THE EFFECTIVENESS OF THE REGIONAL OPERATIONAL PROGRAMME IMPLEMENTATION ON THE RESILIENCE OF THE ROMANIAN COUNTIES

Constantin M. PROFIROIU*, Alina G. PROFIROIU**, Corina C. NASTACĂ***

Abstract

In Romania, for 2007-2013 financial exercise, the Regional Operational Programme (ROP) had the biggest financial allocation and an absorption rate of 93.5%. In order to establish if the projects financed from ROP have generated GDP growth and have managed to lower the unemployment rate on the local level, an exploratory study using secondary data analysis has been conducted. The study aims to analyze how ROP has contributed to the resilience of the Romanian counties considering the programme's impact on the social and economic development of the regions and its high absorption rate. The data collection process was based on official reports submitted by the national authorities. With the collected data, the evolution of the most important economic indicators at the local level during 2007- 2015 period has been calculated trying to establish a relation between the financial value of ROP projects implemented in each County and Region and the GDP growth rate and unemployment rate decrease.

Keywords: Regional Operational Programme, GDP rate growth, unemployment rate decrease

Introduction

The European regional policy was created because the European Union identified the necessity of reducing the economic and social disparities between its regions and the need for improving the economic environment of the regions which were in decline. Even if the European Union is continuously developing from economic and social perspectives, the differences between its regions are still significant. The regional policy is an expression of solidarity between member states and with the accession of new states, the policy, and its objectives evolved considering the needs of the new member states. With the multiple enlargements of the EU, the disparities between regions have increased due to the fact that countries

^{***}Corina C. NASTACĂ is Ph.D. Student at The Bucharest University of Economic Studies, Bucharest, Romania; email: cnastaca@gmail.com.





^{*}Constantin M. PROFIROIU is Professor at The Bucharest University of Economic Studies, Bucharest, Romania; email: profiroiu@gmail.com.

^{**}Alina G. PROFIROIU is Professor at The Bucharest University of Economic Studies, Bucharest, Romania; email: profiroiualina@yahoo.com.

with a relatively low level of economic development, as Romania and Bulgaria, joined the EU.

1. Romanian regions and their evolution during time

When Romania became a member state, the North-East development region was the most underdeveloped region from EU and Vaslui County was the least developed NUTS 3 in the EU in terms of GDP per capita at the purchasing power parity standard and unemployment rate. After the first financial exercise (2007-2013) since Romania has joined the EU and implemented projects with European funding, the Romanian regions managed to improve their economic indicators. In 2016, the North-East region was not the poorest region from the EU anymore. being surpassed by regions like Severozapaden from Bulgaria with a GDP per capita of 29% of the EU average, and followed by Mayotte from France (33%), Severen Tsentralen and Yuzhen Tsentralen from Bulgaria. The GDP per capita of the North-East region increased to 36% of the European average, still a low level compared with the developed European regions, but higher as it was in 2007. The situation improved in Bucharest-Ilfov, too. The region recovered its disparities and evolved from the transition regions to the more developed regions category (where the GDP per inhabitant is more than 90 % of the EU average according to the NUTS classification) (Eurostat, 2013, 2017). In 2016, Bucharest-Ilfov GDP per capita was 139% of the EU average, surpassing regions as Madrid (125%), Berlin (118%), Rome (110%) or Lisbon (102%) (Eurostat, 2017). Improvements could be observed in the West region, too, where the GDP per capita in 2016 was 60% of the European average. Another progress registered by the Romanian regions was the fact that in 2016, only 3 regions were in the top of the poorest regions of the EU: the North-East, the South-West Oltenia and South-Muntenia Regions (Eurostat, 2017). Even if Vaslui remained the poorest NUTS 3 from the EU (with 3054 euros in terms of purchasing power standards per capita) (Eurostat, 2017) and the development of Bucharest-Ilfov Region increased the disparities between the most developed region and the least developed one, it could be observed that all the Romanian regions registered an evolution.

The statistics showed that the Romanian regions registered a positive evolution in terms of GDP per capita which could lead to the idea that the living standards have improved and Romanian regions have chances to recover their disparities. This situation could be an effect of the implementation of European funding projects. The most important program for regional development as financial allocation is the Regional Operational Programme (ROP) and its effectiveness should be analyzed on both counties and regional levels.

www.cse.uaic.ro

2. The evaluation of the cohesion policy

The regional policy contributes through its measures to achieving two main objectives: higher GDP per capita and lower unemployment rate. This policy embodies the expression of EU solidarity towards less developed regions and countries. It not only helps countries with a lower development level compared to the EU average but also helps developed countries to raise their businesses, stimulate investments and transfer the economic and technological know-how, especially the regions where economic activities are in decline or stagnate. This policy is considered an investment policy and pursues economic growth and competitiveness, better life conditions, job creation and sustainable development objectives of the Europe 2020 strategy, in order to create a prosperous, competitive and sustainable Union. (European Commission, 2019).

Regional development policy as part of the cohesion policy of the European Union is one of the most intensely analyzed and assessed policies of the EU. Starting with the reform of the structural funds, which took place in 1988, followed by successive phases of regulators, it has been created a more rigorous system of monitoring and evaluation, covering all regional development interventions financed by the EU. Evaluation of Structural Funds programmes and cohesion are carried out at certain times of the programming cycle: ex-ante, to check its objectives, at the midpoint, in order to determine the need for corrective actions and ex-post, to evaluate the results. These national and regional evaluations are completed by impact studies, meta-evaluation and thematic evaluations carried out by the Commission, and through extensive research sponsored by the Commission and debates on concepts, methods and assessment practices (Bachtler *et al.*, 2006).

