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# ANALYSIS OF THE STRUCTURAL FUNDS IMPACT ON ECONOMIC DEVELOPMENT IN ROMANIA

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Abstract—The present research objective is to analyze the impact of structural funds available in Romania during 2007 - 2013, especially for economic development of the Romania's Western Region. The impact analysis will focus on the analysis of evolution of some socio-economic indicators such as absorption rate of structural funds, Gross Domestic Product per capita (GDP), employment rate, unemployment, job vacancies, and the average net salary. The working hypothesis is a high absorption rate of the structural funds can positively influences the economic development of the Romania and especially of the Western Region, which is subject of the case study in this paper.

*Keywords*—competitiveness, economic development, structural funds, Western Region.

### I. INTRODUCTION

THE largest part of fiscal equalization transfers at the level of the European Union (EU) is spend under the auspices of the Structural Funds Programme. The interest in effects of the EU's structural policy roots in empirical work on regional growth and convergence [1]. The purpose of structural funds lies in the transformation and upgrading of the regions' economy in the EU countries, lagging behind in their preparation for the competition in the single market and in the Euro Zone. Integrated regional development strategies positively affect: human resources development, creating a healthy environment, infrastructure, good improving the economic competitiveness, creating new jobs, increasing employment (decreasing unemployment), supporting small and medium size enterprises, attracting the foreign investors, the gross domestic product (GDP) per capita growth, net average salary increase, increase the number of persons who works in the research and development field, increasing innovation in all economic sectors etc. [2] - [4]. For the programme period 2007 - 2013, the economic and social cohesion policy of the EU has a budget of 308 billion Euros, with three major objectives:

(1) Convergence, an objective supported by 251 billion Euros, dedicated to regions of the EU Member States with a GDP per capita less than 75% of the Community average; (2) Regional Competitiveness and Employment objective, for which 49 billion Euros is allocated, aimed at regions that are not eligible under the convergence objective; (3) European Territorial Cooperation, an objective supported by 8 billion Euros, allocated for transnational cooperation, cross-border and inter-regional cooperation [5], [6].

The model of financial support through the *structural* funds and their impact on the economic development of the EU member states is not new. Literature abounds in studies about the integration effects on the economic growth and prospective estimation become complex. For this purpose, in the beginning, general equilibrium models were used, subsequently the researches were expanded by incorporating factors of imperfect competition and by being supplemented with retrospective analyses on economic growth performance of the EU member countries [2] - [4].

In this context, the paper objective is to analysis the impact of structural funds on the economic development of Romania (especially of the Western Region). There have been identified, process, and analyzed adequate statistical data; appropriate tables and graphs will present the economic indicators that allow the identification of the causes that could improve economic development.

# II. STRUCTURAL FUNDS AVAILABLE FOR ROMANIA IN 2007 -2013 PERIOD

The Cohesion Policy offered Romania the opportunity to attract almost 20 billion Euros during 2007 – 2013. In this context, according to the European Commission, Romania currently has the eighth highest Cohesion Policy allocation, being surpassed only by Poland (67.3 billion Euros), Spain (35.2 billion Euros), Italy (28.8 billion Euros), the Czech Republic (26.7 billion Euros),

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Germany (26.3 billion Euros), Hungary (25.3 billion Euros), and Greece (20.4 billion Euros) [7], [8].

According to the North-East Development Agency reports, the total amount of structural and cohesion funds allocated to Romania in the period 2007-2013 were of 19,668 billion Euros [9], [10].

At the national level, the funds allocated through the Cohesion Policy are distributed among seven OP. Three of them are financed through the European Regional Development Fund (the Regional OP, the Increase of Economic Competitiveness Programme, and Technical Assistance Programme) while other two programmes are funded through the European Social Fund (the Human Resource Development Programme Administrative Capacity Development Programme). Other two programmes (the Environment Programme and the Transport Programme) are financed both by the European Regional Development Fund and by the Cohesion Fund. Table 1 present the structural funds available for Romania in the period 2007 - 2013, by each OP [11].

Of the total structural funds available for regional development in the period 2007 – 2013, Romania has managed to absorb a very low percentage. The absorption of structural funds in December 2013 was 33.47% (19,668 billion Euros). Fig. 1 shows the breakdown of absorption rate of the structural funds to each year. Fig. 2 shows the chart of the Increase of Economic Competitiveness Programme OP by presenting the breakdown of EU funds absorption rate according to OP data available for the period 2007 - 2013 [11].

