

**NATIONAL UNIVERSITY OF POLITICAL STUDIES AND PUBLIC
ADMINISTRATION**

DOCTORAL SCHOOL IN "ADMINISTRATIVE SCIENCES"

THESIS

**SCIENTIFIC COORDINATOR:
Prof. Univ. Dr. ANI MATEI**

**PhD candidate:
ERIKA GEORGETA KUCIEL**

BUCHAREST

2021

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**STRUCTURAL FUNDS AND PERFORMANCE OF REGIONAL
DEVELOPMENT**

- DOCTORAL THESIS SUMMARY -

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THANKS

Now, at the end of my doctoral internship, I have deep feelings of fulfillment, happiness and satisfaction, all coming from the professional and especially personal satisfaction of the advanced studies that I managed to complete.

In this way, I would like to thank, first of all, Mr. Prof. Univ. Dr. ANI MATEI, the scientific coordinator of my doctoral thesis, for the time he gave me, for all the advice, suggestions and guidance he offered me throughout this doctoral period.

With special gratitude, love and respect, I also thank my parents Marina and Petru Kuciel for their unconditional love, support and all the encouragement, I am proud to be their daughter. I also thank my boyfriend Cristi for all the moral support he offered me, as well as his parents (mrs. conductor "math teacher" from the general school and her husband).

PhD candidate
Erika Georgeta Kuciel

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KEYWORDS

Structural Funds, European Union, regional development, performance, cohesion policy, operational programs, impact, Managing Authority for the Large Infrastructure Operational Program, Transport Sectoral Operational Program, Ministry of European Funds, Ministry of Transport, Cohesion Fund, Regional Development Fund, absorption rate.

INTRODUCTION

The topicality and importance of the topic of scientific research

Since the pre-accession period, European funds have been one of the most important topics, through them, a series of projects are underway.

The topic of "european funds" is debated daily, both at the political, national and regional level, and at the social level. If before the accession to the European Union, most projects supported by the European Commission through financial aid in the field of transport, were carried out through ISPA, PHARE and SAPARD, after January 1-st, 2007, the time of our country's accession to the European Union, the discussion focused on cohesion policy funds, the Cohesion Fund, the European Regional Development Fund and the European Social Fund, so the first planning and allocation period of EU funds for Romania was between 2007-2013.

Prior to accession, in the field of Transport, projects were carried out on the road and railway sector, many national roads as well as railway lines were rehabilitated/modernized. Subsequently, starting with the availability of non-reimbursable funds related to the regional development policy, the projects were carried out through the Transport Sectoral Operational Program within the Ministry of Transport (under its various names) for 2007-2013 and currently through the Large Infrastructure Operational Program managed by the respective competent institution, the Ministry of European Investments and Projects.

Through the non-reimbursable financial aid made available to the member states and implicitly to our country, by the European Union, projects can be realized that without this support, would not be possible, at least as far as Romania is concerned. In the period 2007-2013, the European Commission contributed 75% of the eligible value of the project and the remaining 25% was provided from the state budget. In the current programming period, this percentage has increased, reaching 85% of the total eligible cost of a project, the national co-financing being lower, respectively 15%, thus relieving the state budget (in the case of airports, the percentage it is even lower, of 13%, these contributing with a financing from own sources in the amount of 2%, situation that we encounter also in the development of some projects in the Environment sector). As in the previous budget, it was not possible to complete, fully implement the projects, they have been phased and are still ongoing, especially the railway (but also on the road sector) large and with a significant contribution non-reimbursable community aid; however, we hope that they will be completed in the current period. However, what is very important is the fact that the state institutions that are, after all, the beneficiaries of these non-reimbursable funds (at least it is written in the Project Financing Agreements because otherwise, the real beneficiaries are all of us, the inhabitants of the country), have begun to apply for funding for new projects, both on transport and environmental infrastructure, even if the route of beetles is monitored or some of the reimbursement requests are related only to the salaries of experts of all kinds, it is important that we absorb European money.

In the Transport sector, as mentioned above, in the previous budgetary framework, most projects were in the road and rail sectors, while now, the projects in the air and sea sector are lagging behind (there were few projects in the previous financial year).

In the current european budgetary framework, 2014-2020, through LIOP, the largest share is the projects of axes 3 and 4 as well as those for reimbursement of expenses requested by hospital units, related to priority axis 9. However, it should be noted that the largest, significant amounts requested for reimbursement to the Commission, come from the field of transport, given that the ministry dealing with this sector no longer has a Managing Authority but is only an intermediate body (payments

are made by the authorized directorate of the MA LIOP). Due to the fact that cohesion policy has been allocated almost a third of the total budget of the European Union to help member states, they do their utmost to meet their objectives of reducing the existing economic, social and territorial disparities at Community level. For this reason, we are under the n + 3 rule, which means that projects must be implemented by the end of 2023, otherwise, unused funds that have been allocated to projects will be decommitted. During this programming period, the focus is on transport infrastructure, environmental protection, SME competitiveness, research, technological development, improving access to and use of ICT, low carbon, investment in education and training, promoting social inclusion and helping disadvantaged people.

For the next programming period, 2021-2027, the regional policy continues its approach to meet the objectives, through operational programs developed in areas such as: digitization, research and innovation, energy, climate change, waste management, transport, education, social inclusion , combating poverty, health, territorial and urban development, tourism, cultural heritage, labor force, fair transition; projects to be because European funds, are.

