
Education System, Labour Market and Education System Graduates Employment in Romania *

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Abstract:

The objective of our paper is to highlight and analyse certain aspects related to the education system, labour market and education system graduates employment in Romania. It starts by pointing out the importance of education and some of the transformations the Romanian education system has undertaken after 1989 and during the process of passage to the Bologna system. It then focuses on the Romanian labour market and education system graduates employment. We conclude that the education system, the economic system and the labour market in Romania after 1989 have been very different from the communist regime period and that, during the 2006-2010 period, the Romanian education system graduates employment registered a continuous decrease.

Key Words: Education, Labour Market, Employment, Education System Graduates Employment, Market Economy, Knowledge Society

JEL Classification: I21, I23, I25, J60, J63

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1. Introduction

In the actual knowledge society, the issue of economic education is more important than ever, but professional-economic elements remain the easiest to teach and to learn: that is because education in their direction does not need special efforts from individuals, being on a most “natural” line, from the point of view of the millenniums of surviving on this planet; there are not necessary special orientations and transformations of the human being, because they are not related to cultivation and to human personality development, but to surviving. They are consistent rather to what any living creature on the earth learns: they are in our instincts and need no special educative intervention. But for humans, the human superior ones are essential, defining for our specie (compared with other creatures). That is why the care for youth’ education was mostly for cultivating the qualities that put and keep them over the animal kingdom (Popovici and Jivan, 2011: 39).

Even in the modern times of market culture, teaching should contain all the components, in different proportions; by its nature, level and speciality, it should not be partial, simplistic or conducting young people to perceptions that could badly make them not human (non-superior) beings (Popovici and Jivan, 2011: 39).

In his book “Democracy and education”, John Dewey proposes a philosophy of education, which places it among the great theories of education, next to Platon and Rousseau. His philosophy differs from the one of his outstanding predecessors from two points of view. On one hand, being a social philosophy, it is a philosophy of a democratic society, in which the individual inserts himself through the free game of his intelligence. Not of an individualist intelligence in the sense of “capricious” or “whimsical”, but in the experimental sense, that implies putting to the public test his ideas. On the other hand, being a philosophy of nature, it is the philosophy of a nature reflected by science. “Democracy and education” is grounded on the principle of continuity: continuity of the human being and of nature, of the individual and of the group, of the child and of the adult, of the education and of the society. This continuity involves an interaction in which the terms are not distinguished in fact - except by abstraction – one from another. Dewey will later speak more accurately about “the transaction” of the experience. The continuity has as a place of practice the lived experience, whose nature is not different if lived at the school, in the street or at the house, in play or work. Education is the experience of all, child or adult, including educator, in all the moments of life, in all the game or work or leisure situations. Education is, by excellence, according to Dewey’s definition, “the continuous reconstruction of the experience” (Deledalle in Dewey, 2011: 41).

An important motivation of individuals to invest in education is based on the idea according to which accumulated knowledge and competencies tend to lead to a growth in productivity and, implicitly, of the potential earnings. Another important reason for accumulating a high level of education is getting a higher stability on the labour market, which implicitly reduces the risk of unemployment. Educated

workers have a higher rate of participation on the labour market, and the length of their active life is generally higher than in the case of the persons with a lower level of education (Popovici, 2011: 194).

Educational capital presents itself in two different forms: on one hand, there are the abilities acquired as a result of participating at the formal educational systems, knowledge confirmed by diplomas; on the other hand, there are any other knowledge and abilities that have been acquired during the life time, by personal efforts or by contacts with experts in different fields finalized with knowledge gains as a result of assimilating the knowledge received by interaction with them (Popovici and Jivan, 2011: 40).

After 1990, the former very performing educational Romanian system became a problem, because of the diminishing standards and loosing position in international classifications. Its performance was not keeping with our doubtful economy; therefore market mechanisms won and they strongly entered in the Romanian educational system, diminishing its quality (Popovici and Jivan, 2011: 42).

2. The Romanian Education System after 1999

The House of Lords (2012: 5) shows that: "Since 1999, significant changes to European universities have occurred outside the EU framework as a result of the Bologna Process, which has seen the closer alignment of higher education systems across Europe. 47 European countries participate, including all 27 Member States."

