PROPOSAL OF A COMMON SCORING SYSTEM FOR SELECTION OF EU FUNDED PROJECTS DEVELOPED BY ROMANIAN COMPANIES

Droj Laurentiu
University of Oradea, Faculty of Economics, Oradea, Romania
laurentiu.droj@gmail.com

Abstract*: Since the start of the European Union Structural Funding Programs 2007-2013, especially those focused on financing investments proposed by private companies, a big change seems to be taken place. Large numbers of companies have applied for grants within these programs and especially for funding under the European Regional Development Fund (ERDF). But after the initial enthusiasm and initial success reported by both the Management Authorities and private beneficiaries big issues have aroused regarding lack of financial resources for co-financing to support investments or expenditures in the initial stages funding the project. Under this context the banking sector was called for support and was expected to be heavily involved in ensuring external financing. This was not as initially predicted. A big concern came from the fact that the projects, even if achieved excellent scores on the technical evaluation from the management authorities, had huge problems in receiving even basic approval from the banking system. Since it seems that most of these inconsistencies are derived from the evaluation phase of projects this study tries to focus on establishing an equilibrium between banking analysis indicators and the scoring system used by the European Union management authorities. Identifying common criteria used for selection of good sustainable projects to be funded within European Structural Funds constitutes a big challenge for the management authorities and for the banking institutions as well. The applicants must realize financing application based on a set of indicated criteria. In order to achieve financing, these entities learned to modulate their financial indicators and their business plans according to the requirements. But a large number of already approved projects by the ERDF managing authorities found themselves in impossibility to comply with banking standards as well. Correlation of both European Union and banking system criteria, especially the Cost and Benefit Analysis Indicators with the banking financial indicators could be a great solution to current challenges: making the projects proposed for financing bankable, also, and thereby increase the absorption capacity of the beneficiaries. To solve this problem the current study proposed the creation of a mixed scoring assessment system containing 15 indicators for which were established various evaluation values. The main goal of the system was to fulfil both the evaluation criteria of European Union management authorities and the creditworthiness criteria used by the banking sector. In the final stage of this paper the assessment system was tested over a number of 50 Romanian companies, which were selected for European financing.*

Keywords: *financial analysis, Cost Benefit Analysis, European funding, selection system, bankability, European projects*

JEL classification: *H43, G30, G32, C61, G17, G21*

1. Introduction

Since the start of the European Union Structural Funding Programs 2007-2013, especially those focused on financing investments proposed by private companies, a big change seems to be taken place. Large numbers of companies have applied for grants within these programs and especially for funding under the European Regional Development Fund (ERDF).

But after the initial enthusiasm and initial success reported by both the Management Authorities and private beneficiaries big issues have aroused regarding lack of financial resources for co-financing to support investments or expenditures in the initial stages funding the project. In these phases of the projects, European funding grant recipient must invest their own financial resources to support the projects. These resources will be repaid later by the Management Authorities of the Programmes, if they are carried out respecting the national legislation, the rules of the programme and are considered eligible expenses under the conditions of the financing contract.

Under this context the banking sector was called for support and was expected to be heavily involved in ensuring external financing. This was not as initially predicted. The increase of applicants for special banking products which were required for sustaining project grants was initially received with surprise and distrust by the banking sector. But given the effect of the financial crisis and that since this area of activity is proving to be profitable for the banking sector, most Romanian banks have created special packages of products which exclusively dedicated for co-financing and/or pre-financing, to ensure different types of projects European funding.

Soon, big concerns arise from the fact that the projects, even if achieved excellent scores on the technical evaluation from the management authorities, had huge problems in receiving even basic approval from the banking system.

Since it seems that most of these inconsistencies are derived from the evaluation phase of projects this study tries to focus on establishing equilibrium between banking analysis indicators and the scoring system used by the European Union management authorities. Identifying common criteria used for selection of good sustainable projects to be funded within European Structural Funds constitutes a big challenge for the management authorities and for the banking system as well.

The applicants must realize financing application based on a set of indicated criteria. In order to achieve financing, these entities learned to modulate their financial indicators and their business plans according to the requirements. But a large number of already approved projects by the ERDF managing authorities found themselves in impossibility to comply with banking standards as well.

