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BABEȘ-BOLYAI



**Facultatea de Științe Economice
și Gestiunea Afacerilor**

Summary of doctoral thesis

**THE IMPACT OF INVESTMENTS FINANCED FROM STRUCTURAL
AND COHESION FUNDS UPON THE NORTH-WEST DEVELOPMENT
REGION of ROMANIA**

Scientific coordinator:

Prof. Gheorghe CIOBANU, PhD

PhD student:

Ștefana Alexandra Diana VARVARI

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KEYWORDS: development regions; structural and cohesion funds; input -output model; inter - sectorial linkages; output, income and employment multipliers.

Introduction

Regional development policy is one of the most important components of economic policy at the EU level, a fact that is demonstrated by the large share of allocated funds from the EU budget. The motivation is supported by the importance of this policy objective, respectively to decrease economic and social disparities which exist in the EU regions. Over time there have been many reforms of these policies and of the tools through which it is financed. Currently there are three structural tools which finance this policy: European Regional Development Fund, European Social Fund and the Cohesion Fund, each of them with well defined and complementary objectives and areas of intervention so as to ensure a balanced and harmonious European region. The conclusions of the European Commission's studies on the effects of the allocation of structural funds on the economies of countries and regions that have benefited from them revealed that financial support from the EU, support the member states growth. Basically we can say that these funds are intended to contribute to the less developed regions' competitiveness by providing funding resources for interventions in strategic areas.

In this context, Romania, in order to benefit from these funds had to align to the *acquis communautaire* in the field of regional policy and structural funds access. Therefore Romania had to identify on her territory, several units corresponding to NUTS 2 level of the EU and so eight development regions have been formed. Also it has been developed a new institutional framework and new mechanisms required to implement regional policy in Romania. Thus, since 2007, after the EU accession, Romania could benefit from structural and cohesion funds, implemented on the basis of strategic programming documents specific to our country, covering both regions and sectors.

Argument

The reason we chose this topic was generated by the growing interest both in the EU and in Romania concerning European funds spending and the effects they produce on the Member States' regions. If in the European Union's case, we can speak about a large experience of assessing the investments' impact from European funds, in Romania the interest of using tools which assess the impact of public investment, has begun to develop only after the country has been able to access pre-accession funds. Basically this interest came from the obligation to carry out the assessments for the funding programs received before and after the accession to the EU. The main purpose of these evaluations is to quantify the effects of the allocated funds over the economies which benefited of them, to identify the encountered problems during the implementation of various development programs, as well as to offer a basis for future development policies.

We are at almost seven years of membership, at the end of a period during which Romania has benefited from structural and cohesion funds. The interest at political level is extremely high in terms of absorption of EU funds both nationally and regionally (especially while there are lots of discussions lately regarding the reorganization of this territorial level). During the research we found few studies made in this regard in Romania and in the region which has been chosen for study.

In this context, we wanted to achieve a thorough analysis of scale and effects of attracting European funds in the North-West region: which was the level of attracted European funds, which were the types of interventions that have been preferred by the region's beneficiaries and which were the best performers at sub-regional level, in order to evaluate the region's performance between 2007 and 2013. We have also realized a review of the main problems faced by Romania, respectively the North-West region, in the process of accessing European funds and also the measures taken over time to solve them.

By using an input-output model, we wanted to realize some estimates about the impact of European funds on the output, income and employment level in the North-West region and observe the link between the degree of competitiveness and the level of funds accessed in the region.

Finally, we consider that the results of this exercise can provide a series of important information for policy makers in the elaboration of the development policies for the next programming period, considering that at present Romania is preparing the programming documents for 2014-2020.

Research objectives

The main objective of the study was on the one hand the analysis of the main factors of competitiveness in the North-West region of Romania, on the other hand a detailed analysis of the situation about the level of attracting structural and cohesion funds at North-West region's level and to quantify the potential effects on regional economy.

