“Strategic change in investment policy rationale of enterprises modernization as a key condition for getting over economic crisis”

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ARTICLE INFO	Oleg Pravikov, Victor Stetsyuk and Vladimir Denisov (2018). Strategic change in investment policy rationale of enterprises modernization as a key condition for getting over economic crisis. *Investment Management and Financial Innovations*, *15*(3), 212-222. doi: 10.21511/imfi.15(3).2018.18
DOI	http://dx.doi.org/10.21511/imfi.15(3).2018.18
RELEASED ON	Thursday, 06 September 2018
RECEIVED ON	Tuesday, 30 January 2018
ACCEPTED ON	Wednesday, 29 August 2018

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JOURNAL	"Investment Management and Financial Innovations"
ISSN PRINT	1810-4967
ISSN ONLINE	1812-9358
PUBLISHER	LLC “Consulting Publishing Company “Business Perspectives”
FOUNDER	LLC “Consulting Publishing Company “Business Perspectives”

NUMBER OF REFERENCES	NUMBER OF FIGURES	NUMBER OF TABLES
25	1	1

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BUSINESS PERSPECTIVES

LLC "CPC "Business Perspectives"
Hryhorii Skovoroda lane, 10, Sumy, 40022, Ukraine

www.businessperspectives.org

Received on: 30th of January, 2018
Accepted on: 29th of August, 2018

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STRATEGIC CHANGE IN INVESTMENT POLICY RATIONALE OF ENTERPRISES MODERNIZATION AS A KEY CONDITION FOR GETTING OVER ECONOMIC CRISIS

Abstract

Investigation of not only the causes and the factors that cause the development of world crises, but also the perspective and actual tools for reducing the impact of their effects, is topical at the present stage. The purpose of this study is to investigate scientific approaches to justifying the investment policy of enterprise modernization as a key condition for overcoming the economic crisis. The object of the study is the investment policy of modernization of enterprises as a key condition for overcoming the economic crisis. The study specifies the essence and economic content of investment and investment policy of the enterprise modernization, identifies main problems of reproduction of the fixed capital at Russian enterprises in modern conditions, systematizes the main approaches to the justification of the investment policy of enterprise modernization, and suggests the use of the investment policy of enterprise modernization as the main condition for the crisis recovery.

Keywords investments, modernization, investment policy, renewal of fixed assets, reproduction

JEL Classification G01, O11

INTRODUCTION

Growing recessional trends, increasing competition in national and international markets, and limited traditional growth resources are the determining factors for increasing attention to issues of sustainable development of socio-economic systems like enterprises, industries, regions, etc. According to the modern researchers' definition, developed, ever-changing material and technical resources of a manufacturing facility is the main condition for the economic growth of any social and economic system.

It was found that the level of outstripping development of enterprises in conditions of global economic crisis determine such factors as political stability in the country, the level of education and training, social responsibility, government policy in the field of innovation and investment development, type of economic activity, policy of local authorities in the field of innovation and investment development, social and production infrastructure development, consideration of production needs of enterprises by research and development institutions, elaboration of development strategies, financial condition of enterprises, level of organizational culture, innovation activity of enterprises and type of innovation (Polinkevych, 2016).

The current status of Russia in the world economy coupled with economic sanctions proved out the necessity to determine the priorities

in the country's socio-economic development in the sphere of domestic production. The development of the crisis-driven orientation of the industrial enterprises to short-term programs does not ensure their economic growth, since such development supports only their survival and the localization of losses during the crisis (Bezrukov, 2008).

In the authors' opinion, the implementation of anti-crisis measures does not at all deny the need to develop a promising investment policy of industrial enterprises, moreover, it certainly assumes such a thing. At the same time, the global economic crisis significantly complicates the process of formation and implementation of the perspective investment policy of economic growth for Russian industrial enterprises that heavily lost their production capabilities and therefore became less globally competitive.

