ECONOMIC GROWTH, EMPLOYMENT AND THE CRISIS IN EUROPE

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Abstract

Romania recorded in the second quarter of 2014 a decline in gross domestic product (GDP) within the 28 European Union countries (EU) of 1% compared to the first quarter of 2014, and the only economies with negative developments were Germany, Italy and Cyprus. Estimates of GDP for the first quarter were revised down from the previous quarter growth of 0.2% to a decrease of 0.2%.

Romania was in technical recession (two consecutive quarters of decline in GDP compared with the previous quarter) for two and half years 2008-2011 and back in technical recession in early 2012, and managed to return to growth by the end of that year. EUROSTAT data shows that the economies of Germany and Italy were contracted in the second quarter of this year by 0.2% and by 0.3% in Cyprus. In this context, the article proposes an analysis of the influence of the inflation rate and employment rate of labor force on GDP for EU countries and for Romania as an European Union member country.

Keywords: Gross domestic product, inflation rate, employment rate, labor force growth

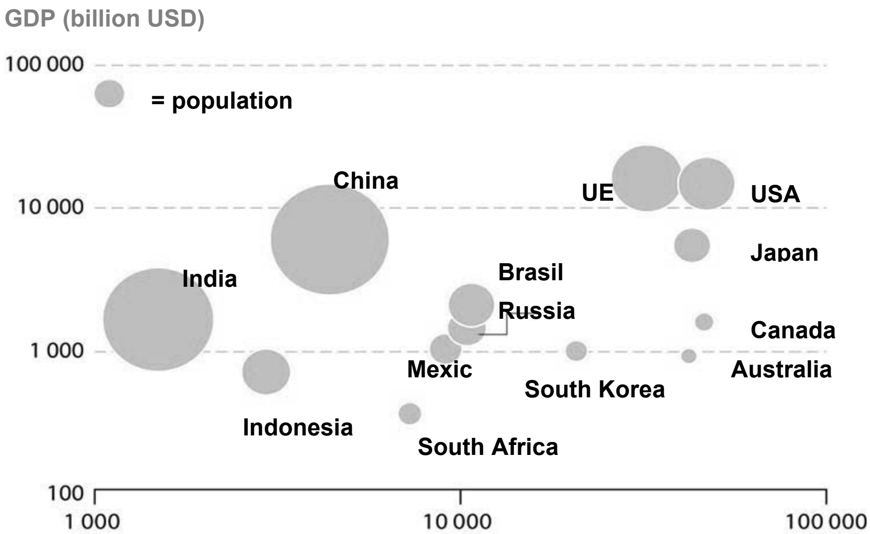
EU economy generated a GDP of around 14 trillion (in nominal terms) in 2014, according to the International Monetary Fund, placing the European Union on the first rank in the world economy.

The rate of growth of the European Union was 0.1% in 2013, inflation of 1.5% in 2013, and the unemployment rate of 10.4% in April 2014.

In terms of labor force, the European Union recorded about 240 million people, of which 70% is employment in services, 25% in industry and 5% in agriculture.

Since 1997 the employment rate of the labor force has grown significantly in the European Union, the increase being faster for women than for men, and this is reflected in the growth rate of labor employment in services. (Davidescu, 2014)

EU in comparison with other world's economies, 2013



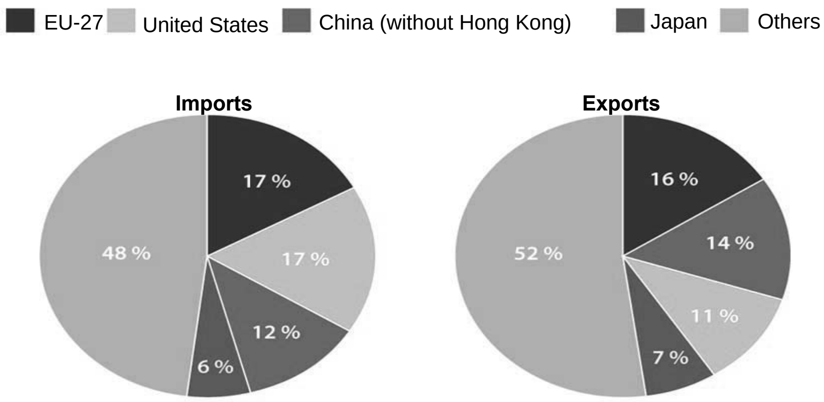
Source: World Bank - GDP per capita (USD)

In terms of foreign trade European Union has the largest share of world trade, being the largest importer and the largest exporter with an export value of goods in 2013 of 1.7 trillion Euros and exports of services of 657 million, and the value of imports of goods and services around 1.6 trillion Euros for imports and 510 million Euros for exports.

European Union together with USA, China and Japan accounted for about half of world trade in 2010, in this respect China becoming a major partner in world trade in recent years, taking over the US position as the second largest exporter in 2007.

Share of total imports and exports, 2013

%



Source: Eurostat

In terms of exports and imports of goods, the transport of equipment and machinery has the highest percentage (40.7% exports and imports of 25.8%), followed by other manufactured products (22.1% exports and 22,7% of imports), chemicals (15.7% imports and 9.4% exports), etc.

