THE RELATIONSHIP BETWEEN JOB DEMOGRAPHICS AND ECONOMIC GROWTH IN EUROPEAN UNION MEMBER COUNTRIES

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Abstract: *This article aims to analyze the relationship between economic growth and the evolution of newly created jobs, in the period 2010-2019, in 22 Member States of the European Union. As an element of originality, the estimation of the evolution of jobs is not made using employment indicators, but with the help of an innovative tool offered by the European Restructuring Monitor, respectively the flow of new jobs created every year. The analyzes carried out showed that the model used explains in different proportions the number of jobs created according to the evolution of the gross domestic product (GDP), as follows: in proportion of 38.8% in the case of the Netherlands, of 3.41% in the case of Greece and 3.9% in the case of France. The extension of the analyzes in the case of Romania, for the entire interval for which we have data, respectively 2006-2019, led to a coefficient of determination of the model that explains in proportion of 41% the change of the number of jobs depending on the evolution of GDP.*

Keywords: *economic growth, GDP, employment*
JEL Classification: *E2; J21; O41*

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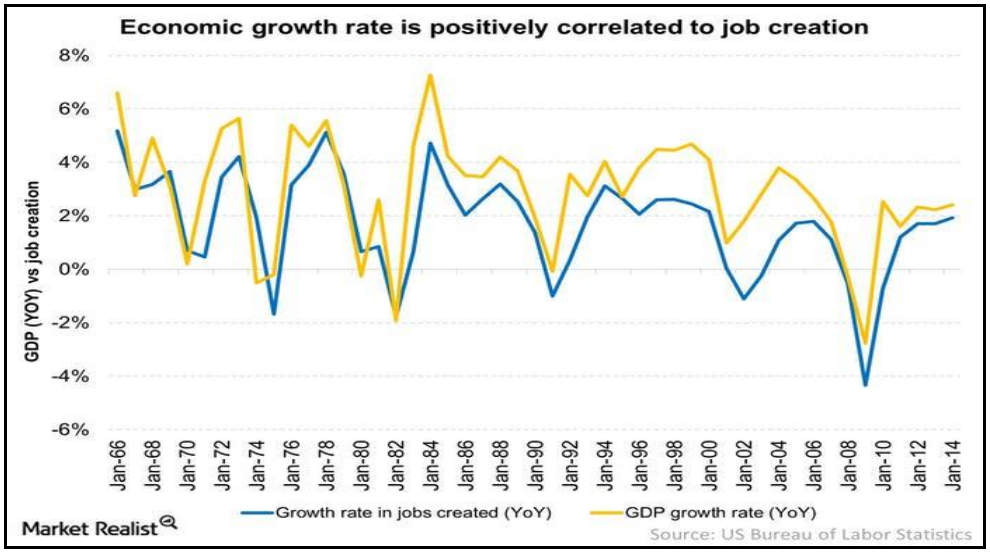
Introduction

The topic of the relationship between economic growth and the evolution of the number of jobs has been addressed by an ample number of studies and contributions to economics literature.

”Why Job Creation and GDP Growth Go Hand-in Hand ?” is the suggestive title of an article by Koesterich Russ, with a focus on this relationship in the US labour market. The author’s conclusion is that, during the 50 year span chosen for his analysis (1966-2014), one could notice a close connection between the two variables, with a correlation coefficient of 0.82 (Russ, 2015). The interdependence between the two, the economic growth rate and the empoloyment rate, can be observed in the **corresponding Figure 1.**



Source: Koesterich Russ, ”Why Job Creation and GDP Growth Go Hand-in Hand ?”, Market Realist, February 13, 2015, https://marketrealist.com/2015/02/job-creation-gdp-growth-go-hand-hand/

Figure 1: Economic growth rate and job creation rate in the US, January 1966-January 2014

The author, however, points out that the growth of the new jobs rate is not necessary equivalent to the growth of the employment rate.

Other authors, who studied the relationship between economic ghrowth and the rate of unemployment, found a significantly negative correlation between these two economic factors (Zagler, 2000).

They explain that economic growth may come along with structural unemployment resulting from an upward economic growth in some sectors, in which new jobs are created, paralleled by a decline in the demand for labour in other sectors, where jobs are disbanded.

Workers with a too narrow technical specialisation will face the loss of their jobs, as new technologies will require new skills. They will innevitably become redundant until they acquire new vocational skills for the booming economic sectors, or adjust to the new technological requirements in their own companies. The dedicated literature describes structural unemployment as the rate of intra-sectoral change rate associated to a faster growth of some sectors than others.

Economic growth is the strongest intrument to reduce poverty and improve the quality of life, and one of the important means to do so is to increase the chances for employment for all the members of society (DIS, 2008). The extent to which economic growth contributes to diminishing poverty depends on the extent to which individuals with the lowest income bring their contribution to the economic growth process, and share the extra revenues that the economic growth has brought them. Nonetheless, the relationship between economic growth and employment cannot be reduced to quantity, i.e. to the number of jobs created. It includes elements that relate to

the profile of the new jobs, to the training and the skills required to qualify for them.

An International Monetary Fund survey (IMF, 2016) finds that while the relationship between jobs and economic growth is not always linear, this does not mean that it does not exist.

Economics researchers measure the balance between economic growth and employment with the aid of Okun's law, according to which the higher the economic growth rate is, the lower the unemployment rate is. The IMF study tries to see if Okun's law can quantify the extent to which employment reflects the growth the Gross Domestic Product (GDP) in the course of one year, in 20 economies of the world, some advanced, some emerging.

In many of the contries considered, whenever the GDP grew, employment also grew, while unemployment dropped. In other countries, economic growth triggered no (un)employment response. The authors also noticed that for the same level of GDP growth, some countries generated more jobs than other countries.

For example, in South Africa, Australia and Canada, one percentage point of GDP growth results in a growth of employment by 0.6% or even more. At the other extreme, employment as a reflection of economic growth stands still in China, Indonesia and Turkey. But, spectacularly, the GDP brings about a 70% growth of employment in Canada and USA, 40% in Russia, United Kingdom, and Australia, and by a very low margin in other states selected for the survey.

