The importance of a project level risk management methodology for EU Structural and Investment Funds accession in Romania

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Abstract. *Accessing EU funds is considered to be an important development chance for all type of beneficiaries in Romania: public bodies, nongovernmental organizations and firms. The grounds for this are the amount of funds available per beneficiary and the co financing rate (for example, the investment projects for firms amounted up to 5 million Euro of EU funding at a EU co financing rate up to 70%). As the Romanian responsible authorities strive to conduct a fast and smooth process, the reality shows the funds accession is rather unpredictable and costly, both in terms of time consumption and financial resources. Lots of causes contribute to this situation, amongst which the inefficient risk management conducted, both by the state authorities responsible with the EU funds management and by the beneficiaries of funds. The effects are visible: a poor absorption rate of the EU structural and cohesion funds (79,23% at the level of January 2017 for the 2007-2013 financial period). The authors' research follows the importance that risk management should have in the process of managing and accessing EU funds. The research methodology starts from the responses that 170 people involved in managing EU funded projects within 2007-2013 financial period gave to an online questionnaire carried on in 2016. The focus was to establish if and how risk management methodologies/procedures/guidelines were used within the implementation of projects and in what measure this kind of approach should be compulsory or optional for the financial period 2014-2020. The research methodology further implied the analysis of key issues for projects financing such as: feasibility and opportunity determination, budgeting, projects' evaluation, etc. The main finding of the research is that applicants and beneficiaries need to implement project level risk management methodologies. Based on this, the authors propose a guideline for drafting project level risk management methodologies, that put into practice might increase predictability during the preparation and implementation and reduce the additional costs of the EU funded projects. It is envisaged that this guideline should be treated as recommendation in order not to enable abuse of regulatory actions from the part of the managing authorities.*

Keywords: risk, risk management, EU structural and investment funds, projects.

Introduction

As EU Member State since 2007, Romania is entitled to access important development funds: Structural and Cohesion Funds (European Structural and Investment Funds) and Agriculture and Rural Development Funds. These are used by EU institutions as means to implement the Cohesion Policy and the Common Agricultural Policy.

With respect to the Structural and Cohesion Funds, during 2007-2013 financial period Romania had the possibility to use up to 18.781.551.599 EUR. At the end of January 2017 Romanian Government declared that the absorption rate of 2007-2013 Structural and Cohesion Funds was 79,23% (Ministry of European Funds 2017).

For the 2014-2020 financial period Romania may use up to 22.541.107.909 EUR (European Commission 2017) from the European Structural and Investment Funds.

As Romania is facing serious delays in accrediting the institutional framework, at the end of January 2017, the 2014-2020 financial period absorption rate was still 0%.

In authors' opinion, amongst the causes for this situation is also a faulty risk management carried on by the authorities and institutions responsible for EU funds management in Romania, as risk management is still treated as “another” activity in the process of managing the EU funds (Badea & Nicolae, 2015).

At least three main aspects support this statement:

- 1) EU Member States use funds respecting the reimbursement principle (the Member State finances projects from its own budget and the European Commission reimburses the funds after verification of their correct use) - out of this arise risks related to legal and appropriate use of funds within particular projects, that can generate nonpayment and/or financial corrections after the projects have been implemented
- 2) the management of EU funds in Romania proved to be a very complex and unpredictable process, the institutional and regulatory framework changing every year - out of this arise risks related to call for proposals organization, proper evaluation/selection and correct and efficient projects' implementation and monitoring
- 3) the implementation of projects financed from EU funds proved to be a long process, from at least 1 year, up to 4 or 5 years even for simple projects developed by private entities - out of this arise risks related to a changed economic environment that can lead to unnecessary investments and/or inefficient ones as long as the managing authorities don't allow project beneficiaries to update the projects (objectives, indicators, procurement lists, target groups etc.)

As the authorities and institutions responsible for EU funds management in Romania have some procedures/methodologies for risk management (compulsory as general regulation for public authorities and institutions), the authors propose also a project level risk management methodology to be used by the projects beneficiaries.

Literature review

Although the risk management represents an important issue for the Romanian public authorities responsible for managing the EU funds, there is little scientific literature on this particular risk management.

