addition, 8% have felt that there were hostile attitudes toward us. In most official situations, neutral or helpful attitudes were peculiar. 4-14% of the respondents have experienced inimical, negative behaviours, least in the embassy (4%), mostly in the health and care sector and in the immigrant office (11 and 14%).

At the end of the questionnaire, prior to the demographic questions, a synthesizing question was put: "Would you choose Hungary again if you had opportunity to choose again?" Almost three-quarters of the respondents (70%) would decide to choose our country again (this rate was 73% in the survey of 2013). 26% of them think that they may come here to study again (22% in 2013) and only 4% think that they would not choose our country (5% in 2013).

Conclusions

Based on the statistics measured in the Hungarian higher education system, the number of students is progressively decreasing but, in addition, it can be observed that there is an average increasing in the participation of foreign students. In the light of preparations for managing the situation, summarizing the challenges and opportunities the higher education is facing, several options are available in order to solve the emerging state:

- Over the next years, the number of higher education candidates may decrease in Hungary in a manner which can be projected from demographic

data. This provides the possibility that the number of students per educator may decrease, namely there would be more opportunities for in-depth workshops.

- The decreasing number of students provides that the workload of educators may be reduced thereby they could publish more publications in periodicals with higher quality than present day. Furthermore, there could be also an opportunity to establish more, clearly researcher jobs.
- One of the utilization methods of the released educator capacity is to increase the present rate and headcount of the foreign school enrolment. To this, it is required to advertise more foreign language courses than nowadays, mainly English language ones.
- Using the previous research results in order to establish the Hungarian education brand-building, an emphasis should be placed on the active communication towards those countries from where potential student headcount may come.
- The Hungarian higher education should be made more attractive for the foreign students since the full-time diploma-mobility will be expectedly promoted against the credit-mobility in the future. To this effect, the domestic higher education institutions' positions should be strengthened in the international ranking lists.
- An emphasis should be placed on the improvement of those areas which were mostly underestimated on the basis of surveys; such as the quality of accommodations, enlargement of the sports and entertainment opportunities and the strengthening of the general acceptance at social level.
- In addition to that the personal attendance needs to be also strengthened in a popularizing process, an enhanced use of the communication channels identified on the basis of survey results is necessary for an effective access.

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OPPORTUNITIES ARISING IN THE FIELD OF EDUCATION AND EMPLOYMENT IN RELATION TO THE MIGRATION

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Abstract: The migration as a phenomenon connected with many social topics can cause many challenge in education and in employment as well. The aim of our research is to analyse the possibilities, challenges and best practice used in the educational system internationally during the integration of the migrants. On other hand, we tried to summarize domestic experiences learnt from the practice during the last years. The situation of the migrants entering and leaving the educational system can be radically different from the status of those people who born (and partly raised) abroad. The recognition of prior learning outcomes can help these people but it can generate other debates on the nature of the validated knowledge, its usefulness or convertibleness. Additional purpose of this article and the research done is to gather the most important information, practices and challenges about the labour market presence of the migrants. During this part of the research, we paid special attention to the discrimination the migrants are facing up to, its causes and the treatment methods currently used. To present the certain aspects of migration, which is a highly relevant social phenomenon, is very important because this will give an objective and scientific approach to the investigated issue. In the article we are focusing on the motivating factors of the international migration with special regards to the actual situation in Syria and in their neighbourhood countries (including Jordan, Lebanon and Turkey). Before starting any discussion about the successful integration of the migrants in the labour market or in the educational system we have to pay attention for their living conditions in those counties where they usually stay before their arrival in Europe. Based on surveys done by the OECD we analysed the thoughts of the migrants regarding to their career and schooling perspectives with a comparison to the Hungarian students. During the literature review we found several publication about the openness of the students studying in the Hungarian higher educational system. The surveys showed that the openness of the people depends on the completed level of their degrees: the higher is the completed level the people will become more open-minded. Other literature showed that the migrants are facing many challenges during their integration in the labour market. In the article we are sharing the best integration practices used by the migrants.

Keywords: immigrants; integration; discrimination; labour market.

1. Introduction

Migration has been already at the forefront of the Hungarian common talk for the third year in a row. Since the migration crisis broke out in 2015, a continuous interest can be experienced on the part of the general public and politics as well. The interest in this topic is well-indicated by the fact that the word “migrant” was continuously highly sought during the last half year and an excessively high interest could be measured in the topic on the week between 11 and 17 March 2018 (Trends, 2018). Both the international public opinion and the scientific community have paid attention to the change in the Hungarian viewpoints related to the migration, among which they have also emphasized the serious modifications in the content of certain laws affecting migrants (Kallius et al., 2016). Over the past years, it has become visible that the EU countries provide different responses to the questions related to the migration. It is not at all certain whether there is such an opinion among the several radically opposing ones which can be considered as solely welcome and successful.

Aim of the article is to examine the migration phenomenon in global, European and Hungarian contexts, from educational and labour market aspects.

2. Background of migration phenomenon

In order to understand the migration phenomenon, we should also be aware of what strategies are considered by the persons involved in the migration themselves when making decisions to choose the migration and what geographical directions they try to move to. According to Ritecz (2016), the migrants detectably try to flee different terrorist acts when leaving their homes and the largest share of them strives to stay in the homeland, as far as possible, and to reach a safer place as so-called internal migrants. Insofar as it is not possible then the large number of them decides to escape to abroad but they most commonly seek temporary homes only in neighbouring countries, hoping that they can return to their homes after the problems triggering off the migration are solved. At the same time, it can be also observed if the refugees hit the road and have the courage to try to start a new life far from their motherland and choose Europe as destination then they generally try to reach the most developed western and northern countries of the European Union; they are at most in transit in the eastern and southern countries, thus in Hungary as well. (Kocsis et al., 2016) States with quite different preparations can be found at some stations of the migration process and these ones do not provide the same treatment and reception for the migrants and refugees. For instance, during the war in Kosovo, the people en masse fled towards Albania and Macedonia while these countries had not even applicable legislation relating to asylum application. (Donev et al., 2002) Nevertheless, it is the fact that the most asylum applications were proportionally submitted in Hungary in the EU in the first quarter of 2015. While there were 365 asylum seekers per 1 million inhabitants according to the EU average, the following pieces of asylum applications per 1 million inhabitants were registered: 239 in Greece, 905 in Germany, 224 in France, 251 in Italy, 1141 in Austria and 1184 in Sweden. At the same time, 3322 asylum applications per 1 million inhabitants were

registered in Hungary in the first quarter of 2015. Obviously, this does not mean that fewer migrants came to the countries being at the beginning of the list; they did not just simply submit their asylum applications there. (Guild et al., 2015)

In our treatise, the collective term “migrant” will be used for all persons who come from third countries and stay in the territory of our country, regardless of whether their legal status is refugee, applicant for refugee status or asylum. For instance, the following persons have been excluded from this category: those who stay in our country using the opportunity based on the freedom of establishment and movement; EU citizens; furthermore those pupils and students who come from third countries to Hungary in the framework of mobility for learning purposes. There is a system by means of which the EU countries have tried to select the humanitarian migrants coming from war zones among the economic refugees, according to criteria based on the Geneva Convention. Ördög (2013) described this system as quite old-fashioned and practically unsuitable for solving the tasks emerging. At the same time, as it is also indicated in the study of Kováts (2013), the migrant population living and appearing in Hungary has extraordinarily heterogeneous characteristics therefore there are no such things as unified labour market strategy or study strategy in their cases. It must be emphasized that, from the aspect of success of both the education and work, it is essential how the migrants are able and willing to assimilate culturally, to learn and get to know the language, culture and norms of the host country (Horn – Kónya, 2016). Naturally, this process should not lead to that the migrants will lose their cultural identity; the headline target is that they can retain their own identity and traditions but it should be achieved that they will also take into account the own habits of the host country when practising their culture.

3. Educational aspects

In order that the migrants coming to Europe can undergo a successful social integration, they should be integrated into such social systems of paramount importance as labour market or education. Unfortunately, those hot spots were already known before the migration wave of 2015 which have been fundamentally determining the success or failure of the integration since then. Those migrants who would like to continue their interrupted studies (for instance, children of school age) should have access to the formal education in any case. Based on the study of the Southern Great Plains Region Social Research Association (2009), success of the educational process is jeopardized by several circumstances among which those language difficulties must be highlighted which in merit damage the integration process and the study success. When the German Immigration Law was adopted in 2005, Germany, which is perhaps the most affected country, already paid particular attention to overcome of the language difficulties in the course of migration processes. Namely, a training system was established, separated for adults and children, in which 600 German lessons as foreign language and additional 30 lessons of German social and culture studies are provided for the immigrants. The training is mandatory and completed by an exam. The German Federal Government and the provincial governments have already spent an amount exceeding EUR 1 billion on the program until now (Friedery, 2016)

By examining one of the characteristic countries of the international migration i.e. Syria, it can be seen that the Syrian education system had fundamentally functioned well until the period before the civil war since the primary education had been

practically accessible for everyone and continuation of the secondary studies had been considered to be almost general. Literacy rate of population was 86%. However, the civil war drastically changed the educational situation in the country: more than quarter of the Syrian schools was destroyed during the war acts as well as the Syrian children and their teachers were frequently direct targets of direct attacks committed by different militias and armed groups. As an effect of the process, 2.4 million children had to escape from the country only in 2016. Among 350 thousand Syrian people coming to the European Union in 2016, there were approximately 131 thousand children and each of them needs education and training in the European states giving them protection. (Wofford – Tibi, 2017) Nowadays, it is estimated that approximately 3 million Syrian children of school age are left out of education. Most of the Syrian refugee children of school age live in Lebanon. Their number exceeds the number of the Lebanese children of similar age that's why a system of forenoon-afternoon alternating education has been introduced in the country, in order to remedy the capacity problems of education system. However, despite all the efforts, the number of refugee children dropping and falling out of the school system is very high albeit the training and education could play a key role in Syria's recovery and the establishment of a calm and well-balanced social system once, as it was ascertained by the researches as well (Peters – Besley, 2015). It can be declared that the Lebanese public service systems, including the education system, are far too overloaded and the drastic growth in population of the country causes problems even in the operation of such basic services as supply systems of drinking water or electricity (Ostrand, 2015). Overall, it can be also seen that the Syrian children living in refugee camps go to school with a greater chance than the migrant children accommodated outside the camps. In addition, it can be also seen that the Syrian children still participate in the primary school education whilst lots of them are taken out of the secondary schools by their parents; chiefly because the children's employment has to contribute to the their families' prosperity and subsistence. In light of this information, perhaps the fact is not surprising either that the school-leaving rate is higher in case of boys than girls (Berti, 2015). The integrator potential in the higher education system should be emphasized even if the rate of qualifications exceeding the educational attainment required for a job is extremely high among the migrants (Hárs, 2013). Whereas it is difficult to calculate because it is difficult to decide what knowledge or competence the migrants are utilizing during their work. However, it seems to be unequivocal that the graduates doing non-intellectual works can be considered as overqualified. In case of the survey carried out according to the abovementioned criteria in 2013, the migrants were the worst ranked among all the assessed social groups since 17% of the graduated employees born in the third countries were not able to or did not want to find intellectual jobs. This is overall more than twice of the 7.2-percent rate of the Hungarian citizens born in Hungary which was assessed between 2007 and 2012. The reporting of data of OECD (2018) brings an additional perspective to the image; this reporting has summarized the career progressions and prospects of those children whom we consider as ones with migrant background. According to the data reported, 26.62% of the children with migrant background living in Hungary think that they have chance to complete tertiary education which can be regarded as a good proportion. The result of a survey carried out in Germany is that only 25.73% of the ideas of similar children living there are along these lines, the results of Belgium amount to 16.27% only while a very low result, namely 8.83% has been measured

in case of the neighbouring Austria. Average of the European Union has reached 36.95% in this issue. It can be also seen that the children with migrant background living in Hungary are expressly optimistic compared to the children born in the country since 40% of the latter hope to complete tertiary education while more than half of the children with migrant background have similar hopes.

The problem is also strengthened by the fact that the Hungarian education system may not be ready for educating migrant children or, in case of other school types, migrant adults. Previously, it was the task of schools operating near the refugee camps to provide education for the migrant children of school age but the competent authorities had several obstacles to overcome when fulfilling the right to education (under a certain age: educational obligation). A part of the schools operating near the camps did not receive migrant children at all who were therefore obliged to commute to other town areas or even other settlements in certain – especially unfortunate – cases in order to continue their interrupted studies. During the previous détente of migration wave before 2015-2016, those problems could not be remedied either which had arisen in relation to the education. It can be acknowledged that the education system and administration of a host country shall cope with the lack of appropriate professionals as well as the weaknesses in the field of linguistic knowledge and intercultural competences and this is quite a long process. As it was mentioned previously, the migrant children's different socialisation and psychological problems also make the integration process significantly difficult (Illés – Medgyesi, 2009).

4. Labour market aspects

Success in the labour market, which has key importance in managing the migration wave, can be hardly interpreted without appropriate qualifications in the 21st century. The formal knowledge being obtainable in the education system is of critical importance from the viewpoints of integration and labour market success because the migrants' qualifications, skills and innovative abilities are of paramount importance so that they can find jobs in such business sectors which have significant great added value and are knowledge-intensive for the nation economy (Máté et al., 2016). Namely, in short, those migrants are capable of being successful in the labour market and therefore those migrants are able to become self-supporting in Europe who complete education with the appropriate quality and level in their homeland or in the migration target- or transit country reached.

From the aspect of judging the immigration and migration, the following factors are of priceless importance: the immigrants' and migrants' behaviour relating to work and how it appears in different media. In this view, different communication counterpoles can be seen well which have great influence on the public opinion and from what aspect the media approaches the migration situation. (Bernáth – Messing, 2015) By their relation to work, the migrants can influence the opinion about them. If the host countries' citizens see that the migrants appear as employees or at least job-seekers in the labour market (or they establish own undertakings) then the image of self-supporting migrants trying to influence their life and existence into positive direction can be strengthened in the citizens' mind. On the contrary, the image of migrants being not interested in work or demonstratively refusing work is able to induce a general negative public atmosphere against the entire migration phenomenon. An additional perspective is brought to the nature of image forming in

the host countries' citizens by the fact that the migrants damage the chances of employment, working conditions and wage prospects of inhabitants born locally.

It is considered that step zero of labour market integration is to assist the migrants obtaining basic information at all about the area they came to. The necessary information is very divergent: cultural, health and housing information as well as ones with economic nature can be found. For example on the Greek island of Samos, at the initiative of Startupboat, such a special homepage was launched with the cooperation of local corporate partners which provides a superb collection of vital information for the migrants coming to the island (Holmes – Castañeda, 2016).

There is a widespread anxiety about that the migrants will seize the jobs of the host countries' employees. Based on Oláh et al. (2017), young people who worked in parallel with or before their studies are more concerned about that the migrants seize their jobs than those who have not worked previously.

In the short term, immigration has just a very small impact on the labour market situation of domestic employees. Employees' success in the labour market mostly depends on what competencies they have. Having regard to the fact that the existence of the required competences was not peculiar to the migrant labour force coming to Europe according to several published surveys, it is unlikely that they would be able to seize the domestic workers' jobs or to find jobs more successfully than the workers born locally. (Bördös et al., 2016) Surveys (Akgündüz et al, 2015) carried out in Turkey's regions bordering on Syria have proved that the presence of refugees, who live in huge refugee camps in border regions near their motherland, has materially no impact on the employment rates. This partly means that the Syrian migrants were not able to become integrated into the labour market in Turkey i.e. they do not emerge as employees. On the other hand, it also means that the employers operating in the affected regions were capable of reacting on the migrants' presence and offering such jobs which can be pursued with low levels of education or in case of absence of knowledge of Turkish language. In addition to the general lack of competences, the absence of the appropriate knowledge of language should be emphasized in case of migrants coming to Hungary. However, this problem is country-specific; the migrants coming to the UK are presumably less affected. In addition to the presence of key competences, it would be indispensably required that the migrants can verify their qualifications. However, this is often difficult because the refugees are rarely unable to carry their certificates. But if they yet met this criterion, there would be a condition of acknowledging the qualifications: contact should be made with the relevant operators of the issuing country (authorities, educational institutions) and certain national certificates should be issued. For instance, it is almost certain that the refugees fleeing Syria in war cannot meet this condition (Mélypataki, 2017).

