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ASSESSMENT OF INVESTMENT ATTRACTIVENESS OF INDUSTRIAL **ENTERPRISES**

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ABSTRACT

The article is devoted to methodological issues of assessing the investment attractiveness of industrial enterprises, based on the nature of investments and the goals of their initiators. Various methods for assessing the economic efficiency of investments in newly created, existing and reconstructed industrial enterprises are examined, and the conditions for their application are determined. The necessity of calculating the economic efficiency of direct investment as part of changing the entire production and economic system of the investor is justified. A structural and logical scheme of interaction between the potential investor and the investment object directly for the implementation of investment projects was proposed, taking into account the number of investments, type of investor and term of the investment. The authors also

proposed a methodology that can be used by an investor to plan for increasing the investment attractiveness of an enterprise and a formula for calculating the coefficient of investment attractiveness of an enterprise.

Keywords: Investor, Investments, Investment Attractiveness, Industrial Enterprises.

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1. INTRODUCTION

In current conditions, any industrial enterprise needs to increase its competitiveness, develop a market position, and ensure its economic growth [1-3]. For this purpose, the enterprise must constantly improve its products, introduce modern technologies, equipment, etc. With an insufficient level of own resources, they resort to external sources to finance these processes, for which it is necessary to have a sufficient level of attractiveness for investors. Investments play a crucial role in the activities of business entities [4-5]. Attracting investment gives them additional competitive advantages and is often a powerful growth tool. The decision on the possibility of investing funds by an investor is directly affected by investment attractiveness.

However, the ability of investments to generate income depends mainly on the potential of the investee under consideration and its ability to most effectively realize the money invested by the investor and to achieve the maximum value in the shortest possible time due to the use by business entities of various systems for managing available resources. Given the increasing role of strategic management aimed at increasing the well-being of the owners of the enterprise`1, and the development of a value management system for strategic decision-making by company management, there is a need to improve the investment decision-making mechanism and methodology for assessing the investment attractiveness of an industrial enterprise for a strategic investor from the perspective of long-term and long-term development of the enterprise.

Previous studies have shown that most of them pay attention to the evaluation of the investment attractiveness of enterprises by the investor or investment company, rather than by the enterprise. An analysis of approaches to assess the investment attractiveness of enterprises by an investor can be used by an enterprise to convince the investor of the feasibility of investing. An enterprise that wants to succeed in business in a fierce competition must be able to convince, using not only economic factors, but also other factors.

2. JUSTIFICATION OF THE NEED TO USE A SYSTEMATIC APPROACH TO ASSESSING THE INVESTMENT ATTRACTIVENESS OF AN ENTERPRISE

Assessment of the investment attractiveness of the company plays a decisive role in choosing an enterprise as an investment object. Potential investors pay the closest attention to precisely this characteristic, resorting to studying the indicators of the financial and economic activity of the enterprise over the past 3-5 years and evaluating it as an element of the industry by comparing it with other competing firms. The choice of a potential investor often depends on the economic viability of the organization and the degree of stability of its financial condition. These parameters most truly characterize the investment attractiveness of the company.

Almost any business niche is characterized by an extremely high level of competition. To take a good competitive position, enterprises are forced to continually develop, borrowing

advanced foreign experience, mastering various innovations, expanding the scope of activities. At this pace of business development, enterprises cannot grow without the right amount of investment. Thus, for the development of any organization, external sources of capital are necessary, since financing projects entirely from their own funds is quite risky. At the same time, investors are interested in making a profit and in multiplying it. In an effort to minimize losses, they take into account all kinds of risks associated with investing. It is for this purpose that investment attractiveness is evaluated in a particular enterprise or project. As a result, investments give the company a competitive advantage and often act as the most robust growth tool.

In the field of studying the investment attractiveness of an enterprise, there is no single interpretation of the concept of "investment attractiveness of an enterprise" and the methodology for its assessment. Existing methods at the moment are based on the use of various indicators, methods of analysis and interpretation of the results.

Investment attractiveness refers to the advantages and disadvantages of investing in certain areas and objects from the perspective of a particular investor [6-8].

Demand for investments (together with supply, price level and degree of competition) determines the investment market conditions. The study and forecasting of the investment market are carried out on the basis of assessing the investment attractiveness of its segments (Fig. 1).

