PROJECTIONS OF THE ACTIVE POPULATION WITH HIGHER EDUCATION BY 2020

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Abstract: In research done we turned to changes in the value of GDP, demand on the labor market and employed populationwith higher education at national and regional level, by estimating the short, medium and long term. In this regard,we have proposed a methodological approach which consisted in analyzing relevant indicators of the context ofdemographic, economic, labor market, education and training system conducted at national and regional level. Inthe research highlighted that new demographic perspectives resizes school subpopulation active, employed ordepent. The implications are manifold, from educational systems to sustainability recalibration school systems.The research carried out we can see that economic developments have a powerful social, as in social developments.

Keywords: foorecast, university graduates, human capital, competitiveness, opportunities.

Segment on education in Romanian society, there is a widespread recognition that education represents the strategic further development of the country by contributing to multidimensional modeling and predictive essential to human capital. Education is seen as a path to sustainable development which, in fact, is a social learning in search of innovative solutions.

Poor quality of Romanian higher education as a result of this transformation into a mass education is a factor that will contribute to increased flows study visits abroad. Losses of candidates to higher education due to departures are not compensated coming to study in Romania. Restore credibility in Romanian higher education takes time and effort to improve the quality and performance line.

Faced with supersaturation degree of the internal market and foreign market with a more selective increasingly more Romanian young people no longer consider higher education an opportunity for their own career. With the development of private economy began to grow and the labor market began to appear increasingly more signs that diploma is no longer a guarantee of employment and, much less, a well-paid job.

These considerations underlying patterns anticipation of demand for labor, requiring studies on medium and long term objectives of the analysis of the dynamics of employment and assessing possible changes that may occur in the labor market. Thus, in the medium term has become the need of weather on demand for labor, to estimate future demand training.

In this case, it is a necessary condition to anticipate and compatibility of skills with labor market needs to determine an increase / employment labor market and integration of policies on

education or career choices based on field / specialization education graduates higher. The steps in this approach which is aimed at designing both, the demand for labor are:

a) obtaining forecasts for the GDP at the national, regional and Bucharest-Ilfov;
b) estimate the number of university graduates at national and regional level.

The first step in implementing such a model involves developing scenarios for variables such as GDP. The projection of demand for labor, with higher and medium-term forecasts, a model which adequately reflect the particularities of Romanian economy and generate plausible results.

The time period analyzed is 2004-2014, and statistics were taken from Statistical Yearbooks published by the National Statistics Institute, representing the National Prognosis Commission estimates based on national and regional statistics and the years 2015-2017 were weather trends based processing of up / down indicators. Based on regression equations, variables were taken into account GDP at national and regional level, the number of graduates absorbed into the labor market and the number of graduates who have migrated and entered the external labor market.

Projections employment and GDP are connected through a function of two factors: labor and capital at national and regional level. This process takes into account external migration of graduates. In terms of equations that describe the labor market at national and regional level, the research analyzed the supply of labor and the insertion of graduates in relation to GDP.

The demand for labor with higher education interrelate with the forecast growth in employment. Operation model is a starting point, the GDP for the whole economy.

In the model were analyzed several variables (GDP, activity rate and degree of insertion), account for university graduates who migrated and were absorbed on the external labor market. This model was simulated by estimating the total employed population for the 2000-2014 period. Data quantifying migration of university graduates are estimates, starting from the active and inactive with higher education exists at two points in time, taking into account the inputs and outputs of the system of people with higher education between the two times considered.

The population with higher and has significantly changed structure of the age group, due to the entries in the system of graduates which covered, on the one hand, the reservoirs and, on the other hand, the outputs of the system as a result of migration or permanent their temporary. Therefore, to estimate the number of university graduates who went to work abroad, permanently or temporarily, can be used the following equation:

$S2 = S1 + A - E$

where:

$S2$ = graduates of the active and inactive high at the time $t2 = 2014$;

$S1$ = higher education graduates in the active and inactive at time $t1 = 2000$;

A = university graduates in the 2000-2014 period;

E = population with higher education emigrated permanently or temporarily.

The calculation took into account only license graduates to avoid duplications for master programs (or doctorate).

The number of graduates was adjusted by taking into account a degree of graduation exam license decreased by 97% and foreign graduates who presumably left for the most part the system after graduation.

$E = S1 - S2 + A = A - (S2 - S1)$

Thus, the calculations made, it was found that an estimated 480 000 people with higher education have left Romania in the 15 years considered in the calculation estimates (including

2000 - 2014 inclusive). Of interest are pronounced labor market trends at national and regional level, after the massive infusion of university graduates (after 2009), given that the working population with higher education increased in 2009-2014.

Active population under 25 has remained relatively constant, which means that recent graduates of higher education in this age group have not exceeded the number of people with higher education passed in the age group 25-34 years, whose growth it was fueled primarily by graduates who have completed their university studies after the age of 25 years. If the increase in absolute numbers is recorded in relative numbers (the rates of activity) evolution is downward, most pronounced in the age group below 25. It is worrying that reduce the activity constant rates in the age groups of 25 years - 34 years and 35 years - 44 years.