Presence or lack of the appropriate qualifications greatly influence what jobs the migrants can pursue. In the United Kingdom with several forms of migration that new employees partly coming from within the EU or third countries try to reach, a detailed survey (Nickell – Saleheen, 2015), commissioned by Bank of England, has examined the impacts of the migrants' presence on the wages. Based on the results, the migrants' presence had negative impact only on those wages which can be reached by the skilled labour force carrying out productive work and unqualified or trained employees working in the services sector. A 10-percent growth in the number of migrant employees' results in a 1.88-percent decline in the wages of the employee

groups affected. It does not matter whether the migrant labour force comes from within or outside the EU.

The migrants' legal status in the target countries greatly affects their wages and chances in the labour market as well. For example in the Netherlands, the asylum seekers are in an especially vulnerable position because their status is uncertain, their future is questionable and it is unpredictable how long their asylum application last and what outcome will be. These circumstances largely make the employment difficult. Moreover, in this situation, the migrants are driven to undertake worse jobs under worse conditions. According to the researches, the migrants undertaking jobs in the Netherlands can close their salary gap during almost 15 years, compared to the non-migrant workers with similar qualifications and experiences. The migrants ingoing in the framework of family reunion are in a slightly more favourable position but they also appear in the labour market with a major disadvantage. (Bakker et al., 2017).

A similar trend was measured in Norway as well (Bratsberg et al., 2014), where the migrants also need one or one and a half decades in order to reduce their salary disadvantages compared to the persons born in Norway. This process is also contributed by the fact that, according to the surveys, the migrants undergo a significant assimilation process during these one and a half decades which obviously has positive effect on their chances in the labour market.

In one of the most popular target countries, namely Germany (Beyer, 2016), considerable income differences can be measure with regards to the wages reached by the locals and the migrants. A migrant without German writing skills and German qualification gets a wage 30% less than the workers having the aforementioned skills. The good German writing skills decrease the difference by 12% and the German qualification by an additional 6%. Beyond these points, it is true that the income difference decreases by 1% per annum as time goes by but the migrants' wages will never be totally equal to the wages of workers born locally.

In the labour market of Sweden (Lundborg, 2013), it was also measured in what position the migrants are compared to the people born locally, in relation to the unemployment and time spent as unemployed. Based on the survey, the migrant employees generally get jobs after a long period of waiting after entering the Swedish labour market; the persons born locally can get jobs much earlier. In addition, it should be also emphasized that the migrants can never reach the employment rate which is peculiar to the locals. However, as time goes by, the migrants are able to close up slowly (as the period spent in Sweden goes by) (at the beginning, they can reach a 70-percent proportion compared to the employment rate of persons born in Sweden which strengthens to 90% during 10 years) but they are not able to catch up with the appropriate indicators of workers born in Sweden.

Jordan can be also considered as a country affected by the migration wave started from Syria but the problems are differing from the above-mentioned ones here. Jordan, due to its geographical situation, is directly involved in the remedy of the humanitarian- and refugee crisis caused by the Syrian war. Syrian migrants had come into the country in large numbers whose presence significantly overwhelmed the Jordanian supply systems. The country was able to provide increasingly fewer public services for the migrants; this had the effect that the impoverished migrants, who had already consumed the prices of their few rescued valuables mostly, tried to enter the labour market of Jordan as employees in larger numbers. The Jordanian government have chosen a specific way after sensing the rejecting attitude of the

Jordanian people in addition to the growing employment demand from the Syrians' side. Namely, the Jordanian government has decided to theoretically allow the migrants escaping from Syria to get jobs and not exclude them from doing so but the permissions required for the legal employment is given to the applicant migrants only in a very low rate. By this, the grey economy is strengthening near the refugee camps i.e. a significant part of the Syrian migrants acts as black workers. (Francis, 2015) A similar situation has been also formed in Turkey where the presence of the Syrian refugee employees has a significant impact on the operation of grey economy which is called informal sector as well (the following activities are meant by informal sector: enterprises operating in a way unauthorized by the authorities or work performed by workers employed by announced companies in an unannounced way.) According to the surveys, a considerable rate of the Syrian refugees living in Turkey works as illegal worker and moreover the child labour is not unprecedented (for instance, in the textile industry). (Korkmaz, 2017)

Despite the above, based on the results of OECD (2018) survey, the children with migrant background are expressly optimistic with regard to their own career image since 74.11% of the children interviewed in the survey as sample think that they will work as manager, professional or associated professional in the course of their adult lives.

As an effect of the circumstances making the migrants' employment difficult, this stratum is considered as one of the groups which are particularly jeopardized by unemployment. Based on Constant et al. (2009), throughout the EU, one of the most common discrimination reasons can be linked to the origin and moreover this kind of discrimination is peculiar both to the public sector and private sector. In addition, it can be observed that there is also so-called employment discrimination to the detriment of the migrants. It is peculiar to this discrimination form that the affected employees are often employed as black workers (namely, without announcement) as well as the migrant employees can specifically often get dirty, dangerous and stressful jobs only. (Juhász et al., 2011) Among the effects strengthening the discrimination, the latent or open xenophobia should be emphasized. As an effect of this, the general attitude to the immigration has changed in Europe (Dajnoki – Kőmives, 2016). While the European people still had mostly positive attitudes to the immigration after the Second World War and the migrants was handled as guest workers, the positive attitude started to weaken progressively after recognizing the migrants' cultural background which is sometimes substantially differing from the locals.

5. Conclusions

Migration is a social process with stressed topicality which presents challenges to the host countries in a number of aspects. The fact that help must be provided to the people fleeing war is the non-negotiable subject of consensus in the continent. At the same time, significant differences can be experienced relating the ideas regarding how to be of help. More ways can be imagined for the migrants' successful social integration; we have just dealt with two of them in details, namely the employment and education.

Return to the education system enables the children forced to escape to complete their studies and become integrated into the society of a host country by taking part in the formal trainings. This provides the possibility for them to learn and get to know

the host countries' languages and culture and, in addition to that, they can retain their on national identity. In the framework of adult education, the adult migrants without appropriate qualifications can get a chance to become successfully integrated into the labour market as employees or self-employed entrepreneurs. Their qualifications obtained in Hungary are widely accepted, the certificates are valid throughout the entire territory of the European Union according to the fundamental rights of the EU and fresh knowledge makes the migrants more attractive in the labour market.

Employment is of paramount importance in the migrants' life from more than one angle. They could establish an independent existence from the wages and may be capable of self-preservation which can significantly improve their state of mind. On the other hand, they will have a chance to convince the members of host country, who are sceptical on the migration or straight hostile or xenophobic, of the fact that the migrants are able to maintain themselves and the reason of their arrival cannot be traced back to gaining economic advantage. At the same time, due to discrimination and xenophobia, they have to face up to several challenges in the course of their employment; to this problem, the entrepreneur career i.e. the self-employment, which is widespread among the migrants, can partly provide a solution.

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THE IMPACT OF HUMAN RESOURCES MANAGEMENT SYSTEM EFFECTIVENESS ON PERFORMANCE

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Abstract: A significant problem that concerns organizations from the business environment is the increasingly stronger competition on a global market and the success of the overall business strategy of a company that is more closely related to the effectiveness of human resources strategies. The world becomes more interconnected, therefore some practices and trends in human resources converge. However, HR managers need a high degree of sensitivity and ability to adapt and communicate policies in an effective and empathetic way. More and more experts pay special attention to the study of management, regarding not only the material conditions of work, the principles of resource management but focusing especially on human resources in terms of behaviors and attitudes of individuals, group dynamics and the direct relationship between managers and subordinates, with the purpose of scientific understanding of individuals and teams at work and how the structures, systems and organizational processes influence organizational performance. In this sense, this study aims to present a series of conclusions obtained after the completion of an extensive research, which has the overall objective of studying the impact of human resource management and performance management on organizational performance in a multinational company from IT&C industry from Romania. Therefore, the results presented in this article are intended to illustrate the impact of human resource management effectiveness, namely the effectiveness of human resource practices on individual and team performance in the analyzed company. The research is based on data and information obtained through questionnaires, interviews, and documents published by the analyzed company. For the analysis and the conclusions of the article, we have used quantitative methods of data analysis, therefore the method used to collect data was the survey based on questionnaire by which we measured respondents' perception on how human resource practices, ensures the effectiveness of human resource management in the company analyzed, and how it affects organizational performance. The statistic population analyzed is represented by the employees of a multinational company in the IT&C industry in Romania. The research was based on a representative sample consisting of 135 employees.

Keywords: Human resources management; performance; human resource practices; HRM effectiveness; HR.

JEL Classification: M12; M14; M15.

1. Introduction

Management is undergoing a revolution that requires managers to obtain better results under certain pressuring conditions, regarding resources and the market that are increasingly apparent. To secure the competitive advantages, one needs better trained employees and more loyal to accept the change, to see it rather a necessity, instead of stability no matter the cost. Leaders require a proper strategy to identify personal and organizational values and the very important role, employees together with managers at all hierarchical levels must undertake in order to strengthen the company's values for employing their potential at maximum.

According to Armstrong (2009), practices of human resource management (HRM) handles all aspects of how people are recruited, selected and the way their work is effectively and efficiently managed within organizations. It covers activities such as the strategy of human resource management, corporate social responsibility, knowledge management, organizational development, performance management, attracting and retaining talented people, learning and development, welfare, health and safety for employees and also providing services for these (Armstrong, 2009: 4).

HRM practices has a strong conceptual basis, drawn from behavioural sciences and human capital theory, which has a strong strategic orientation and industrial relations.

Organizational performance, has a very important role in management research, since it defines the utmost success or failure of an organization. Although the actual term *organizational performance* is common in literature, defining it is difficult because of its many meanings, therefore, there is no universally accepted definition of this concept.

Performance management, as practiced today, incorporates processes such as management by objectives and performance evaluation, but the general approach is significantly different (Armstrong, 2009: 9).

The role of human resources for continuously improving performance to ensure competitive advantage has drawn the attention of many researchers (Den Hartog & Verborg, 2004).

2. Literature review

According to resource-based view of the firm (Barney, 1995), companies can have a competitive advantage only if it creates a *value* that is rare and difficult to imitate by competitors.

Besides these sources of traditional competitive advantage and organizational culture and strategies/procedures implemented in the organization (Den Hartog & Verborg, 2004), the organization's ability to manage human resources effectively in terms of market volatility, was considered by many researchers an important source of competitive advantage.

Underlining the importance of human resource skills, Youndt et al. (1996:839) stated that many researchers have noticed that people are the essential source of a sustainable competitive advantage, while the traditional sources on the market, financial capital and large-scale economies have been affected by globalization and other economic changes.

The impact on the performance of human resource management has become the dominant issue in management research. There have been a number of studies showing a positive association between human resource management (HRM) and performance, encouraging those who held a distinct approach to human resources management.

Studies on strategic management of human resources provides both theoretical and empirical contributions on effective HR practices to enhance organizational performance (Carroll et al., 2011).

Wright and McMahan (1992:298) define strategic management of human resources as a pattern of applications and human resources planned activities, of which purpose is to enable an organization to achieve its goals. Under this definition, the key variables in research on strategic management of human resources should be human resource practices, human capital, organizational behaviors, and linking them to performance and business strategy of the organization (Carroll et al., 2011). Performance management is a systematic process for improving organizational performance by developing individual and team performance. It is a means to achieve better results by understanding the framework of agreed objectives, planned standards and competence requirements (Armstrong, 2009:9). Performance management is much more than evaluating employees, it should be seen as a continuous activity which integrates the practices of human resource management and leadership, thereby contributing to culture change, when necessary. Only in this way, performance management helps to achieve horizontal integration and "joint" HR practices so that they are interrelated and, therefore, to strengthen and complement each other.

Studies on strategic human resource management (Huselid et al., 1997) examined the impact that the implementation of consistent human resources policies and practices has on organizational performance and showed positive effects of these practices on performance.

Other researches in this area have shown the effect of human resource practices on the performance of organizations in several countries such as China (Björkman & Xiucheng, 2002), Korea (Bae & Lawler, 2000) and New Zealand (Guthrie, 2001), providing empirical support for the importance of human resource management.

3. Research Methodology

This study aims to present a series of conclusions obtained after the completion of an extensive research, which has the overall objective of studying the impact of human resource management and performance management on organizational performance in a multinational company from IT&C industry in Romania.

The research is based on data and information obtained through questionnaires, interviews, and documents published by the company under analysis. For the conclusions in this article, we have used quantitative methods of data analysis, therefore the method used to collect data was the survey based on questionnaire by which we measured respondents' perception on how human resource practices, ensures the effectiveness of human resource management in the company analyzed, and how it affects organizational performance.

The statistic population analyzed is represented by the employees of a multinational company in the IT&C industry in Romania. The research was based on a representative sample consisting of 150 employees. Out of 150 questionnaires

distributed, 142 were received filled in, of which 135 have been validated, which is a valid response rate of 95.07%.

The questionnaire used in the research is a set of items that measure the perception of respondents on issues, practices and factors considered important to assess the effectiveness of human resource management and how they influence organizational performance of the analyzed company. The items were measured on a Likert-type scale from 1 to 5 (1 - total disagreement, 5 - total agreement). Therefore, the results presented in this article are intended to illustrate the impact of the effectiveness of human resource management (HRM) and the effectiveness of human resource practices on individual and team performance in the analyzed company.

In order to determine the impact of human resource management effectiveness on performance we establish an analytical model that includes first, items and aggregated variables that relate to human resource practices within the company and their evaluation.

The construct comprised four aggregated variables that sums up the items/primary variables that covers the main areas of activity in the field of human resources, as following:

- Human resources strategies and policies (HRSP).
- Employee involvement (INVOLV).
- Employee motivation (MOTIV).
- Performance management practices (PM).

To determine the impact of human resource management effectiveness and the effectiveness of human resource practices on individual and team performance of the analyzed company, we created two performance indicators, namely:

- Employee satisfaction (SATIS).
- Employee performance (EP).

To achieve the aim of the present study, we tested the following statistics hypothesis:

- *H1*: There are significant and positive relationships between HR strategies and policies, employee involvement, employee motivation and performance management practices.
- *H2*: There are positive and significant relationship between employee satisfaction and employee performance.
- *H3*: HR strategies and policies, employee involvement, employee motivation and performance management practices have a significant impact on employee satisfaction.
- *H4*: HR strategies and policies, employee involvement, employee motivation and performance management practices have a significant impact on employee performance.

Referring to the instrument used for data analysis, we mention that STATA statistical software version 13.0, was used for processing of data.

4. Analysis and interpretation of results

Analysis of the factors that determine the effectiveness of human resource management (HRM), was based on the 4 dimensions / statistical variables.

The variable HR strategies and policies coded HRSP, is the first dimension which analyses the effectiveness of human resource management and investigates

respondents' perception regarding HR strategies and policies that are experienced within the company and consists of 19 representative items. Adding the items that compose this scale, we obtained HRSP variable that records an average of 4.08 (table 1) which is a good average, indicating a positive perception of respondents regarding the human resources practices and policies that are run within the company.

