

## Evaluating Investment Projects' Performance – Non-Monetary Factors

Andreea -Mariana Manta

The Bucharest University of Economic Studies, Faculty of Management, Romania  
*andreeam.manta@gmail.com*

*Abstract* Considering the high significance of taking into account all the monetary and non-monetary factors when assessing the performance of an investment project, the article presents the most common indicators used in this process and the ones that are frequently underestimated and often ignored, in the case of Romania. *Are Romanian investment projects correctly evaluated? Does the evaluation process appreciate all the monetary and non-monetary factors implied in the project? Are all the factors quantifiable? Does the ex-ante projects' evaluation offer comparable results with the ones provided by the ex-post evaluation? What is the reason for the abounding projects that demonstrate to be unsustainable, even though they obtained high scores in the ex-ante evaluation?* To address these questions, a literature review was carried out using statistical data, official and scientific materials. After describing all types of indicators used in evaluating projects' performance, the article exposes the indispensable non-quantifiable factors that have to be accounted as indicators, in order to improve the evaluation process and also to provide the adequate feedback of the implemented projects. In this way, the information resulted after ex-post evaluation of the investment projects can offer a realistic situation of the projects' performance and can also provide a solid base for the upcoming projects. The article demonstrates that not all the factors implied in a project can be quantified. However, they should not be disregarded in the projects' evaluation as they happen to be of critical importance for the projects' performance. Based on the article's results, a new type of analysis has to be developed in order to effectively evaluate the Romanian investment projects' performance. Assessing appropriately the investment projects, the public funds would be correctly allocated and the Romanian governance would have the possibility to implement the performance-based budgeting. Therefore, sustainable economic development of the country could become a reality.

*Keywords:* evaluation, project performance, non-monetary factor, non-quantifiable factor

### 1 Introduction

The present paper aims to highlight the methodology used in Romania in order to assess the performance of a project. The process involves the evaluation of the project's sustainability and degree of the initial objectives' accomplishment.

In the current days, Romanian projects' performance evaluation is deficient due to the weak methodology applied in the ex-post period. The methodology lacks the necessary performance indicators and, therefore, the evaluation's results are not relevant to the effectiveness of the involved resources. Due to this dysfunction, the public authorities cannot substantiate their financial decisions on valid information concerning the real situation of the used funds and the related achievements.

Consequently, the public funds are mismanaged and projects are not strategically integrated, as the European Union recommends through tools such as: Integrated Territorial Investment (ITI) or Community Led Local Development (CLLD).

Furthermore, after identifying the used indicators in Romanian methodology of evaluating projects' performance, the paper explores the good practices related to this matter and proposes a solution to improve the process.

## 1 Literature Review

This section explores the present situation related to projects evaluation in Romania, describes the best practices identified in the literature review. After that the following section provides a new solution to improve the process of projects' evaluation based on the research of the specialized literature.

### 1.1 Present situation in projects evaluation in Romania

Internationally, the evaluation indicators are grouped into: output indicators, result indicators and impact indicators.

The output indicators aim to measure the visible/physical results of a project. For example: number of kilometres built within a project.

The result indicators illustrate the real benefits that the output generates for the target group. For example: reduced time to reach a certain destination due to the built road.

The impact indicators are the most important ones and are set by the authorities involved in the public financial management. Therefore, in the case of the project mentioned above, the impact would be the number of lives saved due to the road construction. (MPF, n.d., 3)

The sustainability of the project signifies that the project will continue to generate positive impact after its implementation. So, in the case of a road construction this would be possible if the access to the newly constructed road is charged with a appropriate fee to enhance the maintenance of the road.

