

# BABEŞ-BOLYAI UNIVERSITY FACULTY OF ECONOMICS AND BUSINESS ADMINISTRATION



## **DOCTORAL THESIS**

## **Summary**

# THE IMPACT OF PROJECTS FINANCED BY THE EUROPEAN UNION ON REGIONAL DEVELOPMENT

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#### **KEY WORDS**

Project management, regional development, sustainable development, structural funds, operational program, impact, impact evaluation

#### INTRODUCTION

Project-specific orientation towards achieving the objectives has determined an increased use of projects in all areas, being basically an adaptation of the working manner to the current economic environment characterized by dynamism and complexity. Projects represent both a way of survival for organizations, and the means by which competitiveness at micro and macro-economical level can achieve.

Projects require a management based on the principles of general management, but adapted to the characteristics of the projects. Project management, through specific methods, techniques and tools, and also by its approach, contributes to projects success in achieving the proposed objectives.

A particular case of projects are the projects financed by the European Union. They support European policies in achieving their goals, being the means by which the European funds allocated to the member states can be accessed. These projects are common at European level, being different from other projects, and require an adapted management.

Projects financed by the European Union generate effects on organizations that implement them, on stakeholders and on the regions in which they are implemented. Through these projects the development of the region and the achievement of the European objective - sustainable development is wanted.

Given the large number of investments initiated through projects at European Union level, it is necessary to assess the impact of these projects, in other words to analyze the created effects to check if the proposed goals were achieved or not. Even if the costs and efforts involved in project impact evaluations are high, the benefits of this long-term analysis justify the costs and, in addition can reduce future costs by generating useful knowledge in project management, having positive effects on the development of organizations and regions where projects are implemented.

A rigorous project impact evaluation can be accomplished by various quantitative and/ or qualitative methods, which are presented in our paper. Each impact assessment method has advantages and disadvantages, and the choice of optimal methods is influenced by the context in which the project implementation takes place, by the data access and the specifics of the project. Most of the impact evaluation guidelines published by recognized international institutions, recommend using both quantitative methods and qualitative ones, to achieve a complex analysis, to obtain different perspectives, to increase the accuracy of the study, and not least to improve the obtained results.

Using projects in all fields has determined an increased importance of project management and of scientific research in this area. The research conducted is focused on project management, the emphasis being placed on projects financed by the European Union.

The Ph.D. thesis "The impact of the projects financed by the European Union on regional development" has as main objective the realization of a complex study on project management, with an emphasis on analyzing and evaluating the impact of projects financed by the European Union on regional development. The research aims the presentation of theoretical concepts, the identification of impact evaluation methods and the realization of an empirical study regarding the impact of the projects, with the purpose of identifying best practices and enouncing proposals that contribute to improving project management, the impact of projects on the performance of organizations that implement them and the effectiveness of the development and implementation of regional strategies and policies.

*Specific objectives* of the research are:

- Presentation of basic theoretical concepts in project management, including the various existing approaches in the literature in order to realize a complex and comprehensive theoretical framework;
- Presentation of the concepts specific to European policies: the region, sustainable development and regional development, European regional development policy, European funds with structural action;
- Identifying the opportunities for projects funding through European Union's programs
  in Romania, in the period 2007-2013 and presenting the way it can be accessed
  through projects;
- Presentation of the theoretical aspects and the methodology of projects impact evaluation, with the emphasis on impact evaluation of projects financed by the European Union;
- Analysis of the absorption of European funds in Romania since 2007 until now;
- Realization of an empirical study regarding the impact of projects financed by the European Union on the development of the North-West region, which includes:

presenting the opinions of project managers, analyzing the effects produced by the implementation of projects, identification of the methods used for the analysis of these effects, the identification of problems that have influence on the project management, providing solutions for solving the most common problems, and identifying the procedures by which the impact of projects can be improved, based on the opinions of specialists in the field.

To achieve the proposed objectives, the used bibliographic and information sources are:

- specialized books published in Romania and abroad by authors internationally recognized in the field of project management such as: Roland Gareis, Harvey Maylor or Rodney Turner;
- articles published in international databases;
- publications of Romanian institutions: Government of Romania, The European Institute of Romania;
- publications of international organizations: European Commission, Organization for Economic Co-operation and Development-OECD, Network of Networks for Impact Evaluation – NONIE, World Bank;
- data transmitted in the Unique System of Information Management (SMIS) by the management authorities of the 7 ministries that manage structural and cohesion funds.

#### **Structure of the thesis**

The thesis is structured on seven chapters covering the topic of research from a theoretical, methodological and practical point of view. We present below the structure of the thesis.

Chapter 1 entitled "*Project management. Basic concepts*", includes a presentation of existing approaches in the literature on the definition of projects and project management. For a better understanding of the concepts in this chapter are presented the characteristics of projects, the role of projects in the realization of investments, the difference between general management and project management and the evolution of the field of project management from the 1950s, until now.

Chapter 2, entitled "*The development of European regions*", addresses issues specific to the European policies: defining the region, presenting the concepts of sustainable development and regional development, as well as the link between them, presenting the

principles and objectives of the European Regional Development Policy 2007-2013, the funds with structural action, the documents that represent the basis of implementing European policies in Romania and the future of structural and cohesion funds in the period 2014-2020.

Chapter 3, entitled "Using projects in implementing European policies", creates the link between the European policies and the projects receiving European financial assistance. To qualify for financial assistance from the European Union, projects must contribute to the objective achievement of operational programs, established at national level according to the development needs. In this chapter we present financing opportunities for projects through the European Union's programs in Romania, for the period 2007-2013, and the role of projects in accessing European funds. We consider necessary to present in this chapter the specific elements of projects financed by the European Union, for better delineation of the concept.

