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Abstract. The aim of the article is to summarize theoretical principles and practical experience regarding the relationship between the investment attractiveness of innovative projects and economic growth. The methods of correlation and regression analysis, extrapolation and modeling are used. The subject of the study was the features and patterns of the formation, use and regulation of the policy for assessing the investment attractiveness of company's innovative projects in modern economic conditions. In the course of the study, an algorithm was developed to assess the size and level of investment attractiveness of the algorithm is based on the allocation of components of the enterprise's potential. It is indicated that models for evaluating efficiency and cost should take into account not only future cash flows, but also non-financial indicators. Are proposed the construction of a multivariate model based on regression analysis. The essence of this model is to combine the traditional method of correlation analysis with least squares. This approach has the main advantage - relatively high accuracy and low costs in the construction and forecasting. The proposed model of a system for ensuring the investment attractiveness of innovative projects of consists of two main subsystems information-analytical and implementation-control. These blocks provide results that allow you to increase investment attractiveness, as well as timely determine the external and internal risks of the enterprise.

Keywords: Investment Attractiveness, Innovation Projects, Technological Advantages, The Potential Growth of The Market, Determination Of Risk, Investment Portfolio.

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I. INTRODUCTION

The investment attractiveness of the project largely determines its future: whether the project will be recommended for implementation and implemented in the future, or investor preference will be given to an alternative project that is more attractive from the point of view of financial investments.

The investor makes a managerial decision regarding the financing of an innovation project due to the assessment of the current investment and innovation conditions of the project implementation environment, as well as the potential of the project, which will bring the investor additional profit and minimize investment risk [28].

In the modern economic literature, scientists have identified many methods of assessing the investment attractiveness of the enterprise. Note that the concept of "evaluation" always involves comparing an object with a certain standard, standard or another object. That is, evaluating the investment attractiveness of a company's innovation projects is a comparison of the results of its measurement with those of the investment attractiveness of other innovation projects, or with the maximum value used only if it can be determined to determine investment performance [40]. Important for enhancing the investment attractiveness of innovative projects of the company is the innovative activity of the subject of market relations in the framework of its strategic development. It is important to keep in mind that the implementations of innovative projects are drivers of the whole system of factors that determine the level of investment attractiveness of the enterprise.

II. LITERATURE REVIEW AND PROBLEM STATEMENT

At the stage of creation of investment attractiveness of innovative projects, the company forms a model of future work, on the basis of which it forecasts the benefits, as well as calculates the risk of inadequate response of the subjects of investment planning and their expectations [9]. The investment attractiveness of the company's innovative projects is determined using multivariate analysis methods to identify based on the genetic algorithm [13]. The investment attractiveness of the company's innovative projects is determined by the aggregate characteristics of its financial and economic and management activities and the ability to attract investment resources. Assessing the investment attractiveness of a company's innovative projects is an integral feature of its internal environment [21].



The essence of the methodology is the formation of a policy of evaluating the investment attractiveness of innovative projects of companies is carried out in the analysis at the following stages:

- 1) assessment of the financial condition of the investment object;
- 2) determining the significance of group and individual indicators based on expert assessments;
- 3) determining the proportion of the scale of variation of the set;
 - 4) determining the ranked value for each indicator;
- 5) calculation of the integral indicator of investment attractiveness [24].

This methodology has several disadvantages - the cross-sectorial features of the enterprises' activities are not taken into account. Similarly, the financial analysis of the investment attractiveness of innovative projects in accordance with this methodology is rather cumbersome as it involves the calculation of more than forty indicators [26]. The results obtained require processing and generalization to identify more meaningful indicators in which experts are involved. At the same time, the definition of the integral indicator and the assessment of the investment attractiveness of innovative projects of the company should be carried out at the level of a particular region in order to identify the most attractive. This, in turn, will attract foreign investors and stimulate domestic investment in identified companies [34]. There are many techniques for determining the investment attractiveness of a company's innovative projects. The author suggested grouping them into three groups:

- ✓ methods based on different peer reviews;
- ✓ methods based on statistical information;
- ✓ combined methods based on expert and statistical calculations [23].

The author suggested to consider the investment attractiveness of innovative projects of the company from the point of view of the financial position of the company as "an integral characteristic of individual firms - objects of possible investments in terms of development, volumes and prospects of sales of products, asset utilization, liquidity, solvency and financial stability" [11]. In his turn, the author proposes to use the method of comparisons, which should cover the following main components of the investment process when formulating a policy for evaluating the investment attractiveness of innovative projects of companies: comparison between investment objects, between investing entities (investors) and between investment conditions [10].

According to the author [25], it is appropriate to formulate a policy for evaluating the investment attractiveness of innovative projects of companies, taking into account the following conditions:

- ✓ a limited number of indicative indicators that directly influence investment decisions;
- \checkmark use in calculating public accounting indicators and statistical reporting data, minimizing the use of inside information;
- ✓ possibility of rating the activity of the company in relation to other economic entities, as well as by time.

