

EDUCATIONAL IMPACT ON THE ROMANIAN'S MACROREGIONS

Florea Adrian

University of Oradea, Faculty of Economics, Oradea, Romania

aflorea@uoradea.ro

Abstract: *In the conditions of continuous changing of educational systems from all around the world, we notice these systems are becoming less a public good and merely a manifestation of an economic sector. Meanwhile a part of the Romania's population develops concerns for perfecting their own education and also the education of their family's members, it is observable how mass-media give us some series of "examples" trying to prove right the idea of succeeding in life without "studying too much". In order to give a pertinent opinion regarding this matter, I decided to carry on this study, aiming to identify a link, a pattern, between the level of education existing in a region and the level of development of that region.*

Keywords: *education, economic development, macroregions, PIB per capita, income per capita*

JEL classification: *A13, I21, I25, J11*

Generally, the education is considered one of the main factors generating and promoting economic growth and development. If some years ago there was a high consideration for the necessity of benefiting from the educational system for the most of the population, without any regard for the schooling level, nowadays it seems there is a focus on the higher education. This one is considered to have a greater impact on the national economy, not only because of the higher taxes on the revenue received by the national budget (the revenues are direct proportional with the years of studying), but due of the connected effects generated: the increase in the savings and investments rates, the development of the entrepreneurial behavior, the concerns regarding health, the decrease of natality and also the pressure put on the environment's resources, etc.

Even if the education's role is generally accepted being one of the fundamental elements which allow economic growth and development acceleration, there still are several questions needing to be carefully answered: which of the three levels of education influences mostly the economic environment? Primary school, gymnasium, high school, higher education or post university? If education presents such a great importance for the economic environment, for the economic growth and development, why is the Government so little involved in supporting it?

The answers were given in various ways during the time by several economic schools. Some of the researchers chose to apply some rigid accountancy methods with regard to macroeconomic data, analysing the correlations between the identified changes in the schooling levels and the alteration of the aggregate production.

Although I managed to find a wide bibliography concerning this matter, the applied methods, also extremely varied, lead to pretty fragile results. The common element for the most of the analysed studies implied a systematic research of the connections between the rates of economic growth and tuition (William E. Becker, D.R. Lewis 1993 : 51).

Another approach insisted on the necessity of conducting a series of analysis in the specific industrial branches' field in order to find out the possible connections between the increase of labour productivity rate and the workers' educational performances of the workers. The conclusions of the studies' authors are pointing out the idea that education

has a positive influence on the economic growth (William E. Becker, D.R. Lewis 1993: 53).

Another interesting approach is in the terms of costs and benefits generated by education, supposing these are affected by the noticeable personal and family features and other unobservable factors as well, all of them having the possibility to affect in various ways the potential profits and the estimated costs (Charlotte Lauer 2005: 63).

Actually, soon after World War II there is a sheer explosion of the theories analysing the benefits of education on the individuals and also on the society in general. It has to be highlighted that in those times the role of the higher education in the poverty decrease had been neglected. Nowadays it is insisted on the idea that higher education is the "engine of development in the new world economy" (D. Bloom, D. Canning, and K. Chan 2006: 1).

My aim in this paper is to study if there really is a connection between the level of graduated studies and the level of Romania's macroregions development. The data used to conduct this study are provided by National Institute of Statistics (NIS). The interpretation of data, comments and also the graphics represent personal opinions. The studies are conducted on the same macroregions given by the NIS, as it shows:

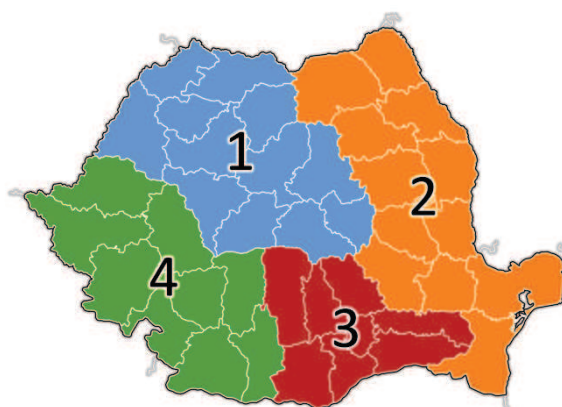


Figure 1: Macroregions of Romania

Source: http://ro.wikipedia.org/wiki/Fișier:România_Macroregiuni.svg

The 1st Macroregion consists of: The North – West development region and the Central development region. It consists of the following counties: Alba, Bihor, Bistrița-Năsăud, Brașov, Cluj, Covasna, Harghita, Maramureș, Mureș, Satu Mare, Sălaj and Sibiu