The modern market upgrading of the national economy changes and complicates the basic business environment for economic entities; it also brings up to date the requirement to work out and implement competitive strategies that should be associated with the investment activity, development of economic climate and investment support schemes for sustainable positioning in commodity, capitals, labor and services markets.

1. THEORETICAL BASIS

At present, the main direction of the implementation of the national structural and investment policy is the modernization of equipment or the renewal of fixed production assets through brand-new technique. The reduction in the effective demand of the population and industries affects primarily the pace of investment activity causing its sharp decline, which results in a reduction in the new fixed assets formation, an increase in the retirement of these assets, a slowdown in the renewal of fixed assets, and an increase in the level of depreciation of fixed assets.

In the short-term and strategic outlook, the formation of structural investment policy will heavily depend on high wear of production fixed assets and the necessity to update them. At present, high interest rates for long-term credits and low level of budgetary financing are the key factors determining the non-competitiveness of investments in the technical re-equipment of enterprises.

Products competitiveness and, consequently, the survival of industrial enterprises is largely determined by the quality of their fixed assets. At the same time, not only the physical wear and tear of equipment should be considered, but also its obsolescence, since products manufactured on domestic equipment can rank below not only in production cost but also in technical features (Belkin, 2007).

At the same time, the slowdown in the pace of production fixed assets renewal leads to the preservation of the lag in the technological structure of the national economy, which is characterized, first of all, by wasteful consumption pattern. In this regard, the continued low-quality level of the productive facilities determines the further upturn of cost inflation, further focusing on the development of the fuel and natural resources sector of the national economy, and the downward spiraling of the national manufacturing industry. In this aspect, analysis and forecasting of renewal of production fixed assets in conjunction with available investment resources, that is, the formation of an investment policy at the level of both the state and an individual enterprise, are of practical importance.

The economic systems successful functioning has been determined and is determined mainly by the level of investment policy pursued in various sectors and types of economic activity. Within the system approach, the investment policy is a link that makes the elements of the system operate in well-orchestrated and timely manner, harmonize the objectives of the elements and the system as a whole, and thereby improve the efficiency of the entire system. Thus, those enterprises and industries that do not have a reasoned justification for investment policy are subject to negative influence in a crisis (Todoryak, 2010).

For now, the formation of the investment policy of modernization of enterprises is not sufficiently developed in Russian practice.

The combination of the interests of an investor and management body that represent the socio-economic system is one of the most important elements in the investment policy. Redistribution of the priority from the investor to the management body allows taking a fresh look at the investment process, identifying new structural relationships, and fundamentally re-establishing the goals and tasks of the process management (Wang, Tian, & Liu, 2009).

Being the material basis of economic growth, investments play a fundamental role in the effective economic performance. So in their work KotowiczJawor and Zukrowska (1997) consider enterprise investment as a measure of adjustment to macrostabilization policy. At the present stage, a business capable of making a profit in the Russian Federation, whether it is industry, construction, transport, communications, or trade, is characterized by a certain level of competitiveness, which cannot be increased without inflow of own and attracted funds in order to upgrade inefficient obsolete equipment and renew range of products.

We can define four basic management decisions at the industrial enterprise: increase in output of manufactured products, production of new products, modernization of production business processes, modernization of technologies that support business processes. Each of these decisions should be economically justified (Karamyshev, 2017).

Growth of absolute and relative indexes of the obsolescence and physical wear of the productive capacity in many branches of the national economy, sharpen an issue of implementing the strategy of stabilizing of the real sector of regional economic complexes through effective investment (Ketova, 2003).

In the current market conditions, positive changes, predetermined primarily by transformational changes, are dynamically occurring within the process of formation and use of fixed capital. Given the diversity of ownership, commercial and industrial restructuring of production is under development and, as a consequence, there is a reorientation of fixed capital to the production of competitive goods and activation of the technical upgrade of enterprises in the industries, whose products are in demand in the market, as well as an increase in the pace of development of the basic engineering infrastructure and the smoothing of structural and technological imbalances in regions. The outlined tendencies confirm the stimulating influence of the market on the fixed capital formation and use. Solving such problems as technological modernization of the region's locomotive sectors, implementation of infrastructure projects, attracting capital forming investment, and a significant reduction in depreciation of fixed capital, is necessary to strengthen this process.