Therefore, the existing policy of assessing the investment attractiveness of innovative projects of companies is not always consistent with the purpose of the investor and sufficient to accept information [30]. Thus, the question arises about the creation of a unified system of indicators of which would allow an objective and valuation, comprehensive analysis of investment attractiveness within the selected mathematical tools. Character of conflicts of corporate interests and business reputation of the enterprise and in our opinion, in order to formulate a policy for evaluating the investment attractiveness of innovative projects of companies, the quantitative and qualitative assessment of the characteristics of the enterprise should be taken into account: capital structure, liquidity and solvency of the enterprise, transparency of senior management activities and level of responsibility to investors [33].

III. METHODS

Most of the investment is financed from internal sources. In this case, the profits from the implementation of investment projects are sufficient to pay off the debt to the bank. As economic expectations grow, the expectations of economic agents become more optimistic, and the number of investment and innovation projects increases, which leads to more active involvement of loan resources in the activity. In the macroeconomics, the quantity and quality of money is changing, the number of financial innovations and the speed of money turnover are increasing [37]. Due to the considerable financing with attraction of the borrowed capital interest rates increase, and, as a consequence, the financial debt of the enterprises under the system of floating rates of credit increases. An entity may apply for a new loan with a bank, but this is limited by the risk of the lender and the overall lack of liquidity in the economy [39]. In order to avoid immediate bankruptcy, entrepreneurs sell their own capital assets.

To assess the investment attractiveness of innovative projects, companies typically use a comprehensive methodology, but the methodology is suggested to take into account a wide range of indicators that allow making probable conclusions or recommendations for the development of investment policy (Fig. 1). According to this method, the investment attractiveness of innovative projects of the company acts as a complex indicator and takes into account three components - financial condition, market environment and algorithm for evaluating the investment attractiveness of innovative projects of the company [18]. Building a matrix for shaping the investment attractiveness of a company's innovative projects includes recommendations on how to develop an investment policy, depending on the group to which the company falls and the corporate governance decision making [12]. The investment attractiveness of innovative projects of the company is evaluated as a component of investment policy, an assessment of investment risk is carried out [43].

According to the received data, the matrix of formation of the investment policy of the enterprise is built and recommendations for its development and implementation are made (Fig. 1).



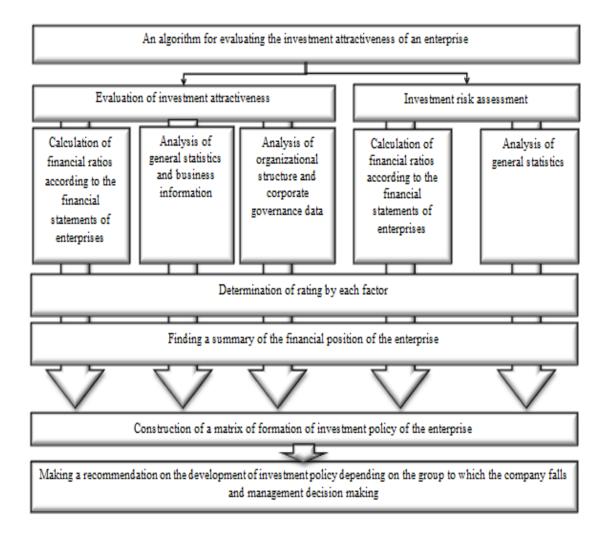


Fig. 1. Scheme of evaluation of investment attractiveness in the framework of forming the matrix of investment policy of the company

Source: formed by authors

The first stage of evaluating the investment attractiveness is to calculate the indicators and coefficients of the financial condition of the studied enterprise [3]. Financial condition is an important component of the investment attractiveness of innovative projects of the company, which determines its

The basis of the algorithm is the allocation of components of the enterprise potential - material, financial and intellectual capital. The step-by-step logic for determining the proportion of elements takes into accounts the author's work and suggestions [16]. It should be noted that the algorithm is based on different level of efficiency of utilization of types of potential by enterprises in a certain branch. Under the same conditions of operation and potential consumption, according to the proposed model, the shares would be equal for all components, and additional analysis for redistribution would be required.

competitiveness, is a guarantor of the effective realization of economic interests of all participants of financial relations: both the economic entity itself and its partners [2].

The general logic of the algorithm is shown in Fig. 2.