The performances dissatisfaction regarding the rate of European funds absorption in the case of Romania have multiple causes as: national accounting rules, business uncertainties, uncertainties financial environment, legislative dynamics, lack of consistent process for drafting projects, bureaucracy, corruption

TABLE 1 STRUCTURAL FUNDS AVAILABLE FOR ROMANIA (2007 - 2013)

Operational Programme	Funds allocated	
(abbreviation used in Fig. 2)	Billion Euros	
Operational Programme Technical	0.17	
Assistance (OPTA)		
Operational Programme Administrative	0.208	
Capacity Development (OPACD)		
Sectoral Operational Programme Increase of	2.554	
Economic Competitiveness (OSPIEC)		
Regional Operational Programme (ROP)	3.726	
Sectoral Operational Programme Human	3.476	
Resources Development (OSPHRD)		
Sectoral Operational Programme	4.512	
Environment (OPENV)		
Sectoral Operational Programme Transport	4.565	
(OSPT)		

Analyzing data dynamics in Fig. 2 there can be seen that the most competitive program was the one dedicated to Administrative Capacity Development (OPACD), with an absorption rate of 50.59%. Regional OP had an

absorption rate of EU funds of 44.87%. The third OP found on the top of European funds absorption was the one dedicated to the Increasing of Economic Competitiveness with 36.4 %.

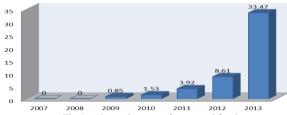


Fig.1. Absorption rate of structural funds in the period 2007 - 2013.

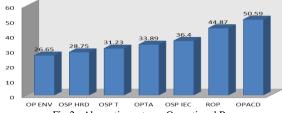


Fig.2. Absorption rate on Operational Programs (December 30, 2013).

The low rate of absorption of the OPENV, OSPHRD and OSPT was determinate by implementation management problems that occurred (the European Commission has blocked the financial support).

Spulbar consider that the international financial crisis had generated negative effects on the absorption of the Structural Funds [12].

From Berica point of view, we can identify two main reasons that generate the inefficiency of the Structural Funds in recipient countries: firstly, a very high percentage of the Structural Funds is allocated for prosperous EU countries and secondly, the government policies lead to errors and unjustified gains. The quality of governance and the public administration generate a high efficiency of the Structural Funds, but their inability to eliminate or minimize corruption is that the economic al and the social benefits that come from Structural Funds absorption is rather low [13].

# III. ANALYSIS OF THE STRUCTURAL FUNDS IMPACT ON ROMANIA'S WEST REGION ECONOMIC DEVELOPMENT

From the economic point of view, the West Region is one of the richest in Romania, after Bucharest – Ilfov (Fig. 3). The GDP per capita of the Western Region is higher than the national average of GDP per capita, in the period 2007 - 2011. Furthermore, analyzing the evolution of GDP per capita there can be seen that since 2008 the GDP began to decrease; 2008 is the year of the economic crisis beginning that have affected all European countries and represents the early years of implementation the structural funds (when absorption rate was very low in the case of Romania). Since 2011, the GDP per capita increasing was associated with an increased rate of

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absorption of structural funds [14], [15].

The regional development depends on the workforce positive dynamics. According to statistic data in 2007 – 2013 period, the Western Region has kept the population around 1.9 million people (Table 2). Even if the birth rate is falling, the linear trend of the population in the Western Region has been maintained because of the emigration low rate, the foreign investments, and because of attraction given by the region's great universities [16].

Table 2 shows the sharing the OSPHRD funds by Romanian region and per capita. The absorption of OSPHRD funds per capita in the Western Region is very high. These demonstrate a high inclusion rate of the OSPHRD available funds. Furthermore, the socioeconomic indicators characterized the Region competitiveness. Table 3 presents the evolution of these indicators, at National level and for Western Region (for the period 2007 - 2012), all indicators have better values than those at the national level, which proofs that the Western Region is a competitive one. In the period under review, all economic indicators have evolved sinuous. This evolution was influenced by the economic crisis and by the low rate of Structural Funds absorption; 2011 is the reference year when employment rate has begun to increase, the unemployment rate and the rate of jobs vacancies have start to decrease.

