EDUCATION – A FACTOR IN THE EU ECONOMIC GROWTH

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Abstract: This paper presents the correlation between the GDP per capita and the education expenses for each pupil, the correlation between the employment rate and GDP per capita, as well as the correlation between the level of the early school dropout and the high school graduation rate of people between 20 and 24 years old, all refer to the member states of European Union. The conclusion which can be inferred from the analyses is that Romania, in most of the situations, is the last among the states of the European Union, thus it has a much to recover and improve to be at the same level as the rest.

Cuvinte cheie: economic growth, education, Romania, UE

1. Aspects regarding education and economic growth

The economic growth represents the main goal of any state. The economic growth represents the long-term increase of the GDP per inhabitant of a certain country, leading to an increase of the living standard of a society, both from a quantitative point of view, through the increase of the consume of goods and service, and from a qualitative one, through the contribution to the technological progress and the increase of innovations. The basis on which all these are constructed is represented by the capital of native knowledge to which the knowledge obtained after the graduation of a school is added, thus bringing an increase of value through education, which leads to the economic growth.

From Schultz’s point of view many paradoxes about the economic growth and development can be explained when the human capital is taken into consideration. He considers that the present economic system is different because the human capital is growing, because otherwise there would be only manual labour and poverty. Thus, without an evolution of the human capital there would be no economic growth.

Thomas Stewart believes that the economic growth should take place before the process of increasing the human capital, and this can be realised in several stages: a) when the enterprise uses what the employees know to the maximum and, b) when as many employees as possible know useful things for the company. This basically explains the influence of the human factor on the economic growth as it follows: a higher number of school years for the workers increases their degree of qualification, their abilities to use modern technologies is increased, a fact which besides making their job easier, it also implicitly increases the production.

Education is defined as an aggregate of measures applied to the youth, and not only, with the purpose of their formation and of the development of their intellectual, moral and physical attributes. Through education it is desired to increase the level of knowledge, which should lead to a more open mind and also to the acquirement of new abilities, all these influencing, in the end, the economic growth.

According to Eric Hanushek and Ludger Wößmann, education can influence the economic growth as if follows:
- Education can increase the human capital intrinsic to the work force, with a direct effect on the increase of work productivity;
- Education can increase the innovative capacity of the economy, as well as the facilitation of knowledge transmission necessary in order to understand and process new information and to successfully implement new technologies;
- The improvement of education quality implies a progress in people’s knowledge, with effects on individual income, revenue distribution and economic growth.

On the other hand, Hanushek and Wößmann mention that a school year does not transmit the same amount of knowledge in all the countries of the world, and that family and colleagues are important factors that contribute to education.

Education is acknowledged as a key component of the European strategy for the development of new abilities, for development, for the success of the knowledge society, and, in general for the whole economy.

2. The Strategies of the European Union

The purpose of the 10 year development strategy of the European Union, launched at the European Council from 23-24 March 2000 held in Lisbon was to transform the communitarian space in the most dynamic and competitive economy, with a sustainable economic growth, more and better paid jobs and an increased social cohesion. One of the main elements of this long term strategy was education.

The evaluations of the Lisbon Agenda have underlined the deficiencies which led to the unsatisfactory fulfilment of this strategy’s objectives:
The absence of an adequate application programme for the member states;
- The absence of a political responsibility at a national level;
- The great number of objectives and quantified targets;
- The deficient monitoring of the member states;
- The insufficient distinction between purposes and means;
- The insufficient correlation between the objectives of the Lisbon Agenda and those regarding the economic convergence;

All these evaluations were taken into consideration in the elaboration of the new European strategy – the Europe Strategy 2020.

The European Union and its member states have adopted the Europe 2020 strategy meant ‘to help Europe have a comeback after the crisis and become stronger, both at an internal level and at an international level’ (The European Commission ‘EUROPA 2020, An European strategy for an intelligent, ecological and inclusion favourable growth’, 2010).

The European benchmarks, established for the period 2010-2020, are based on the objectives established through the Europe Strategy 2020. In the educational domain, the member states have established six levels of reference (Council of the European Union (2010) “Education and Training 2020”, ETUCE Circular 1/2010, Brussels, 2010) according to the data in table no. 1.