The following algorithm and conventions are used in the proposed algorithm:

 Π – realized potential of the enterprise for a certain period; Π^{M} , Π^{F} , Π^{I} – material, financial and intellectual components of capacity;

 $\Pi_m^M, \Pi_f^F, \Pi_i^I$ their subspecies, for which it is possible to determine the relative share of influence on the overall performance of the enterprise;

 K_1^n – coefficient of efficiency of use of subspecies;

j – the number of enterprises surveyed;

 R_1^n – relative performance factor for the metric K_1^n ;



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Step 1. Determination of generic components and subspecies of the enterprise potential		$\Pi = \{\Pi^{M}; \Pi^{F}; \Pi^{I}\}$ $\Pi^{M} = \{\Pi^{M}_{m}\}, \Pi^{F} = \{\Pi^{F}_{f}\}, \Pi^{F} = \{\Pi^{I}_{i}\}$
Step 2. Selection and calculation of efficiency ratios for each subspecies of potential (for j-th enterprise)		$\Pi_m^M, \Pi_l^F, \Pi_l^I \to K_l^n$
Step 3. Calculation of relative efficiency ratios (for i-th company)		$R_{lj}^n = \frac{K_{lj}^n}{K_l^n}$
Step 4. Determination of corrective factors (for i-th company)		$k_{l_j}^m = \frac{B_{l_j}^m}{B_j}$
Step 5. Calculation of the combined relative efficiency ratio for the sub-potential (for the j-th company)		$AR_j^n = \prod_{l=1}^n R_{l_j}^n \cdot k_{l_j}^n$
Step 6. Normalization of the combined relative efficiency ratios by their product (for j-th enterprise)	y	$AR_{N_j}^n = \frac{\prod_{i=1}^{n} AR_i^n}{\prod_{i=1}^{n} AR_i^n}$
Step 7. Calculation of the share of subspecies of potenti- in its total value (for j-th enterprise)	al	$w(\Pi_n) = \frac{AR_{N_j}^n}{\sum_{n=1}^A AR_{N_j}^n}$
Step 8. Redistribution and grouping of subspecies of potential subdivision by its components (for j-th enterprise)		$w(\Pi_m) \to w(\Pi_m^M; \Pi_j^F; \Pi_i^I) \to w(\Pi^M; \Pi^F; \Pi^I)$
Step 9. Calculation of the value of realized intellectual potential (for j-th enterprise)		$\Pi^I = w(\Pi^I) \cdot \Pi$
Step 10. Calculation of level of use of intellectual potenti and its elements (for j-th enterprise)	al	$\frac{P(\Pi^{I})_{j} = w(\Pi^{I})_{j}}{\sum_{t}^{t} w(\Pi_{n}^{I})_{max}}$

Fig. 2. The algorithm for estimating the size of the investment and investment opportunities of the company's innovative projects Source: formed by authors

k₁ⁿ – adjusting factor, so it's defined for relative efficiency

 B_1^n costs associated with a specific sub-type of potential;

B – total operating expenses of the enterprise; ARⁿ – aggregate relative efficiency factor for

sub-potential;

 \overline{AR}_{N}^{n} – the normalized value of the efficiency ratio \overline{AR}_{N}^{n} ;

 $w(\Pi_n)$ – the share of the nth subspecies of the potential in its total value;

 $w(\Pi^I)$ – share of intellectual component of potential;

 $P(\Pi^{I})$ – level of use of intellectual potential;

 Π_{n}^{1} - the subspecies of potential that are part of the intellectual component.

Efficiency and cost models should take into account not only future cash flows, but also non-financial indicators [14]. For example, such as: marketing support for the creation of new products, the quality of staff and its motivation, the general strategy of the company, the availability of evidence of the success of a new product, marketing advantages Source: formed about authors In order to assess the investment attractiveness of innovative projects, it is possible to use the Peter Boehr model,





where the stages of development of an innovative project are divided into the following stages for ease of analysis: the incubation stage, which consists of six stages, is understood as the stage of project deployment and the term "innovation window" is applied to it [8]. of the company (Fig. 3).

After the stage of "mature" growth sets in, the evaluation of effectiveness does not end, but the approach used by Frank Webster will be applied, namely the saturation and decline phases, in which both the "death" of the technology and the existence of a traditional project at the profitability level are possible (Fig. 4).

For cutaneous care, you can thoroughly formulate key indicators, analyse how you can help you adequately manage your investment, and invest in innovative projects of the company. Importantly, so that you can get rid of the criterion of boules with balance, so that they could imagine all the potential of intellectual potential - formulations and development [4]. The basis of the rating evaluation rooted is the selection of products for the skin, as a result of which we criterion with the standard products and the company with the best result. Such permits to undo sub's active expressions of experts and those who are realistically reaching subs of state donations.

IV. RESEARCH

Despite the general belief in the ease and uniqueness of the selection of projects for investment, changes in the modern understanding of the investment process, as well as, the gradual transition to the application of the concept of ethical investing. In today's investment environment, subjective factors come first, and objective ones only perform ancillary functions. The investor himself determines the subjective criteria of the investment attractiveness of the enterprises under the influence of their own judgments and social influence [19]. An enterprise can directly influence only its own results of operations, directly forming objective factors.

Also, an enterprise can indirectly influence investor subjective factors by improving its own reputation through the use of environmentally friendly raw materials and technologies. That is, the investor, when evaluating and selecting the company to invest, considers the performance indicators through the conditional "prism" of their own ethics. In turn, ethical investing is understood to mean making a profit by investing in innovative projects of companies that, in the investor's opinion, create positive changes in the world or that do not negatively affect the world [1].