The following table briefly describes the main stages of a project's evaluation in the current days in Romania:

Table 1: Stages of project's evaluation

| <b>Stage of evaluation</b> | <b>Description</b>                                                                                                                                                                 | <b>The most important criterion</b> |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| <i>Ex-ante</i>             | Involves the assessment of the objectives, the implementation plans and the estimated results. Identifies the most appropriate options to accomplish the programme objectives.     | Relevance                           |
| <i>Mid-term</i>            | Analyses the level of efficiency and effectiveness of the project's implementation and its relevance to satisfy the initial identified needs.                                      | Efficiency, Effectiveness           |
| <i>Ex-post</i>             | Evaluates if the project's impact is related to the identified initial needs and if the project is sustainable and continues to produce positive effects after its implementation. | Impact, Sustainability              |

Source: adapted from (MPF, n.d, 5-6)

The article intends to study the methodology used in the evaluation of the project's performance and, therefore, the regularly used indicators in this process.

The standard methodologies used to evaluate projects are the surveys for beneficiaries and the project or programme managers, study cases, the stakeholders' consultation, the CBA (Cost-Benefit Analysis), Econometric Analysis.

The Cost-Benefit Analysis is appropriate for a certain type of projects. Even if it is frequently used in the ex-ante stage of a project's evaluation, it is not suitable for projects that are written on topics such as: social welfare, sustainable development, green investments or civic engagement. Moreover, CBA cannot be used for health and education related projects.

Furthermore, the ex-ante evaluation takes into consideration several indicators that cannot be compared after the project's implementation. So, it lacks traceability of the performance assessment during the stages of a project. For example, the CBA used in the ex-ante stage of a project involves the calculation of indicators such as:

- "Internal Rate of Return (IRR) which is widely used in Private Finance Initiative (PFI) schemes in the UK for measuring performance." On the other hand, the evaluation of this indicator is not recommended by the Treasury Guidance (2004). (Cuthbert and Magni, 2016)
- Net Present Value (NPV) Due to inflation and to potential incomes from alternative investments that could be made, a certain amount of money in the present is worth more than in the future. "In other words, a dollar earned in the future won't be worth as much as one earned in the present." In order to take into consideration these inherent changes the NPV formula contains the discount rate. The use of NPV to calculate an investment's profitability can generate false results as the indicator is based on assumptions. In the most cases, projects have unpredictable costs and additional resources are required. (Fernando, 2021)
- The Benefit/Cost Ratio (BCR) "It is calculated by taking the net present value of expected future cash flows from the investment and dividing by the investment's original cost." The ratio also known as a profitability index shows if an investment is profitable or not. (Farlex Financial Dictionary, n.d.)

The benefits of an investment without the related costs leads to the CBA ratio. The ratio includes the earned revenue and the generated savings if the analysed investment project is implemented. The calculation of the ratio involves the impalpable benefits and costs, such as the satisfaction of the customer. (Hayes, 2020)

One of the problems of the projects' evaluation in Romania is applying Cost-Benefit Analysis even if the project is not suitable for this kind of tool and involves benefits that cannot be easily monetized or that cannot be quantified at all.

Therefore, the evaluation process of projects' performance has to use a correct analysis that includes acceptable indicators for measuring the benefits which cannot be monetized. Among the benefits that cannot be quantified are: number of lives saved, customer satisfaction, civic engagement, improved health, a higher level of educational process quality.

According to the scientific article entitled "Limitations of Cost Benefit Analysis to support public debate: the case of public Transportation Decision-making in France", (Damart and Roy, 2007, 32-33), in the first stage, in order to have a symmetrical distribution of information and knowledge among the economists and the other stakeholders involved, CBA could be applied in a basic version. This stage should also include a discussion about all the effects that could be enhanced by the project. In this phase, the project could be evaluated through multicriteria analyses taking into consideration different points of view. Therefore, the project evaluation could involve the stakeholders in this initial phase so that a more accurate image of the project's effects could be illustrated. (Damart and Roy, 2007, 32-33)

### ***1.2. The importance of non-monetary indicators***

All the investment projects that aim to generate benefits in social sectors, such as: education, social, health, environmental, people's wellbeing, have to take into consideration especially the non-monetary indicators. However, in practice, this type of indicators are neglected and some of them are associated with monetary values. The lack of accurate appreciation of non-monetary factors in the evaluation process of the projects led to the allocation of funds for projects that proved to be unsustainable and sometimes, useless in Romania.