The 2nd Macroregion consists of: The North – East development region and the South – East development region. It consists of the following counties: Bacau, Botoșani, Brăila, Buzău, Constanta, Galati, Iasi, Neamt, Suceava, Tulcea, Vaslui and Vrancea

The 3rd Macroregion consists of: The South development region and the București and Ilfov development region. It consists of the following counties: Argeș, Calarasi, Dâmbovița, Giurgiu, Ialomița, Prahova, Teleorman

The 4th Macroregion consists of: The South – West development region and the West development region. It consists of the following counties: Dolj, Gorj, Mehedinți, Olt, Vâlcea, Arad, Caraș-Severin, Hunedoara and Timiș

The study takes into account the stable population over 10 years and the given values represent the last graduated level of education.

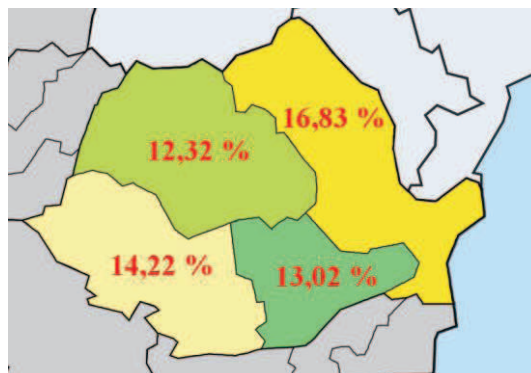


Figure 2: Graduates of primary level

Source: Graphic designed by the author using data provided by the Bihor County Statistics

Figure 2 shows that the 2nd macroregion has the highest rate of graduating a maximum of 4 grades, the lowest rate being registered in the 1st macroregion, only 12,32% of the total population settled for more than 10 years graduated 4 years of school in this area. In the 3rd and the 4th macroregions, the rate, in the population settled for more than 10 years and graduated only 4 grades, registers the value of 13,02 % and 14,22%.

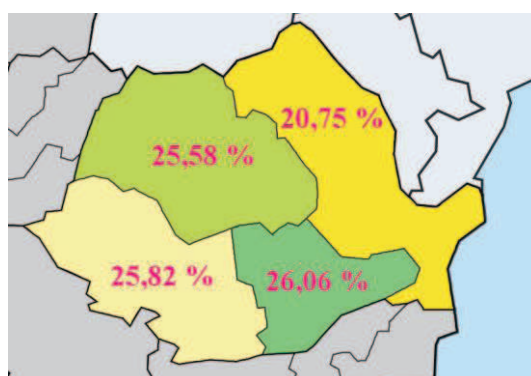


Figure 3: Graduates of high school

Source: Graphic designed by the author using data provided by the Bihor County Statistics

The 3rd macroregion has the highest rate of high school graduates and registers a value of 26,06 %, meanwhile the lowest rates belongs to the 2nd macroregion, only 20,75% of the population managed to graduate 12 grades in this area. For the 1st and the 4th Macroregions, the rates register very similar values, such as 25,58% for the first and 25,82% for the other one.

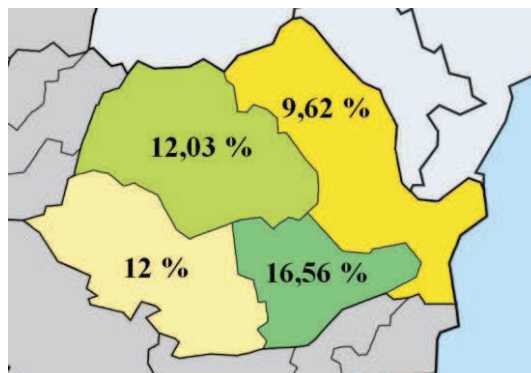


Figure 4: Graduates of higher education

Source: Graphic designed by the author using data provided by the Bihor County Statistics

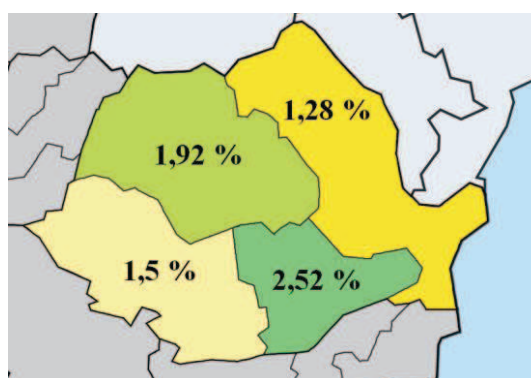


Figure 5: Graduates of post university studies

Source: Graphic designed by the author using data provided by the Bihor County Statistics

Analysing figure 4 and figure 5, we can notice that, regarding university studies and also post university studies, the 3rd macroregion is leading, whereas the 1st and the 4th macroregions are following. The last one in this ranking is the 2nd macroregion.