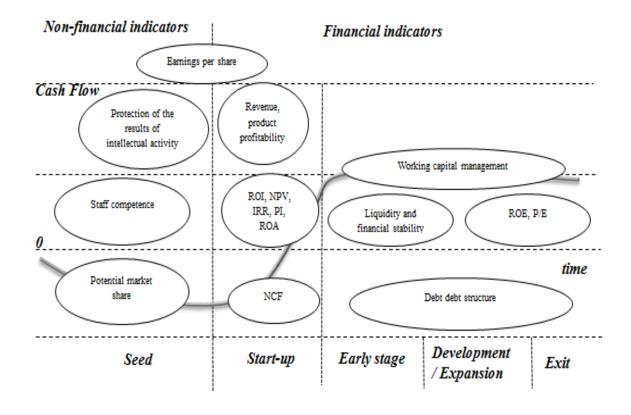


Fig. 3. An example of non-financial and financial indicators that affect the assessment of the investment attractiveness of innovative projects



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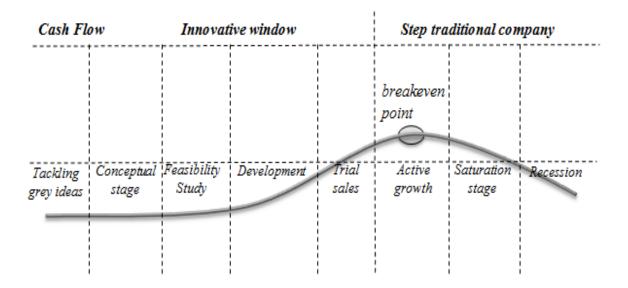


Fig. 4. The cash curve for the stages of the life cycle of the company [29]

Such significant changes require the enterprise to effectively manage their investment portfolio, which generally means the totality of investment resources at the disposal of the enterprise, which are directed to finance its production and economic and financial projects on the basis of optimality, in order to ensure its development as a result of investment activity. In essence, the definition consists of two parts of a portfolio of resources and projects. From the point of view of investment attractiveness, the project part is more important, which is a set of alternative production and economic and financial projects that an enterprise can implement and finance portfolio resources [20]. That is why an efficient process of project investment portfolio formation is important. Especially to provide the company with the necessary financial resources by increasing the level of investment attractiveness. For a better understanding it is necessary to consider in detail the given process, points of influence on it by the investor and local zones of formation of investment attractiveness. A typical scheme of the process of forming the implementation and control of the investment portfolio of innovative projects of the enterprise is shown in Fig. 5.

In general, the process can be presented in three successive stages: "Choice", "Control" and "Rating". Obviously, the investment attractiveness is formed precisely in the project selection phase, where the main decisions are in the area of operation in which the project will be implemented; its financial structure is planned and a model of project integration into the structure of the enterprise activity is being [22]. At the stage of "Control" the analysis of the primary indicators of the functioning of the project is carried out, as

well as the final control of the project results. In the primary process, they check the effectiveness of the project implementation, compliance with the planned cost indicators, investments.

In the final process, they review the implementation of the project's core KPIs, upon which management evaluates its effectiveness. However, the main process, to ensure the investment attractiveness of the enterprise, is to verify the direction of operation and results of the project to the requirements of strategic investors [15].

It's at this stage that the investment attractiveness is checked, the satisfaction of the investor's needs is determined, strategic relationships are formed and the opportunity for future investment is formed. The most important for the enterprise, its efficiency and development is the "Valuation" [17]. It is at this stage to evaluate the overall impact of the project on the performance of the company, the presence of synergistic effect.

The results of modelling and forecasting these groups of indicators for each enterprise are shown in Table 1.

Also, the "Estimation" envisages, based on the previous stage analysis and modelling on the first stage, the development of methods and ways of improving the efficiency of planning, implementation and management of future projects. Another indicator, without which it is impossible to draw the most objective conclusions about efficiency, is the system of risk assessment of implemented projects. It is the complex (integrated PPI, profit and risk) parameters that will identify the companies with the greatest potential for investing in an innovative project [38].