Focusing exclusively on measuring the financial performance of a project often causes negative side effects. One example of these side effects is the connection between financial performance and the rapid rewards received by managers. This connection encourages managers to concentrate on the financial performance on the short term and delay the projects that bring long-term profits. (Kaplan Financial, 2020)

Furthermore, if the organization plan to obtain financial performance, it is essential to also consider the external factors (e.g. competitors' actions) that do not directly raise the profits but have a strong influence on the financial performance in the long run.

Moreover, the indicators measuring the financial performance do not express a complete situation related to the drivers of long-term success and profit. The reason is the carelessness in considering the stakeholders' demands and expectations. (Kaplan Financial, 2020)

In addition, although private organizations must obtain profit in order to survive on the market and have financial performance, the key drivers that play a crucial role in achieving this are non-monetary or non-financial factors, such as: customers' satisfaction, suppliers' interests, investors' preferences etc.

The financial indicators can accurately illustrate mainly past situations. In order to have a whole image it is crucial to also use the non-financial indicators.

The Kaplan's study demonstrate that an optimum system contains both financial and non-financial indicators to measure and control performance. (Kaplan Financial, 2020)

The inclusion of non-monetary performance indicators may seem appropriate in the case of public projects that do not focus on obtaining profit. However, the non-monetary performance indicators are also important for private organizations and there are certain aspects that cannot achieve performance unless non-monetary indicators are used.

For example, the management of human resources include non-monetary indicators, such as: percent of job offers accepted, staff turnover, absentee rates, satisfaction and competence levels, in order to attract, monitor, control, motivate and retain highly qualified staff. (Kaplan Financial, 2020)

Another issue that requires non-monetary indicators is the quality of the product or service. The product's quality impact considerably the business's success or failure. According to the quality offered, the customers can be satisfied or dissatisfied and the sales can increase or decrease. In addition, the products' quality should be continuously compared with the competitors' offerings. In this way, private entities are determined to use innovation in order to obtain competitive advantage and to differentiate their products on the market. (Kaplan Financial, 2020)

An intangible asset every company should aim at is the brand awareness. Brand awareness enhance high quality perceived, high loyalty from the customers, patents or trademarks. Therefore, on the long term, brand awareness translates into financial performance, investors' interest in the company's products increased, improved relationships with all the stakeholders. The associated non-monetary indicators measure the customers' awareness, consumers' opinions and others similar facts. (Kaplan Financial, 2020)

Despite the crucial advantages of non-monetary indicators, the interpretation of qualitative information may be rather difficult. Consequently, most of the information systems use quantitative information as input. On the other hand, qualitative information may considerably affect the decisions taken by managers but, generally, cannot be obtained automatically. (Kaplan Financial, 2020)

In order to become more easily interpretable, qualitative information has to follow an appropriate pattern. Considering the significant importance for decisions making, qualitative information should be analysed in accordance with its impact in achieving the project's established objectives. (Kaplan Financial, 2020)

In order to diminish the level of subjectiveness in evaluating qualitative information, the first stage of the project should contain the establishment of monetary and non-monetary indicators that would be used to assess the project's performance. The non-monetary indicators should be established in connection with the field/sector of activity in which the project will be exploited. A panel of specialists would contribute to indicate the correct non-monetary indicators in order to improve the project's

performance evaluation. It is also true that the implementation of this process in the first stage of the project will increase the costs of the evaluation. (Kaplan Financial, 2020)

The difficulties that appear in the interpretation of the non-monetary factors should not be a sufficient reason to ignore their impact on the project's performance. (Kaplan Financial, 2020)

Therefore, in the private sector, models that involve monetary and non-monetary indicators were developed to obtain a more accurate evaluation of the projects. The most popular models are presented in the following figure:

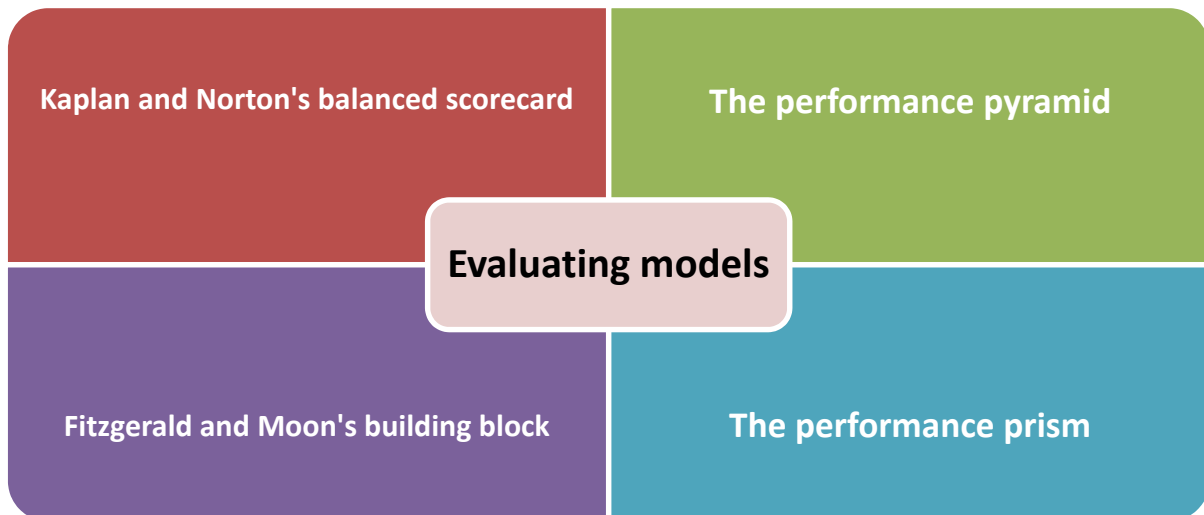


Figure 1 – Models of evaluating performance  
Source: own contribution

### **1.2.1 Kaplan and Norton's Balanced Scorecard**

Kaplan and Norton considered that the measurement of intangible capital has to be part of the management system in order to improve the management of the companies' capital.

This idea was published within the Harvard Business Review in 1992. After that some companies tried to use the Balanced Scorecard demonstrating its real potential. In the next 15 years, thousands of different private and public organizations implemented the Balanced Scorecard as a management tool to implement their strategy. (Kaplan, 2010, 2)

### **1.2.2 Fitzgerald and Moon's building block**

This model is an updated version of the Balanced Scorecard, created to address the service organizations' needs.

The Fitzgerald and Moon's building block aims to evaluate the performance using three sections: standards, rewards, and dimension. Furthermore, the model considers two types of dimensions, 'Results' and 'Determinants'. Results consist in the effects of the past management decisions. The effects are considered from two perspectives, the financial performance and competitiveness.

Determinants represent the future drivers of financial and competitive performance, such as: innovation, quality, flexibility. (ACCA, n.d.)

### **1.2.3 The performance pyramid**

The performance pyramid is founded on dimensions, measures, and standards. The dimensions are represented by the results and their determinants.

The measures to achieve performance are: clarity, motivation and controllability. Clarity has to be a quality as people should have a clear image of the measures that they are responsible for. Motivation is another quality of the measures that should increase the people's involvement in achieving the organizational goals. Controllability is a quality that contribute to the authority of managers related to the drivers that influence the measures.

The three standards are the ownership, the achievability and the fairness. In this way, the people that are responsible for the measures should have a sense of involvement in establishing them. Moreover, the objectives have to be achievable and realistic so that people would not become disappointed. In addition, people have to be treated equally in order to demonstrate that the system is equitable. (Sims, 2014, 45-47)

#### 1.2.4 The performance prism

The Performance Prism has five intercorrelated facets. The first facet is the Stakeholder Satisfaction which identifies all stakeholders, their needs and desires. The second facet is represented by the Strategies which aim to satisfy the stakeholders' needs and wants. The next facet is the Processes which explores what processes should be developed in order to sustain the established strategies. The fourth facet of the prism is represented by the Capabilities. These are all the resources involved in the execution of the processes, such as: people, technology, infrastructure. The final facet is the Stakeholder Contribution. The Stakeholder Contribution involves a symbiotic relationship between the stakeholders and the organization. Therefore, this facet illustrates the value delivered by the stakeholders to the organizations.

