

ANALYSIS OF THE RELATIONSHIP BETWEEN EMPLOYMENT AND ECONOMIC GROWTH IN ROMANIA

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The objective of this paper is to analyze the Romanian current situation in terms of economic growth and employment. It briefly presents the evolution in time of selected indicators (GDP, unemployment rate, employment rate and employment structure by economy sectors and education level) and comments on main findings, showing how the transition from a central economic planning to a free market economy had a negative impact on employment, as volume, structure and labor force qualification. The employment elasticities of growth are computed and a decoupling of the economic growth from employment is reported.

1. INTRODUCTION

After 16 years of transition from a central economic planning to a free market economy, Romania has joined the European Union (EU) in January 2007, becoming the 27th member of the “club”. The joining process was very stimulatory for Romania’s transformation that registered a robust economic growth, especially after 2000. Yet Romania is confronted today with relatively low employment levels and acute labor shortages in certain sectors [1], as manufacturing, constructions and some areas in services.

The economic development is known to be accompanied by several changes in the national economic environment, some of them positive, but also negative [2]. In the positive area are placed the increase of real income/capita, the increase of services in Gross Domestic Product (GDP) and the increase of share of services in employment [3]. But the negative aspects are of particular concern as they are directly linked with the labor force, namely declines in the rate of population growth, aging of population, and development of social security programs that stimulate retirements and reduce the proportion of older persons in the work force.

Another important issue is the poverty level in different areas of Romania, as economic growth alone does not necessary reduce poverty. Large differences are registered between rural and urban zones, and this will be an important fact in the national economy, as more than 40% of Romania’s population [4] is located in rural areas, where the poverty remains high. The employment is the paramount factor that links economic growth and poverty, so measures are to be taken in order to boost the employment rates in more specialized sectors of the economy.

The first action plan devoted to employment in Romania was developed for 2002-2003 and was structured according to the objectives of the Lisbon strategy. One of the Lisbon’s objectives is the raise of the overall employment rate to 70% up to 2010 [5], this being one of the engines that is considered to power the European economy and place it as the most competitive and dynamic knowledge based economy in the world by 2010. This employment rate objective of 70% was already attained and surpassed by some countries of the EU, while others are still engaged on the race to attain this figure, the employment rate raging from 75.9% in Denmark to 52.8% in Poland [6], the mean employment rate for EU-25 having a value of about 64% (data for 2005). The value of employment rate in Romania reached a value of 57.7%, at the end of 2005, being positioned in the last group of countries that are struggling to meet the Lisbon objective.

2. OVERVIEW OF THE ROMANIA'S SELECTED INDICATORS OVER THE PERIOD 1991-2005

During the first years after the collapse of the communist regime, the economic growth registered a significant decrease, being followed by a robust increase starting with 2000, powered mainly by the measures took to join to EU. During 2001 – 2003, GDP rose with more than 5%/year, mainly due to services development, their weigh in the GDP being of more than 45% [7] in the considered years, from about 32% in 1990. Only in 2004 Romania reached a GDP value equal with that recorded in 1989, but in a healthier general economic environment [8] and this has been recognized by the International Monetary Fund (IMF) in the same year, by dubbing Romania a “*functioning market economy*”.

The evolution of the unemployment rates was oscillatory over the first years after 1990, and registered the peak of 11.4% in 1999, mainly due to economic and especially industrial restructuring. This tendency was followed by a decrease over the following years, and the present unemployment rate in Romania is low enough, about 5% (see figure 1). Unfortunately, the fall in the unemployment rates was not accompanied by an increase in the employment rates, especially due to external migration.

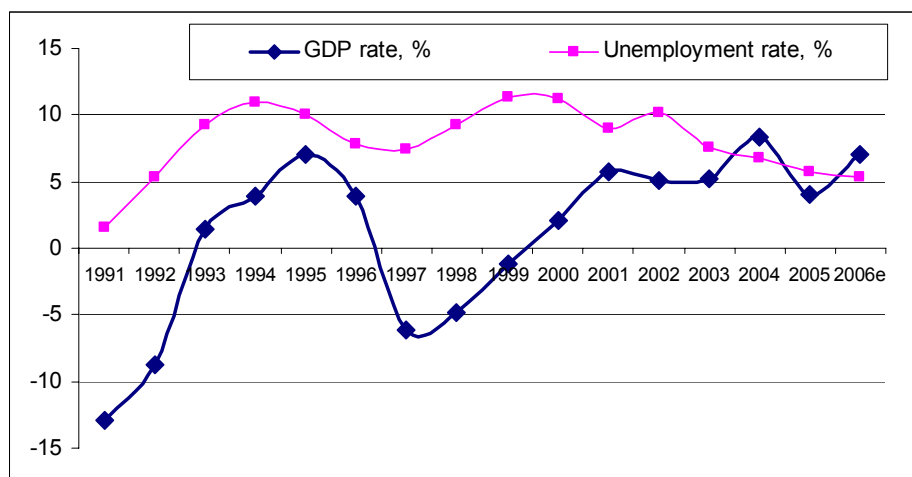


Figure 1. GDP and unemployment rates dynamics over the period 1991-2006.