In terms of the economy of each member country, it varies from one country to another. The Stability and Growth Pact governs the fiscal policy in the EU member countries, which states that each country's deficit would not exceed 3% of GDP and the public debt would not exceed 60% of GDP. Under these circumstances there are still countries that have deficits exceeding 3% and the euro area as a whole has a debt exceeding 60%.

Appendix 1 contains the values of GDP per capita, the inflation rate and the employment rate of the labor force in the member states of the European Union for 2013.

Thus Luxembourg stands out with the largest increase over the average of the analyzed GDP per capita of 264%. This increase can be explained by the fact that there are a large number of foreign residents who are employed in Luxembourg and contribute to GDP, but they are not registered as resident population.

On the second place is Austria, with an increase of 129% from the average of member countries analyzed in 2013, then Denmark, Germany, Ireland, etc. In contrast, the lowest increase in GDP per capita is recorded in Bulgaria, with 47%, followed by Romania with 54%.

In terms of economic growth, the 12 new member states of the European Union had a growth rate higher than EU countries. Slovakia had the highest economic growth in the period 2005-2011 (41.9%) of all European Union countries.

Also in 2006 Latvia had a growth of about 11%, approaching the level of China's economic growth that has averaged 9% over the last 25 years.

Romania has seen a growth in 2013 of 3.5%.

On the opposite side is Greece, with -14.9%, followed by Italy and Portugal with -4.1% and -2.3%.

This growth is mainly due to the massive government commitments regarding the stability of monetary policy, export-oriented trade policies, taxes at low levels, and the use of cheap labor force.

Regarding the methodology used in order to analyze the influence of the inflation rate and the employment rate of the labor force on economic growth, we used regression method, expressing the GDP in relation with the two variables (Table1 and Table2).

Regression model (own processing)

Table 1

Regression Statistics	
Multiple R	0.724441
R Square	0.524814
Adjusted R Square	0.489615
Standard Error	10991.47
Observations	30

Regression model (own processing)

Table 2

	Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept	-25110.9	27718.9	-0.90591	0.372996
Inflation	-335.044	144.1673	-2.324	0.027895
Employment rate	1296.005	277.7439	4.666187	7.47E-05

Analyzing the results we can say that there is a strong relationship between GDP and the two analyzed variables (multiple R equals 0.72). R square has a value of 0.5248 which means that the influence of the inflation rate and the employment rate explains in a percentage of 52.48% the GDP growth, the difference up to 100% being attributed to other factors.

The coefficient of inflation is negative (-335,044), which means that there is an inverse relation between inflation and gross domestic product.

The sign of occupancy rate coefficient is positive (1296.005), explaining the direct relation with gross domestic product.

Significance F <0.05, therefore the model is valid, and the coefficients for inflation and employment rate are statistically significant because the P value <α.

Conclusions

As expected, there is a strong correlation between gross domestic product, the inflation rate and the employment rate, therefore the following steps of analysis will be directed to specific areas in the Romanian economy and factors influencing growth in various sectors (variables that influence the gross domestic product in agriculture for example, depending on arable land, cultivated agricultural area, the employment of labor force in agriculture, subsidies, etc.) and an analysis of Romania's position in terms of percentage of employment in agriculture compared with employment in EU member countries in the same industry.

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Appendix 1

Member states	GDP (Nominal) per capita 2013 Euro	GDP(PPP) per capita 2013 EU27=100	GDP growth rates 2005-2013	unemployment rate 2013	Eurozone yes/no
Austria	37000	129%	13.8%	4.8%	yes
Belgium	34500	119%	9.8%	8.3%	yes
Bulgaria	5500	47%	23.7%	12.9%	no
Croatia	10100	61%	3.4%	17.3%	no
Cyprus	19000	86%	8.7%	14.7%	yes
Czech Republic	14200	80%	20.5%	7.3%	no
Denmark	44400	125%	3.6%	7.1%	no
Estonia	13800	72%	25.1%	8.8%	yes
European Union	25700	100%	8.1%	10.9%	
Finland	35600	112%	8.2%	8.1%	yes
France	31300	108%	7.6%	10.3%	yes
Germany	33300	124%	12.1%	5.2%	yes
Greece	17400	75%	-14.9%	27.2%	yes
Hungary	9900	67%	4.2%	10.6%	no
Ireland	35600	126%	8.5%	13.7%	yes
Italy	25600	98%	-4.1%	12.0%	yes
Latvia	11600	67%	23.9%	12.7%	yes
Lithuania	11700	74%	28.9%	12.4%	yes
Luxembourg	83400	264%	18.3%	5.7%	no
Malta	17100	87%	20.1%	6.2%	yes
Netherlands	35900	127%	7.8%	6.4%	yes
Poland	10100	68%	41.2%	10.6%	no
Portugal	15800	75%	-2.3%	17.3%	yes
Romania	7100	54%	26.2%	7.2%	no
Slovakia	13300	76%	41.9%	14.2%	yes
Slovenia	17100	83%	10.7%	10.7%	yes
Spain	22300	95%	5.1%	26.3%	yes
Sweden	43800	127%	17.1%	7.1%	no
United Kingdom	29600	106%	8.2%	7.7%	no