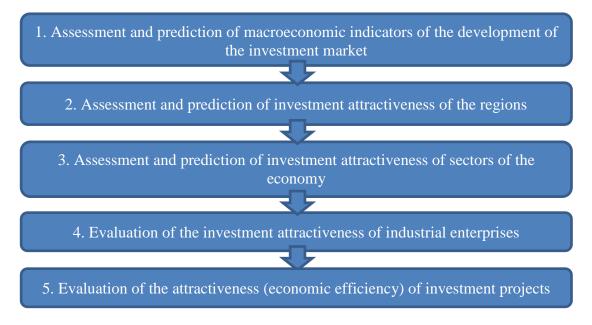


Figure 1 Stages of the study of investment market conditions

Since the investor carries out the investment procedure directly with the enterprise as a legal entity, then he, besides the effectiveness of the investment project, is no less interested in the investment attractiveness of the entire enterprise implementing this project.

At the same time, the investor considers the affiliation of the enterprise to the industry (developing or depressed industries) and its territorial location (region, federal district). Sectors and territories, in turn, have their own levels of investment attractiveness, which include the investment attractiveness of enterprises and projects.

Thus, each object of the investment market has its own investment attractiveness and at the same time is in the "investment field" of all objects of the investment market. The investment attractiveness of the enterprise, in addition to its "investment field", is affected by

the investment impact of the industry, region and state. In turn, the totality of enterprises forms an industry that affects the investment attractiveness of the whole region, and the attractiveness of the states makes up the attractiveness of the state. All changes occurring in higher-level systems (political instability, changes in tax legislation, growth of population incomes in the region, customs duties on products of certain industries, environmental requirements, etc.) are directly reflected in the investment attractiveness of the enterprise (Fig. 2).

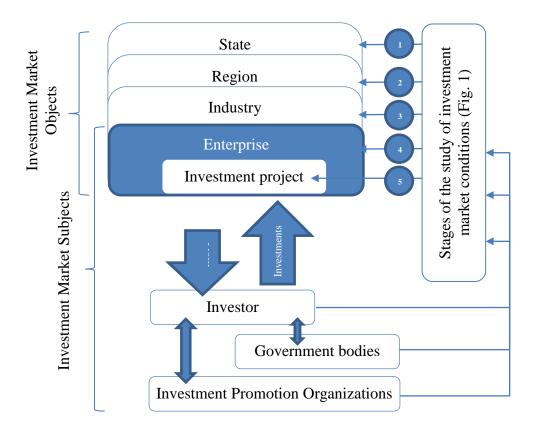


Figure 2 Investment attractiveness of the enterprise in the investment market system

Thus, the company should occupy a central place in the investment process, since it acts both as an object and subject of the investment market.

Currently, there are various approaches to assessing the investment attractiveness of an industrial enterprise. Moreover, the best properties are possessed by methods that form an integral indicator as an evaluation result, which simplifies the procedure for comparing enterprises among themselves when choosing an investment object and makes software algorithmization of the result formation process more accessible.

There are five main approaches to assessing the investment attractiveness of an enterprise:

- 1) methods based on the assessment of the financial performance of the enterprise;
- 2) methods based on the evaluation of business and economic indicators, which take into account not only financial but also other indicators characterizing financial and economic activities:
- 3) methods based on assessing the impact of internal and external factors on the level of investment attractiveness of the enterprise;

- 4) methods based on a comprehensive comparative analysis of investment attractiveness by analyzing the investment attractiveness of the industry, region and enterprise;
- 5) methods based on enterprise valuation, where the key criterion is the market value of the enterprise.

Also, in the process of evaluating an enterprise as operating, the following methods are traditionally used:

- profitable, which consists in determining the value of the enterprise on the basis of the income that it is able to bring to its owner in the future, including profit from the sale of surplus property;
- comparative method for determining the value of an enterprise, based on a comparison of this enterprise with a similar one
- costly based on the determination of the market value of the property of the enterprise minus its credit and other obligations.

We consider this approach more understandable and appropriate; therefore, we will discuss the assessment methods presented in more detail.

The income method involves the use of one of the following valuation methods:

- discounting cash flows;
- capitalization of future income.