RESEARCH HYPOTHESES AND OBJECTIVES

Our scientific research aims to draw relevant conclusions regarding the contribution of European Union funds to the performance of regional development, starting from the following hypotheses:

- hypothesis 1: does cohesion policy provide the appropriate framework for regional development?
- hypothesis 2: do structural instruments contribute to the performance of regional development?
- hypothesis 3: can regional disparities be reduced through non-reimbursable european funds?

RESEARCH METHODOLOGY

Research objectives

The general objective of scientific research is the analysis of the performance of regional development determined by accessing the funds of the cohesion policy of the European Union, the extent to which Romania has managed to reduce regional disparities compared to other EU member states and inter-regional disparities.

The specific objectives taken into account in carrying out this scientific approach, in order to achieve the general objective, are the following:

- presentation of the theoretical conceptual framework of the European Union, of the regional development policy, of the pre-accession and structural funds, of the national and european legislative framework for the previous and current programming period, of the performance theories, of the impact models of the structural funds on regional development performance, in the literature;
- presentation of the theoretical aspects regarding the concepts of region, development regions, in the specialized literature;
- comparative analysis of operational programs for the period 2007-2013 to see to what extent the funds contribute to the performance of regional development;
- comparative analysis of operational programs for the period 2014-2020;
- comparative analysis of the absorption rate at the level of operational programs on June 1-st, 2020;
- presentation of the next European financial framework;
- comparative analysis of expenditure situations by programming periods and areas;
- comparative analysis of objectives, financial allocations related to different programming periods, by development regions as well as between EU member states;
- comparative analysis of the situation of reimbursements by operational programs, financial years, activity sectors;

- conducting a case study regarding the European non-reimbursable funds related to the Large Infrastructure Operational Program 2014-2020;
- presentation of conclusions derived from scientific research.

In scientific research, research methodology and perspectives have combined qualitative research with quantitative research, the descriptive-conceptual sphere with the empirical type. The current research starts from the deductive approach on the concepts related to the European Union, cohesion policy, pre and post-accession structural funds related to Romania, operational programs managed by the Managing Authorities within the line ministries and then continues with the documentation and systematization stage. of the approaches from the specialized literature within which are studied numerous specialized works of foreign and Romanian authors, different reports and reports of the specialized institutions thus, being consulted bibliographical references (with reference in over 200 footnotes) consisting of books and works published by various authors, national and international regulations, web pages, links.

In order to achieve the general objective of scientific research, several research methods have been used, namely:

- descriptive method for the literature on structural and investment funds, regional development, development region/region, performance, impact, tools, evaluation methods, evaluation models;
- the comparative method used in the analysis of the concepts mentioned above to identify similarities and differences;
- the study of the synthesis documents, respectively the reports, the reports elaborated by the institutions/authorities with competences in the field of structural funds;
- the method of collecting data from the consulted synthesis documents;
- graphical representation for highlighting the results in numbers.

The scientific paper **"Structural Funds and the performance of regional development"** is divided into four chapters.

The first chapter, ***"Cohesion Policy of the European Union - past, present and future"***, presents a brief history of the European Union, focusing on the main issues, milestones, since its inception and until Brexit. The objectives of the European

Union in terms of economic and social cohesion, regional development policy, its principles and objectives in various programming periods are then presented. The situation of the financial allocations on operational programs related to the previous budgetary framework as well as their sources of financing are presented at a comparative level. Also, a “review” of the Europe 2020 Strategy was made, presenting the main objectives, financial allocations as well as the programs through which the European money reaches the final recipients, in the period 2014-2020. It continued with comparative analyzes regarding reimbursements from the FESI, pre-financings received from the Commission on operational programs, the absorption rate at the same programs, the situation of LIOP reimbursements until the end of March 2020 and on the Transport and Environment sectors. The national and european legislative framework applicable to the funds related to the programming periods 2007-2013 and 2014-2020, respectively, was presented, as well as the structural instruments that our country benefited from both in the pre-accession period and after the entry into the community bloc.

The European Union is a group of 27 European states, whose institutions operate in Belgium and France. The idea of its creation¹ was born as a result of the collaboration and integration process in 1951 whose initiators were Robert Schuman and Jean Monnet. The current name of the European Union was established by the Maastricht Treaty in 1993. This European Community aims to strengthen economic, social and territorial cohesion for the harmonious development of its member states so that the gaps between the levels of development of the regions are as wide as possible smaller.

Regional development policy at present, cohesion² policy, was conceived with the signing of the Treaty of Rome in 1957, which gave birth to the European Economic Community. The signatory states of this treaty had the same opinion regarding the reduction of disparities between regions as well as the provision of financial support to disadvantaged regions so that the economy of the communities is strong and unitary,

¹ http://europa.eu/about-eu/eu-history/index_ro.htm (accessed 02.04.2015)

² Institutul European din România, *Politica de dezvoltare regională*, p. 1-54, disponibil pe http://ier.gov.ro/wp-content/uploads/publicatii/Politica_regionala.pdf (accessed 19.04.2018)

which could be achieved depending on how development policies were managed and implemented by the Member³ States.

The European Union, in order to create a unitary, logical structure and to develop a regional statistical system for carrying out economic analyzes at the level of each member state, designed in 1988 the Nomenclature of Territorial Units for Statistics (NUTS) through the European Statistical Office (Eurostat). It has had different approaches⁴ to dealing with the concept of social cohesion. First, it is defined in socio-economic terms as a positive result of converging rates of work, unemployment, poverty and education. Secondly, social cohesion is similarly defined as a positive outcome in terms of poverty and social exclusion in the European Union.

