

- ◆ The credit impact on the economic growth
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- ◆ Land value dynamics with endogenous human and physical capital accumulation
- ◆ Environmental Kuznets curve. Evidence from Romania
- ◆ Effects of economic crisis on the distribution of earnings from Romania
- ◆ An approach of social policy in terms of macro-stabilisation function
- ◆ Economy recovery risks which Romanian companies has to cope with
- ◆ The measurement of fiscal behavior in some European countries: Panel data perspective
- ◆ Romanian municipal bond market at Bucharest Stock Exchange: further investigations
- ◆ Inequality and economic growth: theoretical and operational approach
- ◆ Measuring financial development in India: A PCA approach
- ◆ Welfare costs due to economic fluctuations according to different model setups
- ◆ The role of rating agencies in international financial market
- ◆ Socioeconomic development index ranking calculations of cities with fuzzy clustering method: case of Turkey
- ◆ Fiscal transparency in the European Union
- ◆ Epistemic transfers in economics from social sciences
- ◆ Accelerating the development of learning organizations: Shifting paradigms from current practice to human performance improvement
- ◆ Transferring business intelligence and big data analysis from corporations to governments as a hybrid leading indicator
- ◆ The impact of cultural and educational accumulations on entrepreneurial behaviour. Main issues encountered in theoretical approaches
- ◆ Models for evaluating financial crisis – what went wrong for developed and emerging economies?
- ◆ Impact of financial crisis on the decision making process for insurance consumers
- ◆ Beyond the implementation of a dynamic stochastic general equilibrium model
- ◆ How the legislation influenced the M&A transactions in Romania



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Contents

The Europe 2020 strategy – the technical road map filtered through intelligent practices Dumitru-Alexandru Bodislav, Ionuț Bușega	5
The study of communication paradigm from the perspective of active listening Diana Andreia Hristache, Claudia Elena Paicu, Monica Maria Dobrescu	13
The evolution of the savings rate in Europe – empirical evidences Adrian Simion.....	19
Post-crisis evolution of creative industries Marta Christina Suci, Mina Fanea-Ivanovici, Simona Irina Agoston.....	27
The impact of bureaucracy over the foreign direct investments in Romania Laurențiu Gabriel Frâncu	33
Intellectual capital – source of economic recovery Cosmin-Ionuț Imbrișcă, Luciana Nagel-Picioruș, Claus Nagel-Picioruș	39
Fostering active aging Daniela Virjan	49
Europe in the context of the global economic crisis Mihaela Roberta Stanef-Puică, Alina Ștefania Chenic (Crețu)	57
Higher education and the labour market: evidence from Romania and European Union member states Georgiana Camelia Crețan	63
Aspects of structural adjustments in CEE countries during the economic crisis Ionuț Bușega, Anca Dachin	75
The role of education, lifelong learning and health of the population in support of economic growth Ștefania-Cristina Cureau (Neagu), Anca-Teodora Șerban-Oprescu	85
Students on the labor market: causes and effects of the choice between study and work Irina Florentina Băjan.....	93
Perspectives on FDI. The case of sustainable development Raluca Andreea Popa.....	101
Income distribution and social welfare Cristina Borovină.....	111

“Future Directions”: m-government computer systems accessed via cloud computing – advantages and possible implementations	
Daniela Lițan	119
The connection between the education level of young people, labor productivity and inflation in Romania	
Ortansa Florea (Moise)	127
Modern approaches regarding public goods	
Paul Vasile Zai	133
Boom we win, bust they lose: analyzing the boom and bust cycle from the perspective of the political entrepreneur	
Matei Alexandru Apăvăloaei	145

The Europe 2020 strategy – the technical road map filtered through intelligent practices

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Abstract. This paper is focused on observing what was followed and completed in the implementation of Europe 2020 strategy, but the twist that the authors use is based on filtering what was done in tune with the Strategy and what should be done according to an objective fine tuning system that is found in corporate practices and also in policy making refined at art level.

The authors also try to elevate the technical veil for highlighting the fact that Europe's strategy on social regrouping or the traditional catching up process is working and evaluate it through an analysis that underlines also the quantitative side of the social progress at European level, but also the qualitative side that underlines the validation of the macro-statement: reaching the sustainable status for economic development/growth.

Keywords: catching up, Lisbon strategy, economic policy, convergence, educational level.

JEL Classification: E61, F63, I25.

1. The Europe 2020 Strategy

The Europe 2020 is the European Union's economic growth policy and one the community instruments towards labor market stimulation, according to the concepts of sustainable development and economic performance. Launched in 2010, during the deepest economic crisis experienced by the European Union, The Europe 2020 Strategy had the difficult task of reconciling economic recovery, deploying short-term jobs and create the conditions for smart, sustainable and long-term sustainable development.

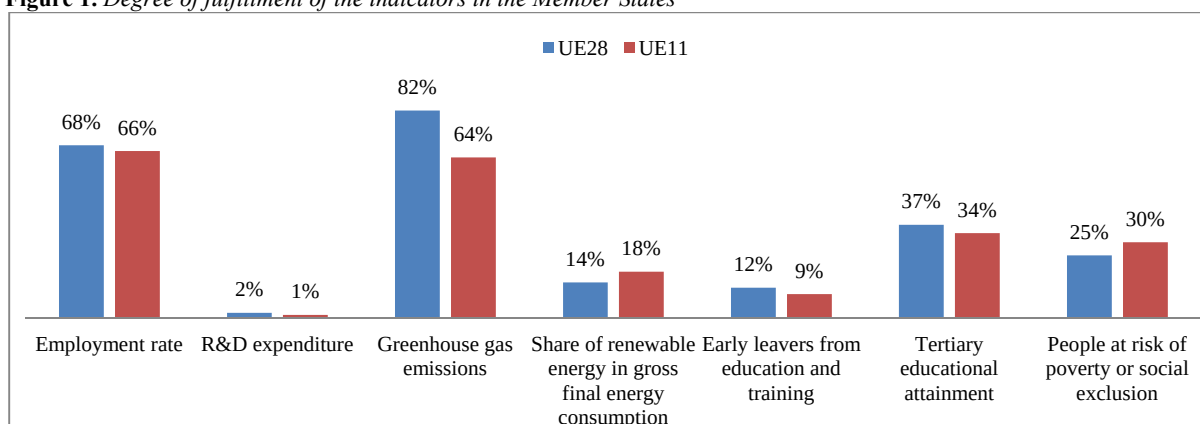
In order to achieve these goals, there have been established a set of five major objectives that Member States' must meet until 2020. These five major objectives are covering areas such as employment, research and development, climate, renewable energy, education, poverty reduction and social inclusion. Therefore, in order to fulfill these objectives, there have been promoted seven initiatives that have the role of providing Member States authorities support mechanisms in areas such as innovation, the digital economy, youth, employment, industrial policy and efficient use resources. There are also many other EU institutional levers that contribute to the achievement of the indicators set out in Europe 2020 Strategy, such as the mechanisms of the Single Market, the Community budget or the Regional Policy.

Therefore, the Europe 2020 strategy underpins the importance of transition to a new phase of integration in the European structure, and also seeks to provide institutional instruments to overcome the structural weaknesses of the European economy by improving competitiveness, productivity inputs and a sustainable labor market.

Also similar to the Lisbon Strategy, Europe 2020 is criticized in the economic literature. Adopted in March 2000 to respond to demographic change and the needs of strengthening the European economy, the Lisbon Strategy has been criticized as too optimistic because of the high targets set at Member State level, and the lack of necessary tools for an efficient implementation and objectives fulfillment. Another negative point claimed was the large number of objectives (which led to "diluted" attention of policy makers) without ensuring consistency and prioritization of needed reforms, as defined in the original plan.

Less than a year from the evaluation and possible reform of the Europe 2020 Strategy, the question regarding the potential for success are numerous.

A first question addressing the potential success of the new strategy was the fact that European Union is characterized by a high degree of heterogeneity of the Member States economic and social conditions. EU economies record a different level of development and a common strategy is liable to produce asymmetric effects. It is well known that the European Union registers highly economic and social disparities between components countries, and even within countries at inter-regional level. These economic differences are striking and also reflect on the achievement of indicators Europe 2020 Strategy. To test this hypothesis, the authors used the mean of the UE28 and new member states (UE11). Figure 1 reflects how the new Member States are less efficient in terms of employment, expenditure on research and development and education.

Figure 1. Degree of fulfillment of the indicators in the Member States

Source: Eurostat.

Major differences in the UE28 are not only observed between Eastern and Western Europe. There are a number of examples, reflecting the fact that each European economic sub-model is characterized by its own advantages or structural weaknesses.

Table 1. Achievement of the indicators in the UE28

	Minimum	Mean	Maximum	Range	Minim	Maxim
Employment rate (%)	53,2	67,2	79,8	26,6	Greece	Sweden
R&D expenditure (% in GDP))	0,46	1,66	3,55	3,09	Cyprus	Finland
Greenhouse gas emissions	42,9	86,1	156,9	113,9	Latvia	Malta
Share of renewable energy in gross final energy consumption (%)	2,7	16,8	51	48,3	Malta	Sweden
Early leavers from education and training (%)	3,7	10,3	23,6	19,9	Croatia	Spain
Tertiary educational attainment (%)	22,4	37,9	52,6	30,2	Italy	Ireland
People at risk of poverty or social exclusion (%)	15	25,5	49,3	34,3	Netherlands	Bulgaria

Source: authors' calculations based on Eurostat data.

Another criticism brought to The Europe 2020 Strategy aims at the governance model that does not provide sufficient incentives from Member States or European citizens to achieve the objectives. The main reason for the failure of the Lisbon Strategy was the "delivery gap" between the assumed objectives and the actual results (European Commission, 2010: p. 4). The only notable difference between these two strategies is the introduction of a single cycle of governance at EU level that has the role of ensuring a greater coherence between macroeconomic policies and Europe 2020 targets (Höpker, 2012). Philippe Pochet (2010) argues that the lack of reform at this level has not carried out by a fundamental reflection on the failure of the Lisbon Strategy. The third criticism relates to the treatment of the financial crisis and sovereign debt crisis. Even though the economic crisis is given in recognition in the strategy, there is no explicitly link specified between the exit strategy options and the strategy for short-term and medium-term objectives achievement.

In response to some of these criticisms, the Europe 2020 Strategy sets out indicators at national level. But the differences between Member States' targets are very high in some cases. For example, regarding tertiary education, 12 countries have already reached or are very close to achieve the 40% target. Other countries such as the Czech Republic, Italy, Romania and Slovakia have a target of less than 20% regarding this manner.

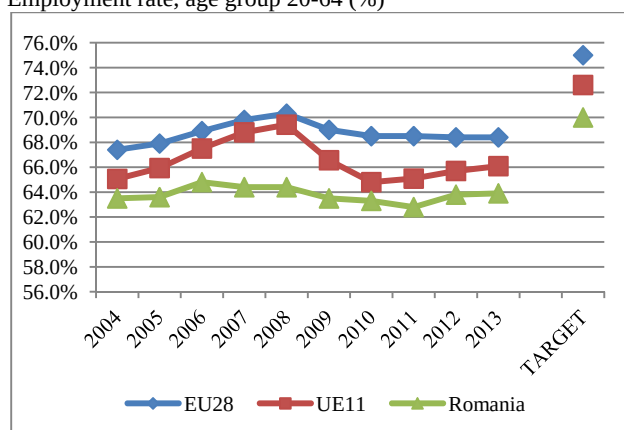
Moreover, the European Commission's report argues that selected indicators have certain advantages over the previous strategy (European Commission, 2014): (1) Targets are illustrative for the changing dynamics of the EU economy, promoted by the fact that the current set of goals are concentrate on supporting the three dimensions of the strategy: smart, sustainable and inclusive growth; (2) the

objectives are closely interrelated and self-sustained; the goals are intended to "anchor" the policies of the Member States, through their transposition into national targets and the granting of Structural and Cohesion Funds 2014-2020.

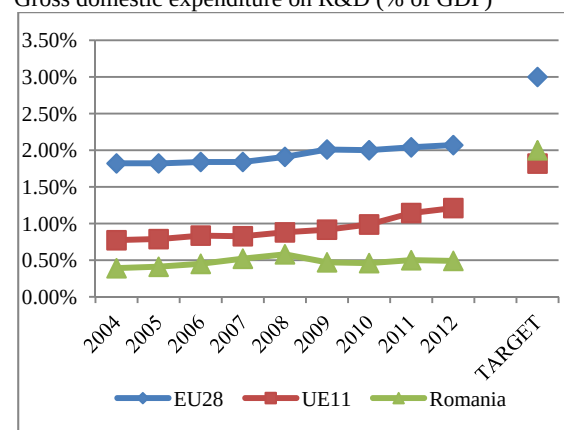
2. Achieving Europa 2020 Strategy targets in a troubled macroeconomic context

Launched in the context of the deepest economic crisis in the history of the European Union, establishing the Europe 2020 objectives was deeply influenced by the vulnerable state of the Member States to the contagion effect. The significant impact of the crisis revealed structural and interdependent weaknesses of the national economies, as well as the need for higher coordination (Bongardt et al., 2010: p. 136). Although not specified in the document as an specific objective, one of the great expectations from Europe 2020 Strategy was to offer a way out the of recession and place the European economy on a new path of sustainable development. Sustainable development is closely linked to human development, as all efforts for sustainable development are designed to create a balanced environment in order to improve people's life quality (Moldovan, 2014, pp. 707-715).

Figure 2. *Europa 2020 employment and R&D targets*
Employment rate, age group 20-64 (%)



Gross domestic expenditure on R&D (% of GDP)



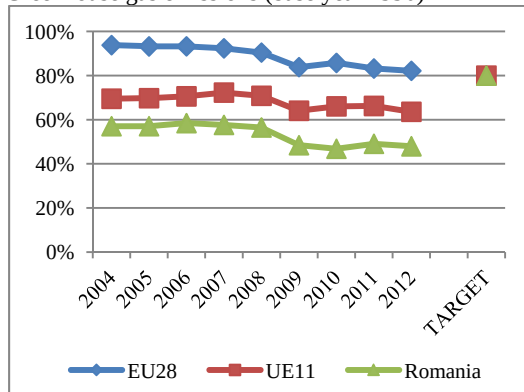
Source: Eurostat.

Until the outbreak of the economic crisis in 2008, the employment rate of people aged 20 to 64 increased both EU28 and in EU11, reaching a peak in 2008 at an average of about 70.3%, respectively 69.4%. The trend reversed in 2009 when the European labor market was deeply affected by the reduced economic activity. At present, there is a slight recovery in the EU11 and Romania, and a slightly constant rate in the EU28.

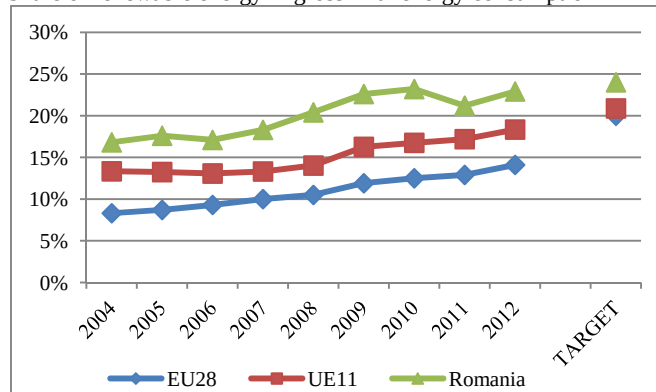
Also, during 2005-2008 the share of R&D expenditure in GDP has remained relatively stable around 2% at EU28 level. This indicator followed a positive trend since 2009, which reflects the approach in the Member States to stimulating economic growth by increasing public spending on research and development in both the EU11 and in EU28. Unfortunately, this trend is not found in the case of Romania. Although at a very low level, this indicator followed a decline from 0.58% of GDP in 2008 to about 0.46% in 2010 (both values being far away from the target of 2%).

Figure 3. *Europa 2020 education targets energy and environmental targets*

Greenhouse gas emissions (base year 1990)



Share of renewable energy in gross final energy consumption



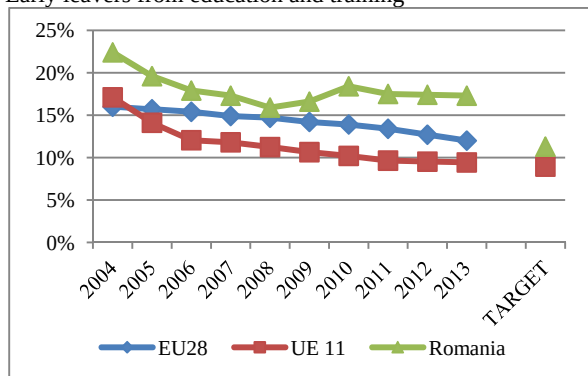
Source: Eurostat.

The period before the economic crisis, emissions of greenhouse gases in the UE28, EU11 and Romania followed a relatively constant evolution, with significant differences between the amounts emitted by the 3 entities, depending on the economic activities. This trend began to decline steadily since 2008, mainly due to the sharp slowdown in economic activity triggered by the economic crisis. The strongest decrease occurred between 2007 and 2011, when emissions were reduced by almost 10% due to substantial reductions in industrial, transport volumes and demand for energy. Romania is in a very good position, due to the fact that the base year 1990, the Romanian industry was based mainly on outdated technology and highly energy-intensive production (Ailenei, 2002).

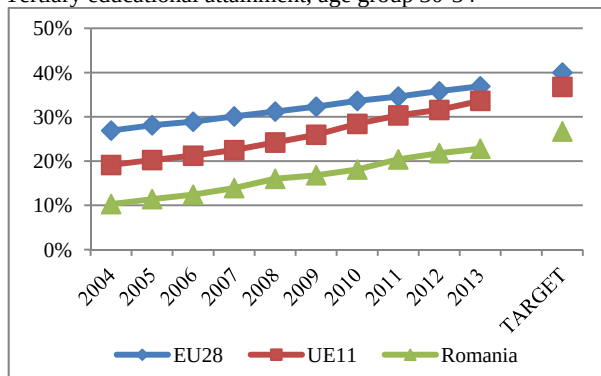
As for the share of renewable energy in gross final consumption of energy, this indicator has increased substantially in all the entities analyzed. According to the reports the European Commission, biomass contributes more than two thirds of the total gross inland energy consumption from renewable sources, followed by progress in the production of wind and solar energy. One incentive for this type of “green” energy represents the support schemes that have enabled significant cost reduction. According to the trends, the crisis had no negative impact on this indicator, but on the contrary (Zai, 2014a, 2014b). Many Member States had to promote structural reforms and invest in new technologies to promote economic recover, modernized production and efficient use of resources. In the UE28, despite the positive trend, there is still more progress required in this field to fulfill the Europe 2020 target of 20%. According to this target, Romania has a larger share of renewable energy in gross final energy consumption, benefiting from a significant amount of natural resources with energy potential.

Figure 4. *Europa 2020 education targets*

Early leavers from education and training



Tertiary educational attainment, age group 30-34



Source: Eurostat.

The number of people early leavers from education and training in the EU fell from 2005. But in the case of Romania, the economic crisis resulted in large dropouts due especially to weaker household income. Regarding the share of population aged 30-34 years with tertiary education, there is an ascending evolution between 2005 and 2013, from 27.9% to 36.8% in the EU28, and from 20.2% to 33.6% in the EU11. Similar to the first indicator, although the tertiary educational attainment increased from 10.3% in 2004 to 22.8% in 2013, there are still large gaps compared to EU28 and regional average.

3. How to create a real convergence between emergent and developed countries by using intelligent practices

To observe the technical layers that are built in the development of a large economy, like the European Union we need to see the economy as a network and filter it by using human psychology. The shift of economic systems is possible by checking three conditions: recognizing knowledge as source for evolution, not as a resource, which is unified with capital and labor, becoming this way an abundant resource. The economy from its practical perspective and also from the theoretical perspective, but escaped from the control of political power (state politics or corporate politics) and manifested as an inter-subjective dimension of human nature and of the limits of economic evolution through the intangibility of human subjectivity.

Any kinds of limitations could decelerate economic growth, but there could be also seen by public figures that are directly involved in political execution in a state, or continental organization or global commercial organization that could be opportunities.

Thomas Friedman in his book "The World is Flat" (2005) underlines as an effect of globalization, like leveling the *playground* for those that are competitors in the global market. Resulted technological innovation obtained in the private sector, but with state support, revolutionized the work place, bringing the power of emergent economies in the league where well-known players from developed countries are. Paradoxically, in the same time these evolutions led to a higher flow for borderless businesses, relational barriers – obstacles that are seen in human productivity, which are peak point levels because of the actual economic context (Branson, et al., 2010: p. A4).

From the perspective of human side of management from transnational companies we have the inefficiency of the existence of a functional leadership because they need to develop hierarchic or network relations (be them states, be them other companies) with other states. The jobs of leaders (at least in the private sector) is easier to execute as a result of technological advance that helps at

lowering the gaps of *distance* and *knowledge*, but these leaders are confronted with derivative limitations that have residual character: historical enemies, cultural differences, unfinished historical situations and generational gaps. These kinds of limitations overgrow the conflict, impose performance losses and an innovational flow under its potential.

After recognizing the problems mentioned above then the entire economic process could be reshaped as a new vantage point on the catching up process developed between the developed side and the emergent side, not only at European level, but also at global level. The catching up process is financed from structural and cohesion funds at European level, but it could also be highlighted as a real adding value process if the technical road map of this process would be dynamically filtered and also the corporate side would be involved, but with total transparency processes, because of the corruption that could be developed in a by-partisan relation. Real convergence could be seen if the private sector's corporate practices and business intelligence implementation would be shifted towards the development of macroeconomic policies.

Conclusions

It is crystal clear the fact that a “flat Earth” needs a new type of leadership and global power, but developed under a strategy that is down to top implemented (from the middle level towards the executive one), but some challenges are developed that are highlighted by these questions:

- 1) What limits develop the biggest challenges (Ernst, Chrobot-Mason, 2011: pp. 81-88)?
- 2) Which are the implications for those that govern and implement development strategies when limits are in a continuous change?
- 3) How real leaders succeed to overpass these limitations, this way implementing a synergy in the future results obtained by the group of national, transnational companies, states or state unions, having a higher yield then if they worked alone?

This research could be seen as a fact based article that shows blunt and cold where we are as a country (Romania), as an Union (European Union) and as an economic area (EU11) and also shows the work needed to be done, but under the influence of limitations erosion and accelerating the ability to create a direction, an alignment and engagement for the limits that needed to be erased and all these being tangible because of the synergy power created by intelligent working groups. The direction represents understanding goal and strategy; alignment represent the master-coordination of resources and activities; engagement represents dedication towards the collective success that has the same satisfaction level as the success of a sole member of the group formed by companies or countries (Drath et al., 2008: pp. 635-653).

Also another component of the recovery procedure for entire Europe is seen as the salvation plan built by Mario Draghi and the European Central Bank. The Quantitative Easing procedure started by the ECB in November 2014 has the purpose of firing up the economy with (almost) free money and also engage the private sector in investing more and more in the European economy. The basic 18 months program includes 1.08 trillion Euro stimulus package, which could be increased, because this European QE is complementary support for the American QE, which ended few weeks before ECB's stimulus package started. Yellen and Draghi support the moderate development of the global economy and help kick-start it by infusing cheap money on the short run (but with possible high costs on the long run). The ECB's stimulus package could reignite the Europe 2020 Strategy as a side effect and create a catching process for the parts of the program that are lagging behind schedule.

The economic crisis was the inflection point that developed the need to create an approach from the complex system perspective of the actual economy and introducing a new concept of sustainable economy

developed through the drawn executive lines in the last part of this paper and underline the fact that the catching up process and national desire are the starting point for the economic development.

To develop an economic model that really allows an intelligent catching up process there is the need of creating a new paradigm for a Multi-Complex Economy and the theory needs to be backed up by the practical side that includes geo-socio-political work variables and has as main pillars: Research and Development (the academic component), Know-How (the business component) and market innovation/development (the synergy between business and state), everything being tested on long run level.

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Notes

- ⁽¹⁾ The EU11 is a group of countries, which include 11 European Union (EU) member states – Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic, Slovenia and Croatia.
- ⁽²⁾ Measured as a yield in the 18 – 24 years old frame, with at most secondary studies and that aren't following educational or continuous training.

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The study of communication paradigm from the perspective of active listening

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Abstract. *Nowadays, communication has, without doubt, one of the most important roles in modern society. Communication plays a major role in achieving goals, whether personal or professional. Equally, communication is a real challenge, both in professional activities and the everyday ones. Thus, individuals should be increasingly better prepared to face the many challenges effectively generated by the different forms of communication. It requires, therefore, a true "compendium" of competencies and skills so that the communication process to be one correct. The variety of communication is given by the variety of skills and aptitudes, unique to each individual, and this variety influences directly the conduct of the communication process. Based on the arguments outlined above, we would like to disseminate the research results obtained by us, regarding the issues brought into analysis by us, from the necessity of surprising other "facets" of what is intended to be the new communicational paradigm.*

Keywords: communication, paradigm, active listening, communication skills, communication aptitudes.

JEL Classification: C00, D83, I2.

Introduction

Communication represented a large area studied and debated since ancient times. Corax of Syracuse, Tisias or Protagoras, a century later, are among the first concerned with communication, specifically with rhetoric and its refinement (Prutianu, 1998). Later, Platon raises the communication to the level of science, to the level of communication theory, and Aristotel deepens the human communication systems through his work "Rhetoric" and "Organon." (Patterson, 2002).

Furthermore, the oldest communication model belongs to Aristotel. The contributions from those listed above can be found in the contemporary literature, both local and abroad, literature which addresses the evolution and the transformations of communication, undergone over time and within the economic and societal structural changes and within the economic environment, in general. Aristotel's model of communication are added others, the mathematical model of Claude Shannon and Warren Weaver and the interactive Model of communication. (Rogojanu et al., 2004), models that help in better understanding of how it should be properly to conduct a communication process.

Apparently easy to achieve, communication requires more attention and study, as it passes through a filter highly sensitive, which also gives a high degree of subjectivity. Some of the most important barriers to communication are given by the opinions and ideas of each individual, based on a set of communication aptitudes and communication skills specific to each individual. Therefore, communication is a field that combines elements of analysis of the most various: economic, psychological, social, etc.

In this context we focus our study on the topic of active listening, a very important element to the communication process itself, and on the analysis of how communication problems can occur, proposing for this purpose and a set of measures that helps the active listening to be improved. For this purpose, we used, as a working method, the quantitative method, namely the questionnaire method.

Active listening, important component of communication process

Studies show that currently, about 70% of active time is allocated to communication activities, through communication understanding speaking, listening, documentation, to which is added also the non-verbal and para-verbal communication activities. Among these, the active listening has an extraordinarily high share in communication activities, almost half - 45%. (Garber, 2008) And yet, listening can raise many problems as to achieve an effective and fair communication process, listening should be active. Problems that can stand in the way of active listening are given by the following:

- usually the interlocutor forgets 50% of what he has listened to;
- if the information is not used, although it has been stored, it is forgotten in a percentage of 75 in about two months;
- And of the 25 percent of information retained, accurately information is 60%, the rest of the information is no longer so sure and certain.

When the information is not secure, the original meaning is lost, so is, the message, when decoding, loses its original meaning. We can witness even to a distortion of the initial information. In this case we can speak about the phenomenon of rumor, since the information is not correct or missing and where it lacks, the natural tendency is to generate information that would fill the gaps. In this context, the feedback proves its usefulness, since he is the one who restores communication and a return to normal parameters. (See the interactive Model of communication) The same study also shows that, generally, individuals retain the recent information, that they hear quite often, that impacts on personal level and usually the applicable information. (Garber, 2008)

To better understand how the active listening works, we used the quantitative method based on a questionnaire; in this regard, we have developed two questionnaires. The purpose of the first questionnaire was to highlight which are the most common mistakes that can be made in the case of active listening. The second survey was carried out in order to show how good the respondents are on the side of active listening.

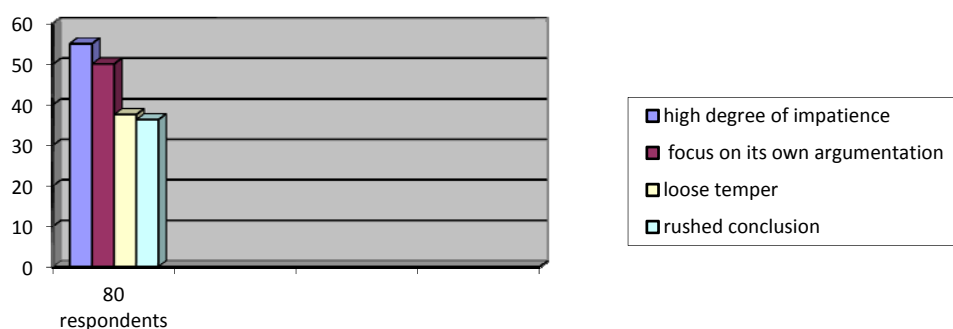
The sample consisted of 80 respondents, female and male, aged 21-21 years, by educational level: university, from urban areas.

The questions of the first questionnaire focused on issues related to: the speed with which respondents draw their own conclusions in a discussion; the degree of patience regarding the subject matter; the attention they gives to the discussion partner, to the topic and to the argument part; the preparation and argument of the ideas communicated; empathy with the discussion partner; respect for the discussion partner point of view, different than theirs.

The results have shown that:

- Respondents show a high degree of impatience with the discussion partner - 55%;
- During the speech of the discussion partner, the respondents think their own arguments and already formulate the response, without according attention anymore to the communication partner - 50%;
- Respondents lost temper when the discussion partner does not share the same view with theirs - 37.5%;
- Respondents rush into draw conclusions, even if they not entirely hold information - 36.25% (Chart 1).

Chart 1. *The most common mistakes in the case of active listening*



The second questionnaire focused on questions about how much the respondents get distracted from the subject under discussion; how are influenced by prejudices; to what extent they consider that the discussion partner knows the subject and how well they argue so that they make themselves understood; how often they interrupt their partner and to what extent they take account of nonverbal communication.

Based on the analysis of data, we concluded that:

- of the 80 respondents, 73 fall within the category of good listener - 91.25%;
- of the 80 respondents, 3 achieved an effective active listening - 3.75%;
- of the 80 respondents, 4 fall within the category the medium listening - 5%;
- there were no respondents who are classified in the weak listeners category - 0% (Chart 2).

Chart 2. *The effectiveness of the active listening activity*



Therefore, we can notice that in the process of communication there should be given a high importance for the active listening part, as to achieve another important component, empathy, first there should be resolved the problems of the active listening. In order to communicate effectively, the respondents should be aware of and be familiar with the factors involved in the communication process, as they will help in planning, analyzing situations, solving problems and, generally, in achieving the objectives. (Montana, Charnov, 2008)

The more important is this awareness, as the individuals are involved in different communication relations and different levels of interaction. These levels can be described as "intra-personal" (the way in which individuals process information), "inter-personal" (the way in which two individuals interact to influence one another), group (how communication dynamics occurs between several individuals), 'organizations' formal and informal (how communication works and occurs in organizations) and "community" and "society" (how communication builds or modifies the agenda of important issues) (Glanz et al., 2008).

Also, transparency and access to information should be the premises of a good communication process, as information should be communicated in arguments, totally (Frâncu, 2014).

Conclusions

Active listening is an activity therefore quite difficult. For this to be done properly we should take into account several important issues for both listening and communication, in general. Thus, we formulate a set of measures that should be followed for the listening to be an active and effective one.

Is important that, at any time, the communication process to use the paraphrasing technique. This is important because it ensures communication continuity, avoiding communication bottlenecks, and provides a permanent feedback. Also this technique proves its efficiency in direct communication processes, for face to face type, as it may request such clarification when information is not clearly understood, in order to avoid distortions when the message is decoded and in order not to led to rumors due to lack of accurate information. At the same time there is transparency throughout the process communication.

This technique is recommended, because the results of the two survey suggest that respondents have problems to empathize with the discussion partner, not giving them attention and preparing their own personal argument even before the discussion partner to complete the presentation of information and his argument.

Also, it is recommended to use repetition to highlight the important information that should be retained. Of course we should repeat the most important information. Repetition is recommended because respondents do not have the patience to listen to the entire exposure of the discussion partner, and by repetition the main and the most important ideas are highlighted so that they should be retained.

Clarifying the message is also very important. The information must be clear, accurate and substantiated. This way increases the chances that the information to be heard and accepted. This measure is recommended as respondents lost temper when they hear ideas that do not agree with. But if these ideas are well reasoned and clear, they can be better perceived by respondents.

Active listening is even more important to be done correctly and efficiently, because the communication exchanges can be both symmetrical and complementary: if the relationship between the people communicating is based on equal exchanges, it means that they tend to match each other's behavior; if based on additional exchanges, it means that one completes the other, producing a reciprocal link of the relationship. (Watzlawick et al., 1967) In both cases, however, to achieve the active listening can be the solution for an effective communication process.

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The evolution of the savings rate in Europe – empirical evidences

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Abstract. *This paper is showing the savings rate's evolution in the EU-28 area in the last decade. In order to emphasize the effects of the crisis, we used a couple of comparisons between the savings rate in the EU-28 group and the main European regions (calculated as averages) for the same indicator. The last part of this study consists in an econometric model, which analyzes the correlation between the Economic Sentiment Index (ESI) and the savings rate (EU-28) between 2001 and 2012.*

Keywords: saving, economic sentiment indicator, crisis.

JEL Classification: E21, E58, R28.

Before the economic crisis started, in 2007, the savings rate in the European Union had higher level than the one in United States, even though the incomes on the Old Continent were significantly smaller – with 50% in average. According to the Eurostat paper “Economy and finance”, the biggest saving rates were in Switzerland (17.1%), Germany (16.7%), Slovenia (16.4%), Austria (16.3) and France (15.6%). The lowest savings rates levels were known in the Baltic Region and in Great Britain (2.2%). Since the beginning of the crisis, until the first semester of 2013, the savings rate in EU-27 dropped with 1 percentage point, from 12% to 11%. Although were taken various pro-active measures, in order to restart the economic mechanism of the European Union, the crisis had a clear effect on the savings. The investments also suffered during the crisis, reaching a positive peak in quarter 1, 2007 of 10.5% and after following a downhill until 2013, reaching a negative peak of 8%.

Now, in the European Union it can be observed a high savings rate, according to the latest Eurostat report. Between January 2014 and March 2014, households savings rate was reaching 10.6% from the total incomes of the EU28, same as in the previous quarter. In the Euro Area, the same indicator was reaching 13% of the incomes.

Taking into consideration the moment of speaking and by not having any supplementary elements, which can suggest us if this crisis has ended or we are in front of a new bubble, this high saving rate in the EU28 and in the Euro Area has the potential to become a problem.

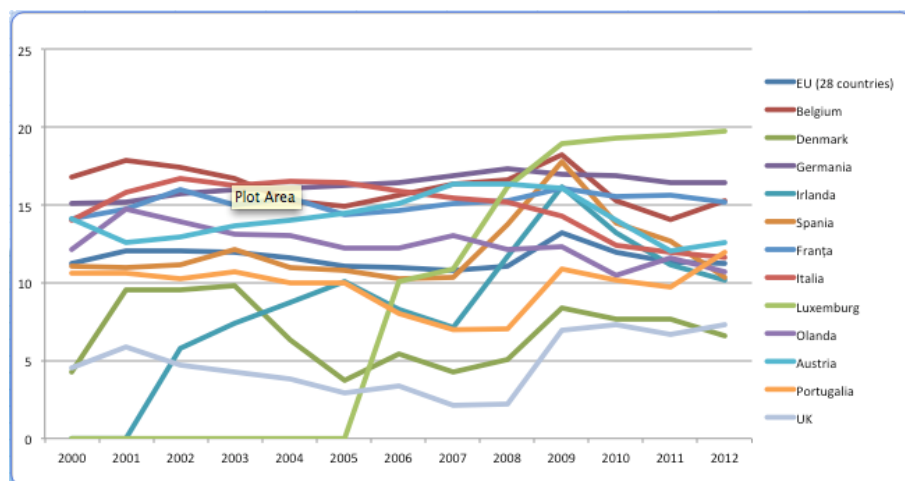
As a consequence of the anti-austerity vote, reflected by the last European elections, Andrea Terzi (2014), in Credit Writedowns magazine, explains why is so dangerous that in the European Union to be maintained the same attitude of fiscal constriction. Therefore, Terzi used five arguments, presented by the economist Josef Steindl:

1. In each economy exists a demand for savings;
2. For each saved euro, exists a debt of one euro in the whole system;
3. When a part of population is willing to save money and the government wants a decrease in the public debt, the economy will be automatically pushed into a recession;
4. The public target of the governmental politics should be the providence of the necessary amounts that should insure a volume of the public debt coherent with the demand for saving;
5. This tool of public policies does not exists in the Euro Area.

Therefore, a high level of the savings rate can drive the economy to a *Savings Trap*. The conclusion of the above-mentioned article is that during a Savings Trap process, the element that misses from the agenda of The European Union is an increase in public investment and a relaxation of the Fiscal Compact.

1. Saving in the European Union

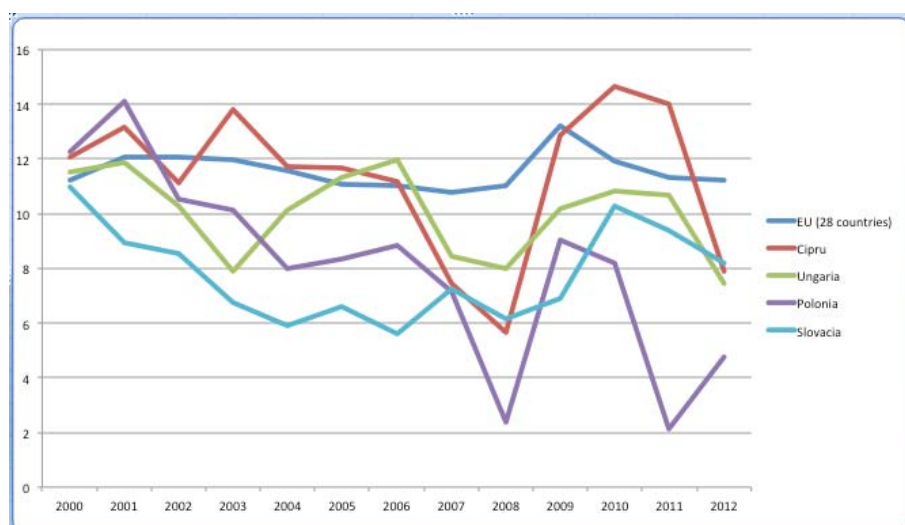
Further, the paper will analyze the evolution of households savings rate between 2000 and 2012. The data series used in this research were downloaded from the Eurostat website. Unfortunately, the data was not complete, and certain sections for countries like Bulgaria, Greece or Romania were missing, so in order to this, we had to exclude these countries from the analysis. Next chart shows the evolution of the savings rate (2000-2012) in Central Europe, compared with the EU28 average:

Figure 1. The evolution of the households savings rate in Central Europe vs. EU-28 average (2000-2012)

Source: Eurostat.

We may observe the fact that in most countries of Central Europe, between 2000 and 2007, the trend has a linear evolution and stays in the tunnel of 10 to 17 percent. Starting with 2008, when the crisis started to feel in the European Union, the savings rate started to grow, followed by a peak at the end of 2009. Starting with 2010, the savings rate trend from almost of the Central European countries had a downturn until the mid 2011, when again, gains a linear appearance. An explanation for this evolution may be the fact that at the end of the boom period there were plenty of liquidities on the market, which have been transformed into savings. A second explanation can be contained in behavioral-economics: when the population felt a real fear regarding the future, has been more cautious, trying to accumulate more for the next period, forecasted as bad one.

Further, the evolution of the same indicator will be described, for several countries from Easter Europe. As we stated a page above, due to data unavailability, we couldn't include in this study countries like Bulgaria or Romania.

Figure 2. The evolution of the households savings rate in Central Europe vs. EU-28 average (2000-2012)

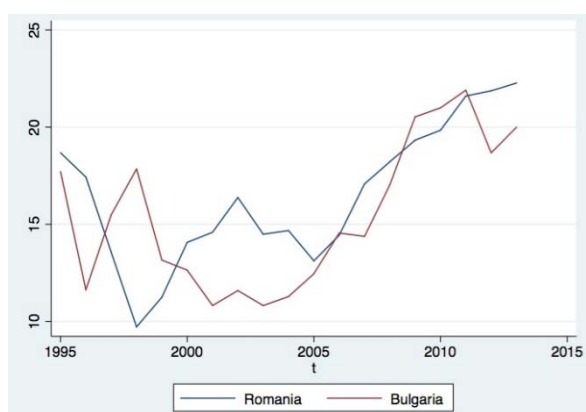
Source: Eurostat.

It can be observed that the households' savings rate of the majority of Eastern Europe countries are below the EU-28 average. This fact was predictable, having in mind that most of these countries are emerging economies, which are on their way from a planned economy, to a market economy. The only exception from the rule is Cyprus and most probably due to the fact that is a fiscal paradise. From figure 2, we can see that in many segments, Cyprus' saving rate is above EU-28 average. It is well known that money from Eastern Europe and especially from Russia, is kept in banks in the neighborhood of the Mediterranean Sea.

Regarding Romania and Bulgaria I used Gross Domestic Saving (GDS) variable, calculated as a percentage of GDP because the data sets related to the savings rate among households was not available. Thus, I used these data, to highlight the successful completion of an overview for saving the European picture. Both countries as we know are still undergo some transformations on their way to a mature economy.

So, both countries known a considerable grow of saving in the last 10 years as a percentage of GDP. Economic growth and the interest characteristic of transition economies have led to a substantial growth of this indicator.

Figure 3. Evolution of gross saving - Romania vs Bulgaria (GDS)

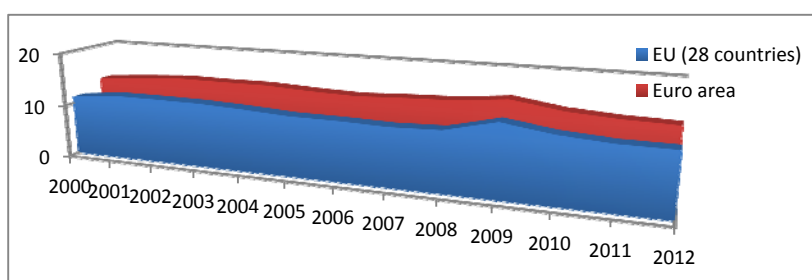


Source: data was processed from World Bank.