Table 1: Descriptive statistics: variable HRSP

Variable	Obs	Mean	Std. Dev.	Min	Max
HRSP	135	4.081092	.5386905	2.578947	5

Source: Own research

Employees' involvement variable coded INVOLV is the second dimension which analyses the effectiveness of human resource management and investigates respondents' perception regarding the involvement of employees in the company and consists of 22 representative items. Adding the items that compose this scale, we obtained the INVOLV variable registering an average of 4.12 (table 2) which is a good average, indicating a positive perception of the respondents regarding the involvement of employees in the company.

Table 2: Descriptive statistics: variable INVOLV

Variable	Obs	Mean	Std. Dev.	Min	Max
INVOLV	135	4.120539	.4716692	3	5

Source: Own research

Employee motivation variable coded MOTIV, the third dimension that analyses the effectiveness of human resource management and measuring perceptions of respondents about current practices in the company aimed to create and maintain a high level of motivation among employees, consists of 18 representative items. Adding the items that compose this scale, we obtained the MOTIV variable which recorded an average of 4.10 (table 3), which is a good average, indicating a positive perception of respondents to existing practices within the company aiming to create and maintain a high level of motivation among employees.

Table 3: Descriptive statistics: variable MOTIV

Variable	Obs	Mean	Std. Dev.	Min	Max
MOTIV	135	4.102881	.4951636	2.833333	5

Source: Own research

Table 4: Descriptive statistics: variable PM

Variable	Obs	Mean	Std. Dev.	Min	Max
PM	135	4.083778	.4546129	3.03	5

Source: Own research

Regarding performance management practices variable encoded PM, was aimed to investigate respondents' perception on existing practices in the company on performance management. The variable is composed of 34 items and records an average of 4.08 (table 4), which is a good average, indicating a positive perception of the respondents to the existing performance management practices within the company.

We still have to check if there are connections between the studied variables. Thus, in Table 5 it can be seen that there are very strong connections between all studied variables ($r > 0.8$). It can be seen that the strongest relationship is recorded between

the variable HR strategies and policies and variable employee motivation ($r = 0.8954$), which means that if you improve the HR strategies and policies, employee motivation tends to improve significantly, result that applies to other statistical connections as well.

Table 5: Correlations

	HRSP	INVOLV	MOTIV	PM
HRSP	1.0000			
INVOLV	0.8511	1.0000		
MOTIV	0.8954	0.8602	1.0000	
PM	0.8657	0.8294	0.8424	1.0000

Source: Own research

To determine the impact of the human resource management effectiveness and the effectiveness of human resource practices on individual and team performance of the analyzed company, we built on the aggregated variables discussed above, two performance indicators (table 6) expressed by statistical variables: (1) *employee satisfaction* coded SATIS, including specific items relating to issues such as engagement, motivation, employee development and (2) *employee performance*, encoded EP, including specific items relating to issues such as policies and strategies, involvement, motivation, employee development and performance management practices.

Table 6: Descriptive statistics: variable SATIS and EP

Variable	Obs	Mean	Std. Dev.	Min	Max
SATIS	135	4.052251	.4906893	2.989899	4.981482
EP	135	4.075225	.4650186	2.907212	4.992424

Source: Own research

To analyze whether the two variables are related statistically speaking, we proceeded to making a correlational analysis, thus we identified that between employee satisfaction and employee performance there is a particularly strong connection ($r = 0.9509$), which means that if the employees' satisfaction improves their performance will significantly improve also.

We intend to study to what extent human resources strategies and policies, involvement and employee motivation and performance management practices influence *employee satisfaction*. For this purpose, we constructed a series of econometric models to study the impact of these variables on the SATIS variable. We presented in Table 7 a centralization of key information generated by these econometric models.

Table 7: The impact of HRSP, INVOLV, MOTIV and PM on SATIS

Variables	N	F	Prob > F	R ²	Coef.	P> t
HRSP - SATIS	135	727.31	0.0000	0.8203	.8249816	0.000
INVOLV - SATIS	135	1336.69	0.0000	0.9164	.9959098	0.000
MOTIV - SATIS	135	890.99	0.0000	0.8571	.9174136	0.000
PM - SATIS	135	546.94	0.0000	0.7551	.9379418	0.000

Source: Own research

We note that all four models are statistically relevant ($P < 0.05$) and all four variables analyzed have a strong impact on SATIS variable. The biggest impact it has variable INVOLV whose variation explains 91.64% of the SATIS variation, respectively, it has a measured impact of 0.9959. This result describes an extremely powerful impact of employee involvement on employee satisfaction.

Furthermore, we examined to which extent human resources strategies and policies, involvement and employee motivation and performance management practices have a significant impact on *employee performance*. As in the previous example, a series of econometric models was developed in order to analyze the impact of these variables on *employee performance*. In Table 8 it can be seen that the models are statistically relevant ($P < 0.05$) and all four analyzed variables have a strong impact on the variable EP.

Table 8: The impact of HRSP, INVOLV, MOTIV and PM on EP

Variables	N	F	Prob > F	R ²	Coef.	P> t
HRSP - EP	135	1781.45	0.0000	0.9057	.8215416	0.000
INVOLV - EP	135	439.41	0.0000	0.8180	.8916922	0.000
MOTIV - EP	135	964.52	0.0000	0.8378	.8595992	0.000
PM - EP	135	2720.61	0.0000	0.9385	.9909399	0.000

Source: Own research

The biggest impact on EP variable has the PM variable, which explains the variation of EP in the amount of 93.85%, respectively, it has a measured impact of 0.9909, which is an extremely powerful. The results in Table 8 show that human resources management practices and performance management practices have a significant impact on perceived performance, measured using non-financial indicators, such as in this case, *employee satisfaction* and *employee performance*. Even if we take into account the financial indicators of organizational performance, we must emphasize that the effectiveness of human resource practices and performance management ensures customer orientation, or market orientation – an important condition for obtaining financial performance.

5. In conclusion

This study aims to present a series of conclusions obtained after the completion of an extensive research, which has the overall objective of studying the impact of human resource management and performance management on organizational performance in a multinational company in the IT&C industry in Romania.

In order to achieve the objective in the present study, we tested four statistics hypotheses regarding the scale, and after analysis performed we noted that all four hypotheses are confirmed thus further formulates a series of proposals and recommendations.

To enhance the effectiveness of human resource management and performance management practices, we believe that we must pay more attention to employee involvement by providing flexibility of work, effective communication between managers and subordinates and developing employees' potential by providing adequate trainings.

Also, in order to strengthen the effectiveness of the incentive system, the company must pay attention to the application of correct principles of remuneration and selection of employees.

Ensuring continuous, constructive and honest feedback regarding individual and team performance and contribution to the organization's objectives.
 A balance between competition and collaboration within work teams.
 Use of non-financial indicators with the financial indicators in measuring organizational performance.
 Awareness among employees of their responsibilities that they should report in the following order: customer/market, company and team to which they belong.

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TOO MUCH DRUG ADVERTISING? A QUALITATIVE PERSPECTIVE OF ROMANIAN PHARMACEUTICAL MARKET

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Abstract: *Nowadays, education and health represent key sectors for social and economic progress. Due to the technological and scientific development, drug producers have developed many products. Because of the high demand of pharmaceutical products, more and more companies appeared, therefore the competition raised. All these lead to the need of promoting pharmaceutical companies and products. Although money spent in research and development (R&D) increased lately (FiercePharma, 2017), pharmaceutical companies nowadays invest huge amount of money in promotional activities, even double compared to the money invested in R&D activities (Olson, 2015). This paper aims to analyze how promotional activities of pharmaceuticals are perceived by the Romanian consumer, using focus-group research technique in order to obtain valuable information. The findings show that there are many people who are complaining about the excess of promotional activities, especially on the T.V. and also, they feel offended because of the content and the childish presentation form of the commercials. All this information may lead to a supersaturation of promotional activities which may decrease sales of the brands who have the most aggressive promotional strategy. Other important findings refer to ethical issues in pharmaceutical industry especially in client-pharmacist relationship which is vital but also criticized.*

Keywords: *promotional activity; ethics; pharmaceutical industry; advertisements.*

JEL Classification: *M31; M37; M38.*

Introduction

Time has proved that the pharmaceutical industry should be carefully supervised and there should be established clear rules regarding promotional activities. On the other hand, there are countries where physicians are better paid if they have few patients because this proves that their work has good results and people are healthy, while in Romania and in most of the countries they are paid through capitation (the more patients they have, the more money they get). Nowadays, education is the key to change people and education is also related to health. In the promotional activity of pharmaceuticals, there are many regulations which limit advertising over the counter drugs (OTC) to consumers and it is forbidden to advert prescription drugs (Rx) to patients. This type of drugs is promoted only to physicians through special platforms and events because they are the prescriptors and they have the capability to choose between them, based on an unbiased analysis which should include the patient record and the attributes of each drug.

Marketing mix is a concept that includes four main elements: product, considered the core of the business, price, promotional (communication) activities and placement (distribution) (Waterschoot and Van den Bulte, 1992). Each of these four elements of the marketing mix has its own submix. The promotional submix is composed by advertising, sales promotion, public relations, events and experiences, direct marketing and personal selling (Kotler et al., 2009) and each one of them has its own particularities in pharmaceutical sector.

Advertising is one of the promotional instruments used in pharmaceutical industry which reaches a great number of potential clients. The number of advertisements seen daily per individual all over the world is extremely high, for instance, in United Kingdom during the period 2010 to 2015 it reached 47 advertisements per individual per day (Statista, 2018). A study conducted by Digital Marketing experts reveal that most of American people are exposed to 4000 up to 10000 advertisements per day (Marshall, 2015). The amount of money invested in the United States in advertising in 2015 hit the record: 9.7 billion \$, up 11% (Kantar Media, 2016).

Sales promotion techniques include discounts, rebate, merchandising, product combination, quantity gift, samples, buy-one-get-one-free or contests (Weisberg, 2015) and are meant to increase sales quickly. These methods are very used in almost each industry, but when it comes to health care and drugs, it is questionable whether rising the amount of products bought is ethical. The increase of sales may be a consequence of buying more drugs once to benefit from these promotional offers, but pharmaceutical manufacturers should not try to increase the dose. Indeed, the battle may be between brands which offers the same type of drugs.

Personal selling is an indispensable tool of promotional submix of pharmaceuticals because it involves specialists who communicate with clients and are supposed to be there for them and respond to all their questions and requirements. Therefore, the client will feel very important and he will perceive that brand close to him and his needs. Authors such as Donohue et al. (2009) reveal that pharmacists are one of the most trusted sources of information and participate directly in the decision of the client. Other researches (Pilarczyk 2011) have shown that in minor health problems, the pharmacist is considered a trust-worthy person who may give the best remedy, without consulting a physician, which is time consuming.

Another important element of the promotional submix is public relations. The techniques associated with public relations are about persuasion of the public to promote an idea, buy a product, support a campaign or recognize accomplishments which in other words means integrated marketing communications and aims to enhance or build a reputation. Among the instruments used in public relations, we can find: press releases, blogging, crisis strategies, events designed for public, marketing research, social media promotions and responses to negative opinions online, etc. Nowadays, people need information and especially when it comes to the health industry Wynne (2016).

Rewarding prescriptors in pharmaceutical industry is made by strong drug manufacturers which are trying to persuade doctors to recommend their products intensively, although global ethics limit very much such activities to little amount of money spent. There are many examples revealing unethical activities. The biggest fine in history payed by a company (not just in the pharmaceutical sector) is of GlaxoSmithKline (GSK) which illegally promoted antidepressant to young people (teenagers and children) and bribed physicians in order to prescribe the drug (Ettinger, 2012). The amount of the fine is \$3 billion. GSK, like many other

companies, identified that in order to increase demand for their products, they may use doctors because they are a powerful source of information and they are trusted by patients.

Authors such as De Pelsmacker, Geuens and Van den Bergh (2005) added more elements of the promotional submix such as sponsorship, point of purchase communication and the Internet. Online media is a powerful source of information and of spending time. The technological evolution developed social networks and nowadays they are part of most of the people's routine. This is why marketing is always preoccupied to stay in touch with new trends and benefit from their potential. Global reports (Marvin, 2015) show that ad spending is the highest spending of all media, nearly 70% of the global ad spend growth overall.

Online media has a great impact also on health industry: many people hope to find answers or solutions on the Internet. Banks (2015) provides information about studies which reveal that American average patients see a doctor three times a year and spend in average 52 hours searching online for health information. According to Brunetti and Hermes-DeSantis (2010), health issues and drug information is the third most common searched information online, next to product information and e-mail in the United States. Although online promotional activities is forbidden in Romania if the source is the pharmaceutical company and the end user is the client, marketing is a creative way to increase demand using alternative strategies such as bloggers. This method represents an undercover way to promote drugs, avoiding direct contact between manufacturers and clients and this is the reason why pharmaceutical companies are interested to know what are the clients searching for in online.

Research methodology

This paper aims to explore consumer's perception regarding promotional activity in pharmaceutical sector. Based on the research aim, further investigations and research should complete the whole picture regarding the consumer's perception of OTC (over the counter) drugs.

We took into consideration variables such as: entities who may interfere with the consumer's decision (physicians, pharmacists, family members or friends and relatives); ethics and its importance. This research also focuses on finding solutions to improve the promotional activity of the OTC drugs.

The three focus group sessions were conducted in 2017 in Romania, Bucharest. From a total of 18 participants, 66.66% were women and 33.33% were men. All of them were over 18 years old and all of them were high school graduated or above.

Research objectives:

1. Exploring the consumer's perception of the promotional activities of drugs;
2. Exploring the consumers' perception of advertising drugs;
3. Identifying unethical practice of promotional activities;
4. Identifying the institution(s) that should have the power in order to regulate OTC drugs.

Hypotheses:

1. The consumer is annoyed by the large amount of drugs' commercials.
2. The consumer is irritated by some of the advertisements.
3. The consumer is not aware of drugs' side effects.

4. The regulatory system of DTC (direct to consumer) drugs should involve the manufacturers, the ministry and other organizations.

Findings

After the transcription of the focus group recordings, collected data was organized, synthesized and compared. The most important results were selected and are presented below, structured by the main topics. Appendix 1 presents the coding process.

1. Promotional activities show how a drug may change your life

The purpose of the promotional activities to inform the public that the brand is on the market and it has specific characteristics. Most of the participants associate drugs' promotional activities with its purpose (pain relief, cardiovascular issues, fever, cold etc.). The participants mentioned that they remember very well many commercials of targeted pain such as headache, back pain, babies crying etc. and those which promote the liver's health and cardiac issues. Few participants remembered a motto of a drug ("Pa durere, Paduden"). On the other side, there were respondents who couldn't remember any motto. Some of them stated that for each problem, the manufacturer has the perfect solution (drug) which is an exaggeration: "You take a wonder pill and that's it!". The nonverbal language reveals that the respondents were very implicated and also annoyed when they were speaking about exaggerations.

Respondents had a tendency to generalize that in advertisements is "always" presented someone who suffers and then someone who recommends a wonder pill that takes away all inconveniences. One of the respondents was very annoyed (using verbal and nonverbal language) by the fact that commercials try to convince that "the more drugs you buy, the better you get". Others were annoyed by some animations with red circles symbolizing the pain and by the suffering presented in an exaggerated manner. "You get the impression they change your life"; "you can also manipulate children: my nephew wanted Triferment because he thought his belly will decrease. But he likes sweets and I realized how dangerous is to exaggerate a drug's effect". Other respondents remembered children influenced by commercials to take (more) drugs than prescribed or finding drugs very attractive because of the advertisements.

Some of the respondents mentioned that they feel surrounded by advertisements of drugs and they have the impression that a great amount of money is spent promoting these products. One of them said that she feels that Romanian people are very sick because of the density of the advertisements. Only one of them said that he is not interested by advertisements of drugs and he completely ignores them.