Sources: calculations on IMF, “World Economic Outlook database”, April 2005, National Institute for Statistics (NIS), “Romania in figures”, 2005, and National Agency for Employment, “The evolution of the unemployment rate”, 2007 (estimation for 2006).

Studying the employment in different sectors of the Romanian economy, it may be noticed that the weight of employed persons in agriculture is very high, in respect with the EU-25, while the weight in services remains one of the lowest in EU (see figure 2). The share of services in employment increased indeed over the years, at the expense of agriculture, mainly due the increase specialization, but the pace is still very slow. The secondary sector registered a slow decrease in time, followed by a bounce mainly due to constructions. Romania’s employment structure is far behind the EU-25, where the share of people employed in the services sector reached 67.7%, while the agriculture sector registered about 5%. This large difference is associated with the slow restructuring of the Romanian economy that was achieved without considering the implications on the labor force, and without thinking proper measures to absorb the laid off work force mainly from industry. Due to the lack of proper policies, the major part of the persons laid off from state-owned enterprises migrated to agriculture, leading to deprofesionalization and increased poverty.

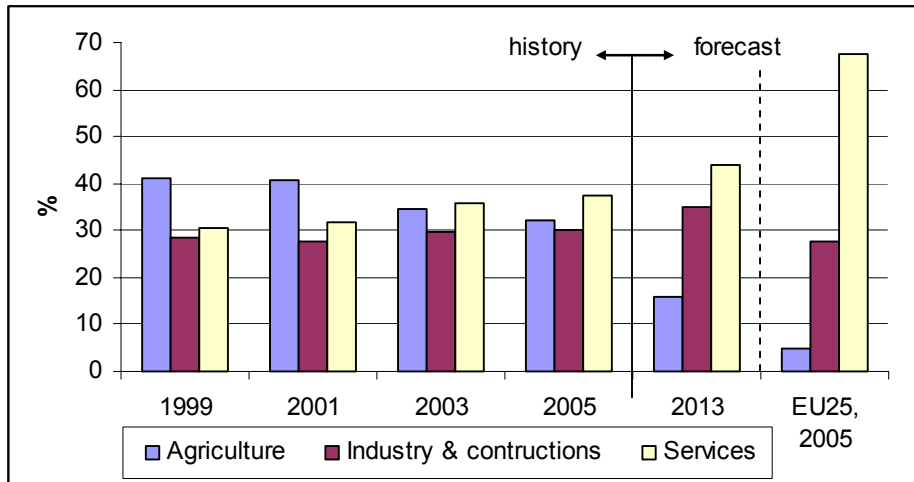


Figure 2. Employed persons in different activity sectors in Romania, in respect with the EU-25.

Sources: calculations on NIS, "Economic growth and employment up to 2013", 2006 and "Europe in figures – Eurostat yearbook 2006-07", 2007.

There is a direct relationship between economic development and the type of qualification: as the economic development accelerates, the jobs requiring qualified work force increase too, leading to a shift of people from agriculture and other primary activities to other sectors. A closer look to the EU-25 social environment shows that this was true for the European economy, but Romania has much to recuperate, as in the horizon of 2013 the forecast shows a large percentage of population still employed in agriculture (16%).

The educational level of the Romanian labor force has registered an increase over the period 1990-2004 [9], but still remains low in respect with the European figures. Although during the considered time, the percentage of the employee with academic education of the total employed population almost doubled (see table 1), Romania still has a shortage of employed persons with tertiary education, this being a result of the present structure of the national economy.

Table 1. The structure of the employed population by education level (percentages of total employed population).

Year	Academic (tertiary) education	High school and post high school education	Vocational and complementary education	Secondary Education	Elementary education/no education
1990	6.5	35.7	19.4	20.4	18.0
1991	6.8	35.5	19.6	20.5	17.6
1992	7.0	35.2	19.9	20.6	17.3
1993	7.2	35.1	20.1	20.7	16.9
1994	7.5	34.9	20.4	20.8	16.4
1995	7.7	34.7	20.6	20.9	16.1
1996	8.1	34.5	21.0	20.9	15.5
1997	8.2	34.4	21.0	21.0	15.4
1998	8.4	34.1	21.2	21.2	15.1
1999	8.5	33.7	21.6	21.4	14.8
2000	9.1	33.5	21.6	21.6	14.2
2001	9.4	33.6	22.3	21.2	13.5
2002	9.6	33.2	22.3	21.6	13.3
2003	10.4	34.8	24.7	21.2	8.9
2004	12.1	35.4	25.3	18.8	8.4

Sources: NIS, "Romanian statistical yearbook", various issues during 1991-2005.

The sustainable economic growth implies a competitive national economy that is evolving in a globalised world, where the technology changes rapidly and the focus is set on innovation. This competitive growth may be achieved in Romania by a continuous accumulation of high skilled human capital with academic education and long life learning. Unfortunately, the present education system, as a whole, is not yet a continuous learning center, but only a provider of initial education, this factor setting a limitation for the adult learning possibilities. In Romania only 1.5% of the population between 24 - 65 years has been involved in continuous education/training programs, in respect with the EU-25, where the participation rate for the same age category was of 10.6% [9] (data for 2004).