Both economies converge towards to the EU average, due to the stated purpose of their integration in the euro area. Therefore with the increasing availability of data, a new paper will analyse Romania and Bulgaria leading indicators in the European Union based on Households Savings Rate and ESI.

Next chart represents a parallel between EU-28 average and Euro Area average for households' savings rate.

Figure 4. Households' Savings Rate: EU-28 vs. Euro Area

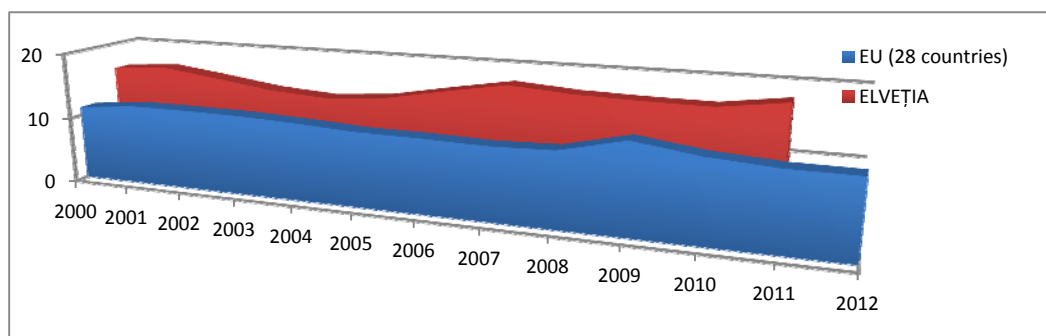


Source: Eurostat.

It could be observed, from this chart, that Euro Area's average is below EU-28 average. This is normal for the countries that have adopted Euro, because they have better performing economies compared to the rest of the Union and they passed to the so-called “purgatory” – Exchange Rate Mechanism (ERM II).

A special case is the one of Switzerland. Here, for the same period, there was a savings rate above 15 percent.

Figure 5. *Households' Savings Rate – EU-28 vs. Switzerland*



Source: Eurostat.

2. Savings rate vs. economic sentiment indicator

In the first section of this paper, we have seen similar evolutions of the trends for the most EU members, also before the crisis, but even during the crisis. After a literature review, we have found that authors like Ewing and Payne (1998) or van Raaij and Gianotten (1990) are supporting the existence of a negative correlation between households' saving behavior and Consumer Sentiment. Matsusaka and Sbordone (1995) are explaining why Consumer Sentiment is reflecting future expectations of economic growth and prosperity. One of the main reasons could be that the households are reflecting into their consumption and saving behavior their expectations regarding the future. Milton Friedman explains also why in a moment in which uncertainty shows up in the economy, the population will be tempted to save more, by calling one of the most powerful characteristics of the money – liquidity. Also, population, by having positive expectations regarding the economic climate, will consider that it has enough time to save money along this road.

Considering the ones described above, we used an econometric analysis which the role to test the correlation between two variables in EU:

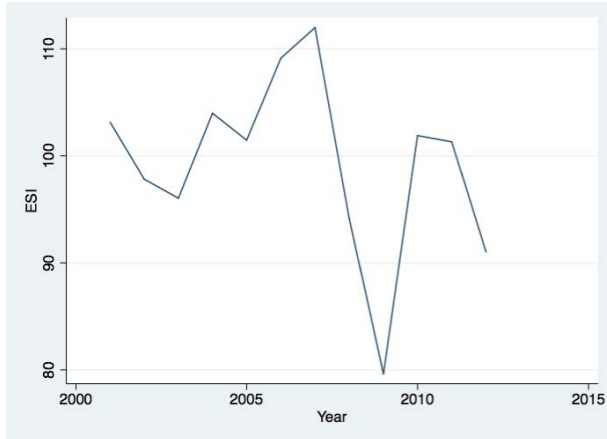
- Growth rate of the households' savings rate for EU-28 area;
- Growth rate of the Economic Sentiment Indicator (ESI), for the same area.

According to the definition provided by Eurostat, ESI is a composite indicator made up of five sectoral confidence indicators with different weights: Industrial confidence indicator, Services confidence indicator, Consumer confidence indicator, Construction confidence indicator, Retail trade confidence indicator. Confidence indicators are arithmetic means of seasonally adjusted balances of answers to a selection of questions closely related to the reference variable they are supposed to track (e.g. industrial production for the industrial confidence indicator). This indicator is calculated as an index with mean value of 100 and standard deviation of 10 over a fixed standardised sample period.

Therefore, the sample we used in our econometric analysis, contains 12 yearly observations, since 2001 to 2012. Unfortunately, the data series was very small and this minus was caused by the data availability. Data were downloaded from the Eurostat website and were primary processed in Excel

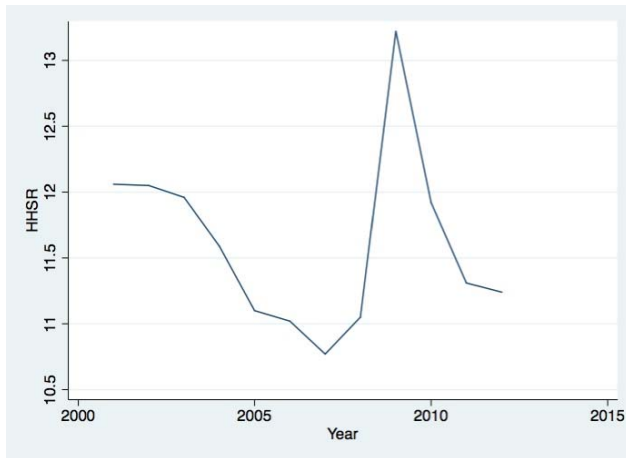
and the regression model was computed in STATA. In the next two charts we can observe the evolution of the variables contained in the model: Economic Sentiment Indicator (ESI) and Households' Savings Rate:

Figure 6. *ESI Evolution (2001 – 2012)*



Source: the author.

Figure 7. *Households' Savings Rate for EU-28 (2001-2012)*



Source: the author.

In order to obtain data stationarity, we have used the first derivative of the time series. The regression equation used to verify our research hypothesis, has the following form:

$$VPHHSR_t = \alpha * VPESI_t + \beta + \varepsilon_t \quad (1)$$

where,

$VPHHSR$ = households' saving rate growth rate for EU-28

$VPESI$ = ESI growth rate

After processing the data in STATA, the output was:

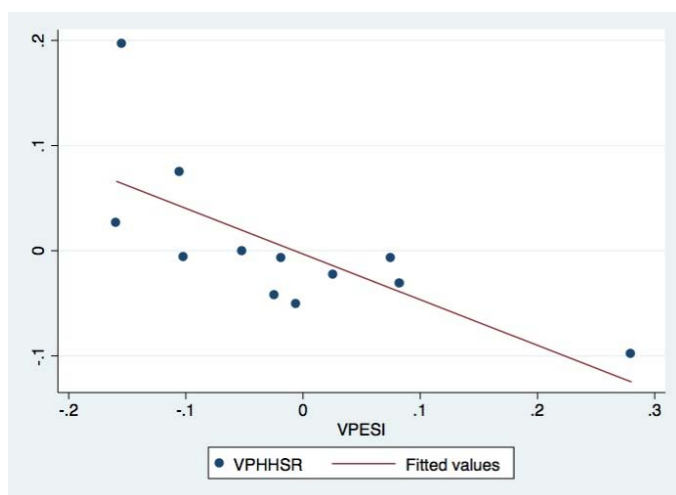
Table 1. *HHSR vs. ESI*

Source	SS	df	MS	Number of obs = 12		
Model	.030850399	1	.030850399	F(1, 10) = 10.42		
Residual	.029614537	10	.002961454	Prob > F = 0.0091		
Total	.060464936	11	.005496812	R-squared = 0.5102		
				Adj R-squared = 0.4612		
				Root MSE = .05442		

VPHHSR	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
VPESI	-.4342488	.1345429	-3.23	0.009	-.7340291	-.1344686
_cons	-.0031177	.015806	-0.20	0.848	-.0383357	.0321002

Source: the author.

It can be observed that the VPESI coefficient is statistical significant, the probability of the t-test being equal to 0.009. Unfortunately, because of the reduced data availability, the free term coefficient does not have a statistic significance.

Figure 8. *Regression line and fitted values*

Source: the author.

After the coefficient estimation, the regression equation will have the following structure:

$$VPHHSR_t = -0.4342 * VPESI_t \quad (2)$$

3. Conclusions and future research paths

Therefore, the change with one percent point of ESI will have as an effect a negative change with 0.4242 percent of households' saving rate growth rate. According to the determination coefficient R^2 , the model explain 51.02% of the intensity between the two debated variables. These results are in accordance with the other studies from our research field. As conclusion, the economic climate, disrupted by the crisis has boosted the savings process. This is not considered as being a good news, by having in mind that a transition to a savings trap may be imminent.

Further, this model can be improved by extending the time series used estimating the model and this can be made only over time and also by adding new variables that may be linked to the households' savings rate in the European Union.

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Post-crisis evolution of creative industries

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Abstract. *Creative industries represent a source of economic growth and change at the level of any economy. This was proven by figures during the years before the crisis and many academics and policy makers advocated the need to implement policies to support this sector and to subsidise certain creative production. The crisis affected most economies in the world and most sectors of these economies. Creative industries have not been an exception. This paper aims to present the way the creative economy, industries and occupations have evolved since the crisis by analysing the most successful countries in terms of creative production in the world.*

Keywords: creative economy, crisis, creative industries, knowledge-based economy, creative occupations.

JEL Classification: L82, O15, O34.

The creative economy accounts for a large share in the gross domestic product. Such share is generated by a group of sectors and industries that are interdependent and overlapping in terms of their object of activity, symbolically called *creative industries*. These sectors and industries have recorded sustained growth as part of *global economy based on knowledge, and innovation*, and become economically and socially more important. They are based on ideas, talent, experience and work, and mainly depend on individual identities (Hartley, 2007).

Annual studies regarding the progress of the creative economy are published by the Department for Culture, Media and Sport (Great Britain), UNCTAD, the Ministry of Trade and Industry of Singapore, Nordic Innovation Centre, the Governments from Ireland, Australia, New Zealand, Taiwan, South Korea, etc.

It is highly important to know the way in which the creative industries reacted in the post-crisis period, especially in order to elaborate policies in the field. Below we present the main evolutions of the creative economy in countries having recorded remarkable results in this field.

Great Britain

In Great Britain, creative industries are those industries stemming from individual creativity, skills and talent, having the potential to create welfare and jobs by generating and making use of intellectual property. Despite this definition, in Great Britain statistics are being calculated concerning the employment in creative industries using a new technology, which was approved and implemented in the year 2014. The methodology is based on the share of workforce in creative occupations and separates the creative industries from the rest of the industries (DCMS, 2014).

The methodology includes three steps:

- identifying creative occupations;
- calculating the creative intensity for all the industries in the economy;
- classifying as creative industries all those industries for which the value of the creative intensity is above a certain threshold.

Employment in the creative economy is measured using the Creative Trident (Higgs et al., 2008). The Creative Trident includes:

1. the employed in creative occupations in other industries;
2. the employed in creative occupations in creative industries;
3. the employed in support occupations in creative industries.

The following three indicators are calculated using these three categories:

The creative economy = 1+2+3;

The creative industries = 1+2;

The creative occupations = 2+3.

The employment by category in the year 2013 in Great Britain is as follows (ONS APS, 2013):

1. jobs in creative occupations in other industries: 818,000;
2. jobs in creative occupations in creative industries: 890,000;
3. in support occupations in creative industries: 907,000.

The findings of the study at national level reveal the following:

- jobs in the creative economy grew from 2.4 million in 2011 to 2.6 million in 2013, which is an increase by 8.8%.
- jobs in creative industries in 2013 were 1.71 million, an increase by 10.1% compared to 2011;
- jobs in the creative occupations in 2013 were 1,8 million, an increase by 7.3% compared to 2011.

These evolutions should be analysed from the perspective of the increase of jobs in the same period, 2011-2013, which was 2.4%.

As concerns qualifications, 57.7% of those employed in the British creative economy are holders of a qualification diploma, while for the whole economy of Great Britain, only 31.2% hold such diploma or equivalent.

The report *Creative Sector Tax Relief* dated April 2014 issued by the UK Trade & Investment presents the main tax relief decisions for certain British creative industries. Thus, in Great Britain tax relief decisions came into force for film production, TV programmes, animation programmes and video games that are classified as British productions. The reason why these activities were chosen is that Britain excels at innovative industries using high technologies and these four in particular have a significant cultural value for Great Britain, as well as an increased potential for economic growth.

It is important to analyse the way in which the creative industries have evolved during and after the economic crisis. The authors that have studied this issue present entirely or partially different conclusions due to the heterogeneity of activities included in this sector. In trying to minimise public spending, the creative industries are the first targets for the governments and their financing is on top of the list for retrenching spending (Pratt, Hutton, 2013). These austerity measures have inflicted upon certain creative industries, and during 2008-2010, arts, recreational and entertainment services dropped by much more than information and communication activities (Reid, Albert et al, 2010).

According to De Propriis (De Propriis et al., 2009), the creative industries that have recorded much more rapid increases in the period prior to the crisis are those that were able to recover sooner after the recession. For instance, before the recession, the British software, video games and electronic publishing grew by 5.5%, which is twice more rapidly than the growth rate of the creative industries. Statistics show it that when the economy recovered, the same sectors recorded growth rates that were much higher than that of the rest of the creative industries. This increase could be explained by the growing demand for innovative products which, unlike the arts, do not depend on public financing. A second conclusion is that the most affected industries are those that depend on government subsidies to a large extent, as well as those industries that are strongly dependent on traditional activities, whose contraction generated a contraction of the production of companies producing creative goods and services (De Propriis, 2012).

Reid (Reid, Albert et al, 2010) considers that the number of jobs in the creative industries fell dramatically as a result of the crisis, while De Propriis discloses positive results. Such differences of opinions, especially the positive results, can be explained by taking into consideration independent employment dedicated to support creativity, which Reid ignores.

France

In France, cultural activities include production and dissemination of traditional cultural activities, as well as other activities that are tightly connected to them; thus, such activities are all indirectly included in the cultural economic perimeter. The cultural activity defined in this manner represented a value added of 57.8 billion Euros in 2011, meaning 3.2% of the total value added of the French economy. This amount is roughly equal to that of the agricultural sector or food industry, twice the value of the telecommunications sector, four times the value of the chemical industry or insurances and seven times the value of the machine constructing industry.

The traditional cultural French industries – luxury products, fashion, gastronomy and decorative arts – are estimated to 40.3 billion Euros altogether, and the number of employees of the creative industry was 670,000 in 2010 (Itty, et al., 2013).

The French government invested 13.9 billion Euros in 2012 in the cultural economy. The top recipients of these budgetary funds are: access to culture and knowledge (libraries, archives, cultural education) and the audio-visual sector (by supporting companies and granting tax reliefs to consumers of audio-visual services). The least publicly financed industries are: visual arts (arts markets, design,

and photography), books, architecture (except for schools of architecture) and image and sound industries. Between these two extremes, the state intervenes to some extent in the following industries: cinematography, heritage, press and performing arts. Local communities contribute too besides the French financial effort. This contribution is as high as 7.6 billion Euros in 2010.

Australia

The creative industries in Australia are classified into four divisions, which are then detailed into groups and classes. The four divisions are: heritage, arts, sports and physical recreation and other industries for cultural recreation and pastime.

In this context, the following structure is being used for the creative industries:

Table 1. *Creative industries structure in Australia*

Creative industries	Copyright industries	Content industries	Cultural industries	Digital content
Characterised by the nature of labour inputs: <i>creative individuals</i>	Defined by nature of asset and industry output	Defined by industry production	Defined by public policy function and funding	Defined by combination of technology and focus of industry production
Advertising Architecture Design Interactive software Film and TV Music Publishing Performing arts	Commercial art Creative arts Film and video Music Publishing Recorded media Data processing Software	Pre-recorded music Recorded music Music retailing Broadcasting and film Software Multimedia services	Museums and galleries Visual arts and crafts Arts education Broadcasting and film Music Performing arts Literature Libraries	Commercial art Film and video Photography Electronic games Recorded media Sound recording Information storage and retrieval

Source: Hartley, John, *Creative Industries* in Hartley, John, *Creative Industries*, Blackwell Publishing, MA 2007

According to the census realised in 2011 and published in the *Australian Creative Economy Report Card 2013* in Australia, the creative industries and sectors employed 531,000 persons (of which 370,000 in the creative industries and 161,000 in the rest of the economy), 5.3% more than in 2006, when the number of employed persons was 463,500. This evolution reveals that the creative sector is one of the most dynamic sectors of the Australian economy, having recorded one of the highest rates of growth. A more rapid evolution was that of the salaries paid in this sector, which recorded a growth from 26 billion dollars in 2006 to 6 billion dollars 2011.

As in the case of Great Britain, there are huge differences among the evolutions of various creative industries. The slow increase by only 1% in the cultural production was offset by an expansion by 4.5% of employment in creative services, while the average growth of the Australian economy was 2%.

A similar situation occurred as concerns the publishing industries, which diminished. However, the following industries grew: digital publishing, photography, digital content, software development, architecture, advertising, and marketing. Considerable growths that are worth noting are: creative artists, musicians, actors, graphic arts, product design, fashion, film, television.

The United States of America

In 2012, four years after the start of the economic crisis in the United States of America, Richard Florida noticed that the labour market situation had improved, but the rate of unemployment was still higher than the one before the crisis.

The study *The Creative Class and the Crisis*, conducted by Todd Gabe, Richard Florida and Charlotta Mellander (Gabe, 2012) reveals that the most affected category was that of blue collars, while the creative class and the regions where the share of the creative class is higher could withstand better the new economic and social conditions. The rate of unemployment among the creative class (in science and technology, business and related occupations, arts, design media, advertisement), which was 1.9% in 2006 reached 4.1% at the end of the crisis, which represents an increase by 2.2 percentage points. The rate of

unemployment for the blue collar workers (for instance, in the food industry, retailing) grew in the same period from 6.5% to 14.6%, which represents a percentage three times bigger than that of the creative class and an increase by 8.1 percentage points. The rate of unemployment among routine workers (production, transport, construction) grew from 5% to 9.3% in the above-mentioned period, reaching a value twice bigger than that of the creative class, following an increase by 4.3 percentage points.

The study revealed that those with creative occupations have lower chances to lose their job during the crisis. All things staying constant, the creative class occupations have reduced the probability of individuals to become unemployed by 2 percentage points in the period 2006-2011. As a determinant, a job in the creative class has a bigger effect over the probability to become unemployed than holding a university degree and an approximately identical effect as holding a postgraduate study degree.

Sands & Reese (Sands, Reese, 2012) study the relation between the creative class indicators and the economic health in the average-sized metropolitan regions from the United States of America both before and after the recession. The authors aimed at studying whether creative communities succeeded in avoiding the economic crisis at the end of the last decade or if they were affected by a smaller decrease of activity compared to other communities where the presence of the creative class is weaker. The researchers' conclusions were that the creative communities are equally affected by the economic decline and its severity can be compared to the one recorded in less creative regions.

Another study authored by Donald and Gertler (Donald, Gertler, 2012) looks into the evolution of creative workers starting from the period of the economic crisis from 2007-2008. There are numerous opinions according to which the creative economy is a significant drive and a fundamental source of change in the economy. However, opinions differ as concerns the significance of this change for the creative workers and the creative workforce. There are studies showing that the creative workforce was able to deal with the non favourable economic conditions much better than the workers that perform routine or production activities. On the other hand, there are authors who disagree to this statement and insist on the instability and growing vulnerability of the creative activity. Donald and Gertler's conclusions are that the nature and vulnerability degree are affected and influenced by the larger macroinstitutional structures in which the economic activities of this type are carried out.

Pratt and Hutton (Pratt, Hutton, 2013) study the relation between the creative economy and cities, including the relation during the financial crisis. The authors learn about the real and expected impact of the financial crisis on the creative economy and cities. Also, the authors synthesise the main evolutions of the relation between the creative economy and the city during the last twenty-five years.

The Romanian Post-Crisis Evolution of the Creative Economy

The government programme for the period 2009-2012 set as priority, inter alia, the promotion of the cultural economy – which is also an objective of the strategy Europe 2020 – including culture, arts, creativity, innovation in order to achieve sustainable development, social cohesion and fight against social exclusion. In 2010, the Romanian Ministry of Culture and National Heritage reactivated the group of experts in charge of elaborating the proposal *Public policy for sustaining creativity in the field of culture*.

Its purpose was to “ensure an adequate financial, fiscal and social framework for the actors of the cultural and creative industries, especially for SMEs, including those in the cultural independent sector (freelancers, creatives and independent artists). Also, the document intends to ensure an adequate environment and to stimulate the access and participation of the public to culture”.

According to *the National Reform Programme*, we can name the proposals below:

- developing entrepreneurial culture within cultural and creative industries;
- identifying tax relief measures for SMEs in the cultural field;
- facilitating the access of SMEs to cultural credits, to grants and the capital market;
- providing facilities and stimulants for sponsorship, patronage and corporate social responsibility;

- adjusting and improving financial-fiscal measures (VAT, cultural revenue stamp, income tax) in order to stimulate the cultural independent sector;
- identifying the social protection measures for the independent artist (Artist's Status);
- ensuring adequate professional training of human resources from the cultural sector in accordance with the market needs;
- adjusting the Occupations Code of Romania in accordance with the cultural sector realities;
- identifying measures to promote classes/courses of education through culture within academic curricula;
- facilitating access to culture for as large as possible a number of people, especially for young people and disadvantaged groups.

The overall conclusion of all statistics presented and of the policies that have been implemented so far in the creative sector is that creative industries have potential for generating economic growth and revitalize regions or cities.

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The impact of bureaucracy over the foreign direct investments in Romania

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Abstract. *Currently attracting foreign direct investment (FDI) in Romania is an opportunity for the development of the Romanian economy. In this case Romanian bureaucratic system may play an important role in attracting foreign investors. The goal of this study is to analyze the effects of bureaucracy on attracting foreign direct investment (FDI) in Romania - the main bureaucratic barriers and their removal (finding feasible solutions). Firstly, I am going to identify the main bureaucratic barriers in attracting foreign direct investment (FDI) in Romania. Secondly, I will present the main viable solutions for increasing the competitiveness of the Romanian economy in terms of attracting foreign direct investment (FDI). That is why we should have an efficient Romanian bureaucratic system (the existence of an optimal bureaucracy to eliminate the negative effects of the excessive bureaucracy that already exists).*

Keywords: excessive bureaucracy; optimal bureaucracy; foreign direct investment; competitiveness; economic development.

JEL Classification: A1; B00; H00.

Introduction

Nowadays we can see that the bureaucratic phenomenon and its effects have a strong impact on economic and social development. A topical issue is to attract foreign direct investment in Romania and developing entrepreneurial spirit among young people. In this sense we can observe a link between excessive bureaucracy existing in Romanian public institutions and attracting foreign investors. Thus, we can observe the main bureaucratic barriers affecting Romania's competitiveness relative to other countries in attracting foreign direct investment: the lack of a well-developed infrastructure within public institutions (streamlining the activities of public officials); lack of transparency in public institutions; prolonged waiting time for solving certain problems; corruption; inappropriate behavior of public servants.

In addition to the negative effect it has bureaucratic system in Romania on attracting foreign direct investment, there are other disadvantages with a major negative impact on the image created among potential foreign investors: lack of infrastructure, political instability, high taxation and change and instability in maintaining certain laws, rules and regulations that could lead to a low attraction of investments.

Although there are many issues that the foreign investors may encounter, Romania has a high growth potential in many areas, and one of the most important is tourism (mainly developing ecotourism area). Area that can be known as a strong development in the coming years if the bureaucratic barriers are removed and we develop infrastructure investments.

In our country we can observe a trend of increasing awareness of the impact of tourism activity on the environment; in this respect mitigation initiatives occurred of the negative influences, through an increased interest in the development and practice of sustainable forms of tourism (Hornoiu et al., 2014: p. 1188).

Thus, to have a sustainable development is necessary to eliminate or diminish excessive bureaucracy of Romanian public institutions and replace it with an optimal bureaucracy (a more efficient Romanian bureaucratic system).

The bureaucracy from public institutions

Nowadays bureaucracy is seen as a set of rules and regulations to be observed in any case where there is an excessive supervision from superiors and employees apathetic (which follows a certain routine and are conservative). However, large organizations must follow the procedures formalized and hierarchical structure to avoid chaos and to ensure efficiency, quality and durability. P.S. Adler believes that there is a lack of theoretical or practical guidelines to build a more efficient bureaucratic system that can support a high level of performance and commitment from employees (Adler, 1999: pp. 36-49).

Regarding the bureaucratization of public institutions, this phenomenon is considered a means by which energy is produced and wealth for the few by exploiting majority. Interaction between underdevelopment, the concentration of power and wealth and bureaucracy prevent beneficial use of technology and science development. In conclusion excessive bureaucracy leads to hinder sustainable development (Deva, 1986: pp. 149-155).

Public institutions are facing increased economic pressure, social tensions, global competition and decreasing public trust, and so governments can no longer afford to address increasingly complex public objectives and adapt to the changing market requirements. In this respect it is necessary to

introduce a computer network information and service within public institutions. This can lead to an increase in the efficiency of public institutions and reducing excessive bureaucracy (Janowski et al., 2012: pp. 1-10). To make the Romanian public institutions become more efficient is necessary to develop an advanced computer system containing information and public databases that citizens have easy access. The possibility of completing the documents and sending them online. Achieving a common computer system for all state institutions will make more efficient the cooperation between public administrations.

To mitigate the negative effects of bureaucracy in public institutions we need effective leadership, which has always been recognized as an essential tool for promoting sustainable development and is considered a crucial element to be included in development strategies. An effective institutional governance promotes accountability, transparency, efficiency and rule of law at all levels and allows efficient management of human, natural, economic and financial for an equitable and sustainable development, to ensure civil society participation in the decision making process. Thus, sustainable development and efficient management (efficient institutional governance) are two closely related concepts. Effective institutional governance does not guarantee sustainable development, but it has no negative effects on all areas of activity. Regarding sustainable development strategy of the EU member countries found that institutional governance is efficient and helps develop an optimal bureaucratic system in public institutions (public institutions increase efficiency and eliminate the negative effects of excessive bureaucracy). In conclusion it is necessary an involvement and an increased interest in institutional governance to improve vertical coordination mechanisms to disseminate best practices on public consultation processes and bring sustainable development strategies closer to people. Thus, the population will be able to understand and make better use of these mechanisms that will lead to a change of behavior from them with positive effects on sustainable development (Kardos, 2012: pp. 1166-1173). An efficient management of public institutions will return a much closer communication with citizens, increased collaboration between public institutions and adapt to new market requirements.

In Romania there is a big problem in terms of communication between public institutions and citizens. Problem affecting among other things the attraction of foreign direct investment, and opening new businesses. Thus, it is necessary to promote new methods and communication strategies to improve the relationship between public institutions and citizens. In this area it was observed that there can be no effective external communication where there is effective internal communication in public institutions. Therefore, the first step would be to develop this area. A basic principle of communication is the fact that people are not always empathetic. Our human nature is to believe in what we hear and see and judge the degree of transparency of public institutions that exhibit. The transparency from public institutions may have major effects on attracting foreign direct investment. In this sense it is necessary to propose a set of techniques to improve the communication from the Romanian public institutions, namely:

- implementation of the concept of e-government;
- achieve a strong and reliable communication program (transmission of information through various media: publications, media, internet);
- creating and organizing an Information Centre;
- creating a strategic and transparent partnerships (Jianu et al., 2013: pp. 174-179).

Another issue that must be remedied in public institutions is related to formal communication. Making poor formal communication can have serious repercussions for a company image. An immediate effect is poor coordination between organization departments and internal emerging activities, one of the causes being represented by the omission of involving employees as key links in promoting the image

of an organization (Hociung, 2011: p. 23). Thus, public institutions must take care of their image, even if not directly compete with a private firm or other public institution because a negative image may affect the country's competitive advantages in attracting foreign investors.

The buildup of the modern image of the organization improves every day with new ways of approach. For this reason, at present, it requires to talk about online communication paradigm (Hristache et. al., 2014: p. 68). To adapt to market requirements Romanian public institutions must use modern means of communication that can help eliminate the negative effects of bureaucracy (the lack of cooperation between departments or institutions and lack of transparency in communicating with citizens).

In conclusion it is necessary that the Romanian public institutions to implement a document management system that will lead to a streamline of their activities plus much more effective communication and cooperation with other institutions, potential investors and citizens. Civil servants will become more efficient and increase their productivity.

The effects of bureaucracy on attracting foreign direct investment in Romania

Foreign direct investment can be defined as a direct or indirect ownership of a foreign entity that holds at least 10% of voting shares of an organization. A foreign direct investment can be an acquisition, a merger, a new business, expanding company or absorption of other enterprise.

For the growth of economy the foreign direct investment come with a key contribution because they:

- create jobs;
- optimize resource allocation;
- allow the transfer of technology;
- stimulates trade (source: <http://www.ccfiscali.ro/content/editoriale/nr13.pdf>).

Foreign direct investment plays an important role in the economic development of any country and its operation based on market economy principles. They are very important for strengthening the Romanian economy characterized by a transition economy and the integration into the world economy. Through foreign direct investments the economies are modernizing (especially in transition economies as Romanian economy) by implementing advanced technologies, new knowledge in various fields, most advanced equipment, new standards and by switching to a higher type of economy growth (source: <http://www.ccfiscali.ro/content/editoriale/nr13.pdf>). For foreign direct investment to be efficient is very important to observe in what branches of industries are attracted and their quality (Cimpoieru, 2015).

In 2013 the net inflow of FDI has reached a level of 2.712 million euros. The areas that are having the most important capital increases were industry (1.253 million euros) and manufacturing (944 million euros) and transport (336 million euros); other areas with substantial capital investments were construction and real estate (476 million euros), financial intermediation and insurance (431 million euros) and trade (332 million euros) (source: [http://www.bnr.ro/Investitiile-straine-directe-\(ISD\)-in-Romania-3174.aspx](http://www.bnr.ro/Investitiile-straine-directe-(ISD)-in-Romania-3174.aspx)).

Regarding development foreign direct investment in the period 2009-2013 we can observe an increase from 48.827 million euros in 2009 to 59.958 million euros in 2013 (source: [http://www.bnr.ro/Investitiile-straine-directe-\(ISD\)-in-Romania-3174.aspx](http://www.bnr.ro/Investitiile-straine-directe-(ISD)-in-Romania-3174.aspx)). However we cannot talk about a spectacular increase, given the range in which it occurred.

A barrier in attracting foreign direct investment in Romania is the bureaucracy that suffocates economic activity in many situations. Romania's competitiveness relative to other countries in

attracting foreign direct investment has suffered from negative effects of bureaucracy from the public institutions such as:

- The lack of a well-developed infrastructure within public institutions. In this case the Romanian public institutions must have a well-developed IT system with a number of software programs that help to increase the efficiency of public servants. The IT infrastructure must be designed to facilitate internal and external communication of public institutions, plus providing public information to citizens. Lack of IT infrastructure coupled with poor management will result in the loss of foreign investors and at a competitive disadvantage in terms of attracting foreign direct investment.
- Lack of transparency in public institutions. This is manifested by a poor communication with the citizens or even with their own employees. For a potential investor it is important to be informed before investing in a particular region or country, and in this case cannot obtain necessary information or receiving only half of the information (in some cases happen to receive incorrect information or data that have not been updated). Lack of transparency of public institutions play an important role in attracting foreign direct investment because it can create a lack of confidence of foreign investors in state institutions. In this case we lose another competitive advantage relative to other countries.
- Prolonged waiting time for solving certain problems. The prolonged duration of time necessary to obtain certain documents, signatures and stamp is an impediment to attracting foreign direct investments. In this case we can speak of the opportunity cost (in that time frame possible investor could perform another task and so he is forced to lose significant amounts of money).
- Corruption plays an important role in the strategy of potential foreign investors in choosing a country to activate. Therefore analyzing corruption perception index is useful for the foreign investor. It can decide whether investing in a country over others depending on the level of corruption. Corruption that can adversely affect the investor businesses. Thus, public institutions must be more open about their activities and public officials need to be more transparent in their decision-making process. Romania is ranked 69 of 177 countries surveyed with a score of 43 points out of 100 points (source: http://transparency.org.ro/politici_si_studii/indici/ipc/2013/index.html).
- The inappropriate behavior of public servants can be reflected over the image of the Romanian public institutions that is created in the eyes of the foreign investors. Inappropriate behavior of civil servants is characterized by: indolence, routine, convenience, conservatism, lack of communication between civil servants, reluctance to changes.

Given that there are many bureaucratic barriers for attracting foreign direct investment is necessary to find solutions to eliminate them. A useful tool in fighting excessive bureaucracy of public institutions is the implementation of the new public management. The new public management can help regulate bureaucratic system (creating a more efficient public sector) and lead to a sustainable economic development (Bezes et al., 2012: pp. 1-52). In this sense it is useful to implement the new public management and its tools in the Romanian public institutions. The Romanian public institutions will be more focused on market requirements and goals through empowerment of employees and managers plus improve of the results of the activities.

Conclusions

It can be seen that the excessive bureaucracy has a strong impact in some situations on attracting foreign direct investment. In this sense it is necessary to find some solutions that would achieve optimal bureaucracy (which will lead to more efficient public institutions). Among the solutions that can lead to the development of an optimum bureaucratic system are:

- adequate training of civil servants;
- eliminating unnecessary rules and regulations that bother the activity from the public institutions;
- efficient communication in public institutions, but also between public institutions;
- decrease in the number of civil servants (reducing the number of luxury civil servants - ineffective);
- the implementation of an efficient information infrastructure;
- orientation of the public institutions to the market requirements;
- greater transparency in providing public information from public institutions.

In conclusion the bureaucracy from the Romanian public institutions must be continually monitored and controlled so as not to adversely affect the attraction of foreign direct investments. This will lead to an increase in foreign direct investment that will lead to sustainable economic development (jobs, an optimal allocation of resources, technology transfer, boosting trade).

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Intellectual capital – source of economic recovery

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Abstract. *The critical moments which came along with the deep financial crisis reshaped not only the economic but also the social perspective and their main coordinates. However, the initial shock has subsided now to the challenge that remained: solving the outstanding issues of the past. In this paper are analyzed the reactions that various countries have had when the market collapsed, the aim being to identify the factors that had a significant impact on the economy. The econometric analysis performed takes into account the objectives to be met in order to record sustainable growth. These results indicate that those countries that have chosen to invest in human capital and intellectual showed an increased resistance to the crisis and were able to recover more quickly and with fewer negative consequences.*

Keywords: intellectual capital, human capital, economic crisis, economic crisis, sustainable development.

JEL Classification: J24, G01, O34, Q01.

1. Measuring the national intellectual capital

Economic growth and the factors that contribute significantly to it have been and remain central topics for economic research. Studies conducted over the recent decades have sought to explain the results obtained by several economies, but not by others, based on standard economic growth models, models based on factors exterior determined, for example the saving level (Solow, 1956), or factors that can be explained using internal variables such as the technological progress (Romer, 1990).

Next it is conducted a brief review of the literature on the concept of intellectual capital and its contribution to economic development. Because the presentation is made from a macroeconomic perspective, the focus is predominantly on the National Intellectual Capital model Indexes 40 (NICI40).

Measuring Intellectual Capital raises by its nature a number of problems caused precisely by its intangible nature. The impediment can be solved to some extent, at company level by selecting the relevant variables in an attempt to obtain an approximation of the actual level. But the problem is more complicated macroeconomically because in this case the information is already aggregated, therefore individual data is almost impossible to obtain; so in turn it does no longer provide an accurate reflection of reality. But beyond this difficulty which requires the combination of a degree of skepticism to any aggregate indicator, the literature identified a number of other obstacles (Lin and Edvinsson, 2010, pp. 12-16):

- Most of the measuring models analyze data at input and output level (Bounfour, 2003).
- Data is collected for other purposes than to measure IC (intellectual capital) and there is no generally accepted internationally methodology (Pomeda et al., 2002).
- Comparisons between countries are made using criteria and data collection methods which vary from one state to another (Klein and Kozlowski, 2000).

In the literature, intellectual capital measurement problem has been solved in different ways using indirect variables such as:

- Expenditure on research and development (Cohen and Levinthal, 1989).
- The number of registered patents (Archibugi and Planta, 1996).
- Number of innovations made (Gavin, 1996).

First intellectual capital measurement methods were based on microeconomic methodologies (Malhotra, 2003). Among these initiatives there are the Danish Agency for Trade and Industry that funded the development of a report on intellectual capital at the firm level in order to further develop its comprehensive indexes on IC; the Government of Norway has developed a model for measuring the competence of capital, model which includes IC (Malhotra, 2003). In addition, to be able to perform the task as well, a number of methodologies have been developed by international organizations:

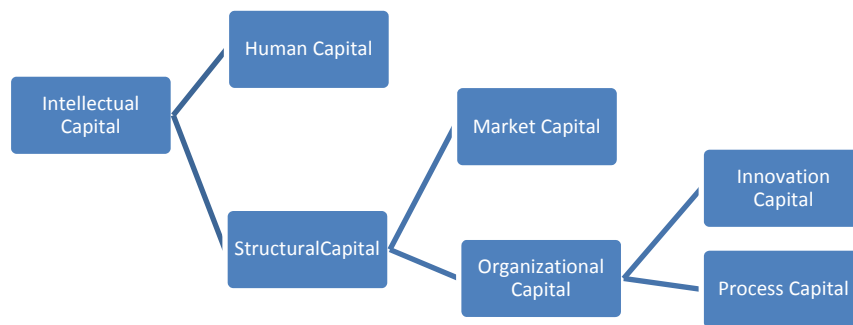
- World Bank Methodology - Knowledge Assessment Approach (KAM).
- OECD Methodology.
- The United Nations Commission for Europe Model.
- The European Forum for Knowledge Management Model.
- e-Readiness Index.

The NICI40 was conducted jointly by CY-Y. Lin and L. Edvinsson and was the result of a large multinational study that brought together previous models proposed methodologies and used panel data for the period 1995-2008. Because the orientation is towards the macro, the proposed methodology departs from usual classification: human capital, organizational capital and relational

capital, and selected variables were divided into 5 categories of capital (Lin and Edvinsson, 2010, pp. 1-32):

1. **Human capital** includes information, knowledge. Expertise, intuition and the ability of individuals to carry out national targets. This capital includes variables that measure the skills of a population and concerns: education, health, experience, expertise, entrepreneurship.
2. **Market Capital**, refers to the relationship between international and local market, and it measures the ability of countries to offer attractive and competitive solution for international investors. The variables measured in this case loyalty, openness to globalization, flexibility, adaptability and satisfaction expressed by strategic partners.
3. **Process Capital**, represents the infrastructure that supports cooperation and transfer of knowledge and information. It may include variables of different kinds, from software and hardware systems, scientific laboratories, communication infrastructure, or the number of PCs, the number of people who have access to mobile or internet, but the existence of a legal system that encourages sharing information, innovation and business flexibility.
4. **Innovation capital**, orientation is given by a country perspective on long-term development. The variables included in this indicator are research and development investments, number of scientific publications, patents, trademarks and other industrial property and innovation capacity.
5. **Financial capital**, includes GDP, external debt, inflation and industrial production.

Figure 1. Components of National Intellectual Capital (Edvinsson and Malone, 1997)



2. Economic development and intellectual capital

To adequately highlight the importance of intellectual capital for the economic development of a country, it was designed a model which correlates the degree of economic development, measured by GDP/capita, with different components of intellectual capital. Also, in order to emphasize the significance of the components, the model contains the foreign investment, namely the expenses with gross capital formation. The decision was supported by the desire to contrast the role of capital investment relative to investment in intellectual capital.

The chosen model is:

$$\text{Log} \left(\frac{GDP}{capita} \right) = \beta_0 + \beta_1 FDI + \beta_2 GCP(-1) + \beta_3 R\&D(-1) + \beta_4 \log(Patents(-2))$$

Where:

GDP/capita = GDP per capita data are expressed in US dollars adjusted for purchasing power 2005

FDI = foreign direct investment as a percentage of GDP

GCP = expenditure on gross capital formation, expressed in dollars adjusted to 2005 purchasing power

R&D = Research and development expenses as a percentage of GDP

Patents = number of patent applications by residents in a year.

The model was tested using panel data processed by the authors, based on data obtained from the World Bank. The results can be found in the table below.