Putting all together the values presented by the earlier graphics, I designed the following table, in order to outline the characteristics of each macroregion in terms of the graduated studies' level of the population settled for more than 10 years.

Table 1: The population settled for 10 years or more by level of education

	primary	high school	higher education	post university
1 st Macroregion	12,32	25,58	12.03	1.92
2 nd Macroregion	16,83	20,75	9,62	1,28
3 rd Macroregion	13,02	26,06	16,56	2,52
4 th Macroregion	14,22	25,82	12	1,50

Source: Figure designed by the author using data provided by the Bihor County Statistics

Analysing the macroregions' level of development I took into account the Gross Domestic Product per capita and the average income per capita. According to these two indicators, the situation of the four Romania's macroregions is the following:

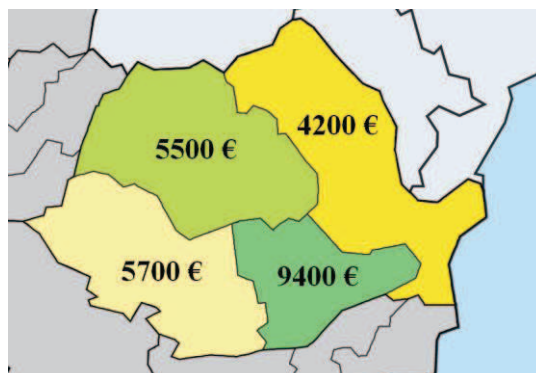


Figure 6: GDP per capita

Source: Graphic designed by the author using data provided by the site <http://epp.eurostat.ec.europa.eu/tgm/mapToolClosed.do?tab=map&init=1&plugin=1&language=en&pcode=tgs00003&toolbox=types> – accessed at 21.04.2014

The 3rd macroregion registers the highest levels for the GDP per capita, while the opposite, the 2nd macroregion, registers the lowest level, less than a half of the value registered by the 3rd macroregion. The 1st and the 4th macroregions register almost equal values, such as: 5500 € and 5700 € for the other.

Analysing the income per capita, there are not such great differences between the four macroregions. Even if the 3rd macroregion keeps the leading position with a value of 953,39 lei per capita, the 2nd macroregion has the last position in ranking, registering a value of 740,41 lei, which also means 77,66% of the 3rd macroregion income, whereas in terms of GDP per capita, formerly presented, the same 2nd macroregion produces only 44,68% of the GDP per capita registered by the 3rd macroregion.

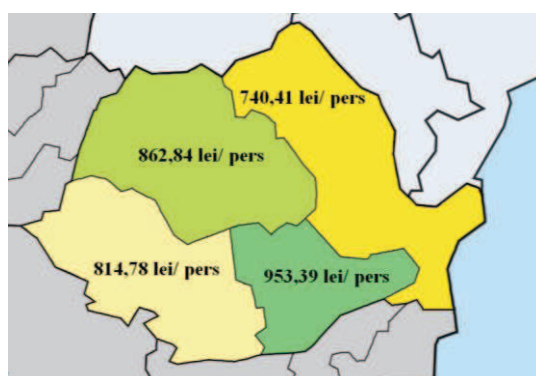


Figure 7: Income per capita

Source: Graphic designed by the author using data provided by the Bihor County Statistics

Conclusions

Analysing the presented data we are able to assert that it is true, there is a correlation of direct proportionality between the level of graduate studies and the level of macroregions' development, however it certainly needs additional analysis in order to highlight the extra benefits associated with the graduation of each level of studies.

In the conditions of the globalization which focuses more than ever on the involvement of a highly qualified labour force, the link between education and economic productivity has to be stronger: the policymaker factors have to pay more attention to the business sector's needs, assuring so a prioritization of the educational systems.

Considering that education has a varied contribution on the economic system, also starting with favouring a rapid industrialization and ending offering a highly qualified labour force and also the possibility of attitude's change regarding the society in general, in my opinion all these have to become a priority for any developing economy.

The higher is the level of education of a nation, the capacity of producing knowledge increases. This knowledge, these information are not only assimilated through the educational system, but they are directly or indirectly transmitted to all the members of the society.

The differences related to the level of education between the macroregions of Romania reflect thus the economic differences between these zones as well. The measures to be taken into account in order to reduce these differences must be of political nature and must focus on continuing the reform of the national educational system.

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