In Chapter 4, entitled "The use of impact evaluations in the management of projects financed by the European Union", we define the impact and projects impact evaluation, present the difference between monitoring and impact evaluation, we present the main challenges and constraints of an impact evaluation, the benefits of a rigorous evaluation, the need to assess the impact of projects financed by the European Union and the usefulness of the information obtained in the impact evaluation.

Unlike other methods of project evaluation, the impact evaluation analyses the intended or unintended effects, on medium and long term. We consider that a rigorous analysis of the impact is most suitable to check if project objectives are achieved, and whether the desired effects are created. In this chapter we present the methodology of project impact evaluation, the steps that must be performed in the impact evaluation, the description of the main quantitative and qualitative methods of impact evaluation and the description of other methods commonly used in the evaluation of projects.

In Chapter 5 entitled "European funds absorption in Romania", is carried out an analysis of the current state of absorption of European funds at national level, depending on the operational programs and at the level of the Northwest region, based on the data published in the Unique System of Information Management (SMIS). Presenting the situation at the level of the Northwest region is important since the empirical study carried out in the next chapter refers to it. There are also presented the factors affecting the performance of the structural instruments, based on a study made by KPMG Romania, GEA S&C and Pluriconsult. We complete this study through the analysis of the reimbursement duration, as a

factor that can influence directly the rate of absorption of funds and the project implementation.

Chapter 6 is entitled "Empirical study regarding the improvement of project management and impact of projects financed by the European Union on the development of Northwest region". We chose the Northwest region for this study primarily because of its economic attractiveness and potential for development. The chapter includes the presentation of the research methodology and the research instruments, the method used for determining the sample and its structure. Through this study are analyzed the opinions of project managers, identify the effects produced by projects and the methods used in their analysis, as well as the problems that occur in the management of projects financed by the European Union, solutions for the most common problems and ways in which the impact of projects can be improved. The study concludes with a set of conclusions, based on the results of the study.

Chapter 7 entitled "Conclusions and personal contributions", presents the final conclusions on theoretical and experimental research, recommendations and contributions, the limits of the research and the future direction of our research.

We approach through this paper the project management from a theoretical and practical point of view, to ensure the identification of best practices and real solutions for the improvement of project management.

We consider our research relevant to the field of study. On one hand, project management is still a new field in Romania, in development, to which we contribute through the literature study made in the theoretical part and through the presentation of the realities of this field in Romania, in the practical part. On the other hand, the management of projects financed by the European Union is a current subject, which fits to the context of an increased importance of the elaboration and implementation of projects, programs and policies in Romania.

# EMPIRICAL STUDY REGARDING THE IMPROVEMENT OF PROJECT MANAGEMENT AND IMPACT OF PROJECTS FINANCED BY THE EUROPEAN UNION ON THE DEVELOPMENT OF NORTH-WEST REGION

#### Methodology and research objectives

We support the idea that qualitative research complements quantitative research, the reason why our empirical study uses a combination of the two types of scientific research, in

order to analyze the means of improving project management and the impact of projects financed by the European Union.

Even though in 2013 the current stage of development at national level will end, research results could contribute to improving the management of future projects and programs, in the following stages of development.

The purpose of the empirical study is to identify best practices in the management of projects financed by the European Union by identifying opportunities of improving projects' effects.

Providing solutions for the most common problems occurring in the management of EU funded projects can improve the impact. On the other hand, the impact or effects of projects are often considered only on short term, or not considered at all. We approach this topic as we believe that the improvement of projects' impact on the organizations that implement them and on the region where they are implemented, contributes to the achievement of the European objectives and to creating a dynamic equilibrium specific to sustainable development.

The specific objectives of the empirical study are:

- Analysis of the opinions of project managers and management team members on the implementation and impact of these projects;
- Identifying the effects of the studied projects;
- Identifying the most appropriate methods of analysis of the effects produced by the implementation of the studied projects;
- Identifying the main problems affecting the management of EU funded projects;
- Proposal of solutions for the most common problems encountered in managing EU funded projects;
- Identifying best practices for improving the impact on organizations that implement projects and the region where they are implemented.

We present schematically in the figure below the research methodology of the study conducted under this chapter.

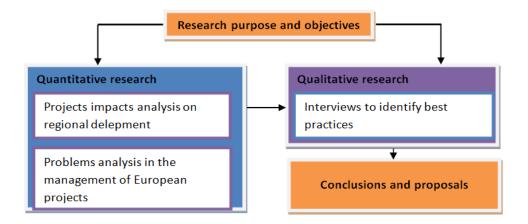


Figure 1. The research methodology of the empirical study

#### Research tools

The research instruments used in this study are:

- A questionnaire focused on the impact of projects financed by the European Union on regional development;
- A questionnaire focused on identifying the most common problems that determine the efficiency and effectiveness of the management of EU funded projects;
- The semi-structured interview.

#### Study on the impact of projects financed by the European Union

The questionnaire was sent to a number of 150 persons involved in implementing EU funded projects in the Northwest region, project managers and members of the project management team. The response rate is 42.67%. The responses were processed using SPSS.

The respondents work in various types of public or private organizations, such as local public authorities, universities, private companies and NGOs that have implemented projects funded by the European Union.

EU funded projects generate positive economic, social and environmental effects, which can contribute to the sustainable development of the regions where they are implemented. Through these projects, the European development goals should be achieved.

According to the responses received, 90,2% of the analyzed projects generate positive economic effects, 91,8% of the projects generate positive social effects and 52,5% generate

positive effects on the environment (Table 1).

