THEORETICAL AND METHODOLOGICAL BASIS OF INVESTMENT EFFICIENCY CALCULATION

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Annotatsiya
Ushbu maqolada To‘qimachilik sanoatiga yo‘naltirilgan investitsiya loyihalarining iqtisodiy samaradorligini baholash yondashuvlari va usullari hamda muhim jihatlari, ijobiy va salbiy tomonlari keltirilgan.

Kalit so‘zlar: Investitsiya, investitsiya loyihalari, samara, metodologiya, stategiya, mehnat resurslari, loyiha samaradorligi, sanoat sohasini.

Аннотация
В данной статье представлены подходы и методы оценки экономической эффективности инвестиционных проектов, направленных на текстильную промышленность, а также их важные аспекты, положительные и отрицательные стороны.

Ключевые слова: Инвестиции, инвестиционные проекты, эффективность, методология, стратегия, трудовые ресурсы, эффективность проекта, промышленный сектор.

Annotation
This article presents the approaches and methods of evaluating the economic efficiency of investment projects focused on the textile industry, as well as important aspects, positive and negative aspects.

Keywords: Investment, investment projects, efficiency, methodology, strategy, labor resources, project efficiency, industrial sector

Investment is one of the most widely used concepts in the economy today. Investment means long-term financial capital investments aimed at the

implementation of various programs and projects in production, social, cultural and other spheres for profit. Investments can be made in the form of money, property or value.

The problem of evaluating the economic efficiency of investment projects aimed at the textile industry requires a comprehensive solution affecting various aspects of macro and micro economic theory, economic-mathematical methods, scientific-methodological trends in economics, sociology, ecology and other industrial sciences. The approach to solving such a problem makes it possible to determine its place and importance in the general system of socio-economic processes, to determine its internal structure, and the interdependence of its socio-economic aspects.

Nowadays, effective investment in various projects is becoming very important all over the world. Many approaches and methods have been created to evaluate the effectiveness of this investment. Among them, the following methods are common:

1. UNIDO (United Nations Industrial Development Organization) method;
2. Little - Mirrliss method;
3. World Bank (WB) method
4. Cost-benefit analysis method
5. Ernst & Young (EY) method
6. Method of Goldman, Sachs& Co;
7. European Bank for Reconstruction and Development (EBRD) method.

UNIDO (United Nations Industrial Development Organization) is the United Nations Industrial Development Organization.

The full name of the methodology called the UNIDO method is called "Manual for the preparation of industrial feasibility studies". It was first published in 1978 due to the lack of comprehensive standards for project evaluation in developing countries. Since then, the approach proposed by UNIDO has been adopted by government ministries, banks, financial institutions, universities and consulting firms.

The UNIDO methodology recommends that an investment project be developed in the form of a cycle consisting of three distinct stages:

• Pre-investment stage
• Investment stage
• Launch phase

Each of these phases is divided into periods, and some of them include important activities such as consulting, design and production.

Investment project planning is an interdisciplinary task that requires a team of economists, engineers, businessmen, public administrators, and sociologists. The UNIDO methodology helps decision-makers in preparing the technical and economic basis of industrial production for investors with different levels of education and professional qualifications in developing and developed countries. The approach according to this methodology is of practical importance [1].

This methodology includes all important aspects of the investment project:

•General information about the project and its history, the name and address of the founder of the project, the direction of the project (directed to the market or the sources of raw materials), the direction of the market (domestic or export), the economic and industrial policy supporting the project. include;

• the following information about annual demand, planned sales, production program and production capacity should be reflected in the market and production capacity;

• raw materials and capital;

• assessment of place and object;

• project engineering summarizes the scheme and scope of the investment project, the final selected technology, the selected equipment and the necessary construction work;

• organization of plants and assessment of additional costs;

• indicate the type and size of the workforce from which employees are selected;

• the procedure for installing the equipment, the installation period, as well as the production evaluation and commissioning period are indicated in the implementation schedule;

• financial and economic assessment of the total costs of investments (related to the capital costs spent on the preparation of construction works, technologies and equipment, production and working capital), the total costs of project financing, production or production, the financial assessment (the net value of the investment which gives, internal rate of return, payback period, normal rate of return, due diligence analysis, impact analysis) and national economic assessment.