The authors of the survey admit that one of the causes of these discrepancies may arise from the inncorrect reporting of the labour market indica-

tors (employment, unemployment), but also from important structural changes in some of these economies, etc.

At world economic level, Kapsos (2005) calculated that, for each extra percentage point of GDP growth, total employment grew by 0.3 to 0.38 percentage points in three of the periods analysed within the time span 1991 – 2003.

True as it is that economic growth has positive effects on the creation of new jobs, it is of no lesser importance that these new jobs should appear in sectors with a high labour absorption potential. Some industries are more labour-intensive than others.

While exploring the dedicated economics literature, Basnett and Sen (2013) identified relevant evidence demonstrating that economic growth in the manufacturing industry and services sector bring a critical contribution to the growth of employment. The effect of the overall growth of the GDP on employment in agriculture is, howver, limited, while the growth of the value added in the agricultural sector has a significant effect upon the growth of employment. For the textile industry, the information is scanty, but the existing studies suggest a direct connection between the growth of the value added, and the creation of new jobs. In the food industry, the authors found that economic growth had a positive effect on employment.

In their turn, Melamed, Hartwig and Grant (2011), going deeper into the subject, determined that economic growth in the services sector plays as a better stimulus for employment than the growth in the manufacturing sector. The authors, after putting together the studies devoted to 24 growth episodes in the 1980s, 1990s, and 2000s, where they found evidence on

employment in various sectors, drew several conclusions, among which: in 15 of the cases examined, employment grew in the services sector, in other 10 cases, employment grew in the manufacturing industry, in 6 cases employment grew in the agricultural sector; in 6 cases employment grew in two of the three sectors considered, but there was no case of a higher employment rate in all the three sectors at a time.

Starting from the conclusions drawn in the surveys above, the aim of our study is to analyse the interdependence between economic growth and the evolution of the number of jobs in 22 of the EU member states, during the period 2010-2019.

1. Source of data. Methodology

Period analysed: 2010-2019

Geographical coverage

The analysis covers 22 European Union member states. Absent the relevant information for the analysed timespan, the following EU member states have been left out: Cyprus, Croatia, Denmark, Luxembourg, and Malta.

Our original contribution

The studies we identified in the dedicated literature usually address the relationship between economic growth and the curve of new jobs, for the estimation of which they use stock indicators regarding employment or unemployment.

In our study, we analyse the evolution of jobs with the help of an innovative instrument provided by the European Restructuring Monitor, which is the number of jobs in each member state. This enables us to determine the flow of newly created jobs each year.

Indicator for the estimation of the economic growth

To estimate the economic growth, we have used the data furnished by Eurostat for the period 2010 - 2019, regarding the real GDP growth index, having the year 2010 as a fixed point of reference.

Starting from these data, we have calculated for the 22 member states examined the real chain base index number of the GDP, in 2010 constant prices (**Table 1**).

Table 1: Chain base index number of GDP growth, 2010-2019 (%)

	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
Austria	102.9	100.7	100.0	100.7	101.1	102.1	102.5	102.4	101.6	106.7
Belgium	101.7	100.7	100.5	101.6	102.1	101.4	101.9	101.5	101.4	107.6
Bulgaria	102.4	100.3	100.3	101.9	104.0	103.8	103.4	103.1	103.4	117.2
Czech Rep	101.8	99.2	99.5	102.7	105.3	102.4	104.4	102.8	102.6	112.9
Estonia	107.4	103.2	101.4	102.9	101.9	102.6	105.7	104.8	104.3	98.4
Finland	102.5	98.6	99.1	99.6	100.6	102.7	103.1	101.6	101.0	104.7
France	102.2	100.3	100.6	101.0	101.1	101.1	102.3	101.7	101.3	104.2
Germany	103.9	100.5	100.4	102.2	101.8	102.2	102.5	101.5	100.6	106.0
Greece	90.9	92.6	96.8	100.7	99.5	99.9	101.5	101.9	101.9	98.3
Ireland	100.3	100.3	101.3	108.6	125.1	103.7	108.1	108.2	105.5	102.1
Italy	100.7	97.0	98.2	100.0	100.7	101.3	101.6	100.8	100.3	98.5
Letonia	106.3	104.1	102.3	101.9	103.3	101.8	103.8	104.3	102.2	97.5
Lithuania	106.0	103.9	103.5	103.5	102.0	102.6	104.2	103.7	104.0	105.8
The Netherlands	101.6	98.9	99.9	101.4	102.0	102.2	102.9	102.6	101.8	107.1
Poland	105.0	101.6	101.4	103.3	103.8	103.0	104.9	105.4	104.1	126.3
Portugal	98.3	95.9	99.0	100.9	101.8	102.0	103.5	102.7	102.1	103.0
United Kingdom	101.5	101.5	102.1	102.7	102.3	102.0	101.9	101.3	101.5	102.5
Romania	102.0	102.1	103.6	103.4	103.9	104.7	107.2	104.4	104.1	114.9
Slovakia	102.9	101.8	100.7	102.7	104.9	102.1	103.0	103.9	102.3	126.9
Slovenia	100.9	97.3	99.0	102.8	102.2	103.1	104.8	104.1	102.4	109.8
Spain	99.2	97.1	98.5	101.4	103.8	103.0	102.9	102.4	101.9	104.9
Hungary	101.8	98.5	102.0	104.2	103.8	102.2	104.3	105.1	104.9	99.0
EU 27	101.8	99.3	99.9	101.6	102.3	102.1	102.7	102.2	101.5	105.0

Source: Authors' compilation of Eurostat data.
Note: Calculation based on the GDP expressed in bn. euro, at 2010 constant prices.

Indicator for the estimation of newly created jobs

To estimate the number of newly created jobs in each of the analysed member state, we have used the data made available by the European Restructuring Monitor (ERM) of the European Foundation for the Improvement of Living and Working Conditions.