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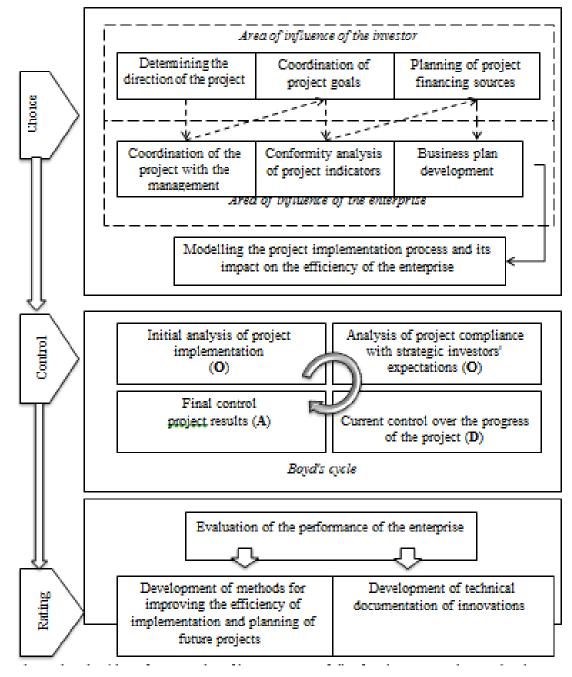


Fig. 5. The algorithm of construction of investment portfolio of projects enterprise Boyd cycle [31]

To predict the results, a multivariate, multivariate model was constructed based on regression analysis. The essence of this model is to combine the traditional method of correlation analysis with the method of least squares. In general, the formula for calculations is as follows [27]:

$$f(x) = b0 + \sum_{i=1}^{k} bixi \tag{1}$$

RSS
$$(b) = {}_{eT} e = \sum_{t=1}^{n} e^{2} t = \sum_{t=1}^{n} (yt - f(xt, b))^{2}$$

This approach has the major advantage of relatively high precision and low construction and forecasting costs. The peculiarity of this model is the presence of uncertainty factor, which is not simulated and leads to deviations of the forecast data from the actual ones. Unfortunately, depending on the specificity of the activity, a non-modelled indicator can have a significant impact [42].

The application of the theory of large numbers in combination with powerful computational complexes will allow predicting results with an accuracy of 95-97.5%, which is higher than the similar indicator. These models by 7-10%, depending on the influence of the unmodified factor [35].

It can be seen that although the enterprises have not achieved profits, however, the dynamics of profit growth shows that in the long run, with the consideration of effective management, the enterprises can reach a sufficient level of profitability. It should also be noted that some companies have doubled their own profits (shown in detail in Fig. 7).



Table 1.Estimates of the efficiency of implementation of the model of the IPP system

#	Indicator	Sub-Group / Year	Base period	Expected data	Projected period				
			2015	2016	2017	2018	2019	2020	2021
1	Integral PPI	potentially independent	2,05	2,11	2,11	2,15	2,26	2,28	2,33
		question mark	2,34	2,38	2,39	2,18	2,13	2,09	2,16
		liquidation	1,88	1,9	1,79	1,78	1,59	1,38	1,32
2	Profit, thousand UAH	potentially independent	-8,37	-8,59	-7,98	-7,86	-6,67	-4,98	-3,45
		question mark	-3,55	-3,61	-3,47	-3,37	-2,93	-2,45	-2,22
		liquidation	-2,5	-2,53	-2,36	-2,39	-2,14	-1,97	-1,72
3	Dynamics of profit %	potentially independent	-	-3	7	2	15	25	31
		question mark	-	-2	4	3	13	16	10
		liquidation	-	-1	6	-1	11	8	12
4	The degree of systemic risk businesses based systemic risk projects	potentially independent	1,22	1,141	1,134	1,123	1,067	1,051	1,04
		question mark	1,12	1,238	1,204	1,234	1,228	1,13	1,034
		liquidation	1,17	1,474	1,615	2,034	1,994	1,854	1,761

Source Author calculated from research data

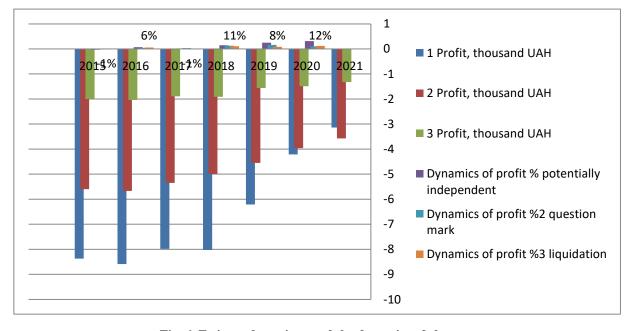


Fig. 6. Estimated earnings and the dynamics of changes

Source: Author calculated from research data





12							
10 8	1.17	1.47	1.62	2.03	1.99	1.85	1
6	1.22	1.14	1.13	1.23	1.23 1.07	1.13 1.05	1
4	2.34	2.38	2.39	1.78 2.18	1.59 2.13	2.09	
2	2.05	2.11	2.11	2.15	2.26	2.28	2
0		2015	2016	2017	2018	2019	2
■ Risk 3 liquidation	1.17	1.47	1.62	2.03	1.99	1.85	1
■ Risk 2 question mark	1.12	1.24	1.20	1.23	1.23	1.13	1
■ Risk 1 potentially independent	1.22	1.14	1.13	1.12	1.07	1.05	1
■ Integral PPI3 liquidation	1.88	1.90	1.79	1.78	1.59	1.38	1
■ Integral PPI2 question mark	2.34	2.38	2.39	2.18	2.13	2.09	2
■ Integral PPI potentially	2.05	2.11	2.11	2.15	2.26	2.28	2

Fig. 7. Comparison of the values of the integral indicator of investment attractiveness of the innovative project of companies and the indicator of the degree of systemic risk

Source: Author calculated from research data

However, in turn, the analysed entities that showed the highest increase in profits and integrated PPIs showed a high increase in the value of systemic risk, which increases the possibility of error and therefore errors in forecasts [7].