This policy was designed as one of financial solidarity to help increase the social and economic cohesion of the community architecture. The most developed member states have had and continue to aim to implement reforms to create a functioning system at regional level. The implementation of cohesion⁵ policy at EU level means reducing the gaps between regions in terms of production, productivity and employment.

For the period 1994-1999, there were initially 13 Community initiatives following that through the 1999 reform, their number reached 4⁶, respectively in the financial programming framework 2000-2006 and were: INTERREG III, EQUAL, LEADER +, URBAN II. For the 2007-2013 programming period, the objectives of cohesion and rural development policy also included previous Community initiatives: INTERREG III, URBAN, EQUAL, LEADER +, FEOGA and IFOP.

If we refer to the current European budgetary framework, there are new community initiatives for cohesion policy: JASPER, JEREMY, JESSICA, JASMINE.

³ R. Leonardi, "Cohesion in the European Union", *Regional Studies*, 40:02 (2006), p. 155-166, DOI: 10.1080/00343400600600462

⁴ G. Boucher, "European social cohesions", *Patterns of Prejudice*, Volume 47, Issue 3: Social Cohesion and Social Change in Europe (2013), p. 215-234, DOI: 10.1080/0031322X.2013.797170

⁵ Tratatul privind UE, art.158, available at <http://europa.eu/eu-law/decision-making/treaties> (accessed 25.08.2016)

⁶ Budgetary execution of Community Initiatives INTERREG III, URBAN II, EQUAL and LEADER + 2000 – 2002, (2003), Status report to COBU – situation at 31 December 2002, available at <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=LEGISSUM:i60014&from=ES> (accessed 13.07.2015)

The financing of this policy is ensured from the budget of the European Union through 3 structural instruments: the European Regional Development Fund, the European Social Fund and the Cohesion Fund, instruments that help the most disadvantaged regions, guaranteeing economic, social and territorial cohesion within European Union. Each of these funds shall finance operational programs representing those documents drawn up by the member state and adopted by the Commission over a 7 year programming period, which include development strategies and cohesion policy objectives.

The challenges facing member states and regions are increasingly going beyond national and regional borders, and cooperation at the appropriate territorial level is needed to address them effectively. Due to the wave of enlargements in 2004 and 2007, with the entry into the European Union of several countries from the former communist bloc, it is obvious that the social and economic differences between states have deepened. This has increased the value of the Structural and Cohesion Funds to EUR 347 billion and made the allocation procedures easier for regions newly entering the Community bloc. The Commission has also simplified the procedure for allocating funds and implementing and monitoring non-reimbursable financial assistance for Member States.

The objectives of the Europe 2020 Strategy cannot be achieved without the involvement of the beneficiary states as well as the European Commission, through reforms that support priority investments such as infrastructure, health, education. To achieve these objectives, regional development policy is best suited for identifying sources and providing a multi-governmental framework for developing strategies at the territorial⁷ level.

⁷ C. Mendez, "The post-2013 reform of EU cohesion policy and the place-based narrative", *Journal of European Public Policy*, 20:5 (2013), p. 639-659, DOI: 10.1080/13501763.2012.736733

Table 1.1. Cohesion policy objectives in different programming periods

<i>Programming period</i>	<i>Cohesion policy objectives</i>
1989 - 1993	<ul style="list-style-type: none"> 1: disadvantaged regions to benefit from development and structural adaptation; 2: regions in industrial decline to be reorganized; 3: long-term unemployment to be combated; 4: adaptation, professional insertion of young people, regardless of gender; 5: agricultural structures to be adapted at a faster pace and lobby for the development of rural areas.
1994 - 1999	<ul style="list-style-type: none"> 1: promoting the development / adaptation of disadvantaged regions; 2: improving the quality of life in regions affected by industrial decline; 3: both young people and older people can be integrated into work and long-term unemployment can be combated; 4: the workforce should be easily adapted to industrial change; 5: promotion and development of sensitive rural areas; 6: development of areas with a population density below the EU average.
2000 -2006	<ul style="list-style-type: none"> 1: development / adaptation of disadvantaged regions; 2: the economic and social transformation of the regions in structural impasse; 3: adaptation / modernization of labor training policies.
2007 - 2013	<ul style="list-style-type: none"> 1. convergence; 2. regional competitiveness and employment; 3. European territorial cooperation
2014-2020	<ul style="list-style-type: none"> 1. improving research, technological development and innovation; 2. access to ICT; 3. High-performing SMEs; 4. less carbon emissions; 5. the need to adapt to climate change; 6. environmental protection; 7. modernization of the transport infrastructure; 8. sufficient and well-paid jobs; 9. combating poverty and discrimination; 10. investments in education and training of workers; 11. a more efficient public administration
2021-2027	<ul style="list-style-type: none"> 1. digitalization of public services, research-innovation; 2. energy, biodiversity, waste, climate change; 3. digitization of transport; 4. education, social inclusion, combating poverty, health; 5. territorial development, tourism

Source: author's processing based on the consulted documents

The financial allocations for cohesion policy in the 2007-2013 programming period amounted to almost 350 billion euros and are set out in the table below.