The ERM data base records every labour development that leads to the creation or disbandment of at least 100 jobs, or at least 10% of the jobs in productive or administrative corporate entities with 250 employees, and over.

In the case of each member state under consideration, we summed up the number of jobs created each year, thus creating a data base regarding the jobs created each year in each member state (Table 2).

Table 2: Jobs created each year, during the period 2010-2019 (number)

	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
Austria	3,447	2,090	1,110	720	895	650	10,625	4,890	635	1,120
Belgium	3,815	740	2,504	2,154	2,729	2,732	980	2,500	5,485	1,568
Bulgaria	1,450	3,210	4,035	1,995	3,816	3,750	3,050	600	2,330	3,340
Czech Rep	10,322	11,618	2,900	12,306	5,921	12,678	16,238	11,948	4,784	3,106
Estonia	2,570	200	900	300	880	379	1,000	200	210	425
Finland	650	920	100	300	400	720	2,840	5,789	3,151	2,120
France	18,039	59,740	38,659	29,239	14,114	14,083	36,814	48,907	46,648	31,809
Germany	11,218	22,251	14,325	15,565	5,155	24,005	15,335	22,883	11,525	10,920
Greece	100	250	100	270	2,501	226	170	100	748	778
Ireland	12,140	4,225	9,665	5,052	8,713	8,836	11,302	11,357	10,837	11,177
Italy	6,790	1,580	4,008	4,340	6,580	33,001	11,987	6,194	7,300	3,960
Latvia	100	778	393	200	0	100	1,200	0	300	200
Lithuania	2,430	2,130	1,430	1,590	1,910	5,155	4,236	5,594	6,123	5,557
The Netherlands	550	140	0	2,050	730	750	9,279	4,275	5,635	6,275
Poland	23,101	26,171	24,798	27,908	41,390	33,164	40,312	44,866	38,128	31,720
Portugal	4,466	4,014	5,724	1,484	2,763	11,275	3,689	5,448	5,717	3,790
United Kingdom	27,958	37,002	43,175	26,516	50,974	31,645	49,762	55,954	43,049	29,728
Romania	16,045	10,879	27,843	16,638	19,569	8,275	29,585	35,045	15,202	10,460

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Slovakia	10,894	8,133	2,340	3,678	4,107	3,693	5,926	10,975	2,170	1,160
Slovenia	2,769	2,161	620	478	912	1,030	1,850	3,328	840	1,249
Spain	2,308	4,020	4,390	2,900	5,906	10,236	13,928	200	14,793	7,221
Hungary	8,220	6,379	4,571	6,376	7,824	5,052	4,707	8,593	3,939	4,053
Total	169,382	208,631	193,590	162,059	187,789	211,435	274,815	289,646	229,549	171,736

Source: Authors' compilation based on European Restructuring Monitor (ERM) data.

After a context analysis with regard to the evolution of jobs created and scrapped in the EU member states chosen for our study, and based on the data in Table 1 and Table 2, we set out to verify and evaluate to what extent economic growth reflects in the growth of jobs.

For this purpose:

- step one: we determined for each of the member states under scrutiny the correlation coefficient of the number of jobs to the real GDP index;
- step two: we grouped the member states into 3 clusters, according to the value of the correlation coefficient;
- step three: we analysed for one member state in each cluster the extent to which the evolution of the GDP index accounts for and influences the number of newly created jobs.

2. Scale of Job Creation and Dissolution in Romania and the Other European Union Member States

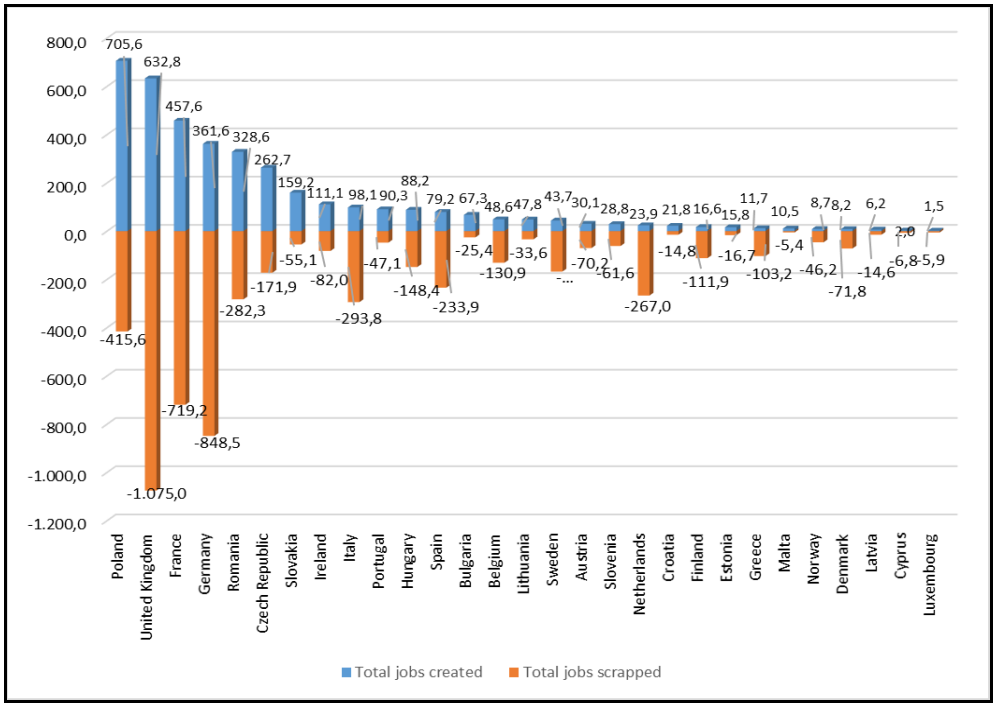
According to the information available in the Explanatory Memorandum for Romania's Accession to the Euro Zone, the data supplied by the European Restructuring Monitor (ERM) for Romania, covering the period 1 January 2005 - 1 August 2018, recorded a total positive balance of 46,284 jobs, resulting from the creation of 328,574 new jobs and the dissolution of 282,290 jobs (**Table 3, Figure 2**).