One of the first and most fully profitable methods developed by American scientists [9]. The main provisions of the way of calculating the assessment were presented in the 1980s. The basis of the study was the provision on the formation of business value based on real income and cash flows. The application of this method requires the fulfillment of such mandatory conditions as: the ability to assess the future income of the enterprise for a certain time, as well as the ability to predict its cash flows. If business prospects seem unstable, then applying this method is problematic.

Valuation of the enterprise from the point of view of forming future profits in Ukrainian reality began to be applied relatively recently. Difficulties using this method in assessing enterprises are caused most likely by the lack of long-term application practices, the difficulty of forecasting incomes, due to the significant influence of political, economic and other risks, as well as the understatement of profits when maintaining accounting reports by a significant number of enterprises. Also, the profit indicator for the last reporting period does not always fully characterize the efficiency of doing business and may be associated with investments and other capital flows, which may affect its level. It is difficult to determine the profit indicator in future periods, which are formed on the basis of internal (market position, assets, innovations, management) and external (competitors' activities, market conditions) factors. Moreover, this method shows greater accuracy in the assessment of small enterprises and enterprises in the service sector than costly or comparative. If the current activities of the company correspond to the expected indicators in the future and their dynamics can be planned, then this method can be used to assess the value of the enterprise.

The method can also be used when performance indicators for future periods will differ significantly from current ones. An example is enterprises that are starting to produce new products or are related to an industry with cyclical or seasonal demand. In cyclic production with an average profitability indicator, there should be an average indicator between the

extremes of the cycles (the highest and lowest points of the period). The use of this method has a number of limitations, ignoring which the calculation of the cost will be inadequate:

- there should be the possibility of forecasting deferred income with sufficiently high accuracy;
- state bodies do not always accept the assessment obtained by this method, since not only the current activity of the enterprise is evaluated, but also the forecast, and this is important for projects in which the state acts as a co-investor;
- lack of data for the formation of a reasonable prognosis of profit or net cash flow for a sufficiently long period.

An additional important factor in increasing the objectivity of enterprise valuation using this method is information about the product life cycle and the phase in which it is currently located

No less critical for assessing the business of an industrial enterprise is an understanding of the economic condition of the industry, which significantly affects its value. At the peak of the development of the scope of the business, business entities sharply rise in price, having the same set of assets and market position, all other things being equal. In such a situation, when the business becomes very profitable, the value of enterprises increases in proportion to the profit. Thus, when evaluating industrial enterprises as an operating business for investment purposes, it is necessary to abandon the identification of business valuation with the valuation of the property of this company. To a greater extent, it is essential to pay attention to such factors as property rights, technology, competitive advantages, tangible and intangible assets, which enable the company to receive income from its activities.

3. METHODOLOGY

The analysis showed that existing methods for assessing the investment attractiveness of an enterprise take into account either only quantitative or only qualitative factors. This is their main drawback, which, in our opinion, can be eliminated if all elements are brought to a single dimension.

Based on the research, using the scientific approaches of the authors, a structural and logical scheme of interaction between the potential investor and directly the object of investment in the implementation of investment projects (Fig. 3), which will show the strengths of the financial and economic activity of the enterprise, its investment attractiveness and convince investor about investing in him. The limiting factors were the amount of capital investment and the investment period.