Table 1. Effects of analyzed projects

Effects of projects	Yes	No
Economic	90,2%	9,8%
Social	91,8%	8,2%
Environmental	52,5%	47,5%

We present in the following table the main effects of the analyzed projects.

Table 2. The main effects of the analyzed projects

<b>Positive effects</b>	Tuote 2. The main effects of the analyzed projects	%
	Creation of a new company	2,36%
	Development of the company	20,47%
	Turnover growth	16,53%
	Increasing resource efficiency / productivity	21,26%
	Increasing the number of clients	10,24%
Economic	Developing customer relationships	3,15%
	Development of new products	10,24%
	Supporting the business environment	14,17%
	Tourism development	0,79%
	Traffic growth	0,79%
	Total	100%
	Jobs creation	51,35%
	Positive effects on disadvantaged categories	21,62%
	Improving the health of the population	20,27%
Social	Increasing access to public sanitation service	1,35%
Social	Improving the quality of educational activities	2,71%
	Increasing public safety	1,35%
	Local community involvement in the education of young	1,35%
	Total	100%
	Reducing pollution on the environment	52,19%
	Use of alternative energy sources	34,79%
	Reducing the amount of waste disposed	2,17%
Environmental	Increasing the amount of recycled waste	2,17%
Environmental	Rehabilitation of agricultural land	2,17%
	Rehabilitation of green space	2,17%
	Biodiversity conservation	2,17%
	Efficient energy consumption	2,17%
	Total	100%

A percentage of 13,11% of the analyzed projects generate effects in the first three years after implementation, 31,15% have effects within the first five years, 9,84% in the first

seven years, 11,48% in the first 10 years and 34,43% of the studied projects produce effects more than 10 years after implementation, according to the received responses. Based on these statistics, we emphasize the need to improve the effects created by projects funded by the European Union in order to contribute to the achievement of European development objectives.

The number of years the project generates effects after implementation, depends on the specifics of the project. For example, it is likely that a project that develops human resources to generate effects after implementation over a period of time shorter than a project that initiates an investment in infrastructure.

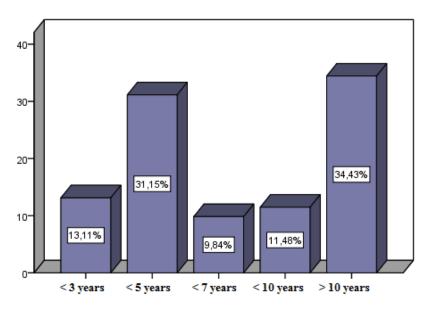


Figure 2. The effects of projects after implementation

Another link that we consider that should be analyzed is the project value and the duration the project generates effects after implementation. To test this link we applied the ANOVA test, where the dependent variable is the number of years that the project generates effects and the independent variable is the value of the project.

*Table 3.* Testing the connection: duration of effects - project value **ANOVA** 

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	58,162	2	29,081	20,920	,000
Within Groups	80,625	58	1,390	•	•
Total	138,787	60			1

Considering that Sig = 0.000 < 0.01, we can appreciate with a probability of 99% that there is a connection between the value of the project and the period of time during which the project generates effects after implementation.

In 59,02% of cases the projects effects were analyzed, and in 40,98% of cases they were not analyzed (Figure 3).

Impact evaluation involves analyzing the effects generated by a particular project, but the knowledge gained through impact assessment can improve the effects of projects under implementation or of future projects.

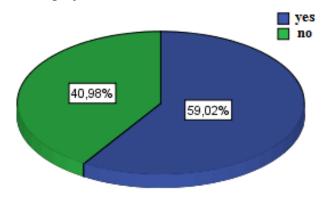


Figure 3. Percentage of projects where effects were analyzed

The following table presents the frequency of the received responses depending on the value of the projects. Of 61 analyzed projects, in 36 cases the effects were analyzed, of which 14 projects worth up to 500,000 Euros, 4 projects have a value between 500,000 and 1,000,000 Euros and 18 projects worth over 1,000 .000 Euros.

Table 4. Frequency analysis of projects effects on the basis of their value

		Total project value				
		less than 500.000 Euro	500.000 – 1.000.000 Euro	over 1.000.000 Euro	Total	
Analyzed	Yes	14	4	18	36	
effects:	No	13	4	8	25	
Total		27	8	26	61	

We believe that the operational program corresponding to the project receiving funding has influence on the decision of analyzing the projects effects. To check whether

there is a connection between the operational program and the analysis of the effects we applied the ANOVA test on the two variables.

*Table 5.* Testing the link effect analysis - OP

#### **ANOVA**

	Sum of Squares	df	Mean Square F		Sig.
Between Groups	3,169	5	,634	3,009	,018
Within Groups	11,585	55	,211		•
Total	14,754	60			

From the analysis, we can appreciate with a probability of 95% that there is connection between the two variables as Sig = 0018 < 0.05. The operational program through which the project is financed influences the decision of analyzing the effects.

In order to be able to assess the impact of projects on the development of a region, their effects should be studied from the economic, social and environmental point of view.

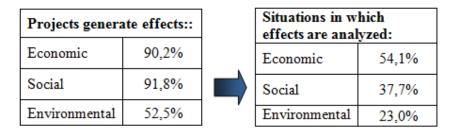


Figure 4. Generated effects vs. analyzed effects

Reported to the whole analyzed sample, 90,2% of the respondents claim that the analyzed projects generate economic effects, but these effects are analyzed only in 54,1% of cases. The situation is similar in the case of social effects, where the difference is 54,1% between projects that generate social effects and projects for which the social effects were analyzed. In the case of the environmental effects there is a difference of 29,5%.