The growing importance given to the assessment of EU cohesion policy is part of a wider international context within the policy and the evaluation of the programs reflect the need to legitimize and justify the interventions of the Governments, which are different in intensity, from state to state (Pollitt, 1998; Furubo, *et al.*, 2002). In the context of the reforms that have taken place at the EU level, two factors help explain this trend.

Firstly, cohesion policy has become, in terms of budget, the most important and costly EU policy. In the mid-1980, the European Regional Development Fund represented only 7.5 percent of the Community budget (EUR 2.3 million) (Michie *et al.*, 1997). Later in the period 2007-2013, the structural funds and the cohesion funds have had an allocation of 36% of EU planned expenditures (308 billion euros) (European Commission, 2019)

Secondly, the reform of the structural funds from 1988, gave greater influence to the European Commission, over the distribution of funds for regional development, with regard to the designation of eligible areas, approval of plans development of the Member States, management and delivery of programs, and control costs. This influence has been often a source of tension between the Commission and the Governments of the Member States, who had objections

regarding the spatial and thematic allocation of the European funding (Bachtler *et al.*, 1997; Bachtler *et al.*, 2004; 2005).

With greater importance given to evaluation, the methodology for the assessment of EU cohesion policy itself has been the subject of considerable debate. This is not surprising, considering the role of cohesion policy and the fact that there are not uniform approaches and methodologies regarding this policy. The current assessment methodologies vary and are of several types: bottom-up, top-down, based on surveys, impact analysis based on aggregate models, as well as studies on the implementation of the structural funds. In addition, there are differences regarding the process of data collecting, the implementation of the surveys and the types of questions. This is only natural, given the diversity of regional policy instruments and purpose, as well as the various institutional arrangements related to the administration and implementation of this policy. But the evaluation of the policy and the implementation of the operational programmes appear to be uncoordinated and raises concerns regarding comparability and consistency of results (Bachtler *et al.*, 2006).

The results reported on the effects of the implementation of EU cohesion policy showed that the policy had a major contribution to job creation, investments and other outcomes (European Commission, 1996; 2001; 2004). However, the poor quality of the monitoring data, the difficulty of isolating the effects attributed to EU funds, as well as other issues and methodological limitations, showed that some of the reported results have been treated with skepticism, particularly, to the extent on which national or regional convergence can be attributed to the cohesion policy of the EU (Ederveen *et al.*, 2002; Tarschys, 2003; Sapir *et al.*, 2004).

Beside the existing disputes concerning the results and impact of the programmes funded by the structural and Cohesion Funds, there were also debates about other effects of EU cohesion policy, such as the effectiveness for the community. Authors (see Bachtler, 2004) argued that the regulatory obligations, together with the Commission's role in promoting "best practices" with regard to evaluation, has encouraged a greater commitment concerning the use, assessment and effective management monitoring programmes (European Commission, 2002, 2004), although, again, the influence of the structural funds in this field has been questioned (ECOTEC, 2003).

In this context, it is necessary to study the impact of the projects financed by the Regional Operational Programme, as part of cohesion policy, to observe directly if the results are similar to those carried out by the Commission and if the programme had the expected outcome in the counties of Romania.

3. The Regional Development Policy in 2007-2013 financial exercise

The regional development policy and structural funds aim to transform and modernize the economies of less developed EU countries and regions in order to prepare them for the competition from the single market and the Euro area. The

www.cse.uaic.ro

budgetary constraints from the 2007-2013 financial exercise, caused by the international financial crisis and the rigorous and selective process of resources allocation have raised concerns regarding the possibility of not achieving the objectives of economic and social cohesion, a situation that could have affected Romania, too. Moreover, the threat of a global recession in 2009 caused specific negative effects on the Romanian economy. The major risks resulted from the excessive deficit procedure that the EU could have started against Romania due to the budget deficit recorded by our country in 2008 (more than 5% of GDP). The budget deficit caused the limitation of national co-financing and the reduction of the structural funds regarding allocation and absorption (Zaman *et al.*, 2009).

The financial resources allocated for 2007-2013 in order to support cohesion policy have been decided after tough negotiations, to a maximum value of 0.45% of European GDP. In consequence, Spain, Portugal, Greece, and other new Member States have asked for an increased budget, considering it insufficient in order to achieve the objectives of cohesion policy, but they encountered resistance from the net contributors' countries (Germany, UK, Sweden, Austria, and the Netherlands). Also, in the methodology for funds allocation, the concept of absorption capacity has been introduced, which limited the transfer of EU funds to a maximum of 4% of the national GDP of each country. A side effect of the establishment of the absorption capacity was a decreased level of aid per capita for the poorest countries, contrary to the allocation methodology principle, which implied that those countries should be a priority. To partially compensate the negative effect of these measures and to facilitate the absorption of funds by the new Member States, the maximum co-financing rate level from the EU has increased from 80 to 85 percent and the n + 2 rule became n + 3 and certain eligibility criteria have been simplified (Zaman et al., 2009).

Even in these circumstances, various impact studies based on econometric models, have revealed conflicting results concerning the possible effects of the structural funds on the Member States' economies. Some studies presented a positive economic impact (see Le Gallo *et al.*, 2011, Moll and Hagen, 2010, Rodriguez-Pose and Novak, 2013) other negative results (see Ederveen *et al.*, 2006, Boldrin and Canova, 2001) while other studies have reported inconclusive results (see, Dall'erba and Le Gallo, 2008; Deardorff, 2004; Rodriguez-Pose and Fratesi, 2004).