2. Is there too much advertising?

Four participants said they ignore advertisements, three of them said they are annoyed by them and may associate promoted brands with something negative, while some of them said "it may be something on the spur of the moment: you have a headache, you see an advertisement and afterwards you want to buy it". The response to the last opinion was that "not everything promoted is true", "you shouldn't trust advertisements", "there are many lies" and "when you see a commercial, you don't hear anything about safety, you hear only: buy me!". At the end of these

negative perceptions about advertising, one of them concluded: "What is the impact of all these advertisements? Don't you want to buy it? All positive characteristics presented don't mean anything to you?" and another participant responded: "It's that thing...but you promote only the facade, not the value inside the product".

3. Rational vs. emotional promotional messages

Asked to choose between rational and emotional messages in promotional activities of drugs, most of them said at first emotional. They have remembered advertisements based on compassion, people suffering who create emphatic connections to costumers. One of them said that "taking into account that the human mind is about 70% emotional and 30% rational, I guess that the fact that you know many details about a substance and what it does is not so important", "I think they use more emotional messages, but I would like to see more rational ideas". An interesting point of view is: "pain itself is something hard to perceive in a rational way". There were participants who stated that a combination between emotional and rational impulses would be perfect to reach the public.

4. Identifying unethical practice of promotional activities

Some of the respondents consider that advertisements are unethical, others consider that it is too much exaggeration. In both cases, the nonverbal language and the voice tone indicated they were irritated: "the grandfather who suddenly becomes superman or the woman who suddenly starts cleaning the house. Soon we will see the sun rising (because of that drug)"; "soon we will see that a drug can cook for us"; "they offend our judgment saying that 99% buy something". Other respondents consider that unethical practice of promotional activities would be to see a child suffering or images which may affect emotionally".

Moving forward to side effects, a respondent asked ironically "what side effects? You never get to hear anything about them. They say it is your duty read the prospect in order to realize how it may affect that drug; they won't tell you". An interesting point of view is: "the voice we hear at the end of the commercial is unethical because it sends you to read the prospect and that voice is speaking very, very quickly. If they care about the consumers, from those 30 seconds of commercial, they would allow enough time for this part". Another complaint was towards drugs which create addiction and in their commercials it is not explained this issue.

5. Identifying the institution(s) that should have the power to regulate advertisements of DTC drugs

In all focus groups the conclusion agreed by the majority was that all three categories of institutions should be involved in the regulatory system of DTCA (direct to consumer advertising). There was a respondent who said that even televisions should reject so many advertisements and those one who are exaggerated, but he was contradicted by other participants: "television wants more and more contracts to promote whatever product or service. Their interest is not our health". An interesting point of view is: "like any other company, drug manufacturers should take responsibility for their products. [...] for instance, if a car is defective, that product may even disappear from the market, which is not what we see happening in the

pharmaceutical industry. I don't recall the case when someone felt bad because of a drug, or suffered because of the side effects to be nursed by the manufacturer. I don't know what happened when someone asks the manufacturer to pull off the market a drug because of its side effects".

The main findings of this research are:

- Respondents don't remember very well certain details from commercials such as mottos;
- Exaggeration of the drug effect is considered unethical and annoying;
- There is too much advertising for drugs and consumers are irritated;
- Rational and emotional messages should be combined in commercials in order to obtain a synergic effect;
- Manufacturers should be more concerned about transparency in communication: side effects should be presented in commercials;
- The ministry, manufacturers and other organizations should involve in the regulatory system of OTC drugs.

Limitations of this research are to be taken into consideration: it is recommended that the moderator of the focus groups should be a different person than the researcher. Secondly, there were time and budget limitations.

Conclusions

After the analysis of data provided from the focus groups, it is obvious that further research is needed in order to deepen certain topics. Comparing the results with hypotheses, there are some hypotheses confirmed: the consumer is annoyed by the large number of drugs' commercials. The larger number of drug commercials compared to other types of products may become a problem of this industry because people's expectations are moving forward. If years ago they wanted to see new drugs and new discoveries in the field, now they want attention, and they need to be taken into consideration. Among other demands of the public and confirmed hypothesis is the fact that consumers are not completely aware of the side effects and one of the reasons is that advertisements don't present the whole truth (they send you to read the prospect).

A piece of information which is not presented is that in Romania, there are many pharmaceutical chains promoted on television. Therefore, participants from the focus group said that they are "sick and tired" to see commercials for the pharmacy chains. In most of the countries this type of promotional activity is forbidden.

Another hypothesis confirmed is that the regulatory system of OTC drugs should involve the manufacturers, the ministry and other organizations. There is the need to have in each country an institution which is in charge with regulatory acts of this industry that is continually changing. Therefore, I think that more studies should be done in order to see what want both the consumer and the manufacturer to see on television or to obtain.

Other important aspect is that nowadays people are always on the run and stress have become a spread phenomenon. Therefore, I believe that the medical system should take into consideration to adapt to people's demand. There are some countries which already introduced a system which allows online consultations if the health problem is not so severe. In this way, both physicians and patients save time.

In conclusion, we believe that a limit should exist when referring the number of advertisements of OTC drugs. Of course marketing is important when new discoveries or new products enter on the market, but on the other hand, we see excessive advertising like an abuse because of the content (pain, disease, suffering and afterword an exaggerated effect). We do believe also in the placebo effect and therefore, we see that so many commercials of sick and suffering people will lead to no good. Because of the repetition, the message enters in the subconscious and it becomes like a program: if someone repeats to you that people who reach 40 years old start having liver conditions, you may become a target when you reach that age.

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THE USE OF THE ONLINE TOOLS FOR CUSTOMER RETENTION IN BIHOR COUNTY MOUNTAIN GUESTHOUSES

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Abstract: *In economic development of the Bihor County, its touristic potential plays an important role. A significant part of the before County touristic potential represented by the Apuseni mountains. In this area there is a high number of touristic guesthouses prepared to receive their guests. Online presence of these guesthouses is an important aspect, because a larger number of tourists are booking and paying online their stays, they are informing themselves online regarding the tourist destinations. In the conducted research we have analyzed the websites' offer of the touristic guesthouses in the Bihor County, situated in Apuseni Mountains area. We dealt with the online instruments used by touristic guesthouses in customer retention strategy. We have analyzed the measure in which those instruments are used on the accent made on each of the instrument categories mentioned in this study.*

Keywords: *marketing online; online tools; customer retention tools; loyal customers.*

JEL Classification: *C80; M21.*

1. Introduction

It is well-known that the tourism contributes to the economic development of a region. As a fact the touristic potential of a County is important and must be worthwhile.

According to (Dodescu and Borma, 2017) Bihor County has a great and diversified touristic potential, (business, cultural, mountain, spa, etc.) covering a great area of the county.

The Apuseni Mountains, with their unique landscapes and unrivalled karst richness, Baile Felix and 1 Mai spa resorts, the cultural and historical heritage of Oradea city, are important points of attraction for tourists.

A significant part of the Bihor County touristic potential concerns the Apuseni Mountains. This is due to the fact that Apuseni Mountains are showing the following characteristics:

- They lay on a significant area of the county
- They are close to a dense modernized road network
- They are crossed by a rich network of forest roads and marked paths, thus being easily accessible
- Offer a great variety of landscaping
- Offer cultural and historical attractions
- Existing amenities give value to a lot of touristic objectives
- They are in the vicinity of the national borders thus being a point of attraction for foreign tourists in the neighbouring country
- Oradea airport makes them accessible to tourists from far away countries

- They are an attractive destination for rest, recreation, hiking, mountaineering, speleological tourism, agritourism, winter sports.

In this area one may find enough touristic guesthouses prepared to receive their guests.

It is well known the fact that an increasing number of customers are shopping from websites. Many of the touristic guesthouse customers are booking or paying online there stay or they are informing themselves regarding touristic destinations.

According to Bilgihan and Bujisic, for the case of online shopping the clients buying decisions are based on information (such as room images, product information, virtual tours, customer reviews) existed on the websites (Bilgihan and Bujisic, 2015). According to Ye, Law and Gu, in tourism industry bookings are influenced by the online reviews (Ye, Law and Gu, 2009).

The Internet have a major impact on all domains which involves marketing (Schibrowsky, Peltier and Nill, 2007). As a result of the explosive growth of the Internet, a large number of firms have integrated technology into their marketing and operations. Many firms are adopting a multichannel strategy. The impact of this strategy was high in field of services (Fernandez-Sabiote and Roman, 2012).

Increasing Internet popularity and the emergence of increasingly easy-to-use computer technologies have determined:

- Increasing the number of tourist boarding houses that have created their own websites
- Increasing of the websites which offers the possibility of online booking
- Increasing of the number of guesthouses' websites accessing prior to choosing the booking location
- Increasing the number of people booking online accommodation.

Thus, the understanding of online consumer behavior is important and so is the development of strategies for increasing the clients' loyalty for the website (Bilgihan and Bujisic, 2015).

2. The premises and research methodology

In this research we have analyzed 60 touristic guesthouses' websites in Bihor County situated in Apuseni mountains area. We focused on the tools which the guesthouses have used for customer retention.

According to Bruhn, customer retention can be achieved by satisfying the clients' needs using customer oriented offer, and also increasing the customer satisfaction with the service provider performance. Consumers compare their own perceptions after buying a product or service with their previous expectancies which today have before buying decision. This comparison may conduct towards the following situations: satisfaction, unsatisfaction or beyond expectancies (Bruhn, 2001; pp.111).

To increase clients' loyalties a multitude of instruments can be used. Bruhn classified these instruments as follows (Bruhn, 2001; pp.124-125):

- The category of tools focused on interaction
- The category of tools focused on satisfaction
- The category of tools aiming to prevent customer migration.

In the conducted research in order to classify the customer retention instruments identified on the analyzed websites we have considered the above-mentioned categories.

We started from the hypotheses:

- Touristic guesthouses websites offer visitors a positive experience
- Touristic guesthouses websites offer visitors needed trust to come back for a new booking
- Touristic guesthouses are focusing on online instruments focused on increasing client satisfaction in their needs for increasing customer retention.

The following issues were considered:

- How much online customer retention tools are used on touristic guesthouses websites
- How much the touristic guesthouses websites are using each of the previously mentioned customer retention tools.

3. Data analysis and interpretation

We have identified 19 customer retention tools used on the analyzed touristic guesthouses websites, categorized as follows (Table 1):

Table 1: Use of customer retention tools

Category of customer retention tools for touristic guesthouses	Number of tools used
tools focused on interaction	4
tools focused on satisfaction	12
tools aiming to prevent customer migration	3

As it can be seen most of the identified tools are in the category of tools focused on satisfaction. This leads us to the conclusion that touristic guesthouses are focusing on this type of tools in trying to increase their clients loyalty.

- In what regards the tools focused on satisfaction:
 - The most used tools are those regarding information related to localizing, room and guest house pictures, and services offered.
 - The least used tools are those regarding information about touristic activities, cultural activities and curative tourism that can be carried out in the area.

The small number of the tools focused on interaction and of those aiming to prevent customer migration made us search in detail the way in which they are used.

- Regarding tools focused on interaction:
 - Although websites contain at least a telephone number for reservation or information. Because the guesthouses are located in Mountain area there are places where telephone signal is intermittent (which is specified on the website). In these situations the email address or the online form represents an alternative.
 - The majority of the websites contain the email address or online forms for booking or information. Still there are guesthouses which offers reservations only by phone. These guesthouses are able to attract more customers if they would offer also online booking.

- The most of the analyzed websites do not have sections for comments or customer reviews. Instead a lot of guesthouses can be found on websites specialized on bookings (such as booking.com) where also exists customer reviews.

Figure 1 shows the extent to which tools focused on interaction are used.

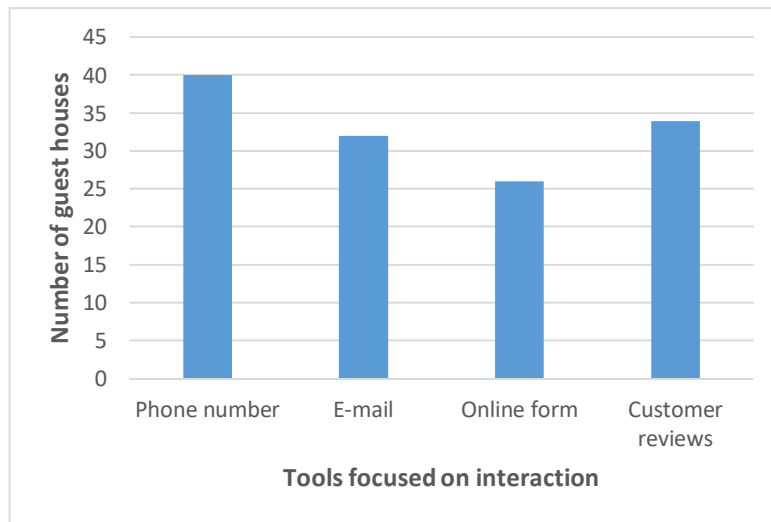


Figure 1: Use of the tools focused on interaction

- Regarding the tools aiming to prevent customer migration:
 - The most common tool used was the one regarding the reputation of the guesthouse.
 - The other two tools have been used on a small number of websites.

Figure 2 shows the extent to which tools aiming to prevent customer migration are used.

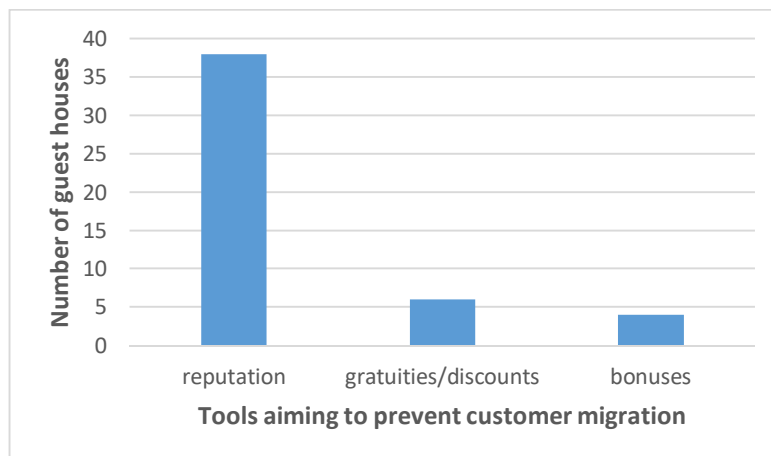


Figure 2: Use of the tools focused on customer migration prevention

4. Conclusions

Taking into account the increasing importance of the Internet in the tourist activity, the guesthouses in the Apuseni Mountains area are also present on World Wide Web. What differs from one website to another is the importance given to various online tools used to attract and retain customers. Websites that use a wide range of online tools have the chance to attract more clients and turn them into loyal customers. Many guesthouses have similar accommodations but using the right online tools they can create themselves advantages.

The study shows that guesthouses use mainly tools focused on satisfaction. A small number of tools focused on interaction are used, but apart from one of them, all the others are present on almost all of the analyzed websites. The smallest importance is given to those tools focused on barriers for customer migration.

Understanding the importance of having as many Internet users as possible, part of the analyzed guesthouses are also present on specialized online booking systems. Thus, 80% of the analyzed guesthouses which have their own websites are also listed on the booking.com platform.

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CONTAGION AND INTEGRATION OF CAPITAL MARKETS IN THE CEE COUNTRIES

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Abstract: *The purpose of this article is to study the contagion and the integration regarding the capital markets in Central and Eastern Europe (Romania, Hungary, Poland and Czech Republic). We will analyze the dynamics of correlation between these markets and the Eurozone over time. The methodology will be consisted of classical methods such as rolling-window Pearson correlation or more complex methods based on the correlation obtained using DCC-GARCH. At the same time, the results will be interpreted in the context of a diversified portfolio and will take into account the specificity of these markets and the phase of the economic cycle. The results revealed that the integration of the capital markets with the Eurozone markets has increased over time and the correlations were stronger. At the same time, increased integration has led to more pronounced contagion during the 2008 economic crisis.*

Keywords: *contagion; financial integration; time-series; volatility; correlation; equity markets.*

JEL Classification: G15; C22; G11.