Table 1.2. Financial allocations for cohesion policy in the period 2007-2013

<i>Cn.</i>	<i>Years</i>	<i>Financial allocation (billion euros)</i>
1.	2007	45,061
2.	2008	47,267
3.	2009	48,427
4.	2010	49,388
5.	2011	50,987
6.	2012	53,716
7.	2013	54,524
TOTAL		348,865

Sursa: <http://epp.eurostat.ec.europa.eu>

Table 1.3. Financial allocations for the financial year 2007-2013 for the "Convergence" objective

<i>Operational Programs Assigned value</i>	<i>Assigned value</i>
Sectoral Operational Program "Transport"	4.288.134.778
Sectoral Operational Program "Environment"	4.412.470.138
"Regional" Sectoral Operational Program	3.966.021.762
Sectoral Operational Program "Human Resources Development"	3.476.144.996
Sectoral Operational Program "Increasing Economic Competitiveness"	2.536.646.054
Operational Program "Administrative Capacity Development"	208.002.622
"Technical Assistance" Operational Program	170.237.790
TOTAL	19.057.658.140

Source: author's processing based on data available on the website of the Ministry of European Funds

Table 1.4. Non-reimbursable sources related to the "Convergence" objective in the period 2007-2013

<i>Nr.</i>	<i>Operational Program (Sectoral) Structural instrument</i>	<i>Operational Program (Sectoral) Structural instrument</i>
1.	Transport Cohesion Fund and European Regional Development Fund	CF, ERDF
2.	European Regional Development Fund	CF, ERDF
3.	Operational Program Increasing Economic Competitiveness European Regional Development Fund	ERDF
4.	Technical Assistance European Regional Development Fund	ESF
5.	Transport Cohesion Fund and European Regional Development Fund	ERDF
6.	European Regional Development Fund	ESF
7.	Operational Program Increasing Economic Competitiveness European Regional Development Fund	ERDF

Source: author's processing based on data available on the website of the Ministry of European Funds

Table 1.5. Cohesion policy objectives 2000-2006 compared to 2007-2013

<i>Programming period</i>					
<i>2000-2006</i>		<i>2007-2013</i>		<i>2014-2020</i>	
<i>Objectives</i>	<i>European funds</i>	<i>Objectives</i>	<i>European funds</i>	<i>Objectives</i>	<i>European funds</i>
Promoting the development and structural adaptation of disadvantaged regions	FEDR, FC, FSE, FEOGA	Convergence	FC, FEDR, FSE, Urban II, Equal	Improving research, development, innovation	ERDF, ESF
Supporting the economic and social reconversion of declining areas	FEDR, FSE	Regional competitiveness and employment	FEDR, FSE, Urban II, Equal	Access to quality ICT	ERDF
Financing the modernization of training systems and the promotion of employment and education systems	FSE	Territorial cooperation	FEDR, FSE, Urban II, Equal	High-performing SMEs	ERDF
INTERREG III	FEDR		FEDR	Reducing carbon emissions	ERDF, CF
Urban II	FEDR		-	-	Adapting to climate change
Equal	FSE	-	-	Environment protection	ERDF, CF
Leader+	FEOGA	-	-	Sustainable transport	ERDF, CF
-	-	-	-	Best paid jobs	ERDF, ESF
-	-	-	-	Combating poverty and discrimination	ERDF, ESF
-	-	-	-	Education and training of workers	ERDF, ESF
-	-	-	-	More efficient public administration	ERDF, ESF, CF

Source: author's processing based on consultation of EU Regulations

Table no. 1.6. Financial allocations for the financial year 2014-2020 intended cohesion policy on operational programs

<i>Operational Programs</i>	<i>Allocations</i>
"Large Infrastructure" Operational Program (LIPO)	9.218.524.484
"Regional" Operational Program (ROP)	6.860.000.000
"Human Capital" Operational Program (HCOP)	4.371.963.027
"Competitiveness" Operational Program (COP)	1.329.787.234
"Administrative Capacity" Operational Program (ACOP)	553.191.489
"Technical Assistance" Operational Program (TAOP)	252.765.958
TOTAL	22.586.232.192

Source: author's processing based on data available on the website of the Ministry of European Funds

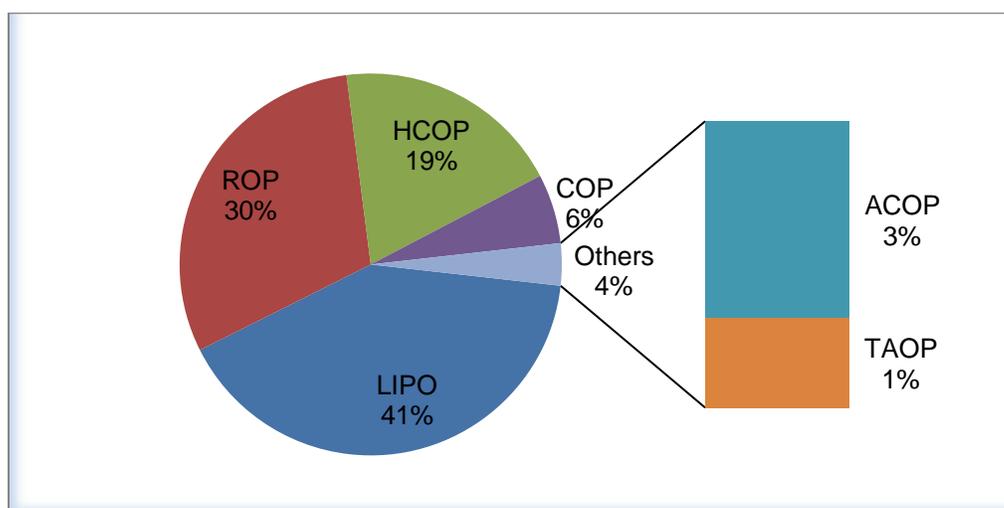
Table no. 1.7. European financial support for the 2014-2020 budgetary framework

	<i>Programming years</i>						
	2014	2015	2016	2017	2018	2019	2020
mld. euro	50,400	50,900	52,400	54,100	55,100	56,000	57,100

Source: Multiannual Financial Framework 2014-2020

The operational programs that have benefited from the largest financial allocations through EU funds, related to the financial framework 2007-2013, are the Environment Sectoral Operational Program and the Transport Sectoral Operational Program, those that carry out major projects whose value exceeds 50 million euros.