4. The regional policy and regional resilience

Resilience represents the ability of a system to return to its initial state after a shock or to find a new equilibrium by replacing a series of parameters with new ones. The most important features of resilience are the absorptive capacity, the adaptability and the capacity of transformation. Resilience is the result of these three capabilities, each leading to different results: persistence, incremental adaptation or transformational responses. These three results can be linked (conceptually) with different intensities of the shock and changes. If the intensity



of the initial shock is lower, is more likely for the household/community/system to withstand and absorb the impact without any consequence on the state/status/ functions (Bene et al., 2014).

Authors (Bene et al., 2014) showed that a resilient system promotes and encourages diversity, flexibility, inclusion and participation, recognition of social values, acceptance of change and uncertainty, lifelong learning, community involvement, economic and social justice, the transverse perspective of the events (resilience is built through social networks, political, economic and cultural local to global) and an efficient governance. Observing the characteristics of a resilient system, it should be considered that the regional policy could help in strengthening the resilience of the regions. The purpose of the regional policy is very complex and includes the development of the economic activities, their diversification, the stimulation of the private sector investments, the decrease of the unemployment rate and better living conditions for the population (Ministry of Regional Development and Public Administration, 2018) so through its investments, this policy could have a positive impact over the regional resilience.

Other authors concluded that resilient regions are characterized by industrial diversification, greater export capacity, reduced financial constraints and developed human and social capital (Di Caro, 2015). The results obtained by them have led to the idea that economic resilience could explain the evolution of a region by providing information on issues of regional development (authors presented information about the resilience of Italian regions, dividing them into two categories: very resilient and vulnerable regions).

Other authors (Aiginger, 2009) suggested that resilience is a goal that should be integrated into growth and employment strategies. The contribution of private firms and of an economic policy which is growth and stability orientated, are both indispensable and indeed support each other. In his opinion, "economic resilience should be achieved through five channels (or policy areas), namely (i) more resilient structures (ii) increasing economic growth (iii) more emphasis on longerterm goals (by firms, analysts and economic policy) (iv) avoiding factors which actually cause economic crises (v) institutions and incentive schemes which serve to stabilize the economy".

Another aspect which affects regional resilience is governance, which is a very important factor which could support economic development and growth. More than that, regional governance is associated with effective and efficient use of public expenditure (including EU funding) and poor regional governance leads to a lack of efficiency and effectiveness in delivering regional policy to foster economic growth. The Quality of Government Institute of Gothenburg University created The European Quality of Government Index (EQI) which measures the institutional quality available at the regional level in the European Union, capturing the citizens' perceptions and experiences with corruption, and the extent to which they rate their public services as impartial and of good quality in their region of residence. The index measure has a mean of zero for the EU28 average quality of

www.cse.uaic.ro

governance such that countries and regions which have better than average governance achieve values greater than zero whereas values below zero indicate a regional quality of governance below the EU average. The regional quality of governance index for 2013 shows that Romanian regions exhibit poor governance as in all regions the index is below zero. With values between -1.10 in South-Muntenia region and -1.98 in South-East region (The European Quality of Government Index, 2017). Poor governance affects the absorption of European funding concomitant with regional resilience.

5. Methodology of research

The present research studies the effectiveness of the Regional Operational Programme and its impact on the resilience of the Romanian counties because strong economies at the local level will help at strengthening regional resilience, too. An exploratory study using secondary data analysis has been conducted in order to establish if the projects financed from ROP have generated GDP growth and have managed to lower the unemployment rate on counties' level.

The data collection process was based on official reports submitted by the Ministry of Regional Development and Public Administration and by the National Institute of Statistics. With the collected data, the evolution of the most important economic indicators in all 41 Romanian counties in 2007- 2015 financial period has been calculated, trying to establish a relation between the financial value of ROP projects implemented in each county and the GDP growth rate and unemployment rate decrease.

The main objective of the research was to establish if projects financed by ROP had a positive impact on the unemployment rate and over the GDP from the local level. The economic evolution of Romania's counties has been studied because the evolution of the unemployment rate and of the GDP growth from each county influence directly the regional resilience. The research has started from the idea which assumes that the counties which registered the highest GDP growth and the highest decrease in the unemployment rate are the most resilient ones. The counties with low unemployment rates and a GDP which is continually growing could be better prepared for economic shocks and stressors and could have the necessary means in order to recover after a new economic crisis.

The purpose of the research consists of the analysis of the economic evolution of Romanian counties from 2007 until 2015 in order to observe the effectiveness of ROP financed projects on the counties' economies. Hierarchies of the counties from the number of implemented projects and their total financial value perspectives have been made, to observe if the counties with the highest number of implemented projects and with the highest financial value allocations are the ones which registered the highest GDP growth and unemployment rate decrease.



The study has two specific objectives:

- O1: To identify if there are significant differences between counties in terms of projects financed from ROP and their values.
- O2: To reveal the existence of a direct relationship between the number and value of ROP projects and counties' economic development (measured by GDP growth and unemployment rate decrease perspectives).

The research has been started from the following hypothesis:

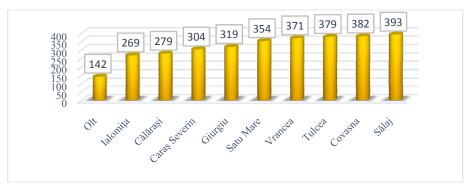
- H1: The counties which implemented ROP projects with the highest financial values should register the highest GDP rate growth and the largest decrease in the unemployment rate.
- H2: There are significant differences between counties regarding the number of implemented projects and their financial values.

The analysis of the economic evolution of Romanian counties has been studied from 2007 until 2015 because that was the last year of ROP financed projects implementation.