Analyzes enterprises of interest to the investor. Defines the main criteria for the selection of enterprises for investment: 1. preliminary assessment and selection of the enterprise; 2. assessment of financial condition and selection of enterprises; 3. assessment of development prospects and selection of enterprises; 4. assessment of production, technological and human resources and final selection of the investment object, etc. Parameters Type of investor Portfolio investor Financial investor (bank) Strategic investor 1. Forms its own methodology for the analysis Investment term 1 to 6 months 6 months to 3 years More than 3 years of production, economic and financial activities Purchase of a large stake in an existing terprise, followed by loans for technical re Acquisition, as a rule, up to 10% shares in the authorized capital and determines the investment attractiveness of Granting a loan enterprise, followed by loans for technical re equipment, construction of a new enterprise. Large and medium-sized enterprises with long-term competitive advantages, with the same production technology for subsequen integration into holding structures the enterprise for the investor, taking into Any company with good financial condition and sustainable development prospects Successfully operating joint-stock companies whose shares are traded account the strengths and weaknesses. on an organized securities market competitive advantages, etc. 2. Defines and takes into account the basic Growth in the market value of a business, sale of products and services, increase in narket share or access to new markets, low Making a profit for usin a loan equisition, as a rule, up to 10% of shares in the authorized capital principles, motives, special and unique qualities of the investor regarding the belief in making production costs Transfer of new production technologies, roduct sales systems, recommendations for the purchase of equipment. stimation of the market value of an aterprise based on official quotes of investment decisions about the feasibility of "Pros" for the enterprise Flexibility of using and repaying a loan investing the enterprise, taking into account the its shares Requirements for payment of dividends and observance of the ights of small shareholders, control over the activities of the board of volume of investments and terms of Payments of interest on the loan, the need to maintain liquid collateral Setting management and accounting in accordance with international standards investment, etc. marketing and investment research, audit, staff training **ENTERPRISE INVESTOR** MAKING INVESTMENT DECISIONS Tactical investment decisions for the short Making long-term strategic investment decisions, taking into account significant term, taking into account small investments Analysis of enterprise life cycle Duration of the Determination of the investment attractiveness of the Sales Life cycle stages period, years enterprise Phase 1 - birth of the organization up to 1-2(formation). Enterprise is considered an attractive Phase 2 - childhood and adolescence investment 3-5 It is advisable to invest an enterprise, if its products have a sufficiently high marketing prospects and are Phase 3 - stability (maturity) 6 - 10innovative in nature, the volume of investments is low and can pay off in the short term Phase 4 - aging organizations 11-20 It is not advisable to invest the enterprise It is advisable to invest an enterprise, if its products have Phase 5 is the revival of the a sufficiently high marketing prospects and are at any stage organization (restructuring, innovative in nature, the volume of investments is low reforming, transformation, etc.). and can pay off in the short term. The financial analysis of an enterprise in The investment attractiveness of an enterprise contains a high level of protection of its investments and expected profit, which may take the process of evaluating investment the following form: attractiveness is transparent and contains 1. The image of the company, its place in the industry, the market; the only the positive sides, which is carried level of its monopoly; assessment of the dependence on the external out in the following areas: environment (economic conditions, legislation, competitors, 1. Solvency: absolute liquidity ratio; suppliers, technology, technology, the mentality of society, etc.). 2. balance coverage ratio; the level of Analysis of production (structure and estimation of production costs, predicted safety. including the main types of products, their profitability, etc.), 2. Financial stability: the ratio of liquid production capacity, the possibility of increasing production. 3. Analysis of logistical and information bases. 4. Analysis of marketing to illiquid assets; coefficient of autonomy; debt ratio; maneuverability strategy; innovative, competitive and socio-environmental aspects. 5. The volume of profit and its use over several periods; analysis of risk factor. and profitability factors, insurance; expected profit. 6. The 3. Profitability and business activity: organizational structure of management; the mechanism of interaction profitability of sales; turnover rate; return between the control and control system; the number of staff on equity. (administrative, production, etc.); salary. 7. Business owners; 4. Schedule of break-even achievement statutory fund; the price of the shares, the distribution of the block of (point of arrival). shares. 8. Transparent financial analysis of the enterprise and forecast before and after the investment. 9. Conclusions and 5. Forecast of financial activity.

Figure 3 Scheme of the interaction of potential investor and investor directly in the implementation of investment projects

4. RESULTS AND DISCUSSION

In addition to calculating investment attractiveness, the proposed methodology can be used by the investor to plan for increasing the investment attractiveness of the enterprise (Fig. 4).