According to Ketova (2003), the last identified problem is important under overcoming resource and technological constraints. Among the factors, which impose these restrictions on production, are outdated equipment and technologies, the cost of creating efficient technological chains, the re-profiling of a number of industries within the import substitution process, and the stagnation of manufacturing enterprises.

In the authors' opinion, this confirms the need to implement in Russia a strategic liberal investment policy that ensures the modernization of fixed capital primarily through the efforts of economic entities. While implementing this task, it is necessary to redistribute, first of all, the population savings to investments.

In turn, a large share of the cost of improving the quality of fixed capital is due to inflationary appreciation. However, in current national economic environment, inflationary processes affect almost all components of fixed capital.

In the activities of economic entities of the Russian Federation, "the strengthening of entrepreneurial principles determines the desire to replace the worn-out part of productive capital for facilities, equipment, computer networks, infrastructure facilities with qualitatively new technical, technological and information capabilities, which increases the innovative parameters of fixed assets introduced into operation" (Ketova, 2003).

The use of the program-oriented and goal-oriented approach in adjusting of the renewal process of fixed capital, in our opinion, is the most effective and rational thing for enhancement of such preparedness.

The application of this method is determined by the multi-choice decisions, when selecting technological and structural changes, and multi-purpose orientation. As a result, the program-oriented and goal-oriented approach should be used to implement an integrated solution of problems of modernization of production capabilities.

The economic engine for managerial decision-making, which is based on economic relations built on a system of mutual interests of government agencies and economic entities, ensures the effectiveness of the regulating system and implementation of the market strategy (Laketa, Anicic, & Laketa, 2016).

The policy of modernization of production capabilities is an important element for developing the fixed capital acceptable for a middle-aged market economy, its effective structure ensuring the necessary level of competitiveness of production in the regions of the Russian Federation. In addition, it is necessary to consider the resource efficient productive factor, which positively affects the price of the output because of renewal of the fixed capital. When working out a development program based on the multiplier effect, the state of not only the technological aggregate of the region, but also the economically interrelated technological assemblies, the competitiveness of the products they produce, the quality of the resources, their mutual location, etc., should be assessed (Ketova, 2003).

Since the reform of the Russian economy is accompanied by a deep systemic crisis, especially acute in the sphere of investments, the task of stimulating the accumulation of national capital to ensure the sustainable development of all sectors of the national economy is in the foreground.

Financial and economic crises have a negative impact on the potential of industrial enterprises: investments in innovation is reduced, fixed capital is wearing down, skilled and young workers are leaving, etc.

It is determined that fixed capital investments have the propensity to concentrate but react strongly to economic crises. Labor resources, by contrast, are distributed relatively evenly, and their concentration in certain regions is increasing steadily (Rastvortseva & Ternovskii, 2016).

Research and development (R&D) investments are risky, and the returns are uncertain and long-term. During recessions, not only firms facing financial constraints are likely to reduce their investment in R&D (Schumpeter, 1939; Freeman et al., 1982; Heshmati & Kim, 2011). R&D investments might also be cut in response to a decreased demand in recession periods (Stiglitz, 1993; Aghion & Saint-Paul, 1998). Furthermore, it has been shown that the responsiveness of companies to policy initiatives is weaker in times of economic uncertainty (Bloom et al., 2007; Bloom, 2008). Uncertainty raises the real option value of investments, which makes firms more cautious concerning their R&D investment decisions during recessions (Hud & Hussinger, 2015).

During the crises, the main threat to the enterprise is the decrease in potential, which is the main factor in the life activity of the enterprise. At the same time, economic environment does not allow to ensure the facilities capability for reproduction. The enterprise can acquire necessary resources only from its activities and at the expense of borrowed funds. As a rule, in the crisis conditions, the identified sources of investment for the enterprise are not available.