Figure no. 1. EU financial assistance 2014-2020



Source: author's processing based on data available on the MFE website

The largest percentage of the non-reimbursable financial support provided to Romania by the European Commission, related to the current programming period, is allocated to the Large Infrastructure Operational Program, a program that includes projects necessary for the development and modernization of transport, environment and energy infrastructure.

Hundreds of thousands of Member States' projects in various fields of activity can be funded through this European Union policy, with Community support being provided through the Structural and Cohesion Funds.

The second chapter, "**Regional development performance**", begins by presenting the concept of *region/development region* in the literature, the development regions of the National Strategy for Regional Development 2014-2020, the types of regions identified by various national and international authors and the gaps regional. Then, the work continues with the presentation of the concept of *performance* in the literature, performance theories, European Commission indicators on regional data, tools and methods for assessing inequalities between regions. We also present the concept of *impact*, we make a comparative analysis between various member states of the European Union in the Transport sector, for the period 2007-2013, the situation regarding the financial allocations from CF and ERDF and what these countries managed to build in 7 years through assistance Community financial resources. For the Environment sector, a comparative analysis was made, also related to the previous budgetary framework and included countries such as Bulgaria, Poland and the United Kingdom. Regarding Romania, is presented the performance of the regional development, how the non-reimbursable funds contributed to the economic development of the country, in the period 2007-2013. Also, this chapter includes the author's own contribution, respectively a *case study* on the largest operational program carried out by the Ministry of European Investments and Projects (ex Ministry of European Funds), namely LIOP - in the 2014-2020 budget. Here we will present a comparative analysis of the expenditures sent for reimbursement to the European Commission, by development regions, priority axes, specific objectives, financial-accounting years to observe the level of regional performance reached by our country in terms of structural funds of the Union. European. At the same time, we are talking about

the current period we are all going through, the coronavirus pandemic and we focus on the National Recovery and Resilience Program needed to get out of the crisis, the next European financial year 2021-2027 and NextGenerationEU which, together with the usual funds, we say, allocated to the member states by the European Commission, they form the largest funding that has ever existed in Europe.

The European economic and political space is essential at different levels of separation of regions, according to the NUTS nomenclature. The common nomenclature of Territorial Units for Statistics was established by Regulation (EC) No. Regulation (EC) No 1059/2003 of the European Parliament and of the Council; is a hierarchical nomenclature that divides each Member State into NUTS 1 territorial units (refers to areas with a population of 3-7 million inhabitants), each of which is subdivided into NUTS 2 territorial units which are in turn subdivided into NUTS level 3 territorial units.

The European Community considered the *region* to be "the lowest echelon of the state", an echelon that administratively and politically manages a territorial community. In regional science, the terms area or areas are also used, while in regional development policy we use the concept of *development region*. In our country, the development regions are formed by the grouping of 4-7 counties similar in terms of demography, economic and social development and corresponding to the NUTS 2 level, have no legal personality and are not administrative-territorial units. Investments are needed for the regions to develop economically, socially, culturally.

The more attractive a region is to investors, the more efficient it is, competitive with other areas.

In Romania, in the European financial year 2007-2013⁸, with the support of EU funds, the performance of regional development led to a significant increase in GDP in 2016 compared to the beginning of the programming period, from 38% to 60%, compared to the average of other member states, the increase of the minimum wage from about 100 euros to over 250 euros in 2016, the increase of exports from 70.5% in 2006 to 75.2% in 2016, the unemployment rate decreased to 6%, the average gross

⁸ http://ier.gov.ro/wp-content/uploads/publicatii/Raport-Romania-10-ani-in-UE-online_0.pdf (accessed 06.08.2021)

salary increased by 146% compared to 2006, the average turnover of Romanian companies increased by almost 65% compared to 2006, the gross profit on the economy increased by over 50% and labor productivity by 4% above the estimated level in the absence of funds. Within the 2014-2020 budget, respectively until the end of March this year, the beneficiaries of European funds in the transport sector received reimbursements from the EC amounting to almost 8.5 billion lei. The projects carried out were related to priority axes 1 and 2 of the LIOP. Also, in the field of Environment and Energy, respectively axes 3-8, the total amounts reimbursed during this period was about 2 billion lei.

Performance⁹ is technical, economic, social, managerial and requires efficiency, competitiveness, involvement, resources. Performance theory is approached at the social, economic, political, sociological level. The organization's performance is based on identifying the group of companies with results, the common elements of strategy, human resources and similarities that lead to increased performance.

In the literature, some authors consider *performance* by the degree of achievement of the proposed goals, both individually and as a team and other authors describe it by the level of success of an organization that has limited resources and resources¹⁰.