From the conceptual point of view, we intended to do:

- a review on the evolution of regional policy in the EU in Romania,
- a presentation of the theoretical concept of regional competitiveness, highlighting the main factors influencing its level
- a presentation of the main ways of measuring competitiveness
- a review of the methods used to assess EU funding, with focus on the input-output model

From the empirical point of view, we intended to:

- highlight the current situation in the North-West region, from the point of view of the competitiveness' main factors
- present a detailed analysis of the projects financed from structural and cohesion funds in the North-West region, both at operational programs' level and territorial level (meaning county level)
- construct the input-output table for the North-West region
- define the scenarios which can conduct to the impact's quantification of the European funds in the North-West region
- measure the potential impact of the EU funds on the output, income and employment level in the North-West region

We mention that our research started from a series of hypothesis:

1. The regions that include the capitals of the states and the major urban areas recorded a better performance both in terms of competitiveness indicators and in terms of attracting European funds
2. More developed regions with a higher level of competitiveness have the highest rate of attracting investments from European funds and their impact is higher than others
3. The most competitive regions grant higher priority for soft interventions than less developed ones
4. In case of developing states and regions, the "hard" type interventions (infrastructure) produce a bigger impact on their economies than the "soft" type interventions (increasing the quality of human resources and institutional capacity)

Research Methodology

For the elaboration of this thesis, there were used a variety of research methods.

The first step consisted into research, selection and systematization of the bibliographic sources, which were used to develop the theoretical chapters of the thesis.

This phase was followed by a data statistical analysis and their synthesis, methods used for the chapters 3, 4 and 5. Also in the development of these chapters there was used a comparative analysis of the obtained data at European, national, regional and county level. Statistical data processing was done with Excel.

During the data collection for Chapters 2 and 5, it was used the benchmarking method to identify the proper practices.

For Chapter 5 there was used economic modeling. Also, the input-output model was used for predicting the impact of investments from European funds on the region. National input-output table was regionalized by using the GRIT method (Generating Regional Input-Output Tables).

To obtain the data needed for the analysis the following sources were used:

- The reports on competitiveness elaborated by the World Economic Forum and the European Commission
- the statistical publications of the National Institute of Statistics of Romania and EUROSTAT and their online databases
- the operational programs and their implementation framework documents for the period between 2007 and 2013, Romania (ROP, IEC SOP, HRD SOP, ENV SOP, TRANS SOP, ACD OP and TA OP)
- the progress reports and evaluations conducted for the operational programs concerned
- the data basis of the European Funds Ministry for the projects contracted between 1.01.2007 and 31.03.2013

Summary

The thesis is structured on five chapters, following the logic of the objectives described above.

The first chapter, "*The development regions and regional development policy in Romania*" presents the approaches of the concept of region at supra-and sub-national level, in the European Union and Romania, and also the main types of regionalization which occurred in the EU countries. At the same time, a review has been done regarding the evolution of the regional policy development in the European Union and Romania, in order to conclude with a few details on the funding sources of different types of interventions, focusing on the three structural instruments. This chapter provides practical information needed to understand the context in which emerged and developed of the North-West region of Romania and in which it could benefit from structural and cohesion funds.

From the perspective of reducing economic and social disparities between the various regions of Europe, the regional development policy is considered one of the most important and complex policies of the EU. Its importance is reflected by the large share of the funds which are allocated for its implementation in the EU budget (in 2006 they reached 46.5%, taking into account also the pre-accession funds). The complexity of this policy is highlighted by the very broad area it

focuses on, and the fact that it ensures the interaction and complementarity with the other EU policies (eg agricultural, industrial, employment).

If until the 50s and 60s interventions were directed towards certain industries, without cooperation at territorial level, after this period it begun to focus on the territorial dimension and the involvement of new actors, representatives of all government levels. Thus, through the development of the regional development policy, it sustains (within the same geographical area) the correlation on various fields' projects, for generating a visible impact on their development. These geographic areas were defined by the Nomenclature of Territorial Statistical Units. This system not only provides the statistical uniformity in order to harmonize the collection and processing of socio-economic data, it also generates the right framework for the implementation of regional development policy.