Previous research was conducted by the authors and focused on:

- Specific procurement procedures as sources of risk in the management of Structural Funds in Romania (Badea & Nicolae, 2015)
- Insurance of risks specific to non-reimbursable funds management system in Romania (Badea & Nicolae, 2015)
- Qualitative Analysis of the Risks Identified in the Management of the Non-Reimbursable Funds in Romania in 2007-2013 (Nicolae, 2015)
- The applicability of international financial methodologies to the risk management system used in funds management in Romania (Nicolae, 2015).

In Romania there is little scientific literature on risk management in general, although there are some fields of activity or sectors where risk management is used on a daily basis. For example, in the insurance sector, with an yearly total of written gross premiums (turnover) of around 2 billion Euro.

In comparison with the insurance industry, the Romania's potential of EU funds absorption is about 5,7 billion Euro per year, out of which the European Structural and Investment Funds represents more than 3,2 billion Euro.

In this respect, we consider that risk management for non-reimbursable funds should be an important research topic.

Research methodology and results

In the first half of 2016, the authors conducted a research amongst the people involved in managing EU funded projects within 2007-2013 financial period.

Research methodology

The research was carried on online, using email, Google and Facebook. It comprised 6 questions focusing on:

- the financing programs the respondents prepared/implemented projects during 2007-2013 financial period
- the risk management procedures/methodologies/guidelines used in relation with these projects
- the quality of these risk management procedures/methodologies/guidelines
- the compulsoriness of such methodologies in 2014-2020 financial period
- which risks such methodologies should necessarily address
- if such methodologies should be similar to or different for all financing programs

The questionnaire was sent to over 1.000 email addresses and posted on Facebook; it was answered by 170 people included in the following categories: central and local authorities, local action groups, universities, companies, NGOs, consultants and auditors.

The 170 respondents declared they were involved in one or more of the 12 financing programs presented in the questionnaire (out of which 8 financed from EU Structural and Cohesion Funds); in total the respondents declared have worked, as average, in 2,5 financing programs (in total on 425 financing programs).

As most of the respondents were consultants or auditors the authors determined their implication was in at least 5.000 projects. For example, one person declared that *"as a financial auditor of more than 100 projects, I have not met any procedure / methodology of risk assessment"*.

Research main results

Four important aspects the research revealed:

- the use of methodologies: 67,1% of the respondents declared they had/used a risk management procedure/methodology/guidelines within the projects they worked in relation with
- the quality of the used methodologies: 53% of the respondents appreciated the procedures/methodologies/guidelines were incomplete, difficult to implement or short (concise)
- the compulsoriness of methodologies during 2014-2020 financial period: 71,76% of the respondents selected 4 and 5 on a 0 to 5 scale (where 5 means compulsory and 4 almost mandatory)
- the most important risks to tackle by the methodologies: 5 out of 10 proposed risk categories were selected by more than 50% of the respondents, as seen in the table below

Table 1. *The most important risks to be addressed within the methodologies used in the 2014-2020 financial period*

No.	Risk category	Respondents (number)	Weight / total respondents (%)
1.	Procurement related risks	146	85.88%
2.	Financial flows related risks	131	77.06%
3.	Deadline overcome related risks	125	73.53%
4.	Reimbursement related risks	102	60.00%
5.	Target groups related risks	87	51.18%
6.	Irregularities and fraud related risks	84	49.41%
7.	Payment requests related risks	78	45.88%
8.	Technical reports related risks	43	25.29%
9.	Communication and dissemination related risks	31	18.24%
10.	Other risks	11	6.47%

Source: Authors' own research.

In the category "Other risks" the respondents included:

- risks related to project evaluation/selection
- risks related to legislation changing/incoherence, including situations in which beneficiaries are audited based on the new rules
- risks related to contractual modifications/exceeding the initial planning
- risks related to personnel turnover within the project implementation team
- risks related to partnership the project is based upon
- risks related to relation between applicants/beneficiaries and consultants
- risks of failure to achieve project' objectives and/or indicators

Further research

In addition to the results of the online research, the authors analyzed also key stages of the projects' financing process. Each and every of these stages is subject to major risks that can affect results and objectives of individual projects, thus affecting the financing programs and, in the end, EU policies itself.

In the table below the authors exemplify risks and situations already met in the 2007-2013 financial period in relation with the key stages of the financing process.