The rise of unemployment among people with higher education is also reflected in increased unemployment rates, which are very high in the age group under 25 years. This upward trend in unemployment in young people with higher education can be a symptom of relative saturation of the labor market to this population. Amid rising unemployment among people with higher education, there is some tendency for structural upward unemployment population has never worked, made up of university graduates and rising long-term unemployment, which may indicate a change in the structure of labor demand. This indicates greater difficulty integration and reintegration into work.

The data provided by the National Agency for Employment (NAE), that the first 15 positions of the unemployed, who recently graduated from university, is constant during 2004 to 2014, the following occupations: economists, specialists consultants in finance and investments, accounting specialists, etc. The inclusion in specialty graduated or in a related specialization depends on the degree graduated. Graduates of economics, for example, take up jobs rather related specialization graduated. The reasons invoked graduates related to a post in a different specialization of the graduate, are linked mostly to the lack of availability of a post in the specialization. Almost 80% of graduates working in another field invoked this reason, other reasons having rather a marginal influence on the decision to engage in a particular job.

Taking into account the proportion of those with higher education, we can determine the upward employment with higher education. In this regard, we propose a scenario of increasing employment. This is ensured by the increase in activity and a moderation in GDP.

Growth is moderate scenario. The simulations were considered the following scenarios as follows:

- GDP for variable three scenarios have been considered (reserved, moderate and optimistic, with increasing levels of between 0.5% and 5%);

- for the explanatory variable rate (activity) three scenarios have been considered (reserved, moderate and optimistic, with increasing levels of between 0.05% and 1%);

- for the explanatory variable (the degree of insertion) three scenarios have been considered (reserved, moderate and optimistic with decreasing levels between 0.02% and 0.05%).

Forecast demand for labor for higher education (specialists in various fields) suggests that in the period under review, there will be an increase in the volume of demand for labor for them, as can be seen in the chart below (chart 1). It is estimated that in the period under review, there will be a growing demand for highly educated workforce for various industries, with approximately 14.8%, which is a need for about 145,000 people.

Following these results obtained in the research can outline a medium-term forecasting in that it is expected that the level of education to continue the positive trend. The biggest gains will be made in the future by increasing the number of students.

In this respect, short-term horizon of 2017, attention will be directed towards the development of human capital and increase competitiveness by linking education and lifelong learning with the labor market and ensuring better opportunities for future participation on a modern labor market and flexible.
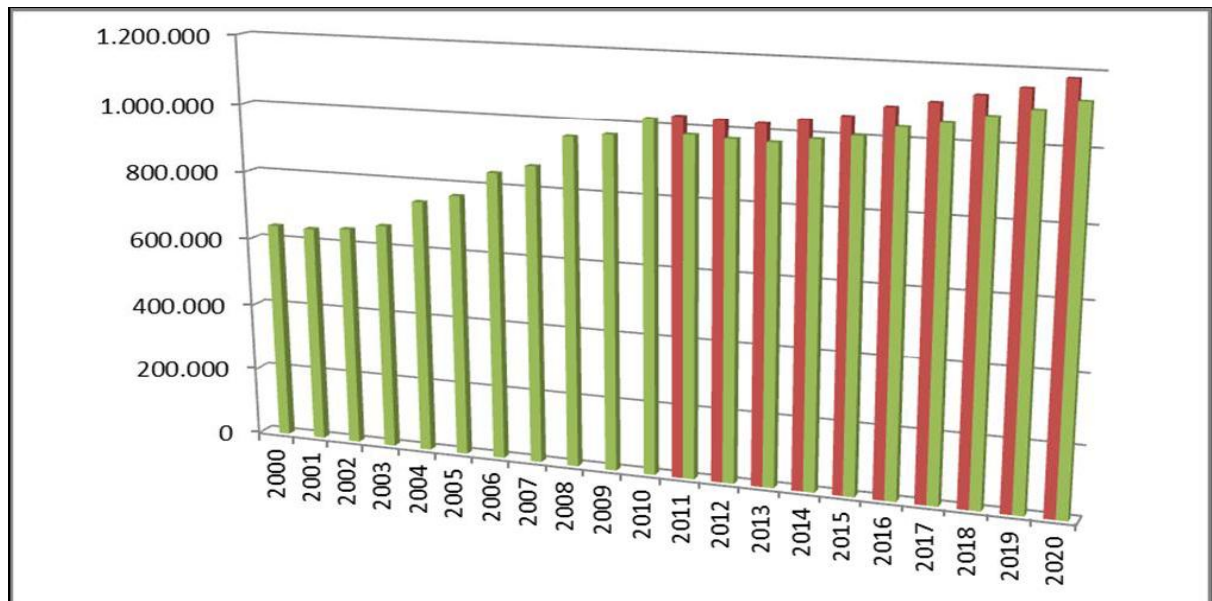

Figure 1. Forecast demand for labor of university graduates (specialists in various fields)

Medium and long term, by 2020, an important role will education and training.

CONCLUSIONS

In the medium term, there are several trends that will lead to a further increase in employment (up occupancy), mainly due to projected increase in GDP.

Due to changes in the relative supply and demand of skills, employment opportunities for people with higher education are more numerous than people with average qualifications.

In the long run, universities, through various programs, will ensure that the competences and skills required to exercise a profession and also facilitate proactive learning throughout life, contributing to increased adaptability and occupational mobility.

Labor market forecasts confirm these trends for the coming years.

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