Table 1 Reference levels for education and research established for the period 2010 – 2020

<table>
<thead>
<tr>
<th>Level</th>
<th>Target established for 2020</th>
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<tbody>
<tr>
<td>Expenses with research- development</td>
<td>The increase of expenses with research – the development to 3% from the European Union’s GDP, starting from 1.9% at present.</td>
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<tr>
<td>Early education during childhood</td>
<td>At least 95% of the children with ages between 4 and age for starting school should participate in the early education.</td>
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<tr>
<td>Aptitudes/ low basic abilities</td>
<td>The percentage of people aged 15 who have acquired low reading, mathematics and science abilities should be lower than 15%.</td>
</tr>
<tr>
<td>Early school dropout</td>
<td>The percentage of those who leave the education system too early should be lower than 10%, starting from 15% at present.</td>
</tr>
<tr>
<td>Tertiary education level</td>
<td>The percentage of the people with ages between 30 and 34 which have acquired tertiary education should be at least 40%, starting from less than a third (31%) at present.</td>
</tr>
<tr>
<td>The participation of adults in the lifelong learning process</td>
<td>An average of at least 15% of the adults should take part in the process of lifelong learning.</td>
</tr>
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3. Correlations regarding education in Romania

Under the aspect of absolute value, GDP per capita and the investment per student at the level of the European Union, is displayed as it follows:

Figure no.1: GDP in the EU in 2008, thousands $
GDP per capita in the European Union shows that Romania takes the last rank and Bulgaria is situated at small difference of Romania. On the top position are Ireland and Nederland.

Figure no.2: Expenses with education in the EU in 2008, thousands $  

Source: Eurostat, International Monetary Fund

Romania is on the last place among the EU member states. At a considerable difference on the penultimate place is Bulgaria. On the first places are Austria, Cyprus and Denmark. The amount allocated by Romania is six times smaller (2.1 thousands %) than that allocated by the first three countries.

Figure no.3: The correlation between the GDP per capita and the expenses with education per pupil in the EU – 2008, thousands $  

Source: Eurostat, International Monetary Fund
As it can be noticed from figure no. 2 in the countries with a weaker economies, thus with a lower GDP the expenses allocated to the education of each pupil are quite low, as it is the case of Romania (2.101,21$) and Bulgaria (4.153,226$), which are the last states of the European union. On the first places are Austria (12.918, 67), Holland (11.796,73) Sweden (11.794,54) and Denmark (10.165,43).

Figure no. 4: The correlation between GDP per capita and the employment rate in the EU – 2008, thousands $  

\[ y = 0.000x + 57.50 \]  
\[ R^2 = 0.230 \]  

Source: Eurostat, International Monetary Fund

The exception from EU is Luxemburg. Romania is on the last rank, but the differences are not so big, like in the case of the correlation between the GDP per capita and the expenses with education per pupil.

Figure no. 5: The correlation between GDP per capita and the lifelong learning rate in the EU – 2010, thousands $  

\[ y = 803.0x + 21788 \]  
\[ R^2 = 0.216 \]  

Source: Eurostat, International Monetary Fund
The chapter *lifelong learning* must be improved in many states of EU. Romania and Bulgaria are the last again.

*Figure no. 6: The correlation between the early school dropout rate and the high school graduation rate of the people aged between 20 - 24 – EU 2010*

At the level of the European Union the highest graduation rate and the lowest school dropout rate are in: the Czech Republic and Slovakia followed by Poland. On the last place are Malta, Portugal and Spain. Romania is somewhere in the middle.

**Conclusions**

Education is one of the factors that influence the economic growth of a country that is why it is important to grant it the necessary resources.

In what regards the expenses with the education, Romania is on the last place in the European Union and implicitly in what regards the result of the correlation between the GDP per capita and the education expenses per pupil, result of the correlation between GDP per capita and the employment rate and the result of the correlation between GDP per capita and the lifelong learning rate.

Romania managed to be somewhere at the middle of the ranking in what regards the correlation between the early school dropout rate and the high school graduation rate of the people with ages between 20 and 24, which represents a good sign, but it is not enough, there are still more things to be accomplished and many provisions of the EU strategies to be adopted.

**Thanks**

This article is a result of the project POSDRU/88/1.5./S/55287 „Doctoral Programme in Economics at European Knowledge Standards (DOESEC)“. This project is co-funded by the European Social Fund through The Sectorial Operational Programme for Human Resources Development 2007-2013, coordinated by The Bucharest Academy of Economic Studies in partnership with West University of Timisoara.

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