3. ANALYSIS OF THE EMPLOYMENT - ECONOMIC GROWTH RELATIONSHIP

Labor force participation tends to be lower in the presence of economic growth and higher income per capita. As can be noticed in table 2, Romania has registered an accelerated pace of economic growth, being in the sixth year of positive evolutions that started in 2000 and consolidated during 2001-2005. The GDP is foreseen to grow at a rate of about 6%/year up to 2010 [10], especially due to increased activities in constructions and services, these being factors to reduce the economic discrepancies between Romania and the other EU member states.

There is a clear decoupling between economic growth and the employment in Romania, as the pattern of growth was not accompanied by absorption of labor. The link between the economic growth and employment is achieved by the *employment elasticity of growth* (ε) that has the formula [12]:

$$\varepsilon = \frac{\text{Employment growth rate, \%}}{\text{GDP growth rate, \%}} \quad (1)$$

In other words, the elasticity measures the per cent change in employment with the per cent change in GDP and the calculations are shown in table 2.

Table 2. The evolution of employment, GDP and employment elasticity of growth in Romania DURING 1997-2005.

Year	Total employed persons (thousand pers.)	Employment growth rate, %	Employment rate, %*	GDP growth rate, %	Employment elasticity of growth (ε)
1997	10807	1.26	65.4	-6.10	-0.21
1998	10596	-1.95	64.2	-4.80	0.41
1999	10535	-0.58	63.2	-1.20	0.48
2000	10508	-0.26	63.0	2.10	-0.12
2001	10440	-0.65	62.4	5.70	-0.11
2002	9234	-11.56	57.6	5.10	-2.27
2003	9223	-0.12	57.6	5.20	-0.02
2004	9158	-0.70	57.7	8.30	-0.08
2005	9147	-0.12	57.6	4.10	-0.03

$$* \text{Employment rate} = \frac{\text{Employed population}}{\text{Total population between 15 - 64 years}} \times 100$$

Sources: data computed from NIS, "Romanian statistical yearbook", 2006 and "Europe in figures - Eurostat yearbook 2006-07", 2007.

The calculations revealed that, during the considered interval, the GDP and employment followed contrary ways, while employed population rapidly diminished, the

GDP grew. The only setback for GDP was registered in 2005, when the economic growth registered a value of 4.1%, especially due to national meteorological conditions. Over the period 1997 - 2005, the employed population decreased dramatically with about 18%. As regards the employment rates, it is worthwhile mention that the value of the recorded employment rates decreased over the years [11], from a 65.4% value in 1997, to 57.6% in 2005, this being a major problem of concern, as the target is 70%, by 2010. The abnormal functioning of the economy caused this real decoupling of the economic and social environments, with an adverse action on the labor market. This proves a poor correlation between labor market and economic reforms in Romania.

The overall values for employment elasticities of growth have been low, but they show a certain increase in the last years. Negative employment elasticities for the whole economy show that employment contracts when GDP rises. However, the positive values recorded for 1998 and 1999 are due to negative figures for both GDP and employment, and are not correlated with an improvement. These negative findings may be desirable for some sectorial employment elasticities, as employment elasticities in agricultural sector, where the negative elasticities may be associated with rapid poverty reduction. As presented above, the agricultural sector was the largest sector in Romania in terms of employment, up to 2003. As 2002 was the first year when agricultural sector registered a significant decrease in terms of employed persons, and taken into account the large percentage of these persons, the large negative overall elasticity might be explained by a significant shift of people from agriculture to more productive jobs. This might be true also in the long run, as people will move out of agriculture, leading to a halving of the employed persons in agricultural sector in 2013 in respect with 2005.

4. CONCLUSIONS

Romanian economic growth registered high scores during the last years, but this was coupled with low employment levels and even labor shortages in certain sectors. The social problems of Romania are serious, as severe poverty, low access to social security programs, international migration, low education levels coupled with low investments in long life learning are some of the facts that negatively influence the present Romanian economy.

The number of the employed persons in the primary sector recorded high values, Romania being the "leader" among the EU-27, with the highest percent of population involved in agriculture. Moreover, Romania has a shortage of employed persons with tertiary education, this being a result of the present structure of the national economy. Additionally, negative employment elasticities of growth were registered over the last 10 years, and are to be expected on the long run. These findings show that Romania has much to do on the road of economic development and the policy measures are to be made in order to create employment structures compatible with the European ones, and to achieve the Lisbon objectives, in particular that regarding the 70% employment rate.

Romania has indeed registered economic growth, but there is much to be done on the road to the complex system of sustainable economic development, that implies, along with the positive evolution of macroeconomic indicators, also the society welfare and fulfillment, obtained by an increased number of qualified jobs and well addressed social security programs. Moreover, a competitive growth may be achieved in Romania by a continuous accumulation of high skilled human capital with academic education, long life learning and programs devoted to promote entrepreneurial development.

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