Adaptation of investment analysis to the features of socially oriented investments

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Abstract. The current trend in the transition of the economy from a linear to a circular model implies, among other things, a reorientation of target indicators from cost criteria in favour of social and environmental significance. The sustainable development of the economy requires the complex interaction of all market players, the awareness of consumers and producers, investments from the state, as well as the attraction of private capital. Socially significant investments in ESG projects have a number of distinctive features, which makes it impossible to assess their effectiveness by the usual criteria for investment analysis. Methods for assessing the social return on investment today certainly exist and are being developed, but their perception, interpretation and, in particular, areas of practical application remain insufficiently accessible. This article is devoted to the analysis of the SROI indicator, as a generally accepted criterion for measuring the social return on investment, as well as the peculiarities of using this indicator for Russian investors. The purpose of the study is to analyse the existing methods for evaluating the effectiveness of investments in ESG projects, taking into account the specifics of the Russian economy in the current realities. Research objectives: To identify the main known methods in the field of evaluating investments in ESG projects; To identify the main problems when using international methods in the practice of assessing socially significant investments in the Russian market; Suggest ways to solve the identified problems.

1 Introduction

The transition of the economy from a linear model to a circular one is impossible without a reassessment of the values of society, the consumer and the producer. A circular economy implies a careful attitude to the environment, which is impossible without conscious consumption, which, in turn, involves the redistribution of cash flows in the economy from the area of economic efficiency to the area of social significance because of capital investment. [1,2]
When analysing investment projects in the field of ESG, that is, aimed not only at a commercial result, at economic efficiency, but also at meeting other needs of society - such as meeting their social values, a rational question arises of how to measure the effectiveness of a project if the result is evaluated different, disparate criteria.

For example, the results of the implementation of investment projects in the field of ESG can be created jobs, the development of socially significant, however economically less profitable industries; environmental effects - such as reducing greenhouse gas emissions, reducing the carbon footprint, recycling waste, etc.

The traditional investment analysis criteria, generally accepted for evaluating investment projects of all industries - NPV, IRR, PI, DPP - analyse cash flows, compare results with costs, taking into account the time value of money, but do not take into account non-monetary effects - the main results of ESG projects. Thus, the assessment obtained by traditional methods may be obviously inadequate - most projects will be categorized as ineffective and not accepted for implementation. [3]

How do you make investment decisions in this case? The problem is obvious - projects need to be implemented, for the implementation of any project capital must be attracted, for the owner of the capital the results of the project must be obvious.

An alternative to traditional investment analysis can be an indicator of social return on investment (SROI - Social Return On Investment). The indicator was developed specifically for assessing social and environmental performance, is standardized and suitable for evaluating the effectiveness of ESG projects. The methodology for calculating the indicator was developed in 2000 by the REDF (Roberts Enterprise Development Fund) in an article by Jed Emerson entitled "Social Return on Investment: Exploring Aspects of Value Creation" (Social Return on Investment: Exploring Aspects of Value Creation in the Nonprofit Sector). At the moment, there is a methodology for evaluating investment projects based on this indicator in several editions [14], the main principles of the analysis and the stages of its implementation are specified. (fig. 1)

**Fig. 1.** SROI analysis steps. Compiled by the author based on data [15]

Based on the generally accepted method of SROI analysis, the effectiveness of capital investment in socially significant projects that may not have sufficient economic results can be determined.

### 1.1 Purpose of the study

The purpose of the study is to analyze the existing methods for evaluating the effectiveness of investments in ESG projects, taking into account the specifics of the Russian economy in the current realities.
1.2 Research objectives:

- Identify the main well-known methods in the field of evaluating investments in ESG projects;
- To identify the main problems when using international methods in the practice of assessing socially significant investments in the Russian market;
- Propose ways to solve the problems identified.

2 Research methods

The theoretical basis of the study is the provisions of neoclassical and neoinstitutional economic theory; scientific principles of knowledge management and innovation; researches of scientists on the problems of innovative development of industrial economic systems of various levels.

The methodological base of the study was predominantly qualitative methods, such as the method of analogies, implemented to justify the parameters used, as well as methods of content and expert analysis and synthesis, which provide a generalization of the results.

The main methods of this study are the methods of analysis, synthesis and generalization. Methodologies for assessing socially significant investments were used as materials for the analysis [17].

Also, the international standard for assessing the social return on investment SROI was used for analysis and comparison. [16]

3 Literature review

Evaluation of investments in socially significant projects is not a new issue in economics. Efficiency, including public procurement, has been studied for a long time and completely. Recently, the issue has not only not lost, but has become particularly relevant in connection with the global trend of growing awareness and the transition of the economy from a linear model to a circular one.

