

Improving Management Based On The Forecast Of Investment Utilization In Industrial Enterprises

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Abstract: *The article analyzes the use of investment in industrial production of the Republic of Uzbekistan and the theoretical principles of a systematic approach to its management. As a method of analysis, a model expressing the effect of factors on the volume of industrial output using econometric analysis was identified. Using this model and a system of time-dependent regression equations of each factor, a forecast of changes in the gross output of industrial enterprises by 2030 was identified and an algorithm for improving the strategic investment management system and an improved investment management strategy and investment management mechanism were developed. Also, proposals and recommendations for achieving the targets of industrial production of the Republic of Uzbekistan are outlined.*

Keywords: *industrial production, investment, systemic approach, sustainable economic development, econometric analysis, forecast*

1. INTRODUCTION

In the current context of globalization, it is important to ensure the competitiveness of industrial enterprises. In this regard, the sustainable development of the industrial enterprise depends on the correct actions of management, an optimally structured mechanism for making management decisions based on economic and mathematical modeling methods. In general, the sustainable development of enterprises in modern conditions is determined by the availability of sustainable investments. Analysis of the practice of enterprises shows that there is a close relationship between the value of investment and the development of development strategies, the renewal of production assets and the quality of increasing the resource base of enterprises. Optimal investment policy, management of strategically well-managed investment projects in the context of overcoming the crisis will allow to achieve sustainable development of enterprises.

The analysis of business practice shows that it should be targeted and incorporated into the management model of the industrial company to minimize the amount of dividends of company owners that correspond to the existing conditions of economic activity of the enterprise. The implementation of these proposals will create a significant amount of insurance reserves of the company, reduce financial risks, determine the optimal types of investments that can ensure the sustainability of the enterprise during the implementation of relevant business projects.

The most important factors in ensuring the sustainability of the enterprise are to determine the possible volume of production, staff qualifications, technical base of the enterprise, the optimal use of production funds, the main problem of business development in recent years

2. LITERATURE REVIEW

P.Masse [1] on the criteria and methods of optimal investment placement, A.Martynov [2], opportunities to increase investment efficiency, methods of comparing costs and capital investments in the economic evaluation of technical measures A.L.Lure [3] Methodological problems of evaluating the effectiveness of investment projects DS Lvov, VG Mednitsky, VV Ovsienko and others [4], analysis of the financial condition and investment attractiveness of joint stock companies in industry, construction and trade MN Kreynina [5], on the main areas of investment D.Garner, R.Owen, R.Convey [6] and the basic principles of distribution of the company's income E.Graut [7], the interdependence of the main directions of the company's investment policy I.A.Blank [8], world experience and modern development of market economy in Russia The most promising development of investment projects on the basis of public-private partnership SP Sazonov [9] investment policy - the introduction of software, through which the implementation of investment policy E.E.Sidorova and D.I.Jivolup [10] conducted research and contributed to the development of the industry.

Y.Shumpeter [11], and K.Sonin [12] on the development of industrial production, increasing investment efficiency and the role of small businesses in it, R.Oakey [13] on high-tech industries in small business and private entrepreneurship in developed countries, small business entities play an important role in the country's economy and have its own characteristics L.Polishchuk [14], the mechanisms of influence of small business on the state and the development of competition were studied by V.G.Basareva [15], which are the most effective investment in industrial production management, no detailed research on sustainable economic development strategies has been conducted.

3. RESEARCH METHODOLOGY

In the course of the research, methods of observation, sampling, statistical analysis, economic analysis, grouping, econometric analysis and systematic approach analysis were used in obtaining and analyzing statistical data.

4. ANALYSIS AND RESULTS

By implementing any measures taken and applying existing principles and mechanisms, enterprises are able to formulate effective investment policies that will yield real results and increase the value of the industrial enterprise. The development of industry will increase the efficiency of resource use through structural and institutional transformations of the economy

through the mechanism of expanding public-private partnership in the framework of increasing the economic activity of both the state and business entities and the rapid development of an effective national innovation system.

Based on the above comments, using the data of the State Statistics Committee of the Republic of Uzbekistan in 2000-2019, the econometric model of how the factors influencing the volume of industrial production (GDP) change under the influence of fixed capital investment (FDI) and employment (TBS) based on analysis and identification:

$$YQ = \frac{AKI^{0,884} * TBS^{1,5}}{e^{8,449999}} \quad (1)$$

From the (1) -model and a system of time-dependent equations of each factor, a multi-factor forecast of industrial output was determined (Table 1).

Table 1
 Forecast of industrial production volumes until 2030

Years	Total industrial output, bln. sum	Investment in fixed assets, bln. sum	Number of bands, thousand
	YQ	AKI	TBS
2019	331007,1	73690,6	1810,9
2020	356090,4	77444,2	1846,4
2021	382066,9	81197,8	1881,9
2022	408945,4	84951,4	1917,4
2023	436734,5	88705	1952,9
2024	465442,7	92458,6	1988,4
2025	495078,3	96212,2	2023,9
2026	525649,5	99965,8	2059,4
2027	557164,3	103719,4	2094,9
2028	589630,6	107473	2130,4
2029	623056,2	111226,6	2165,9
2030	657448,6	114980,2	2201,4

Source: Based on the data of the Statistics Committee of the Republic of Uzbekistan, the author prepared forecast indicators

According to the forecast of Table 1, the volume of investments in fixed assets in 2020 will reach 77444.2 billion. The volume of industrial production in the country amounted to 356090.4 billion soums due to the increase in employment in the sector to 1846.4 thousand soums. The volume of investments in fixed assets by 2030 will amount to 114980.2 billion soums. As a result of a 1.2-fold increase in the level of employment in the sector, this figure amounted to 657448.6 billion soums. soums. It is also expected that by 2030 the volume of industrial production will almost double compared to 2019.