Over the years, the implementation and the institutional, financial and programming of regional policy knew numerous reforms aimed on the one hand at the simplification of the operational framework and on the other hand, at taking into account the needs of each Member State. The accession of the new Member States, brought a series of changes in the instruments it uses in order to generate the proper framework for the implementation of this policy.

The implementation framework for the regional development policy in Romania was defined in 1998, during the period when the country was preparing to join the European Union and it came as a response to the requirements of the EU. Thus, through the Law 151/1998 on regional development in Romania, there were created eight development regions (corresponding to NUTS2 level) and the principles, goals, skills, tools and institutions necessary to promote the policy in this area were defined. With the proper framework, after the accession to the EU, Romania could benefit from the EU funds under the economic and social cohesion policy.

At time of Romania's accession to the European Union, the Lisbon Agenda was into force, a strategy that must be followed by all EU policies which have as main objective to make Europe "the most dynamic and competitive knowledge based economy in the world" until 2010. Therefore the objectives set in Romania by the National Development Plan had to be reorganized and adapted with the objectives of this strategy and contribute to their achievement. This strategy emphasizes the growing importance of the competitiveness at every region's level.

Depending of the Lisbon Agenda objectives which have been transposed into the social and economic cohesion, we identified several elements that contribute to regional competitiveness: infrastructure, transport, energy, telecommunications, health and social services, environmental protection, foreign direct investment, R & D, education and lifelong learning. Basically regional development policy must finance those interventions that support the objectives set by the strategy, so it must ensure an increased competitiveness of the regions. (The fourth report on economic and social cohesion, 2007).

The Lisbon Strategy is currently continued by the Europe 2020 Strategy which aims to ensure a smart, sustainable and inclusive growth, and in the present reglementation of the European funds there is a direct reference to the fact that the interventions financed will have to respect the objectives of this strategy.

Therefore, it sees that the emphasis is increasingly greater on the competitiveness issues and the concept of regional competitiveness has become a key concept in policy interventions. At EU level, regional competitiveness has been defined by the EU Commission as "the ability to produce goods and services which satisfied the international markets' demands, maintaining, at the same time, the income at high and sustainable level" (Sixth Progress Report)

Chapter two "***The regional competitiveness - conceptual approach***" presents a review of the main approaches to the concepts of competitiveness and regional competitiveness, providing information about the determinants and key indicators used in global, European and regional competitiveness measure. In the chapter's final part a summary of the performance of EU economies at global level is provided and also about the recorded performances of Romania, respectively its regions, at European and global competitiveness levels, sustained by those competitiveness indicators.

The establishment of the competitiveness factors, influence the elaboration of public development policy and also contribute to the regional development. In order for a region to reach a certain level of development and play an important role globally, it needs to achieve a high level of competitiveness.

In the European context, the main purpose was the increase of competitiveness, this major objective being mentioned since 2000, when the Lisbon Agenda was adopted.

During the time, a series of various elements that contribute to enhancing regional competitiveness have been identified and also numerous ways to measure it, at global, regional or European level. The growing importance of regional competitiveness at EU level, is suggested by the fact that in recent years numerous studies have been conducted to measure the competitiveness of European regions, thus reaching in 2011 in defining an index of regional competitiveness, which is based on elements proposed by the World Economic Forum, and its calculation method and takes into account the level of regions' development. This indicator, groups the regional competitiveness factors in 11 EU pillars: institutions, macroeconomic stability, infrastructure, health, quality of primary education, higher education and training of human resources, labor market efficiency, market size, readiness to new technologies, business sophistication, innovation, grouped in three categories (basic, efficiency and innovation).

If we take the European Union as a whole, we can say that its performance in competitiveness are globally visible, this fact is confirmed by the reports' conclusions on the indicators of competitiveness (GCI), which shows that member states are placed in good positions, all of them being in the first half of the hierarchy. Better performance is remarked among northern European countries (Netherlands, Finland, Denmark) and weaker for those in southern Europe (Bulgaria, Romania and Greece). From the perspective of the Europe 2020 Strategy's objectives, the EU has had a good performance compared with other advanced economies in terms of inclusive and sustainable growth, but the evolution of smart growth was quite slow.