2. Are the European projects Bankable?

As mentioned by Droj(2012) creditworthiness or “bankability” analysis are performed quite often in the last years especially concerning investment projects. The term bankability, comes from the term bankable and was defined in the Business Dictionary(2012) to be a “Project or proposal that has sufficient collateral, future cash-flow, and high probability of success, to be acceptable to institutional lenders for financing” or more simple defined a project “Acceptable to or at a bank”, as mentioned by Eze(2010). The European Investment Bank(2012) based on Vinter(2006) considers that a “project is considered bankable if lenders are willing to finance it”.

As reflected in recent studies(Hampl et all, 2011) the realization of infrastructure investments, especially on European structural funding are conditioned by making these investments bankable, even if bankability is perceived differently by the different stakeholders: banks, project management companies, beneficiaries, European/national management authorities.
But from this point on the bankability of a project and its compliance to European funding can take different paths. While the banks seem to concentrate and emphasize more on the capacity of the beneficiary to generate stable cash flows and on the fact if the project is capable to cover the long-term debt service(Hampl et all, 2011). It stressed the importance of ensuring „the project's soundness, diligence in legal, technical and economic matters (Hampl et all, 2011) for all factors involved. This is presented in the picture below:

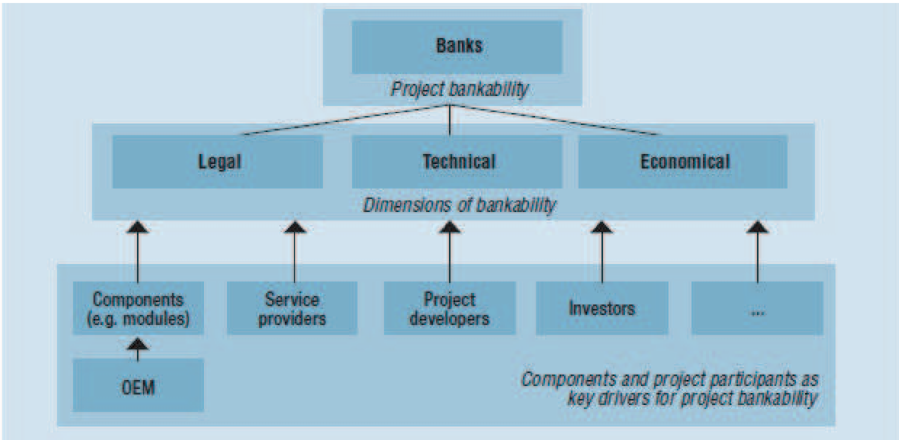

Figure 1: Drivers for legal, technical and economical dimensions of project bankability assessed by banks
Source: Lüdeke-Freund, F.; Hampl, N. & Flink, C. **Bankability von Photovoltaik-Projekten,** *2012*

Under this concern the European funding programs concentrate on rather different indicators which are evaluated in the European projects. These indicators are based especially on Cost Benefit Analysis Methodology. In order to take the decisions, the EU decision makers need appropriate tools for comparing costs and benefits of various types: economic, social or ecological investment projects that are ongoing over several years. These social-economic types of analysis are reviewed also by some banking experts (Iorga, 2011).
Cost-benefit analysis methodology (European Union, 2008) is not an exact science, is seen as having many limitations which are generally based on approximations, working hypotheses and estimates due to missing data or due to inability for providing all possible situations. The goal of the financial analysis is to use the predictions such as cash-flows to calculate relevant indicators especially the Financial Net Present Value (FNPV) and the Financial Internal Rate of Return (FRR), respectively in terms of return on the investment cost, FNPV(K) and FRR(K).
Correlation of both European Union and banking system criteria, especially the Cost and Benefit Analysis Indicators with the banking financial indicators could be a great

solution to current challenges: making the projects proposed for financing bankable, also, and thereby increase the absorption capacity of the beneficiaries (Droj, 2012). The consent with these ideas are also present in a study which is called "Co-responsibility - The key to success" (Iorga, 2011) where in a slide points out to the fact that "bankability of a project is the sole responsibility of the bank" so it is recommended that the entire process absorption of European funds to become "bankable" so in terms of its development is important to select "bankable beneficiaries".