The 2008 financial crisis has transformed the financial environment for small and medium-sized enterprises, resulting in significant declines in the availability of bank lending and venture capital. This has prompted government intervention to improve the availability of debt and equity capital (Mason & Harrison, 2015).

In modern realities, many Russian industrial enterprises working in a constantly changing economic environment are experiencing a decline in production. It is possible to name a rather large number of causes of depressive development, but among the main ones are the inertia of the existing production structure, technological backwardness and physical depreciation of fixed assets, and the lack of priorities of the national scientific and industrial policy, the definition of which would permit necessary restructuring of capacities.

At present, a clear tendency of industrial enterprises of the Russian Federation to lose the ability to produce high-end products with a high degree of added value is observed, and it should be noted that not only new, but also produced earlier in the conditions of stable economic development. Consequently, we can conclude that there is a threat of technical re-equipment of the productive facilities in a number of national key industries including energy, transport, metallurgy, chemistry, mining, etc.

The key reasons for the current state of many industrial enterprises are:

1) low competitiveness of national products, and, as a consequence, lack of demand for them in the national and international markets;

2) acute shortage of investments, reinforced by the financial crisis, inflation, stagnation of the monetary system, costs of the current taxation system for commodity producers;

3) low efficiency of institutional transformations, which entailed the fragmentation of manufacturing complexes, and, as a result, the growth of transaction costs by at least 20 percent and the corresponding rise in price of products.

Authors define the investment strategy of an enterprise as a system of "long-term goals of investment activity determined by the general objectives of its development and investment ideology, as well as the choice of the most effective ways to achieve them". Investment policy in a narrow sense is determined as "a combination of different approaches and solutions used for effective investment in an enterprise" (Torobkov, 2008).

Not only the phases of the economic cycle and market conditions, but also certain stages of the life cycle of the enterprise, have a specific level of investment activity, the main directions and forms of investment activity, and the specifics of the formation of investment resources (Zhu, Liu, Zhang, & Li, 2012). In our opinion, it is the investment policy that makes it possible to build the investment activity of the enterprise in accordance with changes in its economic development.

The investment strategy should be adapted to the possible fluctuations of the factors of the internal investment environment, otherwise investment decisions of the structural divisions of the enterprise may contradict each other, and this will contribute to a decrease in the effectiveness of the investment activity of the enterprise as a whole.

Authors should note that the change in the factors of the company's internal environment is largely depend on cardinal changes in the objectives of operational activities or changes in the stage of the life cycle. Thus, new commercial opportunities change the objectives of the operating activities of the enterprise. In this situation, the developed investment policy ensures the projected increase in the investment activity of the enterprise and diversification of the company's investment activities.

The strategic management of the value of fixed capital as a process of purposeful maintenance and reproduction of fixed assets at a level that provides:

1) planned change in the value of fixed capital for planned periods;

2) compliance with the requirements for a separate object and a set of technologically related fixed assets to reduce critical risks leading to a non-fulfillment of the production plan and, as a result, losses that are above the direct losses in the range of situations from the decline in product quality to accidents;

3) compliance with the standard and planned indicators of physical, functional and economic wear and tear;

4) timely and reliable estimate of the value of each object or complex of objects for solving strategic and operational tasks of managing a joint-stock company in fixed or crisis situations based on the interests of owners.

The chosen investment strategy itself determines the set of ways and methods of investor's behavior in the capital market.

Developed countries have accumulated experience of the state's positive influence and stimulation of investment processes as a system of special depreciation charges, preferential investment lending and reduced taxation of the investment profit, granting budget subsidies, allocating foreign loan funds, and reducing customs duties when importing raw materials and equipment from abroad and exports of finished products (Latkin, 2004; Tang, 2012).

