ANALYSIS OF LABOR FORCE DEVELOPMENTS IN THE EUROPEAN UNION AND ITS COST

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Abstract

In the European Union there is the issue of labor market analysis. European Union directives have approved the free movement of persons, and therefore of the workforce in the European Union. It is important to analyze in the short and long term, what is the labor market in the European Union, taking into account the situation of each country and of the other countries together. In this article, the authors conducted an analysis of labor force developments in the European Union and the Member States. The study is based on the data published by Eurostat and consists in assessing the evolution of the labor force in the period 2005-2015, then analyzed the evolution of the labor force in Romania during the same period. In this context, the analysis of unemployment as well as the employed population was carried out. Of course, this analysis also focused on the comparative study of net average wage and the lowest wage in the EU member countries.

Keywords: employment, labor market, wage, unemployment, minimum income

JEL Classification: J21, J31

Introduction

The survey is structured on the data on active population, occupied population, number of employees and unemployment rate. Conclusions on comparative analysis are presented in the EU Member States as well as in each country. The labor cost analysis and, in this context, the level and evolution of income, wages and salary levels in each country are further developed.

Interesting is also the structure analysis of age groups in which it is found that the most affected is the young age in which even graduates find jobs, regardless of whether they require secondary or higher education.
The graphical representation method for the structure of the employees in each of the 28 member states of the European Union was applied on the three age groups compared to the structure of the employees on the 28 countries, ie the total European Union.

Another interesting element in terms of living standards and the standard of each country is the minimum wage granted to the economy. There is no directive in the European Union which has at the heart of its policy the desire to take up vacancies with a view to making better use of the workforce, reducing the unemployment fund and creating some opportunities for raising average and concomitant income Gross total revenue.

**Literature review**

Anghelache (2008) is a major contribution in the field of statistical analyses. The books of Anghelache (2007-2016) present a complex image on the economic status of Romania in the respective years, the author also describes the significant macroeconomic evolutions, not least, the comprehensive and comparable datasets that support the analysis form themselves a valuable data source for comparative studies over the interval 2007-2016. Belo, Lin and Bazdresch (2014) discuss on the correlation between labor hiring, investments and stock return predictability. Klein and Ventura (2009) analyze the impact of labor movements in dynamic. Silva and Toledo (2009) evaluate the interdependence between labor turnover costs and the cyclical character of vacancies and unemployment. Krause and Uhlig (2012) discuss on the characteristics of the labor market in Germany under the effect of the crisis. French and Song (2014) describe the impact of disability insurance on the supply factor of the labor market. Anghelache, Manole, Anghel, and Sacală (2016) have analyzed the labor market of Romania. Behaghel, Blanchet, and Roger (2014) discuss on the retirement characteristics in the French labor market. Davis, Faberman, and Haltiwanger (2006) develop on the flow approach to labor markets. Donangelo (2014) analyzes the implications of mobility within the labor market on the pricing of assets. Kroft et.al. (2013) present the results of a field experiment on the labor market conditions. Sala, Soderstrom, and Trigari (2008) describe the properties of uncertainty-specific monetary policies by using a model with labor market frictions. Majlesi (2016) discuss some internal household social consequences deriving from the conditions and status of the labor force market. Daly, Hobijn, Sahin and. Valletta (2012) study the real evolution of the unemployment rate. Anghelache, Manole, Anghel and Ursache (2016) have studied, for Romania, the correlation between the evolution of the population and the situation on the labor force market. Moreno-Galbisa and Tritah (2016) present a study,