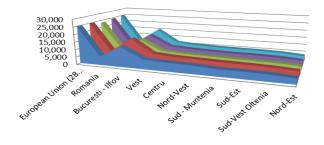


Fig.3. Share of GDP per capita in developing regions of Romania, the national average, and the of GDP per capita between 2007-2011 [15].

TABLE 2
SHARE OF FUNDS FROM OPERATIONAL SECTORAL PROGRAMME HUMAN
RESOURCES DEVELOPMENT (OSPHRD) BY REGIONS

Region	Population Million People	OSPHRD Million Euros	Euros per capita
Northwest	2.8	257	91.79
Bucharest - Ilfov	2.2	155	70.45
West	1.9	132	69.47
Centre	2.6	150	57.79
Northeast	3.8	186.3	49.03
Southwest	2.4	110.6	46.08
South Muntenia	3.4	150	44.12
Southeast	3.0	92.86	30.95

Note: The amount for OSPHRD are obtained through dividing the original amount expressed in national currency to 4.5015 (official exchange rate in March, 2014) [11]

The good evolutions of the employment, unemployment, job vacancies rates, and the absorption of

structural funds have determinate a positive evolution of the average net salary indicator (Fig. 4). Although in previous years the average wage was in the middle of the ranking, starting with 2011 average net salary in the Western Region is placed closer after the value for the Bucharest-Ilfov Region [16].

TABLE 3
EVOLUTION OF SOCIO-ECONOMIC INDICATORS (2007 – 2012) [16]

EVOLUTION OF SOCIO-ECONOMIC INDICATORS (2007 – 2012) [10]							
Indicators	2007	2008	2009	2010	2011	2012	
National	63.4	63.6	60.6	59.6	59.6	61.1	
employment							
Employment	69.3	68.4	64.7	63.6	64	65.9	
National	4	4.4	7.8	7	5.2	5.4	
Unemploy-							
ment							
Unemploy-	3.3	3.8	7.4	5.9	3.7	3.9	
ment							
National Job	2.06	1.94	0.88	0.59	0.64	0.60	
vacancies							
Job Vacancies	2.06	1.02	0.7	0.82	0.6	0.5	

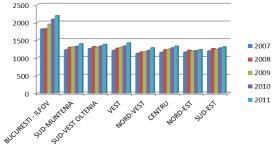


Fig. 4. Evolution of average net salary (2007 – 2011).

The relative poverty socio-economic indicator can characterize welfare of a region; if this indicator has lower values the better for the region. Given that Western Region is characterized by high values of GDP per capita, high employment, low unemployment, high values of the net average salary, this determine a low value of relative poverty of the Region [16].

### IV. RESULTS AND DISCUSSIONS

Romania, as a member state of the EU, is supported in the development process by European funds. Since the creation of a viable transport infrastructure to workforce qualification standards comparable to those of other Member States, all this can be achieved through EU funds. The EU funds are the Romania's chance to recover socio-economic disparities and to become competitive with respect to other EU countries. Implemented on the principle of own contribution (EU gives a percentage of total costs and the Member State undertakes to support its own contribution of these costs), the European funds represent a net gain for Romania - development goals can be met by relatively lower costs than if they had made just from national funds.

The socio-economic indicators analysis has identify that Romania's EU integration has meant the introduction of the country in the European cohesion policy. Through

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the European projects there have been increased the living standards, translated into GDP growth, reducing the risk of poverty, decreasing the unemployment, growing the rate of employment, attracting foreign investors. At the end of implementation period of structural funds allocated to Romania for the period 2007-2013 we can see the following results. Economic growth was influenced on the one hand by the economic crisis that began in 2008 and on the other hand by the absorption of structural funds.

It can be seen that in 2008, when the rate of absorption was very small, only 0.85 percent and when began the economic crisis, all indicators have declined. The GDP per capita fell, the employment rate, the number of job vacancies, but instead increased unemployment and relative poverty of the population. The difficult situation it recovers starting with 2011 when the effects of increasing the absorption of structural funds begin to be felt in the Western Region of Romania. Starting by this year are rising the GDP per capita and employment rate and therefore are reduced the unemployment rate and job vacancies as we can see in Fig. 5.