3. Romanian companies - between EU funding and banking standards – proposal of a common system of assessment

In order to solve this issue the steps overtaken in this paper were concentrated towards validation through different methods of the most efficient selection criteria in order to obtain a common system which should ensure that a project is both bankable and also eligible for financing under EU funding. In this chapter we analyzed and tested a large number of criteria which should allow funding an investment project by the banking system and the managing authorities as well.
In general the financing institutions: Management Authorities and banking institutions, as well are using different models in order to realize the scoring of the beneficiary of a loan or a grant. These models were presented by Oracle Financial Services(2008):

- *Rules based scoring/rating* – represents a scoring model which is established based on the experience of the model's designers. The main advantage of this system consists in automatization of the traditional risk assessment process and "allows the user to assign weighted values to key elements deemed essential to sound credit decisions" as mentioned in a report of Oracle Financial Services(2008).
- *Statistical methods* – are consisting in analyzing "all variables relevant to default or business failure using regression techniques". To develop credit-scoring systems, different statistical methods such as linear probability models, logit models, probit models, and discriminate analysis models are used. The first three are statistical techniques for estimating the probability of default (PD) based on factors like loan performance and borrower characteristics. The linear probability model assumes that the PD varies linearly with the factors; the logit model assumes that the PD is logistically distributed; and the probit model assumes that the PD has a (cumulative) normal distribution. Discriminate analysis differs: instead of estimating the PD, it divides borrowers into high and low default - risk classes.
- *Casual models* consisting in simulation models, option pricing or cash-flow analysis.

Finally the above mentioned research highlights the fact that only a Hybrid approach, obtained by combining these models can bring successful results as observed in Figure 2 Approaches to Credit Scoring/Rating Models.

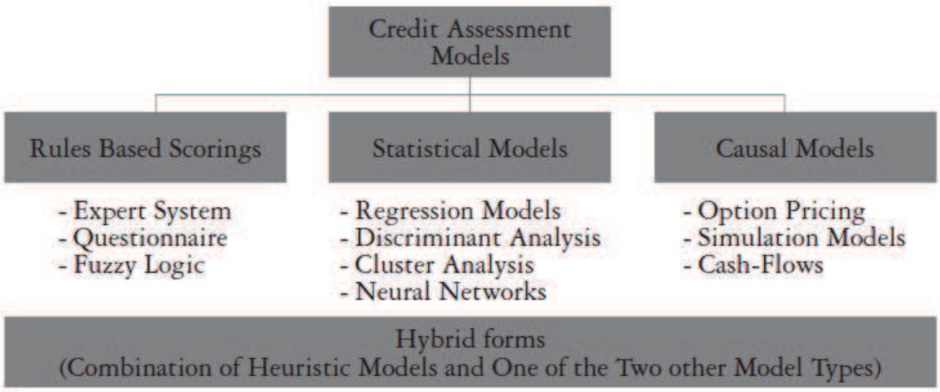

Figure 2: Approaches to Credit Scoring/Rating Models
Source: Oracle Financial Services, Credit Risk Analytics: A Cornerstone for Effective Risk Management, 2008

4. Proposal of common evaluation system - Case study

The steps taken in this paper focused on validation by various methods of the most effective selection criteria for funding of a project to be eligible for both the banks and EU funding. These criteria were tested both qualitatively and quantitatively and were based on the use of spread modelling methods possible to be used in a system of evaluation. In this context was proposed a common economic and financial evaluation system appropriate to select beneficiaries which comply both to EU sectorial grants and bank rating system, as well(Bente, 2011). Ideally the submission and acceptance of a project by European funding authorities should make it directly eligible for financing within the banking sector.

The evaluation system proposed in this paper was tested over 50 companies which benefited on EU funding. The criteria which constitute the main elements of the study are divided in four chapters:

- Applicant's ability to implement the project
- Financial analysis of the project (based on CBA criteria)
- Financial analysis of the company (based on diagnostic analysis)
- Analysis of the non-financial elements of the investment

In the following lines we motivate the score given to each criterion and sub-criteria, the importance of each chapter as a whole but also in terms of evaluation criteria. The maximum score obtainable is 100 points and was intended both to achieve the related eligibility criteria for funding European projects and for having bankable projects as well.

Table 1: Criteria for evaluating an investment project to determine both the eligibility for EU funding as well as its bankability

No.	Criteria / Sub-criteria	Maximum points
1.	**Applicant's ability to implement the project**	**30**
1.1.	Applicant's ability to carry out the proposed investment	10
1.2.	The ratio between the value of investment and annual turnover	10
1.3.	Project budget	5
1.4	Level of warranties of the beneficiary	5
2.	**Financial analysis of the project**	**25**
2.1.	Financial indicators(NPV, FRR)	10
2.2.	Projected cash flow	8
2.3.	Economic analysis and risk assessment	7
3	**Financial analysis of the company**	**35**
3.1	Analysis of financial statements	10
3.2.	Solvency analysis	5
3.3.	Analysis of global financial autonomy	5
3.4	Self-financing reimbursement rate	5
3.5.	Return on Equity	5
3.6	Banking history of the beneficiary	5
4.	**Analysis of non-financial elements of the investment**	**10**
4.1.	Analysis of target market / competition	5
4.2.	Business Idea	5

Source: Proposed by author

Below we intend to present the results of testing the evaluation model over other 30 companies that have not been taken into account to develop the model and that were funded in 2007-2009 were completed successfully investments are operating period of the investment. Assessment of the post implementation stage over 30 companies was based on the criteria they had to accomplish in the initial evaluation stage of the investment project.