Romania signed the Bologna Declaration in 1999, which aimed to form until 2010 a unique European space in the higher education and research field (Popovici and Jivan, 2011: 40). The decision factors declared their goal to harmonize education with the European Union educational systems. The alignment of the teaching system, with regard to its content and organisation, to the requirements of a society based on a market economy was also declared. The country's slow modernization being observed, an urgent solution to the problems caused by this reality was required. This could be through the professions provided by the educational system, through scientific research and through educational policies. Certain radical transformations were made; reorganizations were tested, the number of places in schools and universities has increased, the admission system has been modified etc. Quality problems resulted from it, often replacing quality with quantity (Jivan et al., 2011: 745).

All these reform measures have apparently had noble goals, but improper methods for the Romanian spirit and values, lacking the necessary coherence and the strategic thinking: exactly these goals have been altered, even turned towards market values, by models which are inappropriate for the educational system (Jivan et al., 2011: 748).

Florea and Oprean (2010: 81) state that, in the last years, higher education institutions must subordinate education and research to “the benefit of economy and society”. “However, the criteria for their assessment in this respect are uncertain, particularly because the research on the substance, teaching-learning processes and their impact on employment and work have been more successful in demystifying traditional concepts than in establishing a generally accepted knowledge of ‘good practices’, ‘quality’, etc.”

But we must believe in our nation’s future. Even if 90% of Romanian researchers had to reconvert their work, even if Romanian teaching system was embezzled by becoming more massive, and was reoriented on market goals and partly already devalued, even if Romanian physicists are “hunted” by the western powers etc., in despite of all this virtual “fight” against Romanian intellectuality, we will survive: in a worse way, but we will survive (Jivan et al., 2010: 75).

Florea and Oprean, (2010: 78-79) point out that, in the communist regime, “unemployment in Romania was to be eradicated and every high school or college graduate was to be guaranteed a job, hence the central government allocated slots based on predicted demand for given occupations. As a result of this restricted opportunity for admissions, competition became very intense at an early age...”, while the same authors reveal that that all educational policies after 1989 tried to change the communist heritage “in view of preparing graduates for the tough(er), by all means, different emerging labour market of the 1990s. (Florea and Oprean, 2010: 79)”

3. The Romanian Labour Market and Education System Graduates Employment

Pociovalisteanu (2011: 114) shows that, according to the UN report “A world of work in 2010 – from one crisis to another?”, employment has decreased in many countries, despite the signals of revigoration of the global economy, “as recession and labour markets will remain vulnerable until 2015”.

Herman and Dalalau (2011: 339) consider that all countries are trying to increase employment “in order to increase national wealth”. “Creating the conditions necessary for the labour factor to manifest actively and creatively is one of the main socio-economic issues that all countries of the contemporary world are facing [which] is broadly debated in the specialist literature and is differently reflected in the government programmes.”

“The EU-27 employment rate for persons aged 15 to 64, as measured by the EU's labour force survey (EU LFS), decreased in 2010 to 64.2 %, down from 64.6 % in 2009. This decrease of 0.4 percentage points followed on from a 1.3 percentage point fall in 2009, the first decrease recorded in the EU-27 employment rate since 2002”(http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Employment_statistics).

“Employment rates vary considerably according to levels of educational attainment: for statistics on this issue employment rates are based on the age group 25 to 64 rather than 15 to 64. The employment rate of those who had completed a tertiary education was 83.9 % across the EU-27 in 2010, much higher than the rate (53.8 %) for those who had attained a primary or lower secondary education ... For persons with an upper secondary or post-secondary non-tertiary education the rate fell 1.8 percentage points between 2008 and 2010, while for persons with a tertiary education the rate fell 1.4 percentage points over the same period” (http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Employment_statistics).

According to the European Commission’s website: “The Europe 2020 strategy is about delivering growth that is: smart, through more effective investments in education, research and innovation; sustainable, thanks to a decisive move towards a low-carbon economy; and inclusive, with a strong emphasis on job creation and poverty reduction.” (http://ec.europa.eu/europe2020/europe-2020-in-a-nutshell/priorities/index_en.htm).

We must underline the importance given by the European Commission to the issue of employment in order to enhance social cohesion, for acting towards the inclusive growth priority of the Europe 2020 Strategy. So, the first of the five headline targets for the “Europe 2020” Strategy is related to employment and it aims that 75% of the 20-64 year-olds will be employed by 2020 (http://ec.europa.eu/europe2020/europe-2020-in-a-nutshell/targets/index_en.htm).