No.	Country	β_0	Foreign direct investments FDI	Expenditure on gross capital formation Log(GCP(-1))	Research and development expenses R&D(-1)	Number of Patents(-2)	Adjusted R^2
1.	Aggregated EU	-2,38 (0,52)	0,006 (0,002)	0,558 (0,027)	0,572 (0,023)	-0,336 (0,023)	0,813
2.	Austria	4,614 (2,96)	0,0009 (0,0006)	0,207 (0,131)	0,138 (0,024)	0,0528 (0,1089)	0,932
3.	Belgium	-0,076 (1,069)	0	0,376 (0,0371)	-0,22 (0,038)	0,247 (0,039)	0,930
4.	Bulgaria	1,892 (2,25)	0	0,32 (0,05)	1,38 (0,465)	-0,29 (0,21)	0,911
5.	Cyprus	4,112 (3,28)	0	0,264 (0,148)	0,107 (0,255)	0,035 (0,026)	0,07
6.	Czech Republic	0	0	0,424 (0,049)	0,393 (0,105)	-0,206 (0,196)	0,789
7.	Germany	5,868 (3,67)	0	0,145 (0,133)	0,275 (0,044)	0	0,813
8.	Denmark	4,905 (1,209)	0	0,199 (0,054)	0,024 (0,019)	0,117 (0,064)	0,717
9.	Spain	0	0	0,299 (0,017)	-0,23 (0,047)	0,309 (0,065)	0,941
10.	Estonia	0	0,003 (0,004)	0,394 (0,008)	0,002 (0,089)	0,140 (0,078)	0,854
11.	Finland	3,697 (1,95)	0,005 (0,002)	0,303 (0,075)	0,113 (0,032)	-0,13 (0,064)	0,908
12.	France	1,43 (1,085)	0,007 (0,005)	0,252 (0,094)	0,125 (0,105)	0,204 (0,257)	0,847
13.	Great Britain	0	0	0,447 (0,034)	-0,184 (0,291)	-0,109 (0,088)	0,67
14.	Greece	5,048 (5,195)	0,055 (0,03)	0,195 (0,195)	-1,720 (1,153)	0,173 (0,105)	0,77
15.	Croatia	1,866 (1,181)	0	0,345 (0,061)	-0,214 (0,142)	-0,075 (0,095)	0,854
16.	Hungary	0,651 (2,463)	0	0,343 (0,088)	0,564 (0,065)	-0,023 (0,096)	0,916
17.	Ireland	0,642 (2,309)	0	0,400 (0,084)	0,244 (0,118)	-0,007 (0,146)	0,551
18.	Italy	2,842 (4,603)	0	0,342 (0,180)	0,180 (0,198)	-0,206 (0,157)	0,223
19.	Lithuania	2,776 (1,546)	0	0,180 (0,065)	1,986 (0,228)	0,154 (0,094)	0,95
20.	Latvia	0	0	0,365 (0,020)	0,941 (0,315)	0,047 (0,076)	0,848
21.	Holland	0	0	0,391 (0,043)	-0,136 (0,136)	0,109 (0,161)	0,573
22.	Poland	-15,355 (2,514)	0,008 (0,012)	0,726 (0,069)	-1,560 (0,458)	0,929 (0,286)	0,898
23.	Romania	-5,441 (0,984)	0,0057 (0,004)	0,561 (0,029)	-0,751 (0,141)	0,109 (0,054)	0,973
24.	Slovakia	0	0,005 (0,007)	0,501 (0,028)	-0,585 (0,134)	-0,384 (0,129)	0,847
25.	Slovenia	-1,305 (1,454)	0,010 (0,007)	0,437 (0,057)	0,143 (0,730)	0,139 (0,173)	0,882
26.	Sweden	16,585 (3,963)	0,004 (0,003)	-0,107 (0,128)	0,175 (0,065)	-0,494 (0,122)	0,861

Source: Data available on the website of the World Bank, processed by the author.

As one can see from the above data, research and development expenditures play a key role and they represent, for quite a few of the analyzed cases, an engine of growth more important than investments. Nevertheless, a discrepancy between developed countries and developing ones can be noticed such that research and development expenditures have a less significant impact when compared to how important foreign investments are. This is not the case for developed countries where foreign direct investments are negligible.

Following this, we will evaluate the role of intellectual capital for different countries and see how it contributes to stimulating innovation and, by extension, to economic growth.

3. National Intellectual Capital in Europe

Over time, a significant body of research has been done, at the European level, concerning intellectual capital, such as the Meritum Report which was published in 2001 with the purpose of improving public policy concerning science and technology, or the Ricardis Report, which was done in 2006 at the request of the European Commission so as to stimulate the reporting of intellectual capital by small and medium enterprises. A study, based on the NICI40 methodology, concerning the entire European Union has not been done to date.

In order to maintain the integrity of the data and to make it easier to compare, the NICI40 results obtained by northern European countries will be presented. They are significant and have been selected because they were among the first to recognize the importance of studying IC. Nevertheless, the results cannot be generalized for the entire continent and are worthy of attention because they can be seen as a guide for other countries.

Figure 2. Denmark

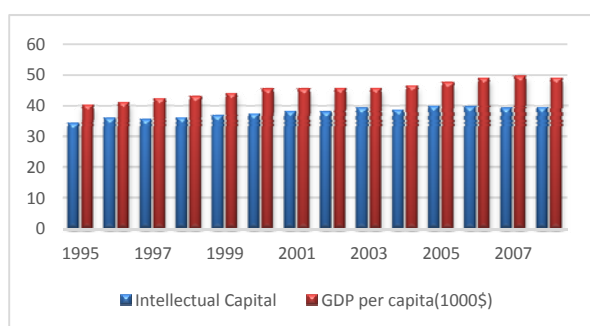


Figure 3. Finland

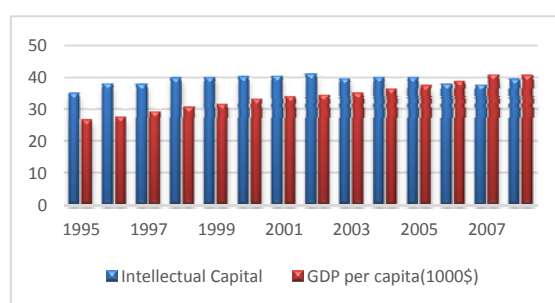


Figure 4. Norway

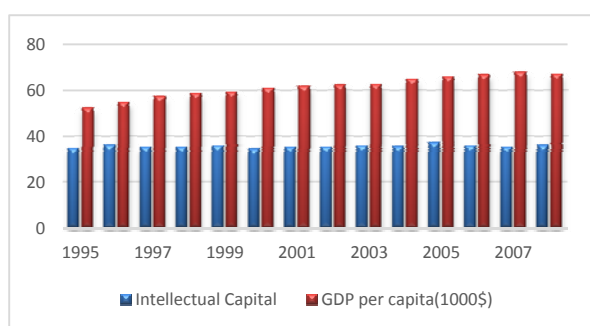


Figure 5. Sweden

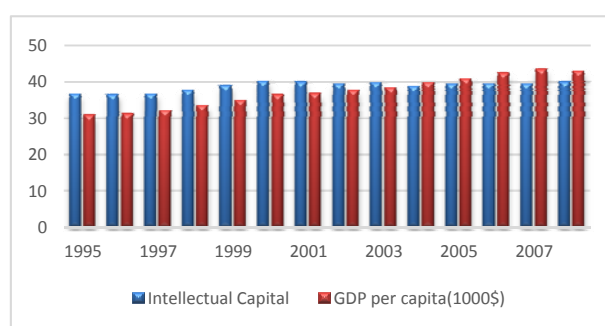
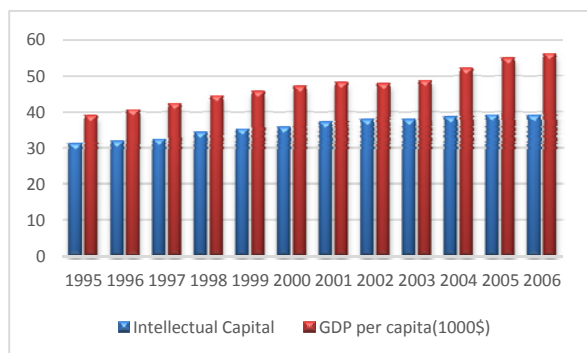


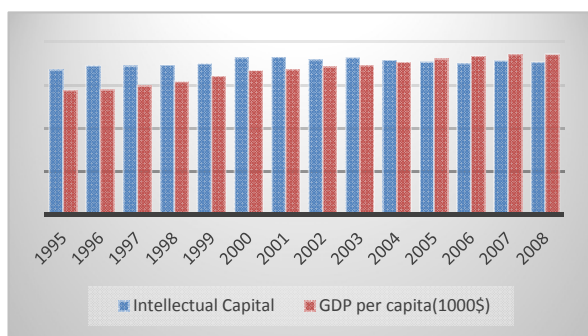
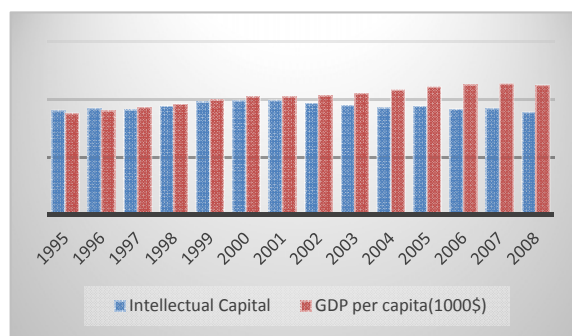
Figure 6. Iceland

Source: (Lin and Edvinsson, 2010).

Northern countries have obtained very high scores in the index and occupy the first, second, fourth, seventh and ninth places, however, this is not surprising when taking into consideration the fact that the first IC reports, both at a microeconomic and macroeconomic level, originate from this group, as well as the level of interest, both public and private, enjoyed by IC components, such as allowing education budgets which range from 5.4% to 7.4%, and devoting between 1.57% and 3.64% of their GDP to research and development (Lin and Edvinsson, 2010).

Intellectual Capital in North America

Countries which belong to the North American group, specifically the United States of America and Canada, have a significant number of traits in common from a cultural, historical, economic and social perspective, and they form a significantly more homogenous group than Europe. For this reason it was not unexpected when they achieved similar results in the evaluation of their national intellectual capital.

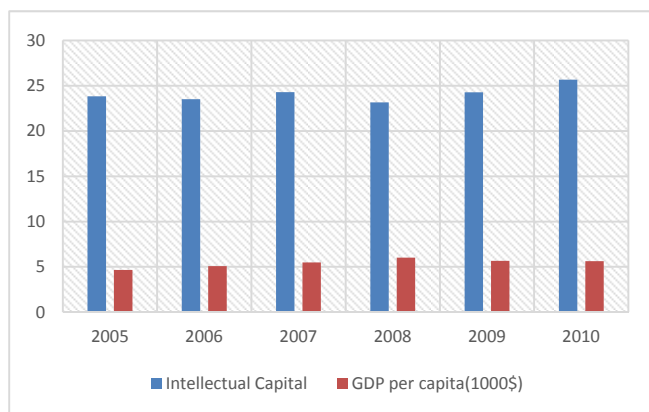
Figure 7. Canada**Figure 8. USA**

Source: (Lin and Edvinsson, 2010).

The two countries have obtained relatively good scores ranking in at 5, Canada, and 10, the US. However, when taking into consideration the significant level of development enjoyed by both countries, the results are not the best. Specifically, Canada performed less than expected in terms of market and innovation capital and the US, even though it got a respectable sixth place in terms of human capital, it will probably lose this position due to the low level of investments in education (Lin and Edvinsson, 2010).

National Intellectual Capital – Romania

Figure 9. *Romania*



Source: (Lin and Edvinsoson, 2014).

We can easily notice that Romania scored significantly lower than the above mentioned countries, as well as many other developed countries. However, the evolution is for the better due to the fact that, even though the 2007/2008 financial crisis had a significant impact, the 2010 results are an improvement when compared to the ones from 2005.

4. Innovation as a source of economic growth

The literature focusing on economic growth and development is both vast and diverse due to the fact that it is the result of different approaches which have been attempted in order to explain, in a satisfactory manner, what are the elements that significantly influence economic growth. Among the most carefully studied causes innovation is included and it is often identified as a contributory factor.

Innovation captured the attention of researchers from the beginning, however economists started to study it closed following the works of Solow. The author showed that technical progress is almost entirely responsible for the economic growth achieved in the United States. (Solow, 1956, 1957). Later, after improving the quality of the data and the statistical devices used, the results were adjusted downwards. Nevertheless, technical progress is still regarded the cause of up to a third of economic growth (Gavin, 1996).

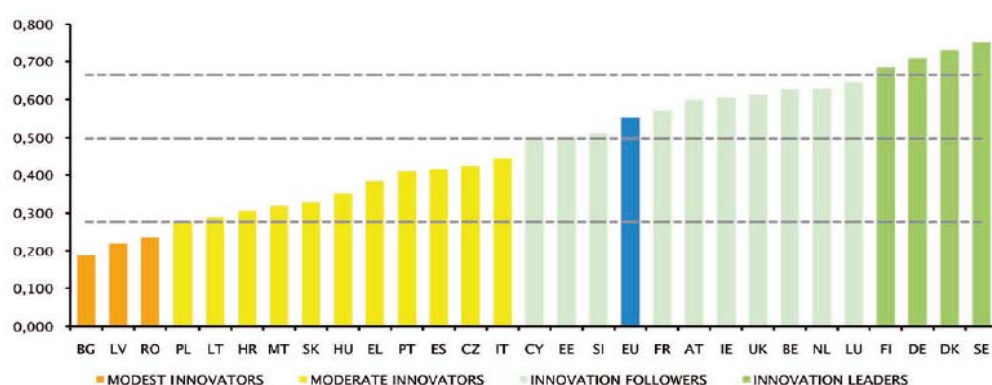
Even if it has not been established, with certainty, the magnitude of the impact that innovation has on economic progress, that it plays an important role is evident and as such, should be studied in detail. From this point of view, however, the methodology proposed by Solow and, by extension, the studies which use his work as a base are relatively poor because they are based on the assumption that technical progress is determined by something outside our control, that the rate of progress cannot be directly influenced. But the assumption is difficult to support, an issue which has led to an explosion of models seeking to measure technical progress (Gavin, 1996) and to introduce it in the economic growth equation, thus obtaining an endogenous model (Romer, 1990).

Another option to measure innovation is to use an aggregate indicator that captures the evolution of several variables. This solution has already been adopted by the European Commission starting with 2007, which, since then, has published an annual report concerning the degree of innovation achieved by each country in the European Union (European Commission, 2014).

Due to the results obtained in 2014, EU countries have been divided into four categories:

- **Innovation leaders:** Denmark, Finland, Germany, Sweden, countries which have achieved results better than the European average.
- **Innovation followers:** Austria, Belgium, Cyprus, Estonia, France, Ireland, Luxembourg, Netherlands, Slovenia, United Kingdom; these countries rank above or close to the European average.
- **Moderate Innovators:** Croatia, Czech Republic, Greece, Hungary, Italy, Lithuania, Malta, Poland, Portugal, Slovakia, Spain, the results obtained are lower than average
- **Modest Innovators:** Bulgaria, Romania, Latvia, countries with lower net indicators.

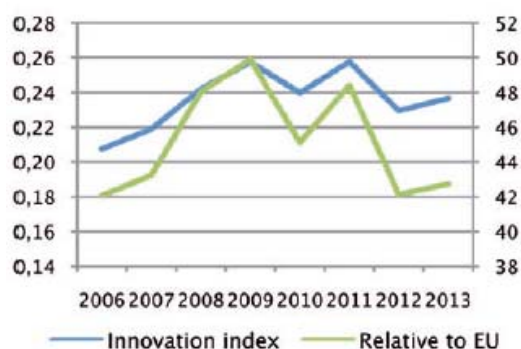
Figure 10. EU countries innovation performance



Source: (European Commission, 2014, p. 5).

From figure 10 we can easily see that the most developed countries of the EU are among those with the best results in terms of innovation. We can also notice that Romania is among the poorest performing countries ranking in at 27 out of 29.

Figure 11. Innovation in Romania



Source: (European Commission, 2014, p. 65).

Apart from the 2013 result, according to the same report, the evolution of Romania in terms of innovation was not the best. Nominally, performances have improved when compared to 2006, but relative to the rest of the union, the results were worse. Among the weaknesses identified are included expenditure with research and development carried out by the private sector and the number of PhD students from outside the EU.

5. Human Capital – a fundamental element of innovation

Innovation depends on the ability of people to generate and after that to apply knowledge and ideas both in their work as well as in society. However, from the beginning we must mention that, although a close link between education and economic development was observed, the underlying mechanisms and how they influence each other have not been determined clearly and are still being debated (World Intellectual Property Organization, 2014, pp. 69-77).

Data from The Human Factor in Innovation reveals that the contribution of education to a developing country's economy due to the fact that it is correlated with more people getting a tertiary education as well as the fact that the more developed regions usually have the highest percentages of people who have finished college.

The same data shows, however, that research and development may not always be the best long term investment. In order to adequately take advantage of the results obtained through research, it is necessary for the average level of human capital to be slightly higher (World Intellectual Property Organization, 2014, pp. 69-77).

Furthermore, a particular issue concerning many developing countries is stopping the phenomenon of "brain drain". The situation is caused by the fact that the openness of the system and the mobility of people trained is must be developed because they are very important factors for the capacity to learn, adapt and innovate. However, by supporting the migration policies of the population in developing countries, they stimulate emigration but they fail to attract as many people trained as they lose (World Intellectual Property Organization, 2014, pp. 69-77, 113-120).

Romania's situation in this respect is poor. Out of the 143 countries considered, Romania occupies a modest 55 place in the innovation index. The index of human capital and research Romania ranked 69 respectively 75 when it considered only education. A major cause for this situation remains the weak financing for education, the country being ranked 83 in this regard.

6. Conclusions

This paper has sought to demonstrate that the economic development of a country depends on its ability to respond in an appropriate manner the changes, with the latter being influenced by its ability to innovate and invest in intellectual capital. In order to support these claims, a basic econometric model was built so that we can which link economic development with foreign investment, gross capital formation, expenditure with research and development and number of patents granted. By applying the proposed model, it was shown that, in many countries, research is an engine of economic growth. However, the results cannot be generalized easily; in addition, there are some cases where it was not possible to establish a link between the two (e.g. Cyprus, Greece and Hungary). It should also be noted that research has a significantly greater impact in developed countries than developing ones.

Acknowledgments

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Fostering active aging

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Abstract. *The impact of losing their jobs on individuals causes an existential crisis for all ages, but the psychological, economical and social impact stronger as people advance in age. Personal perception of job loss varies from person to one person to another; some are able to quickly rejoin the labor market, while some lock up and then need help to get out of that state. States with some institutions and NGOs are trying to encourage active aging through a series of active and passive employment measures. The aging population is a real and very serious problem current facing all countries in the European Union and beyond. Amid rising life expectancy, low birth rates and demographic transition, the aging population raises serious issues to the social protection systems that are in a financial crisis coupled with a deep prolonged global economic crisis. Finding effective policies and measures to encourage active aging is more than necessary to keep business people active and professionally competent.*

Keywords: active aging, employment policies, social security, social protection.

JEL Classification: J4, J6.

1. What is active aging?

The aging of the population is a real, current and very serious issue with which European Union countries, and not only they, must contend with. Given that life expectancy is rising, birth rates are falling and a demographic transition is in progress, the aging of the population raises great difficulties to the social protection systems, which are in a financial crisis coupled with a deep and prolonged global economic crisis.

Active aging is defined by the World Health Organization as *“the process by which we optimize health, participation and security opportunities, with the purpose of improving quality of life for aging people. This allows aging people to find their potential for welfare along their lifetimes and to participate to social life as their needs, wishes and capacities go, while being provided with adequate measures of protection, security and care when they need assistance”*⁽¹⁾.

Global Health Organization under the slogan “Good health adds years to one’s life” has tried to shine a light upon how aged people help develop our society and to draw the attention of deciding factors for them to take measures to encourage active aging and to increase solidarity among generations.

The year 2012 has been declared the European Year of Active Aging and Solidarity among Generations, during which László Andor, European commissary for occupying workforce, social affairs and inclusion, has declared: *“Active aging refers to helping aged individuals stay in the workforce and to share their experience. They must keep playing an active role in society and must lead a healthy, independent and accomplished life. Active aging is essential for achieving the objective of occupying a workforce of 75% employed, aiming to bring at least 20 million people out of poverty by 2020. Each year requires that work be done on a different domain – occupying the workforce, social protection, education and formation, health and social services, homes and public infrastructure”*⁽²⁾.

In the past few decades, life expectancy has increased, especially in developed countries, and once with this increase, also has the standard age for retirement increased, so that in the year 2020, both women and men will retire at the age of 65 years old, and this tendency will still increase. This measure aims to lengthen the active period of people by them paying their dues to the social insurance system, yet the issue is how those people could stay competitive within the workforce and within market competition. Employers want to keep active people who are competitive, flexible and capable of adapting to new conditions and technologies, while a person past a certain age has a series of issues regarding their health and capacity to adapt to these new techniques and technologies. This given, employers wish to “get rid” of these people to bring in younger people who are more adaptable to these new workforce requirements.

The right to work is a fundamentally guaranteed one and part of people who reach the standard retirement age wish to keep on being part of economic life, but there is no favorable framework for this, nor are there programs or projects for encouraging active aging, especially for people past the standard retirement age. They are people with good professional training, with rich experience and who could bring more value to the national economy; as the proverb says „Who doesn’t have an old person should buy one”. There is a well trained workforce in which much has been invested and which at some point we decide that we no longer wish to use because it has reached the retirement age, meaning that a person is only capable and efficient if kept active, and when they retire they become incapable and nobody wants their services anymore. This is an incorrect train of thought, as a person may be creative, efficient and involved even after the retirement age, only that they are

pushed aside of the circles they belonged to up to that point, and sometimes they are even removed from positions of command.

In January 2012, an Euro-barometer was done regarding active aging and it shows that 47% of Romanians believe that their country is „adapted to the needs of aging people”, compared to 65% of people in the EU27 and only 27% of respondents within the occupied population have shown interest towards keeping working past the retirement age, as opposed to 33% in the EU⁽³⁾. The share of people who wish to stay active is small because the living environment is less friendly and society no longer gives them opportunities to grow professionally, and also, their health worsened as years went by.

2. The economic and psychosocial issues facing the elderly

The impact of dismissals or losing their job causes an existential crisis per person, for all age categories, yet the older the person, the worse the impact. Personal perception on losing our job is different from person to person, as some believe in their own potential and quickly reintegrate into the workforce, while others feel devalued, wronged and they lock up.

People who belong to the second category go through four phases (Costișanu, 2014: p. 49): *The shock phase* – during which the said person goes through feelings of helplessness, uselessness, anxiety, confusion, sometimes even panic, and if they realize what they’re going through, they look for help; *The defensive withdrawal phase* – the person tries to prove to themselves that they are the same as always, their thinking becomes rigid, they lose expectations, they refuse to take any change in objectives in account and they see no further perspectives.

Alongside economic issues caused by losing their job and losing the revenue they needed to guarantee the satisfaction of their need for a decent standard of living, psychosocial issues too are important, in particular: increased vulnerability caused by the gradual reduction of their capacity to work as a result of the biological process of aging, inclusively by the increase of natural disease risk; the depreciation of their competences and abilities, a reduced capacity to learn; not knowing their own abilities or failing to adapt their capacities to the market’s needs; reduced capacity to adapt to new situations; low motivation, no longer have expectations; confronting their own negative affective states; anxiety, depression, confusion, panic etc.

Deciding factors ignore these psychosocial issues, rather paying more attention to economic issues, believing that by fixing an economic issue, psychosocial issues are dealt with automatically. This is untrue, if an economic issue is dealt with by occupying the workforce and obtaining a source of revenue, then psychosocial issues, if left untreated, can cause failure at an individual level (depressions, anxiety, a loss of confidence), at a family level (divorce, abandon, detachment, lack of involvement), but also at a social level through not being part of social, group life.

In Romania’s case, the prolonged economic crisis and the current recession have led to an increase in unemployment rates (see Table 1) and a decrease in occupation rates, while contributions to the social insurance system are insufficient for covering the current needs of the pension system.

Table 1. *BIM unemployment rates by age groups, sex and averages for the 2002-2013 period*

Year	The 45-54 year old age group (%)	The 55 year old and over age group (%)	Unemployment rates at a national level (%)
2002	6,02	1,02	8,4
2003	5,35	1,07	7,4
2004	5,80	1,85	6,3
2005	5,32	1,62	5,9
2006	5,55	1,77	5,2
2007	5,12	1,52	4,1
2008	4,47	1,75	4,4
2009	5,43	1,86	7,8
2010	5,32	2,75	7,3
2011	5,17	2,97	7,4
2012	4,52	2,80	7
2013	4,97	3,10	7,2

Source: data available on the INSS website, 2002-20013, at www.inss.ro, press release 89/17.04.2012; press release 92/17.04.2013

Analyzing the 2002-2013 period, from an nationwide unemployment rate point of view, we may see that in the year 2002, we had the highest unemployment rate at 8,4%, when the 76/2002 bill came into effect. After the year 2002, unemployment rates have slowly gone down up till 2007, when they hit 4,1%, but once with the start of the economic-financial crisis at the end of 2007, the unemployment rate made amends for the past ten years, going up to 7,2% by the end of 2013, a bit under 2003's level.

Unemployment rates for people aged 45-54 have followed the same trend as did nationwide levels, but decrease has been slower for this age group, getting to a value of 4.47% by 2008, followed by a slow increase till 2013. The 55 year old and above age group has continued to be affected by unemployment, and as such, the unemployment rate has shown an increase starting from 2003, when the unemployment rate was sitting at 1,02%, reaching 3,1% by 2013.

Given that privatization and reorganization processes have kept being run at an accelerate pace, an increase in workforce occupation rates may be achieved by moving the focus of social protection policies from *passive measures* to *active measures* and by promoting measures to prevent unemployment, especially among youth and among people exposed to the risk of becoming unemployed on the long term. In this context, preventing and combating unemployment among youth and long term unemployment is a major issue of immediate concern for Romania's Government and specialized bodies, towards creating special professional formation measures for youth and adults, according to the needs of the labor market, so as to improve employment capacity and to prolong active life.

3. Law Measures encouraging active aging in Romania

In Romania, legislation regarding encouraging active aging is present within the pension bill 19/2000 followed by bill 76/2002, which has suffered countless supplementations and modifications in the past decade. Bill number 76/2002 and those that followed, regarding the unemployment insurance system and stimulating the workforce, published in the Official Monitor of Romania, part I, number 103 of the 6th of February 2002 has reduced the risk that aged people will lose their job or that they would be marginalized and excluded socially. The bill encourages employers to keep people over 45 years of age active and to hire more people belonging to this group, so as to avoid the need for social protection to intervene and move them from a posture of insured people to a posture of assisted people.

Bill number 250/2013 to modify and complete bill number 76/2002 regarding the unemployment insurance system and encouraging the occupation of workforce and also for modifying bill number 116/2002 regarding the prevention and combating of social marginalization has been published in the Official Monitor, Part I, number 457 of the 24th of July 2013, enactment which contains measures which apply as of 2014 (5). As far as encouraging active aging goes, legislative measures are located in article 85, paragraph (1), (4) and (5).

Art. 85, paragraphs (1), (4) and (5) shall contain the following: (1) Employers who employ, for an indeterminate period, unemployed individuals aged over 45 or who are single supporters of single parent families shall receive monthly, for a period of 12 months, for each person employed belonging to these categories, an amount of money equal to the current value of the social reference indicator in effect, under the obligation to maintain the employment relationship for at least 18 months. (4) Employers who cease their employment relationships with the individuals referred to in paragraphs (1) and (2), ahead of the 18 month term, are required to fully repay the proceeds received from the workforce occupation agencies for each person which has ceased their employment relationship ahead of term, plus interest as per Romania's National Bank's reference values at the time the employment ends, if it has ended due to reasons listed in article 83, paragraph (2). (5) Employers who employ, according to the law, unemployed individuals whom, within 5 days of being employed, fulfill, according to the law, the conditions to require partial anticipated pension, or to have their age limit pension granted, if they do not fulfill the requirements for receiving anticipated partial pension, shall receive on a monthly basis, for the duration of being employed, to the time when the above conditions are met, proceeds equal to the value of the social reference indicator in effect, granted from the unemployment insurance budget."

Source: http://www.avocatnet.ro/content/articles/id_33896/Legea-nr-250-2013-modificarea-si-completarea-Legii-nr-76-2002-sistemul-asigurarilor-pentru-somaj-si-stimularea-ocuparii-fortei-de-munca.html#ixzz2v5LWawTS

4. Impact of measures to encourage active aging

We could say that the implementation of bill 76/2002 has had a significant impact on the 45-55 year age group and less so on the 55 and over age group, which entitles us to say, as the numbers prove (see Table 2), that employers were more motivated to hire unemployed individuals over 45 years of age or unemployed single supporters of single parent families, and less interested in hiring those who are 5 years away from becoming pensioned by subsidizing the job.

Table 2. *The impact of measures encouraging active aging*

Year	Financing to encourage employers to hire disadvantaged jobless people Thousands lei, million lei RON (after year 2005)	The hiring of jobless people over 45 years or jobless single supporters of single parent families, by subsidizing jobs	The hiring of unemployed whom are 3 years away from retirement by subsidizing the job*
2002	61437	17.490	-
2003	420978	20.752	-
2004	622989	25.586	381
2005	640542	20.764	622
2006	75182,4	21.323	567
2007	90180,7	21.862	493
2008	101500,4	18.356	350
2009	70343,2	4.750	58
2010	55590,1	14.229	207
2011	82216,1	20.312	266
2012	85185,3	15.932	204
2013	86005,6	12.484	177

*Up till 2013, the measure's name has been „The hiring of the unemployed whom are 3 years away from retiring through subsidizing jobs”

Source: ANOFM, data available on the agency's website www.anofm.ro

Analyzing the statistical data provided by ANOFM, we can say (see Table 2) that starting from when bill 76/2002, article 85 has been implemented, payments have been made to encourage employers to hire unemployed individuals belonging to the disadvantaged and among people who have 5 years to becoming retired through subsidizing the jobs. The amount of money allocated to implementing policies meant to encourage active aging have steadily increased up to 2008, going up to 101500.4 million lei, after this period the economic crisis starting, payments registering a decrease. In 2009, payments have gone down by 70% as compared to 2008, but were still over how much was given out when the bill was implemented in 2002, by about 14%. In 2010, payments continued to drop, reaching the lowest value of the previous 5 years, and starting from 2011, payments have started registering increasing values, but were below 2007's level.

If we were to analyze how many jobless over 45 years old were hired (see Table 2), their count has risen, reaching a maximum of 25.586 individuals in 2004, afterwards a slow decrease occurred up to 2008, reaching the lowest point of 4.750 individuals in 2009. In 2010, the hiring count tripled as compared to 2009, going up to 14.229 individuals, and 20.312 hires were done in 2011, slightly below 2005's level. In 2012 and 2013, hires were still going down, registering values of 15.932 and 12.484 individuals hired.

As far as hiring unemployed individuals whom are 5 years away from retirement (according to the new legal regulations) through subsidizing the jobs, the number of individuals whom were hired has oscillated in the 2004-2013 period. The highest value was recorded in 2005, that being 622 individuals hired according to the law, and the lowest value was recorded in 2009, 58 individuals. The effects of the crisis' spread were felt throughout all domains and aspects of economic and social life, decreasing and low values being registered.

The measure by which employers hire unemployed whom are 5 years away from retirement, according to the law, was a measure that did not truly motivate employers, as the value of the social indicator of reference (SIR), given out from the unemployment insurance budget for this law, is of 500 lei. Starting from the 1st of July 2014, the minimum wage has been of 900 lei, under which circumstances, employers may not hire for less payment, according to the law, the difference in payment being covered for by the employers, which is unfavorable to them, given the current economic and social situation. This given, the count of people hired based upon this measure has decreased as compared to the 2005-2009 period, there being 177 hires in 2013, according to law.

Legislative measures applied in Romania with the purpose of encouraging active aging have encouraged nationwide occupation rates, but less so for the 45-65 age group. To this end, encouraging active aging so as to ensure opportunities for the aged workforce grants benefits to employers too through mixing in work teams made of individuals of different ages, who bring in the advantages of each age group, and in addition to this, there will also be a positive impact on employees in terms of forming an understanding among generations and on improving young people's attitude on their older colleagues.

Measures meant to encourage active aging have not focused on the fact that each individual is met with certain issues when they lose their job for various reasons, and to this end, we believe that organizing a program through which people may undergo professional and psychological counseling per person or in groups would be very useful, so as to help diminish anxiety and depression, raise

people's confidence and to help them pass from the defensive retreat phase to the action and change phase as far as career orientation goes. During the professional and psychological counseling sessions, an analysis will be done for every person: objectives, interests and aims; an evaluation of their personality, aptitudes, competences and interests; modeling their thinking in optimal terms, which requires that we realistically identify and evaluate the opportunities and risks behind taking on a positive or a negative attitude; defining where to act, identifying resources or channels through which one may find a job; monitoring job ads, going to domain related fairs, online job fairs, contacting recruitment agencies, active presence on discussion forums and even telling friends about the issue and so on.

We believe that mixing economic measures with social and psychological measures will help increase occupancy, especially for the 45-65 age group, so that unemployment rates may be brought down at a national level, and to increase welfare and professional competences at an individual level, through active participation to economic and social life.

5. Conclusions

The year 2012 has been declared the European Year of Active Aging and Solidarity among Generations, opportunity when aged people's contribution to society's development is made visible and to draw the attention of deciding factors to take measures to encourage active aging and improve solidarity among generations. Implementing policies and programs which would favor active aging means, first of all, that we must take it upon ourselves to adapt the environment to aged individuals' needs, whom are still able and willing to work and contribute to society's economic and social life. Through overhauling current policies, we must find a balance between the economic-financial situation and the social situation, so that the two do not conflict, but instead condition each other so that people may feel that measures taken will help bring a bonus of economic and social welfare.

Notes

- (1) Article 2012, the European Year for Active Ageing and Solidarity between Generations, available online <http://www.imarte.ro/voluntariat-socila/imbatanirea-activa-si-solidaritatea-intre-generatii-388.html>
- (2) Article available on the website of Mr. László Andor, European Commissioner for Employment, Social Affairs and Inclusion http://ec.europa.eu/commission_2010-2014/andor/index_en.htm
- (3) Article available online http://ec.europa.eu/romania/news/02032012_lansarea_anului_european_al_imbatranirii_active, access 21.02.2014
- (4) http://www.avocatnet.ro/content/articles/id_33896/Legea-nr-250-2013-modificarea-si-completarea-Legii-nr-76-2002-sistemul-asigurarilor-pentru-somaj-si-stimularea-ocuparii-fortei-de-munca.html#ixzz2v5N0lhO3

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*** Law no.76/2002 on the unemployment insurance system and stimulation of employment-related amendments

Europe in the context of the global economic crisis

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Abstract. *Since 2008, Europe has seen an economic downturn that has brought several nations to the brink of bankruptcy - and its resounding effects are still being felt.*

The recession is changing the way many people live and the way they perceive their prospects for the near and more distant future. Its longer term consequences will not be known for some time, but something can be learned from the effect on individuals and households who experienced financial hardship.

Europe is in the middle of an economic and social storm, although the turmoil since the mid-2008 originated elsewhere. Within this dynamics, the faulty design of the 'single currency' is a key element that was dividing the 'core' of Northern Europe and the 'periphery', mostly composed of Southern European countries.

A way out of the crisis requires not only monetary reforms and expansionary coordinated fiscal measures, but also a wholesale change of economic model. This latter must be built upon a new 'engine' of demand and growth.

Keywords: economic crisis, European construction, austerity policies, behavioral economics.

JEL Classification: E00, E03, F60.

Europe, and more specifically the Eurozone, had a really hard time trying to emerge from the 2008 financial crisis.

The European construction, and particularly the Eurozone, was in deadlock.

After 2008, the strategy of European governments was articulated around two axes:

- (i) austerity policies generalized through the economy, that are based on internal devaluations, i.e. wages, jobs and price compression and reduction of public expenditures;
- (ii) and through successive steps and constraints, the implementation of new institutions and rules to provide the funding required by countries in big financial difficulties.

The process of institutional reform is still incomplete and the way ahead doesn't look so bright. Every condition contributes to limit growth, particularly in south Europe. Making the management of public debt is problematic, although it is precisely this which commands the most attention.

Even the European elite is taking advantage of any further implementation of liberal policies, by reducing social expenditure, which increases inequality and obliges households to rely more on private insurance. This happened because everybody has started to doubt the sustainability of such a strategy since summer 2011. First it happened for the reason that the development of the American debt crisis and the fragility of the American recovery were slow and then, because of the degradation of the economic situation in Europe linked with the generalization of austerity plans. This, along with the assaults against the Spanish and Italian debts, to which European banks are very exposed, was the main reason for all the reforms.

All this explains the measures adopted since the last trimester of 2011 to allow a temporary relaxing of the offensives of financial markets, but tensions reappeared in spring of 2012. To face this repetitive financial pressure on the frailest euro countries, some consider that Europe should move towards some kind of financial federalism, which could take several forms.

In order to reinforce the appeal of EU citizenship and to reduce inequality between EU citizens, the European Union should improve the general conditions of access to social services or public services (health and family aid) and to establish goals in each major field (minimum wage, social protection and pension schemes).

The minimum wage system is to be stretched to every member state, taking into account the present productivity gaps (Cristescu et al., 2014). More compelling procedures are considered to force the respect of minimal norms, for example concerning pension amounts as a percentage of the revenue per capita.

If the EU was to give a new importance to industrial policy over competition policy it could be expressed around the following three points:

- (i) a more dynamic research and innovation policy;
- (ii) the reintegration of large public programs and
- (iii) upscale regional policies.

Research policies could be enhanced through better harmonization with national policies and greater support to new instruments.

Regarding industrial policies, large public programs should be reformed.

Technology-oriented public programs in the areas of energy, ecological transition, telecommunications or aerospace (sometimes military) would outgrow innovation in private firms. The development of European programming would allow the decrease of repetitions at the national level and for more advantage to be taken of synergies. Large infrastructure programs are a driving force for growth through the externalities they create. Europe could design managerial schemes in the fields of railway transport, electricity, gas, ecological transition, telecommunications or postal services.

This is not the time to review the day-to-day policy recommendations associated with the evolution of the European crisis. The sizes of these are multiple, as are the suggestions: from the banking union to the fiscal union, from the Eurobond to an increase in public investments, each seeming unable to work alone. The releasing of the European real 'differences' includes an intervention that concerns not only an expansion on the demand side and/or a recoupling of wages to productivity. A solid intervention on the supply side and in the productive structure, along with financial stabilization, is also called for. Being a fiscal union in the short term is utopian.

Simultaneously, it is foreseen that EU social policy will need to be supported significantly, with interventions focusing on employment creation and on the dimensions of national governments to sustain domestic social safety nets.

Slowly but surely, the austerity policies based solely on coordinated expansionary monetary and fiscal reforms (generalized policy at EU level), with local minimum or maximum levels, have proven lack of effectiveness. They continued to generate new tensions at various levels of society, both in overexposed and underdeveloped countries and in the relatively stable and economically strong ones.

In this new political trend, imposed by the objective reality, European Commission President Jose Manuel Barroso has made in 2013 a number of statements suggesting acute need to change economic policies in Europe: "austerity policy followed by the European Union has no social and political support needed to operate, EU should put more emphasis on policies to stimulate economic growth in the short term and less on reducing budget expenditures, although I believe that this policy is fundamentally correct, I also believe that it has reached its limits", said Barroso at a press conference. But advocates of austerity in the EU feel like it entered in a prolonged pessimism and think about incentives. Of course public debt must eventually be paid, ideal through economic growth, because if not, will be paid through inflation and/or the next crisis could be worse and longer.

The financial crisis has decreased primarily the potential growth for everyone, not only for Europe. It is clear that the healthy solution to counteract this problem cannot be printing money or currency depreciation, but supporting sustainable economic growth through massive investment, increasing productivity and implementing structural reforms (Boyer, 2013). If healthy solution is supporting sustainable economic growth through massive investments without printing money or currency depreciation, the question is where the money for investments comes from. For example Greece where would get its money to invest? Who would lend Greece the money? There is no choice but austerity for Greece? And not only Greece is in this situation, there are very few countries that in current conditions can count on investment.

Europe initially chose exaggerated austerity, generalized and therefore unwise. An austerity focused almost exclusively on the budget but as numbers and not as a structure, focusing more on its appearance and not on the nominal structure. If Europe would have stopped the beginning of the crisis with reforms to strengthen the banking system (as the American model) and not austerity package,

applying shock type strategies, things certainly would have been different today. In addition, in Europe the problem was reduced to the idea of dropping an indicator or another. The real stake ought to be the transition from what is called a quantitative fiscal adjustment to a qualitative one. Relying almost exclusively on austerity (the quantitative, accounting type), the gap in competitiveness between center and periphery in Europe had deepened, periphery being practically unable to have economic growth.

Unlike Europe, America has chosen (avoiding with this occasion triggering fiscal cliff) the solution of a cautious austerity with gradual and sustainable fiscal adjustment both in political terms, but also in economic and social ones. Prudent spending cuts (especially the ineffective ones) as a gradual plan, tax hikes for the rich only (without affecting the middle class, which represents the majority) and as far as possible quantitative relaxation, "quantitative easing", strong injection of money from the central bank for reviving lending, economic growth, reduce unemployment, etc. It thus relies on economic growth, reduce unemployment, etc. with all the advantages that may arise on the medium and long term. Instead, however, Europe has chosen the solution that goes entirely on the idea of austerity relying on a combination of massive spending cuts/tax increases, prudent money injection by the ECB for reviving lending. Theoretically, the combination may be beneficial. Basically, the solution may be viable for the German economy, for example, but with little chance to be applied equally and especially with equal effect throughout the European economy. German economic policy is good only for Germany and the rest should take specific measures. German solution proved that it is not a universal panacea.

It thus becomes increasingly obvious to everyone the idea that outlines two distinct patterns of growth: the US one (that otherwise Japan agrees with, but it seems that France is also agreeing) versus the German model. Europe will have to choose which way is going, as soon as possible, and especially with what cost. It is clear that Europe is improvising, not only in managing the debt crisis, fiscal crisis or devising a plan to bring economic growth, but also in managing the recent banking crisis. Markets will react by moving capital from the periphery to the center, increasing interest rates, with implications for deepening European recession. It may come as a new vicious circle.

The latest example of improvisation in this regard, in the UE28, is Cyprus. Even if the financial problems of Cyprus will be solved, the European financial system recorded on this occasion rather a setback than a step forward. "Thanks" to the improvised solutions, the vulnerability of European construction increases, at least in terms of the robustness of the principles of the monetary union. The issue of capital controls, for example, appeared at the same time increases vulnerability once again. Over time the degree of "optimal" capital mobility has been widely debated in the economic literature, the economists' views remain divergent from this point of view. Best or not, the European Monetary Union has set rules on capital account liberalization, and their change that doesn't work after economic rules (even if restrictions on capital movement are necessary in isolated cases), will once again affect confidence in the euro area.

That does not mean that a state of the Eurozone could return to the national currency when it needs it. In addition, European banking crisis is far from over. More recently it seems that a banking crisis in Slovenia is almost inevitable, which means that the euro area will soon be able to check another failure. Is this the beginning of the end for the Eurozone?

The real stake in this period of struggle against crisis and economic downturn should therefore be rather shifting from what is called a quantitative fiscal adjustment to a qualitative one. So, it is true that a policy of stimulating the economy keeps it afloat, so that in times of crisis and unemployment capital injection creates jobs and maintains investment optimism, while austerity policy generates panic and paralysis. Many economists, followers of the austerity model, argue that nothing seriously happened as long as the public debt does not increase over the GDP.