Romania and its regions are ranked on the last places taking into consideration the various indices of competitiveness (global, European, regional). At globally level, Romania was classified as a country whose economy is based on efficiency. The country performances are better in terms of sustainable growth and very low in terms of smart growth. According to the survey conducted by the World Economic Forum, among companies in Romania, the most problematic factors for businesses in Romania are: corruption, high taxes, inefficient administrative bureaucracy and access to finance. Therefore we can say that Romania still has much work to align with other countries in terms of competitiveness. In the report on regional competitiveness in the EU is emphasized that the region containing the capital city and large urban areas recorded significantly higher performance than other regions, and in the case of Romania this discrepancy is among the most visible, a fact which comes to confirm our first

research hypothesis. Romania's regions which recorded better competitiveness indicators, according to EU index of regional competitiveness, are: the Bucharest- Ilfov (ranking 165 out of 262), North-West (rank 241) and West (rank 242).

The analysis in the third chapter, "*The North-West development region*", is based on the proper practices which are mentioned in the second chapter and presents the current situation in the North-West region taking into account certain factors relating to the competitiveness of the region. The EU proposal for the calculation of regional competitiveness index and the available data for the North-West region were taken into consideration when choosing the areas to be presented. This chapter aims to present the context in which European funding was provided and the development of competitiveness factors since Romania's accession to the EU.

The North-West region has seen since 1998 an increase in its competitiveness if we take into consideration the GDP per capita as a measure of regional income, the main influencing factor being the labor productivity, which also knew an increase in this period. Other factors that contribute to improving the competitiveness of the region are the accessibility by air, the number of companies per 1,000 inhabitants (ranks 2 at national level), the large number of universities and students (which provides skilled labor), etc. From the point of view of innovation, we can say that they have made great steps forward, research and development activities and information society indicators knowing an upward trend.

As the weaknesses of the region we mentioned: GDP / capita lower than the average EU-27 (only 42%, while the Bucharest-Ilfov region has reached 111% and the West region has exceeded 50% of EU average) and the national average (47% of the EU average), a small proportion of the population still employed in services (38.8%) and a low contribution to GDP (about 50% compared to 68% EU average), investments in R & D still low (only 0.33% of GDP, compared to 1.9% of EU GDP), issues of accessibility by rail, without express roads and motorways, health and education infrastructure is still weak especially in rural areas, low levels of foreign direct investment (6th place at national level).

From the territorial point of view, we observe that Cluj county knew an over average development for many of the analyzed indicators, including those for innovation, both regionally and nationally. However, the comparison with European average reporting indicates that this

county still has many problems to solve. In the case of Sălaj, Satu Mare and Bistrița-Năsăud, one can notice that these retain laggard positions for many of the analyzed indicators. This is just another aspect that confirms the research hypothesis no.1 also inside de region.

Chapter four, "*The stage of attracting structural funds in North-West region*" offers for the beginning a brief analysis of the operational programs which were taken into consideration, so that in the second part of the chapter the situation on 31 March 2013 is presented in terms of projects funded by structural and cohesion funds contracted in the North-West region. The analysis is a very detailed one, at the level of seven operational programs, and also in each county, both in terms of the number of contracted projects and in terms of funds contracted through these projects. At the end of the chapter we tried to make a correlation between GDP / capita as an indicator of competitiveness and other indicators on contracted projects (number of projects, project value, contract value per capita, number of projects per 10,000 inhab.).

Romania received 19.688 billion euros from the EU through the Cohesion Policy. Although the amount is higher than that received by the other new Member States (after Poland, Czech Republic and Hungary), per capita, it is only 892 euros, placing it second to last (ahead of Bulgaria). By March 31st, 2013, in Romania 36,207 projects were submitted, of which 32% were approved and only 9,434 were contracted (26%). The absorption rate reached 17%, and the reimbursement rate reached 13%. IEC SOP and ROP programs have attracted the largest number of projects submitted and contracted most projects at national level (3.395, 2.459 respectively). However, in the case of IEC SOP the rate of contraction was the smallest (17%). The largest numbers of projects have been contracted on Axis 4 of the ROP and Axis 1 of the IEC SOP, more exactly, these are the areas which aims to support businesses in the region by financing investments to increase their competitiveness both domestically and internationally. ROP (29.6%) and ACD OP (22.5%) had the highest rates of absorption and TRANSP SOP and IEC SOP, the lowest (10.2% and 14.8%). The low absorption of IEC SOP funds, practically confirm the firms' difficulties during the crisis and the incapacity to support these projects financially.