6. Main findings of the study

In order to study the evolution of the Romanian counties from the economic perspective, the main indicators which have been analyzed were the GDP growth, the unemployment rate, the value of the ROP financed projects and the number of projects implemented in each county. The purpose of the analysis was to establish the existence of a relation between the value of the projects and the evolution of the two analyzed indicators. If the counties with the highest value of the implemented projects have registered the highest GDP growth and unemployment rate decrease, it could be affirmed that ROP has a significant role in strengthening the resilience of the local economies

Figure 1. Counties with the lowest projects' values (million LEI) during the 2007-2015 period



Source: own representation, adapted by the Ministry of Regional Development and Public Administration (2019)

www.cse.uaic.ro

1,429 1500 1,160 1,037 1,038 1,083 938 838 825 807 764 1000 500 0 Hunedoara $D_{\hat{a}_{II}b_{O_{V_{\hat{I}_{\hat{t}\hat{a}}}}}}$ $V_{\hat{a}|_{C_{\mathcal{C}_q}}}$ $S_{U_{C_{Q_{Q_{V_q}}}}}$ Chy $C_{O_{DS_{tan_{fa}}}}$ $\mathcal{A}_{\mathcal{E}_{\mathcal{C}_{\mathcal{S}}}}$ Dolj 1160 lasi

Figure 2. Counties with the highest projects' values (millions LEI) during the 2007-2015 period

Source: own representation, adapted by the Ministry of Regional Development and Public Administration (2019)

Figure 2 shows the hierarchy of the counties with the highest financial values of the implemented projects. Ilfov County occupied the first place. In Ilfov were implemented projects with a value of more than 1.4 billion Lei. It could be observed that the first ten counties which implemented projects with the highest financial values were from: North East region (Iaşi and Suceava County), Bucharest-Ilfov region (Ilfov County), West region (Hunedoara County), North West region (Cluj County), South-West Oltenia region (Vâlcea and Dolj Counties), South Muntenia region (Argeş and Dâmboviţa Counties) and South East region (Constanţa County). These counties implemented projects with total values between 760 million Lei and 1.4 billion Lei. It could be observed that Ilfov County implemented projects with a total financial value of ten times higher than the value of the projects implemented in Olt County.

In 2007-2013 financial exercise in Romania, there were implemented 3773 projects financed from the Regional Operational Programme. The smallest number of projects was implemented in Tulcea County (28 projects) representing 0.74% of the total number of projects from the national level. Figure 3 shows the counties which implemented the fewest projects and it could be observed that they are part of all the development regions. The last ten counties implemented between 28 and 56 projects, representing between 0.74% and 1.48% of the total number of projects from the national level.



56 55 56 50 60 47 47 43 44 50 30 40 28 30 20 10 Satu Mare Boto Sani **Jalonin**a Teleothair Vashii Tinis

Figure 3. The last ten counties by the number of implemented projects during the 2007-2015 period

Source: own representation, adapted by the Ministry of Regional Development and Public Administration (2019)

Figure 4. The first ten counties by the number of implemented projects during the 2007-2015 period



Source: own representation, adapted by the Ministry of Regional Development and Public Administration (2019)

Figure 4 shows the first ten counties by the number of implemented projects. It could be observed that Arges County from South Muntenia region implemented the biggest number of projects: 229, representing 6.07 % of the projects from the national level. The projects from Arges County had a value of more than one billion Lei. Ilfov County which registered the highest financial value of the projects implemented 101 projects representing 2.68% of the total number. The first ten counties presented implemented between 125 and 229 projects representing between 3.31% and 6.07% of the total number of implemented projects.

Arges County implemented 6.07% of the total number of implemented projects, followed by Cluj County (4.9%), Dolj County (4.59%), Prahova County

www.cse.uaic.ro

(4.32%) and Iaşi County (4.27%). The counties which implemented more than 4% of the total number of projects are from different regions: North-West, South-West Oltenia, South Muntenia, and North-East regions. Regarding the counties which implemented the fewest projects, it could be noticed that Tulcea and Vaslui Counties implemented under 1% of the total number of projects (0.74% and 0.80%) and 17 counties implemented between 1.14% and 1.99% of the total number of implemented projects (see Annex 1).

In order to study the effectiveness of the Regional Operational Programme over the Romanian counties economies, the evolution of the GDP and of the unemployment rate have been analyzed. The data about the three indicators have been collected for 2007 and for 2015, from the National Institute of Statistics. The data have been gathered for the first year from the financial exercise 2007-2013 and for the last year of ROP implementation in order to establish if, at the end of ROP implementation, the economies of the Romanian counties have been influenced by the programme.

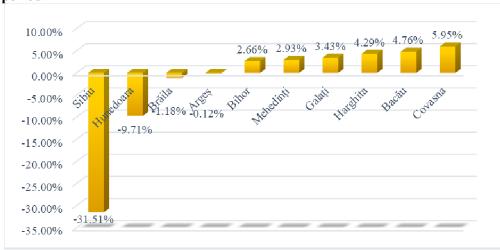


Figure 5. The last ten counties by the GDP growth during the 2007-2015 period

Source: own representation, adapted by the National Institute of Statistics (2019)

The figures presented above show the percent change in the GDP in 2015 compared with 2007. In figure 5, there are presented the last ten counties by the GDP growth. Figure 6 presents the first ten counties by GDP growth. It could be observed that in 2015 compared to 2007, only in four counties, the GDP decreased. In 2015, Sibiu County registered a GDP with almost 32% less than in 2007. Hunedoara County registered a decrease of the GDP with almost 10%, Brăila County with 1.18% and Argeş county with 0.12% 38 of 41 counties registered a positive growth rate of the GDP, the highest growth rate being registered in Giurgiu County (79.94%) and the largest decrease in Sibiu County (-31.51%%).