On the other hand, if some fundamental qualitative changes do not appear in a relatively short time, the policy stimulus can become a bomb. In the US these changes delay to occur because of political deadlock.

In conclusion, the question arises: *What essential element of detail is missed by the financial and economic sciences that they are completely paralyzed in the face of ongoing social realities - more so as the crisis is repeated after a pattern almost identical to the Great Depression during 1929-1933?* The correct answer to this question - according to unusual but very interesting theories developed by behavioural economics - necessarily implies two complementary components whose combination in intensity/maximum concentration is lethal, due to basic elements of market economy, namely continuation - by any means possible - of consumption, as a vital engine of this economy.

- *the imperfection of the economic behaviour of individuals or various human communities in relation with the perfection of the ideal model included in classical economics theories;*
- *material elements, triggering objectives for the economic and financial crisis due to favouring factors, specific for the capitalist economy market.*

Why do so many economists now reconsider the emerging branch of the economy called behavioral economics? Why this new trend to put a high value on an unconventional branch of economics - seen as an interesting mix between actual economy, psychological and behavioral logic and lately even neuro-psychiatry?

Because we take in to account to eliminate at least one of the two complementary components whose combination thus inevitably leading to the triggering of a major crisis. Considering all these aspects, there are two courses of action: a)relinquishing capitalist economy, free market economy called consumer economy, which inevitably leads to the creation of favorable prerequisites to the development of these crises; b)educating democratic society individuals and, implicitly, the communities they formed- in the sense of a deeper understanding of psychological and neuro-motor mechanisms leading to the development and perpetuation of irrational economic behaviour, severely damaging to themselves in a long-term and global context.

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Higher education and the labour market: evidence from Romania and European Union member states

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Abstract. *Considering the expansion process of higher education within European Union, the paper aims at answering the question “what are the effects of higher education expansion on labour market (over-supply of graduates, over-qualification of graduates, skill mismatch)?”. Thus, the study provides evidence on both the evolution of higher education, in terms of input and output measures (enrolled students, public spending, graduates), as well as the evolution of labour market outcomes, emphasizing the progress EU member states recorded in meeting the national targets assumed through the Europe 2020 strategy. Also, the study offers some conclusions and policy implications.*

Keywords: higher education, labour market, public funding, unemployment, Europe 2020 strategy.

JEL Classification: I22, I23, I28, J21, J24.

Introduction

As a reaction to both the partially achieved objectives stated through the Lisbon Strategy and the effects of the economic crisis, in order to boost the potential of the EU for sustainable growth and competitiveness, the European Commission launched, in 2010, the strategy for jobs and growth, Europe 2020, setting out targets to be accomplished within employment, through: increasing labour market participation, developing a skilled workforce prepared for labour market needs, improving the performance of education, increasing participation in tertiary education and promoting social inclusion. Thus, Europe considers that higher education represents a key driver of a knowledge-based society and plays an important role in achieving the targets assumed in what concerns the most important labour market outcome: employment.

During the last two decades, the expansion process of higher education within European Union led to significant changes in the level of public funding per student, as well as in the supply of university graduates, with direct impact on labour market outcomes. Even though higher education has always been considered as that level of education able to reduce the risk of unemployment, once the number of graduates faced a significant increase, the situation changed and continues to change even nowadays.

Moreover, as previous research shows, graduates' employment is also influenced by the field of study completed within higher education. Also, the mismatch between the expansion of graduates from different fields of study and the changing patterns of the labour market demand affects both the short-term and long-term outcomes of the labour market.

Considering all these aspects, the present paper aims to answer the following question: what are the effects of higher education expansion on labour market (over-supply of graduates, over-qualification of graduates, skill mismatch)? To answer this research question we conducted an analysis on the evolution of higher education, in terms of input and output measures (enrolled students, public spending per student, graduates), as well as on the evolution of labour market outcomes in the EU28 member states (employment/unemployment rate, over-qualification). The aim is to present our findings that are relevant to the research question, also by emphasizing the progress EU members states recorded in meeting the national targets assumed through the Europe 2020 strategy. Moreover, the paper will also offer some conclusions and policy implications based on the results obtained.

For the scientific approach proposed in the paper, we used descriptive methods to highlight the relation between higher education and labour market in Romania and EU member states. We dealt with data and technical reports on employment and elements related to higher education, published by both national and international institutions.

The paper is organised as follows. The first section focuses on the conceptual framework for analyzing the link between higher education and labour market, also through providing a review of the most important contributions in the field of higher education (expansion) and labour market outcomes. In the second section we present and discuss the results of the investigation undertaken. The last section summarises the main findings and concludes.

Though several research studies have treated the relationship between higher education and labour market, the present paper underlines the particular case of Romania and other EU member states, emphasizing both the progress registered by these countries toward accomplishing the targets of Europe 2020 Strategy and the domino effects determined by changes occurred within input indicators in the relationship between higher education and labour market.

1. Higher education (expansion) - funding policy - labour market linkages

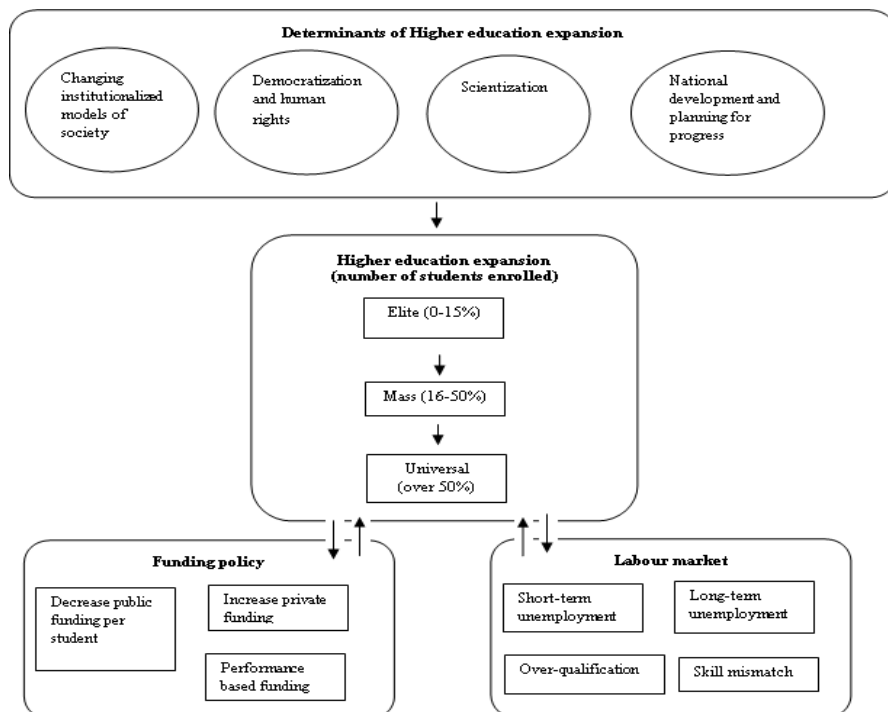
The issue of higher education expansion has captured the interest of many researchers that underlined the determinant factors of this phenomenon (national and global factors), as well as the consequences on labour market.

Changing institutionalized models of society (“national doctrinal statements about the purposes of education shifted from a model of education as fitting people into a static society and labour market to a conception of education as producing human capital for national socioeconomic expansion”), democratization and human rights (“global democratization has a strong positive effect on higher-education enrolment. Education expands faster in time periods when democracy is more prevalent in the world”), scientization (“scientization increases the apparent utility of higher education for a wide range of social roles”) and national development and planning for progress (“as nations mobilize around modern conceptions of national development, enrollments grow faster”) have fostered the expansion of higher education in the twentieth century, especially in the decades after the World War II (Schofer and Meyer, 2005: pp. 902-905).

Along with these changes emerged the issue of transition from elite to mass and even universal access into higher education. According to (Trow, 2007: pp. 243-244) three stages of higher education development were defined depending on the proportion of population enrolled in higher education: elite higher education - between 0-15% (functions - “shaping mind and character of ruling class; a preparation for elite roles”, access seen as “a privilege of birth or talent or both”), mass higher education – between 16-50% (functions – “transmission of skills; preparation for broader range of technical and economic elite roles”; access seen as “a right for those with certain qualifications”) and universal higher education – over 50% (functions – “adaptation of `whole population` to rapid social and technological change”; access seen as “an obligation for the middle and upper classes”).

Expanding higher education entailed governments to decrease the level of public funding per student and to focus more on attracting private resources to ensure the widening access to higher education. For example, (Yang and McCall, 2014: pp. 25-36) underline that there is a negative relationship between the level of public funding per student and the number of students enrolled in higher education, even if the GDP per capita and the share of public expenditure on education in GDP positively influence the number of students enrolled in the system.

Thus, higher education expansion and its determinants influence both the funding policy of higher education and the labour market features (Figure 1).

Figure 1. Basic framework of higher education expansion – funding policy - labour market linkages

Source: author's representation based on information extracted from several research papers.

According to the study conducted by (Plumper and Schneider, 2007: pp. 631-653) state governments use higher education policies as an active instrument of labour market intervention. Thus, the transition from a higher education system in which the access of individuals to such educational qualification was limited to a mass higher education system in which the number of students increased rapidly could determine an unemployment decrease without negative implications on the public budget, in times of economic crisis. The results obtained by the same researchers emphasize that states with a high level of unemployment recorded a much higher level of students enrolled in higher education, compared to the total population, and that these states allocate a lower level of funding per student, treating higher education as a cheap remedy against labour market tensions.

Moreover, expanding access to higher education, even in terms of private funding, can often lead to "over-qualified" labour force and also to skill mismatches for different fields of studies. In this context, (Carroll and Tani, 2013: pp. 207-281) studied the incidence of over-qualification among undergraduate graduates from Australia and the effects of this phenomenon on the level of income earned by them. Research results show that between 24% and 37% of graduates were over-educated shortly after the completion of undergraduate studies, particularly among young women. However, the authors point out that over-qualified rate of people varies by field of study completed and is in a strong relationship with labour market demand. However, three years after graduation, the phenomenon of over-qualification diminishes but does not disappear. In terms of impact of over-qualification on the level of revenues, the study shows that young people do not feel the effect of penalizing the over-qualification, while those over-qualified under the second and third age experience a significant reduction in income, compared to the income corresponding to the qualifications held.

In what concerns the studies conducted in the European Union on the relationship between higher education and labour market, the issues considered are quite diverse. A detailed analysis regarding the

impact of a graduate degree in higher education, but also the impact of the field of study on unemployment in the short and long term in EU was conducted by (Nunez and Livanos, 2010: pp. 475-487). Thus, a diploma of graduation from higher education tends to reduce, in a much more significant way the short-term unemployment than the long-term unemployment. Though, significant differences between fields of study emerged and among those fields of study having the most significant effect on reducing unemployment are: health, education and engineering; health provides employability above average while engineering and education have a positive effect on reducing short-term unemployment rather than long-term unemployment. On the opposite side are fields of study such as science, biology, environment and IT recording an increase in employability and reduction in long-term unemployment. Another approach on how employment opportunities of young graduates vary on the field of study is that presented by (Livanos, 2010: pp. 473-489), in the research conducted only in Greece, for the period of 2000-2004. The study shows that graduates in fields of study that have corresponding mainly in the private sector of the labour market (technical sciences and IT) are much more likely to be unemployed than graduates of traditional fields of study in the public sector labour market (sociology, humanities). The researcher also drew the conclusion that the Greek higher education system continues to produce graduates in fields of study focused on meeting the needs of the public sector.

The issue of the impact of the economic crisis on higher education graduates' employment in EU15, was also addressed by (Livanos and Nunez, 2012: pp. 10-16), showing that a worsening of labour market conditions for graduates of higher education was registered in 2009 compared to the year of 2007. Moreover, the researchers point out that, in fact, the convergence of higher education systems in the EU seeks to improve the quality and reliability of higher education systems in those countries that have difficulties in providing the employability of graduates. Preoccupied by the evolution of matching higher education and job, (Maselli, 2012: pp. 22-30) anticipates, based on trends in the period 2000-2010, that European countries will encounter inconsistencies in the next 10 years on the skills of graduates. Thus, in the EU27, one third of the total workforce holds a qualification, and in the analysed period this category of workforce increased more than the demand for such employees. Though, the researcher points out that there is still room for expansion of higher education, without neglecting the fact that a present match could attract a significant mismatch in the future.

2. Results and discussions

Using descriptive methods and data on enrolled students, public spending of higher education, higher education graduates, employment and the progress registered by EU member states on achieving the targets of Europe 2020 strategy, we highlighted the effects the continuous changes within higher education might have on labour market outcomes, both in Romania and in EU member states. The results are presented in the following three independent sub-sections.

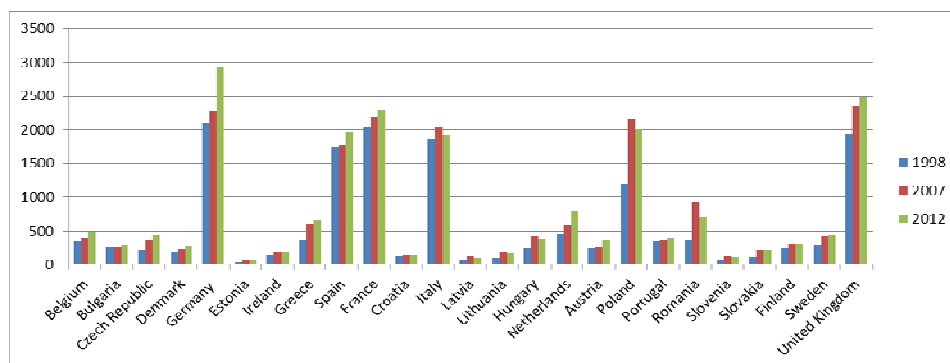
2.1. Higher education evolution in Romania and other European Union member states

Under various endogenous and exogenous factors, higher education policy faced significant changes in Romania and other European Union member states, in the last decades (1998-2012).

The analysis of enrolled students in higher education (ISCED 5-6), in 1998, before the economic crisis (2007) and in the post-crisis year of 2012, shows that most of the European Union countries registered a sustained upward trend (Belgium, Bulgaria, the Czech Republic, Denmark, Germany, Greece, Spain, France, Croatia, Netherlands, Austria, Portugal, Slovakia, Sweden and the UK). Though, until the year of 2007 countries like Estonia, Italy, Latvia, Lithuania, Hungary, Poland, Romania, Slovenia and

Finland witnessed an increase in the number of enrolled students, in the post-crisis period the number of enrolled students declined significantly (Figure 2).

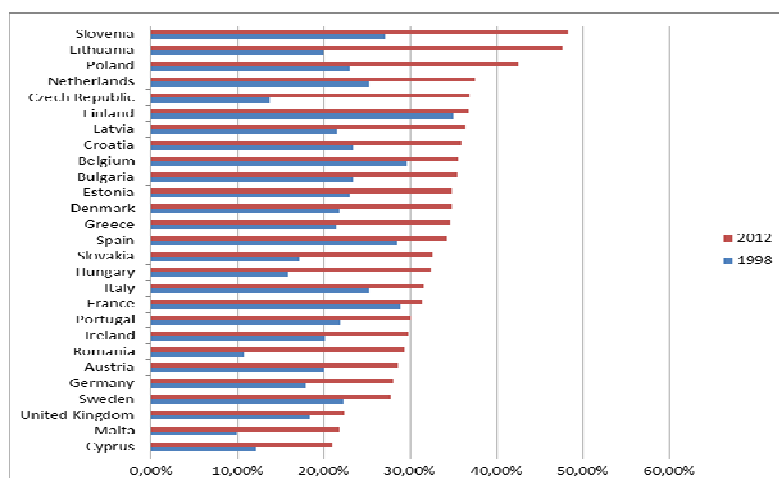
Figure 2. Enrollments in higher education (ISCED 5-6) in EU member states, in 1998, 2007 and 2012



Source: processed by the author, using data from Eurostat, november 2014.

Between 1998 and 2012, the proportion of students aged 20-24 enrolled in higher education in total population aged 20-24 grew spectacularly, in all states (Figure 3). According to Trow's classification of higher education systems based on the percentage of population enrolled in higher education in total population of corresponding age, in 1998 only four European states (Czech Republic, Cyprus, Romania and Malta) embraced an elite higher education system, as they enrolled under 15% of the age group. The other states were oriented to a mass higher education system, enrolling over 15 % of the age group, but without exceeding 35% of the age group (Belgium having 29.63% and Finland 34.98% of the 20-24 age group enrolled in higher education). But, things changed over the analysed period and, in 2012 all EU member states exceeded the 15% limit, by adopting the massification process of higher education. Thus, 8 countries (Germany, Ireland, Cyprus, Malta, Austria, Romania, Sweden, UK) enrolled in higher education between 20% and 30% of the age group, other 16 member states enrolled between 30% and 40% of the age group and 3 countries are going to touch the limit of 50% of the age group population (Poland – 42.49%, Lithuania- 47.63% and Slovenia – 48.32%), moving towards an universal higher education system.

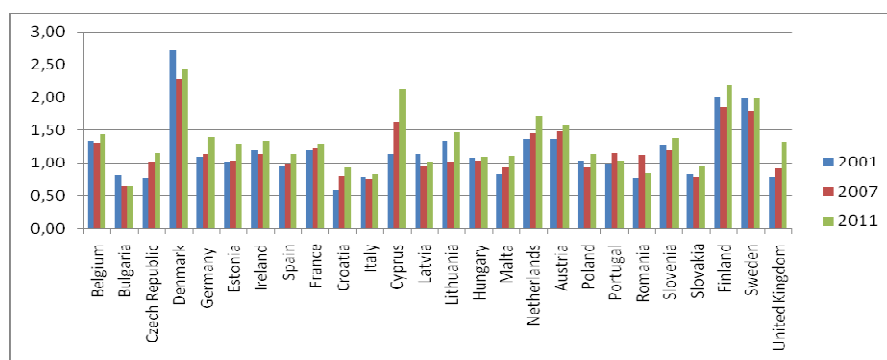
Figure 3. Proportion of students aged 20-24 enrolled in higher education (ISCED 5-6) in total population aged 20-24, in EU member states, in 1998 and 2012



Source: processed by the author, using data from Eurostat, november 2014.

The rising number of enrolled students determined the adjustment of the funding policy of higher education in most of the European countries, on one hand in terms of public expenditures allocated to higher education as a share of GDP (Figure 4) and on the other hand in terms of criteria used for higher education funding of universities.

Figure 4. *Expenditure on higher education (ISCED 5-6) as % of GD, in EU member states, in 2001, 2007 and 2011*

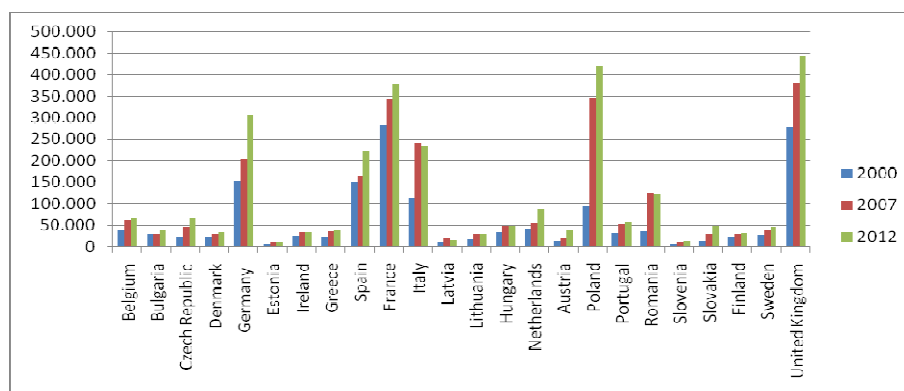


Source: processed by the author, using data from Eurostat, november 2014.

As shown in the previous figure, only a few EU member states (Czech Republic, Germany, Spain, France, Croatia, Cyprus, Malta, Netherlands, Austria and UK) managed to sustain an increase in the share of GDP allocated for funding higher education in both the pre-crisis (2001-2007) and the post-crisis period (2011). Bulgaria, Denmark, Finland and Sweden followed the same pattern, i.e. the share of GDP allocated to higher education funding decreased between 2001 and 2007 and recovered in the post-crisis year of 2011. Romania followed a completely different pattern. Thus, the percentage of GDP allocated for higher education funding decreased significantly in the post-crisis period, getting closer to the value recorded in 2001.

As concerning the number of higher education graduates, the upward trend registered within enrolments was maintained in the number of graduates in most European countries, as shown in Figure 5. Though, the graduates' growth rate was higher in the pre-crisis period compared with the post-crisis period. Moreover, in the post-crisis period 6 EU countries (Estonia, Ireland, Italy, Latvia, Lithuania and Romania) faced reductions in the number of graduates varying from 1.92% (Ireland) to 24.64% (Latvia).

Figure 5. *Number of higher education graduates (ISCED 5-6), in EU member states, in 2000, 2007 and 2012*



Source: processed by the author, using data from Eurostat, november 2014.

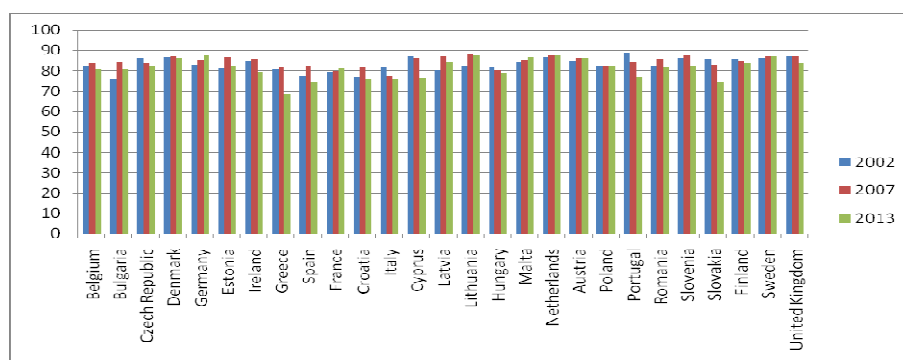
2.2. Labour market evolution in Romania and other European Union member states

As predictable, the massification process of higher education and the tendency of several EU member states towards an universal higher education reached its objectives through the transmission of skills to those individuals with certain qualifications in order to adapt a great part of population to the requirements emerged on labour market as a response to rapid social and technological changes occurred in the last years.

Thus, the evolution of employment in strong correlation with the level of education highlighted, in part, the incidence of the massification process of higher education.

Regarding the employment of the population aged 20-64 having completed higher education (Figure 6), in 2002 the employment rate was between 75.7% (Bulgaria) and 88.8% (Portugal).

Figure 6. Employment rate of higher education graduates (ISCED 5-6), 20-64 years, in EU member states, in 2002, 2007 and 2013

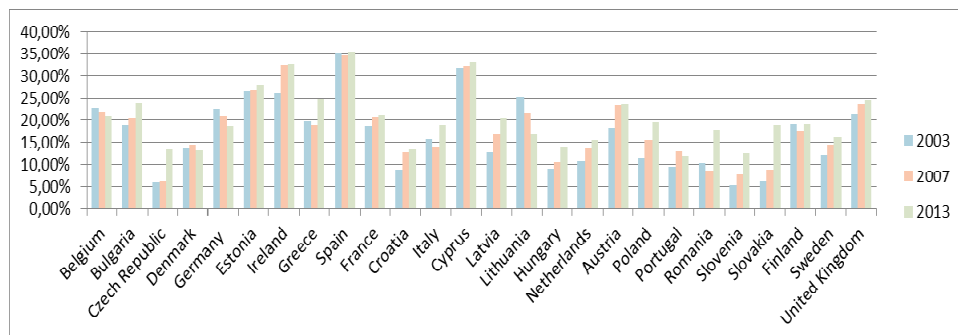


Source: processed by the author, using data from Eurostat, november 2014.

Until the year 2007, the employment rate within population aged 20-64 having completed higher education grew in almost all the analysed states, with a few exceptions (Czech Republic, Italy, Cyprus, Hungary and Slovakia). But, after the economic crisis the employment rate of population aged 20-64 who graduated higher education decreased dramatically in most of the states, excepting Germany, France, Malta and Sweden where the employment rate of this category of population grew.

The situation is quite delicate for those states facing in 2013 a much lower employment rate within the population aged 20-64 who graduated higher education than that registered in 2002 (Belgium, Czech Republic, Denmark, Ireland, Greece, Spain, Croatia, Italy, Cyprus, Hungary, Poland, Portugal, Romania, Slovenia, Slovakia, Finland and UK). This fact could happen either because many of the graduates leave the universities unprepared for the labour market, or because they work in jobs requiring lower qualifications than the ones they have – over-qualification (Figure 7), or even because the job they have requires an inferior level of education than the one they graduated – qualification mismatch (Figure 8). Regarding the issue of unprepared graduates for labour market, universities play an important role in transmitting the proper skills (both theoretical and practical) to their students, accordingly to each field of study. Research conducted on effective methods to prepare students for their future job is quite broad. As (Tartavulea et al., 2012, pp. 140) stated in their article, at least within the field of economics “business simulation method definitively brings an improvement in the understanding of economic principles by students. The dynamic interaction with an enterprise functions..., gives students more confidence about their knowledge... this experience will help them find a job and perform at it”.

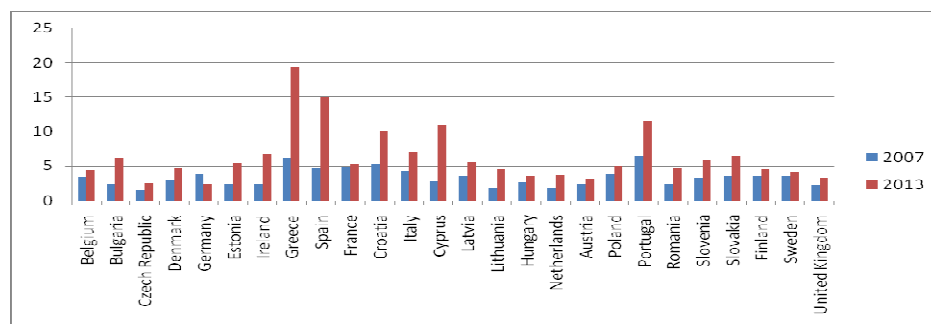
Figure 7. Overqualification (%). High skilled workers (ISCED 5-6) in medium and/or low-silled jobs (ISCO 4-9), in EU member states, in 2003, 2007 and 2013



Source: processed by the author, using data from Eurostat, november 2014.

As shown in the previous figure, the highest number of over-qualified workers holding a higher education degree is registered, in 2013, in countries like Spain, Cyprus, Ireland, Estonia and Greece. The case of Romanian higher education employees, working in medium or low-skilled jobs is not much different than that of the countries holding the top 5 positions. Though, the situation of the high-skilled workers engaged in medium and low-skilled jobs has doubled. If we consider the unemployment rate of population, aged 25-64, who graduated higher education as a proxy variable for highlighting the qualification mismatch within the workforce with tertiary education, we conclude that Greece, Spain and Portugal hold the top 3 positions in over-qualification of higher education graduates (Figure 8).

Figure 8. Unemployment rate of higher education graduates (ISCED 5-6), 25-64 years, in EU member states, in 2007 and 2013



Source: processed by the author, using data from Eurostat, november 2014.

Thus, because of the lack of proper jobs within the labour market, as well as because of the imbalances in the supply and demand of high-skilled labour force, phenomena as qualification mismatch, over-qualification and over-supply of higher education graduates might appear and capture the interest of policy makers.

2.3. Meeting the national targets on higher education and employment assumed by EU member states through the Europe 2020 strategy

Considering the free migration of students and workers within EU member states, as well as the ageing population, the particular issue of increasing labour market participation, by developing a skilled workforce prepared for labour market needs, captured the attention of EU member states. Thus, on the European agenda for 2020 global and national targets within higher education attainment and employment rate were settled in 2010, pushing the member states to undertake significant reforms in order to achieve them.

Thus, in the perspective of year 2020 the national targets assumed by Romania are situated below the European Union targets (Table 1).

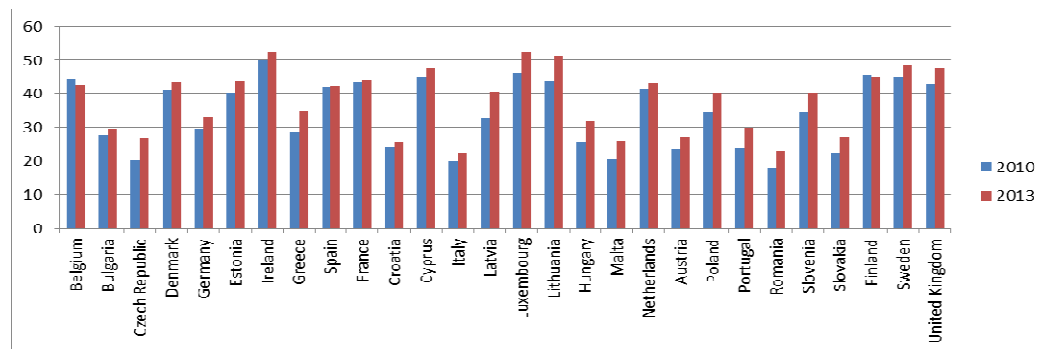
Table 1. *Targets of the Europe 2020 Strategy for EU and Romania*

Indicator	EU 28	Romania	Romania 2013
Employment rate of population aged 20-64	75%	70%	63,9%
Share of population aged 30-34 having completed tertiary or equivalent education	40%	26,7%	22,8%

Source: European Commission, Europe 2020, http://ec.europa.eu/europe2020/index_en.htm, November 2014

Regarding the tertiary education attainment, in 2013 compared to the starting point of the Europe 2020 Strategy, most of the EU 28 member states (Figure 9) registered an increase in the level of this indicator, except Belgium and Finland having higher education attainment rates above 40%, but recently showing decreasing rates. Though, while Finland exceeded its target regarding the share of population aged 30-34 having completed tertiary or equivalent education, Belgium still needs a consistent effort and particular reforms to recover the reduction recorded since 2010 and also to ensure the achievement of the national target by 2020.

Figure 9. *Higher education (ISCED 5-6) attainment rate, 30-34 years, in EU 28 member states, in 2010 and 2013*

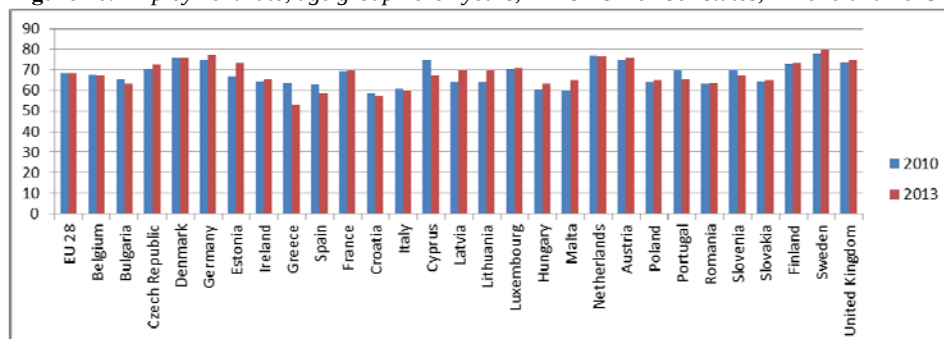


Source: processed by the author, using data from Eurostat, november 2014.

States like Denmark, Estonia, Ireland, France, Cyprus, Lithuania, Latvia, Luxembourg, Netherlands, Poland, Slovenia, Sweden, Spain and UK registered tertiary education attainment rates above 40%, but only some of them are showing a significant progress (Estonia, Lithuania, Latvia, Luxembourg, Poland, Slovenia, Sweden and UK).

Within the states having higher education attainment rates below the 40% EU target, Romania shows the most consistent improvement, being followed by states like the Czech Republic, Greece and Hungary.

Figure 10. *Employment rate, age group 20-64 years, in EU 28 member states, in 2010 and 2013*



Source: processed by the author, using data from Eurostat, november 2014.

Concerning the progress registered by EU 28 member states within the employment rate of population aged 20-64, only Germany reached the target in 2013. Even though, most of the countries improved the employment rate in 2013 compared to 2010, except Belgium, Bulgaria, Denmark, Greece, Spain, Italy, Croatia, Cyprus, Netherlands, Portugal and Slovenia (Figure 10).

3. Conclusions and policy implications

European Union member states embraced a mass higher education system and some of them are moving towards an universal higher education system. Moreover, higher education expansion within European Union and its determinants influenced both the funding policy of higher education and the labour market features, especially in the after-crisis period.

Thus, the expansion of higher education in terms of enrolments, the changes made in the level of public funding allocated for higher education, the changes occurred within the funding mechanisms, as well as the effects of the economic crisis (on the financial situation of individuals enrolled in this level of education and on the labour market conditions) impacted an important output of higher education i.e. the number of graduates.

As shown in the results section, six out of the fourteen EU member states having increased the proportion of GDP allocated for funding higher education, in the post-crisis period, recorded a downward trend in the employment rate of population aged 20-64 years. This situation appears to be registered due to an inefficient match between higher education graduates and labour market, as within these countries the employment rate of higher education graduates aged 20-64 years has decreased, while the number of over-qualified workers holding a higher education degree increased.

The progress recorded by Germany, France, Malta and Sweden in the employment rate of population aged 20-64 is powered by higher investment in human capital, by a growing insertion of higher education graduates in the labour market, as well as by a declining proportion of overqualified higher education graduates. Considering the cases of Belgium, Greece, Italy, Portugal and Slovenia we conclude that the reduction recorded within the employment rate of population aged 20-64 years is also due to a downward trend registered in both higher education funding as share of GDP and the insertion rate of higher education graduates on labour market, as well as due to an increase of overqualified higher education graduates. Though Estonia, Ireland and Romania improved their employment rate of population aged 20-64 years, the employment rate of higher education graduates aged 20-64 years decreased, while the job-education mismatch among higher education graduates increased. Also, in these states the share of GDP allocated to higher education funding faced a reduction.

So, as a reduction in the employment rates of the population aged 20-64 who graduated higher education might appear either because many of the graduates leave the universities unprepared for the labour market, or because they work in jobs requiring lower qualifications than the ones they have, or even because the job they have requires other skills or knowledge than that they have accumulated during bachelor or master studies, both universities and governments should act in order to ensure an efficient match between higher education and labour market.

At least in Romania, because of the lack of proper jobs within the labour market, as well as because of the imbalances in the supply and demand of high-skilled labour force, phenomena as qualification mismatch, over-qualification and over-supply of higher education graduates are a certainty. Thus, state intervention in higher education policy is required and should be focused on the adjustment of the number of publicly funded students and of the cost coefficient used for determining the average cost

per equivalent student, by field of study, within each major field of study, based on the demand for high-skilled workers. Meanwhile, universities should concentrate on identifying and using those innovative teaching methods able to enrich the practical skills of higher education graduates, required by employers.

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Aspects of structural adjustments in CEE countries during the economic crisis

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Abstract. *The Central and East European countries (CEEs) experienced institutional and structural reforms during their transition to the market economy and also, during their EU integration process later on. The 2000s trend of economic growth relied on economic structures not fully aligned to the western standards. In Romania, as well as in other CEE countries, the recent economic crisis hampered the economic growth and emphasized major vulnerabilities and thus, the need for further adjustments. The crisis impact has been interpreted as a contagion effect, but also as a shock causing corrections to the unhealthy sources of economic growth. This paper studies different aspects of structural adjustments of the UE10 countries for the period 2004-2010 using a composite index for the measure of institutional and structural reform results. The aim of our study is to identify the downgrading countries as a response to the crisis with a focus on Romania's deviation from the EU10 trends and its economic policy implications.*

Keywords: economies in transition, reforms, structural adjustments, austerity.

JEL Classification: E02, E60, P21.

1. Introduction

The countries that are changing from central planning to free market are characterized by transition economies. By developing a set of systematic assessment tools, the European Bank for Reconstruction and Development (EBRD) provided also a support for qualitative assessment of the progress made by the countries in transition (Transition Report, 1994). Each country from Central and Eastern Europe (CEE) solved in its own way the dilemmas posed by the transition process in the early 90s, while the other countries from Southern and Eastern Europe, Central Asia and Northern Africa were confronting other circumstances.

The theoretical context regarding the transition of the economic system included the following major components: macroeconomic stabilization; price and market reform; private sector development, privatization and restructuring of the public companies; redefining the role of the state (Gelb and Gray, 1991, pp. 6-17). These countries applied the reforms in different stage of time and thus their degree of institutional and operational standards of the market fulfillment varies (Åslund, 2010, p. 13).

At the beginning of economic transition, domestic production declined sharply in all CEE countries and had a comeback after 5-6 years, emphasizing an "U" shape evolution and marking an efficient reallocation of resources for those economies (Blanchard, 1997, pp. 1-8). After 2000 the sustained economic growth in CEE countries was achieved through the stimulation of the transition economies reforms as a part of the conditional access to the European Union. Although these countries have met the conditions required in adopting EU institutions standards and achieved the status of a functioning market economy before joining the EU, they have not completed the process of transition. The reform of the economic structures continued even after accession to the EU, but at slower rate. Furthermore, the economic crisis stopped the process of growth and highlighted the fragility of the new structures. The incomplete transition was signaled as a factor with negative effect on the economic growth in the late 90s (Hellman, 1998).

The economic crisis affected all EU member countries and urged the acceleration of the ongoing structural reforms with the overall goal of effective allocation of their resources. Recent analyzes (Canton et al., 2014) show that even some developed EU countries required changes in terms of goods and services market and labor market reforms to help economic adjustment and growth. The economic adjustment refers to the structural changes performed to eliminate the macroeconomic weakness and risks and to provide the right premises for economic recovery and sustainable growth. The countries from EU confronting current deficits and high levels of eternal debt are known as vulnerable countries. OECD used a similar approach in order to avoid the effects of the crisis on long-term positive development: "the crisis made the need for reforms to be more obvious and acted as a catalyst for structural reforms" (OECD, 2010, p. 21).

The concept of structural adjustment is commonly used in the IMF agreements. According to IMF, a structural adjustment policy requires a combination of market liberalization measures (such as privatization of public enterprises, deregulation of key sectors of the economy, fiscal austerity) under the argument that this type of reforms will promote an efficient and opened economic environment. Moreover, IMF mostly provides loans to countries that demonstrate a high degree of structural reforms implementation

This paper aims to verify the degree of structural adjustments achieved by the European Union (EU10) member states during the economic crisis and to point out how the crisis affected the process of institutional and economic reform after 1990. The analysis emphasizes Romania's situation as a component of EU10 countries.

2. Methodology

Transition indicator is a tool used by the European Bank for Reconstruction and Development (EBRD) to measure the progress achieved by the transition economies. The transition indicator was designed to capture the overall development of enterprise and financial sector restructuring, as well as for institutional reforms (privatization, price liberalization, trade and exchange, the application of competition policy etc.).

The score is based on a classification system which was originally developed in the EBRD Transition Report 1994, but was improved in further reports. Transition indicators are expressed by numerical values ranging from 1 (indicating little progress / nonexistent of the reform in relation to the initial position of the economy) to 4+ (indicating a country that met the standard criteria of an advanced market economy). The signs "+" and "-" means adding 0.33 points and subtracting 0.33 from the total value.

In this paper, we calculated the arithmetic mean of the indicators and sub-indicators used in Transition reports (EBRD, 2004-2012) in order to highlight the progress achieved by the EU10 countries as a result of institutional and structural adjustments. The study measures the evolution of Central and Eastern Europe countries: Estonia, Latvia, Lithuania, Bulgaria, Romania, Hungary, Poland, Slovakia, Slovenia and Croatia. Although CEE group includes the Czech Republic too, it was not included in this study due to the lack of data provided by the EBRD.

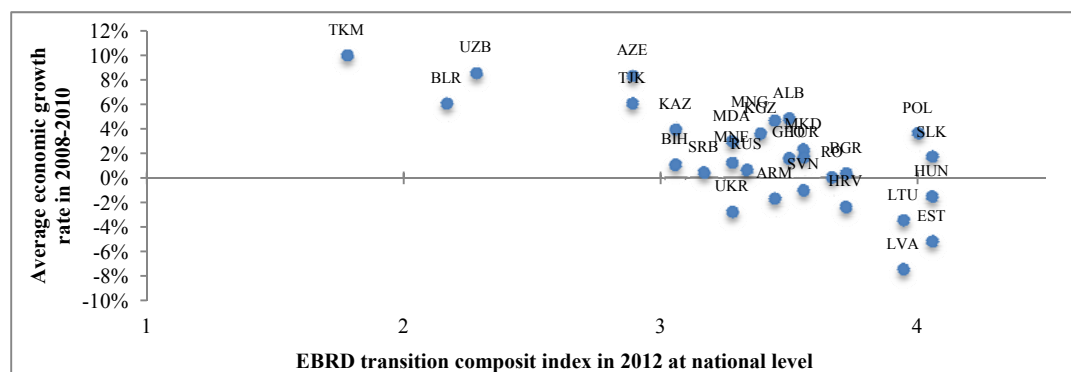
To highlight the progress or regress of the economies reforms developed during the economic crisis we measured these effects by calculating the absolute change using the EBRD index (previous year) and its quantification into two sub-periods: 2000-2007 (pre-crisis) and 2008-2012 (crisis and post-crisis). The availability of data for the banking and non-banking financial institutions reforms is limited to a period of 7 years, respectively 2004-2010.

3. Stage reforms in transition economies and the impact of the financial and economic crisis

The financial and economic crisis had a worldwide impact and its effects differed within countries and also within countries in transition. To get a significant result, in our analysis we considered 29 developed countries presented in the EBRD Transition Report. It includes both countries which have made significant progress towards a functioning market economy in the last two decades and countries with a low level of market liberalization from Southern Eastern Europe, Central Asia and North Africa.

Data analysis indicates that there is a strong negative relation between the recession magnitude (as evidenced by the average economic growth rate) and the market liberalization (reflected by the index calculated by the EBRD transition). According to the authors the correlation coefficient (Pearson) calculated between the average growth rate in 2008-2010 and the transition index reaches a value of -0.74 (significant negative relationship). It is showed in Figure 1 that countries with a higher degree of liberalization savings were significantly affected by the economic downturn, while other regions showed only marginal effects. Barlett and Price (2012) identified two major issues underlying the differential impact of the external shock on countries: (1) different institutional frameworks that have been developed during the transition to a market economy, (2) different degree of national economies integration into the global economy.