Where an analysis of the project effects was made, it was held:

- during the planning of the project in 91,7% of cases;
- during implementation in 33,3% of cases;
- at the end of the project implementation in 11,1% of cases;
- after project implementation 16,7% of cases.

Cost-benefit analysis is the most commonly used method to study the effects of

projects financed by the European Union. To analyze the effects of projects in 69,4% of cases were used cost-benefit analysis. Other used methods are: cost-effectiveness analysis in 8,3% of the analyzed cases that have made an assessment of the effects, multi-criteria analysis in 19,4% of the cases.

Of the specific methods of impact analysis, qualitative methods of impact evaluation have been used to complement the results of the analysis. A proportion of 23% of respondents claimed that they used qualitative methods of impact evaluation to make a description of the studied elements.

The results obtained from the analysis were used, according to the received responses reported to the number of cases in which an analysis of the effects was made:

- to support managerial decision-making in 69,4% of cases;
- as a support for the formulation of opinions in 36,1% of cases;
- as a way of informing public opinion in 36,1% of cases;
- to learn and understand certain things about the project in 41,7% of cases;
- to improve the preparation of the project team, to establish best practices for future projects in 36,1% of cases.

Responses received in this case confirm the usefulness of effects analysis in project management. An increased use of the results of impact evaluations is necessary in order to improve the training of project team members. Also, the establishment of best practices for future projects is necessary in order to obtain better performance in project management.

## Study on problems affecting the management of projects financed by the European Union

Persons contacted for the second questionnaire were the same as in the case of the first questionnaire. The response rate in this case is 31,33%.

The problems affecting the management of projects financed by the European Union can have a negative influence on the results and on the impacts of projects. We need to identify these problems, to be able to propose means of improvement for the management of projects financed by the European Union and for the impact of projects.

To identify the most common problems that occur in the management of projects financed by the European Union, we present in the following table the frequency of the

response for the statements that received the grade 1 – strongly disagree and 2 - disagree from over 30% of the respondents.

Table 6. Opinions regarding the management of projects financed by the European Union

Tuble 6. Opinions regarding the man	<b>Strongly</b> disagree	Disagree	Undecided	Agree	Strongly agree
Duration between approval for funding of the project proposal and signing of the contract is appropriate to project requirements.	40,4%	27,7%	12,8%	19,1%	-
The level of bureaucracy in the preparation of the project proposal and funding request is low.	36,2%	27,7%	23,4%	12,8%	-
In sessions with project submission deadlines, the project submission period provides sufficient time to prepare the funding file.	6,4%	25,5%	27,7%	34,0%	6,4%
The duration of the evaluation period of the project proposal was appropriate.	38,3%	27,7%	19,1%	14,9%	-
The level of bureaucracy in the implementation phase of the project is low.	23,4%	42,6%	23,4%	8,5%	2,1%
Reimbursement payments were made on time.	23,4%	14,9%	23,4%	36,2%	2,1%
The economic situation had a major influence on the project.	14,9%	29,8%	23,4%	25,5%	6,4%
There were no difficulties in supporting the project until receiving the reimbursement.	14,9%	25,5%	14,9%	31,9%	12,8%
The planned schedule of activities was followed without changes.	17,0%	14,9%	36,2%	29,8%	2,1%

Many of the most common problems identified in the management of projects with European funding are external to projects. In order to solve these problems, is needed a more effective management at the level of the institutions responsible for the management of European funds. Reducing bureaucracy in the application for financing phase and in the project implementation phase, promoting a partnership relationship between the intermediate authorities of management and the funding recipients, would encourage the absorption of funds.

To protect themselves from the possible negative effects of the general economic framework on the project, we consider that the management team should identify different

scenarios and possibilities of action in the planning phase, that take into consideration the evolution of the exchange rate, interest rate etc.

An internal issue, quite frequent, is the existence of difficulties in supporting the project from own sources until the reimbursement. The solution proposed by us for this problem is to identify, as early as the planning phase of the project, alternative sources of financing, which can be used in need.

Failure to comply with the schedule of activities is another frequent problem in project management. The solutions proposed in this situation are:

- Establish the duration of activities based on real situations and previous experiences;
- If the duration of a task cannot be calculated accurately, there should be included a safety period in its duration;
- In the relationship with suppliers, to reduce the risk of delays, we recommend the inclusion of penalty clauses in the contracts.

# Recommendations and solutions on improving the impact and the management of projects financed by the European Union

Research carried out in the previous chapters is complemented by the presentation of the results obtained from the interviews.

Selecting individuals for the interview was done taking into account their knowledge in the field of project management and their experience in implementing projects financed by the European Union.

There were contacted 15 project managers of projects financed by the European Union, of which 10 agreed to participate in the interview.

Discussions were based on projects financed through the programs Regional Operational Programme (ROP), Sectoral Operational Programme Increase of Economic Competitiveness (SOPIEC), Sectoral Operational Programme Human Resources Development (SOPHRD) and Sectoral Operational Programme Environment (SOPEnv) and focused on the following themes:

- the relationship between the project and the development strategy of the organization;
- methods for measuring the impact of the project and means of impact improvement;
- means of preventing or solving the main problems in the management of projects financed by the EU.

Solving problems that appear in implementing projects successfully, produces positive effects on the results and impacts of projects.

Most of the problems and the solutions presented are of general nature, even though they were presented in relation to certain operational programs. We believe that the solutions presented in this chapter can be applied in project management, regardless of the operational program.

