CONSIDERATIONS REGARDING ROMANIAN HIGHER EDUCATION GRADUATES

Popovici (Barbulescu) Adina West University of Timisoara Faculty of Economics and Business Administration

The paper aims at analyzing the dynamics of in Romanian higher education graduates in the 2006-2010 period, both in Romania and by the Romanian development regions.

After highlighting the importance of human capital and its education, the paper analyzes the dynamics of Romanian higher education graduates in the targeted period, at both of the above-mentioned levels.

The conclusions reveal that, during the analysed period: 2006-2010, the number of female, and, respectively, male higher education graduates, as well as the total number of higher education graduates, continuously increased in the 2006-2010 period at the whole country level and 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 the eight development regions of Romania.

Therefore, the Romanian higher education system must correlate the graduates number with the number of work places in the Romanian economy, and take into account the necessities imposed by the participation at international competition.

Key words: knowledge-based society, economic growth, human capital, education, higher education graduates

JEL Classification: I21, I23, I25, J60

1. Introduction

Throughout the modern history, all countries of the world have been focused on economic development. Contemporary world comes back to the real purpose of economics, the human being, assuring his welfare and security, both at individual and social level. Thus, it appears on the ideas level a new conceptual paradigm, that of human development, which accompanies and motivates the economic one. This new paradigm has obviously not manifested itself instantaneously, but has developed as a slow, difficult and deliberate process. The rapid rhythm of changes has convinced both the business people community, and the nations, that labour force flexibilization is necessary. Each sector of activity, including the agricultural one, needs a permanent qualification up-date, combined with the accumulation of action knowledge and competencies. This irreversible trend represents a proof of the increasing importance of some "intangible" points in the investments field such as education – while the effects of the "intelligent revolution" are being felt. In this case, investment in education becomes a strategic investment (Popovici 2011: 193). As Jacques Delors, the president of the International Commission foe Education states: "In the 21st century, educational systems must educate in an innovating spirit, promote the capacity of evolution, adaptation to a fast changing world, that each individual should be capable of assimilating" (Ciobanu 2003: 15).

2. The Importance of Investments in Education and Health

Human capital consists in those people's skills, which are characteristic to them and remain the same in any social environment and can be used on the labour market, in exchange for economic resources of any type. Practically, *the human capital* is composed of:

- the educational capital, represented by the skills acquired by individuals during and outside the education process, and
- *the biological capital*, represented by the individuals' physical skills, the most often synthesized by their health state.

Human capital has developed itself as a concept in economy, where it is mainly regarded as "estimation of a person's ability to produce income by labour".

The human capital treatment as investment has generally imposed itself; the abilities human capital is composed of could practically be used anytime, in function of the social and economic environment, in which individuals could place themselves at a certain moment. More, this investment is continuous, aiming either the development (the perfectioning courses or continuous education, for instance), either the maintenance of the capital stock (periodical medical consultancies, for instance) (Cismas and Popovici 2011: 57).

The importance of education and health for the economic growth and development is due to the returns from investments in the two variables. These are two forms of human capital, the improvement of which should enhance worker's productivity. Several studies show that better health, special early in life, is associated with higher educational attainment. Conti et al. (2010) argue that more educated individuals, in turn, have better health later in life and better market prospects. According to the authors, education has an important causal effect in explaining differences in many adult outcomes and health behaviours (Conti, Heckman and Urzua: 2010; Carlei et al. 2011: 174).

Economic growth during the transition period had a particular pattern in CEEC. Capital has provided a certain positive contribution to growth, while labour had a small or even negative contribution (IMF, 2006). In this respect, CEEC stand out among other emerging countries, where labour input has typically contributed substantially to growth. Most of the growth during the transition period was actually accounted by the increase in total factor productivity (TFP). Even though the classical source of TFP growth is technical progress and innovation, growth during transition was mostly explained by efficiency improvements in the use of capital and labour (Havrylyshyn, 2001; Jude and Pop Silaghi 2011: 72).

Starting in the late nineties, CEEC experienced a return to the classical factors determining growth, with an increase importance for innovation and technical progress. Once the transition period completed, the growth process in CEEC should be sustained by factors like capital intensity, innovation, human capital and competition (OECD, 2003; Jude and Pop Silaghi 2011: 72).

3. Romanian Higher Education Graduates in Figures in the 2006-2010 Period

Professional insertion of young people has lately become, both in Romania and in the European Union, a difficult process, which requires an increasing period of time from the moment of finalizing the last form of education, until the moment of finding a work place (Popovici 2011: 194).