79.94% 80.00% 70.00% 45.57% 47.47% 50.19% 60.00% 26.36%27.07% 30.20%30.94% 35.99% ^{39.03%} 50.00% 40.00% 30.00% 20.00% 10.00% 0.00%

Figure 6. The first ten counties by the GDP growth during the 2007-2015 period

Source: own representation, adapted by the National Institute of Statistics (2019)

It could be observed that in two counties the GDP was with more than 50% higher than in 2007 (Călărași and Giurgiu Counties). It is important to mention that even if these counties registered a GDP with more than 50% higher than in the first studied year, these two counties implemented a small number of projects (47) projects in Giurgiu County and 77 in Călărași County). More than that, both counties were situated in the last places concerning the financial values of the implemented projects (Călărași County was situated on the 39 positions out of 41 with a value of the implemented projects of almost 279 million Lei and Giurgiu County situated on the 37 positions with projects of almost 319 million Lei). The counties situated on the last places regarding the GDP growth were from all the development regions, excepting Bucharest-Ilfov region. The counties which registered the highest GDP growth were situated in six development regions, and none of them were from the Center and South-West Oltenia regions. It could be observed that in 15 counties the GDP was with more than 20% higher in 2015 compared with 2007. It should be mentioned that only four of the ten counties which registered the highest financial values of the implemented projects could be found in the hierarchy of counties which registered the highest growth of the GDP (Constanța, Iași, Ilfov and Cluj Counties). Moreover, four of the counties with the lowest financial values of the implemented projects have been placed on the hierarchy of counties with the highest GDP growth (Ialomița, Călărași, Giurgiu and Tulcea Counties).

Another aspect revealed was the fact that Olt County which situated on the last place regarding the financial values of the implemented projects, registered a GDP growth of 15.54%. The analysis of the percent change in GDP for 2015 compared with 2007 revealed that the majority of the Romanian counties,

www.cse.uaic.ro

regardless of the number of implemented projects and their values, registered a GDP rate growth. It could not be established a pattern regarding the GDP growth and the number of projects and their financial values, due to the fact that counties with low financial values of the projects registered high levels of GDP growth. Even if it could not be demonstrated that the ROP influenced directly the evolution of the GDP, it could be affirmed that ROP had an impact over the counties economies. It should be taken into consideration that the economic situation of the Romanian counties was influenced by the economic crisis from 2008 and that could be a reason of the impossibility of establishing a direct relationship between the GDP growth and ROP implementation. Even if the financial crisis had a negative impact on the economic situation of the counties, the evolution of the GDP showed that Romanian counties became more resilient. Even if it could not be established that ROP influenced directly the economic development of the Romanian counties it could be affirmed that ROP had a positive impact over the counties economies and it helped at strengthening their resilience.

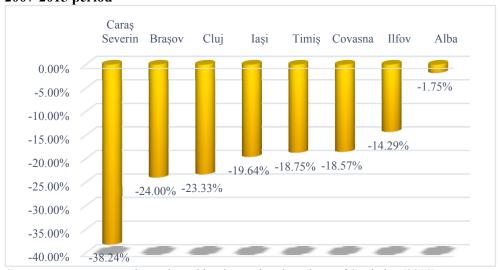


Figure 7: The first eight counties by the unemployment rate evolution during 2007-2015 period

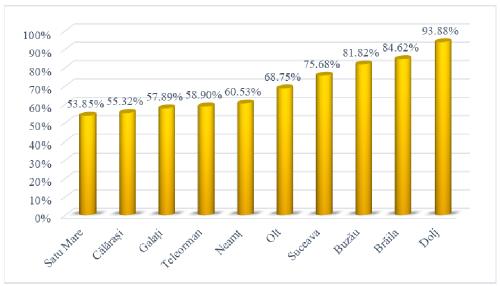
Source: own representation, adapted by the National Institute of Statistics (2019)

Regarding the unemployment rate evolution, the situation was not similar to the GDP evolution. The counties which registered a decrease in the unemployment rate are presented in figure seven. The analysis of the unemployment rate showed that it decreased only in eight counties and in the other 33 counties the indicator increased. The situation could have been influenced by the economic crisis which had a negative impact on the business environment. A large number of small firms closed and the big companies resorted to layoffs due to financial constraints. Even if ROP created 24.582 new workplaces according to the Ministry of Regional



Development and Public Administration, its impact on the unemployment rate has not been significant.

Figure 8: The last ten counties by the unemployment rate evolution during 2007-2015 period



Source: own representation, adapted by the National Institute of Statistics (2019)

The data showed that in 11 counties the unemployment rate increased with more than 50%, the most significant increase being registered in Dolj County from the South-West region. The counties which registered the highest increases in the unemployment rate were from regions with a low level of economic development: the North-East, South-East or South-West regions. It could be observed that four counties from those which registered high GDP growth (Cluj, Iași, Timiș and Ilfov counties), registered a decrease in the unemployment rate, too. It should be mentioned that Caraş-Severin County which ranked 39th in terms of financial values of the implemented projects, managed to rank first regarding the unemployment rate decrease and registered a GDP growth of 47,48%. A different situation could be observed at Dolj County which ranked second concerning the financial value of the implemented projects but ranked first on the unemployment rate increase. As far as Ilfov County was concerned, it ranked first at the value of implemented projects but ranked 7th at the unemployment rate decrease. Another aspect revealed by the analysis was that in 28 counties the unemployment rate increased with more than 10%, which showed that the economic crisis had a strong negative impact. Even if it could not be established a direct relationship between the financial intervention of ROP and the decrease of the unemployment rate, it could be observed that four counties from those which implemented projects with

www.cse.uaic.ro

the highest financial values registered unemployment rate decrease, too, which could lead to the idea that ROP had a positive impact over the evolution of the studied indicator.