Therefore, the authors, and the following experience of China, review the development of the course of the management policies covering the private enterprises that come into an initial establishment from non-existence. It analyses the status quo of the management policies, the existing problems and the inner requirements of the private enterprises. From the point of view of lawmaking and governmental services, it puts forward some suggestions that the management of private enterprises should be adjusted (Cai, 2004; Cai, 2016).

Despite some positive changes taking place in the industry in recent years, it needs significant structural changes.

2. RESULTS AND DISCUSSION

Thus, the rationale for the investment policy of enterprise modernization primarily depends on the competitive strategy and is based on the implementation of certain stages of its development. When the context and structure of the enterprise investment policy with its subsequent application is thoroughly studied, the investment policy acquires the quality of a powerful and effective mechanism for overcoming the current crisis trends, as well as contributes to a qualitative restructuring of approaches to the enterprise management, which results in production growth, and, as a consequence, the structural reorganization of the economy is adequate to modern conditions. In this study, the authors systematized methodological approaches to the formation of investment policy, specified the essence and economic content of the "investment policy modernization" concept, identified the key problems of the renewal of fixed assets, as well as the basic prerequisites for the modernization of enterprises at the present-day stage of development, proposed to use the investment policy of modernization at enterprises as a key element in overcoming the economic crisis in modern conditions.

Authors believe that the introduction of a scientifically based management system for investment activity is, to some extent, an innovation of the managerial process in the economy.

As part of the company's development strategy, investment management is carried out under the influence of additional conditions:

1) the integrated nature of the investment decision;

2) high dynamism of management;

3) variability of approaches to determining the need for investment resources.

Determination of the general need for investment resources of enterprises is one of the stages of implementing the investment plan of the enterprise.

It includes costs in various areas: in production assets, in production infrastructure facilities, in research and development, as well as costs of social and non-productive nature. At the same time, investment needs are not a simple sum of planned investment costs. Their volume is influenced both by general economic, financial, social and political indicators of the development of the region and the country, and by special indicators of market development.

Thus, the authors formulated methodological recommendations for determining the need for investment resources for modernization.

The management processes of the enterprise as a whole, and of each component of its activities, are cyclical, closed-ended. In this regard, the management of the formation and direction of investment flows should be accompanied by regular monitoring of the implementation of previously adopted investment decisions.

The purpose of this monitoring is to determine the compliance of the investment solutions to achieve strategic development indicators of the enterprise. In case the deviations from the planned param-

eters are determined, the enterprise management, on the basis of monitoring data, will be able to make adequate decisions on changing the parameters of investment activity.

The creation of a monitoring system for investment activities aimed at modernizing the enterprises of the country's economy provides for the passage of several stages.

Stage 1. Selection of indicators and indicators characterizing the change in the situation in the area of the company, to which modernization activities and investments are directed.

The set of indicators and criteria should fully correspond to the strategy of the enterprise, assigned to each division goals and objectives. The indicators should include a single indicator, which aggregates reflects the achievement of the enterprise's goal in the period under review.

Stage 2. Determination of the organizational structure and regulations for the collection and processing of information.

The development of regulations for monitoring investment activity can be based on the scheme of regulation of investment activity in the company (Figure 1).

Stage 3. Conducting on a previously established regular basis the collection and processing of information.

At this stage, analytical and estimated calculations are carried out, comparisons are made with target

Source: Developed by the authors.