Figure 1. *Impact of the economic crisis in transition economies*



Source: Representation and own calculations based on EBRD and World Bank data.

The EU Member economies from Central and Eastern Europe experienced economic crisis more acutely than the other analyzed countries. One of the main reasons for their higher volatility is the high level of European and global economy integration. CEE economies also present a common characteristic by experiencing similar economic development: economic growth during the pre-crisis as a result of the foreign capital inflow expansion and deep recession during the crisis (except Poland). The evolution of highly volatile eastern European economies can be attributed to the decreasing external demand and to the sharp slow down of the foreign capital inflows through the main transmission channels: falling exports, difficult access to finance, limiting foreign investments and lower remittances.

4. The progress of economic reforms in the EU 10

The transition index captures the developments of the structural and institutional reforms. To understand the effects that crisis had in CEE, we will present the main results of the reform for a previous period of time. The reference period is 2004 as it marks the first group of CEE countries joining the European Union.

The increasing importance of the private sector as a result of privatization and of the establishment and development of new private firms is reflected in its increasing contribution to the creation of GDP (Table 1). While the private sector in Hungary and Poland arrived to a contribution of 80% since 1999, Romania registered the level of 70% since 2004. Romania approached the EU10 countries average, but the privatization process is not finished, both at large and small scale. The issue of privatization at large scale is widely present also within other CEE countries. Bulgaria achieved level 4 since 2004, and Poland reached 3.7 in 2010, later than Romania. None of the countries reached the level of standard advanced industrial economies typically 4+ (i.e. more than 75% of assets in private ownership and effective corporate governance).

Table 1. Privatization level UE10, 2004-2012

Indicators	Country	2004	2005	2006	2007	2008	2009	2010
Private sector share in GDP (%)	UE10	73,5	73,5	73,5	74,5	74,5	74,5	74,5
	Romania	70,0	70,0	70,0	70,0	70,0	70,0	70,0
EBRD index of large-scale privatisation	UE10	3,6	3,7	3,7	3,7	3,7	3,7	3,8
	Romania	3,7	3,7	3,7	3,7	3,7	3,7	3,7
EBRD index of small-scale privatisation	UE10	4,1	4,1	4,2	4,2	4,2	4,2	4,2
	Romania	3,7	3,7	3,7	3,7	3,7	3,7	3,7

Source: Own calculations based on EBRD data.

Price liberalization process was completed by 2000 in all CEE countries. Also, starting with 1990-1991 were made decisive steps with the purpose of international transactions liberalization in order that in 1994 all considered countries reached a level 4 (EBRD indicator) which involves insignificant intervention on imports and exports (Table 2).

Table 2. The reforms on commerce and market, 2004-2010

Indicators	Country	2004	2005	2006	2007	2008	2009	2010
Share of administered prices in CPI (%)	UE10	16,0	15,5	15,2	15,0	14,0	15,1	...
	Romania	22,4	21,9	20,6	21,4	21,0	19,1	...
Share of trade with non-transition countries (%)	UE10	71,6	68,7	67,2	65,8	63,7	79,8	79,8
	Romania	79,8	79,8	79,8	79,8	79,8	79,8	79,8
Tariff revenues (% of imports)	UE10	1,6	1,3	0,6	0,3	0,4	0,7	...
	Romania	3,2	3,1	3,1	0,6	0,3	0,4	...
EBRD index of price liberalization	UE10	4,2	4,2	4,2	4,2	4,2	4,2	4,2
	Romania	4,3	4,3	4,3	4,3	4,3	4,3	4,3
EBRD index of FOREX and trade liberalization	UE10	4,3	4,3	4,3	4,3	4,3	4,3	4,3
	Romania	4,3	4,3	4,3	4,3	4,3	4,3	4,3

Source: Own calculations based on EBRD data.

The progress in the area of competition policy was highlighted later by relating it to the price liberalization and to the international transactions. Although the liberalization process posed competitive pressure on goods and services market, the legal and administrative framework needed to prevent anti-competitive practices emerged with a different rate in the countries from our study. In Romania the Competition Act came into force in 1996 and this fact marked a leap in the evolution of competition policy, but it was a late one compared to the other countries. The obligations flowing from the accession conditions to the European Union have accelerated this process since 2003 in the CEE group and since 2005 in Romania, but not even in 2012 the desirable characteristics of a competitive environment in terms of a functioning economy of market (level 4+) were accomplished.

Table 3. *Index of competition policy*

Indicators	Country	2004	2005	2006	2007	2008	2009	2010
EBRD index of competition policy	UE10	2,8	2,9	3,0	3,0	3,1	3,1	3,2
	Romania	2,3	2,3	2,7	2,7	2,7	2,7	3,0

Source: Own calculations based on EBRD data

Enterprise restructuring was slower than the privatization process in all CEE countries (Table 4), and barely exceeded the threshold of Level 3 when the crisis started. Level 3 is a stage characterized by significant and supported actions with the goal of hard budget constraints introduction and effective corporate governance promotion.

Table 4. *The enterprise reform*

Indicators	Country	2004	2005	2006	2007	2008	2009	2010
Budgetary subsidies and current transfers (% of GDP)	UE10	3,7	4,1	4,2	4,1	4,5	5,4	...
	Romania	14,6	14,2	14,7	15,8	16,6	18,5	...
EBRD index of enterprise reform	UE10	2,9	3,1	3,2	3,2	3,2	3,2	3,2
	Romania	2,0	2,3	2,7	2,7	2,7	2,7	2,7

Source: Own calculations based on EBRD data.

In Romania, the soft budget constraints in the early stages of the transition have delayed the beginning of the restructuring until 1993, afterwards the progress being slow. In the period preceding the accession, the process accelerated, exceeding level 2 defined by EBRD and associated with more rigorous financial discipline through credit, bankruptcy legislation and measures to strengthen competition and corporate governance. Romania is less advanced than Hungary, Poland and the Czech Republic, which have continued developing even after joining the EU.

In the early stages of transition the financial systems were fragile in all countries. Faster and positive evolution of the banking system occurred in the Czech Republic, Hungary and Poland. In these countries the private commercial banks from privatization or from new creation had an important role and function in a better regulated environment yet from 1997. Foreign-owned banks were already well represented. Hungary reached the highest degree of reform fulfillment since 1997 and was closely followed by the Czech Republic. Table 5 shows that the parameters defining the banking system tend to reach the average value of EU10 countries.

Table 5. *The reforms on banking system and financial institutions*

Indicators (average/country)	Country	2004	2005	2006	2007	2008	2009	2010
Number of banks (Romania compared with the average per country in UE10)	UE10	28	29	29	30	31	31	-
	Romania	32	33	31	31	32	31	-
Asset share of state-owned banks (%)	UE10	5,9	5,7	5,8	5,5	6,9	7,5	-
	Romania	7,5	6,5	5,9	5,7	5,6	7,9	-
Asset share of foreign-owned banks (%)	UE10	71,9	75,0	79,6	78,1	80,9	79,3	-
	Romania	58,5	59,2	87,9	87,3	87,7	84,3	-
Non-performing loans (% of total loans)	UE10	5,2	4,2	3,7	2,8	3,6	9,1	-
	Romania	1,7	1,7	1,8	3,0	4,5	8,5	-
Domestic credit to private sector (in per cent of GDP)	UE10	37,5	45,7	54,5	62,5	67,5	69,3	-
	Romania	15,6	19,9	25,9	35,6	38,5	40,7	-

Indicators (average/country)	Country	2004	2005	2006	2007	2008	2009	2010
Domestic credit to households (in per cent of GDP)	UE10	13,3	17,6	22,4	26,9	28,6	31,3	-
	Romania	4,8	7,2	11,2	17,7	18,8	19,1	-
Of which mortgage lending (in per cent of GDP)	UE10	6,4	9,2	12,6	15,3	17,1	19,1	-
	Romania	0,5	0,6	0,9	1,4	3,8	4,5	-
Stock market capitalisation (in per cent of GDP)	UE10	21,7	23,5	30,9	38,1	15,3	18,1	-
	Romania	13,8	22,1	24,4	26,6	11,0	18,2	-
Stock trading volume (in per cent of market capitalisation)	UE10	19,9	25,3	23,1	27,9	20,9	22,9	-
	Romania	11,6	21,0	16,0	20,8	11,3	7,9	-
EBRD index of banking sector reform	UE10	3,6	3,6	3,6	3,7	3,7	3,7	3,6
	Romania	3,0	3,0	3,0	3,3	3,3	3,3	3,3
EBRD index of reform of non-bank financial institutions	UE10	2,9	2,9	3,0	3,2	3,3	3,3	3,2
	Romania	2,3	2,3	2,3	2,7	3,0	3,0	3,0

Source: Own calculations based on EBRD data.

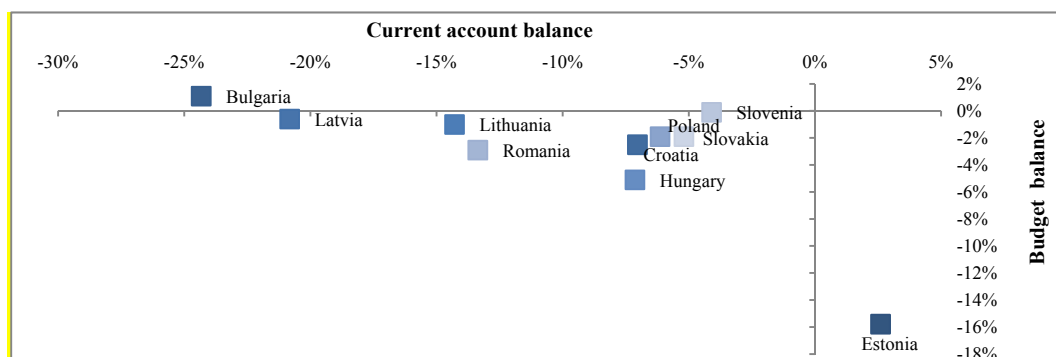
5. Constraints of the crisis and structural adjustments

The recent financial crisis has significantly affected the economic activity of the countries in East and Center of Europe. The decline could be attributed to the downturn of exports, to the decrease of investment and to the fact that in some economic sectors the boom period ended before the crisis started. Moreover, because of macroeconomic imbalances accumulated during the boom period, the financial requirements increased and generated a high impact even when the net capital outflow was relatively moderate (EBRD, 2009, p. 6).

However, the impact of the crisis did not lead to the banking systems collapse, to the dramatic increase of the inflation rate or to exchange rate crises. The reasons for which this situations have been avoided, unlike the previous crises on emergent markets, are connected to the fact that despite macroeconomic imbalances the financial sectors remained relatively unaffected by toxic assets and the capital outflows from the region were not significant, except Latvia. Furthermore, there was a coordination of the policies regarding financial stabilization between national authorities, international organizations and actors from the banking market.

In Figure 2 is shown that the majority of EU10 states have registered macroeconomic vulnerabilities as a result of unfinished reforms and low competitiveness compared to the partner countries within the European Union. In these countries the main channel for economic growth was the irrational consumption based on credits and imports, which led in most of the cases to current account deficits. More developed CEE countries, such as Poland, Slovakia and Slovenia managed to avoid this trend by focusing on export increase and on internal market strengthening. In addition, the fiscal policies before the crisis were strongly procyclical while large budgetary deficits were accumulating. The only states of the region with a more solid fiscal position were Bulgaria and Estonia. At the same time the contagion effect of financial and economic shocks began to be noticed in the banking sector, in the industrial production sector and in the markets for goods and services, by the unemployment increase, more insolvencies and bad loans.

Considering the fundamental role of the institutional framework built during the transition, the research subject of many studies was the link between adopted structural reforms, vulnerabilities of transition economies facing external shocks, as well as the ability of these economies to have a rapid and sustainable catching-up process (Mitra et al., 2000).

Figure 2. Budget balance and current account balance in 2007

Source: own representation based on Eurostat data.

In some cases, economic crises can block adjustment processes or, on the contrary, they can stimulate them. Previous experiences show that supply side reforms were initiated during economic crises. An argument is that economic turbulences tend to act more acute on weaknesses which were initially masked by the high rates of economic growth. But how economic crises increase the incentives for reforms depends on several factors such as the crisis severity, maturity of institutions in the pre-crisis period, social cohesion degree, policy regimes more or less reform oriented, external anchors (such as the *aquis communautaire*) etc. (EBRD, 2009, p. 7).

Until the adoption of austerity measures in 2010-2011 in the CEE countries the most common anti-crisis policies aimed at stimulating the aggregate demand in order to limit the free fall of the economies. International institutions (especially the International Monetary Fund) had a significant role in the development of policies meant to attenuate the negative effects of the crisis and to relaunch the economies on a sustainable growth slope. Another important contribution of the IMF was the financial assistance provided to countries facing liquidity problems and financial instability. The international financial support from the IMF and EU in Eastern Europe varied between 4% and 6% of the GDP in the three East European countries that have accepted the IMF programs (Romania, Latvia and Hungary) and provided for Poland the access to a flexible credit line of € 20 billion dedicated to countries with a solid macroeconomic position. In order to be eligible for these loans the countries had more or less the obligation to implement policies such as: (1) decrease of government expenditures, (2) increase of taxes in conjunction with improved tax collection, (3) privatization of state owned enterprises to attract liquidity and to create incentives for efficiency, (4) market deregulations to encourage competition, (5) more economic openness and limitation of protectionism, (6) control of inflation rate by means of monetary and fiscal policy instruments etc. According to IMF the macro-prudential and structural adjustment programs aimed at restoring the process of sustainable economic growth and financial stability in the national economies. However the IMF requirements were often perceived as an expression of austerity policies which hinder the economic recovery.

The analysis of the reform progress as defined by EBRD and IMF during the period 2004-2010 reveals that the recent economic crisis influenced the way these reforms were implemented in the CEE countries. In this respect there are different developments measured by the efforts of structural and institutional adjustments compared to EBRD standards. These developments depended on the exposure of each CEE country to the global contagion effect, as well as on the flexibility/sustainability of these economies.

According to the empirical researches, the financial crisis led to the decrease of the progress in the field of institutional reforms. Table 6 marks the progress in each EU10 country by using a conventional coefficient which shows that each accumulation of 0.33 points indicates a progress step during the period of analysis. Note that the accumulated progress during the pre-crisis period was

superior to the progress after 2007. In 2008-2009 the only progress was in the field of governance and enterprise restructuring (Croatia, an increase from 3 to 3+ in 2011 and Latvia, from 3 to 3+ in 2012) and in the field of large scale privatization (Poland in 2010, from 3+ to 4-, as a result of new privatization programs). Regarding the structural indicators, Romania together with Croatia and Slovenia had a positive trend of the labor productivity in industry.

Table 6. Accumulation of progress in privatization and enterprise restructuring, in the EU10 countries

	Large scale privatization		Small scale privatization		Governance and enterprise restructuring	
	2000-2007	2008-2012	2000-2007	2008-2012	2000-2007	2008-2012
Bulgaria	0.66	0	1	0	0.34	0
Croatia	0	0	0.33	0	0.33	0.33
Estonia	0	0	0	0	0.66	0
Hungary	0	0	0	0	0.33	0
Latvia	0.33	0	0.66	0	0.33	0.33
Lithuania	0	0	1	0	0.33	0
Poland	0	0	0	0.33	0.66	0
Romania	0	0	1	0	0.66	0
Slovakia	0	0	0	0	0.66	0
Slovenia	0	0	0	0	0.33	0
Total	1	0	4	0.33	4.68	0.66

Source: own calculations based on EBRD data.

The best progress has been recorded in the field of competition policies in almost all EU10 economies (Table 7). OECD even remarks that OECD economies managed to avoid major mistakes of structural policy specific to economic crises in the past, such as severe protectionist measures or labor market policies which proved to be harmful in the long run (i.e. early retirement) (OECD, 2010, p. 20).

Table 7. Accumulation of progress in competition policy, price liberalization, trade and foreign exchange system, in the EU10 countries

	Competition policy		Price liberalization		Trade & foreign exchange system	
	2000-2007	2008-2012	2000-2007	2008-2012	2000-2007	2008-2012
Bulgaria	0.33	0.33	0.33	0	0	0
Croatia	0.33	0.33	0	0	0.33	0
Estonia	1	0	0	0	0.33	0
Hungary	0.33	0.33	0	0	0	0
Latvia	0.66	0.66	0	0	0	0
Lithuania	1	0.33	0.33	0	0.33	0
Poland	0.66	0.33	0	0	0	0
Romania	0.33	0.66	0	0	0	0
Slovakia	0.33	0.33	0.33	0	0	0
Slovenia	0.33	0	0	0	0	0
Total	5.35	3.35	0.99	0	0.99	0

Source: own calculations based on EBRD data.

The lack of progress in price liberalization and foreign exchange during the period 2008-2012 can be explained by the fact that these reform components already reached the highest standards according to the EBRD methodology.

The progressive intensification of turbulence on financial markets in the time of crisis led to the need of financial stabilization measures applied by the national authorities. It also drew the attention to the level of regulation on these markets. In many cases governments and central banks had interventions by means of specific instruments (deposit guarantee, injection of liquidity, recapitalization of banks etc.). Central Banks of Croatia, Poland or Romania reduced the minimum reserves and in some cases the bank guarantees were extended to € 100,000 (Lithuania) or even to unlimited guarantees (Slovakia and Slovenia). Also the government of Latvia, which had to face the contraction of economic activity and the massive currency devaluation, was forced to recapitalize the banks with liquidity problems.

According to the EBRD benchmarking, the index of reform in the banking system recorded two setbacks in Hungary (due to the government's decision to impose additional taxes to banks and other financial institutions) and in Latvia (nationalization of a majority stake of the largest banking group). Also, in Slovakia there was a setback regarding reforms in the insurance market and non-banking financial institutions, due to changes imposed by the Slovenian Government in the pension system, which has made the market for private pensions less predictable. In contrast, there was progress of the reform in the market of non-banking institutions in Bulgaria, Romania and Poland (due to the successful introduction of a new platform for bond trading).

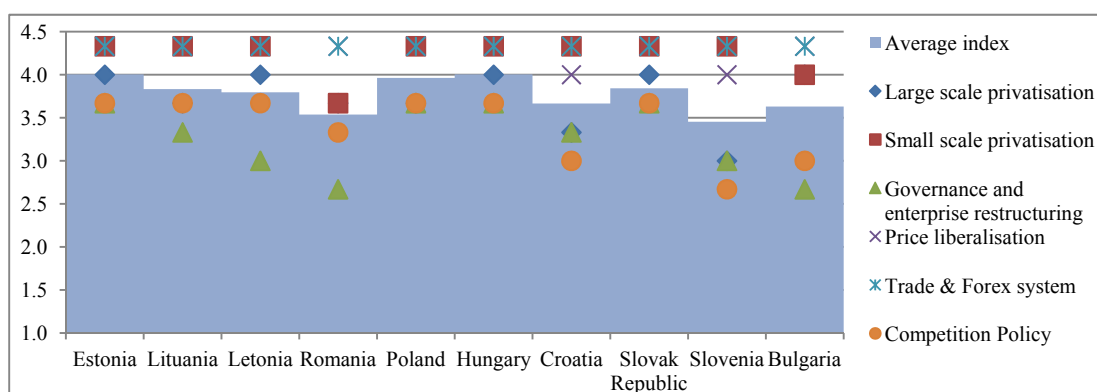
Table 8. Accumulation of reform progress in the banking system and non-banking financial institutions, in the EU10 countries

	Reform of the banking system		Reform of the non-banking financial institutions	
	2005-2007	2008-2010	2005-2007	2008-2010
Bulgaria	0.0	0.0	0.33	0.33
Croatia	0.0	0.0	0.33	0.0
Estonia	0.0	0.0	0.33	0.0
Hungary	0.0	-0.33	0.33	0.0
Latvia	0.33	-0.33	0.0	0.0
Lithuania	0.33	0.0	0.33	0.0
Poland	0.33	0.0	0.0	0.33
Romania	0.33	0.0	0.33	0.33
Slovakia	0.0	0.0	0.33	-0.33
Slovenia	0.0	0.0	0.0	0.33
Total	1.32	-0.66	2.31	0.99

Source: own calculations based on EBRD data.

There are several reasons why the pace of reforms declined during the economic crisis. The first one is related to external, circumstantial factors, which do not depend on the will of national economic policy makers (privatization of state-owned enterprises is a relevant example: even if it requires the commitment of the national authorities, this process depends on the interest of various investors). The second reason is that most policies were short term oriented aiming at reducing the negative effects of the crisis and were less oriented towards long-term structural policies. Many structural reforms actually involve a trade-off between short run and long run benefits, which in times of crisis is difficult to accept from political and social point of view. The last reason is that the analyzed countries reached in some respects the upper limit of the EBRD benchmarking (figure 3). The CEE countries are already in the situation to implement reforms similar to those in more developed EU countries, especially as regards competition, labor market flexibility, governance etc.

Figure 3. Stage of reforms reached by the EU10 countries in 2013



Source: own representation based on EBRD data.

Conclusions

The transition countries have experienced institutional and structural reforms during the transition from a planned economy to a market economy. In the last two decades the Central and East European countries made significant progress towards a functional market economy and became better integrated in the global economy, but they felt the shock of the crisis more than other transition countries.

On the eve of the crisis the CEE countries, which in the meanwhile became members of the European Union, were already close to the standards of the European institutional configuration, but the structural reforms specific to the transition period were still unfinished. The fragility of the new structures was a vulnerability during the crisis. The progress analysis for the period 2004-2010 regarding the reforms as defined by BERD and IMF reveals that the recent crisis had an influence on how these reforms were implemented in the CEE countries. The crisis has generated major deficits of the state budget and current account, which shows that the CEE countries had a high economic vulnerability.

The reforms were carried on even after the beginning of the crisis, although more slowly and with interruptions. This continuity shows that the transition to market economy and the European integration appears to be an irreversible processes. The pressure to implement structural adjustments determined the continuation of the large scale privatization (Poland), enterprise restructuring (Croatia and Latvia) and especially the improvement of the competition policy (almost all countries). However the data do not significantly reflect the role of the crisis as a catalyst of structural change for economic growth.

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The role of education, lifelong learning and health of the population in support of economic growth

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Abstract. *The accurate evaluation of the level of education and health status of the population of a country and estimated trends of these indicators in the medium and long term, are key elements in designing a sustainable model of development.*

In this research we aim to develop an analytical model, based on a system of macroeconomic indicators to assess the impact of education, lifelong learning and health of population on economic growth, with a focus on Romanian reality.

Based on research conducted we conclude that successive increased investment in education, lifelong learning and health causes positive externalities, adding to the amounts of total production, improving the health of people and the safety of environment, with a decisive role on sustainable growth.

Keywords: education, life long learning, health, sustainable development, economic growth.

JEL Classification: I25, I15, O15.

1. Introduction

The importance of the topic discussed in this paper is determined by the fact that the eradication of poverty is closely connected to economic development, and the engine of this economic development (and growth) is represented by innovation, which, in turn, is generated by the progress of education, lifelong learning and health status of the population.

The main objective of this study is to provide a critical overview of the impact of education, training and health status on economic growth, with a focus on Romanian reality.

In this context we suggest a system of macroeconomic indicators to analyze the correlation between education, lifelong learning, health and economic growth in EU member states, grouped into two categories:

- the first Top 10 EU countries ranked in terms of human development index;
- countries from central and eastern Europe, similar to Romania historically and socially.

The data was collected from official resources (the statistical data provided by the EUROSTAT, the World Bank, the Romanian Statistical Yearbook, sociological research, journal articles and specialized magazines, the evaluations of international organizations).

The paper was written by taking into consideration the orientations of national and international programmes, respectively the National Strategy for Research, Development and Innovation 2014-2020, the Europe 2020 Strategy, the resources provided by international and national conferences on the investigated topic, informative bulletins, the current information in the mass-media, legislative documents, a.s.o.

Research methodology

The research methodology applied in this study is based on a thorough interdisciplinary approach. In the first part of the paper, the research will provide a synthesized discussion of the international literature in the field with regard to the analysed concepts.

In the second part of the study, the methodology will focus on the collection and analysis of statistical data.

The activities carried out for completing the research will require gathering information regarding the orientations of national and international programmes.

The following methods were used to investigate the role of the education and health in increasing economic competitiveness: scientific abstraction, analysis and synthesis, quantitative analysis methods, induction and deduction, mathematical models, the evolutionary investigation of the analysed events and phenomena.

The research activity involved the study of specialty economic literature, the national and international legal system which regulates the activity in the field, specialised web sites, statistical data, information resources provided by various specialised entities and by the public administration, the reports of European organisations.

2. Literature review

The fundamental landmark in the analysis of the process of economic growth is the neo-classical model of Solow (1956). This model starts from the macroeconomic function of production, which expresses production function of capital and labor. Although in this model capital may include, in

theory, both human capital and physical (material) capital, in practice, human capital has not been taken into account in many studies.

The inclusion of education as integral part in economy was introduced by Uzawa (1965). He considered that „[...] the employment in this sector, which in addition to traditionally understood education included also health services and some other public services, conditioned labour productivity in the economy. The higher the employment in the education sector, the higher the labour effectiveness”.

In the endogenous models, human capital is reflected differently. Romer (1986), Lucas (1988) and Barro's works (1990) are the pioneering studies in this field.

Romer (1986) tested the impact of human capital formation and reached the following conclusion: the coefficient of human capital accumulation is significant which means that, together with physical capital accumulation, the accumulation of human capital determines increases per capita in GDP.

Lucas (1988) considered human capital an important factor in production function in terms of physical capital.

In his model, the differences between rates of economic growth for various states are given by the different degrees of accumulation of human capital. In this context, government should invest more to educate people and increase overall the education level.

The Barro's model (1999) is one of the most well-known studies investigating the effect of the initial level of human capital on the growth rate. Barro analyzes the effect of education on growth in a panel of around 100 countries observed from 1965 to 1995. According to his results, prolonging by one year the average duration of education after primary school has the effect of raising the future rate of economic growth by 0.7 percentage points.

One of the most prominent studies shedding doubt on human capital's influence on the economic growth rate is that of Benhabib and Spiegel (1994), which underlines the fact that the stock of human capital determines the ability of an economy to grow and assimilate technologies and, consequently, to produce economic growth.

More recent studies show the positive association between per capita income and health status of an economy (Muysken et al., 2003; Bloom et al., 2004; Çetin and Ecevit, 2010).

3. The impact of education, lifelong learning and health on economic growth.

Comparative European study

To analyze the correlation between education, lifelong learning, health and economic growth, we suggest the following system of indicators:

- Mean years of schooling – for education;
- Expected years of schooling – for lifelong learning;
- Life expectancy at birth (average lifespan) – for health;
- Human development index – for economic growth.

Further we will analyse the dynamics of these indicators in Romania compared to several European Union member states.

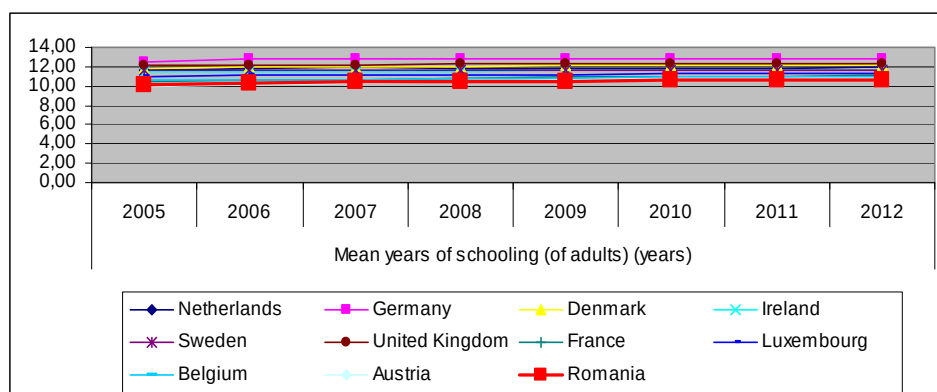
The countries selected for the analysis were grouped into two categories:

- the first category includes the Top 10 European Union countries with high human development index;

- the second category includes Poland, the Czech Republic, Slovakia, Slovenia, Hungary, Bulgaria, countries which were selected due to their geographical proximity to Romania, as well as due to the historical and social similarities.

From the perspective of mean years of schooling indicator, we can notice that Romania is currently placed on the last position when compared with the Top 10 countries, with a difference of 2.2 years from Germany, which holds the first position (Figure 1). It is worth mentioning that in our country the value has increased from 10.1 years in 2005 to 10.7 years in the present.

Figure 1. Mean years of schooling in Romania compared to the developed EU countries (years)

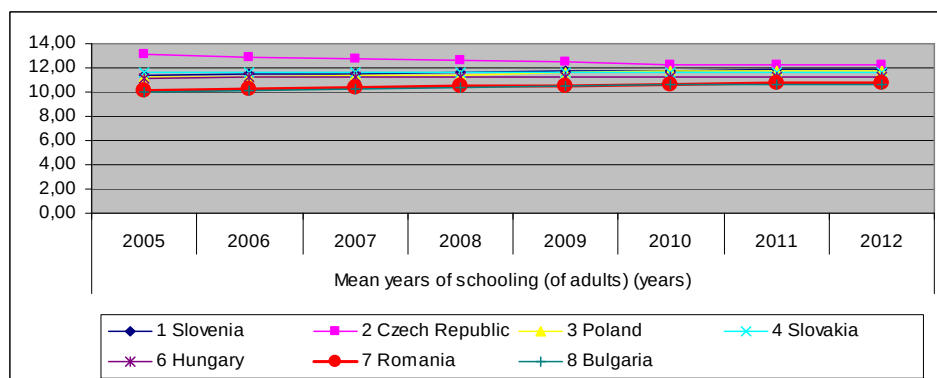


Source: Human Development Reports, UNDP.

In the East-European context, our country is also far from reaching the level of the former socialist countries in terms of mean years of schooling.

According to the data presented in Figure 2, Romania is at the bottom of the top, the only lower value being recorded in Bulgaria.

Figure 2. Mean years of schooling in Romania compared to several EU member states from Central and Eastern Europe (years)



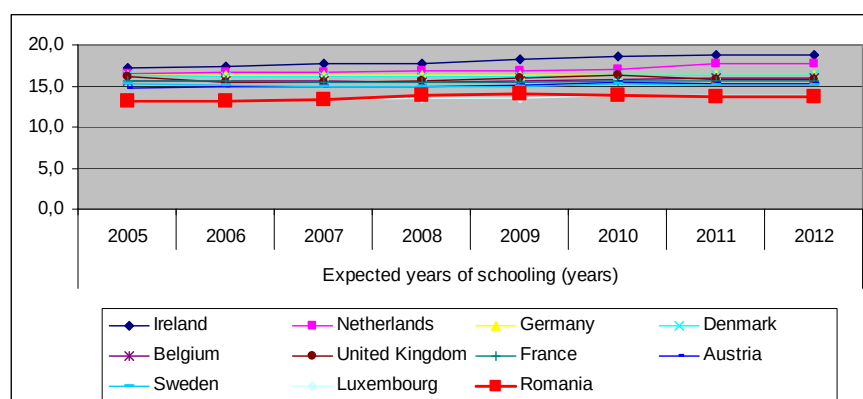
Source: Human Development Reports, UNDP.

According to the second indicator of the system, respectively the expected years of schooling, our country is positioned similarly as from the perspective of the mean years of schooling indicator when compared to the Top 10 European Union countries with high human development index, as well as in the East-European context.

Figures 3 and 4 highlight this aspect, as well as the evolution of the indicator in the analysed period.

The maximal value of the expected years of schooling indicator in Romania is of 14 years at the level of 2009, compared to 18.7 years in Ireland, which occupied the first position in Top 10 from the perspective of this indicator.

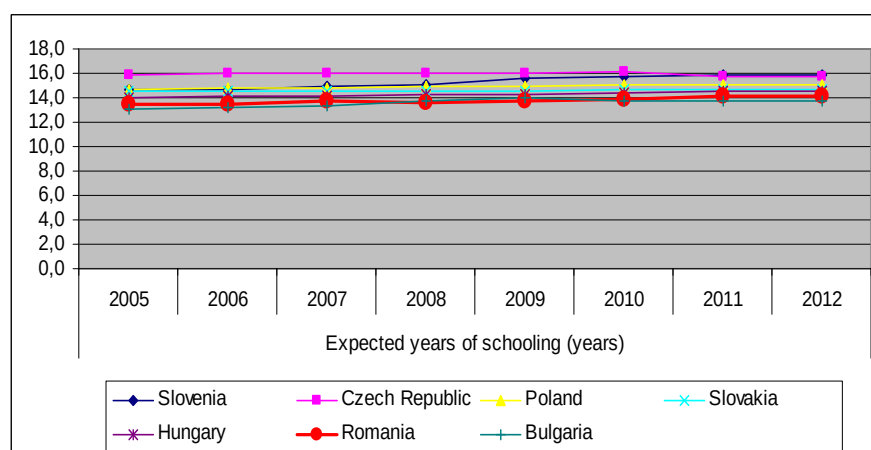
Figure 3. Expected years of schooling in Romania compared to the developed EU countries (years)



Source: Human Development Reports, UNDP.

Among the European Union member states from Central and Eastern Europe the highest value of the expected years of schooling indicator is recorded in the Czech Republic, followed by Slovenia, while the lowest values are recorded in Romania and Bulgaria.

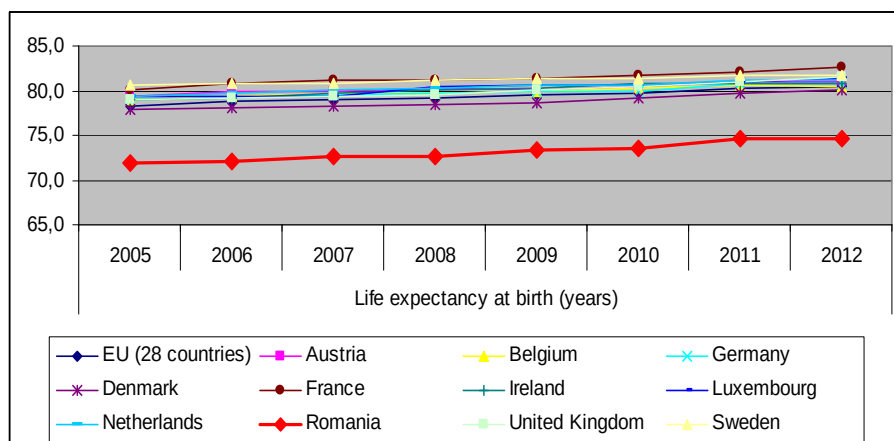
Figure 4. Expected years of schooling in Romania compared to several EU member states from Central and Eastern Europe (years)



Source: Human Development Reports, UNDP.

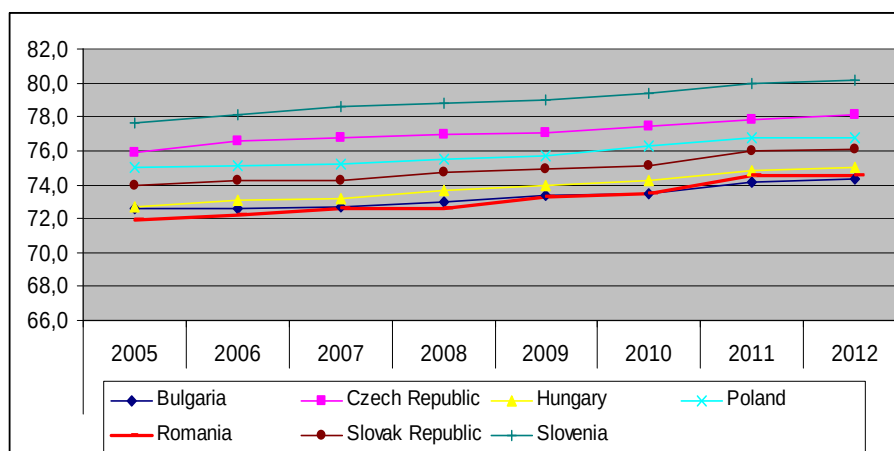
The Romanian life expectancy at birth indicator also has low values. With an average lifespan of 74.6 years in 2012, Romania is placed on the last position in a comparison with the Top 10 countries (Figure 5).

In the analysed period, in Europe the highest value of the indicator was recorded in France – 82.6 years in 2012 –, and the lowest in Romania – 71.9 years in 2005 (Figures 5 and 6).

Figure 5. Life expectancy at birth in Romania compared to the developed EU countries (years)

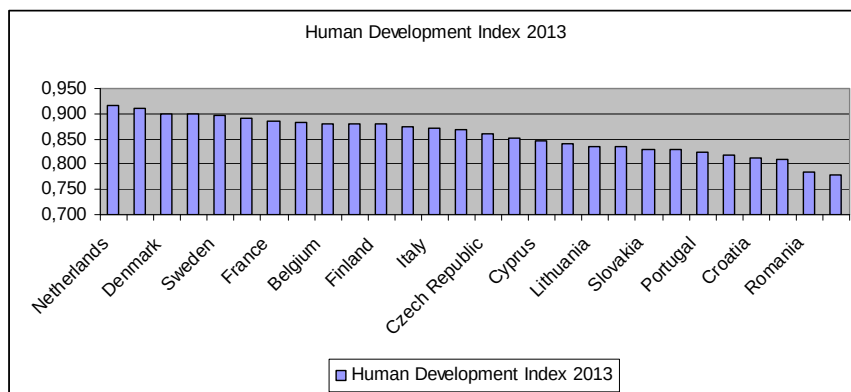
Source: Human Development Reports, UNDP.

The future improvement of the life expectancy at birth indicator is undoubtedly an emergency for Romania and is linked to the allocation of resources for the population's access to health care, prevention, health education and the adoption of a healthy lifestyle, the formation and remuneration of specialised staff, hospital endowment, etc.

Figure 6. Life expectancy at birth in Romania compared to several EU member states from Central and Eastern Europe (years)

Source: Human Development Reports, UNDP.

Further we will also analyse Romania's position compared to other countries from the perspective of HDI values.

Figure 7. *The Human Development Index in Romania compared to the EU countries*

Source: Human Development Reports, UNDP.

In 2013 Romania's HDI had a value of 0.782, which placed our country on the last but one position in the European Union (Figure 7).

The 27th position held by Romania in 2013 in a global HDI top is a modest one, which illustrates a low capitalisation of the development potential in our country.

Most of the EU member states from Central and Eastern Europe are above Romania. A lower value of 0.777 is only recorded in Bulgaria, which holds the 28th position. Slovenia has the highest value of 0.874 and occupies position 12.

4. Conclusions

In the study conducted for Romania we conclude that major drawbacks are to be observed in the case of this country as opposed to the situation in developed countries, requiring consequently major investments in education and health that will help create a sustainable and innovative economy which will, in its turn, support renewed growth in our country.

The following measures are suggested for ensuring that education and health contribute to the improvement of Romanian economic growth:

- increasing the level of public investment until it reaches the value required by the European social model;
- implementing partnerships and incentives for the sustainable growth of investment made by enterprises and individuals;
- directing financing in education towards the areas which are most likely to produce actual results;
- introducing reforms with regard to the quality and acknowledgement of higher education courses to maximise their effectiveness in the European context.

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Students on the labor market: causes and effects of the choice between study and work

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Abstract. *School to work transition is a highly debated topic in the scientific literature, being associated with the changes and uncertainty in early adult life. Eurostat data on the unemployment rate among young people shows that this transition is not at all easy: the EU rate reached 23.4% in 2013 - an increase of about 16% compared to 2009. However, most research focuses on the study of labor market insertion of young people after graduation and little is discussed about term-time employment. This issue gains importance as higher education costs increase and the labor market is facing an increasingly higher offer excess. The paper aims to conduct a study of the phenomenon of term-time employment and its consequences for higher education institutions and the labor market.*

Keywords: human capital, school to work transition, higher education, labor market, economics of education.

JEL Classification: D11, J29, J64, I2.

Introduction

According to human capital theory, education can be seen as an investment in the future of an individual, since it provides knowledge and it develops skills that can be used later in the labor market, resulting in a higher financial gain than a lower-educated individual. The same applies to training and workplace experience in this regard. In applying this theory, an important part is also the way in which the individual makes the transition from education to the proper application of knowledge in the workplace, what in scientific literature is called the school to work transition.

In the past 15 years, the number of higher education graduates has increased in most European countries. In Romania, the number of higher education graduates (bachelor and master) increased from 63,622 in 1999 to 200,106 in 2012, representing an increase of 31.8%. Meanwhile, youth unemployment rose from 16.5% to 22.6% in the same time period. Increasing efficiency standards that came with entry into the EU market and into the global market, the need to raise competitiveness due to increased competition among a larger number of graduates in Romania, as well as the economic crisis which led to decreased economic activity and bankruptcies represent some of the multiple factors that hamper the school to work transition.

However, the study of this process very often omits an important component. Some graduates do not have their first contact with the labor market immediately after finishing college, but when they are still in school. They decide to divide their time between study and work in expectation of immediate or future benefits.

This paper aims to make an analysis of the factors underlying the decision to enter the labor market before completing education and its impact on students, the higher education institutions in Romania and the labor market.

The decision to work and its influence on students' lives

Prevalent theories in the literature on students' decision to work represent a mix between the standard model of human capital and a model of time allocation during higher education (Flannery and O'Donoghue, 2013). Thus, we assume that students are rational economic agents that are trying to maximize their total utility from consumption of goods and services and leisure. Their consumption depends mainly on available time resources, the direct and indirect costs of education, and their wage earnings. Considering all these limitations, students must choose between three activities: study, leisure and employment. Each of them comes with its own costs and benefits and individuals will choose the combination that would bring them the greatest utility.

A student's decision to work during college can be based on a variety of reasons. First, we must take into account the financial advantages. A salary during college may give the student the lifestyle of his choice or can help finance its studies, also earning independence from its parents: " Driving students into term-time employment will be financial need: the less money a student has or the greater their consumption, the more likely they will be to work." (Metcalf, 2003: p. 9). Secondly, students can also consider the non-material benefits that they can obtain in the future, such as adding work experience to their resume which will increase their chances to be called for an interview for the job they really want after graduation. Indeed, previous research shows that work experience is one of the determinants of labor market success for recent graduates (Băjan, 2011). It

is worth mentioning that the study refers to work experience that relevant to the field of study of the graduates.