According to Voinea et al. (2010: 16): “In Romania, the employment rate is below the EU average (57.4%) and the discrepancies between men and women are wider (65.7% compared to 52.5%). These differences are even more significant when it comes to the employment rate of the older workers (only 34.4% for women, compared to 53% for men).”

The same authors consider that: “The objective of increasing the employment rate is of paramount importance for Romania. In our opinion, it is the single most important objective of the Europe 2020 Strategy. Currently, more than 4 million Romanians from the active population are not employed – at least not in Romania and not in the formal economy. If this figure improves, the budget revenues will also significantly improve and the need for social transfers will decrease. Nevertheless, it is not enough to secure again high rates of economic growth, as the employment rate grew only marginally in the previous boom period. More specific, active policies are needed, both at central and local government level” (Voinea et al., 2010: 16).

Herman (2012: 5) treats the relationship between employment and economic growth, due to the fact that “Employment is considered a key mediator between economic growth and poverty reduction”. She shows that: “... most of the countries have a persistent job deficit and they have to deal with the problem of unemployment, and on the other hand, because employment does not grow enough while the economy is growing (phenomenon called jobless growth).”

She also talks about the employment elasticity in function of economic growth, measured by Saget for 11 Transition Economies in Central and Eastern Europe (CEE) and the Commonwealth of independent states (CIS) for the period 1989-1998, who identified three types of elasticity patterns in the region: "First of all, in countries such as Poland, Hungary and Slovenia, employment growth appears closely linked with GDP growth, as evidenced by relatively high employment elasticity. In the second group, including the Baltic States, the Slovak Republic and the Russian Federation, the elasticity is much lower. In the third group (Bulgaria, Romania and Ukraine), a statistically significant relationship between employment and economic growth" (Herman, 2012: 6).

Herman, (2010: 163) considers that the decline in employment in Romania is mainly due to "the restructuring of the Romanian economy, the disassembling of economic and social reform elements, the errors of employment policies which were mainly passive and concerned more with recovering the effects than with removing the causes; all these, and many others, raised the risk of firing a large number of employees and created the conditions for increasing unemployment."

Employment rate among young people (15-24 years old) is much lower than that of the total population, because many young people are still included in the educational system and don't have a work place. On the other hand, the decrease in young people employment can also be determined by their migration abroad, the decrease in the birth rate and the black economy (Popovici, 2011: 210-211). Herman and Dalalau (2011: 343) point out the gravity of young people unemployment and underline the categories of young people who are the most affected by unemployment: "Within this group of unemployed people we usually find people who are not involved in training activities, graduates from high school, occupational schools, as well as graduates from university immediately after graduation."

According to the data supplied by the National Institute of Statistics, there is a decreasing trend with regard to the evolution of young population until 2025. This evolution may be explained by the decrease in the birth rate, the increase of the period and level of education, the social mobility, women's emancipation. Regarding young people's unemployment rate in Romania, it was of 22.1% in 2010, a little higher than the average unemployment rate in the European Union. This situation can be explained, on one hand, by the inexistence of a correspondence between the educational (too much theoretical) level and the requirements of the labour market, and, on the other hand, by the companies' desire to employ qualified labour force. The lower unemployment rate among young people with higher education, in comparison with other categories, as well as the fact that the smaller the necessary period for finding a work place, the higher the educational level is, brings an increasing importance to the diploma at the beginning of the career (Popovici, 2011: 194-195). Florea and Oprean, (2010: 80) also reveal that "graduate employment is being presently challenged to the core and two of the most frequently invoked underlying reasons are unadjusted curricula to job market demands, and graduate skills' failure to meet employers' requirements."