Table 1. Correlation between the value of the implemented projects and the GDP growth and unemployment rate's evolution

| | | The value of the implemented projects | The GDP Growth | The unemployment rate's evolution |
|------------------|---------------------|---------------------------------------|-------------------|---|
| The value of the | Pearson Correlation | 1 | 039 | 094 |
| implemented | Sig. (2-tailed) | | .808 | .558 |
| projects | N | 41 | 41 | 41 |
| The GDP Growth | Pearson Correlation | 039 | 1 | 287 |
| | Sig. (2-tailed) | .808 | | .068 |
| | N | 41 | 41 | 41 |
| The | Pearson Correlation | 094 | 287 | 1 |
| unemployment | Sig. (2-tailed) | .558 | .068 | |
| rate's evolution | N | 41 | 41 | 41 |

Source: own representation

Table 2. Correlation between the number of the implemented projects and the GDP growth and unemployment rate's evolution

| | | The number of implemented projects | The GDP Growth | The unemployment rate's evolution |
|------------------|---------------------|------------------------------------|-------------------|---|
| The number of | Pearson Correlation | 1 | 017 | 070 |
| implemented | Sig. (2-tailed) | | .916 | .664 |
| projects | N | 41 | 41 | 41 |
| The GDP Growth | Pearson Correlation | 017 | 1 | 287 |
| | Sig. (2-tailed) | .916 | | .068 |
| | N | 41 | 41 | 41 |
| The | Pearson Correlation | 070 | 287 | 1 |
| unemployment | Sig. (2-tailed) | .664 | .068 | |
| rate's evolution | N | 41 | 41 | 41 |

Source: own representation

In order to establish if the ROP financed projects influenced directly the evolution of the GDP as well as the unemployment rate, correlations between these variables have been computed. The results showed that there was not a direct relation between the variables due to the value of Sig. (over 0.05). The data showed that the counties' economic development was not influenced directly either of the value nor of the number of the implemented projects.



Conclusions, research limitations and future trends of research

The study revealed that, for the studied period, 40 of 41 counties registered a GDP rate growth, the highest rate growth being registered in Giurgiu County and the largest decrease in Sibiu County. As the unemployment rate was concerned, it decreased only in 8 counties, a situation that could be influenced by the economic crisis

Regarding the relation between ROP projects financial value and the GDP rate growth, we could assume that ROP played a significant role in the economic development of the Romanian counties but a direct relationship between the two variables could not be proven. Concerning the unemployment rate, it could be observed that the counties with the highest value of ROP projects registered a slower increase of the unemployment rate but neither in this case, a direct relationship could be established. The data validated partially the first two hypotheses of the study.

The study revealed that there were significant differences between counties in terms of projects financed by ROP and their values. Regarding the counties, the difference between the number of implemented projects was very high. Tulcea County implemented the lowest number of projects (28) and Arges County implemented eight times more projects (228). Regarding the financial values of the implemented projects, Olt County had the lowest financial value and implemented projects with a value of 142 million Lei and Ilfov county had the highest financial value of the implemented projects of 1.4 billion Lei, which represented ten times more than the financial value of the projects implemented in Olt county,

In conclusion, the ROP played a major role in the development of the Romanian counties and regions and it could be assumed that the programme helped at strengthening the resilience of local and regional economies. Even if the unemployment rate increased in the majority of counties and regions, it could not be affirmed that ROP did not have the expected results. It should be taken into account that 2007-2013 financial exercise was the first period in which Romania had been allocated European funding and in the same period, the local and regional economies were influenced by an economic shock- the economic crisis which affected the normal trajectory of the economy. The study results showed that ROP has an impact on regional and local resilience through its effect on GDP growth.

A limitation of the research is that we presumed that ROP had the most important impact on the economic growth and implicitly, on the resilience of the Romanian counties. Another limitation is that the implementation of the operational programmes and the local resilience are influenced by good or poor governance. As future research, a study regarding the impact of governance on European funds absorption will be made because we would have a better picture of the situation and we could establish if there is a direct relation between European projects implementation and resilience.

www.cse.uaic.ro

Acknowledgment: This work was supported by a grant of the Ministry of Research and Innovation, CNCS - UEFISCDI, project number PN-III-P4-ID-PCCF-2016-0166, within the PNCDI III project "ReGrowEU - Advancing ground-breaking research in regional growth and development theories, through a resilience approach: towards a convergent, balanced and sustainable European Union"