Metcalf (2003) identifies other motivations at the bases of the decision to work during college. One of them is the value the student attributes to education, either as consumption or an investment in future earnings. If a student puts a high value on his studies, then we can expect him to be more willing to sacrifice work time rather than study time. This value can in turn be influenced by the attitudes prevalent in the social environment where the individual comes from on employment, higher education or their combination. The value attributed to leisure will influence the decision to work in the same way. Another factor influencing the decision, although of less importance, will be the number of employment opportunities. The research also asserts that students who choose to pursue higher education in the hope that will help them find a good job after graduation showed a greater tendency to focus only on their studies.

The decision to work can bring both benefits as well as negative effects on student life. According to Curtis (2007), one of the benefits of working as a student is the development of transferable skills, such as the organization and time management skills, which are some of the important characteristics that employers look for in a potential employee. In addition, there is the development of interpersonal skills, which helps the employee be a better team player. Work experience is evidence of enhanced communication skills and team working skills right from the first interview. In addition, employers indicate that work experience in college may even improve the profile someone with a weak school record.

In addition to these benefits, students declared that work helped them gain more self-confidence and a better understanding of the business environment (Curtis and Shani, 2002). Other studies show that students are happy to work part-time, gaining satisfaction from their jobs mainly because they form the basis for much of their social lives (Lucas, 1997). Moreover, part-time jobs can be very useful in testing certain careers paths, may be the first step in developing future careers or can help students better understand the path they wish to choose in the future (Billett and Ovens, 2007).

There are also disadvantages to combining work and study during college. For example, working students have less time to study. If we look at the relationship between work and study as a zero sum game, then we consider the time available to be divided between the two. Therefore, as work time will increase the time devoted to the study (attending classes, preparing for exams, further readings etc.) will decrease (Bozick, 2007). This can be especially true in the case of full-time work.

Less time for study is often associated with poor academic performance (Salamson and Andrew, 2006). Students who work are more likely to do worse in exams than their non-working peers, to drop out of college or to repeat a year and finish their studies later. However, some research argues that there is an optimal number of working hours for students. Neill et al. (2004) show that 15 work hours per week can be beneficial for students, but beyond this number part-time work studies can become detrimental to academic performance.

Spending time at work may prevent the student from developing strong relationships with colleagues and teachers, since interactions will be limited. In addition, participation in extra-curricular activities within the faculty (communication sessions, conferences, meetings, etc.) will also be limited. This can lead to an individual's shift in priorities. He will identify less with the role of student and will put more value on his work (Tinto, 1975).

Other studies show that combining studies and work may result in a much higher workload leading to an increase in stress and anxiety related to fear of academic failure (Robotham, 2008).

However, there is the possibility that work time and study time may not be mutually exclusive. First, higher education is not compulsory, so students may be absent from school, which gives them greater flexibility in organizing their program. Secondly, we must take into account a student's free time. When he decides to work he can keep his study time almost intact if he decides to reduce leisure time. Some studies even claim that working students are aware of the time restrictions which become an incentive to be better organized (Butler, 2007; Trueman and Hartley, 1996).

Estimates of the term-time employment phenomenon among students in Romania

In an attempt to describe the intensity and characteristics of the phenomenon of term-time employment we will use data from the Eurostudent IV (2008-2011) study, whose main purpose is to collect comparable data on the social dimension of higher education in Europe.

According to Eurostudent, the number of undergraduate students having a stable job amounts to 14%. The data refers to students who do not live with their parents, since they were more likely to depend on their own earnings, so they have a higher workload than their peers who still live with their parents. It should be noted that the percentage of working students is quite low in our country compared to other countries, such as England (32.1%), Austria (39.7%), Denmark (51.8%), Estonia (44.8%), Germany (35.3%), Poland (39.7%), Netherlands (48.8%) and Portugal (46.9%).

In terms of the number of hours devoted to study, a student from Romania spends 32 hours per week attending classes or on individual study and between 3 and 6 hours in the workplace. Students for whom education is more important than any other activity spend on average 34 hours a week in study-related activities and 4 hours working, while students who do not consider studying important allocate only 14 hours to their studies but the time allotted to work can reach 28 hours per week. This might be because working students come to appreciate time spent studying less, since they no longer identify with the role of students.

However, if we look at the time budget by hours of regular paid employment, we can see that those who work more than 15 hours per week spend more time studying than the others. According to the Eurostudent database, they spend on average 46 hours a week going to classes and on personal study time. For comparison, those working between 11 and 15 hours per week spending only 26 hours on study related activities and those working between 6 and 10 hours per week allocated to study only 16 hours. Major differences between these groups could support the hypothesis that students who undertake employment do so knowing in advance that will be able to handle the workload, having better time management skills.

Regarding the distribution of the time budget depending on field of study, we observed that Bachelor students who spend the most time working are those in Agriculture, with 26 hours per week. They also have the fewest hours devoted to study - 22. The difference between first and second place is quite large, students in Social sciences, Economics and Law allocate 8 hours per week to work and 28 to study. The students that focus most on study are in Medicine (41 hours for study, 2:00 to paid work), and Arts and humanities (36 hours for study, 3 for work).

Among undergraduate students that work, 40.8% of them say they are satisfied or very satisfied with their workload and 41% found it acceptable. These data could support the hypothesis that those working chose this being aware beforehand of their time management skills.

Influence of term-time work on higher education institutions in Romania

In Romanian higher education, most students are enrolled in state universities. According to INS, in the 2011-2012 academic year, of 540,000 students, 300,000 were enrolled in public higher education.

State higher education is free for the number of students approved annually by the Government and also allows paying fees according to the law. Each HEI is responsible for the organization of admission, the general criteria being established by the Ministry of National Education. Access is free for all who have completed the baccalaureate exam and admission may consist of an examination that tests their knowledge or on the selection of candidates based on a dossier with evidence of previous school experience.

Undergraduate studies correspond to a number between minimum 180 and maximum 240 transferable study credits according to the European Credit Transfer and Accumulation System (ECTS). The normal duration of undergraduate studies is 3-4 years and corresponds to 60 transferable credits for one year of study. Higher education is optional and each university decides whether participation of students enrolled in courses is mandatory or not.

Compared to other countries in Europe, admission fees are generally low. Regarding aid to students, only some of them receive scholarships, be it performance scholarships or social grants and their size is not sufficient to cover all costs of student life. According to Eurostat in 2011 scholarships for students represented 9.3% of total public expenditure on education, the European average being 19.8%. Eurostudent data shows that public funding represents between 5 and 13% of the total monthly budget of an undergraduate student.

Although we observed that the percentage of Romanian students working is not worrying (14%), we can expect it to grow in the future. Influencing factors to consider include: an increased cost of living, along with the stagnation or possible reduction of public spending on education; expectations of employers regarding the work experience of young employees; impression among students and/or their parents that higher education does not provide the necessary knowledge for the labor market, etc.

There are researchers, including Hilary Metcalf (2003), that propose higher education institutions have a change of attitude to have a larger support for students who choose to work, adapting its internal policy to ensure equal access to education. However, there is the disadvantage that when switching to such requirements, universities attract more working students, which would lead to a reduction in school performance in the university, finally being associated with poor quality education.

Universities could impose stricter rules on attending classes and other school activities, but this would only ignore the need of part of the students to work. A different approach could be including work activities into learning activities. An example of this can be internships that are required for

completion of higher education in Romania. However, they are not paid and may be too short and require too few responsibilities that the student cannot learn something useful. Another example is a type of masters study programs in France, which is called the *master apprentissage*, where universities are partnering with businesses to provide students with a variety of employment opportunities and the students' time is divided between university and the workplace. This is however only available for a second year master because it involves advanced knowledge.

It becomes obvious, however, that there is a need to create and use new teaching and learning strategies to attract students, to make them realize the importance of their academic development and the possible learning opportunities outside the university. Higher education institutions should see students as partners in knowledge, by developing programs to better understand the needs of students and to guide them in organizing their schedules, between work and education, so that the latter does not have to suffer. In addition, universities should be aware of the expectations of employers and incorporate into the curriculum activities that develop research and problem solving skills, teamwork, analytical ability and self-analysis, communication skills, critical thinking, numerical skills, time management, interpersonal skills, computer skills, entrepreneurship and creativity.

Impact of term-time work on the labor market

When it comes to finding a job during college, we can expect most students to seek part-time jobs or to work at late hours, so as not to interfere with their studies. Studies show that students prefer jobs that are usually in sales, hospitality services and other services (Hakim 1998). But these types of jobs are usually associated with low-skilled workers. "Students do not object to the marginal status of their job as they regard it as a temporary measure. Their time-horizon is limited and their career possibilities are perceived elsewhere (after graduation)" (Hofman and Steijin, 2003, p. 129). Thus, we might consider that this disrupts the labor market position of low-skilled workers and they are being "pushed" out of their jobs.

This could be a problem, given that low-skilled workers have employment rates much lower than those with higher education. According to Eurostat, in Romania, people with secondary education had an employment rate of 63.1% in 2012, as opposed to those with tertiary education, where the employment rate was 81.4%.

On the other hand, there are studies that contradict these arguments. For example, Van Ours and Rider (1995) believe that the jobs occupied by students are located on another level of the labor market. Workers with lower education levels will not be interested in these jobs as they prefer full time work. Moreover, it is considered that there are jobs for students just because there is a labor force made up of students that are searching for these jobs.

The reasons why employers prefer students to the detriment of low-skilled workers may be different. They perceive students as more flexible and productive. Also, the salary paid to a student may be lower. Students can communicate better with colleagues, customers and suppliers (Hoffman and Sterjin, 2003).

Still, student work would be a problem only if the number of students that work would be substantial and economic conditions would deteriorate so as to prevent workers with a lower education level to find another job.

Conclusions

This paper analyses the decision of tertiary education students to work during college, showing that it can have both positive and negative effects on student life. Available data show that in Romania only a relatively small number of students choose to work and those who do seem to combine study and work efficiently, most even stating they were satisfied with the job they hold. Higher education institutions can also be affected by the decision of students to work, requiring new strategies for teaching and learning. And in terms of the labor market, we can expect that an intensification of the phenomenon of working students could lead to a change of position for low-skilled workers.

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Perspectives on FDI. The case of sustainable development

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Abstract. *Foreign direct investment (FDI) has been viewed as a power affecting economic growth directly and indirectly during the past few decades. Nowadays, in the context of the economic crisis, countries are more concerned on having growth but also to be sustainable. The changing direction of foreign direct investment from developed countries towards developing ones, especially after the crisis, has started to attract more attention in the literature. This paper aims to analyze the investment climate and how it's evolution can affect sustainable development. First part contains a literature review about foreign direct investments and investment climate. The second part presents the recent trends on FDI. The last part of the paper underlines the main ways in which FDI affect sustainable development making references on Romania's case.*

Keywords: foreign direct investments, sustainable development, investment climate.

JEL Classification: Q01, F63, L21, M14.

Introduction

There is a continuing and increasingly concern on the fact that companies, especially multinationals, have a responsibility to society beyond economic and legal performance duties (Sarbutts, 2003; Carroll and Shabana, 2010). Sustainability is a term chosen to bridge the gap between development and environment. Sustainable development, as economic concept became popular with the publication of the Brundtland Report in 1987. Since the publication of the report, company managers have increasingly tried to make their companies more sustainable. A number of studies show positive results in the companies which were directed towards sustainability and bring into discussions the motives and nature of firms' contributions to sustainable development and social responsibility and see corporate responsibility as a generator of sustainable development (Moon, 2007). However initiatives to build corporate image "green" or organization "sustainable" have been accused of being superficial and often do not exceed the level of simple public relations initiatives (PR) (see, for example, Basu and Palazzo, 2008). The definition of sustainable development is "a process to meet the needs of the present without compromising the ability of future generations to meet their own needs" (UNEP, 2005). In addition, there are many definitions and concepts of sustainable development as supported by Rogers, PD, Jalaj, KF, Boyd, JA (2008, p. 54) mention in their study the existence of over 57 definitions. The important thing is that the concept of sustainable development is still under development and are constantly under review and simultaneously achieve three major interrelated areas - economic, social and environmental.

Sustainable development captures two central and basic ideas namely:

- sustainable development is a dimension that is environmental, economic and social environment
- if the basic characteristics of sustainability (ecology, economy and equity) are considered as a triangle, then the relationship is between (UNEP, 2010):
 - Ecology - meaning conservation and management especially those that are not renewable or are precious in terms of life support;
 - Economics - which means generating prosperity at different levels of society and cost effective approach of all economic activity;
 - Society - which means respect for human rights and equal opportunities for all in society.

Therefore the concept of sustainability explores the relationship between economic development, environmental quality and social equity Rogers, P.D., Jalaj, K.F., Boyd, J.A. (2010). FDI impact on sustainable development can be given by the level of employment of labor, technology transfer, the transfer of skills and software and the environmental performance of multinational companies through economic growth generated and by practicing good corporate governance (Pericles, et al., 2011).

The current situation of FDI in Romania

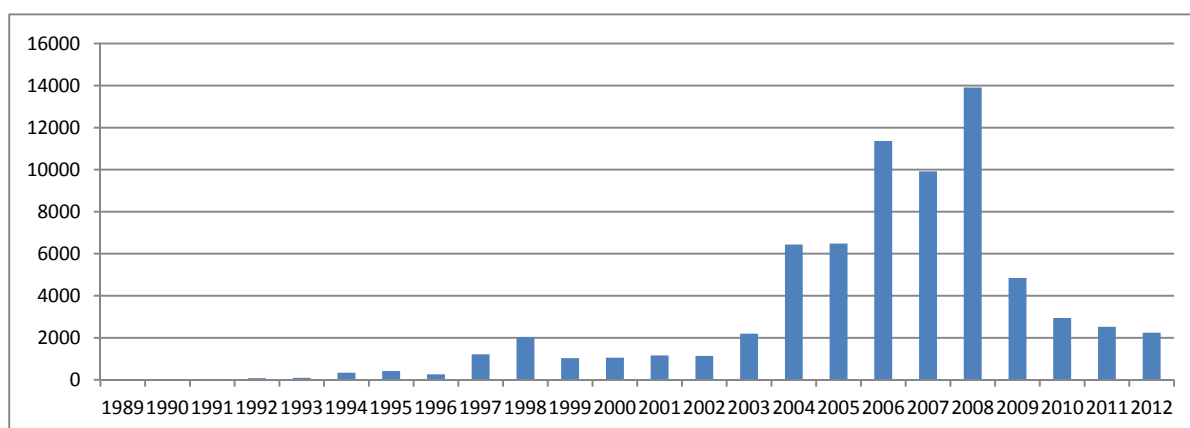
Since 1990 until now there has been a gradual progress in different rhythms and consistency that made the Romanian economy to pass from socialism to a market economy, and then in the institutional context, to the European Union. Investment climate's reforms in Romania have increased with the onset of the economic crisis. Studies conducted by the World Bank from 2008 to present attest that it has been taken a series of measures such as reducing the tax burden for companies, improving taxation, reducing the number of days to register a property, specific measures relating to the Land Registry Cadastre and substantial amendments to the law of insolvency, building permits amend regulations to reduce charges and acceleration, the introduction of electronic payment of taxes and eliminating minimum annual tax, reducing the time required to obtain a certificate of approval from the tax administration agency being facilitated in this way starting a business, strengthening the legal

framework for secured transactions. Studying Doing Business reports from 2004 to 2013 Romania had the following evolution:

- the time required to start a business decreased from 29 days (2004) to 10 days (2013);
- obtaining construction permits has kept a constant number of procedures, namely 15, the number of days increased from 243 (2006) to 287 days (2013) and the cost calculated as a percentage of per capita income of 169.8 (2006) to 79.1 (2013);
- registering a new property is realized in 2013 in 26 days compared to 2005 when they were needed 77 days;
- index in terms of legal rights registered values from 0 to 10 where 10 is a very good level of strength of legal rights for Romania in 2013 has recorded a value of 9 compared to 2005 when the growth had a value of 8;
- in terms of investor protection in 2013 Romania ranked 49 going down comparing with 2012 from 185 countries being above countries such as Finland, Germany, Lithuania, Austria, the Netherlands, France, Slovakia;
- the number of payments per year in terms of taxes decreased from 108 in 2006 to 41 in 2013. What is mentioned here is the progress made by Romania in 2013 compared to 2012 when there were a total of 113 payments per year. This remarkable improvement made possible the rise in the rankings from position 157 to 136 in 2013.

Foreign trade has not experienced significant changes during this period, export documents maintaining 5 days and the import to 6, the time required for export is 12 days and for import the required 13 days. Analysis of the structure and dynamics of FDI in Romania, mainly covers the period 2003-2012, since 1990 until 2003 the volume increased slowly, reaching a cumulative total of 7.682 billion euros, that is, on the average, with much below one billion euros annually because of difficulties and subjective and objective factors of the initial period of transition to a market economy for Romania. In particular, by 2003, most foreign investors in Romania were not formed by strategic investors only small and medium business, mainly in trade and services sector. Since 2000, when negotiations were started for the accession to the EU, our country became also a member of NATO, the credibility of the business environment in Romania increased appreciably, were triggered large privatizations, which increased the attractiveness of national economy for foreign investors. The table below shows the evolution of FDI throughout the period of transition.

Figure 1. *The evolution of FDI in Romania*

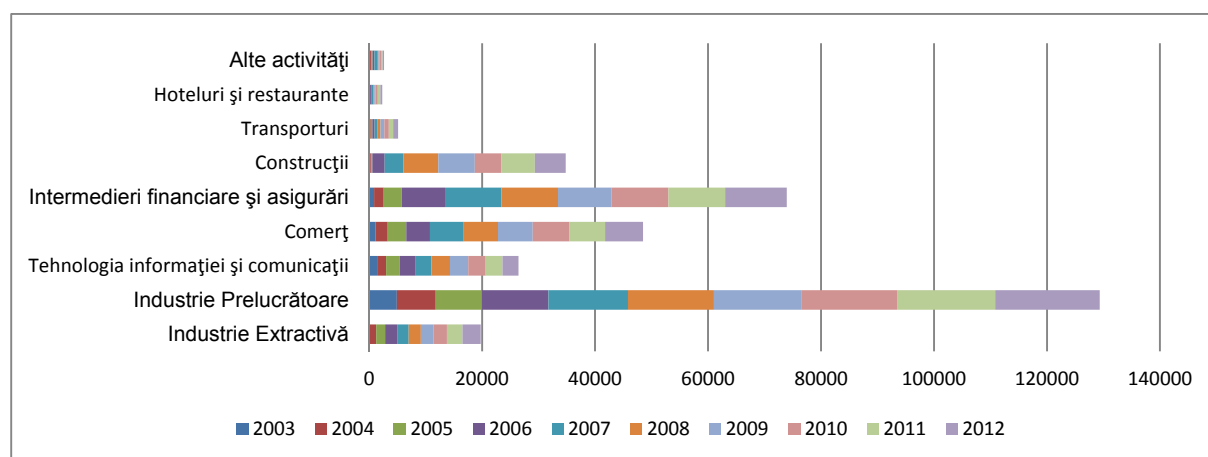


Source: UNCTAD Database 2013.

It is noted that from 1990 to 2003, the evolution of FDI experienced a slow path. The period 1990-2003 showed a low level of FDI mainly due to legislative inconsistency, lack of clear economic objectives and strategies, delay of privatisation of key sectors, the institutional instability. The period 2007-2008 was characterized by privatization of the banking sector and utility and energy sector and Automobile Craiova, Electrica Muntenia. It is observed from the graph that 2008 was a peak year for FDI, reaching a value of 13,908.52 million dollars according to UNCTAD. Starting with this year, due to the crisis installed in Romania, increased lending volume which shows that firms have reduced their investments considerably from net income some being affected considerably by incurred losses. In 2009-2012 FDI has decreased significantly compared to previous years in 2010 reaching a value of 2940.222 million dollars. FDI continued the decrease in 2011-2012 amounted to USD 2242.083 million in 2012. This decrease continues throughout the economic crisis. With this development it can be stated that FDI contributed during this period, especially in 2003, increasing the private sector in the national economy now becoming dominant in certain sectors which bring advantages to foreign investors. From 1998 to 2008, the Romanian economy recorded massive privatization of state enterprises by foreign investors. A large number of multinational companies have chosen to hold majority control of assets purchased, which entitles them to decision entirely as directed by the parent company.

Privatization of state enterprises with foreign investors have brought negative aspects of volatility of FDI, changing on the activity of enterprises or bankruptcy of enterprises, which contributed to the desindustrialization of the domestic economy and decrease of its effectiveness. Foreign investors have not complied with post-privatization investment commitments and took advantage of their dominant position, based only on the company's subscribed capital without ensuring paid-up capital, changed profile production activity, they bought industrial enterprises not to contribute for their technological and economic recovery and maintain activity profile but to use them for demolition and scrap, scrapping export of machinery or for using the land acquired at very low prices on a long-term profitable real estate market. All this is reflected on sustainable development in Romania in a negative way.

Figure 2. *The stock of FDI by sectors 2003-2012 (mil. EUR)*



Source: NBR reports on FDI 2003-2012.

It can be seen that the sector has attracted the most FDI in the period 2003-2012 is the manufacturing sector in a more accurate way we can say it's the metal sector whose share in total FDI is around 15%. Compared to 2003, this sector has grown by 276% in 2012. The evolution of manufacturing can be an

unfavorable aspect of sustainable development that may occur due to negative externalities. Second place as a share of total FDI stock is held by financial intermediation sector and third place also in the terms of the share is the trade. Financial intermediation sector, especially in times of crisis, presented a high degree of volatility. Any high risk adversely affect social welfare gaps so bring a negative impact on sustainable development. Trade sector experienced a slight decrease of 3.7% in 2003 compared to 2010 and then resumed growth. The fourth sector as importance for foreign investors is the construction sector which has peaked FDI in 2009 followed by a massive decline of 27% in 2010, then in 2011 over 2010 followed an increase of 24% then in 2012 a decrease of 7.4%.

From the experience of other countries with emerging economies, and also from the one of Romania, increasing in absolute and relative terms of the service sector, there is no evidence of a sustainable evolution of the economy because this sector for certain subdomains like finance presents a high degree of vulnerability and volatility due to the fact that many of the activities related to services are vulnerable, volatile and speculative and may increase procyclical instability. In recent years Romania registered a strong decrease in the absolute volume for the vast majority of production industries, especially those with high technological level (pharmaceuticals, fine chemicals synthesis, electronics, technology and communications, etc.) and increased level of exports of goods with low processing degree, with little added value but with high natural factor.

For a better perspective on sustainable development it is analyzed the Human Development Index (HDI) which is a composite index measuring average between three sub-indices considered basic dimensions of development, namely: a long and healthy life, knowledge and a decent standard of living. This includes sub-indices such as life expectancy, average number of years of schooling, the average years of schooling and net national product per capita.

Table 1. Evolution of the Human Development Index for Central and Eastern European countries

Year	1995	2000	2005	2008	2010	2011	2012	2013
Country								
Bulgaria	0,722	0,731	0,749	0,766	0,773	0,774	0,76	0,77
Czech Republic	0,783	0,796	0,845	0,856	0,858	0,861	0,861	0,861
Poland	0,755	0,788	0,803	0,817	0,826	0,830	0,833	0,834
Romania	0,703	0,713	0,750	0,781	0,779	0,782	0,782	0,785
Hungary	0,745	0,780	0,805	0,814	0,817	0,817	0,817	0,818

Source: Human Development Index trends, 1980-2013.

It can be observed a favorable evolution of Romania in HDI. It increased its position to 55 in the ranking of 187 countries surveyed and it is located in class with high human development. Bulgaria is the country that is below Romania although the trend is positive and it is ranked 58. The other three countries are in a higher class of development being in class with a very high Human Development registering Poland 34th, 28th Czech, Hungary 43th place. As trend for Romania's HDI has decreased slightly during the crisis followed in 2011 and 2012 to an increase to resume growth. The other countries surveyed have experienced a positive development of the HDI except Hungary which during the crisis decreased. Therefore there are prerequisites for sustainable development in Romania depends on how businesses and state agencies will know how to make this possible.

FDI and sustainable development in Romania

As we have seen sustainable economic development from the perspective of firms means the ability to meet present needs of customers, taking into account the needs of future generations. Sustainable development includes a business model that creates value constantly with long-term preservation and strengthening of financial capital, environmental and social. Sustainability company is based on the

need for companies to fully accept that the business world is part of the natural system (Shrivastava, 1994) and social (Davis and Blomstrom, 1966); This has two dramatic implications for corporate world: acceptance scarcity of natural resources (Hart, 1995), and the fact that companies and society are co-responsible for the use and development of social resources. Perspective sustainable company supports the idea that companies should create sustainable value (economic, social and environmental)

According to the above lines FDI affect sustainable development through three vectors, namely economic, environmental and social. This influence may be exercised directly through economic growth, changes in national production, changes in consumption patterns and technology transfer. The literature has been shown over time that market opening and international trade led to economic growth. Opening markets can lead to a more efficient and productive use of resources, to enhance the contribution of new technologies and the opening of local companies to the international market. The benefits that come from FDI inflows are increasing production, know-how and technology and job creation. Multinational companies are a powerful tool for spreading technology from developed countries to developing countries and often are the only source of new and innovative technologies. If we look at the impact of FDI on productivity and capital accumulation, researchers and De Mello (1999) conclude that FDI increases productivity in countries where they operate and are usually a catalyst for domestic companies and technical progress. Most studies examining 'horizontal spillovers' through the production function. The effect of foreign investment on productivity of domestic firms in an industry is captured by the share of foreign companies present in industry and the people hired by them. Most studies in developing countries suggest that horizontal spillover effect is zero or negative for example Bulgaria and Romania (Konings, 2001). Although FDI bring benefits there are studies (Saggi, 2000) which demonstrate that to encompass these effects of innovation and technology, countries must reach a certain level of development, in particular education or infrastructure. Gorodnichenko, Y., Svejnar, J., Terrell, K. (2014) conclude that the companies that are present for more time on the market where production methods and skills are visible benefit from foreign competitors and from the offer made by foreign firms.

A very important benefit brought by FDI through mergers and acquisitions is related to corporate governance improvements that may arise including organizational and management. Level which corporations observe basic principles of good corporate governance is a factor increasingly important for international investment decisions. Corporate governance programs that establish rules to protect shareholders and encourage clarity and transparency regarding financial reporting and not only have an important role in growth and development of the stock market and in this way companies will be able to access funds having chosen a large number of investors (Maher and Andersson, 2001).

Corporate governance is another factor which contributes to sustainable economic growth. The most commonly used definition of corporate governance is the system by which companies are directed and controlled (Cadbury Committee, 1992). More precisely is the framework which various interests of the parties are balanced and are "relationships created between system management, board of directors, shareholders, minority shareholders and other stakeholders." Another approach would be that corporate governance: Corporate governance is the system of laws, regulations, institutions, markets, contracts and policies and procedures at the enterprise level (such as the internal control system, budgets) that guide and influence the decisions of the higher level of company (shareholders, committees and executive decision makers). Through corporate governance are set the circumstances for the efficient functioning of capital markets and are promoted the efficient allocation of resources. A good corporate governance system helps to maintain investor confidence and attract long-term capital and it is crucial to developing countries such as Romania. The concept of corporate governance is closely related to corporate social responsibility (CSR). It covers a wide range of actions of

companies and investors which have as a result as it is stated in the Lisbon strategy, an "essential contribution to sustainable development". Regarding Romania, CSR actions have begun early in 1990 and focused more on humanitarian actions being carried out by NGOs. Since 2000, these actions were intensified and were favored by foreign direct investors's involvement. Generally, these actions were seasonal and manifested during the holidays. Recently, a study of Ernst & Young, says that these actions have gone to a more refined stage in which 70% of companies with foreign capital using CSR to increase recognition and visibility, 74% motivates CSR programs as part of the strategy of public relations, 23% motivates involvement in CSR as a requirement of shareholders and 22% as required by company policy. Also from this study show that most social responsibility actions are oriented to education, environment and community support. Number of CSR programs in 2013 grew by 108% compared to 2012, reaching an average of 13.7 CSR projects after during the crisis has decreased as companies chose to cut expenses associated social responsibility. There are certain actions at national level which may result in developing a culture of social responsibility. These are: presenting the benefits of social responsibility practices can bring to society and business environment, incentives for companies responsible (through tax incentives or incorporate social and environmental criteria in public procurement policies), harmonizing the legislation of Member States thus creating the prerequisites for fair competition. Also at firms level there are benefits in terms of sales growth and increased market visibility. Pirnea C.I. et al. (2014) conclude organizations should make a difference between having performance and ensure sustainable performance by increasing their ability to meet the needs and expectations of customers and stakeholders in the long term.

FDI can bring tangible benefits and intangible which may have a significant effect on sustainable development. There are studies that show that FDI has a positive effect on FDI recipient country (de Mello 1997; Borensztein et al. 1998; Lipsey R. 2001). These effects are likely to increase employment, increase salaries, additional opportunities for gains and improve professional skills, aspects of social responsibility of the enterprise with foreign capital etc. Moran Th. demonstrates that the positive effects of FDI may generate a series of distortions and extreme damage to a country's development, including pressure of multinational corporations, for the adoption permissions pollution of harmful operations and safety standards or toleration of the abusive behavior of subcontractors. Stiglitz (2002) argues that FDI especially from mining industry oil and other natural resources have a real incentive to get concessions at low prices (Stiglitz, 2002, p. 72). Therefore have a negative effect on sustainable development. In Romania there are this kind of situations the latest example being the case of Rosia Montana. Another negative impact on sustainable development in Romania comes from the nature of the goods exported, due to the low value added content of exports and high natural capital can generate large economic and environmental damage including the medium and long terms (e.g., export of logs, minerals, scrap).

One of the major strategic challenges for enterprises with FDI from the host country is targeting profitability and revenues of foreign capital in terms of economic and social impact in internal and external participants/beneficiaries to this profit. The latest data from UNCTAD confirms that FDI companies repatriated profits usually are higher than reinvested profit in the economy of the host country, which shows a greater advantage for foreign investors than for national economies where are located branches of the multinational firms (Burnstein, 2005; Durham, 2004, Borensztein, 1998). According to BNR, companies with FDI from Romania repatriated, in the years 2003-2010, an amount of dividends distributed by 11.730 billion euro, which adds 2,382 euro billion from net interest income, a total profit of 14.112 billion euro repatriated at a capital stock in 2010 of about 52 billion euro. If we look at the ratio of total profit repatriation and the stock of FDI, the efficiency FDI has a size of 26%, which shows a relatively high profitability situation of FDI in our country. For 2013, according to statistics provided by the NBR, we find that most areas of economic activity where there

is significant FDI share we find an increase of the participations to capital in FDI enterprises, which means continued investment process in 2013. The areas that had the major capital increases were industry (1253 million) and manufacturing (944 million euro) and transport (336 million euros). Regarding the balance of reinvested profit in 2013 increased by 3.3% compared to 2012 and net loans from foreign direct investors increased by 4.4% compared to 2012. But if we refer to the contribution of FDI, the equity flows reaches a maximum increase of 192% in 2013 and the lending drops significantly compared to 2012 by 83%.

For Romania, the main problem posed by the exports of the firms with foreign capital established in Romania is not about competitiveness degree, but the extent to which this level affects direct and indirect the national economy on the short, medium and long run (spillovers or positive externalities). In 2013 the contribution of FDI to exports of goods is 70.9% increase compared to 2012 (70.3%) and imports is 64.5% decreasing compared to 2012 (62.6%). From this point of view, if the profit is fully repatriated to foreign parent company, then the impact on investment in Romania is very low or nonexistent, leaving the only positive effect of FDI on wages of employees of foreign companies plus taxes on profits centralized by Government and also a number of other advantages related to increased know-how, the use of raw material resources, fuel and energy real plan, a better formal confidence compliance with environmental standards. Another negative aspect of the bill on sustainable development is given to transfer pricing. Subsidiaries of the parent company exports products and services at lower prices than market prices after that are resold at higher prices in other markets.

At the level of national economy and firms, bribery and corruption are obstacles to sustainable economic growth. Bribery and corruption come from the existence of economic systems, political and institutional weaknesses and have strong impact on sustainable development. However, numerous studies have shown that there are many cases when corruption becomes a factor of attraction of FDI in a country and becomes a positive one (Popa, 2014) especially for developing countries. For foreign investors as long as the costs do not outweigh the benefits of bribery and corruption, corruption becomes a factor of interest. Countries that have such systems tend to attract foreign investors corrupted with weak anti-corruption systems and have a low level of sustainability of the company and by transitivity nor the host country can contribute to a level corresponding to sustainable development. For example, Healy and Serafeim (2011) concluded that firms with weak anti-corruption systems tend to increase their sales more quickly in corrupt countries comparing to companies with strong systems to combat corruption. In contrast, sales of the two groups is very similar in countries with low levels of corruption. Although corruption can make possible an increase in trade, empirical studies have shown that countries with high levels of corruption have poor economic performance and low rates of both national and foreign investment (Mauro, 1995; World Bank, 1997, Wei, 1998). The mechanisms by which corruption impedes sustainable development are simple. First corruption and bribery alter the economic decision and increase the transaction costs and the economic uncertainty. In addition, corruption increase government expenditure and distorts composition of public expenditure so that public expenditure will not be targeted in areas such as education and health and will be directed to large public infrastructure projects. Therefore economic growth is slowing, being promoted so-called crony capitalism at the expense of efficiency. Through corruption the talents are distributed inappropriately and distort sectoral priorities and accumulation of technologies.

Conclusions

By this study what should be emphasized is that FDI plays a complementary role in the development of a country and the country without proper effort to create a solid legal system they may have as we have seen negative effects. The degree to which they may participate varies depending on the degree

of the capacity of absorption and responsiveness of the host country. As it was said in addition to favorable effects, FDI can have some less positive implications for economic and social level. Every host country must consider and meet the ups and downs that can be made by a foreign investment project in time and be able to correct the negative aspects. Also the cooperation between local and foreign businesses has to be strengthened so that FDI become an incentive for competition and cooperation. FDI should be encouraged in sectors where productivity is high as the peak domains of technological progress (high tech) are, with high added value, also should be encouraged the increase of reinvested profits in the host economy, increasing absorption capacity of high-tech post-accession financial instruments of the EU. There should be also a stricter control on transfer pricing, in this respect, in Romania have been made progresses by NAFA creating a special department for supervision of transfer pricing.

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Income distribution and social welfare

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Abstract. *The actuality of the selected topic resides in the fact that the income level, as a social and economic category, appears as an indicator of the “social price” of the changes occurring in the daily life, during the great changes in the society. The world experience shows us that the preparation and implementation, within due deadlines, of the complex programs of economic development lead to the improvement of the living standards of the citizens. The generally low living standard in Romania, as compared to that recorded in other European countries, underlines the feeling that the income distribution is unjust, which affects the economic and social behavior, as well as the social cohesion. Adopting and implementing certain social and economic policies oriented towards bringing back and maintaining the inequity within reasonable limits require information regarding its level and evolution trends, knowing the causes and determining factors, as well as the connection with the economic and social development.*

This paper presents an approach of the population’s welfare by equally capturing the economic and social factors, by measuring the objective and subjective components, objectified by people’s aspirations and satisfactions, without however minimizing the important economic factor – the income.

Keywords: welfare, economic politics, income distribution, inequity and polarization.

JEL Classification: I30, E62, E64.

Introduction

In the context of the current global economic and financial crisis, the European Union, and mostly certain member states, among which Romania, are faced with extremely serious problems in their economic, social and implicitly political lives. Under these circumstances, the solutions implying the blotting out and later annihilating the effects of the crisis often imply fast, effective and sadly harsh governmental and institutional reactions, economically and socially. However, all these reactions must carefully and responsibly be weighed in order to avoid a possible “social collapse”. Thus, it is absolutely necessary that the rectifying measures, whichever nature they may be, be taken in full awareness (Constantinescu, 2011). That is why the correct and detailed monitoring of the social and economic life becomes a primary element, in the absence of which any rectifying attempt is doomed to fail. The transition to the market economy and the manifestation of the economic crisis have caused extremely profound and contradictory changes in the living standard of the Romanian population. On the one hand, a diversification of the income sources has occurred, with the occurrence of several manners of obtaining incomes from additional activities, on their own, constant or occasional, new possibilities of business gains. Further to these new opportunities, a segment of the collectivity has benefited from much higher incomes, while a part of the population has quickly become richer. On the other hand, the dramatic decrease of the production, coupled by rapid changes in the level, structure and distribution of the population’s incomes, has caused, in a short historic period, an explosion of poverty. An increase of the inequity in an economy like that of Romania is mainly justified by the fact that it also implies the transition from the egalitarian principles specific to the communist society to a distribution according to the rules and mechanisms of the market:

The importance of income distribution – inequity and polarization

According to the European methodology (European Council of Laeken, 2001), the available incomes are a relative indicator of measuring welfare, considering that the poverty limit is at 60% of the average available income at national level, for each member state. The relative poverty indicator is sensitive to the shape of the income distribution.

The specialty literature on economic inequity is continuously growing as a result of the increased interest in measuring and understanding the level, causes and expansion of the incomes and poverty. Thus, a modification has occurred in the research field, and the emphasis was no longer laid on the economic growth and the convergence of the incomes among countries but rather on the analysis of the income distribution, its development in time and identification of the factors determining it (Ailenei, 2007). In reality, the distribution we note at a certain time in a country is not only the result of a spontaneous social and economic mechanism, but it is influenced by a deliberate policy of the private and state bodies, which are trying to reduce this inequity, and help the unfavoured persons (Profiroiu et al., 2011)

In the opinion of John K. Galbraith, the income distribution is unequal among the members of society, because people are different from one another due to their aspirations, level of education, desire to make money, one’s skill to earn it, multiply it, effectively administer it etc. (Galbraith, 1997). The author also states that the current market economy allows the income distribution in a totally inequitable manner, showing its unfortunate social effects.

The size of the incomes is not only a topic of the economic preoccupations but also one of the social preoccupations because the income is one of the key factors influencing the living standard, while the income distribution determines differences in satisfying the needs, explaining the degree of providing the existence of several categories of population (Giarini and Liedtke, 2001). Within the functional

(primary) distribution, one can act in the sense of increasing the salary incomes, while in the redistribution area, the social security system is used, knowing the fact that the individuals or families that are subject to the risk of poverty obtain incomes from social benefits (pensions, sickness benefits, unemployment benefits, family allowances, social security benefits, etc.).

Achieving welfare implies the existence of certain distribution – redistribution mechanisms; these mechanisms work depending on the goals they intend to attain, on the results they intend to obtain. The issue of the welfare equitable distribution is ubiquitous in all the political decisions for two reasons:

- *Any measure regarding the allocation of resources almost necessarily has a redistribution effect*, because it is almost impossible for it not to affect a certain number of persons in a favourable or unfavourable manner. Even though there is a welfare gain for collectivity, the modification of resource allocation is not neutral as far as distribution is concerned, only if there has been a complete compensation of the injured.
- *A very important part of the expenses programs and public interventions especially aims at a redistribution objective* (for instance, the expenses in the health department, agricultural department).

The main instruments which can be used in order to induce a redistribution effect on the income are taxation, public expenses, and prices administration.

Taxation is undoubtedly the most popular redistribution means but is probably the least visible. It exerts a redistribution effect when the total fiscal puncture, i.e. what results from the entirety of the fiscal system is proportionally higher for the high incomes than for the modest incomes. The progressiveness of taxation depends, on the one hand, on the progressiveness of each tax, and on the other hand, on the structure of the fiscal system. The fiscal systems are made up of a juxtaposition of a series of different taxes. Besides the income tax, they also use the tax on estate, successions, donations, sales, capital benefits, and different other rights and taxes with a fiscal nature. The distribution function, achieved by means of taxes and public expenses, becomes necessary to the extent to which the distribution of incomes and fortune among the individuals and legal entities is not in agreement with the needs and social justice. The equity proves the manner in which the economic result is distributed to the members of society, so that the fiscal burden should equitably be distributed among taxpayers, both horizontally and vertically, and the equity in imposing the taxes should be a target in achieving the fiscal policy. Speaking about the equitable imposition principle, which should be considered when distributing the fiscal charges among the members of society, one must make a distinction between the equality before the tax (the taxation should be made in the same manner for all individuals and legal entities) and the equality by means of the tax (the differentiation of the fiscal burdens from one person to another).

Public expenses. The state can act on the income distribution either by providing in kind, which should mainly and particularly favour the classes with modest incomes, or by transferring purchasing power to certain categories of persons, as allowances. Among the public provisions in kind we mention those reserved to the persons fulfilling certain specific conditions justifying an aid in kind from the state (medical and social security, etc.); those which are potentially at the service of those who need them (such as free education, medical care, and vaccination campaigns), but whose gratuitousness or low cost make them accessible to certain categories of population that could otherwise not benefit from them; those who aim at well-determined categories of population, however irrespective of the financial situation of the beneficiaries (social services intended for the elderly or disabled persons, family allowances, vocational guidance services, etc.).

However, in order to obtain a redistribution effect, they mostly use cash transfers, which unlike the ones in kind, are more or less selective.

We must note the fact that transfers are not necessarily directly distributed to the persons who need them. Certain subsidies can be granted, for instance, to the enterprisers especially employing young people who have completed their studies. Also, certain subsidies are granted in order to reduce the price of certain indispensable products or services, which overburden the family budgets of the social categories with modest incomes (for instance, certain foods like bread, milk, eggs, transportation).

Prices administration. Equally, the state can obtain a redistribution effect intervening on certain markets in order to modify the relative prices. This can be obtained in three manners; however, experience has shown that this manner of acting has serious inconveniences regarding the effectiveness of resource allocation. The minimum wage policy considers that the salaries of those less qualified should enjoy a particular protection in order to determine their remuneration. This protection is materialized by introducing a minimum salary above the balance price of the labour market (Cristescu et al., 2014). The objective of rent control is maintaining within acceptable limits the level of rents, as these are a significant part of the budgets of the families with modest incomes. At last, subsidizing the agricultural prices is determined by the preoccupation to provide the agriculturalist with a minimum income, joint in relation to that of the workers, and in order to protect them against the fluctuations of the price of the agricultural products caused by the uncertain nature of these productions.