The SROI indicator, in principle, is not new in economic science, for example, the authors Ross Miller and Kelly Hull [6] in their 2012 study analyzed the applicability of the indicator in healthcare enterprises. The study revealed that despite the generally recognized indicator at the world level, there are practical and ideological barriers to the application of this indicator in the industry under consideration.

The article by Brian Yates and Meat Marr [7] analyzes the problems of applying the SROI indicator and suggests ways to solve them using standard evaluation methods, such as the cost-benefit model and optimizing the results of SROI in a resource-limited condition (optimization problem) or as a dual problem - cost minimization.

In their work [8], the authors explore the application of the indicator to the statistics of social enterprises in the UK. The article analyzes in detail each stage of the analysis using the SROI method. An example of using the methodology in the sports industry is considered in [4].

In the article [5], also on the example of the healthcare industry, the authors give a comparative description of two methods generally accepted in the evaluation of investment projects in the social sphere - CBA and SROI. The scientists conclude that the joint use of the two methods and greater standardization of SROI will provide a more complete picture of the costs and results of socially oriented investments.

Russian economists also analysed the possibility of assessing the social return on investment. Thus, the authors of [12] consider the use of the indicator for evaluating environmental projects. This indicator is noted as applicable in principle to the analysis of
the activities of non-profit enterprises, social entrepreneurs and even individual civil initiatives.

The authors [9] note the specifics of evaluating the effectiveness of socially oriented investments, as well as the presence of a traditional subject-object characteristic of the essence of social investments, and an alternative interpretation proposed by the authors in terms of changing the value of social capital of society at various levels.

In the article by the authors Yakimov & Khmura (2020) [13], the main subject of the study is a comprehensive methodology for assessing the investment attractiveness of territories of advanced socio-economic development (TOESD), which involves both the assessment of traditional cost indicators and the assessment of socially significant results, since PSEDA also implements socially significant projects. To evaluate the latter, the authors suggest using the method of expert assessments.

4 Research results

SROI is, at its core, a generally accepted indicator of return on investment with a number of nuances. The indicator is calculated not as a percentage, but as a certain coefficient, for example, an SROI value of two means that 2 CU will be received per CU of invested funds in the form of values created by this project.

The formula for calculating the indicator is shown below:

\[
SROI = \frac{\text{Value of Outcomes}}{\text{Investments}}
\]

At the same time, Value of outcomes is the results for all stakeholders of the project, both planned and spontaneous, positive and negative, the indicator is measured in monetary units (for comparability with costs), however, it measures not the “cost”, but the “value” of the result for project stakeholders.

It is important to note that the value of results indicator takes into account the positive and negative results of the project, which can occur simultaneously - for example, the project creates jobs, but causes significant damage to the environment, then the balanced indicator of the value of the results will be negative, SROI will also be negative, and the project will obviously - inefficient.

Investmens - a traditional indicator of invested funds in a project, expressed in monetary units.

The assessment of the indicator is generally similar to the assessment of the results of the profitability indicator - a negative value indicates inefficiency, a positive one indicates efficiency, is characterized as follows - an SROI value of 2 means a return on 1 CU of invested funds of 2 CU in the form of values created by the project.

The value of the indicator less than one, obviously, indicates the non-recoupment of the project, however, it is possible that the project will pay off later, that is, in this case, it is necessary to take into account the stage of the project life cycle.

It is important to note that the monetary unit of return on capital in the context of SROI is a unit for measuring the effect of the project - value, not cost, that is, a qualitative rather than quantitative indicator that allows you to measure the investment efficiency of the project. Only long-term effects are monetized for SROI analysis (figure 2).
Investment in the Project

Short-term effect

Medium-term effect

Long-term effect

Outcome

Investment

Social Value

* Only the “result” indicator is used to calculate the social value.

**Fig. 2. SROI analysis process**

Analysis of the ESG projects effectiveness, as already noted, has a number of objective features, for example, the calculation of the effect - the implementation result. As can be seen from Figure 2, the final result has three intermediate stages - short-term effect - these are the results obtained at the very beginning of the project implementation, the second stage - medium-term - the result obtained during the direct implementation of the project, the last - the results obtained after the project implementation.

The essence of this breakdown of results is that social projects, unlike commercial ones, can have a delayed effect.

Obviously, it is the “monetization” of the result that is the most problematic step in the analysis of SROI. Based on the results of the analysis, it is possible to formulate a number of recommendations and the sequence of their application to systematize and simplify the process of translating the qualitative results of socially oriented investment projects into valuation.

**Stage 1. Definition of the basic concept.**

Here, under the basic concept, we mean the "mission" of the project, formulated by such broad concepts as "well-being", "health", "motivation" and so on. The task of this stage is to choose the basic concept for the implementation of which the investment project is aimed at. One of the SDG goals can be chosen as such a concept. [19]

**Stage 2. Concretization of the basic concept.**

At this stage, it is necessary to “narrow down”, concretize the basic concept. Determine the target segment, the main stakeholders of the project.