1. Background

The integration of financial markets in Central and Eastern Europe has been a strong topic in recent years in the literature, especially in the aftermath of the economic and financial crisis of 2008. Global capital markets have become more interconnected and those in the Eastern European countries have not made an exception. The integration of capital markets has been supported in particular by the intensification of trade flows between states, their economies becoming more and more connected and more synchronized.

Integration of financial markets leads to the unification of markets and the reduction of frictions, and in this respect globalization has played an important role. On the other hand, there are a lot of theories, such as the modern portfolio theory, which suggests that the integration of capital markets leads to a reduction in the benefits of diversification, while all markets react in the same way. Thus, we can talk about the concept of contagion in the context of a crisis. The effects of a negative shock is transmitted very quickly in the context of an integrated capital market, bringing us to the idea of a higher contagion risk. However, beneficial effects could be more numerous than negative ones.

The level of integration and the risk of contagion can be measured by various instruments, and the literature is very extensive. Classical methods of beta-

convergence, sigma-convergence, rolling-window Pearson correlation, or different models that capture market correlation and conditional volatility, can be applied as tools for measuring contagion and integration. From the category of these models we can remember the class of multivariate GARCH models, and finally we can go to the CCC-GARCH or DCC-GARCH models.

Taking into consideration all of these and the researches from the literature, we aim through this paper to measure the correlation and integration between capital markets in the Central and Eastern Europe. The novelty is not represented by the applied methodology, but the markets for which it is applied and the way how we tested the benefits of the methodology and how we placed it in the context of a portfolio management. It should be noted that the study will be conducted for the following eastern European countries: Poland, Hungary, Romania, Czech Republic, compared to the Eurozone. This methodology will pursue to estimate the dynamics of the correlation between these capital markets using a dynamic conditional-correlation autoregressive conditional heteroscedasticity (DCC-GARCH) model. At the same time, we will look at the benefits of using this model versus a Pearson coefficient (Pearson Correlation) and will present how the results can be used in the context of a equity portfolio management.

Thus, this paper is designed to study the correlation in capital markets from Central and Eastern Europe and the Eurozone, but also the manner in which this correlation has evolved over the last 18 years. It is considered that the correlation measure is a good indicator for the integration of financial markets or for contagion, and it is important to follow the evolution according to market events. At the same time, the benefits of DCC-Garch's correlation over Pearson Correlation will be highlighted in the context of a portfolio. The analysis will be conducted over different periods of time (18 years) in order to capture a complete economic cycle in Central and Eastern Europe.

2. Literature Review

The literature regarding integration and analysis of contagion is wide and the approaches for this topic are different. They can study integration into the financial markets through the concepts of sigma-convergence and beta-convergence, as Babetskii, Komarek and Komarkova (2007) did, addressing the issue of financial integration in the countries of Central and Eastern Europe. Also, Babetskii, Komarek and Komarkova (2013) made a more recent analysis of the integration level based on sigma convergence and beta convergence, but this time they expanded it, alongside the capital market and other financial markets: the forex market, the money market and the bond market.

Another way to approach the concept of integration and contagion in the financial markets can be represented by the analysis based on GARCH models to estimate the correlations between the markets in the dynamics. Thus, basic papers can be taken into account for explaining GARCH models, such as those of Engle (1982), Bollerslev (1986), Nelson (1991) or Glosten, Jagannathan and Runkle (1993). These works have laid the foundation for univariate GARCH models in the literature and, starting from them, we can move on to multivariate GARCH models that allow for the estimation of correlations between financial markets in different countries. Thus, the methodology of this research will be in line with that proposed by Engle (2002) and then, by Diebold, Yilmaz (2009) addressing contagion and correlation

between different financial markets. Starting from these ideas, the present study will be carried out for the case of the countries of Central and Eastern Europe, including the case of Romania, in order to highlight the level of integration.

The literature has highlighted a number of advantages and disadvantages of financial integration. Thus, integration leads to lower transaction costs, increased competition, but also leads to lower benefits of diversification. Ferreira P. (2016) revealed in his paper that the increase in the level of integration leads to accelerating economic growth, to welfare growth due to better allocation of savings. On the other hand, if these benefits are not properly managed, they can generate imbalances, and these can be accentuated by high integration that favors high contagion. Thus, following the 2008 economic crisis, it has been revealed that an increase in market integration can sometimes bring major disadvantages in terms of increasing contagion or accelerating it. This topic has been addressed by Das D., Bhowmik P., and Jana R. (2018), and by Panda A.K. and Nanda S. (2018), highlighting the fact that integration has brought a number of advantages but, on the other hand, exposed financial markets to a high risk of contagion in the face of an economic downturn or financial crisis. Thus, a financial crisis can be more severe when a number of markets are heavily integrated financially and commercially.

As mentioned above, there are numerous ways to study correlations, and the most recent are those based on conditional correlation obtained by applying multivariate GARCH models. This will be the general direction for this paper, and as a starting point we will consider the work of Paramati et al. (2016). He studied the relationship between the Australian stock exchange and the stock exchanges of its major trading partners, considering that their economies may be integrated to a certain extent. The authors used cointegration models and different types of DCC-GARCH (asymmetric dynamic conditional correlation-generalized autoregressive conditional heteroskedasticity) to model the dynamics of the stock indices chosen for the analysis. Starting from this paper and from the researches identified in the literature, we will construct our work for the case of Central and Eastern Europe.

3. Data and Methodology

The purpose of this paper is to identify the extent to which Central and Eastern European capital markets are linked to the Eurozone, while also highlighting the integration process. At the same time, it will highlight the added value of using DCC GARCH to measure the correlation in the context of an equity portfolio, taking into account the comparison with the use of Pearson Correlation with rolling window. In this respect, we have chosen to analyze data relevant to the equity markets of each country. In order to capture the evolution of these markets, daily data were selected for relevant indices in each market for a period of 18 years, so as to include a complete economic cycle: economic growth, recession and recovery. Markets are considered to be correlated differently over different periods of the economic cycle. Further, we will present a synthesizer table for the data sets that are going to be used in the analysis:

We are going to use data for the main stock indices in Romania, Eurozone, Poland, Hungary and Czech Republic. The data will be daily, but the period for which data was used is 18 years: 01/01/2011 - 30/06/2018.

Table 1. Selected countries and their indices

Stock Market	Benchmark Indices	Frequency
Romania	BET Index	Daily
Eurozone	Euro Stoxx 50	Daily
Poland	WIG20 Index	Daily
Hungary	BUX Index	Daily
Czech Republic	PX Index	Daily

Source: Own computation

The data will be processed to be used within the model. It is necessary to obtain series of daily returns. For this purpose, we have used the following formula:

$$r_t = \ln\left(\frac{index_t}{index_{t-1}}\right)$$

Volatility and asset correlation analysis has always been an important element in portfolio management debates. Thus, the knowledge of market correlations can provide information on the efficiency of diversification and how an equity portfolio from different markets can be managed. For estimating correlation there were used a lot of methods in the literature, such as Pearson Correlation, VAR, VECM, Granger causality, impulse response function, or different GARCH models. The results were different and the findings showed that each of them works properly in certain markets or in certain periods.

For this paper we have selected DCC-GARCH for correlation estimation. This model was developed by Engle R. (2002) for modeling time-varying volatility and correlation between different markets. Also, Pesaran B. and Pesaran M.H. (2010) improved this model using it to estimate correlations, but assuming multivariate t-student distributions for heavy-tailed data modeling. Thus, starting from these papers, we will use the DCC-GARCH model for the Central and Eastern European markets and will see if this model brings value-added compared to Pearson Correlation in the context of a diversified portfolio of shares.

Further, we will try to outline the methodology behind estimating the DCC-GARCH model. The general equation for the DCC-GARCH model is presented below:

$$H_t = D_t R_t D_t$$

Where H_t – conditional variance matrix

D_t - diagonal matrix having conditional variance ($\sqrt{h_{it}}$) on its diagonals

R_t - is time-varying correlation matrix (off-diagonal elements)

Further, the conditional variance for each asset (h_{it}) is estimated using an univariate GARCH presented below:

$$h_{it} = w_i + \sum_{x=1}^{X_i} \alpha_{ix} r_{it-x}^2 + \sum_{y=1}^{Y_i} \beta_{iy} h_{it-y}, \text{ for } i = 1, 2, \dots, k$$

Where, $w_i, \alpha_{ix}, \beta_{iy}$ are non-negative and $\sum_{x=1}^{X_i} \alpha_{ix} + \sum_{y=1}^{Y_i} \beta_{iy} < 1$; α_{ix} , is the short-run persistence of the shocks to returns Y to long-run persistence (the GARCH effects) and the number of assets is denoted by k .

ε_t are residuals and $\sqrt{h_{it}}$ - conditional standard deviation.

Furthermore, we are going to explain the elements from the general form of DCC-GARCH:

$$D_t = \begin{bmatrix} \sqrt{h_{11,t}} & \cdots & 0 \\ \vdots & \ddots & \vdots \\ 0 & \cdots & \sqrt{h_{kk,t}} \end{bmatrix}$$

$$R_t = Q_t^{*-1} Q_t Q_t^{*-1}$$

$$Q_t^* = \begin{bmatrix} \sqrt{q_{11}} & \cdots & 0 \\ \vdots & \ddots & \vdots \\ 0 & \cdots & \sqrt{q_{kk}} \end{bmatrix}$$

Q_t^* - diagonal matrix of its diagonal elements

Q_t is symmetric positive definite conditional covariance matrix

\bar{Q} - unconditional covariance of the standardized residual of univariate GARCH models. Hence, we can write the following form:

$$Q_t = (1 - a - b)\bar{Q} + a\varepsilon_{t-1} - 1\varepsilon'_{t-1} + bQ_{t-1}$$

Also, we are going to use the classic form of correlation know in the literatura as Pearson Correlation. The well known formula is presented below:

$$\rho_{ij} = \frac{cov(i,j)}{\sigma_i \sigma_j}$$

4. Empirical Results

First of all, in order to interpret the results and to put them in an appropriate framework it is necessary to analyse them and it is necessary to present descriptive statistics for each of them. We recall that we used data series for 5 stock indices (BET Index, PX Index, WIG20 Index, BUX Index and Euro Stoxx 50). Based on these indices we have computed series of daily returns. Thus, we will provide descriptive statistics on performance data series.

Table 2. Descriptive statistics

	BUX	BET	EUROSTOXX	PX	WIG20
Mean (%)	0.032	0.061	-0.006	0.018	0.006
Median (%)	0.012	0.012	0.015	0.024	0.000
Maximum (%)	13.178	17.625	10.438	12.364	8.155
Minimum (%)	-12.649	-20.770	-9.011	-16.185	-8.443
Std. Dev. (%)	1.485	1.598	1.469	1.355	1.484
Skewness	-0.103	-0.330	-0.053	-0.487	-0.149
Kurtosis	9.511	21.122	7.621	16.490	5.740
Jarque-Bera	8304	64343	4181	35792	1487
Probability	0	0	0	0	0
Observations	4696	4696	4696	4696	4696

Source: own computation

Thus, it can be seen that the average yield for most indices was close to zero and the median was approximately equal to the average, which shows that we are working with about symmetric distributions. However, the Jarque Bera statistic suggests that the data series does not follow a normal distribution.

Out of the five selected markets, it can be noticed that the Romanian capital market recorded the most wide fluctuations with daily returns varying between -20% and 17.5%. On the other hand, for the Polish market there were the least variations in the daily yields of the stock market. To further highlight this aspects, we will also present a series of graphs on daily returns for 5 stock indices:

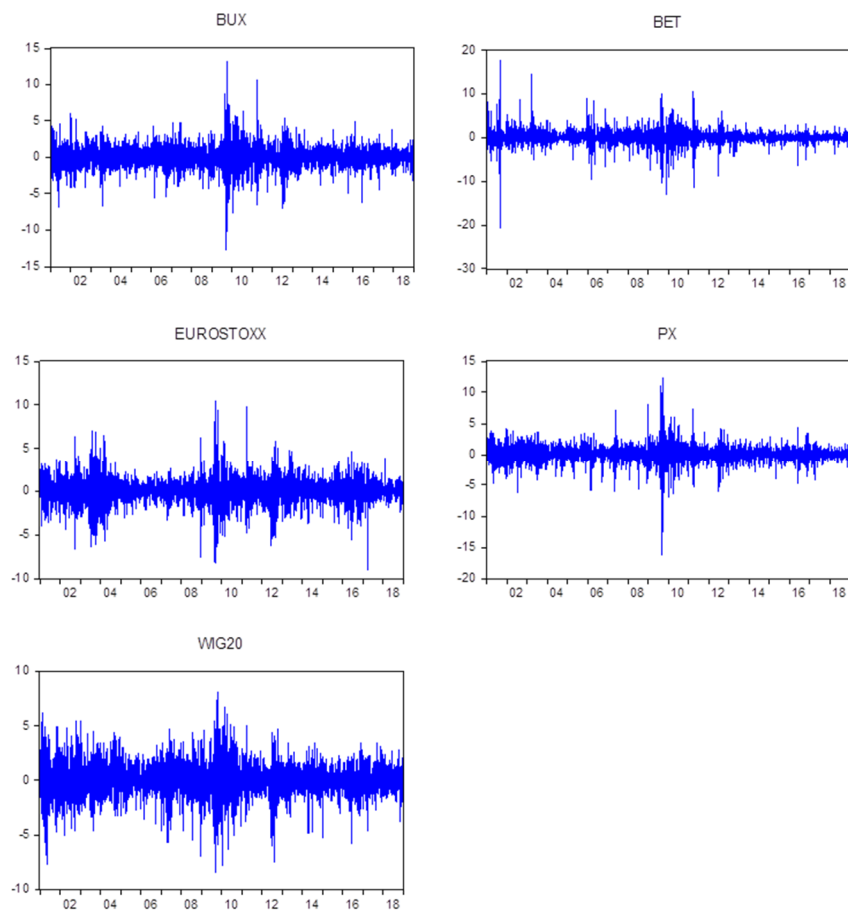


Figure 1: Daily returns for stock market indices

Source: Own computation based on the data published by each stock exchange

Also, in order to better know the data series that we will work with, we have made graphs that reveal a comparison between the empirical and theoretical distribution for daily returns.