In the North-West region there have been contracted 12% of the total national projects (1,143 projects). The most projects were contracted on ROP and IEC SOP, this is a similar situation with that from the nationally, but in this region, the interest was higher (considering their share in total contracted projects in the region). A larger number of projects were contracted by axes no.4

(DMI 4.3. Supporting the micro-enterprise development) and no.3 (DMI 3.4. Rehabilitation / modernization / development and equipping of pre-university, university and continuing professional training's infrastructure) from ROP, axis no. 1 (DMI 1.1. Productive investments and preparation for market competition of enterprises, especially SMEs) and no.3 (DMI 3.1. Supporting the use of ICT) from IEC SOP and axis no. 5 (DMI 5.1. Developing and implementing active employment measures) and no. 1 (DMI 1.5. Doctoral and post-doctoral programs for support of research and DMI 1.3. Development of human resources in education and training) of HRD SOP. From this review, we can observe that at the North-West region level, it has been an increased interest from companies to attract EU funds in order to increase their competitiveness levels both, on domestic and foreign markets.

Through these projects, in the North-West region were contracted 7.2 billion lei, about 10% of the total contracted funds nationally. Through ROP and IEC SOP were contracted 25% respectively 13% of these funds, but the largest contribution was on ENV SOP. Significant funds were contracted in this region on axis no. 1 "Supporting the sustainable development of cities - urban growth poles" and axis no. 2 , "The improvement of regional and local transport infrastructure" from ROP, axis no. 1 "An innovative and eco-efficient production system" and axis no. 4 " The increasing energy efficiency and its security in the context of climate change" from IEC SOP, axes no.1 "Education and professional training support for growth and development of the knowledge society" and axis no. 5 "The promoting of active employment measures" on HRD SOP.

If we consider that the percentage for North-West region's funds was established at 12.09%, one can notice that this percent was exceeded in the case of ROP on DMI 3.4. "Rehabilitation / modernization / development and equipping of pre-university and university infrastructure", 3.1. "Rehabilitation / modernization / equipping of health services infrastructure", DMI 3.3. "The improving of equipment level for operational units in case of emergency interventions" and DMI 4.1. "Development of sustainable business support infrastructures of regional and local importance". The main idea of this program reveals that the region has performed better than initially estimated.

From the territorial point of view, the largest number of projects and the highest amounts were recorded in Cluj county, followed by Bihor and Maramureş counties, thus confirming the

research hypothesis no. 2. The most projects were contracted on IEC SOP and ROP in Cluj county and ROP in the rest of the counties of the region. ROP is the second important source of EU funds at county level (after ENV SOP).

From the perspective of ROP and IEC SOP contracted funds, Bihor county ranks second in the region. Also, this county and Maramureş county received the largest funds through TRANSP SOP. The investments in Sălaj focused on ROP and TRANSP SOP. In this county we observed that there were accessed the lowest number of contracts, except for the ROP where Satu Mare county is the last ranked and TRANSP SOP which is first ranked regionally. From the TRANSP SOP point of view, Cluj and Maramureş counties received smaller amounts or, in the second case, received no funds.

If we analyze the number of contracted projects we can observe that on HRD SOP a small number of projects were contracted in Sălaj, Satu Mare and Bistriţa-Năsăud counties, due to low interest or ignorance, or because of the low preparation of the projects. Moreover, in Sălaj and Bistriţa-Năsăud counties there were also a small number of projects on ACD OP. These data confirm the research hypothesis no. 3.

From the perspective of competitiveness and GDP per capita, we observe that the region's most competitive counties (Cluj, Bihor) attracted the largest funds, maintaining on the same regionally rank (research hypothesis no.2 is confirmed).