V. DISCUSSION

The most important organizational and economic factors for enhancing the investment attractiveness of enterprises are financial health; determination of efficiency of investments; timely and correct assessment of the financial condition of the enterprise; rational use of working time and labour potential of the enterprise; attracting foreign experience in assessing and enhancing investment attractiveness; the use of corporate governance mechanisms [36]. The last major objective of the system is the selection and evaluation of alternative investment projects, which should not only be financially successful, but also increase the overall investment attractiveness of the company. Therefore, this task takes into account the results of all previous ones, as well as information about the environment. After a thorough examination of the main tasks of the system, it becomes clear that its integrative nature, which allows to successfully combine the results of work of different departments and provide their own recommendations to management [41]. The positive dynamics of the indicators of investment attractiveness of the enterprise testifies to the high efficiency of the built system and actions of managers in the direction of increasing the potential of investment activity.

In Fig. 6 shows the system of providing investment activity of the enterprise, developed in accordance with the above tasks and characteristics. Based on the quantitative and qualitative characteristics of the inputs of the system, the management of the company formulates strategic goals, which, in turn, serve as the basis for planning all the processes of the company, and ensuring investment attractiveness in particular. The security system consists of two main subsystems

- information-analytical and implementation-control [5].

Obviously, the first unit performs most of the information-gathering and processing tasks, as well as its responsibilities for establishing stable relationships with other departments and entities. Particular attention should be paid to two aspects: the interconnection of the two subsystems to ensure the investment attractiveness of the enterprise and the two-way relationship between the entity and the investee, which results in investment attractiveness [32]. These blocks provide the results that allow to increase investment attractiveness, as well as to timely determine the external and internal risks of the enterprise. Implementation of the measures provided by the block of implementation of investment programs and projects allows to create additional competitive advantages, as well as to ensure the efficiency of economic activity and individual business processes.



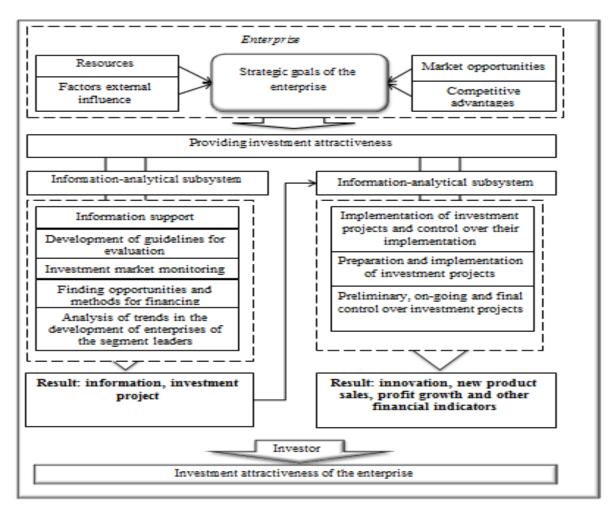


Fig. 8. Model system of providing investment attractiveness of innovative projects of the company

Today, there are a number of reasons in Ukraine that cause investors to be reluctant to invest in domestic enterprises: from the shortcomings of national legislation and the lack of effective mechanisms for its implementation to the corruption of government structures and the low efficiency of enterprise activities [6]. Overcoming investment unattractiveness requires a clear and coordinated effort, which should be part of identifying specific investment policy priorities.

VI. CONCLUSION

The main scientific and practical results of the study made it possible to draw the following conclusions at the first based on the conducted research, it is proposed to take into account a wide range of indicators (indicators) that allow to make probable conclusions or recommendations for investing in a specific innovative project of the company. According to this method, the investment attractiveness of innovative projects of the company acts as a complex indicator and takes into account the components - financial condition, market environment of the company. The algorithm of estimation of size and level of investment attractiveness of innovative projects of the company is developed. The basis of the algorithm is the allocation of components of the enterprise potential - material (fixed and working capital), financial and intellectual (human, organizational, relations). It should be noted that the algorithm is based on different level of efficiency of utilization of types of potential by enterprises in a certain branch (by type of activity). Under the same conditions of operation and potential consumption, according to the proposed model, the shares would be equal for all components, and additional analysis for redistribution would be required. Based on the results, modelling and forecasting of groups of indicators for enterprises were carried out. To predict the results, a multivariate, multivariate model was constructed based on regression analysis. The essence of this model is to combine the traditional method of correlation analysis with the method of least squares. To predict the results, a multivariate, multivariate model was constructed based on regression analysis. The essence of this model is to combine the traditional method of correlation analysis with the method of least squares.