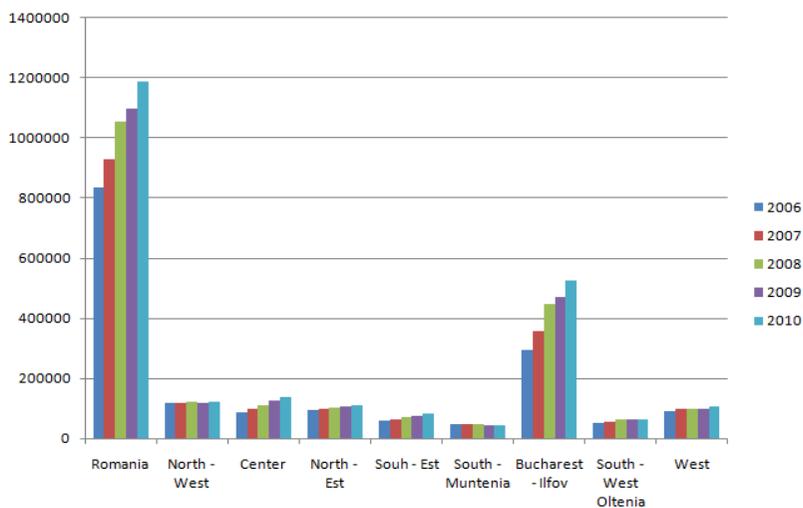
Further on, we shall analyse the dynamics of the Romanian education system graduates employment, taking into account the total number of graduates, corresponding to all education levels, during the whole analysed period: 2006-2010, by its rate measurement.

Table 1. The Total Number of Graduates in Romania and by the Romanian Development Regions in the 2006-2010 Period in Romania

Region / Year	2006	2007	2008	2009	2010
Romania	834969	928175	1056622	1098188	1188033
North - West	115758	116077	120265	118799	121979
Centre	85618	97279	109909	125877	138714
North - Est	95102	97937	101994	104497	107979
South - Est	57133	62649	70982	74949	80680
South Muntenia	47983	46206	46621	43142	42966
Bucharest Ilfov	293861	357641	446981	470100	526829
South-West Oltenia	50737	53702	60864	60908	64681
West	88777	96684	99006	99916	104202

Source: <http://epp.eurostat.ec.europa.eu>

Figure 1. The Total Number of Graduates in Romania and by the Romanian Development Regions in the 2006-2010 Period in Romania



Source: <http://epp.eurostat.ec.europa.eu>

As Table 1 and Fig. 1 highlight, the total number of graduates

- continuously increased in the 2006-2010 period at the whole country level;
- registered an increase trend, as well, by the eight development regions of Romania in the 2006-2010 period (with very few exceptions in some years of the period, in some of the eight development regions of Romania) (Popovici, 2012: 381).

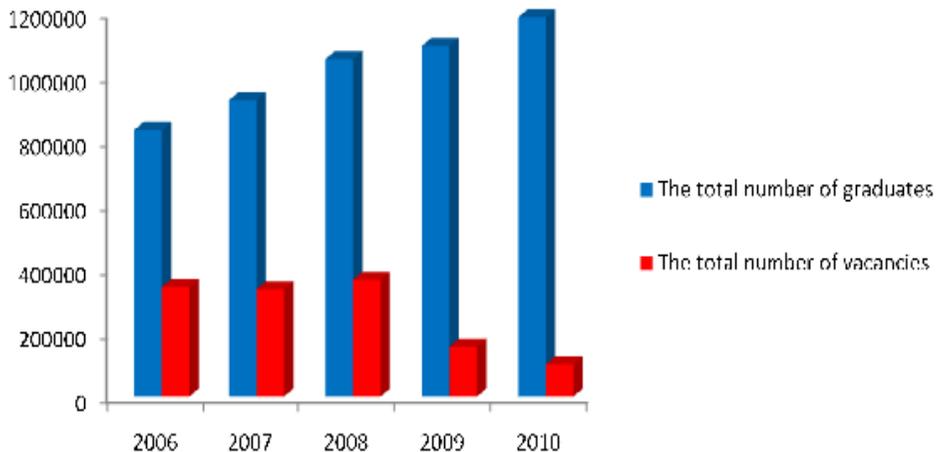
Florea and Oprean (2010: 81) point out why graduate employment in Romania increased, as well: “Despite the efforts undertaken in the educational policy of the last decade ... it has become clear that the mismatches have become widespread, even endemic. Both the instrumental ambitions of students and their intrinsic motives regarding enrichment through knowledge and reflection have led to an increase in their enrolment in higher education beyond expected demand from traditional areas of graduate employment.”