Methodology research and data

• Labor force

Speaking of the free movement of persons in the European Union, one must find out what is the migration movement (immigration and emigration), and what is the evolution of the unemployment rate and in concrete terms, in absolute figures of the number of unemployed. In the European Union, there has been an issue from the outset of stimulating the economic recovery of member countries, with the European Commission setting a strategy by 2020 to set the conditions for the European Union to harmonize, to narrow the gap between some countries and In a word, to be a situation in which each country will thrive and all of a sudden to initiate projects, to make investments and, in one word, to increase as much as possible the economy of each country, and on this background to grow And the standard of living of these countries. For example, in the European Union, the emphasis was on Member States to invest in the growth of the young labor force, prepared at the current standards, and more to understand that it is possible to set up funds for the labor force. An essential thing in the European Union is the evolution of the workforce. The data can be analyzed from 2005 to 2015, for which we have data published by Eurostat, but on the other hand a shorter analysis can be made, starting with 2007, in line with the labor force chapter established by the Treaty of Amsterdam. In 2015 in the European Union the employed population aged between 20 and 64 represented 70.1% of the total population between these two ages. In 2008 there was a decrease, and then it reached 70.3%, and then in the years 2012 and 2013 the percentage dropped to 68.4%. Of course, this perspective is also interesting from the point of view of the analysis of the
situation in the European Union. In summary, we can see that in the European Union with 28 states the rate of employees aged between 20 and 64 was 70.1%. Czech Republic was 74%, Denmark 76.5%, Germany 78%, Estonia 76.5%, Lithuania 73.3%, The Netherlands 76.4%, Austria 74.3%, Sweden 80.5% (United Kingdom 76.8% and Iceland, Norway and Switzerland had 86.5%, respectively 79.1% and 82.8% respectively. Romania from 2005 to 2015 has registered employment rates of the population aged between 20 and 64, 63.6% in 2005, 64.4% in 2008, 64.8% in 2012, 65.7% in 2013, and 66% in 2015. In 2016, the percentage is very close, i.e. 66.2%. Romania has registered a growth trend, but it is quite insignificant compared to other EU member states. There are also countries with a much lower employment, such as Greece 54.9%, Croatia 60.5%, Italy 60.5%, or Macedonia and Turkey which are countries also taken into account in the European Union analysis with 51.9% and 53.9%, respectively. This employment of working age aged 20 to 64 was recorded as shown in table no. 1.
### Employment rate, age group 20–64, 2005–15 (%)

*Table no. 1*

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(2) 2015: break in series.
(3) 2008: break in series.
(4) 2014: break in series.

*Source:* Eurostat - Key figures on Europe 2016, pag. 77
From the point of view of the analysis of employment in the structure, by sex, we find that in men we meet a higher percentage, and in women a lower percentage. There is also a possibility to undertake an analysis of older employment, ie the last age group, which accounted for 53.3% of total European Union in 2015. Another element of the employment analysis or the number of employees is their situation according to the level of training. Thus, the rate of full-time employees with at least one level of training was 80.7%. Population with secondary or post-secondary education was 70.7%. The analysis can also be deepened by interpreting the level of employment, on the three groups considered significant, to have a proper labor force study. Thus we take into account the age group of 15-24 years, the second group 25-54 years and the third, the 55-64 age group. We find that the highest percentage of people in the 25-54 age group, then the population aged 55-64, and lastly the population aged 15-24.

**Employment rates by age group, 2015 (%)**

*Figure no. 1*

Note: The figure is ranked on the overall employment rate.

*Source:* Eurostat - Key figures on Europe 2016, pag. 78

There is a fairly reasonable employment rate.
• Unemployment

A rather important element in the use of labor capable of working is the study of unemployment. On the whole of the European Union in 2014, the unemployment rate was 10.2%, falling in 2015 to 9.4%. A number of states record a high share of the number of unemployed among them being Spain with quite high rates and, in contrast, Luxembourg with only 0.4 percent.

![Unemployment rate, 2005–15 (%)](image)

Source: Eurostat - Key figures on Europe 2016, pag. 79

Analyzing the structure of gender unemployment, we find that between 2005 and 2015 the number of unemployed people in general was lower in men. Thus, in 2005, it was 8.4% for men and 9.8% for women, declining in 2008 to 6.6% for males and 7.5% for women, in 2012 it again rose to 10.4% % In men and 10.5% in women, 2013 10.8% in males and 10.9% in women, in 2014 10.1% in males and 10.3 in females and 2015 9.3% in males and 9 , 5% in women. By age group, population aged up to 25 years, in 2005 and 2015, a very high unemployment rate was consistently high, being 19% in 2005, decreasing in 2008 to 15.9% in 2012 23, 3%, 23.7% in 2013, 22.2% in 2014, and in 2015 slightly falling to 20.4%. The age group aged between 25 and 74, also considering those who have reached retirement age but who are still working, find that their percentage was between 5.9% in 2008 (the lowest unemployment rate) and 9 , 5% in 2013 (the highest unemployment rate in this age group). In 2015 the unemployment rate in this category was 8.3%. In the long run, the male unemployment rate ranged between 2.4% in 2008 and 5.1% in 2013, for women between 2.8% in 2008 and 5.1% in 2013.
• **Wages and labor costs**

A particularly important aspect of the analysis of the labor force situation is paid salaries and, in a word, the cost of labor. In the European Union, 28 states the hourly labor cost was 25.3 euro / hour and for the European Union the first 19 states were 29.5 euro / hour. Of course, the cost of labor is different, with the wage paid, and this is very clear from the estimated working time of 2015 hours for all EU Member States. The following chart presents the salary and income situation as well as other labor costs for each country.