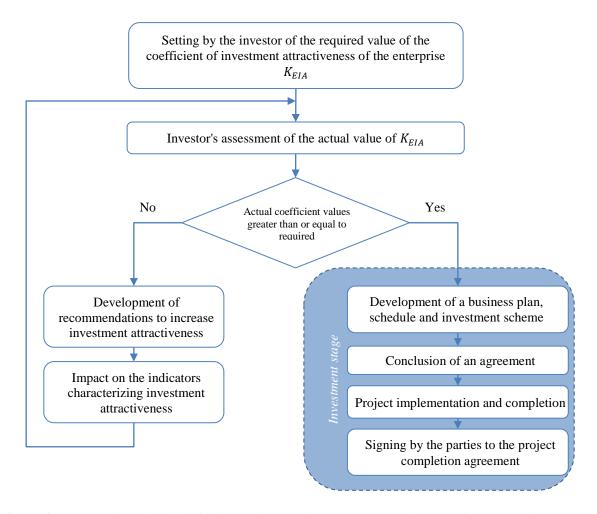


Figure 4 The planning algorithm for increasing the investment attractiveness of the enterprise

Based on strategic goals, the investor determines the required (planned) level of the K_{EIA} , then evaluates the actual K_{EIA} of the enterprise and compares it with the planned.

The coefficient of investment attractiveness can be calculated by the following formula:

$$K_{EIA} = \frac{\sum_{j=1}^{m} x_j}{\sum_{j=1}^{m} T_j}$$

where x_j – the score for each factor taken into account, taking into account its weight (factors are determined by the investor);

 T_i – the maximum score for each factor considered, taking into account its weight;

j = 1, 2, 3, ...m – the number of factors considered.

If the investment attractiveness of the enterprise is low, then the investor develops recommendations and makes decisions to increase the investment attractiveness of the enterprise, which are implemented in the form of "investment impact" on factors characterizing the investment attractiveness of the enterprise. A subsequent assessment of investment attractiveness is carried out, taking into account these changes. If the actual

instrumentation has become more than planned, then a decision is made to move to the investment phase, which begins with the development of a business plan, schedule and investment scheme.

5. CONCLUSION

Improving the investment climate is a priority task that can only be achieved by properly managing the process of increasing the investment attractiveness of all segments of the investment market and, above all, enterprises.

The main purpose of increasing the investment attractiveness of the enterprise is to create optimal conditions for investing its own and borrowed financial and other resources that provide growth of income on invested capital, to expand the economic activity of the enterprise, to create better conditions for victory in the competition.

The field of quantitative and qualitative factors that influence the formation of the investment attractiveness of the enterprise, the options for its evaluation and the proposed general methodological approach, with regular monitoring of the dynamics of investment attractiveness, will allow evaluating the various quantitative and qualitative parameters of the investor to get an objective picture of the status and effectiveness of the use of existing investment potential and level of investment risk.

A promising area for further research is the improvement of economic and mathematical modelling in assessing the investment attractiveness of industrial enterprises.

REFERENCES

- [1] Bondarenko, S., Laburtseva, O., Sadchenko, O., Lebedieva, V., Haidukova, O., and Kharchenko, T. Modern lead generation in internet marketing for the development of enterprise potential. *International Journal of Innovative Technology and Exploring Engineering*, 8(12), pp. 3066-3071. 2019
- [2] Ponomarenko, T., Khudolei, V., Prokopenko, O. and Klisinski, J. Competitiveness of the information economy industry in Ukraine, *Problems and Perspectives in Management*, 16(1), pp. 85-95. 2018
- [3] Kasych A., Vochozka M. Modernization processes in the modern world: methodology, evolution, tendencies. *Revista ESPACIOS*. Vol. 40 (N° 24), P. 20, 2019. https://www.revistaespacios.com/a19v40n24/19402420.html
- [4] Nadiia Davydenko, Investment attractiveness of enterprises, May 2017, DOI: 10.15330/apred.1.13.59-68
- [5] Bashynska, I.O. Using SMM by industrial enterprises. *Actual Problems of Economics*, 186(12), pp. 360-369. 2016
- [6] Gutkevych, S. Investment attractiveness of industries: features and trends, August 2019, DOI: 10.30525/2256-0742/2019-5-3-50-58
- [7] Bolgarova, N. K. and Panevnyk, T. M. Priority Aspects of Investment Attractiveness of Ukraine, May 2019, DOI: 10.32983/2222-4459-2019-5-56-61
- [8] Kurikov V.M., Tashlanova I.V. The methodology of evaluation of investment attractiveness of the region, January 2019, DOI: 10.17513/vaael.467
- [9] Jay E. Fishman, Shannon P. Pratt, William J. Morrison. *Standards of Value: Theory and Applications*, New York City: Wiley; 1 edition (November 10), 368 pages. 2006