Table 3: Jobs created and dissoluted in Romania and the other EU 28 member states, in the time span 1 January 2005 - 1 August 2018 (number, %)

	Jobs created (number)	Share of total jobs created in EU 28 and Norway (%)	Jobs eliminated (number)	Share of total jobs eliminated in EU 28 and Norway (%)	Balance (number)
Austria	30,092	0.8	70,219	1.3	-40,127
Belgium	48,627	1.3	130,906	2.4	-82,279
Bulgaria	67,269	1.8	25,376	0.5	41,893
Croatia	21,828	0.6	14,759	0.3	7,069
Cyprus	2,038	0.1	6,791	0.1	-4,753
Czech Rep	262,711	7.0	171,926	3.1	90,785
Denmark	8,203	0.2	71,836	1.3	-63,633
Estonia	15,847	0.4	16,662	0.3	-815
Finland	16,570	0.4	111,888	2.0	-95,318
France	457,581	12.1	719,242	13.0	-261,661
Germany	361,644	9.6	848,549	15.4	-486,905
Greece	11,656	0.3	103,226	1.9	-91,570
Hungary	88,188	2.3	148,397	2.7	-60,209
Ireland	111,078	3.0	81,986	1.5	29,092
Italy	98,050	2.6	293,839	5.3	-195,789
Latvia	6,169	0.2	14,557	0.3	-8,388
Lithuania	47,758	1.3	33,613	0.6	14,145
Luxembourg	1,514	0.0	5,858	0.1	-4,344
Malta	10,486	0.3	5,397	0.1	5,089
The Netherlands	23,934	0.6	266,993	4.8	-243,059
Norway	8,672	0.2	46,157	0.8	-37,485
Poland	705,638	18.7	415,576	7.5	290,062
Portugal	90,281	2.4	47,135	0.9	43,146
Romania	328,574	8.7	282,290	5.1	46,284
Slovakia	159,232	4.2	55,084	1.0	104,148
Slovenia	28,757	0.8	61,566	1.1	-32,809
Spain	79,245	2.1	233,931	4.2	-154,686
Sweden	43,743	1.2	167,331	3.0	-123,588
United Kingdom	632,786	16.8	1,074,981	19.5	-442,195
Total	3,768,171	100.0	5,526,071	100.0	-1,757,900

Source: Explanatory Memorandum for Romania's Accession to the Euro Zone, Governent of Romania, 2019.

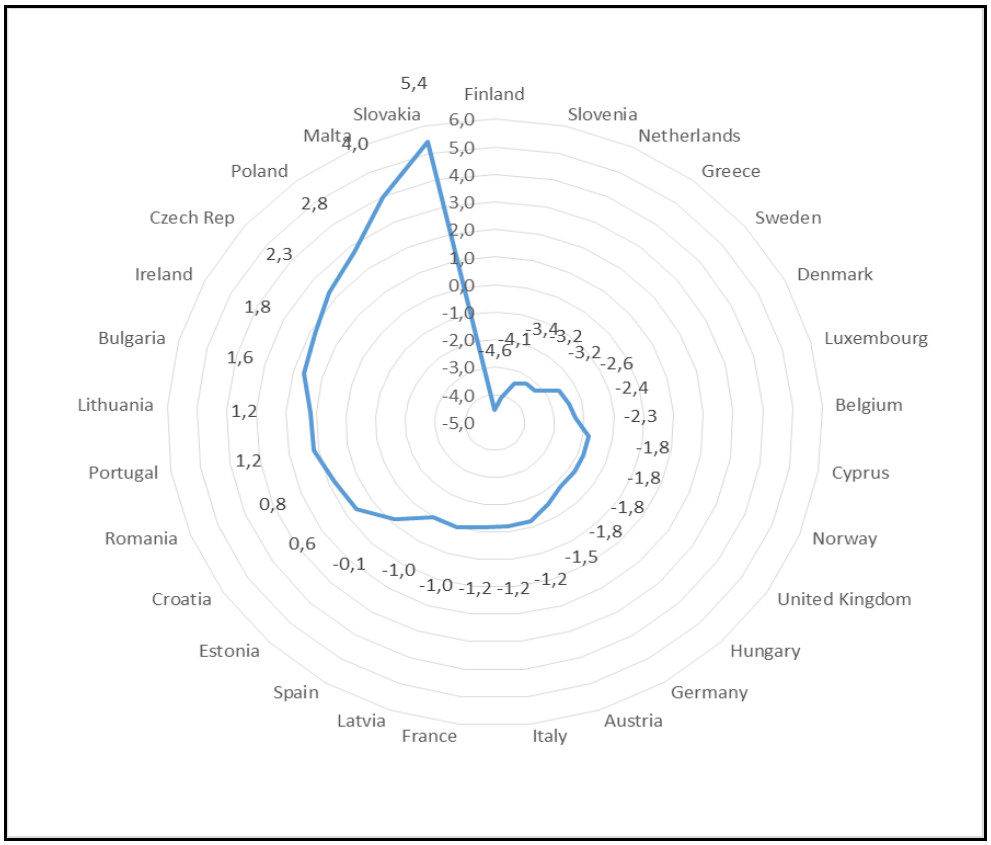
A relatively recent study shows that in the time interval 1 January 2005 – 1 August 2018, Romania accounted for 8.7% of all the new jobs created in the EU 28 and Norway, and for 5.1% of all the jobs eliminated in EU 28 and Norway (Racoviţan, Chivu, coord. 2019).



Source: Racoviţan, Chivu, 2019.

Figure 2: Total jobs created and jobs eliminated in Romania, 2005 - Aug. 2018 (thou' jobs)

In Romania, during the same reference time, the balance of jobs (created vs eliminated) accounted for a share of 0.8 % of the number of wage workers (Figure 3). In the other countries, it ranged from -4.6% in Finland, to 5.4% in Slovenia.