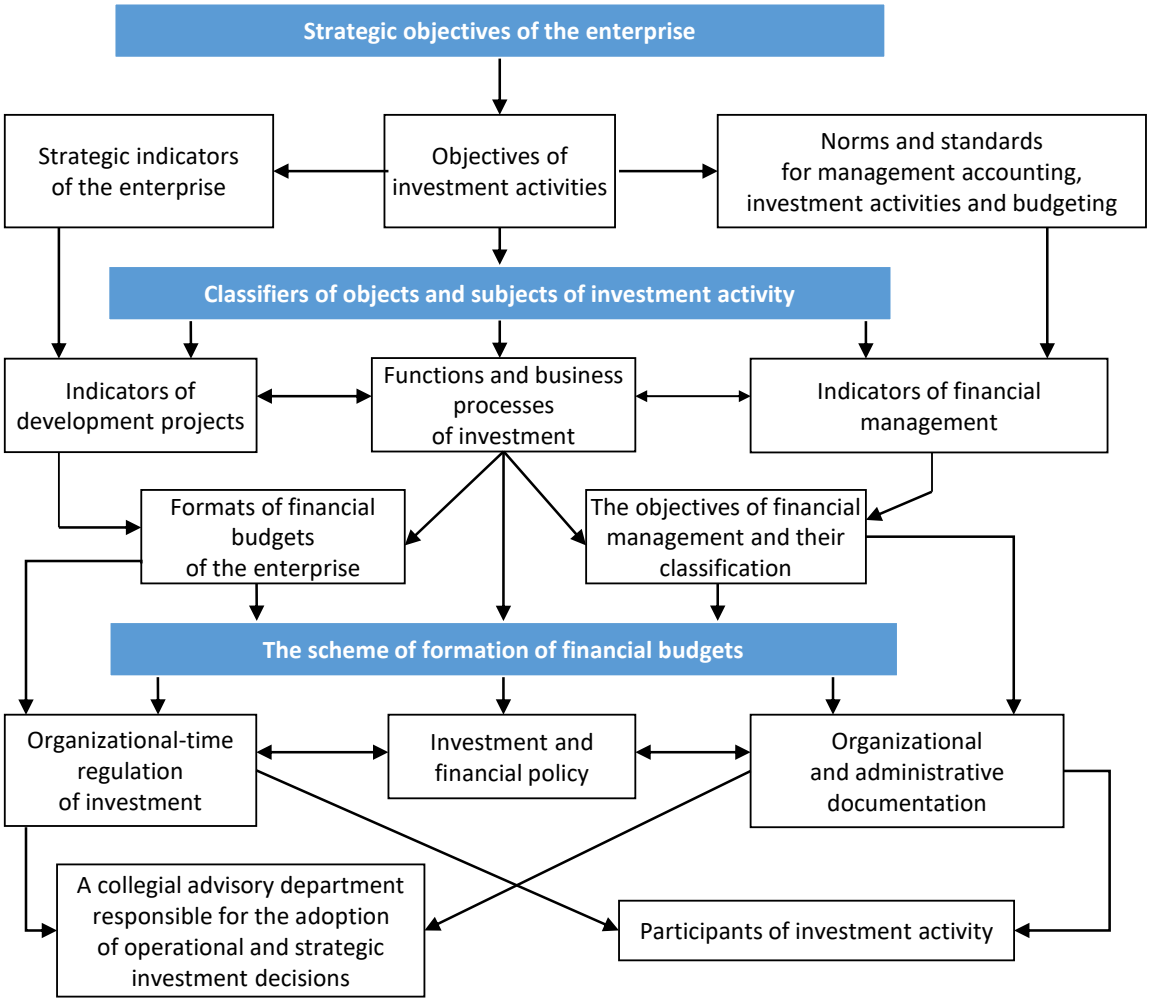

Figure 1. Regulation of the investment activity of the enterprise

indicators and strategic criteria, comparisons with industry indicators and other analytical activities.

Stage 4. Preparation and submission of accounting information. Drawing conclusions and making management decisions to optimize investment and modernization activities.

Monitoring of investment activities aimed at modernization, as mentioned above, should be of an operational nature and meet the conditions for the dynamism of investment management. However, modernization from the point of view of the production process can give noticeable results with the passage of a certain time, typical for the production or financial cycle, as well as the life cycle of the goods, the time of technology introduction.

In order to build a monitoring system that meets the objectives of investment activities for the modernization of the enterprise, we believe that the following set of methodological recommendations is appropriate.