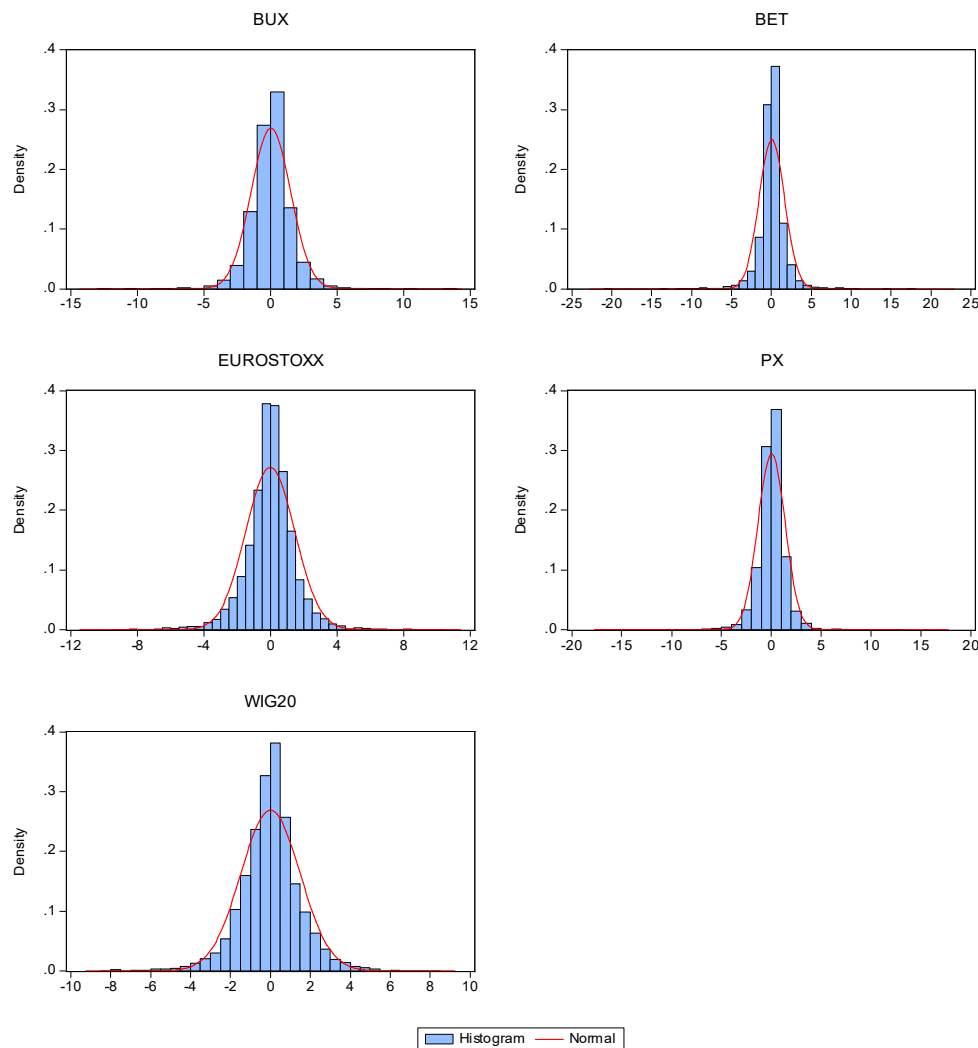


Figure 2: Empirical vs. theoretical distributions for daily returns

Source: Own computation based on the data published by each stock exchange

Based on these graphs, it can be argued that the daily data series for Euro Stoxx 50 and WIG20 are the ones that come closest to a normal distribution. On the other hand, the BET and PX series are the ones that are the most distant, with strong leptokurtic distributions. This is also evidenced by Table 2, where we presented the values for descriptive statistics. Thus, the kurtosis values calculated for BET and for PX are significantly higher than the level 3 specific for a normal distribution.

Further on, we will go to the presentation of the results obtained for the conditional correlation from DCC-GARCH for these markets versus the Euro Stoxx 50 Euro area capital market. At the same time, the conditional correlation will be presented compared to the Pearson correlation obtained using a rolling window. The calculation horizon was 01/01/2001 - 30/06/2018. We would like to remind you that we will follow how the correlation / integration has evolved, as well as the benefit of

using the conditional correlation from DCC-GARCH compared to a simple Pearson correlation in the context of a diversified portfolio. Thus, we will consider the modern portfolio theory, which asserts that once the correlations grow, the benefits of diversification decrease. Hence, this theory can be extended to the analysis of integration of the European capital markets: once the level of integration increases, the benefit of diversification through taking positions on different markets in Europe is decreasing.

The first chart that is going to be presented is related to the correlation between the capital market in the Eurozone and that in Romania. Therefore, we will still have a graph that highlights the correlation between the Euro Stoxx 50 and the BET using the DCC-GARCH and Pearson Coefficient.

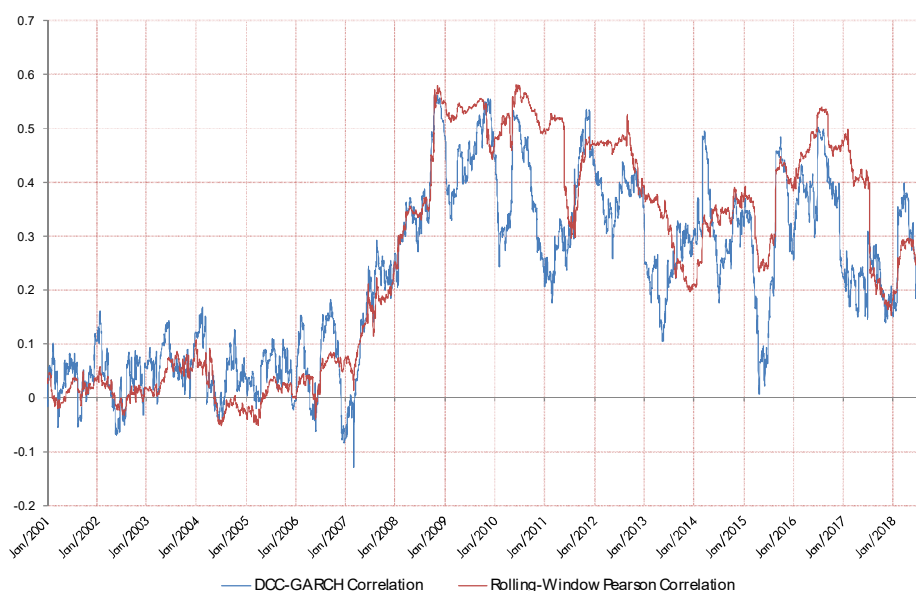


Figure 3: Conditional Correlation DCC-Garch vs. Rolling-Window Pearson Correlation (Euro Stoxx 50 vs. BET Index)

Source: own computation

The above graph highlights a number of very interesting and useful aspects of managing a diversified portfolio. Firstly, it can be seen that the level of correlation / integration of the two stock markets considered (Romania and the Eurozone) is increasing during periods of economic stress (global economic crisis 2008-2009). Also, after the accession of Romania to the European Union, the correlation between these markets has increased, even in periods without economic turmoil. Thus, we can say that the benefit of diversification drops sharply when there are turbulence on the market and has also fallen for the markets of Eastern Europe with the integration in the US, since they have become more correlated with the Eurozone markets.

On the other hand, it has been observed that the result obtained by applying the DCC-GARCH model has led to a series of correlations that are modeled more rapidly. The correlation obtained through this model is much more sensitive to

market developments, highlights trend shifts faster, responds faster, and can be more useful when managing a diversified portfolio. Thus, if we see an increase in correlation, we can see that portfolio diversification no longer adds value and should reduce exposures in several correlated markets. Conversely, when correlations decrease, a higher diversification is warranted. Therefore, it is necessary for a portfolio manager to have a tool to show it as soon as possible when market correlations change and the result of DCC-GARCH mode is more flexible and faster than that obtained by applying Pearson Correlation.

The results for the correlations between the WIG20, BUX and PX and Euro Stoxx 50 indices, ie the Polish, Hungarian and Polish capital markets and the Eurozone, will be presented in the same way. The graphs for conditional correlation using DCC-GARCH and Pearson Correlation will be presented, and interpretations will be made later for all three cases.



Figure 4: Conditional Correlation DCC-Garch vs. Rolling-Window Pearson Correlation (Euro Stoxx 50 vs. WIG20 Index)

Source: own computation

The first aspect that can be observed for the case of Hungary, Poland and Czech Republic is that the capital markets in these areas have been more closely linked to the Eurozone since the beginning of the analysis period, being countries already integrated into the European Union in 2003 -2004, when low correlation levels were observed for Romania. Thus, for that period, the diversification principle would have worked for the case of Romania and would have been less useful for the other 3 countries, being more closely related to the Eurozone market. On the other hand, it was again noticed that the degree of correlation increases significantly when there is a period of stress on the financial markets, just as it happened in the 2008 global economic and financial crisis. The correlation between the markets in Poland, Hungary and the Czech Republic and the Eurozone have increased, underlining

that the principle of diversification has become less useful in these conditions, considering that markets have evolved to a great extent in the same direction.

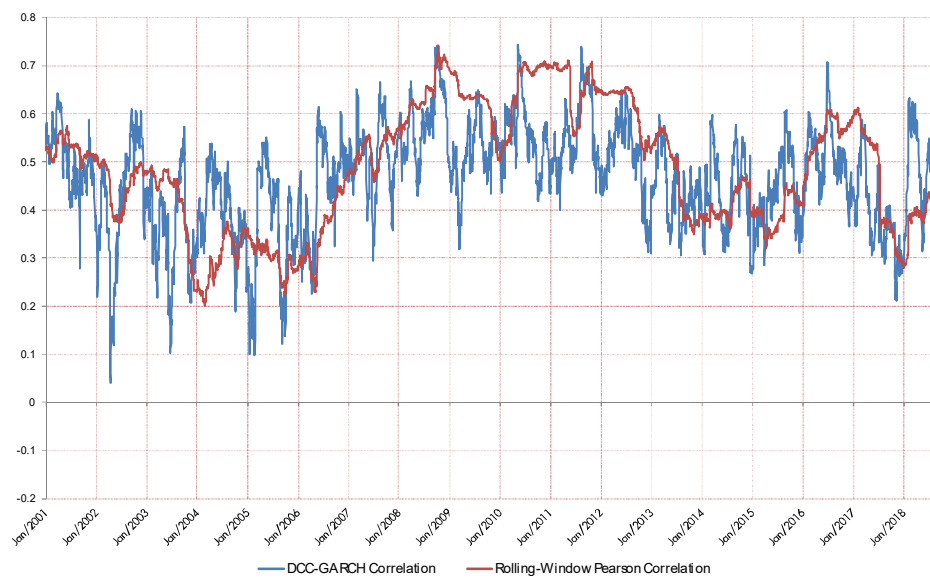


Figure 5: Conditional Correlation DCC-Garch vs. Rolling-Window Pearson Correlation (Euro Stoxx 50 vs. BUX Index)
Source: own computation

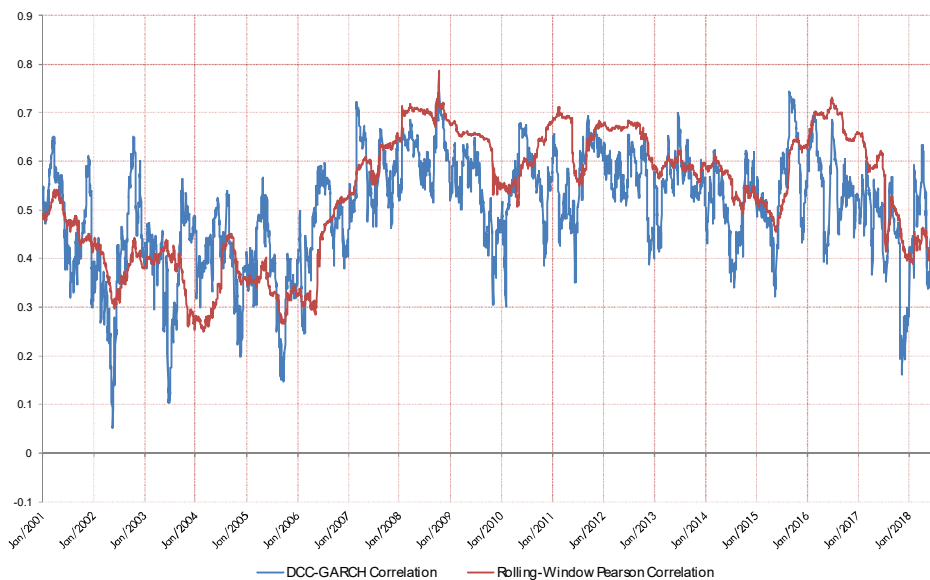


Figure 6: Conditional Correlation DCC-Garch vs. Rolling-Window Pearson Correlation (Euro Stoxx 50 vs. PX Index)
Source: own computation

Another important aspect that has also been validated in the case of the Romanian stock market: the correlation obtained using DCC-GARCH has proved more flexible than the rolling-window Pearson Correlation. Thus, it turns out that the DCC-GARCH model can be more useful in the context of a stock portfolio because it reacts faster and allows the fund manager to decide early on whether diversification makes sense or whether it can remain exposed only on certain markets, correlation to decrease. DCC-GARCH allows for greater flexibility and faster adaptation to the market compared to the rolling-window Pearson Correlation, where the reaction is slower.

5. Conclusions

The aim of this paper was to study the level of integration with the Eurozone for Central and Eastern European countries in terms of the capital market. Four countries were selected for study: Romania, Poland, Hungary and Czech Republic. It was intended to highlight integration and dynamics over the past 18 years using correlations calculated based on rolling-window Pearson Coefficient and DCC-GARCH model. It should also be noted that it was also highlighted how integration between markets can be considered when discussing the management of a diversified portfolio. Thus, a high correlation (high integration) makes the diversification principle no longer work. Moreover, a comparison was made between the two methods of estimating the level of correlation between the markets, aiming to highlight the best method to capture this aspect.

The study revealed that the Romanian market was little correlated with the Eurozone market in 2001-2006, the level of integration being very low before Romania joined the European Union. Subsequently, this level of integration has increased significantly, with two possible determinants: i) the economic crisis in 2008 that has led to increased correlations in the market; ii) the increase of trade flows between Romania and the Eurozone after the accession to the European Union.

For the other 3 countries (Poland, Hungary and the Czech Republic) a higher correlation level was observed since the beginning of the analysis period (2001), and the dynamics was similar. The correlation with the Eurozone increased significantly during the crisis period and then gradually diminished, but remained slightly higher than in the pre-crisis economic and financial period of 2008. Thus, it can be said that in times of crisis associated with the increase of integration between countries, the principle of diversification does not work any longer, as they move in the same direction. This is useful for portfolio managers, as they can reduce exposures to specific markets because they no longer add value to a portfolio.

Another idea followed by this paper is the difference between rolling-window Pearson Correlation and the DCC-GARCH conditional correlation. It was highlighted that the result obtained by applying DCC-GARCH is more appropriate for the context of managing a diversified portfolio. The DCC-GARCH correlation is more flexible, responds faster to market changes, and provides the portfolio manager with faster market change information compared to the rolling-window Pearson Correlation. Thus, the fund manager could react more quickly and make faster investment decisions in the context of new market realities.

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THE ROMANIAN LABOUR MARKET ASSESSMENT AND CHALLENGES TO JOIN THE EURO AREA

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Abstract: *In this article, we are assessing how prepared is the Romanian labour market so far in the context of joining the Euro Area, by proposing as tool the labour market flexibility (LMF) meant by its definition, to absorb the economic imbalances. Among the determinants of the LMF considered in our analyse are the demo-economic structures, the employment rate, the unemployment rate, the wage flexibility, the working time and employment period, the geographic mobility, etc. The analytical approach is structured on studying the distinct features of the Romanian labour market compared to the other EU Member States in general and those in the Euro Area in particular that can induce different responses to the various adjustment levers in Romania, compared to the other states. The results our research highlight that there still are gaps between Romania and the other EU28 Member States, and therefore, reducing these gaps requires the promotion of measures / programs to stimulate investment in technology, as well as measures to protect the redundant workforce resulting from these investments and, implicitly, specific strategies and the ability to support the costs attached to them. Since Romania is no longer competitive in terms of the availability of adequate workforce, this in a wider context of the new challenges faced by the Romanian economy, with potential significant impact on labour demand architecture (digitization, industry 4.0, environmental compliance and sustainable development requirements, energy paradigm changes, etc.), which support the need to estimate the demand for labour and its quantitative and structural-qualitative characteristics, as well as strategies adopted by the state and companies to provide the necessary labour force. Therefore, a responsible wage setting policy is needed to ensure that overall wage dynamics are attuned to productivity developments and reflect prevailing conditions on the labour market, while the public administration and the private sector need to work closely together to improve the Romanian labour market before it becomes a major impediment to further economic development.*

Keywords: *Romania; Euro Area; labour market; labour market flexibility; demo-economic structures; employment / unemployment rate; wage flexibility; workers geographic mobility; labour and wage policy.*

JEL Classification: *F15; F20; F22; J11; J18; J21; J30; J51.*

1. Introductory Remarks and Theoretical Background

In the context of joining the Euro Area, due to the loss of the necessary leverage to adjust to the economic shocks (e.g. exchange rate, interest rate, etc.), the *labour market flexibility* (LMF) can become an important tool for absorbing the economic imbalances. Under these conditions, it is more than obvious that a high labour market

rigidity can be more expensive for a member of the Economic and Monetary Union (EMU) than outside it.