Through interviews we tried not only to identify problems that may affect the project management and the related solutions, but also to surprise some opinions on the impact evaluation of projects.

Regarding the best method for impact evaluation of projects, we support the opinion of an interviewed project manager, according to which the method used in measuring the impact should be established based on the organizations' activity and the specifics of the project.

Another interviewed project manager believes that measuring the impact should allow quantifying all the elements influenced by the implementation of the project in a positive or negative way.

The methods used in impact assessment, identified in discussions with project managers are:

- Tracking result indicators of the project;
- Periodic analysis of statistics that capture the evolution and effects of the project;
- The application of questionnaires to direct beneficiaries;
- Conducting interviews (discussion) with direct and indirect beneficiaries.

We recommend the integration of projects in the development strategy of the organization in order to ensure a high impact of projects on the development of the organization. Eight out of ten projects that were the basis for discussion in interviews are integrated in the development strategy of the organization. The two projects that are not integrated, but support tangentially the development of the organization, are projects funded through SOPHRD and implemented in public organizations.

To summarize the discussions held in the interviews, we present the means of improving the impact of projects financed by the European Union on the development of organizations and the regions where they are implemented. The impact of projects can be improved through:

• favorable resolution of the problems affecting the management of projects;

- conducting impact analysis and use of the results of these analysis to act on items with potential for improvement;
- linking the project with other projects already implemented or to be implemented in the organization.

#### CONCLUSIONS AND PERSONAL CONTRIBUTIONS

Project management is a relatively new field and still developing. Due to the high frequency of projects in all fields, project management has an important role in ensuring the competitive advantage in the current economic environment.

To bring long-term benefits, projects should take into consideration the context in which they are implemented, should meet the development needs of the organizations that implement them and last but not least, should solve problems.

From the point of view of the relationship between projects and programs, projects can be independent or included in a program. In our research we focused on projects included in operational programs existing in Romania for the period 2007-2013. Each project financed by the European Union should contribute to the achievement the programs' objectives and the achievement of objectives set through European policies.

We used in our paper the definition of Luhmann (1995), according to which the region is a social system composed of society, organizations and the interactions between them. In these circumstances, projects financed by the European Union can contribute to the development of regions through positive effects on organizations and society.

Long-term effects produced intentionally or unintentionally by projects represent their impact. Although is often spoken about the impact of projects financed by the European Union, the analyses made stop almost every time to a study on the absorption of European funds. Probably most of the analyses are based on the assumption that projects generate the desired effects and a higher level of funds absorption contributes directly to achieving the objectives of European policies, as regional development or sustainable development.

Through this paper, we underline that the analysis of projects' impact is necessary in order to check if they produce the desired effects, if they contribute to achieving the objectives of programs and European policies. The knowledge gained through impact evaluations are useful primarily to beneficiaries of European funding, but also of the institutions responsible for the implementation of the European programs and projects

(intermediate authorities, managing authorities, the Romanian Government and the European Commission).

Most project managers and project team members, who participated in our study on the impact of European funded projects on regional development, agree that the impact assessment has positive effects on organizations that implement projects by stimulating individual and organizational learning and by the contribution they can have to improving future projects.

The researched topic is of particular importance, especially now, when we are facing a new development stage at European level (2014 - 2020), a period in which the results of the impact assessment can be useful to the preparation of new programs.

A rigorous impact assessment takes into consideration the context in which the project is implemented, external factors that can influence the results. Impact assessment is not mandatory for projects receiving EU funding, but there are cases when managers are aware of its benefits and choose to use besides the cost - benefit analysis in the planning phase, qualitative impact evaluation methods.

For the projects analyzed through the questionnaire on the impact of EU-funded projects on regional development, was used as a method of projects evaluation, especially the cost - benefit analysis (69,4%). Qualitative methods of impact evaluation were used in 23% of cases to provide a clearer picture of the projects' effects. Specific quantitative impact assessment methods are less popular among persons involved in project management who participated in the study.

Improving the impact of projects can be achieved through efficient and effective management. The main means of improving the project's impact, identified in the empirical study are:

- carrying out impact evaluations and using the results of these analyzes to target elements with potential for improvement;
- favorable resolution of problems occurring in project management;
- linking projects to other projects already implemented or to be implemented in the organization, integrating projects in the development strategy of the organizations.

Based on the empirical study, through which were identified solutions for the most common problems that may occur in the management of projects financed by the EU, we formulate a number of proposals that can contribute to increasing the success chances of projects and improving their impact.

The proposals and recommendations for the institutions responsible for the management of EU funds in Romania (intermediate or managing authority) are:

- Development of a partnerships between institutions responsible for managing EU funds and banking institutions to support the implementation of projects, through banking products and through consulting services.
- More flexibility concerning the strict obligation to monitor (in days) the calendar of
  activities: the acceptance of a margin of +/- 5 days to the timetable would help
  beneficiaries.
- Review and simplification of procurement procedures, guidelines and instruction to create clearer, more transparent and uniform instructions, which leave no room for interpretation, would eliminate the subjectivity and lead to fewer mistakes in making acquisitions.
- Better coordination of activities at the management authorities' level can reduce bureaucracy in realizing the reports specific to the implementation phase.
- Promoting collaboration and partnerships between intermediate authorities and beneficiaries can reduce the number of delays in project evaluation, in verifying procurement activities and in making payments.
- Simplifying the mail with the intermediate bodies would reduce the consumption of time. For example: there is no need for approving the information-advertising materials if models are published.