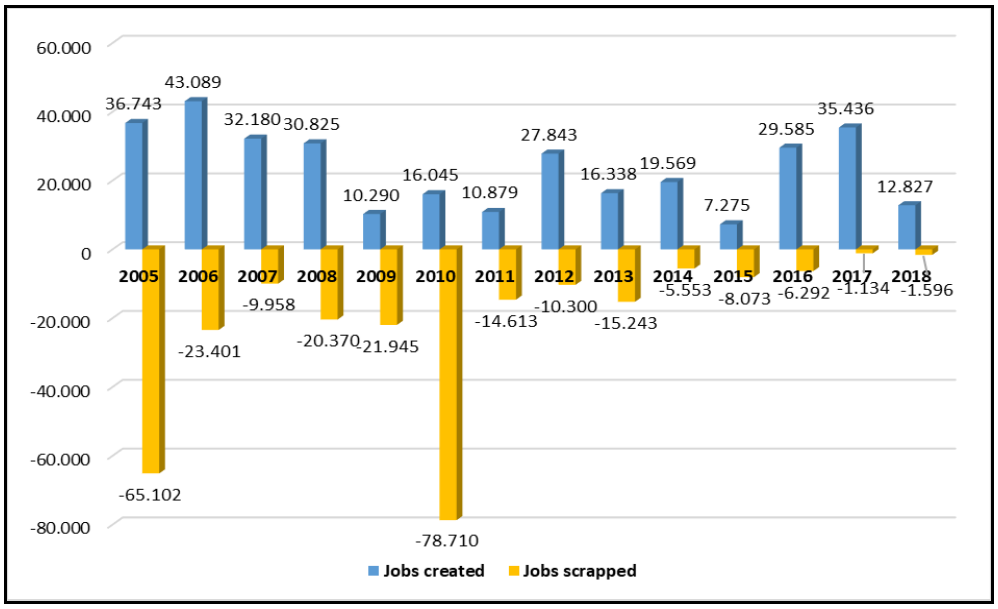


Source: Racoviţan, Chivu, 2019.

Figure 3: Share of the balance between jobs created and jobs eliminated during the reference period 2005-Aug. 2018, in the number of wage workers, in the EU 28 and Norway (%)

The study quoted above demonstrates that, with regard to the jobs created vs jobs scrapped in each of the years in the period 2005-aug. 2018, one can notice the transition from the dynamics of 2005, when the magnitude of both creation and elimination of jobs was high, but with a negative balance, to more moderate rates of job scapping during the period of eco-

nomic growth 2006-2008, when the balance was positive. The global economic and financial crisis caused an increase in the number of disbanded jobs until 2010 (-78.7 thou'). Then, starting from 2012, the general trend was to have a greater number of new jobs to the number of eliminated jobs. The only exception was the year 2015, when, although both the number of jobs created and the number of jobs eliminated were much lower than in the other years, the balance of jobs was a negative one. (Figure 4).



Source: Racoviţan, Chivu, 2019.

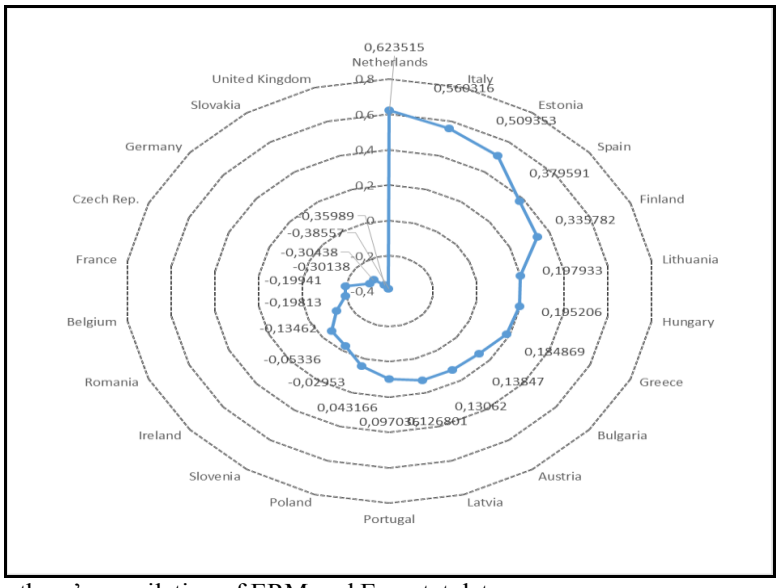
Figure 4: Jobs created and eliminated in Romania, 2005 - Aug. 2018

The loss of jobs in Romania during this time frame had multiple causes: internal restructuring (90.6% of all), bankruptcy or shut-downs (6.8%), offshoring / outsourcing (1.7%), mergers and acquisitions (0.5%).

3. The correspondence between economic growth and newly created jobs in 22 member states of the European Union. An analysis

Based on the numbers in Table 1 and Table 2, and on the correlation matrix between the GDP and the new jobs created in each of the 22 EU member states chosen for our comparative analysis, we have reached the following conclusions:

- for approximately 13.5% of these countries, the interdependence between the evolution of the GDP and the number of jobs created annually is strong and positive;
- for 45.6% of the states, the interdependence is weak, but positive;
- for 40.9% of the states, the interdependence is weak, and negative (Figure 5).