It is necessary to indicate the main advantages of the investment project, the main disadvantages of the project and the possibilities of project implementation. Various decision-making methods can be used to reach such conclusions. Investors mainly use INVEX's heuristic decision-making strategy in practice [2].

Among the above, the Little-Mirrlis method is now widely used. The Little-Mirrlis method is a method of calculating goods and services at international prices. Its main disadvantages are as follows [3]:

- based on the concept of administrative command economy, where labor resources are used in unlimited quantities;
- a large impact on international speculative prices, which leads to errors in the evaluation of the project's effectiveness;
- since the world prices of goods and services may change, additional calculations may be required during the project, which requires the creation of new price conversion ratios, which further complicates the method.

The Little-Mirrlis method has the following limitations and disadvantages:

- The methods and criteria for choosing an investment project are clearly based on the concepts of a planned economy with unlimited labor resources;
- the world prices of products are very prone to speculation, and using the Little-Mirrlis method here can lead to incorrect results of evaluating the efficiency of investment projects;
- lack of data when calculating price conversion coefficients;
- the method requires a large number of additional calculations due to possible changes in the world prices of goods and services during the implementation of the investment project and, accordingly, the need to obtain calculations of new coefficients for price changes is born.

The World Bank project analysis method is widely used in countries based on market economy. Its main achievement is aimed at creating conditions for sustainable economic growth. The World Bank gives impetus to the investment project, because its financing mechanism is associated with high risk and it is a development bank that is implemented under the state guarantee. Development banks primarily work within the framework of evaluation of investment projects and implementation of activities in financial markets. They evaluate projects based on social, environmental, financial, marketing, economic and other aspects.

The World Bank approaches the assessment of the effectiveness of investment projects from the perspective of project analysis. Project analysis is a methodology for assessing the social effectiveness of a project, not a commercial one.

The fourth of the above-mentioned methods - the cost-benefit method, first appeared in France in the 19th century, then moved to the United States, where it began to develop rapidly in the 1940s. It was at this time that economists began to solve the problem of finding an optimal balance between costs and benefits. Since then,

research in this area has been carried out, the method has undergone changes, and the final decision is still not available. The main principle of this method is to calculate the net present value obtained from the implementation of a certain investment project.

It allows you to find benefits and costs at different times to make the best investment decision based on the calculation of net present value (NPV, IRR). The shortcomings and limitations of the method are embodied in the lack of long-term profit accounting, the lack of consideration of non-commercial profits and the impact on the effectiveness of the redistribution of funds, as well as the presence of a certain degree of subjectivity in its application.

The last three methods (Goldman, Sachs&Co; Ernst & Young; EBRD) are the first step in creating an investment project and are used in the development of business plans. Economists at Goldman, Sachs&Co suggest using official statistics for calculations that are less prone to intentional distortions, such as data on average prices for energy and building materials. Ernst & Young uses adjusted present value (APV) to evaluate investment performance.

At the same time, this indicator adjusts NPV to the amount of financial costs for issuing shares, which cannot be issued by all organizations in the country and does not take into account investment risks. The methodology of the European Bank for Reconstruction and Development seems to be the most effective, because its use requires solid experience in developing business plans and evaluating the effectiveness of investment projects.

Almost all of the seven methods listed above are widely used in world practice today. In particular, the methods of the World Bank and the European Bank for Reconstruction and Development are actively used in the evaluation of large projects. However, if we look at the world level, we can see that the UNIDO method of the specialized organization of the UN is widely used in the single methodological guidelines developed at the government level for the selection of investment projects and their effectiveness evaluation.

In recent years, new methods and evidence have been emerging in the assessment of investment efficiency. A number of factors influenced the occurrence of this news. One of the important factors is that the cost of investment performance research has decreased. Previous studies evaluating the performance of funds were based on proprietary or expensive commercial databases. By now, scientists have managed to place their data on web pages or applications of scientific publications.