Hidalgo¹¹ argues that performance is given by a country's economic situation. If the products are sold in the downtown area, then their sale is faster and more expensive, while the sale of products on the outskirts is volatile. In some organizations¹², performance is not "mandatory" for all employees because they are discriminated against on the basis of sex, ethnicity, religion. For this reason, managers encounter difficulties and establish together with other subordinates the criteria for measuring performance. The meaning and content of the term *performance* in business

⁹ M. Niculescu, G. Lavalette, *Strategii de creștere* (București: Editura Economică, 1999), p. 267

¹⁰ R. Tannenbaum, H. Shimdt, "How to choose a leadership pattern", *Harvard Business Review* (2009), p. 1-154

¹¹ C. A. Hidalgo, B. Klinger, A. L. Barabasi, R. Hausmann, "The Product Space Conditions the Development of Nations", *Science* 27 Jul 2007: Vol. 314, issue 5837, p. 482-487

¹² R. L. Mihai, I. F. Băjan, A. Crețu, "Performance management in the context of globalization", *Theoretical and Applied Economics Volume XXIV* (2017), No. 1(610), Spring, p. 227-232

performance research is also comprehensively discussed by Folan¹³ who emphasizes three priorities or objectives of performance governance: it must be analyzed by each entity within the limits of the environment in which it is decided to act, it is always related to one or more many objectives set by the entity whose performance is analyzed and reduced to relevant and recognizable characteristics. In the case of performance management, the term performance can be used at different levels (personal, individual, team, organizational).

In regional development, *performance* is the extent to which the Structural Funds have been properly, efficiently managed and can be assessed at the end of the programming period.

Theories of performance are: institutional, resource dependence, resource-based, complexity.

In the literature¹⁴ there are several theories regarding individuals, organizations, institutions and social behavior: the theory of the four cultures, cultural theory, the theory of competitive values, the theory of relational models, the inverse theory.

The theory of the four cultures or the theory of the "gods of management" includes the ideologies:

- power orientation: maintaining power through competition and conflict is the dominant value;
- role orientation: competition and conflict are limits of compromises and agreements, the dominant value being the assignment of roles;
- task orientation: economic and non-economic goals represent the greatest value;
- orientation of people: the greatest value is the appreciation and rewarding of the organization's staff.

This theory was popularized in 1985 by associating it with the four deities of greek mythology: Zeus (the leader of the organization), Apollo (the organizer, the

¹³ P. Folan, J. Browne și H. Jagdev, "Performance: Its meaning and content for today's business research", *Computers in Industry*, Vol. 58, nr. 7 (2007), p. 605-620

¹⁴ C. Talbot, *Theories of performance. Organizational and service improvement in the public domain*, (Oxford: University Press, 2010), p. 131

distributor of tasks), Athena (the one who monitors the performance of duties) and Dionysos (the workers).

*In cultural theory*¹⁵, the grid-group matrix is used to produce archetypes of the organization or institutions and includes the types: fatalistic, hierarchical, egalitarian and individualistic.

The theory of competitive values or the framework of competitive values results from the efficiency of the organizational movement. According to researchers, there are four types of organizations (clan, hierarchy, market and adhocracy), four organizational cultures (collaboration, control, creation and competition) and eight managerial roles (mentors, intermediaries, supervisors, coordinators, directors, producers, brokers and innovators).

The theory of relational models has two components: the definition of relational models that emphasize human social interactions and the second refers to evolutionary origins and their relationships with cultural elements.

The reverse theory has its origins in psychology and in the study of emotions, motivations and personality and consists in the fact that people react differently to the same elements, depending on the mood. Mental states are: serious-playful, docile-rebellious, perfectly-sympathetic, selfish-oriented towards others.

The aspects encountered in measuring the performance of the public system, programs, policies and organizations are: positivism (public organizations have a real level of performance that exists without any observation), constructionism (it is a reaction to the problems of positivism in relation to the human system) and realism (there is a real reality even if it cannot be observed).

Public organizations are in the midst of the interest of organizational performance and the interest of public sector performance as a whole. Therefore, the performance of organizations is a final variable for both the study of organizations and the study of the public sector.

The performance of the organization and the factors that influence it are based on:

¹⁵ ibidem

- identifying the group of successful companies or organizations;
- common elements regarding strategy, human resources policy, culture, leadership;
- similarities that lead to an increase in performance.

Performance measurement can be done through multi-dimensional models that are based on results, strategies, resources, management. The European Union uses sets of indicators to monitor the implementation of its policies and depends on the allocation and control of resources, transparency and collaboration with third parties. In order to be able to compare EU regions, it is necessary to agree on a set of indicators or a specific index that can be used throughout the Community. The Regional Competitiveness Index refers to the NUTS 2 regions of the European Union and comprises over 70 indicators that can be compared, assessing the ability of an area to attract investment and develop. It provides an overview of the performance of the regions, both locally and nationally, as an important means of developing more effective policies. The Eurostat Regional Yearbook also provides an "up-to-date" overview of regional indicators presented in different dimensions. In addition to these sets of indicators, the European Commission has also developed regional indices such as: Regional Competitiveness Index, Regional Human Resources Development Index, Europe 2020 Index, EU Quality of Government Index, Entrepreneurship and Regional Development Index, Regional Index on population poverty, the Regional Social Progress Index, the Regional Sustainable Welfare Index, the Regional Welfare Index.

At the level of the European Commission, ex-ante evaluations are also carried out during the implementation of the European-funded programs that Member States benefit from, in terms of their capacity to perform. These assessments require the fulfillment of the so-called ex-ante conditionalities, namely: the correlation of the Community legislative framework with those of the Member States and the existence of investments, categories of expenditure in a strategy designed at the level of each country. The economic expectations of the respective programs, ie the financial and result indicators, are also taken into account, in order to see to what extent the objectives have been met.