For the first chapter of evaluation - Applicant's ability to implement the project were awarded a total of *30 points* since is considered an important chapter of evaluation present both in evaluations characteristic of the banking sector and in the implementation of grant programs. Regarding the sub-criteria were proposed to be granted 10 points to each of the first two sub-criteria:

1.1 *Applicant's ability to carry out the proposed investment* and 1.2 *The ratio between the value of investment and annual turnover* because was desired to be quantified the important historical elements in the analysis of both eligibility and bankability. From the point of view of the applicant's ability to carry out the proposed investment the analysis focuses on both quantitative and qualitative criteria considering the crucial elements required.

Criterion 1.3 Project budget (maximum 5 points) is followed strictly at the level of management authorities and also within the banking system both in terms of clarity, realism and its time-schedule.

Criterion 1.4 Level of warranties of the beneficiary (maximum 5 points) is an essential criterion for the determination of the proposed credit / letter of guarantee from a bank account. This item can be correlated according to Government Decision 606/2010 on the security / mortgage of movable or immovable obtained funding. This criterion was used by organizations such AIPPIMM in evaluating projects submitted under the START Programme. The results, as it can be seen in the picture below, obtained pointed out that most of the most beneficiaries of funding (about 80%) achieved good scores highly on this criterion, which can be explained by the fact that both the initial assessment criteria proposed by Financing Authorities and especially the evaluation criteria have high relevance to the success of project funding.

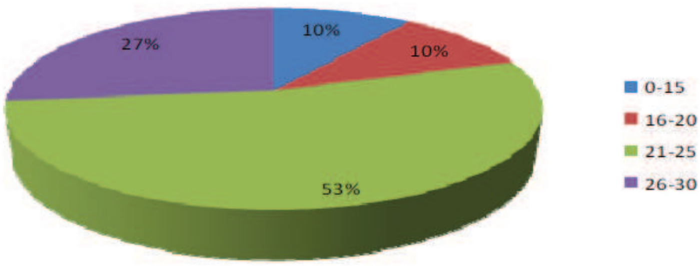

Figure 3: Applicant's ability to implement the project
Source: Data processed by author

2. Financial analysis of the project (according to requirements of the European Commission - CBA) **–** it is an important criterion awarded with 25 points and is composed from three other sub-criteria**:** *2.1 Financial Indicators* **–** which are important to be determined by the banking system and the management authorities as well since contains the calculation of NPV, FRR and their correlation with the sustainability elements. *2.2 Projected cash flow* **–** it is necessary to be positive in both analysis and receives a maximum of 8 points, being considered an essential condition for the financial sustainability of the investment. *2.3 Economic and risk analysis* **–** receives a maximum score of 7 points. This analysis is particularly important especially regarding major infrastructure projects. In case of simple investment projects is recommended to be realized only the realization of a brief analysis and risk control strategy.

As observed in figure 4, below level scores were obtained in chapter: "The financial analysis of the project" and this can be explained by the fact that funding bodies require, as basic conditions, IRR values well below those considered acceptable by banks. Also in this aspect of the analysis, were realized corrections due to the different methodologies used in practice. Increased attention should be paid towards bankability of projects.