Analyzing the industrial sector of the real sector, in particular the textile industry, we should emphasize that one of the most important stages of pre-investment research is the assessment of the economic efficiency of the investment process, which includes the calculation and evaluation of direct and indirect indicators. is considered:

Indicators for evaluating the efficiency of the investment process in an industrial enterprise	Directly	Initial	The total amount of investment costs Inactivity period Investment attractiveness level
		Calculated	Net present value Internal profit rate Profitability Coverage period
	Indirectly	Expert assessment of investment value	Liquidity of investment value Assessing the investment value environment
		Reputation of investment value	Validity Number of process elements

System of indicators for evaluating the economic efficiency of the investment process in industrial enterprises.

The stages of evaluating the efficiency of industrial enterprises group two methodological approaches:

- accounting, accounting based on the calculation of the profitability of the industrial enterprise and the use of financial coefficients;
- an economic (production) method that includes the level of profit, cost and risk, the main criterion of which is the optimality of operation.

The essence of the first approach is to evaluate the efficiency of the industrial enterprise as a relative calculated value. The main performance indicators of this approach are return on assets (ROA (Return On Assets)) and capital return (ROE (Return On Sales)) indicators (the Dupont System of analysis (Dupont formula)), net interest margin, cost efficiency, etc. are calculated. Despite the advantages of financial coefficients (simplicity in calculation and interpretation of received data, openness to all evaluators), the complexity of determining factors affecting efficiency limits the use of this method [4].

DuPont's analytical model (ROA and ROE) or the method of decomposition (decomposition of the whole into parts) analysis of private capital profitability is

based on the method of financial ratios, although it allows us to determine the factors affecting the return on capital of an industrial enterprise. The peculiarity of the methodology is that it is possible to use one way in three directions to obtain a reliable assessment. In this regard, the following directions should be distinguished: analysis of sales profitability, analysis of asset turnover and study of sources of financial stability of industrial enterprises.

The second approach to evaluating efficiency considers an industrial enterprise as a service firm for investment companies. This approach is based on the synthesis of the theory of financial intermediation and the theory of the firm. According to this approach, efficiency is considered as a characteristic of the production process, that is, the main principle of economic activity is the optimization of the organization of the industrial enterprise while observing the reduction of costs and the maximization of production. The application of this approach is based on the use of groups of parametric and non-parametric methods for evaluating efficiency.

The non-parametric method of evaluating the efficiency of industrial enterprises provides consideration of the sum of factors affecting input (resources) and production parameters. However, the application of these methods is limited by ignoring the possibility of error and assessing technological aspects of efficiency.

Parametric estimation methods make it possible to estimate the efficiency of allocation (the ability to optimally manage resources based on their cost). The essence of the last stages of evaluating the efficiency of industrial enterprises is to generalize the results of research by identifying and analyzing the factors affecting the level of efficiency by means of auxiliary methods such as the formation of conclusions and proposals.

Each of the above-mentioned methods has positive and negative aspects. Therefore, the acceptability and expediency of their use depends on the specific situation, in particular, the assessment subjects, information consumers, assessment goals. The choice of the method of evaluating the efficiency of an industrial enterprise depends primarily on the purpose of the evaluation.

The current economic climate is accelerating investment in digital transformation as emerging markets look to increase demand for technology to fuel further growth and developed markets look for new ways to cut costs and innovate. Digital technologies are driving increased consumer demand and income, education and training, and efficient use of capital and resources, especially in emerging markets. Industries that invest in information technology can rely on the countries they operate in to achieve faster economic growth and prosperity using modern

technology. In order to make a decision on the strategy of development of the national economy, it is necessary to take into account the structural changes in the priorities of the flow of investments in the international capital market. Evaluating prospective gaps and segments of the global digital market, predicting investment returns, and industrial enterprises require the development of new methodological approaches to assess investment risks of new technologies.

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