All in all, the model of Performance Prism is a very effective managerial tool that helps “management teams to influence their thinking about what the key questions are that they want to address when seeking to manage their business.” (Neely, 2001, 7)

The benefits of these models are presented in the following figure:

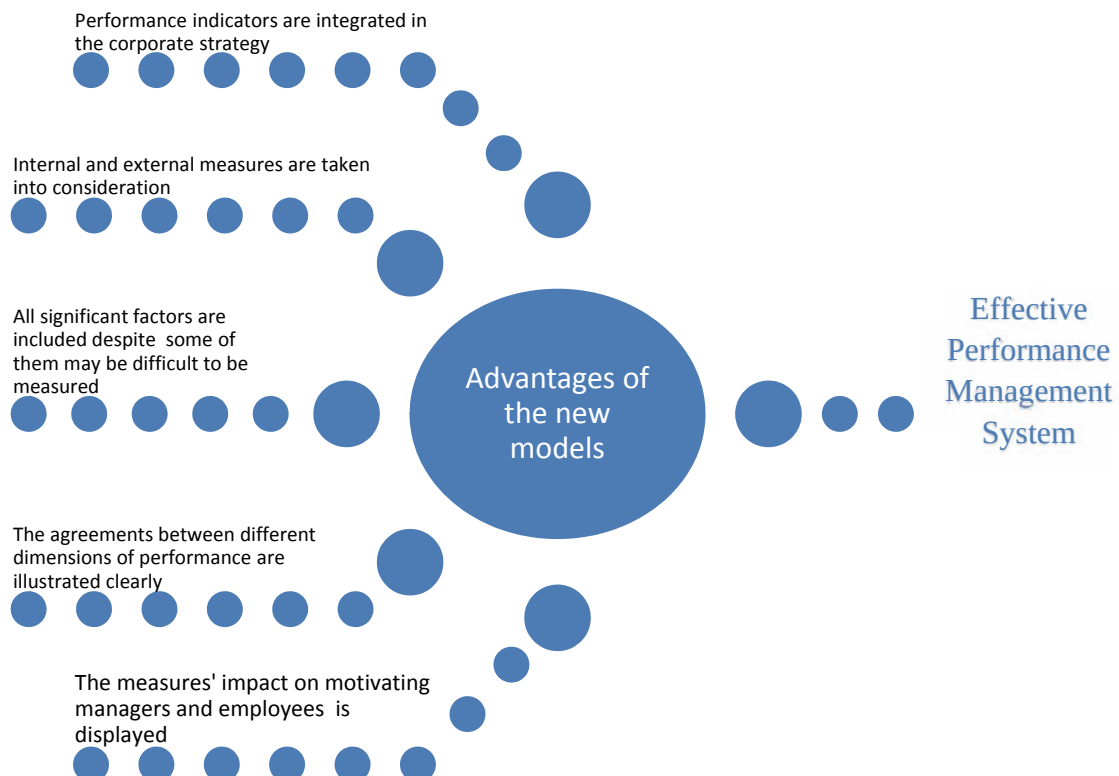


Figure 2 – Advantages of new evaluation models  
Source: adapted from (Kaplan Financial, 2020)

### 1.3 Good practices

“The Organisation for Economic Cooperation and Development (OECD) offers an example of an evaluation framework that involves six main criteria: Relevance, Coherence, Effectiveness, Efficiency, Impact and Sustainability.” (OECD, 2021, 18)

An activity such as: technical assistance, policy advice, programme, project, policy, strategy, financing mechanism is considered to be an intervention. The evaluation framework has been used to measure the efficiency of many different programmes and projects, or policies and strategies in various fields of activity. (OECD, 2021, 18)

When using the criteria for evaluation some principles have to be respected in order to tailor the evaluation to diverse contexts or stakeholders (OECD, 2019; OECD, 2021, 23). One principle is to aim to obtain an useful evaluation. Another principle is to adapt the criteria to the evaluation’s purpose. Moreover the evaluation using these six criteria can take place in different moments, before, during and after an intervention. (OECD, 2019; OECD, 2021, 23)