REFERENCE

- Andreoni, A. (2016). "Varieties of industrial policy: models, packages and transformation cycles". In Noman, A., and J. Stiglitz (eds.), Efficiency, Finance and Varieties of Industrial Policy: Guiding Resources, Learning and Technology for Sustained Growth. New York: Columbia University Press: 245–304
- Andriushchenko K., Ishchenko M., Sahaidak M., Tepliuk M., Domina O. (2019), "Prerequisites for the creation of financial and credit infrastructure of support for agricultural enterprises in Ukraine", Banks and Bank Systems, vol. 14(2), pp. 63-75, ISSN 1816-7403, DOI 10.21511/bbs.14(2).2019.06
- Andriushchenko K., Datsii O., Aleinikova O., Abdulla Alebri TMohamed, Ali Alhemeiri Mohammed. Improvement of the water resources management system at the territorial level // Problems and Perspectives in Management. Vol. 17. 2019. Pp. 421-437.





- Andriushchenko, K., Lavruk, V., Uliganets, S., Kovtun, V., Matviienko H. (2019). Reputation risk management companies based on competence approach. TEM Journal, 8(2), 516-524. ISSN 2217-8309 https://doi.org/10.18421/TEM82-27
- Andriushchenko, K., Rudyk, V., Riabchenko, O., Kachynska, M., Marynenko, N., Shergina, L., Kovtun, V., Tepliuk, M., Zhemba, A., Kuchai, O. (2019). Processes of managing information infrastructure of a digital enterprise in the framework of the «Industry 4.0» concept. Eastern-European Journal of Enterprise Technologies, 1/3(97), 60-72. https://doi.org/10.15587/1729-4061.2019.157765
- Andriushchenko, K., Stefanyshyn, D., Sahaidak, M., Tepliuk, M., Buchynska, O., Rozmetova, E., Marusei, T., Levchenko Ia., Smyrnova I., Zhytomyrska, T. (2018) Process of resources provision management of the enterprise's activity with consideration of gender factor. Eastern-European Journal of Enterprise Technologies. 6(3), (96), 6-19. DOI: https://doi.org/10.15587/1729-4061.2018.150799
- Andriushchenko K., Tepliuk M., Boniar S., Ushenko N., Liezina A. Influence of cost drivers on value-oriented management of investment activity of companies. Investment Management and Financial Innovations.Vol. 16. 2019. Pp. 353-364. http://doi.org/10.21511/imfi.16(3).2019.31
- 8. Barberis, N., Greenwood, R., Jin, L., Shleifer, A. (2015), "X-CAPM: An Extrapolative Capital Asset Pricing Model", Journal of Financial Economics, Vol. 115, Issue 1, pp 1-24.
- Beugelsdijk, S., Hennart J. F., Slangen A., Smeets R. (2010), "Why and how FDI stocks are a biased measure of MNE affiliate activity". Journal of International Business Studies, 41(9): 1444–1459.
- Blanchard, O., Acalin J. (2016), "What does measured FDI actually measure?" Policy Brief 16-17, Peterson Institute for International Economics, Washington, DC.
- 11. Blank, I.A. (2007), Cash flow management. Kiev: Nika-Centre.
- Bogdan, T. (2016), "Determinants of Capital Flows to Emerging Market Economy: A Case of Ukraine", Transformations in Business & Economics, Vol. 15, No 1 (37), pp. 127-146.
- Bonnitcha, J., L. N. Skovgaard Poulsen, and M. Waibel (2017), The Political Economy of the Investment Treaty Regime. New York: Oxford University Press .
- Buzdugan, S. R., and H. Tüselmann. (2018). "Making the most of FDI for development: 'new' industrial policy and FDI deepening for industrial upgrading". Transnational Corporations, 25(1): 1–22.
- Charlotin, D. (2017), "The place of investment awards and WTO decisions in international law: a citation analysis". Journal of International Economic Law, 20(2, 1 June): 279–299.
- Damodaran, A. (2008), "What is the risk free rate? A Search for the Basic Building Block", New York University - Stern School of Business, retrieved from: http://pages.stern.nyu.edu/~adamodar/New_Home_Page/papers.html (accessed 04 January 2017).
- Damodaran, A. (2015), "Country Risk: Determinants, Measures and Implications - The 2015 Edition", New York University - Stern School of Business, retrieved from: http://pages.stern.nyu. edu/~adamodar/New_Home_Page/papers.html (accessed 04 January 2017).
- Fama, E. F., French, K. R. (1992), "The cross-section of expected stock returns", Journal of Finance, Vol. 47, No. 2, pp. 427-465.
- Filipovic, D., Kremslehner, R., Muermann, A. (2015), "Optimal Investment and Premium Policies Under Risk Shifting and Solvency Regulation", The Journal of Risk and Insurance, Vol. 82, No. 2, pp. 261–288.
- Galeitzke, M., Steinhofel, E., Orth, R., Kohl, H. (2017), "Intellectual Capital-Driven Technology and Innovation Management", International journal of innovation and technology management", Vol. 14. Issue 5.
- Gilmore, E., Andersson U. Memar N. (2018), "How subsidiaries influence innovation in the MNE value chain". Transnational Corporations, 25(1): 73–100.
- Hall B. H., Lerner, J. (2009), The Financing of R&D and Innovation.
 NBER Working Papers # 15325. National Bureau of Economic Research, Inc., – 55 p
- Harrison, A., Rodríguez-Clare A. (2009), "Trade, foreign investment, and industrial policy for developing countries." Working Paper w15261, National Bureau of Economic Research, Cambridge, MA, USA.
- 24. Harrison, A., Rodriguez-Clare A. (2010), "From hard to soft industrial policies in developing countries." Vox CEPR Portal. https://voxeu.org/article/hard-soft-industrial-policies-developing-coun tries.