According to the theory of Robert M. Mundell (Mundell, 1961), in order to be optimal, a monetary union in addition to the common preferences of the Member States on economic policy objectives, it is necessary inter alia for each Member State to have sufficient flexibility of the domestic wages, as well as to provide the appropriate conditions for a high rate of labour mobility between the union's Member states.

Various theoretical and programmatic developments of the subject have led to a much more complex concept of LMF that includes adequate demo-economic structures, an institutional labour market framework tailored to these desiderata, real wage flexibility, between Member States, flexibility in the degree and form of employment of labour resources, functional flexibility in close correlation with the ability to adapt quickly to skills and qualifications needs, etc.

In our analytical approach, we start from a UK HM Treasury study (HM Treasury, 2003) that defines the *flexible labour market* as "one that has the ability to adjust to changing economic conditions in a way that keeps employment high, unemployment and inflation low, and ensures continued growth in real incomes. This applies whatever the monetary regime, but EMU puts a particular premium on certain aspects of flexibility, including that of wages" (HM Treasury, 2003, p. 10).

Among the determinants of the labour market flexibility considered are demo-economic structures, employment rate, unemployment rate, wage flexibility, working time and employment period, geographic mobility, etc. (see Figure 1).

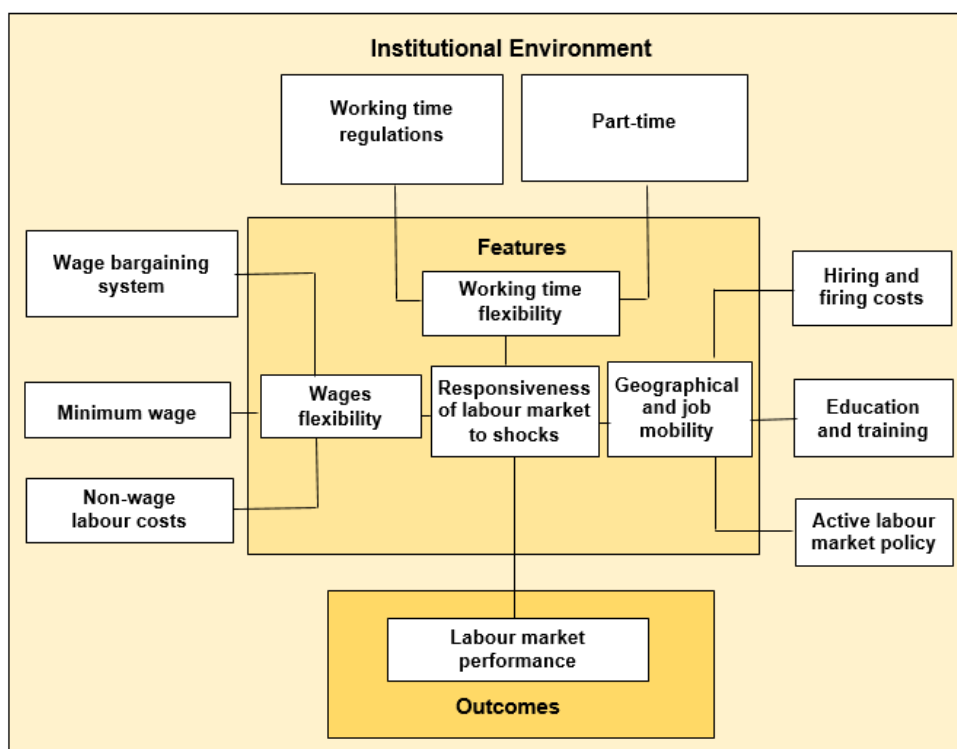


Figure 1. Determinants of labour market flexibility

Source: Soltwedel, Ruediger & Dohse, Dirk & Krieger-Boden, Christiane (1999). EMU Challenges European Labor Markets. IMF Working Papers, No. WP/ 99/ 131. 99. 10.5089/9781451855265.001, available on-line at the link https://www.researchgate.net/publication/45124536_EMU_Challenges_European_Labor_Markets/download, cited in HM Treasury (2003) *EMU and labour market flexibility*, EMU study, London, UK, p. 11, link <http://image.guardian.co.uk/sys-files/Guardian/documents/2003/06/09/labour1.pdf>, accessed on November 2017.

However, "labour market is not necessary to be flexible in all dimension, it is not fully possible. High flexibility in one dimension may help to compensate for low flexibility in another. A greater flexibility in each dimension will enable the labour market to operate more effectively and increase its ability to adapt to changing economic conditions. Labour market flexibility has also a beneficial impact on productivity, by supporting the more effective use of human resources within the economy." (Şerban, 2012, p. 4543)

2. Research Methodology and Hypothesis

The analytical approach is structured on studying the distinct features of the Romanian labour market compared to the other EU Member States in general and those in the Euro Area in particular that can induce different responses to the various adjustment levers in Romania, compared to the other states.

2.1. Persisting demographic decline. Growing trends of the demographic and economic dependency rates with an impact on the labour force substitution rate and on the sustainability of the budgetary balances

When grouping the 19 member states of the Euro Area by the evolution of natural, migratory and total population growth, four typologies of demo-economic behavior is emphasised. Using this methodological framework for the year 2017 (preliminary statistics data accessed on March 2018), Romania is included alongside Latvia and Lithuania in the group of states with total, natural and negative migration, while 3 of the states are characterized by total and natural negative growth and positive migration growth, other 5 states by total positive growth in the context of a negative natural growth but with a positive migratory growth, and for the other 7 states both the total, and the natural and migratory growth are positive (see Chart 1).

In the context of these developments, the *demographic dependency ratio* increased from 46.9% to 48.7% between 2002 and 2016 (World Bank, 2017), where: *Demographic dependency ratio* = $(Population\ aged\ under\ 15 + Population\ aged\ 65\ and\ over) / (Population\ aged\ 15-64) * 100$, and according to the EUROSTAT (own computation based on data of the EUROSTAT, 2017 - *Demographic challenges — population projections: tables and figures*) forecast it will continue to grow to 52.3% in 2025 and 58.1% respectively in 2030.

These trends are due to the decrease in the *Youth dependency ratio* from 25.8% in 2002 to 22.9% in 2017 and the estimation of a further reduction of this indicator to 23.5% in 2030, where *Youth dependence rate* = $(Population\ aged\ under\ 15) / (Population\ aged\ 15-64) * 100$, and of an increase in the *Dependency ratio of elderly people* from 20.6% in 2002 to 26.6% in 2017 and the further increase of this indicator to 34.7% in the horizon of 2030, where *Demographic dependence ratio* = $(Population\ aged\ 65\ and\ over) / (Population\ aged\ 15-64) * 100$ (Chart 2).

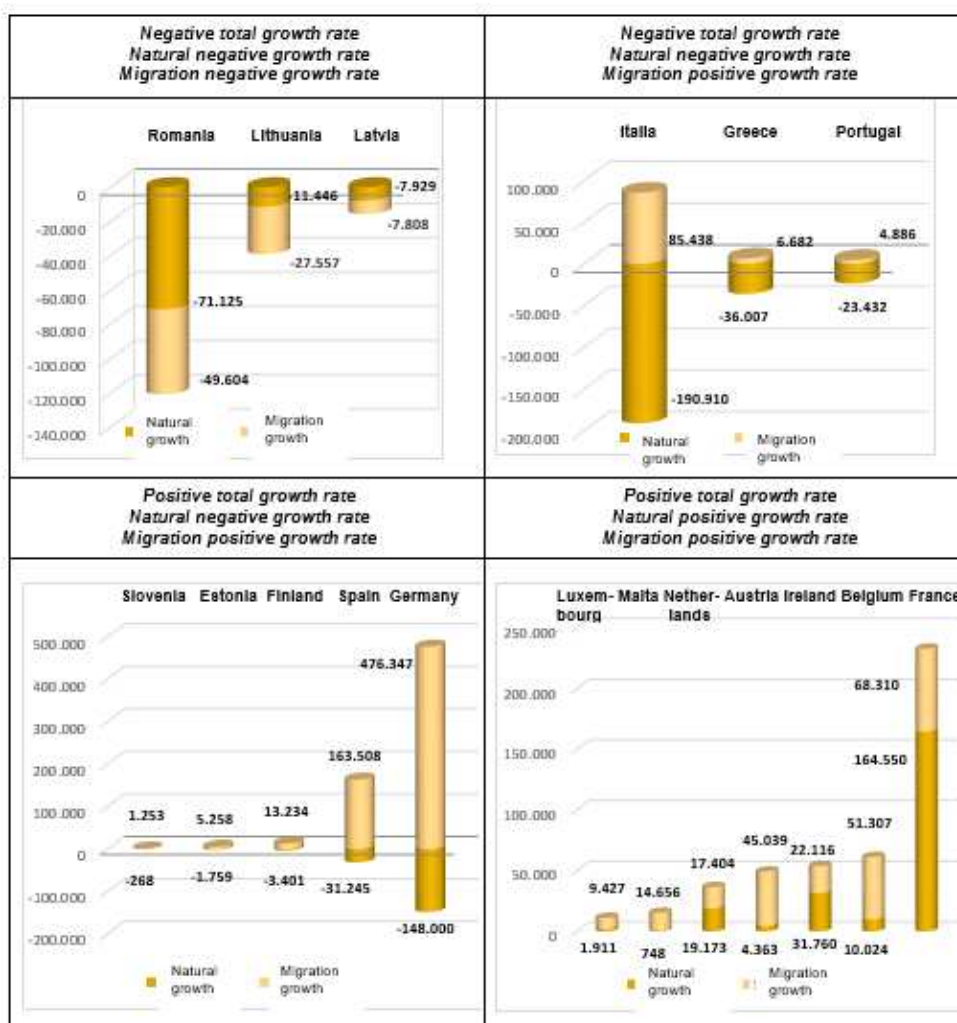


Chart 1. Natural and Migration Growth Rates in the Eurozone and Romania (2017 preliminary statistics data accessed on March 2018)

Source: Own computation based on the statistical data of EUROSTAT, *Demography and migration*, link <https://ec.europa.eu/eurostat/web/population-demography-migration-projections/data/database>, accessed on March 2018.

The *demographic dependence ratio* is doubled by a high *economic dependency ratio*, where the *Economic dependency ratio* = $(\text{Inactive population} + \text{Unemployed}) / \text{Occupied population} * 100$. In recent years, according to our own calculations of the *Economic dependency ratio* based on data released by NIS (National Institute of Statistics, Romania) – INS, AMIGO, AMG1010 - INSSE - *Baze de date statistice - TEMPO-Online serii de timp* - in Romania, on average, at an occupied person there were 1,2-1,3 inactive and unemployed persons (this rate was calculated for both the population aged 15 and over and for the population aged 20 and over). This level of

Economic dependency ratio is reflected in challenges in terms of labour force replacement rates and the sustainability of social security, health and unemployment insurance balances.

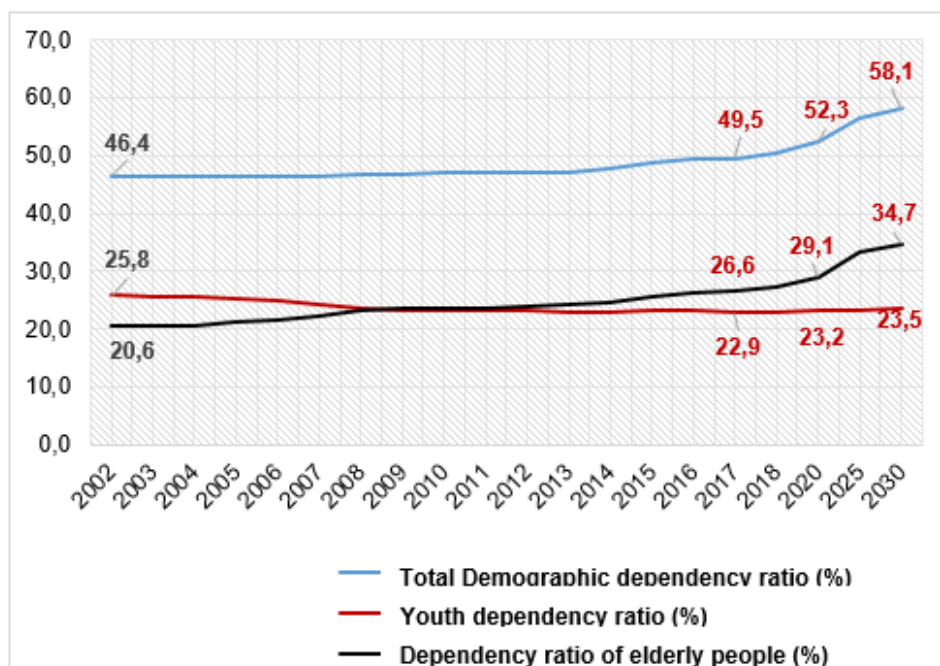


Chart 2. Demographic dependency ratio in Romania, between 2002-2016 and forecasts to 2030 (%)

Source: Own computation based on data of the EUROSTAT, 2017 - *Demographic challenges — population projections: tables and figures*, link [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=People in the EU - population projections#A demographic future E2.80.94 concluding remarks](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=People_in_the_EU_-_population_projections#A_demographic_future_E2.80.94_concluding_remarks), accessed on November 2017.

2.2. Characteristics of the employed population that differentiate Romania from the other Member States, with possible different response of the labour market to the specific adjustment levers

Although in recent years the employment rate of persons aged 15-64 has registered an upward trend in Romania, it is still at a lower level by about 3 percentage points compared to the average EMU 19 and by about 4 percentage points below the average level EU 28 (see Graph 3).

Against the backdrop of the external migration flow, during 2008-2016 the unemployment rate in Romania was below the average of the EU28 Member States and below the average of the EMU19 (EUROSTAT, *EU labour force survey (EU-LFS)*, accessed on November 2017). The unemployment rate of the under-25s is still high according to EUROSTAT database (2017) *Employment and unemployment (Labour Force Survey) (employ)*.

During the years 2015 and 2016 in Romania, consumer prices registered negative developments, while the period 2014-2017 is characterized by declining unemployment rates and low inflation (EUROSTAT, *Harmonised Indices of Consumer Prices (HICP)*).

These findings highlight the need of the Romanian economy for investment in human capital, the promotion of costly labour market measures to stimulate geographical mobility, to engage in dual education, etc. with effects on active employment measures and implicitly on public spending on employment.

An important role in striking a balance between flexibility and security on the labour market also rests with other regulations concerning wages and working conditions in the budgetary field, labour taxation, industrial relations regulation framework, regulations and practical results of collective bargaining, etc. (Dăianu, D., et al, 2016, p. 143)

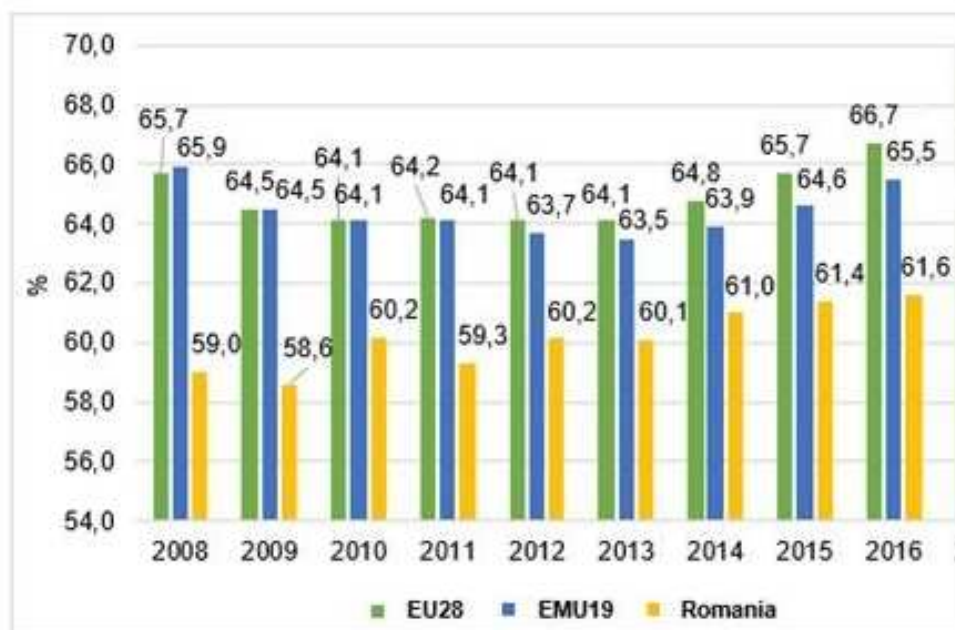


Chart 3. Employment rate of persons aged 15-64 in EU 28, EMU 19 and Romania, 2008-2016 (%)

Source: Own computation based on EUROSTAT database - *Employment and unemployment (Labour Force Survey) (employ)*, accessed on November-December 2017.