Table 2. *Examples or risks encountered in practice during 2007-2013 financial period*

No.	Project stage	Examples of risks	Examples of situations already met in practice
1.	feasibility and opportunity analysis	the risk to establish a project as feasible and profitable on current circumstances, that until its implementation significantly change	- companies that prepared projects under Sectoral Operational Program Increase of Economic Competitiveness (SOP IEC) waited up to 2 years for the projects to be evaluated and discarded to financing because the machinery which had to be purchased was already outdated
2.	budget preparing	the risk of prices changing from budget preparation stage to budget implementation stage	- because of the Euro/RON exchange rate modification, there were projects contracted after years from its submission, with up to 15-20% budget shortage
3.	submission of projects	risk of not submitting the project in due time	- especially for big projects (ex: roads, environment) the submission of projects follow the principle "first come, first served", an advantage having those submitting projects early
4.	evaluation of projects	risk of selecting less relevant projects	- most of the evaluation criteria used for project selection assumed the appreciation

			of the assessors (ex: "in which degree projects respects...."
5.	contracting	risk of delaying contracting	- as contracts were signed by the ministers themselves, alongside with up to tens of civil servants, there were situation where contracting took more than 3 months
6.	projects' implementation	risk of appeals to procurement procedures from bidders who lost the contracts	- in relation with EU funded projects, especially those with big budgets, the National Council For Solving Complaints in Romania had to solve up to thousands procurement appeals per year
7.	projects' monitoring after implementation	risk of project beneficiaries not coping with the indicators set in the projects	- many companies that submitted projects under SOP IEC did not thoroughly verify the financial provisions prepared by consultants (ex: turnovers set ten times as the ones in previous year before project submission)

Source: Authors' own research.

This kind of examples show an ineffective use of resources in order to obtain the non-reimbursable financing.

Research implications for the field

During 2007-2013 financial period there was no compulsory use of risk management methodologies at project level.

However, the public bodies beneficiary of funds, had internal risk management procedures, mandatory by general laws in force. Still, these procedures did not treat specifically the risks related to projects preparation and/or implementation.

The private bodies beneficiary of funds (companies and NGOs) did not have any specific risk management procedures/methodologies/guidelines. The only analysis of risks they made was for drafting the project proposals and only for those projects that required specific information on risks related to project's implementation (ex: for some projects a logical framework was mandatory; for some other projects, risks were treated in the business plans, feasibility studies and/or cost-benefit analysis).

Apart from the scientific literature mentioned above, risk management is addressed in a minimal manner in a series of studies and analysis elaborated mainly by the public authorities and institutions in relation with or with financing from the operational programs from the 2007-2013 financial period.

For example, within the "Good practices guide for public procurement within projects financed from structural instruments" (Ministry of European Funds 2015)) risk management is considered important because *"inadequate risk management inevitably lead to the occurrence of irregularities / nonconformities that affect reaching goals"*. The project manager is supposed to identify risks, analyze it, keep a risk registry and prepare an action plan for reducing or eliminating the identified risks. Furthermore, the guide recommends that risks monitoring and control to be carried on two times a year.

On the other hand, the financing programs implementation reports, drafted each year of the financial period, treat risks only related to the public authorities and institutions that ensure the management of the EU non-reimbursable funds in Romania. There is no analysis regarding the use of risk management at project level, nor guidelines on how to do it.

Thus, the authors' research is not only complementary to the studies and analysis elaborated by various public authorities or mentioned within the programs

implementation reports, but is meant to be a step forward for implementing a coherent risk management at project level.

The following positive implications of using a risk management guideline are envisaged:

- the applicants *understand the "hidden costs"* of a EU financed project (ex: a long duration from submitting a project to signing a financing contract; possible changing of the specific rules to be observed during the implementation)
- the applicants *carefully forecast* the indicators and results to be achieved during the implementation, but also those monitored after projects implementation
- the applicants better *plan all projects' aspects*

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Proposed guideline for drafting project level risk management methodologies

As resulted from the research, the authors propose a guideline for drafting project level risk management methodologies.

The guideline aims to create the premises for increasing the predictability during the preparation and implementation and reduce the additional costs of the EU funded projects.

The context

There are three major phases for a project:

- preparation phase (that finishes with the financing contract)
- implementation phase (ends with the final payment for the project)
- monitoring phase (that starts at the end of the implementation phase and lasts for 3 or 5 years, in which the financing beneficiaries have to achieve indicators set in the financing contract)

The preparation phase is usually carried on by a consulting organization and less that the potentially beneficiaries themselves. In this phase, an analysis of all the potential risks should be carried on.