The welfare theory – predominant ideologies and essential components

Among the stated objectives of the modern states, providing the welfare of their members plays a central role. This makes them be often called welfare states. Traditionally, the preoccupations related to providing the (collective) social welfare have been focused in the redistributive phase, in order to establish the criteria for granting certain incomes instead of or in addition to those which the individuals could obtain in the distributive phase. The extremely dynamic socio-demo-economic and political changes in the post-war period have in time forced the approach of the policies aiming at income redistribution to the one of their distribution, mutually taking over criteria of resource/income distribution. Thus, the economic effectiveness criteria, which used to govern the distributive phase, have been taken over and inserted more and more explicitly among those of the social equity, which used to govern the redistributive phase, and conversely.

In the specialty literature, they are discussing a lot about the “welfare state” concept. Olsson (1993) identifies a duality of the concept, as it includes, on the one hand, a redistributive component whose purpose and also results are the social welfare, and on the other hand, an institutional aspect (the state), referring to the *inputs* and *outputs* related to implementation. At the same time, one can say that this concept has several facets, with different components. Thus, one can identify a political component (as a manifestation of a political community), a social one (as an expression of the social solidarity), and an economic one (promoting the economic growth, economic security and welfare, and eliminating poverty).

In all societies, several institutions offer social welfare: family, civil society, market and state (Cace, 2004). In time, they have performed typologies of the welfare distributors (Titmuss, 1958) and welfare states (Wilensky and Lebeaux, 1958), especially based on the type and purpose of the welfare responsibility assumed by the state. Wilensky H. and Lebeaux C.N. distinguish between the residual welfare state and the redistributive-institutional state. In the first one, the state tries to limit its

commitments only for the marginal groups, while the second one is universal regarding the obligations of the state, and considers the entire population.

Titmuss R. (1974) uses these concepts, and inserts an interim type of welfare state, called the industrial achievement-performance model, within which the welfare needs can be satisfied based on merits, labour performances and productivity.

The residual (minimal) welfare state model is characterized by the fact that it takes responsibility for a delimited group of collectivity, of those in need (the poorest). The premise of this model is that the basic needs of an individual can be completely satisfied by means of two “natural” channels, i.e. market economy and family. Only when these disappear or fail, can the social protection institutionalized mechanisms act, but only temporarily. So, the objective of the social policy is not the entire collectivity, but only a segment of it, marginal. One can identify a few features of this type of welfare state:

- low income taxes and reduced social public expenses;
- social transfers limited only to the poorest collectivity segment, not being oriented towards the reduction of the social inequities.

Its objective is not the provision of an optimal social welfare level at the level of the entire society, but only providing a minimum level, a subsistence level, of the poorest of the poor. Thus, the used poverty thresholds aim at the level of absolute poverty.

The model is centered on a social security system based on testing the material means of the person. Considering that the market economy can satisfy the needs of the large majority of the population, the social security is to intervene where the market economy fails, and grant a focused aid. The universal forms of support are poorly represented within this model. By means of the qualification for the social assistance based on testing the means, they also grant a series of other services as forms of support (for instance, medical care, dwelling aid, etc.), and the residual social services are only granted to the poor population. The attempt to maintain the “total” occupation of the labour force is abandoned, and unemployment is left to evolve depending on the market mechanisms, as the interventions of the state are considered to be counterproductive. This type of welfare state can especially be found in the countries where liberalism is traditional: USA, Canada, Australia, Great Britain.

The performance achievement industrial state is founded on the important role played by the social welfare institutions in supporting economy. They are trying to satisfy the social needs depending on merit, labour performance and productivity, as the social welfare is subject to the economic structure. Here one can identify a quite good development of the social rights, highlighting the maintenance of the differences. The principle of subsidiarity is dominant in providing the welfare, with a strong influence of the Catholic Church, while the state is involved to a small extent in socializing the family welfare, discouraging the women with children to get employed on the labour market. The clearest example for this model is represented by Germany.

The (universalist) redistributive institutional welfare state model is oriented towards proving universal services outside the market, based on the necessities principle, regarding the social welfare as a major institution, integrated in the society. The universality refers, on the one hand, to the fact that the entire collectivity is targeted by the welfare policies, and on the other hand, to the fact that all the aspects of the human life are put under the star sign of welfare. The following characteristics can be mentioned:

- orientation towards the reduction of the social inequities, especially by means of the social transfers;
- financial support extended to the entire population, in case a special need appears;

- the universalization of the social services (education, medical care, etc.);
- involvement of the state in creating jobs, tending to completely occupy the workforce;
- equality between social classes, based on high standards, having as an objective the elimination of relative poverty, not only of the absolute poverty;
- social security based on testing the means is present at a marginal level, acting only in the case in which the universal forms of support are insufficient;
- the state is the main one responsible for providing the social security, and for this, the taxation is high, similarly as the social public expenses.

The typical examples for this type of welfare state are the Scandinavian countries (Sweden, Norway, Denmark), Holland, Austria.

The ideological option of the governments at a certain time, and projecting on this basis of what has been defined to be a just distribution of resources in society have caused the ways in which the objectives of the welfare states would be implemented to differ. The most quoted work which tackles these concepts is that of Esping-Andersen G., "The three worlds of the welfare capitalism" (1990), in which the term "regimes of welfare states" is inserted. Esping-Andersen has outlined the existence of three response directions: liberalism, Christian-democracy, and social-democracy, based on which he has prepared the famous classification of the welfare regimes: liberal, corporate, and social-democrat. (Esping-Andersen, 1990, 1999).

Within the first model, the market and the family are the main offerers of social services. The social securities are only used as temporary measures in the situation in which the first two sources fail in providing welfare. The second model is based on performances, and the social policy is dealt with as an additional element to the economic policy. The aid from the state is conditioned by the individual performance which supports any kind of insurance with equalization between payments and benefits. The last model is based on the powerful redistribution from the state. The social policy is a complete instrument used for achieving the social cohesion, with redistribution taxes and income equalization programs. The goods and social services are offered based on necessities. Gosta Esping-Andersen performs a typology of the welfare states, organized in "regimes groupings" of welfare states. He considers that, on the one hand, the capitalist states are welfare states, and on the other hand, the level of social expenses is not a trust indicator for characterizing a welfare state and for establishing the differences between them. That is why, Esping-Andersen suggests an analysis grid which considers structural features of the welfare state, such as: degree of universal access to benefits, degree of differentiation of social benefits for several groups, relation between the private and public pension system. He suggests that the most important factors explaining the differences between the three groupings of welfare states are: the political mobilization of the working class (by means of the social-democrat parties which have governed), historic Catholic tradition, and size of the authoritative state.

In Romania, the welfare state is strongly shaken by social, economic, but also political issues that the country is facing. At the same time, at the population level, an increased distrust in the direction we are going is expressed, as the public opinion barometers are showing. Poverty, increase of inequities and social polarization, the moral crisis which is present in our society – all these are questioning the existence of the welfare state in Romania. In Romania, there is a welfare state more in terms of structures and less strictly in terms of population. The problem occurs at the level of implementing the principles, which we seem to use for guidance, the agreement between attitudes, values and actions (Hudea, 2015).

Pasti (1997) states that there is a "survival society" in Romania. Zamfir (1999) states that we have to choose between a welfare policy and a social survival policy. Choosing between building a welfare

society (guided by the principle of co-responsibility between collectivity and individual, by investing in the human capital and a pronounced social policy) or a survival one (by means of a social policy centered on reducing poverty). Mărginean (1994) pleads for building a “moderate” welfare state. The raw spot of the social policies in Romania during the last years seems to be represented by their lack of coordination, of taking *ad hoc* measures.

That is why, one must first analysis the possible orientations and then, using the experience of other countries in the social policies field, express a clear general option. One must not take over a model of welfare state from those already built; as a matter of fact, it is not possible to take over/imitate a model. This is not possible due to the fact that Romania is **different** (in terms of history, culture, traditions, etc.), has its own features (as any other country, for that matter). The options must be adapted to the Romanian reality (Lazăr, 2000).

Conclusions

The socio-economic and political reality has proved the fact that there are no pure models of social welfare states, but hybrid models resulting from the mutual influences among these models. The most typologies of the social welfare states converge to the existence of three main types of regimes, i.e. liberal, conservatory-corporate and social-democrat. The development of the Swedish state of social welfare, which is considered to be a social-democrat state of social welfare, has been influenced by the liberal ideology of welfare, similarly as the development of the liberal state has been influenced, in its turn, by the evolution of the social-democrat ideology of welfare. The development of the social welfare state is in close interdependence with the economic growth. Most of the times, the economic policies and social policies of the social welfare state are correlated (economically and socially). For instance, the occupation as completely as possible of the workforce is both an objective of the social policy, and one of the economic policy. However, in the evolution of the social welfare state there have also been periods in which the objectives of the economic policy have conflicted with the objectives of the social policy (economic versus social). For instance, the economic growth has been sacrificed in favour of a more generous social policy.

The welfare of the citizens of a state is all the more higher as it finds better solutions for the allocation and management of its resources, which has probably determined Baldock (Baldock J., 1999) to say that the economic policy and the social policy deal with the same issue, but from two different viewpoints: economic and social.

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“Future Directions”: m-government computer systems accessed via cloud computing – advantages and possible implementations

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Abstract. *In recent years, the activities of companies and Public Administration had been automated and adapted to the current information system. Therefore, in this paper, I will present and exemplify the benefits of m-government computer systems development and implementation (which can be accessed from mobile devices and which are specific to the workflow of Public Administrations) starting from the “experience” of e-government systems implementation in the context of their access and usage through cloud computing and mobile cloud computing technology.*

Keywords: e-government, m-government, information technologies, cloud computing, mobile cloud computing, Public Administration.

JEL Classification: H70, H83, O14.

1. Introduction

The technological progress in recent years has resulted in the changing of the operating and communication mode. In the globalization “era”, the perception of time and distances has radically changed the as compared to “the past”. “Today” we work in virtual teams, even if team members have not physically ever met, we participate in courses, speeches and attend meetings that are held in any location on the globe, even from our own office or home. “Today” we can appeal to a medical consult, psychological or legal advice online before stepping into the specialist's office or sometimes totally avoiding the physical encounter with him/her. Moreover, in the Internet “era”, we can transfer money anywhere in the world, which are received almost instantly directly converted into the local currency of the recipient or make payments with money that we have never seen physically (card payment, online payment, etc.).

A context as the one “sketched” above, enabled the expansion or sometimes the permanent migration of companies from the country of origin to other countries and / or continents, some being interested only in selling other in the well-qualified labor force but cheaper than in the country where they were created. In short, in all areas of economic activities (and others) we felt the implications and consequences of the technological progress of the past 30 years.

However, technological developments continued its course culminating now with the increased use of mobile phones, tablets etc., known as mobile devices. While “yesterday” we needed a computer to send an email for example, today we can achieve even more than that, using our phone. A great advantage of using modern mobile devices is that the users can enjoy a wide freedom, the activities they engage in, whatever their nature, personal or professional, being characterized by these two words: “anywhere, anytime “.

To these “changes”, companies have adapted without great difficulty, obviously influenced by the fact that by automating the activities of employees and offering them access to modern technology, on the medium and long term, corporate profits have increased, even if the initial investment in “technology” were high. Obviously, the “flip side” in this context of technological evolution, has appeared: although companies have run every year increasing amounts of money, which are important sources of revenue for the government from taxes and duties, along with the processes automation a number of jobs were abolished resulting in layoffs.

There is no doubt that the adaptation of businesses to the “era” of new information technologies was a success, but the situation is different regarding Public Administrations. Automation of workflows from the Public Administrations is called e-government. This automation consisted in developing systems accessed by ordinary computers, PCs (Personal Computer) such as “desktop”. Even if e-government systems were not always perfectly adapted to the needs of citizens and responded only partially to their expectations, due to technological progress, in the not too distant future they will be replaced by m-government systems.

What are m-government systems? How could they improve or streamline the activities developed at the level of Public Administrations or how could they increase efficiency and productivity of Public Administrations employees on the one hand, and on the other hand, how could these computer systems meet the needs of the “end customer”, the citizen by responding to his/her expectations and also what type of technology could help achieve the performance listed above, I intend to respond to this in this paper.

2. m-Government, from definition to the "technology of the hour", mobile cloud computing

While consulting research literature, we can observe that there are two main directions regarding the way in which the concept of m-government is referenced: on the one hand, in some works, the concept of m-government is treated as a subset of the e-government: "m-Government is [...] a class of e-Government applications and refers to any transaction via mobile technologies, such as laptops, phones or personal digital assistants (PDAs)" (Al-Hadidi and Rezgui, 2010, pp. 88-94), and on the other hand, the same concept (m-government) is seen as a continuation/extension of the one of e-government: "m-government is an advance set of e-government. M-government endures is to use the mobile wireless communication technology between the government organization and in distributing of services and information to citizens and industrial enterprises" (Alsenaidy and Tauseef, 2012, pp. 5-8).

I personally believe that the second direction is much closer to "nowadays reality". The main goal of the m-government computer systems is facilitating the interaction between citizens or companies and public institution, as well as e-government systems, but the way of analysis, design, development, implementation and access or use is totally different, as the methodologies and technologies used are specific to mobile devices. "The implementation of m-government is more complex than implementing e-government as governments need to identify the mobile technologies and applications relevant to service efficiency." (Alrazooqi and de Silva, 2010, pp. 1037-1047)

What could we learn, however, from the e-government "experience" so as to develop modern m-government computer systems which could be successfully used by citizens? The e-government "experience" can teach us that the computer system developed should be designed from the outset so as to take into account the following elements:

- the computer system to be developed, will be accessed, used by very different people in terms of age, profession, level of knowledge in using the computer, mobile device etc.;
- computers or mobile devices used by the users who access the computer system have different information processing capabilities;
- the time allotted to consultation, to the use of the computer system by the citizen may be affected by the type of Internet connection, personal factors (e.g. patience, etc.).

Consequently, if we consider the several constraints listed above, the computer system should be developed as simply as possible, user "friendly" with pages that can be loaded onto the user's device in a very short time even if he/she has a less powerful Internet connection (wireless). Of course in terms of technology such a computer system version is possible, but as in any "compromise" in this situation, we should give up on a number of elements such as efficiency, performance of the developed computer system, abandoning its initial purpose of development.

Yet, what could be the solution that respects the constraints outlined above, but without giving up performance? Certainly, the only answer to this question is: Mobile Cloud Computing (MCC) or also called "the technology of the hour". "MCC is the combination of cloud computing, mobile computing and wireless networks to bring rich computational resources to mobile users, network operators, as well as cloud computing providers." (Abolfazli et al., 2013, pp.1-32), (Liu et. al, 2013, pp.14-22)

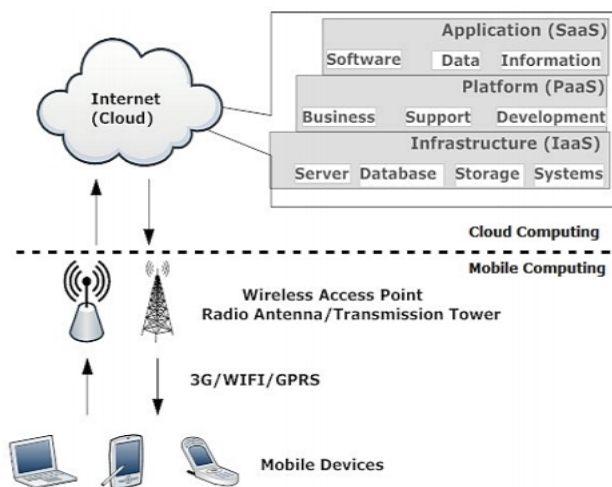
"A mobile cloud approach enables developers to build applications designed specifically for mobile users without being bound by the mobile operating system and the computing or memory capacity of the smartphone. Mobile cloud computing centered are generally accessed via a mobile browser from a remote webserver, typically without the need for installing a client application on the recipient phone" (Techopedia.com, 2015), therefore the "Internet connection is critical to mobile cloud computing" (Dharmale and Ramteke, 2015, pp. 2072-2075).

Next I will explain why this cloud computing technology is so “special”, highlighting its main characteristics (adapted from Lițan, 2013, p. 111):

- *“common resources*. Classically, the user accesses his/her own resources. In cloud computing technology, the resources of several computers are automatically managed;
- *dynamic allocation of resources*. The user requires resources when he/she needs it and similarly gives them away when he/she does not need it. In cloud computing technology different types of resources are offered automatically and automatically released: CPU, storage media, software, applications, services;
- *multiple computing systems*. The nodes (workstations) of cloud computing are typically built using a large number of computing machines, so you can easily add a new node or easily replace a node which breaks down;
- *automatic monitoring of resources*. This feature contains a lot of configuration tasks usually handled automatically by the system: save, restore, setting, resource allocation and release etc.;
- *virtualization*. In cloud computing technology resources are usually virtual, being shared between multiple users to increase system efficiency;
- *parallel computing*. There are several work environments for the use of parallel processing, leading to hundreds or thousands of processors “(Lițan, 2013, p. 111).

Returning to Mobile Cloud Computing technology, to more accurately understand the operation method of this technology, in the figure below (Figure 1) it is represented a simplified Mobile Cloud Computing architecture.

Figure 1. Mobile Cloud Computing architecture, source: (Qi and Gan, 2012, pp. 195-202)



In Mobile Cloud Computing architecture, shown in Figure 1, it can be seen that „mobile cloud computing can be simply divided into *cloud computing* and *mobile computing*. Those mobile devices can be laptops, PDA, smartphones, and so on, which connects with a hotspot or base station by 3G, WIFI, or GPRS. As the computing and major data processing phases have been migrated to ‘cloud’, the capability requirement of mobile devices is limited, some low-cost mobile devices or even non-smartphones can also achieve mobile cloud computing by using a cross-platform mid-ware. Although the client in mobile cloud computing is changed from PCs or fixed machines to mobile devices, the main concept is still cloud computing. Mobile users send service requests to the cloud through a web browser or desktop application, then the management component of cloud allocates resources to the

request to establish connection, while the monitoring and calculating functions of mobile cloud computing will be implemented to ensure the QoS until the connection is completed.”(Qi and Gan, 2012, pp. 195-202)

With applications like Mobile Cloud Computing, from the “desktop” computer, from one’s mobile, tablet or any other type of mobile device, surely each of the present “consumers” of Internet service have already worked without being aware that they deal with such an application. I make this statement given that applications benefiting from a very high popularity such as: Google Gmail, Google Voice for the iPhone are actually Mobile Cloud Computing applications.

There in the case of Romania, some known applications that can be integrated in the Mobile Cloud Computing category, and that are obviously dedicated to mobile devices in particular. Of these applications, I shall mention:

- *Orange Cloud*: according to supplier (Orange Romania), this application allows the creation of a digital content backup (photos, videos, music, documents, personal calendar and contacts from the address book), offers the possibility to sync, view, distribute and access it anytime, anywhere, from a computer, tablet or smartphone with Android or iOS operating system installed.
- *Vodafone Cloud*: functionalities are similar to those of the application presented above, Orange Cloud.

3. Cloud computing technology implemented in the public institutions: between project and reality

In *Romania*, at the level of Public Institutions, the cloud computing technology has not yet been implemented, but such a possibility is considered: on the website of the Romanian Government, gov.ro, in the section “Objectives” one can read document “Government Program 2013-2016”, which includes among other courses of action of the Chapter “Communications” that of “implementation of cloud technologies in Public Institutions by creating a centralized, scalable and dynamic platform able to offer quality IT services at reduced costs to a level of security at European standards. Government Cloud will combine a particular concept of a Hybrid Cloud - a Public Cloud area dedicated to the relationship with the citizens in the context of e-Government (streamlines e-Gov development costs) and a sensitive area of Private Cloud dedicated to the interoperability of governmental organizations”. (Guvernul României, 2013).

While in Romania, an implementation at Public Institution level of cloud computing technology is only an objective, in other countries, such projects are already “old”. An example of this is the *Republic of Moldova*, where M-Cloud platform has been implemented since February 2013. “By using Cloud technology, many institutions use common applications, stored in a single data center. The advantages of M-Cloud system are:

- saving resources;
- elimination of maintenance costs;
- increasing the quality of data management;
- increasing information security;
- delivering quality services to citizens and businesses.” (Guvernul Republicii Moldova, 2013).

Other examples of states that have “adopted” the cloud computing technology in Public Institutions:

- *United States*: „The U.S. Army, Air Force, Navy, DOJ, USDA, Department of Education and more have been early cloud adopters, setting the trend and direction for others to follow.” (Perepa, 2013).
- *United Kingdom*: “The UK is one of the European pioneers of Governmental cloud. According to G-Cloud experience in the UK to date, the focusing on highly specialized cloud services enabled

G-Cloud to benefit from the major benefits of cloud: agility, scalability, flexibility and efficiency, all reflected in the services provided to citizens.” (Ymens and NEC Corporation Part., 2015).

“The central idea of European cloud computing strategy [announced in 2012] is the need to accelerate the use of cloud computing model in all economic sectors, the final result being the boost of economic growth and innovation in the EU. Thus, Cloud Computing at the European level is one of the tools under consideration for a smart, sustainable and socially inclusive economic increase, the major objectives for 2020.”(Ymens and NEC Corporation Part., 2015)

4. Cloud Computing and Mobile Cloud Computing, “tools” for e-government and m-government computer systems?

From my point of view, cloud computing technology and its “successor”, “mobile cloud computing” may be excellent “choices” in terms of their implementation in the Public Institution. Although initially, the costs of implementing such technologies would be increased, in time the government will even be able to save money that is currently used for internal software and hardware of Public Administrations. The main advantage being on the one hand, that no resource (software or hardware) will remain unused, which currently happens frequently. According to IBM's website „the two key features important of cloud computing technology are:

- Cloud computing enables convenient, on-demand network access to a shared pool of configurable computing resources (such as networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction.
- There are three basic models of cloud service: Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS).” (Preston, 2011).

Currently, Public Administration employees have local, physical stations by means with which they operate, but the CPU or the data storage capacity, for example, are not used to their maximum values every time. On the other hand, the maintenance costs of software and hardware products will drop, being easier to manage and maintain a cloud computing system instead of hundreds or even thousands of workstations. In this context, cyber security of information that “run” on the activity flow in Public Administrations, would achieve a much higher level than the one at present.

Another improvement in the flow of activities developed in the Public Administrations could be the use of m-government applications accessed from mobile devices by employees through a Mobile Cloud Computing system. The benefits of such a deployment could be easily seen, especially in case of employees whose duties pertain to fieldwork. Currently, these employees perform part of the activity outside the office, but the information “collected” at the end of the activity, will be introduced in the computer systems of Public Administrations. The improvement of the activity may lie in the fact that by using a mobile device connected to the Mobile Cloud Computing technology, on the one hand the employee’s work output could increase, turning the fixed office into a mobile one, by being able to introduce new information or consult the one existing in the information systems with which he/she currently works, or even to perform operations that require a high level of resources that the used device does not contain („mobile device has fewer sources than the normal desktop computer” (Zamzami and Mahmud, 2012, pp. 1-5)), wherever he/she is, and on the other hand by offering autonomy to the employee, the result will be the increase of his/her commitment to the work he/she performs.

Another advantage worth taking into account, regarding the Mobile Cloud Computing technology implementation in the Public Institutions in the context of automation of processes performed by them could be noted in case of activities of employees who need to provide support and maintenance outside office hours and during holidays. Once all IT processes within the Public Administrations are automated

and the citizens access the services of these institutions, mostly, only through computer systems (e-government, m-government) a permanent technical support for the good functioning of these systems has to be provided by specialized departments (IT, software, hardware, etc.). In the context of implementing Cloud Computing and Mobile Cloud Computing technology the physical presence of employees in the office, in particular, for providing the support described above, in the vast majority of cases, would not be required any longer, as the employee can accomplish his/her work duties, from anywhere and at any time, without any "barrier" regarding space, time and the software or hardware resources necessary for the development of business, only via a fixed or mobile device. By offering such a freedom to the employee, in addition to recognizing his/her professionalism, a relationship of fidelity to the institution where he/she works can be created, decreasing the possibility of looking for a new job, thus keeping professionals and specialists as long as possible as public sector employees.

At the "opposite side" from the employee of the Public Institutions, is the citizen, obviously viewed from the perspective of "customer". The "opening" receptivity and interest of the citizens regarding the use of new information technologies (mobile phones, tablets etc.) is already well known, thus going through a first "step". The next "step", is the providing continuous and modern services to the citizens through computer systems such as m-government and/or e-government accessed through cloud computing and mobile cloud computing technology. While we already have a lot of information about e-government information systems, accessed in a "classic" way via a browser (Internet browser), as these are implemented in various forms and with some constraints of use including in Romania, next I will answer the question: what types of services could be integrated into m-government computer systems, mainly those accessed from mobile cloud computing? I think the main advantage in accessing and using the information systems of Public Administrations as citizen by means of cloud computing and mobile cloud computing technology as compared to "classic" accessing (web-based application or application installed on the user's device) is that, the citizen will be able to use applications provided by Public Administrations regardless of the "resources" of the used device (memory, processing power, etc.). Thus, we can find an answer and solve the problem of choosing the type of technology by means of which the computer system will be developed, being able to choose any type of technology. I say this knowing that some technologies which enable the development of computer systems make the operation of the system possible only with a high level of resources (memory, processing power, etc.), and thus the use of modern but high-cost devices.

Therefore, by exceeding including the "limited resources" coercion, the computer systems provided by Public Administrations to citizens can achieve a new level of performance and the services offered through these systems, in addition to the "classical" ones: pay taxes, virtual counter, electronic voting, etc. (by information systems such as e-government and m-government), may include services specific to cloud computing and mobile cloud computing technology, the state turning into a service provider, services which in Romania are currently offered only by a few private companies, for example rental through an agreement (in cloud "network") of "resources" to the citizens and businesses (for example: "virtual" space for information storage, processing power, etc.), the state thus obtaining new sources of income.

5. Conclusions

I believe that through this paper, by presenting one of the newest technologies in the context of its use in the Public Administrations (cloud computing and mobile cloud computing technology), I highlighted the benefits that the government could obtain by implementing it, on the one hand, and on the other hand, I explained and exemplified how we can remove the constraints from the present that

need to be taken into account in the development of m-government computer systems, starting on the one hand from the “e-government” experience and on the other hand using “the technology of the hour”: cloud computing and mobile cloud computing.

Also, I explained how through m-government computer systems accessed from cloud computing and mobile cloud computing “network”, one can streamline Public Administrations activities and the employees can become “loyal” and increase their commitment to the position they hold. At the same time, I explained and exemplified the benefits that citizens can enjoy by accessing and using m-government applications through a “cloud” “network”.

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The connection between the education level of young people, labor productivity and inflation in Romania

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Abstract. *Labor productivity is an important indicator for any economy. An increase of productivity is benefits for the entrepreneurs and for the national economy. This paper discusses the link between changes in the number of high school graduates in Romania, to amend the rate labor productivity and inflation rate. The period under review is 2004-2012. The data used are those published by the National Institute of Statistics, National Bank of Romania and Eurostat.*

The data used are those published by the National Institute of Statistics, National Bank of Romania and Eurostat.

We calculate the relative change in the number of graduates of university education and the relative change in the volume of labor productivity and identify the links. Furthermore, we highlight the correlation between these indicators and will try to identify the relationship between changes in the number of graduates in secondary education and inflation.

Keywords: graduates, pre-university graduates, labor productivity, inflation rate.

JEL Classification: A23, I21, J24.

Introduction

This paper examines the relationship between changes in the number of pre-university graduates in Romania, changes in the level of labor productivity and the inflation rate. It is analyzed data on the number of pre-university graduates, labor productivity and inflation. Also, we make correlations between these indicators and we analyze the results obtained. We are attempting to verify such hypothesis that a reduction in the number of pre-university graduates would not necessarily lead to a reduction in labor productivity and thus to higher inflation.

"The purchasing power of gold and silver coins is inversely proportional to their quantity in circulation" (Pohoață, 1995: p. 31). Starting from the I. Pohoață assertion, we can say that one of the inflation causes is money supply growth. Other causes of inflation are the increasing demand for goods and services, but also the reducing supply of goods and services. One reason for the increasing of inflation rate, considered in this work, would be the reducing supply of goods and services. This could be found by analyzing labor productivity, i.e. labor productivity index. The production of goods and services is made using the production factors. Among the traditional production factors, labor has an important role.

The best possible use of this factor leads to increased labor productivity level. "Productivity is the efficiency with which is used the labor as a production factor" (Dictionary of Economics, 1999: pp.369). The labor productivity is influenced by a number of factors, including: work motivation, working conditions, social climate at working place. Regarding the first factor, people are tempted to work more when their work is rewarded. This is possible only when the labor results are superior. A firm, and why not an economy, will function normally when productivity growth exceeds wage growth dynamic. "Productivity improves with the level of education" (Marinescu, 2001: p. 22). Therefore, to get the expected results, both at micro and macro level, you have to increase the education of young people. "Research carried out recently revealed a very close correlation between the level of professional training, even of general education on a larger scale, and labor productivity." (Mungiu-Pupăzan, Vasilescu, 2011). The fact that in Romania there is a reduction in the number of pre-university graduates should not lead to a reduction in labor productivity, on the contrary. "Any action of education provides to the one who carries it knowledge and skills likely to be exploited in activities generating cash income" (Marinescu, 2001: p. 22).

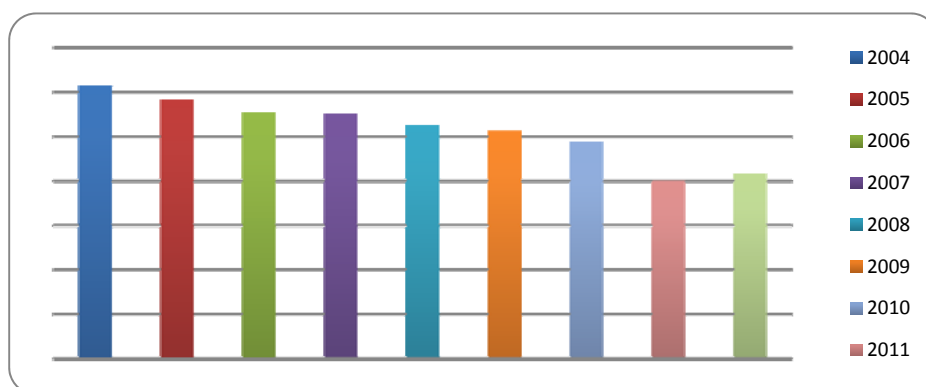
Methodology

One of the objectives of the strategy "Europe 2020: a new strategy for jobs and growth" is "Employment", i.e. the employment rate among people aged between 20 and 64 years to be of 75%. Also, a special role is played by the initiative "Youth Opportunities", which aims to provide support to find a job for unemployed young people, especially those who have left school early, but also to graduates. Based on these objectives of the strategy "Europe 2020", using data provided by the National Institute of Statistics (NIS) and Eurostat, it will be calculated relative changes in labor productivity and inflation level. We will also establish correlations between these indicators and regression equations. Coefficients of these equations were calculated using the method of least squares. There will also be estimated labor productivity and prices indices based on regression equations.

Table 1. *Evolution of the number of graduates in pre-university education*

Year	The number of graduates in pre-university education
2004	614160
2005	583183
2006	553572
2007	552073
2008	524606
2009	512881
2010	487813
2011	400076
2012	415288

-persons-

Source: National Institute of Statistics.**Figure 1.** *Evolution of the number of pre-university graduates*

Over the period analyzed we can see a tendency of decrease in pre-university graduates from a number of 614 160 graduates in 2004 to 415 288 in 2012. This is possible due to reducing population and also to school population reduction. Over the same time period there is a change in labor productivity. The highest growth rates were recorded in 2004 (10.3%), 2006 (7.1%) and 2008 (7.3%). In the same period there were decreases in the level of labor productivity. In Figure 2 the reductions are obvious.

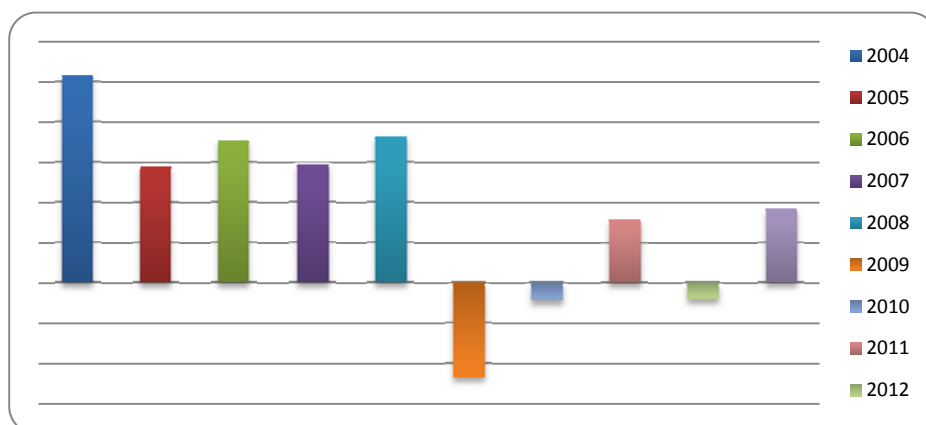
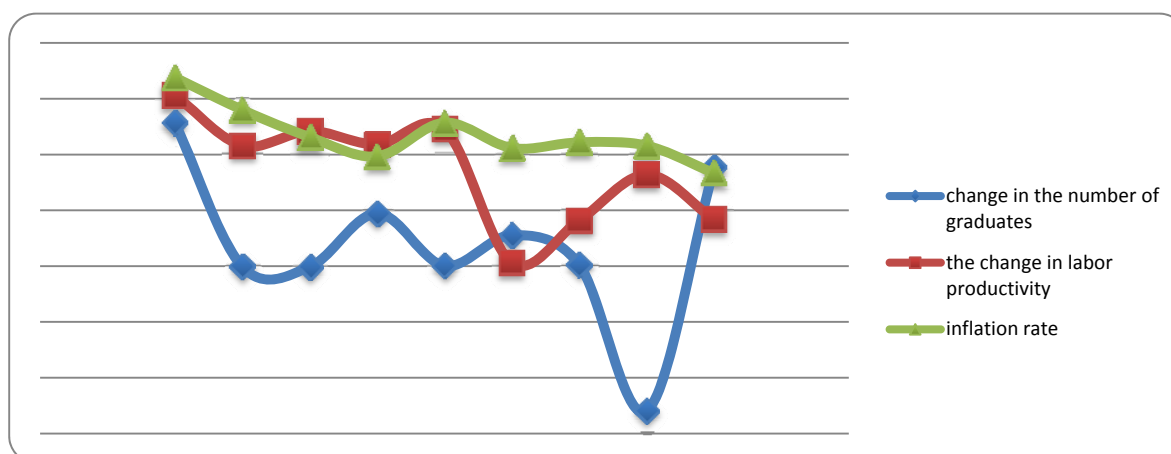
Figure 2. *Change in labor productivity***Source:** calculations based on data provided by Eurostat.

Table 2. *Change in the number of graduates, labor productivity and inflation rate*

Year	Change of the graduates number in preuniversity education (%)	Change in labor productivity (%)	Inflation rate (%)
2004	7,83	10,3	11,9
2005	-5,04	5,8	9,0
2006	-5,07	7,1	6,56
2007	-0,27	5,9	4,84
2008	-4,97	7,3	7,85
2009	-2,23	-4,7	5,59
2010	-4,88	-0,9	6,09
2011	-17,98	3,2	5,79
2012	3,8	-0,8	3,33

Source: Calculations based on data provided by the NSI and Eurostat.

In Table 2 were calculated relative changes in the number of graduates and labor productivity. In general there is an inverse relationship between them, except for the years 2004, 2009 and 2010.

Figure 3. *Evolution of change in the number of graduates, the change in labor productivity and inflation rate*

Results

Using indicators "Index of number of pre-university graduates" (endogenous variable - x) and "Index of labour productivity" (exogenous variable y), it was calculated the regression equation.

$$y = 94,72 + 0,092x.$$

The parameter b, which represents the slope of the regression equation, is positive, showing the direct relationship between graduates index and the productivity index. In Table 3 it was calculated the correlation between these indicators. The value obtained (0.136496) means the weak relationship existing between them.

Table 3. *Correlation between changes in the number of graduates, the change in labor productivity and inflation rate*

Period	The correlation between changes in the number of pre-university graduates and labor productivity change	The correlation between the change in labor productivity and inflation	The correlation between changes in the number of pre-university graduates and inflation
2004 - 2012	0,136496	0,676983	0,246809

In Table 4, based on the equation obtained, there were estimated the values for labor productivity index.

Table 4. Estimation of labor productivity increase based on changes in the number of pre-university graduates

Year	Index of graduates number (X)	Index of labor productivity (real values) (Y)	Index of labor productivity (estimated values)
2004	107,83	110,3	104,64
2005	94,96	105,8	103,46
2006	94,93	107,1	103,45
2007	99,73	105,9	103,89
2008	95,03	107,3	103,46
2009	97,77	95,3	103,53
2010	95,12	99,1	103,47
2011	82,02	103,2	102,26
2012	103,8	99,2	104,26

We tried to calculate the regression equation for indicators "Labour productivity index" (endogenous variable - x) and "Prices index" (exogenous variable -y).

The resulting equation is:

$$y = 70,4 + 0,35x.$$

In this case the slope of the equation is positive, which shows the direct link between these indicators. Also, the correlation coefficient 0.676983 reflects the presence of a significant link. We tried to estimate the prices index starting from the regression equation and then the inflation rate (Table 5).

Table 5. Estimation of inflation rate based on labor productivity change

Year	Index of labor productivity (X)	Index of prices (real values) (Y)	Index of prices (estimated values)	Inflation rate (calculated values)
2004	110,3	111,9	109,00	9,00
2005	105,8	109,0	107,43	7,43
2006	107,1	106,56	107,88	7,88
2007	105,9	104,84	107,46	7,46
2008	107,3	107,85	107,95	7,95
2009	95,3	105,59	103,75	3,75
2010	99,1	106,09	105,08	5,08
2011	103,2	105,79	106,52	6,52
2012	99,2	103,33	105,12	5,12

Knowing that the inflation rate is influenced by the volume of goods and services produced and that this could grow due to the increased number of graduates, we tried to identify the link between the number of graduates and inflation rate.

Using indicators "Index of the graduates number" (endogenous variable - x) and "Prices index" (exogenous variable – y), it was calculated the regression equation.

$$y = 98,44 + 0,086x.$$

In Table 6 are shown the estimated values of the prices index and inflation rate.

Table 6. Estimation of inflation based on changes in the number of graduates in pre-university education

Year	Index of graduates number (X)	Index of prices (real values) (Y)	Index of prices (estimated values)	Inflation rate (calculated values)
2004	107,83	111,9	107,7	7,7
2005	94,96	109,0	106,61	6,61
2006	94,93	106,56	106,60	6,60
2007	99,73	104,84	107,01	7,01
2008	95,03	107,85	106,63	6,63
2009	97,77	105,59	106,84	6,84
2010	95,12	106,09	106,62	6,62
2011	82,02	105,79	105,49	5,49
2012	103,8	103,33	107,36	7,36

Conclusion

Analyzing the estimated values for the productivity index based on regression equation, we observe that the number of graduates influence directly the labor productivity. The estimated values for the index of labor productivity are lower, but have the same trend with the real ones. The same is observed in the case of prices index. The estimated values are generally lower than real, but have the same trend. Although there is a reduction in the number of graduates, an increase in labor productivity leads to the thought that there was an increase in the quality of education, so an improvement in how skills are formed. This confirms what Mungiu-Pupăzan and Vasilescu claim, namely "the existence of a very close correlation between the level of professional training, even of general education on a larger scale, and labor productivity." A weak correlation exists also between changes in the number of pre-university graduates and inflation rate. A decrease in the number of graduates does not necessarily lead to a decline in the volume of goods and services and thus to an increase in inflation rate. Therefore, although they are factors influencing the inflation rate, they are not the only ones. In Romania it seems that this imbalance is a phenomenon with multiple causes.

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Modern approaches regarding public goods

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Abstract. *This article is trying to present general elements regarding public goods. It is presenting also all types of public goods and optimum provision of public goods. Public Goods designate goods, benefits which belong to all citizens, or community. Four categories of goods can be delimited Public goods; Private goods; Common goods; Taxable goods. We also introduce two new concepts of public goods: “Club Goods” and “Joint” Goods.*

Keywords: public good, private good, common good, taxable good, club goods.

JEL Classification: E6.

The concept of public good is used in various forms in the literature (pure and impure public goods, collective public goods, social goods, common property, property tax, international public goods, national and local goods, mixed goods,) "clubs" goods, "joint" goods, but the most commonly used form is the public good. To better understand this term of public good, we will study each word separately.

Good as an adjective comes from Anglo-Saxon word "good", which means on the one hand, the sample and on the other hand enjoyed, pleasant⁽¹⁾. As a noun, it refers to goods and personal property⁽²⁾. This term was also used as detrimental good⁽³⁾, an example is pollution⁽⁴⁾.

Public comes from the Latin publicus⁽⁵⁾, meaning adult, which in our case is related to citizens. Also, this term designates belonging to a state, to a community as a whole. The word public also refers to things that are available to all. On the other hand, the opposite of the word public, private⁽⁶⁾, comes from the Latin "privation" and means to dismiss. This word has a significance which belongs to the state, the public. If you associate the two terms, they designate goods, benefits that belong to all citizens, or community.

Some authors define public goods as those "goods which are given by the public sector" (Ulbricht, 2003: p. 67 and Heikkila Ej, 2000: p. 103). Randal G. Halcomb defines public goods as those "goods that are produced by public sector" (Halcomb, 1996: p. 96).

Goods are not rivals, meaning that an additional person can consume without reducing the product for another consumer benefit. Once the product or service is produced, the marginal cost of an additional consumer is 0. Public goods cannot be excluded, meaning that if a person consumes a good, it does not reduce the possibility for that good to be consumed by other people, because the consumption of such goods does not get right on their property. The traditional example of a good that has both properties is the national defense. Haveman defines public goods as those "goods which are not subject to exclusion principle" (Haveman, 1970: pp. 26-27).

Once a region is protected, in that region there is no additional cost when others appear there as an individual or a person in the region cannot be excluded in order not to enter the protection program. Another example is the lamp used to guide ships. Once a lighthouse is functional, a new ship may be further guided by the light lighthouse, besides those already using it. It can be very expensive (if not impossible) to impose a fee for vessels that use lighthouse. Sidgwick (1883) in his book "The Principles of Political Economy" was the man who invented the "lighthouse example", as a public good. (Papandreou, 1994: p. 27).