References

- Aiginger, K. (2009), Strengthening the Resilience of an Economy. Strategies to Prevent another Crisis, WIFO Working Papers, No. 338, Austrian Institute of Economic Research (WIFO), Vienna.
- Bachtler, J. and Turok, I. (1997), Conclusions: An Agenda for Reform, in: Bachtler, J. and Turok, I. (eds.), *The Coherence of EU Regional Policy: Contrasting Perspectives on the Structural Funds*, London: Jessica Kingsley Publishers, pp. 346-372.
- Bachtler, J. and Wishlade, F. (2004), *Searching for Consensus: The Debate on Reforming EU Cohesion Policy*, European Policy Research Papers, No. 55, European Policies Research Centre, University of Strathclyde, Glasgow.
- Bachtler, J. and Wishlade, F. (2005), *From Building Blocks to Negotiating Boxes: The Reform of EU Cohesion Policy*, European Policy Research Papers, No. 57, European Policies Research Centre, University of Strathclyde, Glasgow.
- Bachtler, J. and Wren, C. (2006), The evaluation of EU cohesion policy: research questions and policy challenges, *Regional Studies*, 40(2), pp. 143-153.
- Béné, C., Newsham, A., Davies, M., Ulrichs, M. and Godfrey Wood, R. (2014), Resilience, poverty and development, *Journal of International Development*, 26, pp. 598-623.
- Boldrin, M. and Canova, F. (2001), Inequality and Convergence in Europe's Regions: Reconsidering European Regional Policies, *Economic Policy*, 16(32), pp. 207-253.
- Dall'erba, S. and Le Gallo, J. (2008), Regional convergence and the impact of European structural funds 1989-1999: a spatial econometric analysis, *Papers in Regional Science*, 82(2), pp. 219-244.
- Deardorff, A. V. (2004), The Past, Present and Future of the European Union, *IEA Conference Volume*, 138, PALGRAVE Macmillan.
- Di Caro, P. (2015), Testing and explaining economic resilience with an application to Italian regions', *Papers in Regional Science*.
- ECOTEC (2003), Evaluation of the Added Value and Costs of the European Structural Funds in the UK, *Final Report to the Department of Trade and Industry and the Office of the Deputy Prime Minister*, ECOTEC Research and Consulting Ltd, London.
- Ederveen, S., de Groot, H.L.F. and Nahuis, R. (2002), Fertile soil for the Structural Funds?

 A panel data analysis of the conditional effectiveness of European Cohesion Policy,
 CPB Discussion Paper, No.10, CPB Netherlands Bureau for Economic Policy
 Analysis, The Hague.
- Ederveen, S., H. de Groot and Nahuis, R. (2006), Fertile Soil for Structural Funds? A Panel Data Analysis of the Conditional Effectiveness of European Cohesion Policy, *Kyklos*, 59(1), pp. 17-42.
- European Commission (1996), *First Report on Economic and Social Cohesion*, Office for Official Publications of the European Communities, Luxembourg.





- European Commission (2001), Unity, solidarity, diversity for Europe, its people and its territory, Second Report on Economic and Social Cohesion, Office for Official Publications of the European Communities, Luxembourg.
- European Commission (2002), Community added value: Definition and evaluation criteria, Working Paper, DG Regional Policy, Commission of the European Communities, Brussels.
- European Commission (2004), A new partnership for cohesion: convergence, competitiveness, cooperation, Third Report on Economic and Social Cohesion, Office for Official Publications of the European Communities, Luxembourg.
- European Commission (2014), Trecere în revistă a politicii regionale (retrieved from http://ec.europa.eu/regional policy/what/index ro.cfm).
- European Commission (2018), European Quality of Government Index 2017 (retrieved from https://ec.europa.eu/regional policy/en/newsroom/news/2018/02/27-02-2018european-quality-of-government-index-2017).
- European Commission (2019), What is the regional policy (retrieved from https://ec.europa.eu/regional_policy/ro/policy/what/history/).
- Eurostat (2013), Eurostat regional yearbook 2013 (retrieved from https://ec.europa.eu/ eurostat/documents/3217494/5784301/KS-HA-13-001-EN.PDF).
- Eurostat (2017), Archive: PIB-ul la nivel regional (retrieved from http://ec.europa.eu/ eurostat/statistics-explained/index.php/Archive:PIB-ul la nivel regional).
- Furubo, J-E., Rist, R.C. and Sandahl, R., (2002), International Atlas of Evaluation, Transaction Publishers, New Brunswick, New Jersey.
- Le Gallo, J., S. Dall'Erba and Guillain, R. (2011), The Local Versus Global Dilemma of the Effects of Structural Funds, Growth and Change, 42(4), pp.466-490.
- Michie, R. and Fitzgerald, R. (1997), The Evolution of the Structural Funds, in: Bachtler, J. and Turok, I. (eds.), The Coherence of EU Regional Policy: Contrasting Perspectives on the Structural Funds, Jessica Kingsley Publishers, London, pp. 14-28.
- Ministry of Regional Development and Public Administration (2018), Politica de dezvoltare regională - concepte (retrieved from http://www.mdrap.ro/dezvoltareregionala/politica-de-dezvoltare-regionala).
- Mohl, P. and Hagen, T. (2010), Do structural funds promote regional growth? New evidence from various panel data approaches, Regional Science and Urban Economics, 40(5), pp. 353-365.
- National Institute of Statistics (2019), Statistics (retrieved from http://statistici.insse.ro: 8077/tempo-online/#/pages/tables/insse-table).
- Pollitt, C. (1998), Evaluation in Europe: Boom or Bubble?, Evaluation, 4(2), pp. 214-224.
- Rodríguez-Pose, A. and Fratesi, U. (2004), Between Development and Social Policies: The Impact of European Structural Funds in Objective 1 Regions, Regional Studies, 38(1), pp. 97-113, (retrieved from DOI: 10.1080/00343400310001632226).
- Rodríguez-Pose, A. and Novak, K. (2013), Learning processes and economic returns in European Cohesion Policy, *Investigaciones Regionales*, 25, pp. 7-26.
- Sapir A., Aghion P., Bertola G., Hellwig M., Pisani-Ferry J., Rosati D., Viñals J. Wallce H., Buit M., Nava M. and Smith P.M. (2004), An Agenda for a Growing Europe: The Sapir Report, Oxford University Press, Oxford.
- Tarschys, D. (2003), Reinventing Cohesion, The Future of European Structural Policy, Report No. 17, Swedish Institute for European Policy Studies.
- Zaman, Gh. and Georgescu, G. (2009), Structural Fund Absorption: A New Challenge for Romania?, Romanian Journal of Economic Forecasting, 10(1), pp. 136-154.