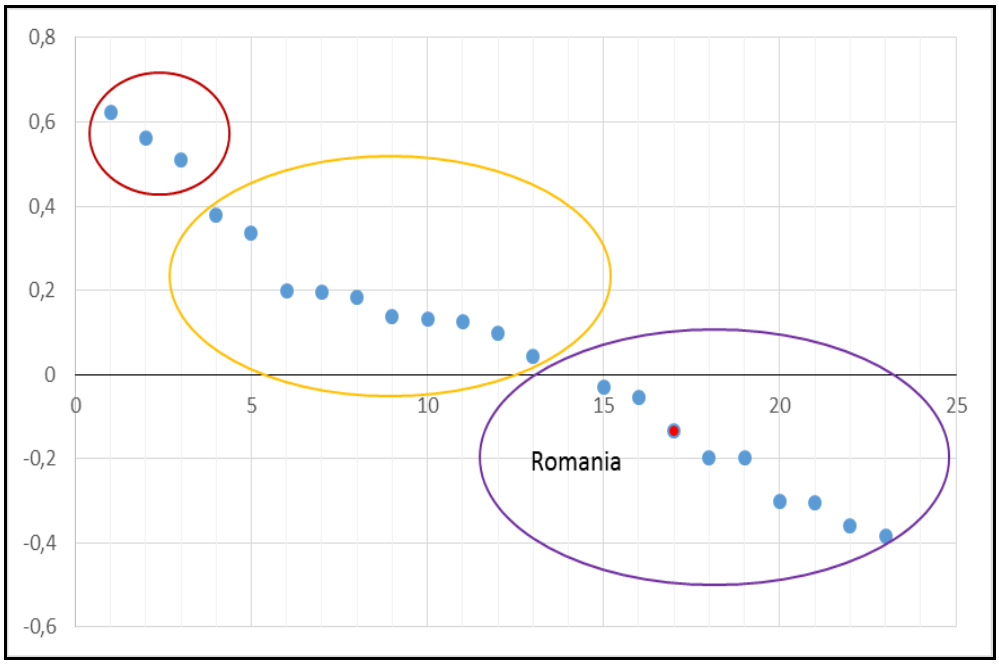


Source: Authors' compilation of ERM and Eurostat data.

Figure 5: Corelation coefficient between economic growth and the new jobs created annually, 2010-2019

Based on the results so obtained, we grouped the 22 member states in 3 clusters, in view of the level of the correlation coefficient:

- Cluster I - 3 member states with a correlation coefficient ≥ 0.5, respectively The Netherlands, Italy, Estonia;
- Cluster II - 10 member states with a correlation coefficient ranging between [0;0.5), and these were Spain, Finland, Lithuania, Hungary, Greece, Bulgaria, Austria, Latvia, Portugal, Poland;
- Cluster III - 9 member states with a correlation coefficient below 0, which were Slovenia, Ireland, Romania, Belgium, France, The Czech Republic, Germany, Slovakia, United Kingdom (Figure 6).



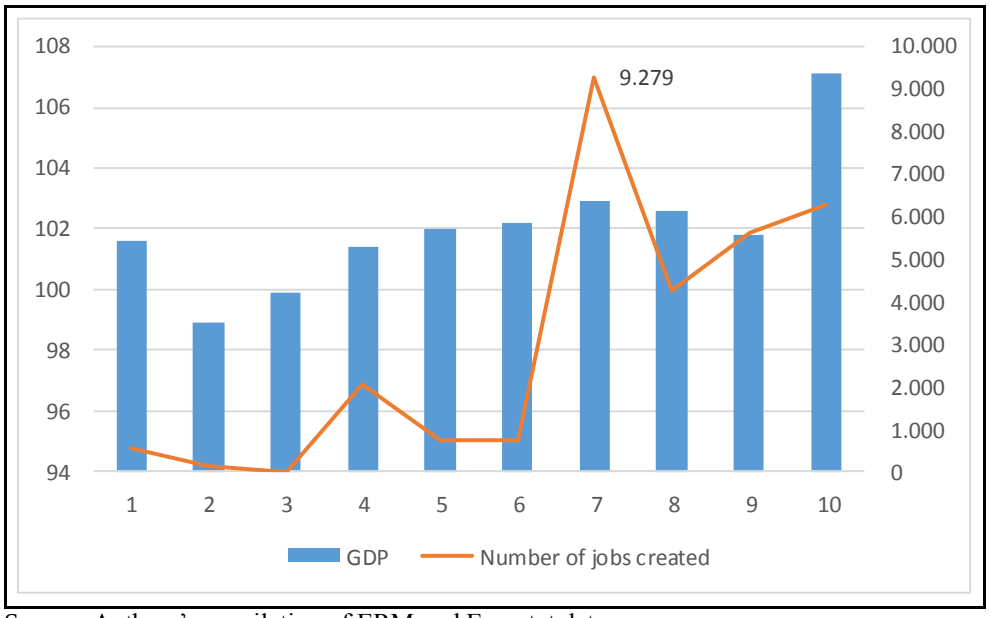
Source: Authors' compilation of ERM and Eurostat data.

Figure 6: Member states clusters according to the correlation coefficient between economic growth and new jobs created annually, 2010-2019

In order to obtain a higher accuracy with which this model quantifies the shifts in the number of new jobs as a ratio of the GDP, we have decided to bring in and process additional information about one member state in each cluster. This resulted in regressive statistics for each of these countries.

From Cluster I, formed of member states where the correlation coefficient between the GDP index and the number of new jobs created annually was higher than 0.5, we have chosed The Netherlands (Figure 7).