- 25. Leino, T., Ali-Yrkko J. (2014), "How well does foreign direct investment measure real investment by foreignowned companies?: Firm-level analysis". Research Discussion Paper No. 12/2014, Bank of Finland Helsinki
- Maher, M. W., Stickney, C. P., Weil, R.L. (2012), Managerial Accounting: An Introduction to Concepts, Methods and Uses (11th ed), Hampshire, UK: South-Western Cengage Learning.
- Maji, S. G., Goswami, M. (2016), "Intellectual capital and firm performance in emerging economies: the case of India", Review of International Business and Strategy, Vol. 26, No. 3, pp. 410-430.
- 28. Mentel, G., Brożyna, J. (2015), "Compatibility of market risk measures", Journal of International Studies, Vol. 8, No. 2, pp. 52-62.
- Momeilovic, M., Vlaovic Begovic, S., Zivkov. D. (2015), "Cost of equity: the case of Serbian food industry", Custos e agronegocio online, Jan-Mar, 2015, Vol. 11, No. 1, pp. 184-197.
- 30. Order of the Agency for the Prevention of Bankruptcy of Enterprises and Organizations (1998). Metodika integralnoi ocinki investicijnoi privablivosti pidpryiemstv ta organizacij [Methodology of Integral Assessment of Investment Attractiveness of Enterprises and Organizations] (electronic source), Available at: http://zakon4.rada.gov.ua/laws/show/z0214-98 (accessed 21 December 2017).
- Palei, T., Nagimova, A., Zainullina, M., Afonin, P. (2016), "Estimation of investment requirements in providing potential of reliability of energy provider", in Social Sciences and Interdisciplinary Behavior - Proceedings of the 4th International Congress on Interdisciplinary Behavior and Social Science, ICIBSOS 2015. pp. 27-30.
- Popov, E. V., Vlasov, M. V., Hanusch, H. (2017), "Traditional Economy Influences on Intellectual Capital Development", Montenegrin Journal of Economics, Vol. 13, No. 1, pp. 87-95.
- Popovic Z., Paunovic M. (2015), The Dependence of the Cost of Capital on Degree of Diversification. Montenegrin Journal of Economics. Vol. 14. No. 1 (2018), 53-67
- Rodrik, D. (2014). "Green industrial policy". Oxford Review of Economic Policy, 30(3): 469–491.
- Salazar-Xirinachs, J. M., Nübler I., Kozul-Wright R. (2014), Transforming Economies: Making industrial Policy Work for Growth, Jobs and Development. Geneva: ILO.
- Sauvant, K. (2017), "Beware of FDI statistics!" Columbia FDI Perspectives No. 215, Columbia Center on Sustainable Investment, Columbia University, New York
- 37. Tsai, C. F., Lu, Y. H., Yen, D. C. (2012), "Determinants of intangible assets value: The data mining approach", Knowledge-Based Systems, Vol. 31, pp. 67-77.
- 38. UNCTAD (2015), Investment Policy Framework for Sustainable Development. New York and Geneva: United Nations.
- UNCTAD (2017a), Investment Facilitation: A Review of Policy Practices. UNCTAD. Available at http://investmentpolicyhub.unctad.org/Publications/Details/1184.
- UNCTAD (2017b). "Promoting foreign investment in the Sustainable Development Goals". Note by the UNCTAD Secretariat. Investment, Enterprise and Development Commission, UNCTAD, United Nations, Geneva
- Van Harten, G., Scott D.N. (2016), "Investment treaties and the internal vetting of regulatory proposals: A case study from Canada". Journal of International Dispute Settlement, 7(1): 92–116.
- Zhan, J. X. (2011). "Making industrial policy work." Project Syndicate, March 11.
- 43. Zhan, J. X., Karl J. (2016). "Investment Incentives for Sustainable Development". In Tavares-Lehmann, A. T., P. Toledano, L. Johnson and L. Sachs (eds.), Rethinking Investment Incentives. New York: Columbia University Press.

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