In addition, when building a monitoring system, it is necessary to consider that the indicators of the results of the modernization of the enterprise and the efficiency of investment activity are related to different areas of competence. In this regard, monitoring will be borderline (or matrix).

Within the framework of the target setting of the enterprises' activities to increase the competitiveness of the products, four directions of modernization are proposed.

1. Modernization of the production system. As the main indicators in this case, the following can be proposed: the volume of incoming raw materials; volume of output; share of sales of products in accordance with contracts of sale and purchase; number of pieces of equipment; equipment maintenance costs; capital productivity and others, depending on the specifics of production processes.

2. Modernization of marketing activities. In this section of monitoring, it is proposed to include indicators: the cost of production, taking into account the price index for raw materials, materials, fuel and energy; value of contract prices of products in the currency of contracts; number of distribution channels; number of links in the chain of distribution of products; sales volume in a separate sales market; availability of channels for dissemination of information about products; costs for stimulating sales of products, various types of advertising, PR activities, special promotions; costs for the development and promotion of corporate identity, trademarks, etc.

3. Introduction of technologies. The main indicators here can be selected: the shelf life of products; duration of the production cycle; labor productivity person/unit products; expansion of product range.

4. Modernization of the personnel and organizational structure, which can be estimated using the coefficient of effectiveness evaluation of the organizational structure; number of employees; capitalization.

Table 1 shows the matrix of balanced indicators of monitoring the effectiveness of investment activities for the modernization of enterprises.

For each of the indicators, in addition to regular monitoring and comparison of its values over time, it is necessary to conduct a ranking procedure, that is, to establish its specific gravity. The specific weight of the indicator of the modernization event is set depending on the degree and depth of influence of this measure on the achievement of the company's strategic goals. Specific weights can be established using a variety of methods, depending on the financial capabilities of the enterprise, the life of the enterprise, the availability and development of a system for collecting and processing information on the activities of the enterprise.

As a result, the authors formulated methodological recommendations for determining the need for investment resources for modernization. The main directions of the monitoring of investment activities aimed at modernization are proposed. Finally, the authors proposed a matrix of balanced indicators for monitoring the effectiveness of investment activities for the modernization of enterprises.

Table 1. The matrix of balanced indicators of the effectiveness of investment activities for the modernization of enterprises

Source: Developed by the authors.

Indicators of modernization				Indicators of investment efficiency			
Nomination	Values	Change for the period	Specific weight	Specific weight	Change for the period	Values	Nomination
1.1.	1.2.	1.3.	1.4.	2.4.	2.3.	2.2.	2.1.
Modernization of the productions sphere							
The volume of incoming raw materials (for each type of product)							Coefficients of an estimation of profitability of investment activity
The volume of output (for each type of product, depending on the type of installed production lines)							
The share of sales of products in accordance with the contracts of purchase and sale (for each type of product)							
Number of pieces of equipment							
Equipment maintenance costs							
Modernization of the marketing system							
Market share of the company							Coefficients of turnover of operating assets Coefficients of an estimation turnover of the invested capital
The pace of the company's market share outperformance in the market							
The cost of products, taking into account the price index for raw materials, materials, fuel and energy (other components of costs), rubles							
Contract (holiday) price of products, in the currency of contracts							
Number of product distribution channels							
Number of links in the chain of distribution of products							
Sales volume in a separate sales market							
Availability (number) of channels for disseminating information about products							
Expenses for stimulating sales of products, various types of advertising, PR activities, special promotions							
Expenses for development (rebranding) and promotion of corporate identity, trademarks, etc.							
Technology implementation							
The shelf life of products (for each type of product), days							Coefficient of profitability of used assets (analysis by DuPont model)
Duration of the production cycle, days							
Productivity of labor, person/unit of products							
Expansion of product range							
Modernization of the personnel management system, modernization of the organizational structure							
Volume of output issued per shift (per day)							Equal assets
The share of defects in the total output per shift							Coefficient of organizational effectiveness evaluation
The number of employees (or the cost of paying salaries and social contributions)							

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