The implementation phase is the responsibility of the project team, established during the preparation phase. The project team has to check all the effects of the preparation phase' specific risks, reanalyze all the risks specific to the implementation and monitoring phase and further monitor all the risks within the implementation phase.

The monitoring phase is usually in the responsibility of the organization management.

Steps of the methodology

The following steps are recommended to be followed for an efficient project level risk management:

- step 1 - analysis of the exhaustive risks database

The risks database should be published online by the public authorities and permanently updated with funds beneficiaries' involvement.

The organization/persons preparing the project should consult the database and select the risks that may affect the project in every of the three phases presented above. A project risks list should be drafted.

- step 2 - identification of the causes for the selected risks

Each risk in the database should be in relation with a detailed list of possible causes. The list of causes should be also published online and updated permanently with funds beneficiaries' involvement.

The organization/persons that prepare projects should consult the list of causes and select the ones applicable to the specific project and, if possible, identify new ones, specific to the beneficiary's or project's context.

The authors emphasize that the causes are more important than risks itself because only approaching the causes can limit the effects and even eliminate risks.

➤ step 3 - quantification of the selected risks

Based on the lists of risks and causes and using further analysis methods/techniques, the organization/persons preparing the project can quantify the impact the identified risks.

A presentation of such methods/techniques or at list simple calculation algorithms should be made public alongside with the lists of risks and causes.

➤ step 4 - Establishment of risk management solutions

For each risk, based on the quantification of risks, the organization/persons preparing the project should select one of the risk management solutions normally used and presented in the literature (Badea, 2003):

- avoiding risk
- prevention of risk
- reduction of risk
- retaining risk
- transfer of risk (insurances)

➤ step 5 - Periodically revise steps 1 to 4

The authors recommend that revision of the risks, causes, quantification and selected risk management solutions be done periodically: half-yearly for the preparation and monitoring phase and quarterly for the implementation phase.

Case study

In order to test the use of the guideline, the authors exemplify with a potential project to be submitted during 2014-2020 financial period, under Regional Operational Program, call for proposals *"POR/102/2/2 - Supporting the creation and expansion of production capacity and developing advanced services"*. This financing is open from 23.02.2017 to 23.08.2017.

The project is to be submitted by company "Example", a small enterprise until 2018 when it will turn to medium sized enterprises. The project has the following characteristics:

- total eligible budget: 1.000.000 Euro
- main procurement procedures:
 - warehouse works: 300.000 Euro
 - machinery and equipment: 600.000 Euro
 - other procurement (studies, consultancy, permits etc.): 100.000 Euro
- company "Example" submits a project in a region where the financing rate is 70% for small enterprises and 60% for medium sized enterprises
- one of the eligibility criteria sets out that beneficiary must keep its SMEs category until signing the financing contract
- planned month for signing the financing contract: November 2017
- in order to receive all possible points, the applicant should oblige to reach a rate of return on equity $\geq 7\%$ and a general solvency ratio ≥ 4

Step 1 - analysis of the exhaustive risks database

The consultant preparing the project selected the following risks that may affect the project:

- ❖ in the preparation phase:
 - 1.1 risk of not submitting the project in due time (project not financed)
 - 1.2 risk of project receiving less points in the evaluation process (project not financed)
 - 1.3 risk of financing rate downsizing from 70% to 60%
- ❖ in the implementation phase:
 - 2.1 risk of receiving higher bids than budgeted
 - 2.2 risk of higher construction costs than contracted
- ❖ in the monitoring phase
 - 3.1 risk of not achieving a rate of return on equity $\geq 7\%$
 - 3.2 risk of not achieving a general solvency ratio ≥ 4

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Step 2 - identification of the causes for the selected risks

- in the preparation phase:
 - 1.1 other potential applicants submit projects in the first two months and cover all the available funds
 - 1.2 the project receives less points on the business plan quality because of the short details offered in it
 - 1.3 the evaluation and contracting phase extends up to 2018, when company "Example" will be a medium sized enterprise
- in the implementation phase:
 - 2.1 when requesting offers for drafting budget, the applicant does not specify that the project will be implemented after at least 1 year and that offers should take into account inflation and other macroeconomic indicators
 - 2.2 the procurement specification is low, so that bidder may offer lower prices while still respecting the technical requirements; when delivering works, they claim more funds in order to reach specification not set in the procurement stage
- in the monitoring phase
 - 3.1 the consultant forecasts financial flows only for the project to receive maximum points available and not taking into account the real premises
 - 3.2 Idem 3.1