Table 2. The Total Number of Graduates and the Total Number of Vacancies in the Economy in the 2006-2010 Period in Romania

Years	2006	2007	2008	2009	2010
The total number of graduates	834969	928175	1056622	1098188	1188033
The total number of vacancies	343488	336128	365792	155625	101239

Source: <http://epp.eurostat.ec.europa.eu>

Figure 2. The Total Number of Graduates and the Total Number of Vacancies in the Economy in the 2006-2010 Period in Romania



Source: <http://epp.eurostat.ec.europa.eu>

As it can be noticed from Table 2 and Fig. 2:

- the total number of graduates continuously increased in the 2006-2010 period at the whole country level, while:
- the total number of vacancies in the economy:
- decreased in 2007 to 336128, from 343488 in 2006;
- increased in 2008 to 365792, from 336128 in 2007;
- decreased again in 2009 to 155625, from 365792 in 2008 and in 2010 to 101239, from 155625 in 2009.

So, the total number of vacancies in the economy registered a decrease trend in the 2006-2010 period, except in 2008, when it registered an increase compared to 2007.

We name the Romanian education system graduates employment rate the ratio (in percentages) between the total number of graduates and the total number of vacancies in the economy, according to the formula:

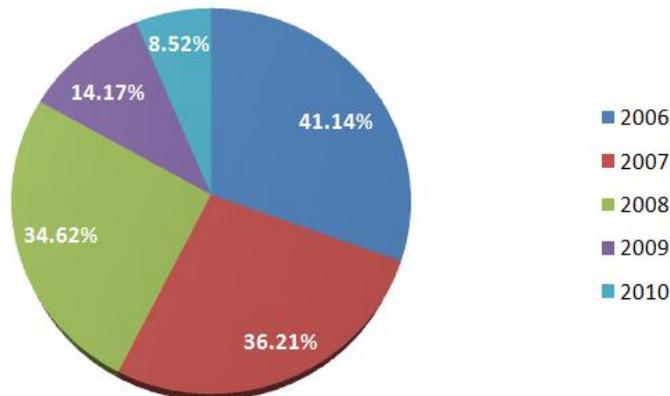
$$\text{The Romanian education system graduates employment rate} = \frac{\text{the total number of graduates}}{\text{the total number of vacancies in the economy}} \cdot 100$$

Table 3: The Romanian education system graduates employment rate in the 2006-2010 Period (in %)

Years	2006	2007	2008	2009	2010
The Romanian education system graduates employment rate (in %)	41.14%	36.21%	34.62%	14.17%	8.52%

Source: <http://epp.eurostat.ec.europa.eu>

Figure 3. The Romanian education system graduates employment rate in the 2006-2010 Period in Romania (in %)



Source: <http://epp.eurostat.ec.europa.eu>

With regard to the Romanian education system graduates employment rate in the 2006-2010 period in Romania, both Table 3 and Fig. 3 point out a continuous decrease in its figures during the whole period:

- it decreased from 41.14% in 2006 to 36.21% in 2007;
- it decreased from 36.21% in 2007 to 34.62% in 2008;
- it decreased from 34.62% in 2008 to 14.17% in 2009;
- it decreased from 14.17% in 2009 to 8.52% in 2010.

This continuous decrease in its figures during the 2006-2010 period is the result of the correlation between the two opposite dynamics of the number of graduates and the number of vacancies, which are the counter and, respectively, the denominator of the ratio in the formula, and of the difference in their dynamics rhythm: the continuous increase at the whole country level, of the number of graduates, in the context of a decrease trend in the total number of vacancies, with an increase in the total number of graduates much smaller than the decrease in the total number of vacancies.

4. Conclusions

Education in Romania has suffered significant changes after 1989 due to the passage from the centralized economy to the market economy, to the increasing requirements of the labour market and to the challenges it has been confronted with in the actual knowledge society.

Romania signed the Bologna Declaration in 1999, which aimed to form until 2010 a unique European space in the higher education and research field. The decision factors declared their goal to harmonize education with the European Union educational systems. As a result of the Bologna process, certain radical transformations were made; the number of places in schools and universities has increased, the admission system has been modified etc. But quality problems resulted from it, often replacing quality with quantity.

Both the economic system and the labour market in Romania after 1989 have been very different from the communist regime period. In the context of the economic transition process, the Romanian labour market has suffered big changes with regard to its volume and the main labour force indicators structure.

Before 1989, in the communist regime, unemployment in Romania was inexistent, due to the fact that the government guaranteed a job to every high school or university graduate.

In the 2006-2010 period, the number of the Romanian education system graduates and the number of vacancies on the Romanian labour market have

registered two opposite dynamics and a difference could be noticed, as well, in their dynamics rhythm: the continuous increase at the whole country level, of the number of graduates, in the context of a decrease trend in the total number of vacancies, with an increase in the total number of graduates much smaller than the decrease in the total number of vacancies. As a result, the Romanian education system graduates employment registered a continuous decrease during the whole analyzed period.