Relevant in this respect is the synthesis by the authors of the study "*Romania and joining the euro area, under what conditions! / România și aderarea la zona euro, în ce condiții!*", based on the set of indicators provided by the World Bank in the framework of the program for evaluating the easiness of doing business in a certain country for 2015, "Easy of Doing Business". (Dăianu, D., et al, 2016, Table A3.7) The indicators used are grouped into four categories and measure with the help of a set

of indicators deriving easiness / hardness, flexibility / rigidity of the work schedule, easiness / difficulty of making available, redundancy costs and job quality.

An important role in shaping the current framework of labour relations in Romania and the levers of flexibility in the labour market has also been the adoption of the new Law on Social Dialogue (Law 62/2011) in 2011.

The legislative reform achieved through this regulation had a negative social impact on social partnership, collective bargaining, and the quality of employment and working conditions.

Among the arguments in support of this statement, at least in the first years of law promotion, we recall that: following the reform, trade unions and employers' organizations faced considerable difficulties in effectively carrying out their functions; since the entry into force of the law, the number of trade union members has decreased, while many employers' organizations have encountered difficulties in acquiring representativeness under the new legal criteria; the reform has had a negative impact on the functioning of the national social dialogue institutions, one of the immediate consequences being the dysfunctionality of the Economic and Social Council (ESC); the regulation of working conditions through collective bargaining has significantly diminished, primarily through the abolition of the collective labour contract at national level which established a number of working and employment conditions, including the minimum wage at national level.

The cumulative effect of abolishing the collective labour agreement at national level, supplementing sectoral representation conditions, and introducing the absolute majority criterion for achieving representativeness for collective bargaining at company level was that over 1.2 million workers, particularly those employed in enterprises with fewer than 20 employees, have been excluded from collective bargaining, which may have a negative impact on wage levels and the quality of working conditions in general; due to the difficulty of obtaining representativeness for collective bargaining at the sectoral level, the social partners have concluded very few collective agreements at this level; they exist mainly in the public sector and according to the law, they do not contain salary provisions; the number of collective bargaining agreements at company level has diminished, the protection afforded by them has decreased compared to previous contracts and the number of covered workers has decreased significantly; in the absence of collective bargaining, the responsibility for regulating working conditions is largely the responsibility of the government, etc.

Difficulties in terms of regaining representativeness by social partners at all levels and conducting social dialogue and real negotiations restrict the active involvement of social partners in shaping sectoral, national strategies, in debating legislative initiatives, etc., all of which result in poor predictability of the impact of certain promoted measures, and sometimes in reducing the effectiveness of adjustment measures through flexibility-security balancing.

In close connection with these, an important part of the LMF is the quantitative one, reflected by the number of jobs created and dismantled in total and the causes of their creation or abolition.

Another aspect that deserves attention in the context of analyzing the effectiveness of leverage to promote flexibility is the relatively high proportion of employees in foreign-owned companies, generating exposure and vulnerability to relocation risk and sectoral / territorial imbalances.

In 2016, some 1.2 million people (29.8% of the employees of Romanian companies) were employed in companies with foreign capital. ("*Capitalul privat românesc 2016* - Ediția a II-a", PIAROM & Ziarul Financiar, 2017)

By the share of these companies in the number of employees, the degree of exposure of certain areas and branches of activity to the risk of delocalization is relatively high.

In 2014, for example, in 11 branches of Romanian industry the share of employees in these categories of companies was over 50%, in the case of 9 branches between 30 and 49.9% and in 3 branches between 18 and 29.9%. ("*Capitalul privat românesc 2016* - Ediția a II-a", PIAROM și Ziarul Financiar, 2017)

Similar situations are also recorded in a large number of small or urban localities where the share of employees in foreign companies is higher than 50%.

In a November 2017 analysis by the European Commission on Romania's net international investment position (NIIP), referring to the risks and vulnerabilities associated with net negative positions and their influence factors, it was mentioned inter alia that the stock of investments foreign direct debts represent a high percentage of external liabilities causing negative NIIP, a similar phenomenon being encountered in Estonia, Lithuania, Latvia, Bulgaria and Poland. (European Commission, 2017, p.10)

2.3. Income of the population with levels much lower than those in the other Member States, with multiple implications

Romania's lack of attractiveness for jobseekers from the other EU Member States due to low wages makes the attraction of labour from these states impossible to take into account, at least in the coming years, as an important lever of LMF.

Although in the last decade, according to Eurostat data, the monthly minimum wage in Romania has increased, in terms of this indicator, Romania is on an antepenult place in the hierarchy of Member States with a minimum wage at national level, the only countries with lower minimum wages Bulgaria (260,76 Euro) and Lithuania (400 Euro). (EUROSTAT database, *Wages and labour costs: tables and figures*, link https://ec.europa.eu/eurostat/statistics-explained/images/e/e1/Wages_and_labour_costs_YB2018.xlsx, accessed on November 2017)

The share of the minimum wage in the average wage in the real economy, a synthetic indicator of wage flexibility, reflecting a wage development trend in the economy as a whole compared to the minimum wage, evolved in Romania from 31.3% in 2008 to 43.6% in 2016 (see Table 1).

Public wages have been raised significantly since 2015 - largely on an ad-hoc basis. The government has justified the increases as necessary to attract and retain high-quality staff in the public sector, in line with its priority to improve the quality and efficiency of public sector services. The reality is that for the time-being, the public sector leads wage determination in Romania, which implies that with the public sector as a leader, the wage setting policy should ensure that overall wage dynamics are attuned to productivity developments and reflect prevailing conditions on the labour market. Or alternatively, imprudent public wage policy carries the risk of triggering economy-wide wage dynamics that are inconsistent with productivity developments. An image of the degree of LMF through salaries can also be reflected by other synthetic indicators, i.e. the share of gross remuneration of employees and / or gross salaries in total value added in the economy.

Table 1. The share of the minimum wage in the average monthly salary in the real economy in Romania and other EU Member States in the period 2008-2016 (%)

Year EU Member State	2008	2009	2010	2011	2012	2013	2014	2015	2016
Slovenia	43,4	44,2	50,5	51,7	52,2	53,2	52,8	52,4	52,7
Lithuania	40,2	42,4	43,6	42,6	42,0	48,3	46,4	47,0	50,6
Luxembourg	n/a	47,8	48,6	49,3	49,5	50,4	50,3	49,5	48,9
Malta	50,6	47,2	47,4	47,8	46,7	47,5	46,9	48,0	47,8
Poland	39,1	42,2	42,0	41,7	43,5	44,6	45,3	45,5	46,3
Ireland	46,3	46,2	45,7	45,8	45,2	44,6	44,6	44,0	45,8
Portugal	44,2	42,8	42,4	42,2	42,9	42,7	44,1	43,7	45,4
Latvia	37,4	41,3	41,9	44,8	43,4	42,0	44,1	46,4	45,3
United Kingdom	38,2	38,6	38,7	39,1	39,6	39,3	40,2	41,0	44,1
Romania	31,3	34,9	32,4	35,4	34,1	36,3	38,5	40,5	43,6
Hungary	38,8	38,3	38,0	38,6	42,5	43,3	43,3	43,2	43,4
Netherlands	44,2	43,9	44,2	43,6	43,3	43,3	43,2	42,7	43,3
Bulgaria	40,6	39,1	36,3	35,5	37,9	39,2	40,5	41,0	43,1
Croatia	37,6	37,9	38,0	37,5	37,0	37,5	38,8	39,4	41,9
Germany	n/a	n/a	n/a	n/a	n/a	n/a	n/a	41,9	41,0
Estonia	34,8	36,4	35,5	33,5	33,0	34,1	35,9	37,2	38,3
Slovakia	33,6	35,7	36,0	36,1	35,6	36,0	35,4	36,9	37,7
Spain	37,6	37,6	37,8	36,7	36,4	36,1	36,0	35,6	36,0
Czech Rep.	35,0	34,3	33,3	32,4	31,6	32,6	32,8	34,4	35,5
Belgium	0,5	0,5	0,4	0,4	0,5	0,5	0,4	0,4	n/a
Greece	48,9	46,6	43,4	56,4	n/a	n/a	n/a	n/a	n/a
France	46,5	47,0	46,5	46,2	47,1	46,9	46,4	46,1	n/a

Source: Own computation based on EUROSTAT database, *Wages and labour costs: tables and figures*, link https://ec.europa.eu/eurostat/statistics-explained/images/e/e1/Wages_and_labour_costs_YB2018.xlsx, accessed on November 2017.

Legend: n/a = not available

In close correlation with wage levels and the low level of all other income, EUROSTAT statistics places Romania at the top of Europe in terms of poverty and the poverty rate. (EUROSTAT database, *Wages and labour costs: tables and figures*, link https://ec.europa.eu/eurostat/statistics-explained/images/e/e1/Wages_and_labour_costs_YB2018.xlsx, accessed on November 2017)

These factors fuel the inclination for external migration, and the lack of these services is, along with the level of salary, among the factors that influenced the decision to leave Romania to work in another EU member state, but also the lack of employees' for internal migration to areas with poor service provision.

2.4. Significant productivity gaps compared to other countries

Although since 2008 the gaps in labour productivity between Romania and the average of the EU28 Member States have fallen by about 15 percentage points, they remain at a high level. In 2016, labour productivity in Romania accounted for 61.9% of the EU28 average (see Table 2).

Table 2. Productivity of average work per person employed and hour worked (% , UE28 = 100)

State	2008	2009	2010	2011	2012	2013	2014	2015	2016
Ireland	130,3	134,8	141,6	144,4	146,8	142,7	146,5	188,5	185,5
Luxembourg	169,5	162,7	162,5	166,3	162,1	163,3	169,9	168,2	163,2
Belgium	128,0	129,4	131,1	129,6	130,5	130,0	130,3	130,0	129,3
Austria	117,4	117,6	115,3	115,6	117,5	116,8	116,3	117,5	116,5
France	116,3	117,3	116,9	116,6	115,0	116,3	115,7	115,2	114,8
Denmark	107,6	109,5	115,2	114,6	114,4	115,2	115,3	114,3	111,9
Sweden	118,0	116,0	116,6	116,1	116,0	113,8	113,2	114,1	113,6
Netherlands	119,5	116,8	114,6	113,3	113,0	114,9	113,1	112,4	111,6
Finland	115,7	113,2	112,5	112,4	109,3	108,1	107,3	107,6	108,7
EMU19	108,4	108,5	107,8	107,7	107,1	107,2	107,3	107,2	107,0
Italy	114,7	114,7	112,7	112,0	109,9	108,5	107,1	106,1	107,3
Germany	106,7	104,0	105,0	106,3	105,1	104,5	106,4	106,1	106,3
Spain	100,7	105,3	101,8	101,1	102,9	103,2	103,2	102,0	101,8
EU28	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
United Kingdom	106,1	104,1	104,0	102,2	102,6	102,3	102,0	101,5	101,3
Malta	93,1	94,0	94,7	91,2	90,4	89,6	91,2	95,1	95,5
Cyprus	94,9	95,2	91,5	89,9	88,7	86,7	84,9	84,8	84,3
Slovenia	83,6	80,0	79,5	80,7	80,1	80,4	81,4	80,7	80,7
Slovakia	79,2	79,0	83,4	81,4	82,3	83,5	83,8	82,5	81,6
Czech Rep.	77,7	79,1	77,1	77,4	76,1	76,6	79,1	79,7	79,8
Greece	98,4	98,0	89,6	85,5	85,9	86,9	86,2	83,1	80,9
Portugal	77,4	79,4	79,8	76,4	76,7	79,6	78,8	78,2	78,0
Poland	61,9	65,2	70,0	72,6	73,9	73,7	73,5	73,9	74,1
Lithuania	64,9	61,1	67,1	71,2	72,9	74,0	74,5	73,2	72,0
Estonia	66,0	66,6	70,6	72,0	73,2	73,2	73,7	70,9	71,8
Croatia	70,5	68,5	67,3	70,2	72,4	73,5	70,7	70,2	71,3
Hungary	70,5	72,4	73,0	74,1	72,8	73,1	71,1	69,8	67,8
Latvia	56,1	56,1	58,8	61,4	62,9	62,4	64,4	63,8	64,8
Romania	51,2	51,3	50,6	51,5	55,6	56,0	56,5	58,6	61,9
Bulgaria	39,3	39,4	41,3	42,2	43,5	42,9	43,8	44,1	45,4

Source: Own computation based on nominal productivity published within the EUROSTAT database, *Wages and labour costs: tables and figures*, link https://ec.europa.eu/eurostat/statistics-explained/images/e/e1/Wages_and_labour_costs_YB2018.xlsx, accessed on November-December 2017.

As above shown, wages in Romania are low relative to the rest of the EU28 and they are expected to continue growing faster than the EU28 average as the economy catches up. However, wage growth needs to be commensurate with productivity gains. Overall, in Romania the increase in real compensation per employee was broadly in line with that of labour productivity between 2011 and 2016. In 2016, however, wages started to race ahead of productivity, and this way, the public sector raising wage policy could affect economy wide wage settlements in a number of ways. Sharp increases in wages in the public sector, which accounts for almost 20% of employees, could provide a strong signal to private sector wage-setting (demonstration effect). Higher wages could also attract private sector employees to the public sector, forcing private companies to increase wages, particularly if the labour market is tight. Competition by the government for the hiring of educated and skilled employees could also create tensions in particular segments of the labour market. Overall, a substantial impact of public sector wage hikes on private sector wages will tend to weaken the link between wages and productivity in the latter.

3. Conclusions

There still are gaps between Romania and the other EU28 Member States and reducing these gaps requires the promotion of measures / programs to stimulate investment in technology, as well as measures to protect the redundant workforce resulting from these investments and, implicitly, specific strategies and the ability to support the costs attached to them.

Economy-wide real wage growth in Romania has been accelerating since 2015. Overall, the increase in real compensation per employee was broadly in line with that of labour productivity between 2011 and 2016. Already in 2016, however, real compensation started to race ahead. Therefore, a responsible wage setting policy is needed to ensure that overall wage dynamics are attuned to productivity developments and reflect prevailing conditions on the labour market.

Since Romania is no longer competitive in terms of the availability of adequate workforce, this in a wider context of the new challenges faced by the Romanian economy, with potential significant impact on labour demand architecture (digitization, industry 4.0, environmental compliance and sustainable development requirements, energy paradigm changes, etc.), which support the need to estimate the demand for labour and its quantitative and structural-qualitative characteristics, as well as strategies adopted by the state and companies to provide the necessary labour force. Therefore, the public administration and the private sector need to work closely together to improve the Romanian labour market before it becomes a major impediment to further economic development.

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