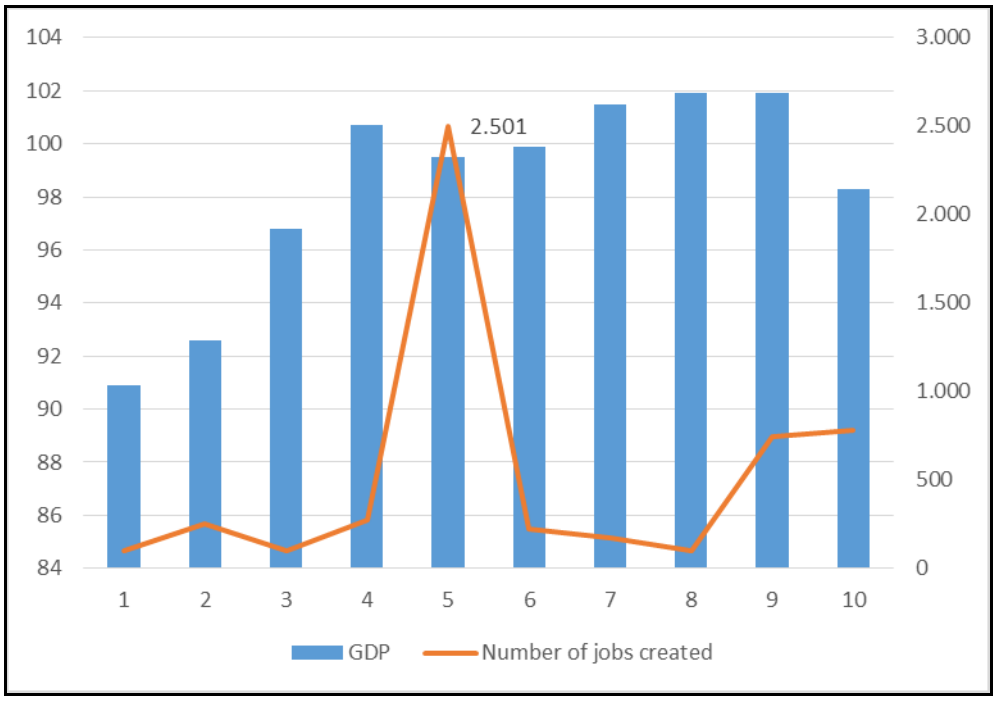
The coefficient of determination of the model indicated that the model explains in a proportion of 38.8% the number of newly created jobs as directly depending on the evolution of the GDP in The Netherlands.



Source: Authors' compilation of ERM and Eurostat data.

Figure 7: Chain base index number of the GDP (%) and the new jobs created annually (number), The Netherlands, 2010-2019

From Cluster II, which includes member states with correlation coefficients ranging between 0 and 0.5, we have selected Greece (Figure 8).

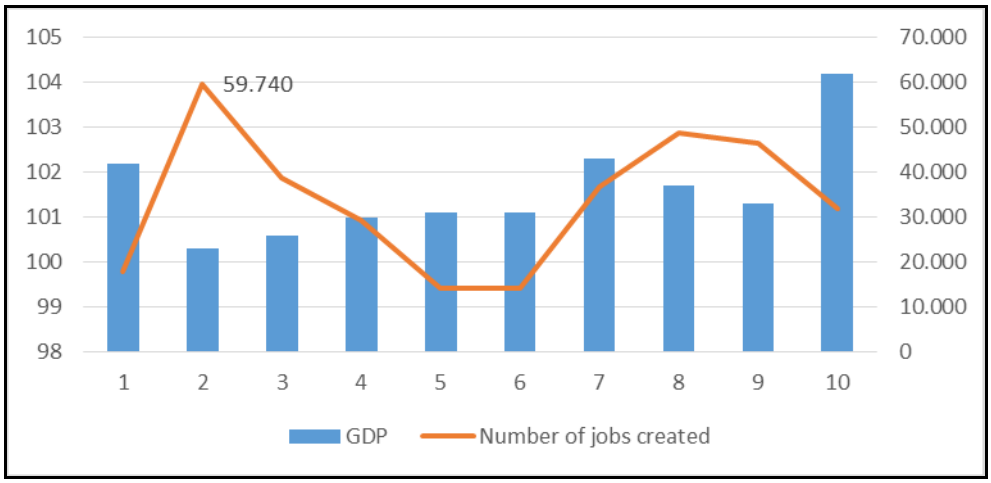


Source: Authors' compilation of ERM and Eurostat data.

Figure 8: Chain base index number of the GDP (%) and the new jobs created annually (number), Greece, 2010-2019

The coefficient of determination of the model shows that the model explains in a proportion of 3.41% the number of newly created jobs as an effect of the evolution of the GDP in Greece.

From the third Cluster, grouping the countries where the resulting correlation coefficients were below 0, we have chosen France (Figure 9).



Source: Authors' compilation of ERM and Eurostat data.

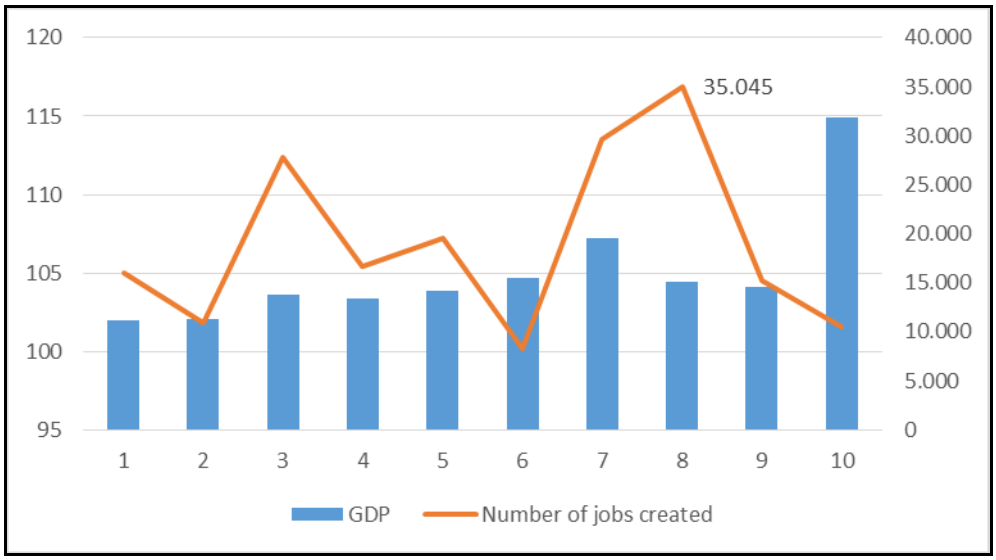
Figure 9: Chain base index number of the GDP (%) and the new jobs created annually (number), France, 2010-2019

The coefficient of determination of the model indicated that the model explains in a proportion of 3.9% the modification of the number of jobs as an effect of the evolution of the GDP in France.

4. The correspondence between economic growth and the newly created jobs in Romania

In previous analyses realised by other authors, when the relationship between economic growth and the newly created jobs was examined with regard to Romania over a period of 10 years, the correlation was found to be weak and negative.