www.cse.uaic.ro

| | Projects' | No.of | GDP | GDP | Δ% | Unemployment | Unemploymen |
|-----------|---------------|-------------|-----------|-----------|-----------------|----------------|----------------|
| Counties | value | implemented | 2007 | 2015 | | rate 2007 (%) | rate 2015 (%) |
| Countres | (LEI) | projects. | (Mil.LEI) | (Mil.LEI) | | 1410 2007 (70) | 1410 2010 (70) |
| Alba | 570.500.219 | 73 | 8066,3 | 11776,4 | 46 | 5,7 | 5.6 |
| Arad | 699.815.705 | 58 | 9469 | 15321,7 | 62 | 2,3 | 2.4 |
| Argeş | 1.037.793.839 | 229 | 14340,9 | 19079 | 33 | 4.8 | 5.1 |
| Bacău | 744.806.073 | 108 | 10033,7 | 14001 | 39 | 4.4 | 6.6 |
| Bihor | 579.962.213 | 73 | 11861,1 | 16218,9 | 37 | 2.4 | 3.5 |
| Bistrita | 558.506.047 | 67 | 5069,6 | 7483.3 | 48 | 2.4 | 3.5 |
| Năsăud | | | , . | , , , , , | | | |
| Botoşani | 647.770.135 | 43 | 4686,1 | 6913 | 47 | 4 | 4.9 |
| Braşov | 427.999.008 | 111 | 13987 | 23442,6 | 68 | 5 | 3.8 |
| Brăila | 657.036.990 | 67 | 5859,3 | 7712,4 | 32 | 3.9 | 7.2 |
| Buzău | 449.350.643 | 85 | 6408,2 | 10258,8 | 60 | 5.5 | 10 |
| Caraş- | 303.998.916 | 47 | 5176,8 | 7634,7 | 47 | 6.8 | 4.2 |
| Severin | | | Í | | | | |
| Călărași | 278.686.912 | 77 | 3274,4 | 6550,5 | 100 | 4.7 | 7.3 |
| Cluj | 838.341.736 | 185 | 18420,6 | 31178,2 | 69 | 3 | 2.3 |
| Constanța | 1.037.378.750 | 148 | 16907,6 | 32782,9 | 94 | 3.5 | 3.6 |
| Covasna | 382.044.339 | 56 | 3617,6 | 5105,5 | 41 | 7 | 5.7 |
| Dâmbovița | 1.082.506.018 | 125 | 8181,4 | 12629,6 | 54 | 5.3 | 7.2 |
| Dolj | 1.159.967.594 | 173 | 10795,2 | 17230,8 | 60 | 4.9 | 9.5 |
| Galați | 442.647.929 | 87 | 9157,6 | 12615,8 | 38 | 5.7 | 9 |
| Giurgiu | 318.971.840 | 47 | 2769,9 | 6638,9 | 140 | 4.5 | 6.5 |
| Gorj | 463.607.874 | 75 | 7244,6 | 11310,8 | 56 | 5.9 | 7.7 |
| Harghita | 428.491.610 | 84 | 5303,1 | 7367,1 | 39 | 5.1 | 5.5 |
| Hunedoara | 763.843.982 | 92 | 9045,1 | 10878,5 | 20 | 4.8 | 6.1 |
| Ialomița | 269.346.245 | 50 | 3367,8 | 6615,3 | <mark>96</mark> | 6.9 | 7.9 |
| Iași | 806.787.267 | 161 | 12473,5 | 21755,5 | 74 | 5.6 | 4.5 |
| Ilfov | 1.428.643.976 | 101 | 10329,6 | 19129,4 | 85 | 1.4 | 1.2 |
| Maramureş | 532.114.880 | 108 | 6972,7 | 12092,2 | 73 | 3.4 | 3.5 |
| Mehedinți | 592.369.363 | 65 | 3736,6 | 5122,8 | 37 | 8.1 | 11 |
| Mureș | 650.393.734 | 103 | 10312,6 | 15595,1 | 51 | 4.3 | 4.8 |
| Neamţ | 618.084.861 | 133 | 6653,3 | 9732,6 | 46 | 3.8 | 6.1 |
| Olt | 141.777.971 | 76 | 5617,5 | 8645 | 54 | 4.8 | 8.1 |
| Prahova | 616.489.288 | 163 | 16741,9 | 28086,3 | 68 | 3.8 | 4.3 |
| Sălaj | 393.418.562 | 88 | 3857,9 | 6087,1 | 58 | 4.4 | 5.4 |
| Satu Mare | 354.442.198 | 55 | 5448,1 | 8609,7 | 58 | 2.6 | 4 |
| Sibiu | 596.567.376 | 62 | 9437,2 | 8609,7 | - 9 | 3.1 | 3.7 |
| Suceava | 825.369.696 | 146 | 8914,1 | 12771 | 43 | 3.7 | 6.5 |
| Teleorman | 462.277.696 | 44 | 4809,8 | 7047,6 | 46 | 7.3 | 11.6 |
| Timiş | 637.379.517 | 56 | 18556,1 | 33611,6 | 81 | 1.6 | 1.3 |
| Tulcea | 378.823.654 | 28 | 3278,7 | 5518,3 | 68 | 3.8 | 5.5 |
| Vaslui | 478.032.061 | 30 | 3830,3 | 6297,2 | 64 | 9.7 | 11.2 |
| Vâlcea | 937.881.678 | 137 | 6784,4 | 9758,3 | 44 | 3.4 | 4.7 |
| Vrancea | 370.898.676 | 57 | 4683.4 | 7296,1 | 56 | 3.8 | 5.5 |