**Estimated hourly labour costs, 2015 (EUR)**

![Estimated hourly labour costs, 2015 (EUR)](image)

Note: Enterprises with 10 or more employees. NACE Rev. 2 Sections B to S excluding O. Provisional data.

*Source:* Eurostat - Key figures on Europe 2016, pag. 81
We find that Denmark, Belgium, Sweden, Luxembourg, France, the Netherlands, Finland, Austria, Germany, Ireland, Italy and the United Kingdom have a high level of revenue and total cost. In the last 5 positions with very low incomes, Bulgaria, Romania, Lithuania, Latvia and Hungary. The low level of this income is due to the state of the economy, the growth and the decline of those countries that still have enough economic problems.

- **Minimum wage**

  In January 2016, 22 countries in 28 European Union member states had set a minimum wage in the economy. Denmark, Italy, Cyprus, Austria, Finland and Sweden did not have this provision. In January 2016, the monthly minimum wage was variable, the lowest being Bulgaria (125 euro / month), and the highest in Luxembourg (1923 euro / month). Of course, there is the question of what is the ratio between the minimum wage rate on the economy and the rate calculated at purchasing power parity. From this point of view, the minimum wage in terms of purchasing power parity as a term was 445 for Romania and 1597 purchasing power parity index in Luxembourg. In 2014-2015, the minimum wage in the economy was 33% of gross national income to 50% in the situation of countries in a more delicate situation. The chart below shows the minimum wage situation for those countries that calculate it, resulting in Romania and Bulgaria being also on this indicator on the last two places.

**Minimum wages, January 2016 (PPS per month)**

*Figure no. 4*

Source: Eurostat - Key figures on Europe 2016, pag. 83

It also notes that the minimum wage expressed as a proportion of monthly average gross earnings shows a classification that in general terms
resembles the proportion or classification according to purchasing power parity index. As for the proportion of the minimum income in the average monthly gross income, there are countries such as Western countries, and a larger proportion are countries such as Greece, Slovenia, who really have some difficulty in finding the To use them for an adequate standard.

- **Job vacancy**

  Based on these factors, the unemployment rate, the total number of registered unemployed receiving aid, the desire of countries to make efforts to absorb some of the unemployment, to create new jobs for investment, the vacancies offered at The level of national economies. In the European Union, by 2007, there were 2.2% of vacant jobs that should have been occupied. In recent years, the vacancy vacancy rate has followed a steady trend, with 1.4% in 2009, to 1.4% in 2010, running until 2011, 2012, 2013 and even 2014 With the same value. The vacancy rate in the European Union remained high in Germany (2.9%), Malta (2.5%), Great Britain (2.3%) or Belgium (2.2%). A small share of vacancies (less than 1%) met in 15 of the 28 EU Member States. The lowest level was registered in Latvia in 2014 (0.4%). The following chart shows the percentages registered by the European Union member states regarding vacancies (unoccupied).

  **Job vacancy rate, 2014 (%)**

  ![Figure no. 5](image-url)

  *Source: Eurostat - Key figures on Europe 2016, pag. 85*

  There is also a chart of Job vacancy in the period 2004-2014 which expresses the same tendency of a trend, on average, on the European Union constantly and non-alarmingly, in the perspective of the jobs required in the European Union’s economy.
Conclusion

The survey data show the analysis of labor force developments in the European Union as a whole as well as each member country. As a result of the analysis carried out, a number of theoretical and practical conclusions are drawn.

We have to conclude that there is a concern in the European Union to better deal with working-class population, as well as the concern that the population of the third group as an active source of work is best occupied and the effect of migration between European countries are not a phenomenon of alarming rise in unemployment in some countries. Of course, there are many issues to be discussed, such as the situation of Spain with high unemployment, but which accepts the population that is looking for substantial jobs, but this is actually the labor market in the European Union, which creates opportunities and needs to be taken up by those who have some problems. The study can also be deepened by using econometric models that calculate regression parameters to estimate the evolution of these indicators.
References