If the programs are carried out according to the plan, according to the schedule of reimbursement of expenses, execution of works both from the financing contracts and from the additional documents to them, the respective program may receive in addition a sum of European non-reimbursable money in the amount of 6 % of the amount initially allocated to the program. But there is also the situation, as it happened in the previous budget year 2007-2013, in which the programs, the projects did not work, the targets in the financing contracts were not reached and the European Commission suspended those operational programs and applied financial corrections.

The *case study*, the author's contribution, refers to the current budgetary framework, 2014-2020 in our country, through the Large Infrastructure Operational Program, which presents an analysis of the expenditures declared by the MA LIOP to the Ministry of Finance and the CAP, in with a view to their reimbursement by the European Commission. This analysis starts in 2017 and ends in 2020. Data are presented and analyzed for each region of economic development of the country, comparative situations on priority axes, specific objectives, sources of European funding and breakdown of annual statements of expenditure.

If we talk about EU member states¹⁶, both at regional and local level, there is pressure on plans to assess the effects of the implementation of funded policies. Performance measurement is the sub-process of performance management whose purpose is to identify, track and communicate performance results using performance indicators. Unlike performance management that performs actions based on evaluation results and ensuring the achievement of results, performance measurement refers to the evaluation of results¹⁷.

Sets of indicators are used to monitor and implement European Union policies. In 2010, the Europe 2020 Strategy decided to guide the general policies of the European Union, the global objectives aimed at the economic, social and environmental spheres, including integration with other EU policies including cohesion policy and the general framework of EU economic governance. To support the social dimension of economic

¹⁶ S. Bourdin, E. Ragazzi, "La science regionale et la performance des politiques publiques: retour sur les methodes d'evaluation, Regional sciences and public policies: feedbacks from the evaluation methods", *Revue d'Economie Regionale&Urbaine*, no. 2 (2018), p. 225-242

¹⁷ <http://www.managementulperformanței.ro> (accessed 19.03.2017)

and monetary union, a framework for employment and social indicators such as unemployment, population income, poverty was established in 2014. Indicator systems monitor and manage regional development policy. Monitoring involves the collection and evaluation of information, both qualitative and quantitative, in terms of processes, inputs, policies and results and aims to track progress and evaluation aims to achieve objectives. Therefore, the reduction of regional disparities, the impact of regional development policies in terms of regional economic results, is the field of evaluation. In the European Union, performance indicators, target values and financial allocation mechanisms have been selected at the level of each Member State, under European guidance. In impact assessments, the net effects of the intervention (net impact) can be measured and the effects of the project on the medium and long term can be quantified. The medium and long term impact can be anticipated both before the implementation of the program or project but also during it and can be calculated after implementation.

The third chapter, "***Impact models of structural funds on the performance of regional development***", includes the presentation of the model concept in the literature, the classification of model types and the characteristics of econometric models. Then, several impact models are presented, namely: E3ME, TRANS-TOOLS, input-output as well as the macroeconomic models of the European Union for the analysis of the impact of the structural funds on the performance of regional development respectively HERMIN, HEROM, QUEST and EcoMod.

Economic modeling is the economic discipline that aims to substantiate the managerial decision through economic-mathematical models using computer technology, giving managers the opportunity to make strict, precise decisions related to human, financial, material and organizational objectives. In other words, the modeling of economic processes effectively substantiates the managerial decision with the help of economic-mathematical models. Any model must meet certain requirements, namely: to correspond to the mechanism of operation of the real system it represents, to use correctly the information at its disposal, to be similar to the real system for the essential elements, to develop algorithms for solving as well as the use calculation techniques.

To analyze the impact of the Structural and Cohesion Funds, the European Commission uses three mathematical models: HERMIN, QUEST and EcoMod.

The HERMIN model comes from the HERMES multisectoral model and was developed by the European Commission in the early 1980s. The reason why it was created is the lower availability of data from peripheral Member States, less developed and time series and is structured in 3 main parts: in terms of supply, absorption and distribution of revenue and therefore works as an integrated system of equations.

HEROM is a macroeconometric model with multiple equations and aims to assess the impact on the convergence process in our country. The HERMIN model was "transformed" into HEROM, in other words, the HERMIN model for Romania and was used by the National Forecast Commission for measuring, macroeconomic assessment of the impact of European funds allocated by the European Commission in the European budget frameworks 2007-2013 and 2014 respectively -2020. The researchers who conducted the study did not have much data available, given the limits of the Romanian economy but took into account two options, namely: the option with a degree of absorption of 100% of European non-refundable money and the option in which there were no this money than for pre-accession funds. Each state has its own particularities and this can be seen in the databases available to use one evaluation model or another so that the forecasts in one country depend on those of others¹⁸.

QUEST¹⁹ is a Keynesian global macroeconomic model used by the European Commission's Directorate-General for Economic and Financial Affairs to analyze macroeconomic and research policy. This model is based on optimizing the use of profit in terms of goods, labor market and financial markets. It was designed by the European Commission and is a multi-country model developed to analyze the business cycle, long-term economic growth in the Member States of the European Union and the interactions between these states with other countries, especially the USA and Japan. The model distinguishes 26 areas, the national models in structural form being present in 13 of them. The demand for imports in each of the countries can be considered as data for determining exports based on bilateral trade flow equations and world imports must correspond to world exports. The bilateral import quotas of each state are used to

¹⁸ N. Marcu, C. E. Dobrotă, "THE ECONOMIC IMPACT OF THE COHESION POLICY", *Revista Economică* 68:3 (2016), p. 1-20

¹⁹ https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/economic-research/macro-economic-models_fr (accessed 16.04.2017)

determine the import price based on the export price of each state. Bilateral actions are also used to calculate the export price index in relation to competition, an index used in the price equations of exports from structural models.