**Stage 3. Selection of indicators for evaluating the results of the project.**

Determine what kind of results should be obtained in the course of the implementation of the "concrete strategy", select a group of indicators and criteria that characterize the level of achievement of the result and its effectiveness. The selected indicators will be the units of measure. One or more indicators may reflect a systematic concept. Quality of life indicators can be a range of conditions, such as health or social relationships, that can be assessed on a specific scale. Thus, the overall score reflects the quality of life.

**Stage 4. Definition of a database for evaluating project performance indicators.**

Data can be quantitative, obtained through the collection of statistical information, through marketing techniques such as questionnaires, or qualitative, for example, expert assessments of certain circumstances.
To monetize the “values” of the project results for stakeholders, financial “proxies” (as an indicator representing another indicator) are used, which will indicate the value of those results that do not have a market value. The search and definition of proxies in practice is the most complex and time-consuming process, therefore, a precedent approach is often used - proxies from other reports are used (reports on the implementation of social investment projects containing the calculation of SROI), comparable by a group of stakeholders.

Another important principle of the reliability of the analysis is taking into account the ratio of financial proxies to each other: financial proxies, indicating the consumer value of different results of one project for one group of stakeholders, should be correlated with the relative importance of these results. To do this, in practice, the anchor proxy calculation method is often used, when the proxy of one result is taken as the basis, which can be obtained by any available method, and other proxies are calculated based on the “anchor proxy” using weights - indicators of the relative importance of different results for stakeholders in percent or any other units. [16]

The easiest option for monetizing the result of the implementation of the ESG project will be if the result is cost savings, or an increase in the income of stakeholders - citizens or the budget.

Monetization of results using the stated preference or contingent valuation method involves directly asking respondents how they evaluate certain project results compared to
comparable ones that have some market value, or the question can be formulated in this way - what is the subjective assessment of obtaining / avoiding a certain event (as a result of the project). This approach evaluates the willingness to pay or receive compensation for some hypothetical benefit.

Revealed preference method when people's behaviour and choices cannot be observed or such information is not available, it is necessary to judge potential choices in the absence of real evidence of how individual consumers might react in a choice situation.

Hedonic pricing - as a rule, people's preferences are valued in monetary terms in terms of maximum willingness to pay (Willingness to Pay, WTA) or minimum willingness to accept (Willingness to Accept, WTA) changes in the quantity or quality of services provided or access to resources. Therefore, for example, you can analyse how much a consumer is willing to pay for clean air or waste reduction.

The travel cost/time value method is the basis of this method to determine how much time / money consumers spend on the road to get the desired benefit. This inconvenience, which they are willing to put up with, can be expressed in monetary terms and get a rough estimate of the benefits that people acquire with these goods and services.

5 Conclusion

Based on the results of the analysis, the following conclusions can be drawn:

1. The pool of proven indicators for measuring the effectiveness of budget expenditures cannot be fully used to assess socially significant investments, since they are mainly reflected in quantitative indicators, and not in value ones. ESG investments are designed for a wide range of investors, for whom the economic efficiency of capital investments is no less important.

2. Despite the fact that the SROI methodology has established itself as a practical tool for analyzing the effectiveness of socially oriented investment projects, there are a number of factors that hinder its application. These factors include the difficulty of translating indicators that characterize the results of the project from qualitative or quantitative to monetary.

3. Existing databases with already evaluated "proxies" have a certain country, regional affiliation, which makes it difficult to extrapolate them and use them to evaluate Russian socially oriented investment projects.

4. Due to the lack of a domestic “proxy” database, each socially significant investment project must be evaluated separately, the procedure is resource-intensive in all respects, that is, not only expensive, but also time-consuming. If we take into account the stage of the life cycle of an investment project at which the calculation should be made - before the investment, the complexity of the calculation significantly reduces the number of potentially implemented socially significant investment projects.

6 Directions for further research

Further research in this area should be aimed at simplifying the process of monetization of non-financial results, at the formation of an internal database of financial proxies for the Russian market, which would make SROI analysis more accessible. In addition, a theoretically substantiated expansion of the base of investment analysis criteria is needed to evaluate the effectiveness of socially significant projects, taking into account their specifics. The formation of a comprehensive methodology for evaluating investments in ESG projects, supplemented by recommendations for its practical application, will make it possible to
implement a greater number of such projects, which is necessary for the transition of the Russian economy to sustainable development.

7 Acknowledgements

The study was funded by the Russian Science Foundation grant No. 23-28-01316 “Strategic management of effective sustainable ESG development of a multi-level cluster-type cyber-social industrial ecosystem in a circular economy based on the Industry 5.0 concept: methodology, tools, practice”, https://rscf.ru/project/23-28-01316.

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