Another conclusion is related to the counties' preference for developing certain types of interventions. Thus, it was observed that more competitive counties (Cluj, Bihor) attracted not only infrastructure development funds, but also focused on human resource development funds, a fact that is not found for less developed economies (Bistriţa-Năsăud, Satu Mare). Therefore, it is observed that more competitive regions, focuses more on "soft" interventions than less developed ones. (research hypothesis no.3 is confirmed).

Although the absorption of EU funds is a priority for Romania, there are still many problems inside this process, both in terms of beneficiaries (infringement of guidelines and contract conditions, breach of public acquisition legislation, low potential of co-financing and an unsafely of cash flows insurance, lack of experience in managing projects financed by European funds, etc..) and also at the level of coordination and management of funds (unprofessional conduct,

excessive bureaucracy, breach of public acquisition policy, fraud, corruption, etc..). To all these can be added a non-stable legislation or an unclear formulation. However, during the time a series of measures have been taken in order to eliminate these problems, and currently, the Priority Action Plan for strengthening the capacity of absorption of structural and cohesion funds is under review.

We consider that many of these types of issues can be solved through a series of actions like: development of standard procedures for all operational programs, including only where is necessary, specific procedures and developing a manual which include standard models and even examples of best practice, reducing bureaucracy, financial corrections should be charged directly from beneficiary and not from the project, so that attracted European funds are not lost; adoption of a law on public acquisition; high penalties and even the prohibition, for a determined period, for those who execute fraud actions against EU projects; salary motivation, based on performance, for staff responsible in projects implementation (both in the institutions with coordinating role and managing in European funds and also, potential beneficiary institutions of structural and cohesion funds); hiring qualified staff with experience in the implementation of projects financed by European funds, especially for those operational programs for which long delays in assessment or reimbursement are found.

The last chapter, "*Impact Assessment of the Structural Funds investments in the North-West region*", is a review of the methods which can make an impact assessment of European funds on the socio-economic development and which details the use of input-output model for its implementation on the North-West region. This chapter present the way in which the input-output table was regionalized and also the scenarios for applying this method regionally, starting from the previous chapter premises for structural funds in the region. At the end of the chapter the interpretation of the results obtained by including scenarios in the regional input-output table is presented.

The steps for preparation of this chapter are:

1. Construction of national symmetric input-output table and aggregation of sectors for 2008. Because of the fact that, regionally, data for gross value added and employment

for all 85 economic activities are not available, an aggregation of national input-output table was done at the level of 11 economic sectors:

S1 . Agriculture, forestry and fishing

S2 . Mining and quarrying, electricity, gas, steam and air conditioning, water distribution, salubrity, waste management and decontamination activities

S3. Manufacturing industry

S4. Constructions

S5. En-gross and en-detail trade, repair of motor vehicles and motorcycles; transport and storage, hotels and restaurants

S6. Information and communications

S7. Financial intermediation and insurance

S8. Real estate

S9. Scientific and technical professional activities; administrative and support services activities

S10. Public administration and defense, social insurance on sectors of public, security, education, health and social assistance.

S11. Cultural and entertainment activities, repairs of household goods and other services.

2 . Construction of regional input-output table for the North -West region, through the regionalization of the national table for 2008. For regionalization used GRIT method, based on the location coefficients: simple - SLQ, cross -sectorial - CILQ and Flegg and Webber - FLQ

3 . Analysis of the linkages between sectors, based on output, income and employment multipliers. For this purpose, was used backward sectoral linkages coefficients proposed by:

Chenery and Watanabe, Rasmussen and Hirschman. Analyzing the proposed multipliers, we noticed the following conclusions:

- the sectors with the greatest potential to generate an impact on regional output (both direct and indirect) are en-gross and en-detail trade, repair of vehicles and motorcycles, transport and storage, hotels and restaurants, constructions, cultural and entertainment activities, repairs of household goods and other services and agriculture, forestry and fishing
- from the income perspective, the significance of regional links are focused on the next sectors: public administration and defense, social insurance on sectors of public, security, education, health and social assistance, en-gross and en-detail trade, repair of vehicles and motorcycles, transport and storage, hotels and restaurants, financial intermediation and insurance and cultural and entertainment activities, repairs of household goods and other services.
- regional sectors which generate a high direct impact on employment are: agriculture, forestry and fishing, en-gross and en-detail trade, repair of vehicles and motorcycles, transport and storage, hotels and restaurants, public administration and defense, social insurance on sectors of public, security, education, health and social assistance and scientific and technical professional activities; administrative and support services activities.
- for all three multipliers, the lowest values are recorded in manufacturing and real estate activities
- from the perspective of induced effects, the ranking of high potential sectors is: real estate, agriculture, forestry, fishing, constructions, but also on employment : real estate, mining and quarrying, electricity, gas, steam and air conditioning, water distribution, salubrity, waste management and decontamination activities.
- from the perspective of total effects, the lowest values are recorded in: information and communications, public administration and defense, social insurance on sectors of public, security, education, health and social assistance.

4. Defining scenarios by introducing policy measures in regional input-output table. To analyze the impact of EU funds on the economy of the North- West region, a baseline scenario and two

alternative scenarios categories was defined. The first category of scenarios, that highlight the impact on the regional economy generated by all seven operational programs, are differentiated based on the level of absorbed funds in the region (scenarios 1-3). The second category of scenarios are differentiated depending on the objectives of structural and cohesion funds programs attracted in the region (scenarios 4-6) . Thus, we have:

- **Baseline scenario** - is the starting point for the impact assessment, presenting the existing situation in 2008, according to regional input-output table
- **Absorption scenario** - complies with the absorption rate existing at 31 March 2013 and it estimates the max level it can reach at the end of the program, based on the average growth in the past year for each program. Thus, it showed an average absorption rate of 51 %, with the highest value for the ROP (77 %) and the lowest for the TRANSP SOP (29 %).
- **Contracts scenario** - it is considered that all contracted funds until March 31st, 2013 will be absorbed on each program
- **Regional allocation scenario** - it is considered that, an amount equal to the regional allocation, according to ROP, will be absorbed from each program, more exactly in the North - West region, 12.09 % .
- **Regional competitiveness scenario** - only the funds attracted through the Regional Operational Programme and the Increase of Economic Competitiveness Sectorial Operational Programme are taken into consideration, those two operational programs focusing directly on investment for business environment in the region and are fully financed by the European Regional Development Fund.
- **Human resources and administrative capacity scenario** - only the funds attracted through the two programs financed by the European Social Fund: Human Resources Development Sectorial Operational Programme and Administrative Capacity Development Operational Programme are taken into consideration, the programmes that finance "soft" type operations.
- **Transport and environmental infrastructure scenario** - only the funds attracted by the two operational programs financed by the ERDF and Cohesion Fund: Transport Sectorial

Operational Programme and Environment Sectoral Operational Programme are taken into consideration, which aims the financing the "hard" type projects.

5. Impact analysis, made by including the regional scenarios into regional input-output table, to identify the different effects generated from the proposed scenarios

After using the input -output model, it was found that the total impact potential is obtained in the case of third scenario, in which we considered that the region will attract for all the programs, 12,09 % of national funds, in which case the impact is almost double comparative with the situation of scenario no. 1, in which is considered the rate of absorption. Therefore, we must ensure that every attracted funds are used and also, funds on the un-accessed intervention areas are accessed, in the North-West region (eg HRD SOP DMI 1.4. and 6.4., TRANS SOP axis 3 ACD OP DMI 1.2.). In the sectors of mining and quarrying, electricity, gas, steam and air conditioning, water distribution, salubrity, waste management and decontamination activities and constructions, the highest impact was for scenario that considered that all contracted amounts will be used.

In our opinion, the most realistic scenario is that in which we took into account the absorption rate recorded during the last year and made an estimate of it until the end of the period. In this scenario, it was estimated a growth of 3.9% in output, with 4.2% in income and 4.1% in employment in the North-West region, generated by the absorption of structural and cohesion funds.