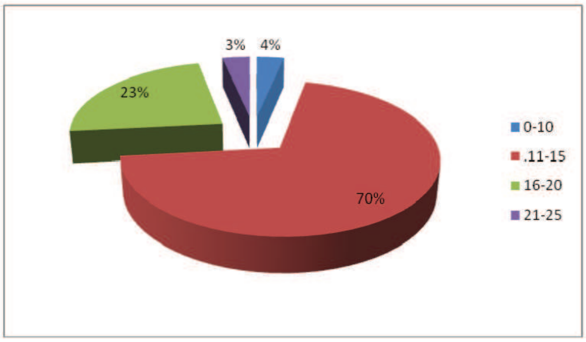

Figure 4: Financial analysis of the project
Source: Data processed by author

3. *The financial analysis of the company* benefits from a maximum of 35 points distributed on a number of 6 criteria. To the first criteria were allocated a maxim number of 10 points: *3.1 Analysis of financial statements*. The following four criteria were allocated a maximum of 5 points for obtaining average values of the indicators proposed: *3.2. Solvency analysis 3.3 Analysis of global financial autonomy 3.4. Self-financing reimbursement rate*, *3.5 Self-financing reimbursement rate.* The last criterion 3.6 *Banking history of the beneficiary* is considered to be a key element in the analysis of a company both when contracting new loans but also when monitoring the level of financial discipline at the level of beneficiaries.
Financial analysis of a company provides very clear results about the financial potential that companies which contract EU funding must benefit to implement their projects. Thus any of the analyzed companies did not score the three lower thresholds. In this context we can assume the Iorga's observation (2011) is accurate: "European funds are not designed for beneficiaries 'with no money'".

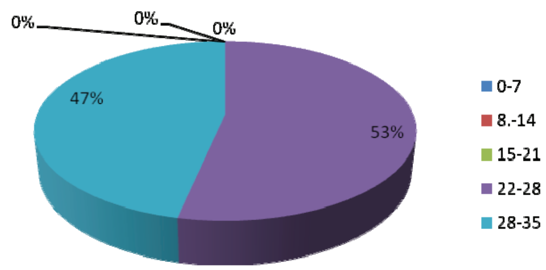

Figure 5: Financial analysis of the company
Source: Data processed by author

4. *For analysis of non-financial elements of the investment* are allocated only 10 points divided equally on two simple criteria to evaluate: 4.1 *Analysis of target market*

/ *competition* and 4.2 *Evaluation of business ideas*. These elements may indicate some qualitative aspect of business proposals. As shown in the above lines were not proposed criteria and allocation of scores to the socio-economic elements of project: number of jobs created, equal opportunities, sustainable development, utilization of local resources. In the analysis of non-financial items we can observe that the winning projects received higher scores on the scale proposed by the author. Thus 77% of the projects reviewed have achieved scores above 7 points which shows that better construction of non-financial elements at the level of applicant companies is imperative to be achieved and later measured during the selection process.

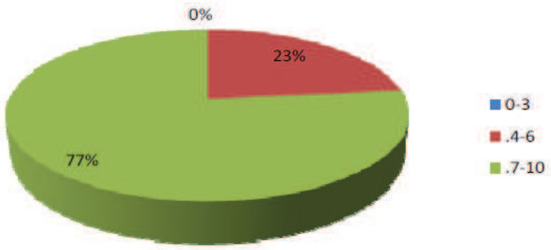

Figure 6: Analysis of non-financial elements of an investment
Source: Data processed by author

5. Conclusions

Identifying common criteria used for selection of good sustainable projects to be funded within European Structural Funds constitutes a big challenge for the management authorities and for the banking institutions as well. The applicants must realize financing application based on a set of indicated criteria. In order to achieve financing, these entities learned to modulate their financial indicators and their business plans according to the requirements.

Correlation of both European Union and banking system criteria, especially the Cost and Benefit Analysis Indicators with the banking financial indicators could be a great solution to current challenges: making the projects proposed for financing bankable, also, and thereby increase the absorption capacity of the beneficiaries.

To solve this problem the current study proposed the creation of a mixed scoring assessment system containing 15 indicators for which were established various evaluation values. The main goal of the system was to select those indicators/variables which fulfil both the evaluation criteria of European Union management authorities and the creditworthiness criteria used by the banking sector. Upon completion of the analysis of the four criteria for selection, as observed in the lines above, the projects were approved for funding and recorded superior results on the proposed selection grid, so it can be validates for a larger usage. Of course this proposed model should be based on the specifics and extension of each proposed programme: major infrastructure projects business / tourism / industrial cannot be assessed in the same way as those involving minor investments or those

developed by micro-enterprises. It should also be separated the investments which require bank financing from those who do not need it.
A better attention should be given to the input data which are used for calculation, especially when assessing the financial analysis of the project, because the banking system and the management authorities use the same type of analysis but with different data and sometimes different simulation methods.
Applications for Analysis and Assessment linking the financial analysis with the bankability of projects should be expanded and developed properly, perhaps through the technical assistance programs of the European Commission. A partnership between management authorities, banks and / or consulting companies could generate, in 2014 – 2020, higher acceptable rate by the European Union and the banks. This will really take to a significant influence of the banking and financial measures in order to encourage the absorption capacity.

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