On the other hand, proposals for European funding recipients are:

- More transparency at the organizational level and at the level of collaboration with intermediate bodies can avoid delaying refunds and the occurrence of mistakes in the application of procurement procedures.
- Matching projects with organizations' development strategies help facilitate financial support of projects.
- Allocation of a period (a few months/ an year) at the beginning of the project implementation, for carrying out procurement procedures, decreases the risk concerning failure to respect de calendar of activities;
- Promoting transparency and regular information of all persons involved in the implementation of the project on the state of the project and the main changes would reduce the problems of communication between project team members.

Selecting people according to the performance criteria of the job, setting deadlines for
the realization of activities, establishing clear responsibilities and penalties applicable
in case of not respecting the obligations helps avoiding the risk that members of the
project management team don't meet their obligations.

#### Theoretical and practical contributions

The theoretical research is based on a comprehensive bibliographical study, including reference books and articles published in international databases, official publications and statistics. The majority of the bibliographic sources used are from foreign literature, but we also used sources with Romanian authors, naming the members of the Management Department of the Faculty of Economics and Business Administration, Babeş-Bolyai University, Cluj-Napoca. The interdisciplinary nature of projects influenced the choice of bibliographic sources that can be classified in the following fields: project management, strategic management, management, economics, public policy, finance and statistics.

The theoretical research is materialized into an elaborate study of the literature which aims the explanation of concepts and the preparation of the necessary framework for conducting the experimental research.

Our contributions to the theoretical research are:

- establish the structure of the paper, showing in a logical sequence the most important theoretical concepts, to ensure that the context in which the experimental research is conducted;
- presentation of the main existing approaches in the literature on the project management;
- identification of opportunities for project funding through the European Union's programs in Romania, in the period 2007-2013;
- presentation of the access means of EU funds through projects and the main elements of this type of projects;
- presentation of general aspects regarding the impact and projects impact evaluation:
   defining the concepts, the difference between monitoring and impact evaluation,
   challenges and constraints in the preparation of the evaluation, the necessity of the
   evaluation and the usefulness of the obtained information, and the identification of the
   main categories of stakeholders in projects evaluation;

• presentation of the methodology of project impact evaluations: the evaluation questions, the choice of indicators, description of the methods used for the evaluation and presentation of data sources that can be used in the impact assessment.

Part of our documentation for theoretical research was carried out during the research internship at Wirtschaftsuniversität Wien, from which I benefited through the project POSDRU/88/1.5/S/60185.

For the practical research on the impact of projects financed by the European Union on regional development, related reports and analyses to this topic were studied.

The practical research comprises two parts:

- an analysis of the absorption of European funds. The analysis is based on data published by the Authority for the Coordination of Structural Instruments in Romania and on data published in the Unique System of Information Management (SMIS) by the management authorities of the 7 ministries that manage structural and cohesion funds. The purpose of the analysis was to present the current situation concerning the absorption of EU funds in Romania and in the Northwest region.
- a study on the improvement of project management and the impact of projects financed by the European Union on the development of the Northwest region. Experimental research carried out in the framework of this study was made using methods of quantitative analysis of data obtained through two questionnaires and qualitative methods of analysis of the data obtained through interviews with project managers and project management team members. The aim of the study is identifying means of improving projects' impact.

Through answering the questionnaires and especially by participating in the interviews, it was demonstrated the availability of the project managers and members of the management team for improving the management of projects, for increasing efficiency and effectiveness in the implementation of projects in order to improve the impact.

The main practical contributions, of our scientific research can be summarized as follows:

- analysis of the current state of absorption of European funds in Romania and at the level of the Northwest region, in the period 2007 – July 2012;
- completion of the study conducted by KPMG Romania, GEA S&C and Pluriconsult on the factors affecting the performance of the structural instruments by identifying another important factor: the duration of reimbursements;

- carrying out an analysis of the reimbursement duration in case of 195 refund requests, reported in SMIS from January 2012 to July 2012;
- analyzing the opinions of project managers and management team members of projects financed by the European Union, concerning the management of projects and their impact;
- identification of the effects produced by the studied projects, based on the responses received to the questionnaire on the impact of projects financed by the European Union on regional development;
- identifying methods of analyzing the projects effects used in the case of studied projects;
- identification of the main problems affecting the management of projects financed by the European Union, based on the responses received to the questionnaire on the management of European projects;
- the proposal of solutions for the most common problems that occur in the management of projects financed by the European Union;
- proposing recommendations and solutions for improving project management and improving their impact on developing the organizations that implement them and on the region where are implemented, based on interviews.

The research is based on real data, the proposals have been formulated starting from the discussion with experts in the field and are applicable in practice.

Research results presented in this paper can be considered a support for the improvement of the management of projects with European funding. Another potential impact of the research results is the awareness of the project managers on the importance of evaluation and monitoring of projects' impact and its benefits.

Research results have been presented within national and international conferences, and published in recognized journals, BDI and CNCSIS (B +), which increase the level of credibility of the research.

#### **Research limitations**

In any scientific research can be identified issues limiting the obtained results. We present the main limitations of our research:

- From the methodological point of view, the research based on questionnaire and interview has a certain degree of subjectivity. However, we consider the research tools used appropriate to the conducted study and the obtained results relevant.
- Another limit of the practical research is the number of responses received to the
  questionnaires, although reported to the number of people contacted, the response rate
  is good and the information is relevant.
- Through our research we did not establish as a goal to realize a precise quantification of the impact of projects financed by the European Union on regional development. The high level of complexity of such a study is given by the uniqueness and diversity of projects that should be analyzed, being necessary a team of researchers for its achievement, and also a longer analyzed time horizon.