If we consider that all contracted funds will be absorbed inside the region, we notice the fact that they produce the greatest impact interventions in transport and environmental infrastructure scenario (output 3.1%, 3% and 3.2% of employment income) and the smallest effects are generated by interventions aimed at developing human resources and administrative capacity scenario (research hypothesis no.4 is confirmed) .

From the perspective of impact of investment in ROP and IEC SOP, those two programs that focus directly on measures to increase the competitiveness of companies in the region, we can say that regional effects are close to those of Scenario 6 (infrastructure), resulting an increase with 2.61% of the output, with 2.74% of the income and with 2.68% of the employment. The largest increases, in absolute terms, are expected in the following sectors: manufacturing

industry, en-gross and en-detail trade, repair of motor vehicles and motorcycles, transport and storage, hotels and restaurants and constructions; and in percent, in information and communication (over 12% for all three intended effect), scientific and technical professional activities, administrative and support services activities (10%) and real estate (over 6 %).

The sectors of services and construction are expected to generate higher growth of output, income and regional employment. In the sector of services, this growth is generated by the en-gross and en-detail trade, repair of motor vehicles and motorcycles, transport and storage, hotels and restaurants. An important contribution on income growth is brought also by the public administration and defense, social insurance on sectors of public, security, education, health and social assistance, and on employment by the scientific and technical professional activities, administrative and support services activities. In absolute terms, a high impact on output, income and regional employment is generated by the manufacturing industry. The other industries also generate a significant growth, especially, in regional output and income.

Therefore, we observe a higher impact in sectors related to infrastructure development (mining and quarrying, electricity, gas, steam and air conditioning, water distribution, salubrity, waste management and decontamination activities, manufacturing industry, constructions, en-gross and en-detail trade, repair of motor vehicles and motorcycles; transport and storage, hotels and restaurants), those which are based on the economy modernization and on the development of new technologies and know-how (manufacturing, scientific and technical professional activities, administrative and support services activities) .

Conclusions

Finally, we can say that the impact of EU funds on regional competitiveness is not up to expectations, because the use of European funds is still dependent on the lack of long term vision on the development of integrated and coherent socio-economic development, both nationally and regionally.

Even if there are strategic documents at both the economy as a whole and across economic sectors, it was observed, during time, that the implementation of the priorities has resulted in a scattered development. This is due to the fact that funded projects do not support each other. Therefore, there is not an efforts' concentration on the really important areas, being funded small

projects in all areas instead of large strategic, integrated projects, which can produce a strong impact on economic development and therefore on the regional or national competitiveness. In other words, because of this, synergy effects through related projects, which pursue an unitary economic strategy are not achieved.

Although there was a strategic framework from the beginning of the programming period, the priorities were not clearly established and there has been no hierarchy established. Thus, the interests varied by the different views of the political forces which have succeeded in government. This fact led to both the abandonment of projects which were already started or the completion of a large number of projects which did not generate the expected effects of economic and social environment.

We can mention the fact that many of the projects submitted and funded, especially those having public administrations beneficiaries, were not the result of a strategic planning, but they became a "priority" for the simple reason that the possibility of funding existed. Therefore the projects were not prepared according to the needs, but they have developed in order to get financing through various operational programs.

We believe that the results obtained in this thesis can be of great use for the development policy makers, providing information about the impact which interventions from different operational programs, can produce on the output, income and employment, in various sectors. Thus, first one has to take a decision regarding the long term target for the region (do we want an increase in output, in income or in employment?), and by the end one can see the programs (according to scenarios 4-6) and the sectors that should be given more importance (in terms of funded projects).

In conclusion, we consider absolutely necessary, for the next programming period, that the strategic documents have a higher degree of concentration and correlation in the use of funds, focusing on those specific priority interventions identified based on potential and actual needs of a territory, sector or a specific target group. It is also very important that in the identifying process of the priority actions, economic and social partners and representatives of all political parties are involved so that these are assumed by all parties and continuity is assured, regardless

of the changes at the decision-maker level that might appear in the national, regional, county and city level.

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