EcoMod is a multi-sectoral, dynamic, multi-regional general equilibrium model that covers 87 regions worldwide, distinguishes a maximum of 69 types of goods and is used for general macroeconomic and sectoral analysis. The general equilibrium models represent the next generation of Input-Output models, models that were developed by Wassily Leontief in the 1940s to quantitatively identify linear correlations between industries, households and governments. Unlike these models, the general equilibrium ones were used to highlight the impact on the economy as a whole but also on imports, exports, labor. These models are based both on the interactions between industries but also allow the evaluation of public policies.

The general equilibrium models are the tools for analyzing structural problems and include elements at both microeconomic and macroeconomic level, at regional, national and sectoral level. They focus on the economic, social and financial framework in which goods and markets interact, but also on how governments intervene in them. They are based on microeconomic theories and are designed to measure economic and environmental impact in the short, medium and long term as a result of changes in the economy. The impact assessment concerns multisectoral issues and the links between economic operators.

The fourth chapter, ***"Measuring the performance of regional development in different countries - case studies"***, focuses on the performance reserve, the system of indicators used in the countries that were taken into account in our comparative analysis, namely: the European Union as a whole , Italy, the United Kingdom and the United States of America. Each of them has systems of indicators that do not differ much, however, the authorities that supervise the performance of regional development are different. For example, in the United Kingdom, the institutions that monitor and evaluate the performance of regional development are the Regional Development Agencies while in the US, this monitoring is done by the Economic Development Administration which consists of federal departments and agencies under the coordination of the Department for Trade. We also present the situation in our country

regarding the macroeconomic indicators on the basis of which we observe the development potential of the economy, of the regions. Based on the data published by the European Commission in the Regional Competitiveness Index 2019 regarding the development regions of Romania, the Bucharest-Ilfov region is the best performing, registering the highest score, namely 55.92 out of 100 maximum possible, but it is ranks 151st out of 268 regions analyzed.

The objectives of regional policy are to ensure a better standard of living by encouraging competition between regions so that they are attractive for investment and access to quality public services. These goals can be achieved through the collaboration of state institutions, both locally and centrally. In the UK, for example, goal-setting activities are delegated to local government agencies, while in the US, regional development is handled by decision-making departments along with localities and the private sector. Achieving performance, however, requires a system of indicators, the collection of information, data and their distribution to measure the effectiveness of programs, policies, being a support, a means of designing the medium-term strategy. Indicators are the tool by which data and information are used to make decisions and can be of several types: input (we refer to financial resources, human resources, time resource for the production of goods and the provision of services), process (how resources project, the program are used in carrying out its activities), output (for example, how many kilometers of railway have been rehabilitated with the amount allocated) and the result (how many trains have additionally used that railway line as a result of its rehabilitation). The indicators depend on both exogenous factors of regional policy, direct targeting factors and gross and net outflows.

Conclusions

In order for the living standards of the people of the European Union to increase, it is important that Member States also want to do this by streamlining public administrations at national, regional and local level and through projects funded by the Structural Instruments. However, external factors are also of particular importance, such

as globalization, which can lead to structural changes at all levels and which has a major impact on the economic development of states. And in the next period of accession to the European Union, there will be states that will be "poor" at the time of accession. For this reason, all of them may be eligible for structural assistance, which will demonstrate once again the particular importance of European regional development policy.

Assessing the impact of a project is an assessment of the changes made by it to the purpose, timing of the evaluation and the position of the members of the evaluation committee. The medium and long term impact can be anticipated both before the implementation of the program or project but also during it and can be calculated after implementation. Two types of evaluation are used to evaluate Community financial aid, namely ex-ante and ex-post. Ex-ante evaluation involves collaboration with the institution responsible for drafting legal programming documents, while ex-post evaluation is performed at the end of program implementation, based on the results obtained.

Macroeconomic performance analysis models are designed as a series of interconnected equations that use statistical techniques and data series. Statistical variables are analyzed on the basis of models and impact measurement involves the construction of scenarios such as "funded" and "unfunded" in which evaluators take into account variables or coefficients that are part of the chosen model.

Many of the objectives of cohesion policy are defined at the macroeconomic level. The results of the macroeconomic models are in line with the requirements, which means that the model has met its targets. Multisectoral macroeconomic models measure the impact of economic policies, including European cash flows, the pace at which variable levels change and changes in the labor market and spending.

The dynamics of macroeconomic equilibrium depends on the behavior of economic agents, the demands of global supply and demand, the ratio between needs and resources so that economic activities are in a tendency to adapt.

The performance reserve mechanism was implemented in the European Union for the period 2000-2006, especially to increase the spending of European money by holding a certain share of the allocations for each Member State and was distributed to

programs, projects, beneficiaries that have reached to a large extent, the objectives. Along with this mechanism, during the mentioned period, we had to deal with two other instruments, namely, the interim evaluation of programs, projects and risk, the rule of decommissioning European funds. Because it did not have the expected success, at the level of the European Union, it was decided that in the European financial framework 2007-2013, to abandon the performance reserve mechanism.

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