#### **SELECTIVE REFERENCES**

- Achterkamp, M. C., Vos, J. F. J. (2008), Investigating the use of the stakeholder notion in project management literature, a meta-analysis, *International Journal of Project Management*, 26, p. 749–75
- 2. Ahlemann, F., Teuteberg, F., Vogelsang, K. (2009), Project management standards Diffusion and application in Germany and Switzerland, *International Journal of Project Management*, 27
- 3. Alasuutari, P., Bickman, L., Brannen, J. (2009), *The SAGE Handbook of Social Research Methods*, SAGE Publication
- 4. Baker, J. (2000), Evaluating the Impact of Development Projects on Poverty: A Handbook for Practitioners, Washington, D.C.: The World Bank
- 5. Baker, M., Baker, M., Thorne, J. and Dutnell, M. (1997), Leveraging human capital, *Journal of Knowledge Management*, Vol. 1 No. 1, p. 63-74
- 6. Bamberger, M., Fujita, N. (2008), Impact Evaluation of Development Assistance Designing Methodologically Sound Impact Evaluations Under Budget, Time and Data Constraints, A Practical Handbook Edition 2, Foundation for Advanced Studies on International Development
- 7. Bell, S., Morse, S. (2008), Sustainability Indicators Measuring the Immeasurable?, Second Edition, Ed. Earthscan, London, UK
- 8. Blackburn, W. (2008), *The Sustainability Handbook*, Environmental Law Institute, Washington, D.C., USA
- 9. Campbell, H., Brown. R. (2003), Benefit Cost Analysis Financial and Economic Appraisal Using Spreadsheets, Cambridge University Press
- 10. Chelcea, S. (2001), *Metodologia cercetării sociologice, Metode cantitative și Calitative*, Editura Economică, București
- 11. Chelcea, S. (2001), Tehnici de cercetare sociologică curs
- 12. Cleland, D., Gareis, R. (2006), Global Project Management Handbook, 2nd Edition, McGraw-Hill Print
- 13. Cończ, E., Skirke, U., Kleisen, H., Barber, M. (2007), Increasing the rate of sustainable change: a call for a redefinition of the concept and the model for its implementation, *Journal of Cleaner Production* 15, 525-537

- 14. Eric von Breska, European Commission, Directorate-General for Regional Policy (2010), Investing in Europe's future Fifth report on economic, social and territorial cohesion, Belgium,
- 15. Gareis, R. (2005), Happy Projects, Manz Verlag, Vienna
- 16. Gareis, R., Huemann, M., Martinuzzi, A. (2011), What can project management learn from considering sustainability principles?, Project Perspectives, *The annual publication of International Project Management Association* 2011, Vol. XXXIII
- 17. Gareis, R., Huemann, M., Weninger, C. (2010), The consideration of sustainability principles in the project assignment process: An analysis of Project Management approaches, *IPMA World Congress*, Istanbul, Turkey
- 18. Gareis, R., Huemann., M. (2001), Assessing and Benchmarking Project-oriented Societies, Project Management *International Project Management Journal*
- 19. Gareis, R., Stummer, M. (2008), Processes and Projects, MANZ, Vienna
- 20. Gertler, P.J., Martinez, S., Premand, P., Rawlings, L.B., Vermeersch, C. M. J. (2011), *Impact Evaluation in Practice*, The World Bank, http://www.worldbank.org/pdt
- 21. Hanisch, B., Lindner, F., Mueller, A., Wald, A. (2009), Knowledge management in project environments, *Journal of Knowledge Management*, Vol. 13 No. 4/2009, p. 148-160
- 22. Ilieş, L., Crişan, E., **Mureşan., I.** (2010), Best Practices in Project Management, *Review of International Comparative Management*, Vol. 11 No. 1 / 2010
- 23. Ilieş, L., Crişan, E., **Mureşan., I.**, Pleşcan, M. (2010), Methods for Evaluating the Impact of Project Implementation in Regional Development, *The Proceedings of the 3rd International Conference Managerial Challenges of the Contemporary Society*, Ed. Risoprint, Cluj-Napoca
- 24. Ilieş, L., **Mureşan., I.**, Crişan, E. (2012), Impact Evaluation for EU Financed Projects, The Proceedings of the 5th International Conference Managerial Challenges of the Contemporary Society, Ed. Risoprint, Cluj-Napoca
- 25. Ilieş, L., **Mureşan., I.**, Muntean, B. (2012), Knowledge Management in EU Founded Projects, *The Proceedings of the 19th International Economic Conference IECS 2012*, *The Persistance of the Global Economic Crisis: Causes, Implications, Solutions*", Sibiu, Romania