References

1. Deledalle, G. in Dewey, J. (2011) "Democratie et Éducation", Armand Collin Éditeur, Paris.
2. Florea, S. and Oprean, C. (2010). "Towards an Integrated project: Higher Education and Graduate Employment in Romania", *The Journal of Management of Sustainable Development*, Volume 2 (2): 78-85.
3. Herman, E. (2012). "The Influence of the Economic Growth Process on Romanian Employment", *Annals of "Dunarea de Jos" University of Galati* Fascicle I. Economics and Applied Informatics Years XVIII (1): 5-12.
4. Herman, E. (2010). "Inflation and Unemployment in the Romanian Economy", *Annals of the University of Petroșani – Economics*, vol.X – Part II: 157-170.
5. Herman, E. and Dalalau, D. (2011). "The Romanian Labour Market in the Last Two Decades - In or Out of Crisis?", *Revista Economica - Revista de teorie și practica economico-financiara*, No. 2(55), 339-348.
6. House of Lords (2012), European Union Committee, 27th Report of Session 2010–12, "The Modernisation of Higher Education in Europe", Published by the Authority of the House of Lords, HL Paper 275.
7. Jivan, A.; Talpos, I.; Mirica, M.; Popovici, A. (2010). "Economic Roots of the Transformations in Intellectual Behaviours in Romania Nowadays. Focus on Education and Scientific Research" – selected paper indexed in *GEBA 2010 Conference Proceedings Citation Index*, Dinu Airinei, Carmen Pintilescu, Mircea Asandului, Alin Marius Andries (editors), "Globalization and Higher Education in Economics and Business Administration" *The ISI Proceedings of the 4th International Conference on Globalization and Higher Education in Economics and Business Administration – GEBA 2010, 21-23 October 2010, Iasi, Romania*, Alexandru Ioan Cuza University Press, Iasi, 71-76.
8. Jivan, A, Talpos, I, Popovici, A., Mirica, M. (2011). "National Specificities and Problems in the Romanian Higher Education System: Certain Economic Foundations", "L'UE et Ses Rappports au Monde: Perte de Statut ou Emergence d'un Nouveau Modele de Croissance « Made in Europe »?" *Travaux Scientifiques du Reseau PGV sous la Direction de Claude Martin*, Tome 2, Université Pierre Mendès-France de Grenoble Editions PGV, 744-756.
9. Pociovalisteanu, D.-M. (2011). "The Labor Market in Romania – between Structural Reform and Current Adjustment", *Equilibrium*, 6(3): 103-114.
10. Popovici (Bărbulescu), A. (2012). "Considerations regarding Romanian Higher Education Graduates", *The Annals of The University of Oradea. Economic Sciences*, Tom XXI (1st Issue / July 2012): 377-383.
11. Popovici (Bărbulescu), A. (2011). "Human Capital and Higher Education in Romania in the Last Years", *Annals of the University of Petrosani, Economics*, Vol. XI (4): 207-214.

12. Popovici, A. (2011). "The Dynamics of the Romanian Universities Graduates Number in the 2005-2010 Period". *The Annals of the University of Oradea, Economic Sciences*, Tom XX (2nd Issue – December 2011): 193-199.
13. Popovici, A.; Jivan, A. (2011). "Higher Education and Research Issues in the 21st Century in Romania", *Proceedings of the Ninth International Conference on "Challenges In Higher Education And Research In The 21st Century" organized by the Technical University of Sofia, June 5-8, 2011, Sozopol, Bulgaria*, Vol. 9, edited by Tasho Tashev, Radoslav Deliyski, Badea Lepadatescu, Heron Press, Sofia, 39 – 44.
14. Voinea, L., Pauna, B., Lungu, L., Cojanu, V., Busuioc, A. (2010). "Romania and the Europe 2020 Strategy", The 6th GEA Report on Romania and the Lisbon Agenda.
15. <http://epp.eurostat.ec.europa.eu>
16. http://ec.europa.eu/europe2020/europe-2020-in-a-nutshell/priorities/index_en.htm
17. http://ec.europa.eu/europe2020/europe-2020-in-a-nutshell/targets/index_en.htm
18. http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Employment_statistics