Performance indicators and logical frameworks are the most frequently used techniques. Organizations are not frequently using techniques of SROI, Cost Benefit Analysis, and Return on Investment. (KPMG, 2014, 16). The following figure illustrates the level of use of evaluation techniques:

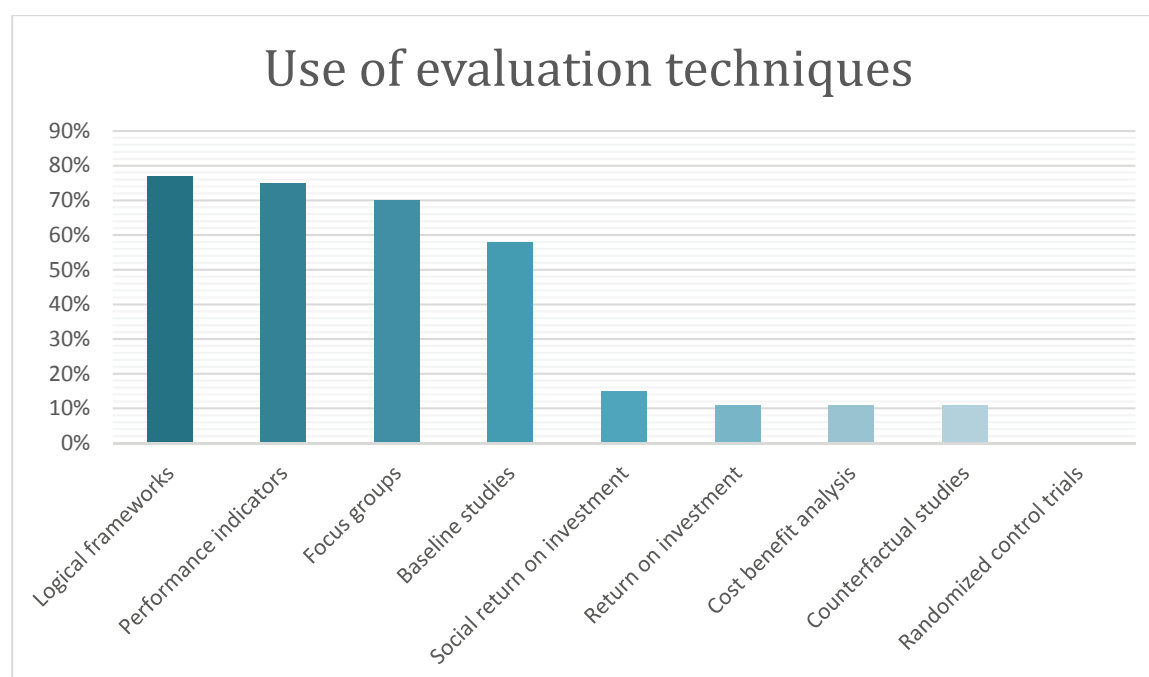


Figure 3 – Use of evaluation techniques  
Source: adapted from Figure 7 (KPMG, 2014, 16)

Benefits should not be limited to financial benefits. Although many benefits can be quantified financially, there are others where it is difficult, undesirable, or insensitive to attribute a financial value. These benefits are called non-monetary. (New Zealand Government, 2019, 12)

Non-monetary (or non-financial) benefits can be as important, if not more so, than monetary benefits, depending on the desired outcomes from the project or programme. They can include improvements in areas such as risk exposure, social, cultural, heritage, and the quality of services provided to New Zealanders. (New Zealand Government, 2019, 22)

Note that, depending on scale and risk, one option for analysis for comparing non-monetary benefits and costs is multi-criteria decision analysis (MCDA). (New Zealand Government, 2019, 23)

## **2 Proposed solution**

The proposed solution to evaluate projects and other types of interventions is to use a multi – criteria decision analysis and a panel of specialists, depending on the field of activity in which the intervention is going to be implemented. In the ex-ante evaluation of the project, all the performance monetary and non-monetary indicators should be established so that in the entire lifecycle of the intervention, they can be monitored, evaluated and the necessary changes would be made on time, before implementing an unsustainable project.