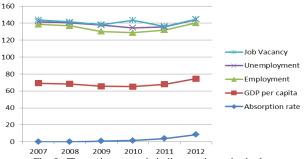


Fig. 5. The socio-economic indicators dynamics in the West Region of Romania (2007 – 2013).

West Region is one of the most competitive regions in Romania (eight in total). The analysis of the Western Region socio-economic indicators identifies always a position immediately after the Bucharest-Ilfov region. From the point of view of centre-periphery development theory, Western Region positioned on the Romania west border does not benefit from the Bucharest pole of influence, but from openness to western and central proximity to the EU. If the absorption rate of the Structural Funds would have been higher, the welfare would feel earlier than 2011 and the economic crisis effects would have been annihilated.

The limits of this work were imposed by lack of information for the years 2012 and 2013 and by missing information for projects developed by regions. The future researches will focus on the detailed study of the structural funds in the Western Region, how many projects were submitted, how many projects were rejected, the projects implemented and their impact on regional development of this region.

#### V. CONCLUSIONS

At the end of implementation period of structural funds, we can draw the following conclusions for the Western Region:

- Structural funds have influenced the economic development of Western Region;
- Starting with 2011 when the absorption rate of structural funds started to rise the indicators which emphasizes the economic development also began to increase;
- If the absorption of structural funds had been highest, the influence of structural funds on the economic development of Western Region would have been more obvious;
- In the future framework 2014-2020, Romania have to be more competitive in the absorption of structural funds;

For increasing the absorption rate in the next framework, Romania has to do some changes in the terms of legislations, transparency, elimination of corruption and bureaucracy.

#### REFERENCES

- O. S. Becker, P. H. Egger, and M. Von Ehrlich. "Going NUTS: The effect of EU Structural Funds on regional performance." Journal of Public Economics, vol. 94.9 (2010), pp. 578-590.
- [2] B. Balassa, "European Economic Integration", Amsterdam: North Holland, 1975, pp. 23-134.
- [3] R. Baldwin, "The Growth Effects of 1992", Economic Policy, October 1989, pp 123-145.
- [4] R. Baldwin, P. Haaparanta, and J. Kiander, "Expanding membership of the EU", Cambridge University Press, 1996.
- [5] A. Smith and A. Venables, "Completing the Internal Market in the European Community", European Economic Review, vol. 32, 1988.
- [6] G.Zaman and G.Georgescu, "Structural fund absorption: A new challenge for Romania?", Romanian Journal of Economic Forecasting, vol. 1/2009, pp. 136-154.
- [7] European Commission, "Cohesion Policy 2007-2013: Indicative Financial Allocations", 2007, p.1.
- [8] T. Roman, "Regional development and European convergence ", "Dezvoltarea regională şi convergența europeană", Cross-Cultural Management Journal, vol. III, Issue 2(15), pp.12-17, 2006.
- [9] R. M. Sirbu, "European Union Strategy and Foreign Direct Investments Impact on Romania's Regional Development", Proceedia - Social and Behavioral Sciences, vol. 124, pp. 442-450, 20 March 2014.
- [10] Ministry of European Funds, "European Summit on the Multiannual Financial Framework for 2014-2020", 2014.
- [11] Ministry of European Funds, "European funds allocated for Romania between 2007-2013 and 2014-2020", 2014.
- [12] C. Spulbar, "Strengthening Romanian bank's role in the European funds absorption." Finance Challenges of the Future, vol. 1, no. 9, 2009, p.174
- [13] C. Berica, "Factors that influence the low rate of Structural Funds absorption in Romania", CES Working Papers, II (4), 2010, p. 3
- [14] F. Frant, "Economic situation of the Western Region", "Situația economică a Regiunii de Vest", Studia Universitatis "Vasile Goldiş" Arad, Seria Științe Economice, vol. 19/2009, Partea a IVa, pp. 9-15.
- [15] Eurostat, "Regional gross domestic product by NUTS 2 regions million EUR", 2014.
- [16] National Institute of Statistics, Institutul Naţional de Statistică 2014, <a href="https://statistici.insse.ro/shop/?lang=ro">https://statistici.insse.ro/shop/?lang=ro</a>