- 26. Ilieş, L., **Mureşan., I.**, Salanţă, I. (2012), Investments Values and EU Founded Projects, Conferinţa internaţională "European Integration New Challenges" 25 26 mai 2012, Oradea, Romania
- 27. Ilieș, L., Stegerean, R., Osoian, C., Lungescu, D. (2005), *Managementul firmei*, Ed. Risoprint, Cluj-Napoca
- 28. Khandker S., Koolwal G., Samad H. (2010), *Handbook on Impact Evaluation Quantitative Methods and Practices*, The International Bank for Reconstruction and Development / The World Bank, Washington DC
- 29. Leeuw. F., Vaessen, J. (2009), *Impact Evaluations and Development Nonie Guidance on Impact Evaluation*, The Network of Networks on Impact Evaluation, Washington, USA, www.worldbank.org/ieg/nonie/
- 30. Littau, P., Jujagiri, N. J., Adlbrecht, G. (2010), 25 Years of Stakeholder Theory in Project Management Literature (1984–2009), *Project Management Journal*, Vol. 41, No. 4, p. 17–29
- 31. Löwer U. M. (2006), Interorganisational Standards, *Contributions to Management Science*, Germania
- 32. Luhmann, N. (1995), Social Systems, Stanford University Press, Stanford, California
- 33. Marczyk, G., DeMatteo, D., Festinger, D. (2005), Essentials of Research Design and Methodology, New Jersey, John Wiley & Sons
- 34. Maylor, H. (2010), *Project Management*, 4th Edition, Harlow, Pearson Education
- 35. Mills, R., Turner, R. (1995), *Projects for shareholder value*, The commercial project manager, London, McGraw-Hill Book Company
- 36. Morton, M. (2009), Applicability of Impact Evaluation to Cohesion Policy Report Working Paper
- 37. **Mureşan, I.** (2011), Do projects financed by EU generate sustainable changes in Romania?, *PMWorldToday*, Vol. XIII Issue VII July 2011
- 38. Rao, V., Woolcock, M. (2003), The impact of economic policies on poverty and income distribution: Evaluation techniques and tools, Integrating Qualitative and Quantitative Approaches in Program Evaluation, Washington, D.C., p. 165 190
- 39. Stoian, A., Gligor, L. (2012), Lucrare clarificatoare nr. 5 Beneficii de cuantificat în Analiza Cost-Beneficiu a proiectelor finanțate din FEDR și FC
- 40. Turner, J.R., Simister, S.J. (2004), Manualul Gower de Management de proiect, Ed. Codecs

- 41. Vintilă, N., Grosu, M. (2012), Lucrare clarificatoare nr. 4 *Costuri utilizate în Analiza*Cost-Beneficiu a proiectelor finanțate din FEDR și FC
- 42. Voinea, L. (coordonator), Cojanu, V., Lungu, L., Sandu, D., Şerb, I. (2007), *Manual de evaluare a competitivității regionale*, Realizat în cadrul proiectului GOF "Romania Building Regional Assessment Capacity in Line with the Lisbon Agenda", București
- 43. Whitty, S. J., Maylor, H. (2009), And then came Complex Project Management (revised), International Journal of Project Management 27
- 44. Wolff, P. (2005), A Framework for Indicators to Monitor the EU Sustainable Development Strategy, Applied Research in Environmental Economics, *ZEW Economic Studies*, Volume 31, 23-49
- 45. \*\*\*, Association for Project Management (2006), The APM Body of Knowledge 5th Edition Definitions
- 46. \*\*\*, British Standards Institute (2000), BS6079-1: Guide to Project Management
- 47. \*\*\*, Comisia Europeană (2004), Project Cycle Management Guidelines
- 48. \*\*\*, Comisia Europeană (2004), Regions Nomenclature of territorial units for statistics NUTS 2003 / EU25 Part 1,
  - http://epp.eurostat.ec.europa.eu/portal/page/portal/product\_details/
- 49. \*\*\*, Comisia Europeană (2007), Regions in the European Union Nomenclature of territorial units for statistics NUTS 2006 /EU-27, Luxembourg
- 50. \*\*\*, Comisia Europeană (2008), Guide to Cost-Benefit Analysis of investment projects Structural Funds, Cohesion Fund and Instrument for Pre-Accession
- 51. \*\*\*, Comisia Europeană (2008), Impact Assessment Guidelines [Draft version 27/05/2008]
- 52. \*\*\*, Comisia Europeană (2009), Sustainable development in the European Union 2009 monitoring report of the EU sustainable development strategy, Belgium
- 53. \*\*\*, European Commission (2009), Sustainable development in the European Union 2009 monitoring report of the EU sustainable development strategy, Belgium
- 54. \*\*\*, European Communities (2006), Evaluation Methods for The European Union's External Assistance, Methodological Bases for Evaluation, Volume 1, Franţa, http://ec.europa.eu/europeaid/evaluation/methodology/methods
- 55. \*\*\*, Guvernul României (1998), Manualul de management al proiectelor
- 56. \*\*\*, Guvernul României (2007), Cadrul Strategic Național de Referință 2007-2013, București, România

- 57. \*\*\*, Guvernul României, 2007, Planul Național de Dezvoltare, București, Romania
- 58. \*\*\*, Guvernul României, 2008, Strategia Națională de Dezvoltare Durabilă 2013-2020-2030, București, România
- 59. \*\*\*, Institutul European din România (2003), Politica de dezvoltare regională, Seria Micromonografii Politici Europene, versiune actualizată
- 60. \*\*\*, Institutul Național de Statistică (2011), Anuarul statistic al României 2011
- 61. \*\*\*, International Project Management Association (2006), ICB IPMA Competence Baseline, Version 3.0
- 62. \*\*\*, KPMG Romania, GEA S&C, Pluriconsult (2010), A Formative Evaluation of Structural Instruments in Romania Final Report
- 63. \*\*\*, Office of Government Commerce (2009), An introduction to PRINCE2: Managing and Directing Successful Projects, UK
- 64. \*\*\*, Project Management Institute (2004), Project Management Body of Knowledge
- 65. \*\*\*, Project Management Institute (2008), The Standard for Program Management, 2nd Edition, USA
- 66. \*\*\*, The World Bank (2004), Monitoring and Evaluation: Some Tools, Methods & Approaches, Washington, D.C.
- 67. \*\*\*, The World Commission on Environment and Development (WCED) (1987), Our common future, University Press, 1987, Oxford
- 68. \*\*\*, United Nations (2007), Indicators of Sustainable Development: Guidelines and Methodologies, Third Edition, New York, USA