Romania is part of Cluster III, and the coefficient of determination of the model explains in a proportion of 1.8% the shift in the number of jobs as an effect of the GDP evolution (Figure 10).



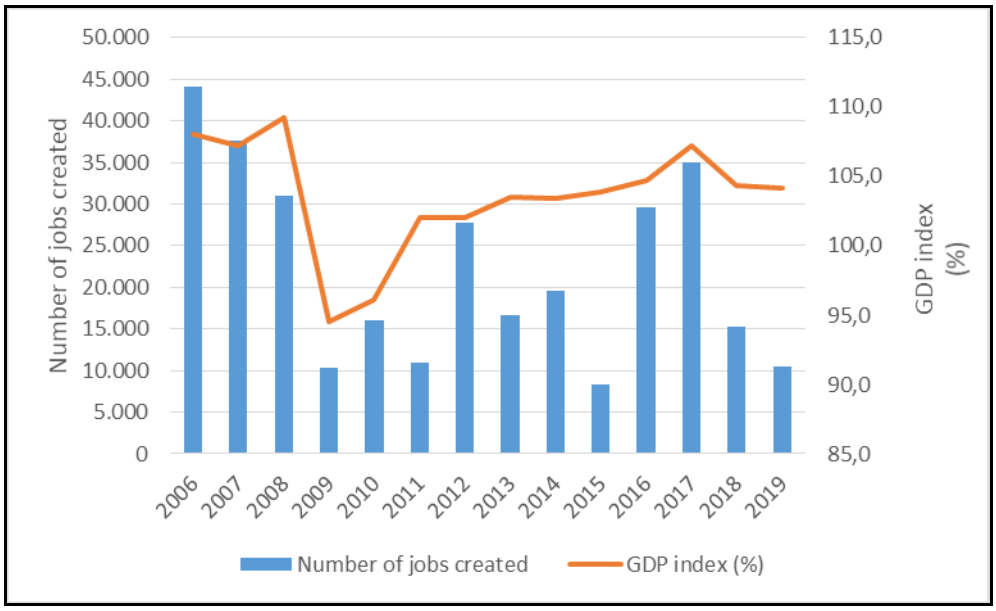
Source: Authors' compilation of ERM and Eurostat data.

Figure 10: Chain base index number of the GDP (%) and the new jobs created annually (number), Romania, 2010-2019

As explained above, the limitation of our analysis to a period of 10 years derives from our intention to include as many EU member states as possible. The time bracket we have chosen enabled us to analyse 22 of the member states.

While for the sake of the international comparative analysis the time span had to be limited to a decade, we have placed our analysis of the economic growth / job correlation for Romania within the time frame 2006-2019 (14 years), for which information is available.

For the period 2006-2019, the coefficient of determination of the model reveals that the model explains in a proportion of 41% the changes in the number of newly created jobs as an effect of the evolution of the GDP in Romania (Figure 11).



Source: Authors' compilation of ERM and Eurostat data.

Figure 11: Chain base index number of the GDP (%) and the new jobs created annually (number), Romania, 2006-2019

The correlation coefficient between the two indices, in this case, is 0.65, which shows a strong positive correlation.

The results so obtained demonstrate, *inter alia*, the need for data on a wider length of time, so that the model could be tested in a more relevant way.

Conclusions

The purpose of our study was to analyse the relationship between economic growth and the evolution of the newly created jobs during the decade 2010-2019, in 22 of the European Union's member states.

The review of studies and contributions to the economics literature tackling this topic revealed to us, through arguments of substance, the interest taken by researches in the analysis of the correlation between economic growth and employment.

As an original contribution of our study, while the research we identified so far generally examines the relationship berween economic growth and the curve of jobs, based on stock indicators regarding employment or unemployment, our analysis estimated the shifts in the number of jobs with the aid of a new instrument provided by the European Restructuring Monitor, respectively the flow of jobs newly created everey year, in 22 of the European Union's member states.

By determining the correlation matrix between the chain base index number of the GDP and the number of new jobs created every year in each of the 22 EU member states considered in our analysis, we have reached the following conclusions:

- for approximately 13.5% of these countries (The Netherlands, Italy, Estonia), the correlation between the evolution of the GDP and the the number of jobs created every year is strong and positive (Cluster I);
- for 45.6% of the countries (Spain, Finland, Lithuania, Hungary, Greece, Bulgaria, Austria, Latvia, Portugal, Poland), the correlation is weak and positive (Cluster II);
- for 40.9% of the states (Slovenia, Ireland, Romania, Belgium, France, Czech Republic, Germany, Slovakia, United Kingdom), the correlation is weak and negative (Cluster III).

A further, in-depth, analysis based on the coefficient of determination of the model for one member state in each Cluster, demonstrated that the applied model explains in various proportions the number of jobs created as an effect of the evolution of the GDP, more specifically: in a proportion of 38.8% in the case of The Netherlands, 3.41% in the case of Greece, and 3.9% in the case of France.

For Romania, which is part of Cluster III, in which the correlation is weak and negative, the coefficient of determination of the model explains in a proportion of only 1.8% the changes in the number of jobs as an effect of the evolution of the GDP.

When the analysis for Romania was extended to the entire period of time for which data were available, we obtained a coefficient of determination of the model which explains in a proportion of 41% the changes in the number of jobs as an effect of the evolution of the GDP in Romania.

This shows that, if we pursue to obtain conclusions that are relevant indeed, it is advisable to extend the analysed period as much as possible.

An adequate understanding of the results arising from the analysis of the correlation between economic growth and the ups and downs of jobs in the labour market requires good knowledge about the structural transformations in the economy, identification of the influences playing a role during economic crises or economic booms, etc., for which additional research is mandatory.

The information regarding the newly created jobs, furnished by the ERM, make it possible for researchers to sum them up by sector. As topics for future reasearch, it would be interesting to undertake a detailed analysis

by sector, in each country's economy, with the aid of the correlation between the chain base index number of the gross value added and the number of jobs created annually in each sector.

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