Today exist in the world about a billion young people with the age ranging between 15 and 24 years old, 85% of them living in developing countries. The participation rate on the labour market among young people has decreased at a world level from 59.3% to 54.4% during 2004-2010, mainly because of the prolonging of studies among young people. In the European Union currently live about 62 million young people, which represent 12.7% from the total population. According to the data supplied by the National Institute of Statistics, there is a decreasing trend with regard to the evolution of young population until 2025. This evolution may be explained by the decrease in the birth rate, the increase of the period and level of education, the social mobility, women's emancipation (Popovici 2011: 194).

The statistical data show that Romania, like other EU countries, faces a major problem of the labour market, i.e. young people unemployment. The unemployment rate among young people is three times higher than the average rate (20.8% as compared to 6.9% in 2009). The high level of employment among young people should be an important reason in applying some active policies that should aim at this vulnerable category. 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 (Herman and Dalalau 2011: 343).

Romanian Development Regions have no legal personality, being not subject to administrative law, but the result of concentration achieved at intercounty level, corresponding to NUTS II division of the European Union. By agreement of the local councils and county councils four macroeconomic development regions have resulted, in conformity with NUTS I division of the EU, each of them being composed of two regions, so there are 8 development regions across the country. The main objective for establishing these regions is to access EU funds in a unified manner and to achieve an integrated development of infrastructure projects at regional level (Avram and Pociovalisteanu 2011: 46).

Table 1. The Number of Female Graduates in Romania and by the Romanian Development

Regions in the 2006-2010 Period.

Region / Year	2006	2007	2008	2009	2010
Romania	462740	520709	595369	618096	671696
North - West	64550	64878	68135	66455	68669
Center	46437	52520	61510	71187	79011
North - Est	54977	57101	58522	59492	61489
Souh - Est	31246	35079	40166	40853	43893
South - Muntenia	26131	26351	26726	23882	23976
Bucharest - Ilfov	164690	202755	252017	269718	303330
South -West Oltenia	26986	28897	33235	32637	34783
West	47723	53128	55058	53872	56546

Source: Eurostat

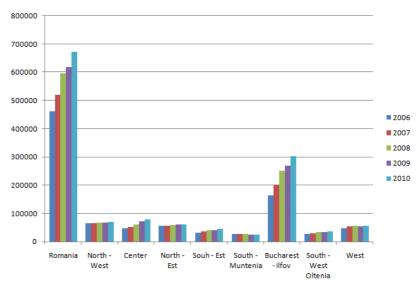


Figure 1. The Number of Female Graduates in Romania and by the Romanian Development Regions in the 2006-2010 Period.

Source: Eurostat

As Table 1 and Fig. 1 show, the number of female graduates:

- continuosly 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 the eight development regions of Romania).

Table 2. The Number of Male Graduates in Romania and by the Romanian Development Regions in the 2006-2010 Period.

Region / Year	2006	2007	2008	2009	2010
Romania	372229	407466	461253	480092	516337
North - West	51208	51199	52130	52344	53310
Center	39181	44759	48399	54690	59704
North - Est	40125	40836	43472	45005	46490
Souh - Est	25887	27570	30816	34096	36787
South - Muntenia	21852	19855	19895	19260	18990
Bucharest - Ilfov	129171	154886	194964	200382	223499
South -West Oltenia	23751	24805	27629	28271	29899
West	41054	43556	43948	46044	47656

Source: Eurostat

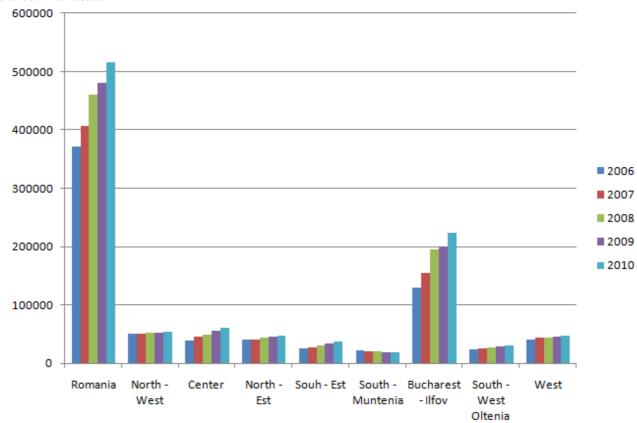


Figure 2. The Number of Male Graduates in Romania and by the Romanian Development Regions in the 2006-2010 Period.