Step 3 - quantification of the selected risks

- ❑ in the preparation phase:
 - 1.1 all the costs for preparing the project are supported by the applicant (minimum estimated: 20.000 Euro)
 - 1.2 Idem 1.1
 - 1.3 applicant's financing increasing from 300.000 Euro to 400.000 Euro
- ❑ in the implementation phase:
 - 2.1 applicant's financing increasing with the amounts exceeding budget
 - 2.2 applicant's financing increasing with the amounts exceeding contract
- ❑ in the monitoring phase

3.1 financial penalties paid by the beneficiary, up to returning all the received financing

3.2 Idem 3.1

Step 4 - Establishment of risk management solutions

✓ in the preparation phase:

1.1 *reduction of risk*: negotiate lower initial costs for preparing project

1.2 *prevention of risk*: applicant carefully analyze consultant's business plan and deliver input for improving it

1.3 *retaining risk*: there is no possibility to avoid or prevent it

✓ in the implementation phase:

2.1 *reduction of risk*: in the requests for offers the applicant details all possibilities and ask bidders to take it into account when bidding

2.2 *reduction of risk*: procurement specifications are as very detailed

✓ in the monitoring phase

3.1 *reduction of risk*: a careful forecast of the financial flows

3.2 Idem 3.1

Based on this demarche, the applicant may decide if is suitable to apply to financing and if so, what are the important things to tackle in order to be most efficient.

As mentioned above, the applicant should periodically revise steps 1-4.

Conclusion

A guideline for drafting project level risk management methodologies is useful both for the applicants/beneficiaries, but also for the authorities and institutions managing EU non-reimbursable funds. Its main purpose is to help applicants to prepare and implement better projects.

Such a guideline should be treated as recommendation in order not to give authorities the opportunity to add extra control, thus further burdening funds' accession.

The guideline itself and the methods/techniques proposed to be used in relation with it should be always simple, in order for all the potential beneficiaries to use it and not to give birth to further consultancy needs.

Further development of the guideline may be carried on with regards to quantification of risks, the proposed methods being of use also for the quantification of risks identified in their activities by the public authorities and institutions responsible with the management of the non-reimbursable funds in Romania.

References

- Badea, D. & Nicolae, C. (2015). *Specific procurement procedures – sources of risk in the management of Structural Funds in Romania*. Bucharest: Proceedings of the International Finance and Banking Conference FI BA 2015 (XIIIth Edition), Retrieved from <http://store.ectap.ro>.
- Badea, D. & Nicolae, C. (2015). *Insurance of risks specific to non-reimbursable funds management system in Romania*. Bucharest: Financial Studies, Year XIX – New series – Issue 2A(68A)/2015, Retrieved from <http://fs.icfm.ro>.
- Badea, D. (2003). *Insurance & reinsurance*. Bucharest: Editura Economică.
- European Commission (2017). *"2014-2020 Financial Allocations by Member State"*, Retrieved from <https://cohesiondata.ec.europa.eu/>.
- Ministry of European Funds (2015). *"Good practices guide for public procurement within projects financed from structural instruments"*, Retrieved from www.fonduri-ue.ro.

- Ministry of European Funds (2016, November 30). *"Absorption stage for the 2007-2013 Operational Programs at November 30, 2016"*. Retrieved from www.fonduri-ue.ro.
- Ministry of European Funds (2017, January 31). *"2007-2013 absorption stage at January 31, 2017"*. Retrieved from www.fonduri-ue.ro.
- Nicolae, C. (2015). *Qualitative Analysis of the Risks Identified in the Management of the Non-Reimbursable Funds in Romania in 2007-2013*. Bucharest: Proceedings of the 11th International Conference on Administration and Public Management "Strategic Management for Local Communities", Retrieved from <http://confcamp.ase.ro/2015/proceedings/>.
- Nicolae, C. (2015). *The applicability of international financial methodologies to the risk management system used in funds management in Romania*. Bucharest: in course of publication.