Also, in the first stage of the intervention, all the stakeholders should to be identified, they should be consulted and their interests, benefits should be taken into consideration in the implementation stage of the project.

However, the model of evaluating performance of investment projects can vary and can be adapted according to the needs. The Balanced Scorecard, or another updated version of it, the Performance Prism can be used successfully to monitor and evaluate a public intervention. The most important lesson that developed countries offer is that all the stakeholders, all the benefits, monetary or non-monetary have to be accurately predicted in order to achieve performance.

In Romania and in any other country, it is absolutely necessary to evaluate the performance of the implemented projects so that the public financial resources can become benefits for the society and in the long term, sustainable development of the country.

In addition, all the European instruments should be used to improve the funds expenditure, the projects and interventions implemented and to enhance sustainable economic development.

## **3 Conclusion**

The present paper promotes the urgent improvement of the performance evaluation framework used for all types of public interventions. It was substantiated on the specialized literature and on the good practices offered by international organizations and developed countries.

Romanian investment projects are evaluated using old tools that do not appreciate non-monetary results, factors. The ex-ante evaluation results cannot be compared to the results provided by the ex-post evaluation of a Romanian project. The proposed solution aims to eliminate the unsustainable projects that obtain high scores in the ex-ante evaluation due to the inappropriate evaluation models used, the lack of stakeholders identification and consultation and due to incomplete evaluating indicators used.

In these latter days, the crucial importance of non-monetary factors has been acknowledged at a large scale. Therefore, environmental, social, governance and wellbeing of people have to be considered and evaluated in every public investment project.

This research illustrated diverse models for evaluating performance and underlined the significant importance of the non-monetary indicators in the evaluation process.

Based on this article, further research can be continued to discover which model is the most effective for evaluating public interventions, or which model is more appropriate for private investment projects. Also, research can identify common evaluating indicators that can be included in a standard for performance evaluation.

## **Acknowledgement**

This article is the result of the research carried out within the doctoral studies programs of the Bucharest University of Economic Studies, Doctoral School of Management, in the project financed from the European Social Fund through Operational Programme Human Capital 2014-2020, project number



10.1108/13683040110385142.

[https://www.researchgate.net/publication/228602984\\_The\\_performance\\_prism\\_in\\_practice/link/0deec53236ff198557000000/download](https://www.researchgate.net/publication/228602984_The_performance_prism_in_practice/link/0deec53236ff198557000000/download)

New Zealand Government. 2019. *Managing Benefits from Projects and Programmes: Guide for Practitioners*. Pages 12, 22, 23. Retrieved 11.01.2021 from: <https://www.treasury.govt.nz/sites/default/files/2019-11/TSY-managing-benefits-guidance-nov2019.pdf>

OECD. 2019. *Better Criteria for Better Evaluation: Revised Evaluation Criteria Definitions and Principles for Use*. DAC Network on Development Evaluation, OECD Publishing, Paris, Retrieved 20.02.2021 from: <https://www.oecd.org/dac/evaluation/revised-evaluation-criteria-dec-2019.pdf>

OECD. 2021. *Applying Evaluation Criteria Thoughtfully*. OECD Publishing, Paris, Retrieved 20.02.2021 from: <https://doi.org/10.1787/543e84ed-en;>  
<https://www.oecd-ilibrary.org/docserver/543e84ed-en.pdf?expires=1618515712&id=id&accname=guest&checksum=F4503EBA1495BC8965F3A4A1E816BF63>

Sims, A. 2014. *Enterprise Strategy. Financial Management*. Pages 45-47. Retrieved 01.10.2020 from: [http://secure.cimaglobal.com/Documents/Student%20docs/2010%20syllabus%20docs/E3/fmarticle\\_e3\\_aug14.pdf](http://secure.cimaglobal.com/Documents/Student%20docs/2010%20syllabus%20docs/E3/fmarticle_e3_aug14.pdf)