Source: Eurostat

As revealed by Table 2 and Fig. 2, the number of male 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 the eight development regions of Romania).

Table 3. 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
Center	85618	97279	109909	125877	138714
North - Est	95102	97937	101994	104497	107979
Souh - 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: Eurostat

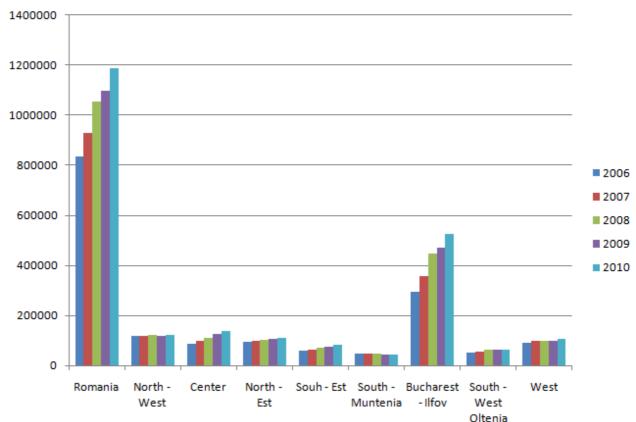


Figure 3. The Total Number of Graduates in Romania and by the Romanian Development Regions in the 2006-2010 Period in Romania.

Source: Eurostat

As Table 3 and Fig. 3 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 the eight development regions of Romania).

4. Conclusions

The conclusions reveal that, during the analysed period: 2006-2010, the number of female, and, respectively, male higher education graduates, as well as the total number of higher education graduates, continuously increased in the 2006-2010 period at the whole country level and 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 the eight development regions of Romania.

Therefore, the Romanian higher education system must correlate the graduates number with the number of work places in the Romanian economy, and take into account the necessities imposed by the participation at international competition.

Acknowledgement

This work was cofinanced from the European Social Fund through Sectorial Operational Programme Human Resources Development 2007-2013, project number POSDRU/89/1.5/S/59184 "Performance and excellence in postdoctoral research in Romanian economics science domain".

References:

One-Author Books:

- 1. Ciobanu, O. *Educația economică în România: prezent și perspectivă*, Editura ASE, București, 2003.
- 2. Institutul National de Statistică. *Anuarul statistic al României 2005-2006*.

Journal Articles:

- 1. Avram, Daniel and Pociovalisteanu, Diana Mihaela. "Impact Of The International Financial Crisis On Labour Market In The South-West Oltenia Development Region". *1th WSEAS International Conference "Tourism and Economy Development*, University of Craiova, Drobeta Turnu Severin Center, Romania, October 27-29, 2011: 46-49.
- 2. Carlei, Vittorio et al. "Human Capital and Development: Some Evidence from Eastern Europe". *Analele Universității din Oradea, Științe Economice*, Tom XX (1st Issue / July 2011): 173-178.
- 3. Cismas, Laura and Popovici, Adina. "The Importance of the Investments in Human Capital for the Sustainable Development of the Romanian Economy". *The Annals of the University of Oradea, Section Economic Sciences*, Tom XVIII (2009): 56-59.
- 4. Conti, Gabriella, Heckman, James and Urzua Sergio. "The Education-Health Gradient." *American Economic Review* 100(2010): 234-238.
- 5. Herman, Emilia and Dalalau, Daniela. "The Romanian Labour Market in the Last Two Decades In or Out of Crisis?". *Revista Economica- Revista de teorie şi practica economico-financiara*, Nr. 2(55)/2011: 339-348.
- 6. Jude, Cristina and Pop Silaghi, Monica. "Innovation versus Income Convergence in Central and Eastern Europe. Is There a Correlation?". *The Annals of the University of Oradea, Economic Sciences*, Tom XX (1st Issue / July 2011): 72-79.
- 7. Popovici, Adina. "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.

Official Reports:

- 1. Havrylyshyn, Oleh. "Recovery and Growth in Transition. A decade of Evidence". *IMF Staff papers, Transition Economies: How Much Progress? Vol. 48* (2001): 53-87.
- 2. IMF. *Growth in the Central and Eastern European countries of the European Union*/Susan Schadler, Ashoka Mody, Abdul Abiad, and Daniel Leigh—Washington D.C. International Monetary Fund, 2006.
- 3. OECD. Science Technology and Industry Outlook, OECD Publishing, Paris, 2003.

Websites:

1. http://epp.eurostat.ec.europa.eu