If a good is not rival to another, the marginal cost of adding a consumer is 0, then the efficiency has a value 0. Of course, a 0 price will not be a revenue to cover the fixed costs, so the property assets will be provided in an effective amount by private firms. Examples of goods that are not "rivals" include a range of goods such as an uncirculated street, bridge, park. If a park is not busy, then another person can use that park without diminishing the fun and benefit of another person.

It is obvious the governmental potential in providing non-rival goods. Its task is to collect revenue to cover the fixed costs of services (cost of developing, operating, park operation), while maintaining the price for each use of the park equal to 0, which is equal to the marginal cost. The Government may use general taxes to pay fixed costs and because the general tax does not depend on the use of the service, by paying the price each use is 0. It is important that public goods could be found as non-rival as in the special case of externality. A non-rival good for which a consumer may be added at no cost for others is a good of special externality. A non-rival good for which a consumer may be added at no cost for

others is a good of beneficial externality. Everyone can benefit if a consumer provides a non-rival good, such that the benefit externality is high compared to the private benefit reached only by buyer. From this perspective, in sense of efficiency, the major difference between a non-rival good and an external benefit is the relative impact of private versus public impact.

In the classical approach, public goods are those goods in particular that everyone has access, meaning that consumption of the good by a person does not bother other people consuming it (Samuelson, 1957: p. 387). "Goods have a particular potential to be public, if they are non-rival and non-excluded" (Kaul, Mendoza, 2003: p. 87). Goods are in fact public if they are not excluded and can be consumed by everyone. (This definition tries to draw attention to the temporary property assets. Some may belong to the private sector today and tomorrow this situation may change. Public goods are not market failures and are not really produced only by the state. The consumption of public goods can be volunteer: some may want to watch a sunset, some not. In other cases the contrary is required, if we think about traffic rules) (Kaul, Mendoza, 2003: pp. 88-89). Sandmo believes that "a state that works well is a public good" (Sandmo, Agnar, 1987).

Stretton and Orchard believe that the goods are called public because "they cannot be given to anyone without being available to all, and users of these goods may have to pay for them. These are goods that can be offered by the market, while others are provided by the state at very low or no cost: education, public transport. There are also goods that usually are not taxable: bridges, weather forecasting, public libraries, national parks" (Stretton, Orchard, 1994: p. 54).

When making the distinction between public goods and private goods, we must first explain the economic significance (which means the market) of the word good (product). The word "good" by definition involves the economic concept of scarcity on the market - both the public and private - as we refer to goods when it comes to rare goods and not the free (which are on the market in unlimited quantities and for which not have to pay any price to get them, e.g. air, ocean). Scarcity of goods is the feature that gives them a certain amount and makes consumers to abandon part of their income to get them. The production of goods is thus held to the needs and preferences of consumers and the value that they give to the goods (value that materializes in the price paid). Such market producers produce those goods in such quantities so they meet the consumers' needs. But the market occurs and the need for goods (Note: When referring to goods we include services also) in whose production no one is interested (because the costs are very high and the income very low or absent) e.g. environmental protection, even if on the market offering these goods the requirements are too high for it to cope, education also.

I remember at least two reasons for the state's intervention in providing certain goods and services on the market, referred to public goods, but perhaps the most important reason for the need for the supply of goods by the state is the very special nature of certain goods, namely those services and goods relating to security and safety of the individual that any rule of law must ensure.

What would happen if issues of national defense, personal protection services (police, army) would be left to the private market? The decisions are taken on the amount of the services offered, the price of such services and to whom they should be offered, how long and in what time they can be left at the discretion of the decision makers from the private space, but not on the citizens' demand.

As we have already argued about the need for public goods, it is necessary to have a brief clarification of the two types of goods: public goods and private goods. If you make a more detailed analysis of the

public and private property, it can be observed that the distinction between the two is not always very accurate and also on the market these two types of goods are often in a complementary relationship.

Thus, we can say that we have goods on the market that are offered for the public and social interest and it is normal that the state holds monopoly in providing these goods (defense, police, nuclear plants, etc.). But there are goods and services most of which are offered by the public and private sector involved in their production and supply. This is caused by the increasing complexity of the development needs of its society. Thus the public sector cannot meet the growing needs of the public, and the private sector comes to fill them (e.g. providing fixed telephony services, central heating as an alternative for central heating, etc.). There is also a situation where the private sector is the one that anticipates and meets the needs of their citizens as a better alternative to those offered by public service (e.g. the pension system where citizens can choose between private and public).

Another issue related to public goods is the amount of these goods to be offered to the market. How does the government know how to provide national defense and many health services? The private market is determined by the market demand, but in the public sector this problem cannot be left to citizens as they are not allowed to make such decisions that affect the society. In addition, there are public goods and services for which there is a clearly expressed demand but they still exist and must be provided (population).

Also, just for a good distinction between public and private shows and not by what is offered in the market sector. It can be considered a public good offered by the private sector (health services are generally offered by private companies, although the problem in a community clean is public). On the other hand, a private good can be provided by the public sector (health care).

Types of public goods. As previously mentioned, public goods are those goods which meet two conditions: they are non-rival and non-excludable. These two concepts allow us to differentiate public goods from other categories of goods.

As a general rule, 4 categories of goods can be delimited (Troger, 2005: pp. 176-178):

- “Public goods;
- Private goods;
- Common goods;
- Taxable goods.”

<i>Non-rival goods in consumption</i>	<i>Rival goods in consumption</i>
<i>Excludable goods</i>	
Taxable goods: cable TV, various courses	Private goods: chewing gum, juices
<i>Non-excludable goods</i>	
Public goods: National Defense, radio waves, fireworks, lighthouses	Common goods: fish, air, water

Public goods are non-rival and non-excludable in consumption. Examples: fireworks, lighthouses, National Defense (Buchanan, 1970: p. 25), the justice system (Mikesell, 1995: p. 4), air waves (Halcombe, 1996: p. 97), environment protection (Buchanan, 1970: p. 26), public lighting (Stretton, Orchard, 1994: p. 54). Such goods can be used by more citizens at the same time. It is also impossible to prevent the citizens who don't pay for these goods to use them.

Private goods are opposed to public goods, in the sense that they are rival in consumption and excludable. Mikesel mentioned “food and clothing among private goods”.

(Mikesell, 1995: p. 4). Most of the private goods are sold on the free market. Most of the goods sold on the market are private goods. Such an example is the coffee sold at the vending machine. Coffee is a private good in consumption because only one person can drink from one particular cup and also it is excludable because you must pay for the coffee at the vending machine in order to be able to drink it.

Common goods are rival in consumption but non-excludable. An interesting definition is given by Steiner (1974): “any collective good delivered publicly is a public good”. (Steiner, P.O, 1974: p. 247) A more detailed approach to the concept can be found in Adrienne Hertier’s book „Common Goods Reinventing European and International Governance”. The first part treats the subject of public goods at length. The author defines them by making a distinction between the sociological definition of “welfare”, which does not refer to the individual but to the social system. Common goods are generally considered a subcomponent of “public welfare” (Mayntz, 2002: pp. 15-29) Mankiw uses for instance the idiom “common resources” when referring to common goods. (Mankiw, 1998: p. 227) Such goods are numerous and accessible, which makes them non-excludable. The difference between common goods and public goods lay in the fact that common goods are rival in consumption. Examples of common goods: “fish in the ocean, environment (ibidem), crude oil reserves” (Mikesell, 1995: p. 4).

Taxable goods are non-rival in consumption but are excludable. (Weimer, Vining, 1999: p. 80) An alternative term may be the natural monopoly. Examples: cable TV, toll bridges. They are exclusive because if you don’t pay the toll you cannot cross the bridge.

Pure Public Goods, Impure Public Goods and Impure Private Goods Table		
Pure Public Goods		International Public Goods
		National Public Goods
		Local Public Goods
Impure Private Goods		
Impure Goods	Impure Public Goods	Excludable Public Goods
		Congestible Public Goods
		Mixed Public Goods
	Impure Private Goods	Private Goods with Externalities
		Mixed Private Goods
		Private Goods Publicly Delivered

Pure public goods, in their classic form, meet two properties: “non-rival benefits and non-exclusion of debtor” (Sandler, 2003: p. 132) “Pure public goods can be defined as goods for which only the public dimension is relevant” (Shmanske, 1991: p. 99). “Pure public goods “are the kind of goods and services non-rival in consumption and for which exclusion is impossible”. The consequence of such non-rivalry is that “there is no additional cost for any additional consumer” (Stiglitz, 2000, p. 128: p. 132).

“This type of goods is available for all members of the society. One product unit produced delivers more units for consumption, which are somewhat identical. Non-exclusion is applied in extreme cases. Additional consumers can be added at a zero marginal cost. This definition is restrictive and therefore criticized by many economists” (Buchanan, 1968: p. 49) “The National Defense” (Musgrave, 1986: p. 49) is probably the best example of pure public goods.

Pure public goods are divided into:

- International Public Goods;
- National Public Goods;
- Local Public Goods.

International Public Goods. While the last two words were defined at the beginning of this article, it remains to study the term „international”. In a broad sense, the term suggests that the entire world population benefits from those public goods. In a narrow sense, things are completely different. Let’s take malaria for example. In practice, for most people the risk of being infected with malaria is almost zero. The conclusion Oliver Morissey, Dirk Willem Te Velde and Adrian Hewitt reached is that (an International Public Good is a benefit which delivers a utility available in principle to everyone on the Globe). (Morissey et al., 2002: pp. 34-35). International Public Goods include, among others: environment, knowledge, international security.

Environment protection is an issue discussed more and more often; considering that societies’ demands are perpetually growing, wood exploitation is often impossible to control (as a sole example, we can consider Romania’s deforestation process in the past 15 years), air pollution is continually rising and the global warming is no news any longer.

International security has become priority especially after the events on September 11, 2001 and the 2004 bombings in Spain. When considering USA’s example alone, it is clear how much damage can the international insecurity determine.

Knowledge may very well be the most common non-rival good. Millions of people benefit from discoveries made thousands of years ago (fire, wheel). Such knowledge is also non-excludable because the society does not pay for such innovation.

National Public Goods. National Public Goods are pure public goods, non-excludable only within the borders of the respective country. Public goods include: national defense, justice, and education. Such goods are non-excludable and non-rival only for the people in a certain country. More often than not, several countries may benefit from the advantages of a national public good (e.g., nuclear security), or on the contrary, they may feel threatened (countries neighboring the ones in conflict).

Local Public Goods. These are pure public goods because they are non-rival and everyone must pay for them. Pure public goods only refer to a determined area. For instance, a theatre in open space is a pure public good, but others may also benefit, such as the people living in the area. Local public goods are available to people without them having to pay a certain price but with the condition that they benefit from them. Of course, there are similarities, as well as differences between international and local goods; it is why some may tend to include a certain product within local goods and others may consider it to belong to international goods. However, local public goods are completely non-rival and non-excludable.

Impure Goods are divided into:

- Impure Private Goods;
- Impure Public Goods

Pure Private Goods are fully rivals in consumption and at the same time they are excludable, because those who don’t pay for such goods may not use them. In the category of pure private goods we can include: a pair of socks, a piece of chewing gum, a cup of coffee from the vending machine. Such goods are rivals in consumption because they can be used (consumed) by one person at a time; they are also excludable because one must pay in order to use them. In conclusion, pure private goods may only be consumed by those who pay for them.

Impure Public Goods. Different economists have proposed various alternatives to these less pure goods: impure public goods, mixed public goods. Each of these alternatives somehow infringes the conditions a good must fulfill in order to be called “pure”.

Public Goods can be divided as it follows:

- “Excludable Public Goods. They are public goods that can be excluded. An example of excludable public good is “club” good” (Buchanan, 1965: pp. 1-14). „Club goods are non-rival goods that are available only to the members of this club” (Cornes, Sandler, 1986: p. 24). The distinction between the “club” goods and the local goods is the fact that local goods are available to those that wish to consume them and the “club” goods are available only to the members. The concept of “club” goods will be detailed in the following pages. Halcombe said that an example of a “club” good is a pool maintained by the residents of a building (Halcombe, 1996: p. 122), while Rosen reminded about surrounded communities which are in fact many houses on a certain surrounded area where the access is granted only to the residents (Rosen, 2002: p. 475). Another example could be the “broadcasting of a TV program”. This program can become an exclusive one if transmitted by cable.
- Congestion Public Goods. These are public goods that are non-rival if moderately used but become congestion goods if contrary (e.g.: highways). Each additional user adds another cost (Hyman, 2002: p. 139) to another user.
- “Mixed Public Goods. Public goods can be combined with other types of goods, resulting impure public goods. An example of this kind of good is the radio commercials. Radio programs are both non-rival and non-excludable. They are non-rival because it can be listened by everyone without restrictions (compared to a program listened by a person that cannot be listened by someone else.), and non-exclusive because it can be searched without paying something in exchange. All in all, radio commercials are rival private goods and non-exclusive. Radio commercials are exclusive from the point of view of the one that makes the publicity. Two commercials can’t be transmitted in the same time on the same program. At the same time, they are exclusive because if the one wishing to benefit from the commercial doesn’t pay the radio program for the time dedicated to his publicity, the commercial will no longer be broadcasted. The mixed good is created when we have a good that is private and for those that make publicity and another one that is dedicated to the listeners. So we can say that the ones that make publicity are indirectly paying for a public good” (Trogen, 2005: pp. 189-199).

Impure Private Goods are the most rarely used goods. As we all well know, pure private goods are completely rival in consume and completely exclusive. So a private good becomes impure when each of its characteristics are not accomplished.

Impure Private Goods are classified in the following way:

- Private Goods with externalities. The concept of externality was discussed at the beginning of this article and we are not going to present again the issue of defining externalities. An externality appears every time a transaction between two actors sets the costs or benefits for a third actor that is not a participant at the transaction. If we think about negative externalities we can say that a cost is imposed to a third actor. Negative externalities are a reason for state intervention in order to establish a control upon the negative phenomenon. This is why a transaction is not a pure private one, a statement that is also true in the case of positive externalities. In the case of negative externalities some people activities generate cost upon another. The result is inefficient allocation

of resources because the resource is overused. The measures that can eliminate negative externalities are taxes.

In the case of positive externalities the situation is different and that's why the activities that generate them are encouraged through grants in order to obtain an increase of their production towards the optimum level.

- **Private Mixed Goods.** They are similar to public goods but begin as private ones. If we intend for instance to eradicate a disease through vaccination we can say that this is a private good because the vaccine is rival and non-exclusive, but the result of that vaccine becomes public because it is non-rival and non-exclusive.
- **Public Provided Private Goods.** It is a good provided by the state rarely. An example could be the houses provided by the state. It is a rival good in consumption and on the other hand exclusive because if the residents don't pay the rent for their house, they lose the access to that good.

Different Categories of Public Goods: "Club Goods" and "Joint" Goods. As we reminded before the "club" goods are non-rival goods that are available only for the ones that are part of a certain "club" (Cornes, Sandler, 1986: p. 24). The origin of the "club" theory comes from Pigout (1920) and Frank Knight (1924). Both authors took into consideration two examples: a crowded road, without potholes and well maintained but very narrow and another one not crowded, wider, with multiple lanes but of poor quality and with potholes. Both of them solved the "clubs" problem by restricting the access on congested roads. Charles Tiebout (1956) shows how the size of local authorities' jurisdiction can be determined. In the Tiebout model, the amount of public goods that must be shared is precise and distinct for each local community. Tiebout specified the fact that a decentralized decision mechanism can reach Pareto efficiency for public goods.

This model is similar to the situation of mixed population, where individuals are divided into clubs with homogenous members. In the case of private goods, *Wiseman (1957)* examined the clubs principles in which they highlighted that "the costs of those that benefit of utilities are divided". Tiebout and Wiseman were the first researchers that concentrated upon the rational division of the costs in the clubs situation. The most recent research referring to clubs was realized by *Mancur Olson (1965)* and *Buchanan*. Olson made the distinction between total and unique clubs. The general ones (pure public goods) have no restrictions regarding the dimension while the unique ones (impure public goods) have restrictions regarding their dimension. Olson didn't use the term of club for a collective. Buchanan wrote over 200 articles on the subject of "club" goods. In his work Buchanan talked about both the goods providence in the case of clubs and the conditions that have to be accomplished in order to be a member of the clubs (impure goods situation). The research of these great authors regarding clubs theory was completed by other authors like *Tollison (1972)*, *DeSerpa (1977)*, *Artle*, *Averous*, *Helpman*, *Hillman* and *Sandler (Cornes, Sandler, 1986: pp. 161-163)*

Optimum Provision of Public Goods. Samuelson was the one that promoted the optimum providence model for public goods. His work was influenced also by *Wickesell* and *Lindhal*. Samuelson argued that in the situation that we take two goods (A and B) where one of them is public, the optimum provision requests that:

$$MRS_{p_p}^A + MRS_{p_p}^B = MRTS_{p_p}$$

where:

RMS- marginal rate of substitution;

MRTS - marginal rate of technical substitution;

P-private;
 p-public;
 A- good A;
 B- good B.

The only difference from the Pareto's optimum is the fact that goods A and B are private.

$$MRS_{PP}^A + MRS_{PP}^B = MRTS_{PP}$$

Brown and Jackson (Brown, Jackson, 1990, p. 90) come with a schematic derivation of the conditions proposed by Samuelson. The efficiency conditions proposed by Samuelson are restrictive from some points of view, because (Howard, 2001: p. 14):

- "The model supposes the existence of one person that knows how many taxes is a certain person willing to pay for public goods.
- The model makes suppositions in connection with individuals' preferences without taking into consideration the "free-rider" problem.
- The model is the subject to information failure because the cost of collecting information in a larger group will be prohibited".

The efficient production of public goods can be demonstrated by remembering that in conditions of competition, companies produce towards the point where the price is equal to the marginal cost, also found in the domain's literature through approaches like those stated earlier, but yielded depending on allocation efficiency (Bodislav, 2014: p. 28). The demand curve shows the marginal cost at each level of a certain good production level:

$$MRS_{AB} = MC_A / MC_B.$$

where:

MC – marginal cost;

MRS- marginal rate of transformation;

A, B goods.

Because the price of good B $P_B = 1$ Leu and the price equals the marginal cost then $MC_B = 1$ Leu, and $MRS_{AB} = MC_A$ so we can identify the marginal rate with the marginal cost which is the same with the demand curve.

When referring to common market, the efficiency conditions should look like (Head, 1974: pp. 74-75):

$$RMS^A + RMS^B = MT$$

For private goods: $P_x = MC_x$,

And for public goods: $P_Y^A + P_Y^B = MC_Y$, where P_Y^A și P_Y^B are the prices of the goods for people A and B, and are chosen so that:

$$RMS_{Yx}^A = P_Y^A / P_x \text{ and}$$

$$RMS_{Yx}^B = P_Y^B / P_x.$$

$$\text{As a result we have: } RMS^A + RMS^B = P_Y^A + P_Y^B / P_x = MC_Y / MC_x = MT$$

The approaches for providing public goods of Lindh's and Wickesel were based on the principle of tax benefit, which established that citizens have to pay taxes related to the benefits they experience from consuming public goods.

There are two ways you can get resources for the production of public goods:

- the voluntary agreement and
- the compulsory taxation – which is a method often used in the production of public goods.

The voluntary agreement is a method rarely used in the production of public goods, not widely used in practice. The problems that occur with this method are related to the fact that individuals tend to hide their assessment of the public good, so in this case they are considered non-beneficiaries, thus not obliged to pay. In this situation, they are called illegal beneficiaries.

The approaches related to the exchange on a voluntary basis were first identified by Knut Wicksell who claimed that each public good should be funded by a separate tax, and secondly that the unanimous agreement of all members of society should be used in the production decision (what and how) for a public good. Lindahl was the one who developed a replacement, by making a correlation between the tax rate and the size of the public good. According to this model, an equilibrium is reached when each individual pays a fee (tax) equal to the marginal utility afforded that good. The voluntary exchange shows that each individual consumes the optimal amount of public good to a given tax rate. Unfortunately, in practice, such a voluntary agreement is complicated by the possibility that individuals do not express their real preferences and become illegal beneficiaries of the public good.

In Musgrave's conception (Musgrave, 1985: p. 13), the Wickesel model starts with a fair distribution of income to arrive to an efficient and fair distribution of income. On the other hand, Linhdal's concerns were directed to determine the balance to reflect the tax that is fair and the output of public goods. This equilibrium is based on the fact that people say the true preferences, but the problem is to tell these preferences for large groups.

The Tiebout model uses the following assumptions (Tiebout, 1990: p. 569):

- “The governmental activities don’t produce externalities;
- Citizens are fully mobile and are ready to move to other communities to satisfy preferences. Each person can move to a community where the public services are better. On the other hand, every citizen is free to find a job wherever they wish, with no restrictions on where to settle.
- Citizens have the perfect information about income and expenses related to public services and community taxes.
- The number of local communities is large so the citizens would find a community to meet their requirements for public services.
- For every pattern of community service, which is guided by the preferences of older people there is an optimal community size.
- Communities that are undersized are trying to attract new residents to a lower average cost. Those below the optimum size shall reverse and those trying to maintain the optimum size constant population”.

Oakland has shown that the efficiency conditions for public goods can be applied to the final intermediate public goods. Public goods “are intermediate inputs in the production of private companies that produce goods for citizens. According to Oakland's model, each firm produces the same private good using public intermediate goods, which is the subject of non-rivalry in its use with another company. Efficiency is obtained by adding the marginal evaluation of companies using the public good inputs. Sandler and Tschirhart also argued that the theory of "club" can be used to determine the optimal size of a community, while Buchanan said that a club is divided between benefits and costs” (Howard, 2001: pp. 15-16).

In conclusion, we can find multiple connections between the public and the private sectors. A good can be produced in some cases both by the public sector and the private one (e.g.: public and private education). In other situations, a good can be produced only by the private sector (e.g.: clothing, food) or sometimes only by the public sector (laws, park maintenance, streets cleaning, national defense). Solving the congested streets problem the “club” problem was also solved by establishing some rules regarding the access.

This article attempts to give an overview of public goods on the one hand, and on the other hand of externalities, presenting how each author approaches the concept of externality and public goods. Also in this section there is a classification of externalities and public goods.

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Notes

- (1) See Webster *New International Dictionary of English Language*, 2nd ed., Unabridged. Springfield, MA: GC Merriam Co, 1942, p. 1078.
- (2) See Webster's *II New College Dictionary*, Boston: Houghton Mifflin Co, 1995, p. 480.
- (3) See Musgrave R.A., “The nature of the fiscal State: the roots of my thinking”, In *Public Finance and Public Choice: Two Contrasting Visions of the State*, EDS. Cambridge, MA: MIT Press, 1999, p. 41.
- (4) See Hyman D.N., *Public Finance: A Contemporary Application of Theory and Policy*, Fort Worth, TX: Harcourt, 2002, p.136.
- (5) See Webster *New International Dictionary of English Language*, 2nd ed., Unabridged. Springfield, MA: GC Merriam Co, 1942, p. 2005.
- (6) See Webster's *II New College Dictionary*, Boston: Houghton Mifflin Co, 1995, p. 895.

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Boom we win, bust they lose: analyzing the boom and bust cycle from the perspective of the political entrepreneur

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Abstract. *This paper brings to the attention of the academic community a new line of research centered on the ultimate decision maker that activates in the political arena. Starting from the Catallactic split of the different functions he performs, we analyze the benefits incurred by the political entrepreneur if a Boom and Bust Cycle is set into motion. During the Boom phase, the Cantillon Effect will lead to an increase in Policy Making Rent, as well as in the Net Tax Income. During the Bust, the political entrepreneur stands to gain from an increased Legitimacy Rent and Policy Making Rent.*

Keywords: political entrepreneur; boom and bust; Austrian School; Austrian Business Cycle; political economy.

JEL Classification: B53; E 32; L26.

1. Introduction

Almost seven years have passed since December 2007, the date that was singled out by the NBER as the official debut of the U.S. Recession which shortly afterwards engulfed most developed countries. Ever since, policy makers, the academia and businessmen have been divided among themselves on matters concerning the cause and the appropriate response to boom and bust cycles (Woods, 2009). Adherents of Monetarism, Equilibrium Business Cycle Theories, Real Business Cycle Theories, New Keynesian, post-Keynesian and of the Austrian School have come forward with explanations for the cyclical evolution of the capitalist economic system (Bagus, 2012), but consensus is far from being reached even in the current post-crisis environment.

The present paper intends to shed some light on the subject, starting from the Austrian School's explanation of the phenomenon. The most concise and clear-cut explanation of the business cycle is to understand it as a direct consequence of economic interventionism, which makes fractional reserve banking, and the expansion of fiduciary media possible. The paper is going to take the original explanation put forward by Mises in 1912 (2009) according to which "[w]hat brings about the recurrence of periods of economic crises is precisely the reiterated attempts of governments and banks supervised by them to expand credit in order to make business good by cheap interest rates" (p. 422) and analyze it from a political economy point of view.

The analysis is centered on the political entrepreneur, the ultimate decision maker in matters concerning expropriation and policymaking. The aim is to bring to the forefront the equivalent of the (economic) entrepreneur, an approach that is compatible with methodological individualism, but appears not to have been extensively treated by Austrian School scholars. This article is going to present the logic and the gains the political entrepreneur stands to make by engaging in a policy that ultimately culminates in the boom and bust cycle.

2. The Austrian business cycle: a short presentation

According to the Austrian Business Cycle Theory (ABCT), the ultimate culprit responsible for the business cycle is the State. "In the purely free and unhampered market, there will be no cluster of errors, since trained entrepreneurs will not all make errors at the same time. The "boom-bust" cycle is generated by monetary intervention in the market, specifically bank credit expansion to business" (Rothbard, 2000: p. 9).

The role of the State is twofold. First and foremost, it fails in properly protecting the property rights of depositors. By allowing the practice of fractional reserve banking, the State creates the premises for the creation of unbacked money substitutes - fiduciary media (Rothbard, 1983).

Second, this institution creates the premises for bank cartelization and coordination under the auspices of the Central Bank, thus eliminating the constraints imposed by free banking competition which would have limited the money supply much more effectively (Salerno, 2012). Corroborating this second point with the State's monopoly on money, backed by legal tender laws and ultimately severed from its link to a commodity, leads to flooding the economy with fiat money which in turn is multiplied via the banking system by maintaining uncovered bank deposits.

This type of interventionism lowers interest rates, with the unintended consequence of leading to erroneous investments (mal investment), viz. projects that are started in the absence of a curtailment of consumption that would free up the necessary resources for completing the more roundabout processes of production (Braun, 2012). Entrepreneurs and marginal entrepreneurs engage in unsustainable and risky investment projects (Miller, 2012). In order for this boom period to continue, the central bank must allow for an ever-accelerating injection of money in the economy, which will ultimately lead to

hyperinflation. The alternative is to halt monetary expansion, which in turn will lead to a credit crunch (Cwik, 2008). After this last decision, a bust occurs, which – if left to perform its role – will allow the economy to eliminate unsustainable projects and reallocate resources to economically viable projects.

Mises's original thesis has remained essentially unchanged, but in order to avoid consequentialism further elaboration has been undertaken by Hülsmann (1998) who provides an explanation for the generalized absence of correct entrepreneurial anticipations that characterizes the business cycle. By maintaining an illusion based on the inoculation of the idea that it is an indispensable institution for the functioning of human society, the State has at its disposal the levers that lead to the denaturing entrepreneurial calculations time and again. Thus, fractional reserve banking is kept alive and seen as a boon; inflation is presented as a cure, while the lack of regulation is bemoaned. In turn, this leads to the reoccurrence of the business cycle.

Hülsmann (1998) explains, the perpetuation of fiduciary banking system and that of fiat money can only reoccur as the result of a general illusion that deludes people into believing that the current monetary system can bring higher growth rates than the natural evolution of the economy.

3. ABCT at the confluence with political economy

From the above presentation of the ABCT it becomes evident that Austrian School has an endogenous monetary explanation for the depressions. The seeds of the bust should be traced back to the boom period, viz. in the institutional setup of the banking system. But the Austrian explanation does not portray the boom and bust as an inherent characteristic of laissez faire Capitalism. On the contrary, both Mises (2008) and Rothbard (2009) treat the problem of the business cycle in the chapter dedicated to the hampered market economy, as the system appears to be dominated by government meddling. As Mises (2008, p. 794) explains: "But today credit expansion is exclusively a government practice. As far as private banks and bankers are instrumental in issuing fiduciary media, their role is merely ancillary and concerns only technicalities. The governments alone direct the course of affairs. They have attained full supremacy in all matters concerning the size of circulation credit. While the size of the credit expansion that private banks and bankers are able to engineer on an unhampered market is strictly limited, the governments aim at the greatest possible amount of credit expansion. Credit expansion is the governments' foremost tool in their struggle against the market economy. In their hands it is the magic wand designed to conjure away the scarcity of capital goods, to lower the rate of interest or to abolish it altogether, to finance lavish government spending, to expropriate the capitalists, to contrive everlasting booms, and to make everybody prosperous".

If the ABCT is ultimately linked to State intervention in the workings of the free market, it can be affirmed that treating it under the aegis of political economy can further our understanding of it.

Political explanations for the business cycle have been put forward since the '70s. Nordhaus (1975) uses a Phillips Curve approach in order to explain how incumbents use monetary stimulus in order to bring unemployment down before an election. Olson (1982) explains how price and wage rigidities come about as a result of the entrenched interests of unions and cartelized industries, which, in time, negatively impacts the competitive engines of growth. By using insights from the ABCT, Wagner (1980) explains how macroeconomic analysis usually fails to recognize the possible inconsistency between the type of macroeconomic policy required to promote prosperity and the type of policy that is consistent with electoral success in a democracy. In this vein, government may act to promote business cycles rather than dampen them, thereby giving rise to what has been referred to as a political business cycle. Wagner recognizes the Austrian insights on the effect of artificially lowered interest rates, the Cantillon effect, the need to have a discriminatory policy that favors some against the others in order to win democratic elections, and the role played by political entrepreneurs in finding new ways of bypassing the electorate's expectations.

In the following sections of this paper, the role of the political entrepreneur will be further elaborated upon. We will attempt to define his role more accurately, and to further our understanding of what he stands to gain from engaging in policies that lead to boom and bust.

4. Defining the political entrepreneur

Austrian School scholars have dedicated a substantial part of their work to the entrepreneur. Basically, in their view, there is an entrepreneurial function at work in every acting individual. This agent is the driving force of the capitalist system. Without him, production could not be conceived. It is the entrepreneur that anticipates the future wants and needs of the consumers, basically judging what are the most stringent needs of the consumer and how he can best address them. The essence of the role played by the entrepreneurs and the organizations they build based on economic calculation is part of the subject of Catallactics, the Praxeological fine-tune decoding tool of the economic life.

In contrast to this, the State is the generally recognized monopolist that can legitimately exercise force over a given territory. This entity decides the price its citizens must pay (the tax level) in order for it to perform the task of ultimate decision maker (Hoppe, 2009). According to van Creveld (1999), the State is an abstract entity, different from both its members and its rulers. Like a corporation, the State has a legal persona, which amounts to more than the sum of its parts.

Like the modern firm, the State has acting individuals behind it, the living and breathing actors that are the *de facto* owners of this complex machine: the political entrepreneurs. The political entrepreneur is a distinct figure from the public manager. The so-called “public servant” is an (more or less formal) employee of the political entrepreneur. The discretion he can exercise in the allocation of resources depends on the (again, more or less formal) mandate that is handed over to him by the political entrepreneur. A similar point is made by Mises (1944, p. 43) in his *Bureaucracy*: “Bureaucratic management means, under democracy, management in strict accordance with the law and budget. It is not for the personnel of the administration and for the judges to inquire what should be done for the public welfare and how the public funds should be spent. This is the task of the sovereign, the people and their representative. The courts, the various branches of the administration, the army and the navy execute what the law and the budget order them to do. Not they but the sovereign is policy making”.

In essence, the roles of the political entrepreneur consist in handling uncertainty in order to maximize the amount of expropriated resources he ultimately controls and reallocate them in accordance to personal preferences, that is consumption (personal *par excellence*), investment (forego present consumption in order to maximize future consumption via an expanded expropriated income), or give away. Like his counterpart that engages in voluntary exchanges of property, the political entrepreneur bases his judgment on anticipated market prices. He knows that he can expropriate the largest quantity of resources from burgeoning sectors and from a growing economy; also he knows that he needs the tools to do so (legitimacy and a coercive apparatus for the few instances when he faces opposition). But in order to elaborate a pertinent judgment on how much to expropriate, where to expropriate from, though what means to do it, and how to continue doing it, it is necessarily to have a functioning market economy, viz. by using the price system. If his judgment proves correct, the political entrepreneur will reap Political Profit.

The role of the political entrepreneur is studied under the aegis of Politics, a sister branch of Catallactics that drops the assumption that policymakers are benevolent. Politics builds on the edifice of Catallactics, but takes into account the interests, logic and calculations realized by political entrepreneurs. Unlike the mainstream approach to analyzing political decisions, typical of Stigler and Buchanan, the political entrepreneur is not tied to the Procrustean bed of *homo economicus*, who seeks

only to gain in affluence. On the contrary, like any acting individual, he is guided by a combination of economic, ideological and altruistic motives that cannot be grasped by the assumption of simple and quantifiable maximization.

The above discussion can be synthesized and taken a step further by deducing the corresponding income strings that a political entrepreneur stands to incur:

$$Y_{pol. \text{ entrep}} = W_L + (Interest) + Legitimacy \text{ Rent} + Political \text{ Profit};$$

$$Political \text{ Profit} = Net \text{ Tax Income} + Policy \text{ Making Rent}.$$

W_L is the wage income that the political entrepreneur receives for occupying a political position. This remuneration comes as compensation for managing the State bureaucracy. But, as we have said, the political entrepreneur is more than that. Depending upon the institutional arrangement (under monarchy), the political entrepreneur could *de jure* own some form of property. Thus, a monarch would be expected to receive *interest as compensation for the capital goods* he owns and employs in various enterprises (Hoppe, 2001).

The *Legitimacy Rent* is a virtual income, a cost abatement that the political entrepreneur gets, as long as the State *qua* institution is endowed with legitimacy.

Like his correspondent from the private economy, the political entrepreneur stands to earn a residual income, i.e. *Political Profit*. This is not an accounting figure that can be found in a financial statement, although it can take monetary form and make the subject of economic calculation. Any election is fought over occupying the positions that will give access to this string of residual income. Although political profit has an obscure character, viz. any form of its manifestation is kept hidden from the eyes of the general public, its nature is not difficult to grasp once the idea of ultimate decision maker and what it involves are translated from (economic) entrepreneurial theory. In the absence of a benevolence assumption, little else can economically explain why political positions are so sought after.

Political Profit is, in its turn, made up of a *Net Tax Income* and a *Policy Making Rent*. The first consists of the resources extracted via taxation that are at the political entrepreneur's discretion after he has incurred the *necessary* expenses of maintaining the State apparatus. The Policy Making Rent is the corresponding income string that stems from the political entrepreneur's discretionary powers, viz. from the fact that only public laws and not private laws apply to its measures (Hoppe, 1990, Raico, 1993).

The political entrepreneur is faced with two trade-offs: on the one hand, if political profit is too large, he may lose some of its legitimacy rent, and ultimately his position; on the other hand, in the long run, there is a trade-off between Net Tax Income and Policy Making Rent. If the political entrepreneur chooses a more discretionary stance, capital accumulation is going to be impaired; this leads to lower growth rate. In other words, Policy Making can affect the tax base.

5. The place of political entrepreneurship in the Austrian Business Cycle Theory (ABCT)

As we have seen in the above section. In the light of the *ABCT and Politics*, while assuming that the wage component and Legitimacy Rent are optimized for the status quo, what is the rationale behind the political entrepreneur's economic behavior in a *democracy*? Why does he intervene in a manner that leads to boom and bust cycles?

The political entrepreneur can gain in several ways from creating the premises for the perpetuation of fractional reserve banking and a loose monetary policy that lead to the business cycle. This is directly linked to the anticipated length of the period he expects to remain in office.

On the one hand, a political entrepreneur with a longer term in office would prefer a more stable monetary unit that would allow for better planning on his part and on that of the private economy. This would allow for a larger output to be produced, which can lead to an increase in real value of each undiluted monetary unit he manages to extract via taxation. An expected lengthier term in office will, *ceteris paribus*, encourage more farsightedness and planning, and would make a policy that culminates with the business cycle more costly.

On the other hand, the shorter the term, the more appealing it becomes for the political entrepreneur to manipulate the medium of exchange and interest rates, so as to maximize his Political Profit.

If profit and property form the base on which taxes are imposed, it becomes obvious that the state will attempt to, in the shortest amount of time possible, taking into account his limited term in office. This can be achieved by luring economic entrepreneurs to engage in investment projects. If profit is the corollary of error, deliberately pushing the private economy into mal investing is going to lead to reaping the maximum amount of tax during the Boom phase. The political entrepreneur can increase his short run income by accepting to distort the capital structure, thus impeding the long run growth of the economy in favor of higher Net Tax Income. Thus, fueling the boom via cheap money becomes “policy”, not an unintended error.

Also, inflation does not affect the whole economy immediately. Thus the effects of increasing the money supply are going to be transmitted in waves. This phenomenon, also known as the Cantillon Effect, benefits the first receivers of the newly injected funds: the State sector, the banking system, the state connected industries and the capital goods producers (working capital represented by raw material that are usually under state monopoly represent a revealing example) (Grinder and Hagel, 2005). By doing this, the political entrepreneur stands to increase his Policy Making Rent, as pressure groups will try to offer him benefits in order to push their agenda for cheap money.

Besides directly benefiting from low interest rates for servicing public debt and increasing policy making rents, political entrepreneurs also gain another crucial advantage: they gain from the enhanced transparency which is subsequently employed against tax evasion. All business that is conducted via the banking institutions, which is among the most tightly controlled sectors of any national economy, cannot escape taxation. Financing businesses and consumer booms via bank credit assures that tax collection becomes more facile. Also, tax evasion is more difficult in business-to-business relations, which is characteristic for transactions with capital goods.

Low interest rates allow marginal entrepreneurs to engage in riskier projects. As (economic) entrepreneurs become convinced that the risks of unforeseeable events are lower, more resources, which would play the role of reserve assets dedicated to abating risk, are released into production. This allows for a temporary, yet significant, shift of the production possibilities frontier, which translates into a temporary extension of the tax base.

But what happens when the bust occurs? Does not the political entrepreneur pay his share of the bill via lower taxes?

If the State can maintain the illusion that it had no role to play in fueling the boom phase, it can play the same card during the bust. The political entrepreneur can compensate for the shrinking economic base by raising his policy making rent, either by increasing the number of areas where intervention is needed, or by manipulating the economic entrepreneur into thinking that the very causes that lead to the bust are needed in order to put the economy back on track. This amounts to saying that the privileged industries – the banking sector and those deemed too big to fail – never pay the bill.

Another consequence of the bust is the concentration of economic activity. Because of the limited possibility of contracting credits during downturns, all but the largest corporations will be in an impossibility to finance their activity via bank loans. Thus, the political entrepreneurs manage to increase their control over the economy even (or especially one might say) during the bust.

But, even with the benefits of both the boom and bust periods sketched above, one is still in no position to argue that business cycles are deliberate unless he can prove that the benefits of the boom must outweigh its costs, including the possible diminution of public support the political entrepreneur enjoys. This point is a twofold issue.

First, it must be emphasized that political entrepreneurs base their decisions on a subjective judgment (understanding) of the future. If a political entrepreneur thinks that his interests are better served in the short run, and believes that the benefits of a loose monetary policy are greater than the costs, he will engage in such policies that are inherently followed by a bust. Like all human action, his judgment is subjective and prone to uncertainty (ex post it can prove to be an error). One cannot apodictically say that no matter who occupies a certain position, that individual is going to further allow fractional reserve practices and will continue to enforce legal tender laws that allow the existence of fiat money. What one can say, in the light of the above mentioned benefits of a policy that leads to business cycles, is that a political entrepreneur has multiple incentives that would favor such a policy.

Second, one has to take into account the nature of political competition in a democracy. Not only does democracy favor demagoguery and redistribution, but it also presupposes inheriting the economic consequences of the previous office holders. If the political entrepreneur that lost the elections had previously engaged in loose monetary policy, putting a stop to it would lead to a bust. Unlike the political business cycle advocates who consider that a loose monetary policy is going to precede an election, followed by tightening and necessary a recession immediately afterwards until the eve of a new elections campaign, an analysis that is more Austrian in spirit would recognize the complexity of the economic system and the impossibility of accurately predicting when the boom is going to come to an end, or when the bust finally liquidated all the mal investments. This amounts to saying that a fine-tuning approach that aims at starting and ending a cycle is impossible to put into practice. Returning to the nature of the democratic process, a political entrepreneur that inherits an easy money policy is more likely to continue it in the hope that the bust is not going to become manifest during his term in office.

6. Conclusions

It becomes evident that political economy can provide us with a better understanding of the business cycle, when interpreting it from the perspective of the political entrepreneur. This analysis started from the insights provided by the Austrian Business Cycle Theory and used this framework to deduce the benefits the ultimate decision maker in matters concerning expropriation and policymaking stands to gain during each phase of the cycle.

Our analysis reveals that during the boom, the political entrepreneur can increase his political profit in a short time period. By permitting fractional reserve banking and by employing a loose monetary policy, the political entrepreneur increases his tax base at the expense of a viable capital structure (more projects are started although there are not enough resources to complete them; marginal entrepreneurs begin riskier projects with lower provisions set aside in case they fail). At the same time, the Cantillon effect creates winners and losers in the economy in favor of early receivers of the newly created money (the State apparatus and well connected industries).

During the bust, political entrepreneurs gain greater control over the private sector and intervene in order to bail out too big to fail industries.

Corroborating these benefits with better visibility and lower tax evasion which are brought about by an increase in bank intermediation and by industry concentration, one can observe that political entrepreneur have considerable incentives in remaining faithful to the initial causes that bring about economic cycles.

If one were to add the impossibility of fine-tuning the boom and bust cycle, in the sense of getting in and out of a boom phase with engineering precision, it becomes evident that democratic competition will stiffen the resolve of political entrepreneurs to prolong the boom for as long as possible, hoping that the check is going to be picked up by his successor.

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