According to the results of the analysis, today the Republic of Uzbekistan requires the development of a system of strategic investment management, a strategy for sustainable

economic development and an improved investment management mechanism to ensure the economic stability of industrial enterprises.

It is known that the capital structure includes the assets of the organization, the working capital of the enterprise and the funds allocated for the implementation of investment projects. If an enterprise's financial resources are insufficient, management will begin to reduce the number of investments in working capital, which will quickly accelerate the financial and subsequent production problems of the enterprise.

Most local business leaders are trying to solve these problems by attracting new loans and credits, which have been tested, as usual, many times. This, in turn, leads to additional costs, increases the overall value of projects, reduces efficiency, and negatively affects the sustainable development of manufacturing enterprises.

The process of sustainable economic development of the enterprise is considered as a complex, multifaceted and rigidly structured phenomenon based on the consideration and analysis of many factors in foreign and domestic theoretical research. Based on this, the following algorithm is proposed, which may include the following sequence of key steps to improve the strategic investment management system in order to ensure the sustainability of manufacturing enterprises (Figure 2).

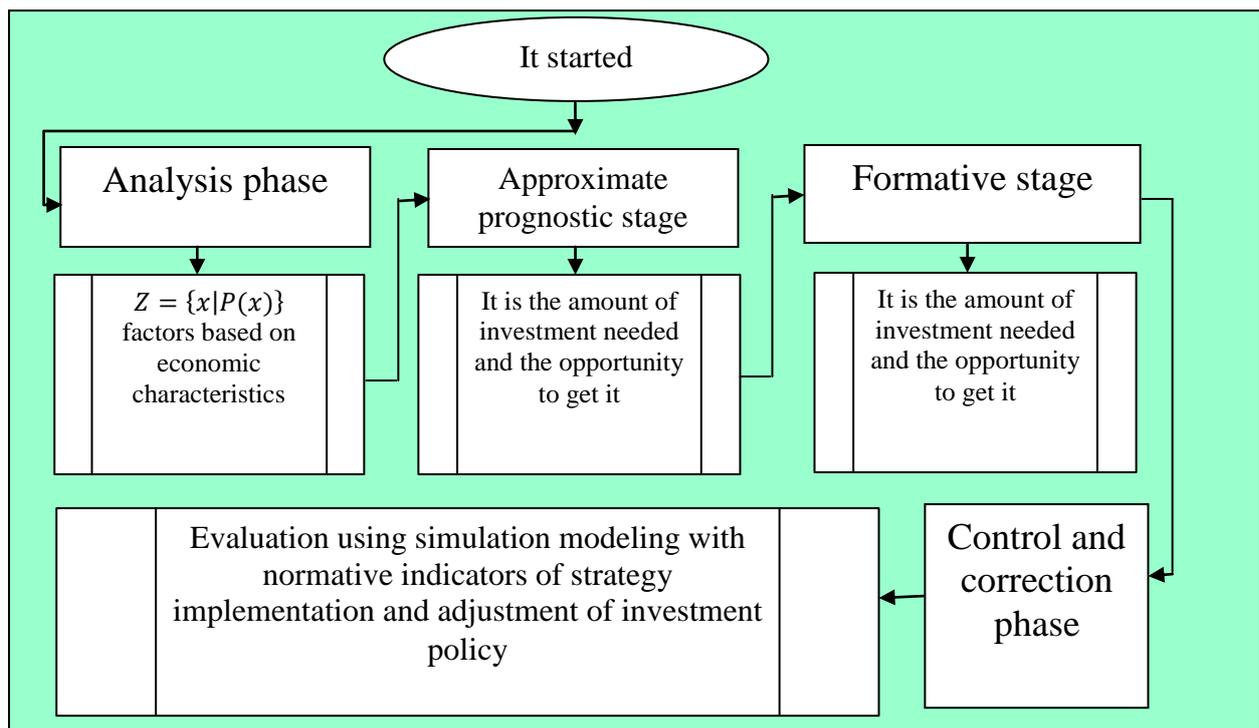


Figure 2. Algorithm for improving the strategic investment management system

Explaining the algorithm for improving the strategic management system shown in Figure 1:

1. Analysis phase. At this stage, the analysis of the external and internal environment of the enterprise should be based on limited factors, otherwise it will be difficult to get a clear result due to the complexity of data collection and processing. Clearly obtained data allows you to create a system of criteria for the successful operation of the company and show the approximate amount of investment required.

2. Approximate prognostic stage. This includes the formation of indicators of sustainable development of the industrial enterprise. The management of the enterprise should evaluate the efficiency of the main activity, analyze the structure of income and assets of the enterprise, the structure of borrowed funds, net profit, determine the reliability of assets.
3. The formative stage includes the development of strategic decisions on the directions of innovative changes, production, modernization of the technological base, which should lead to a state of sustainable development of the company.
4. Control and correction phase. At this stage, the planned results will be compared with the normative indicators of the company's strategy implementation and adjustments to the investment policy. Of course, the sequence of steps outlined above is not one-time, but continuous. These steps need to be repeated throughout the life of the enterprise, only then can long-term sustainability be ensured.

In the management of strategic investments of industrial enterprises, the above algorithm can ensure sustainable operation and development, taking into account the key factors that ensure sustainable operation using this algorithm and sustainable economic development based on a system of criteria that allows assessing and forecasting sustainable development parameters. and an interaction model for improving investment management can be developed (Figure 3).

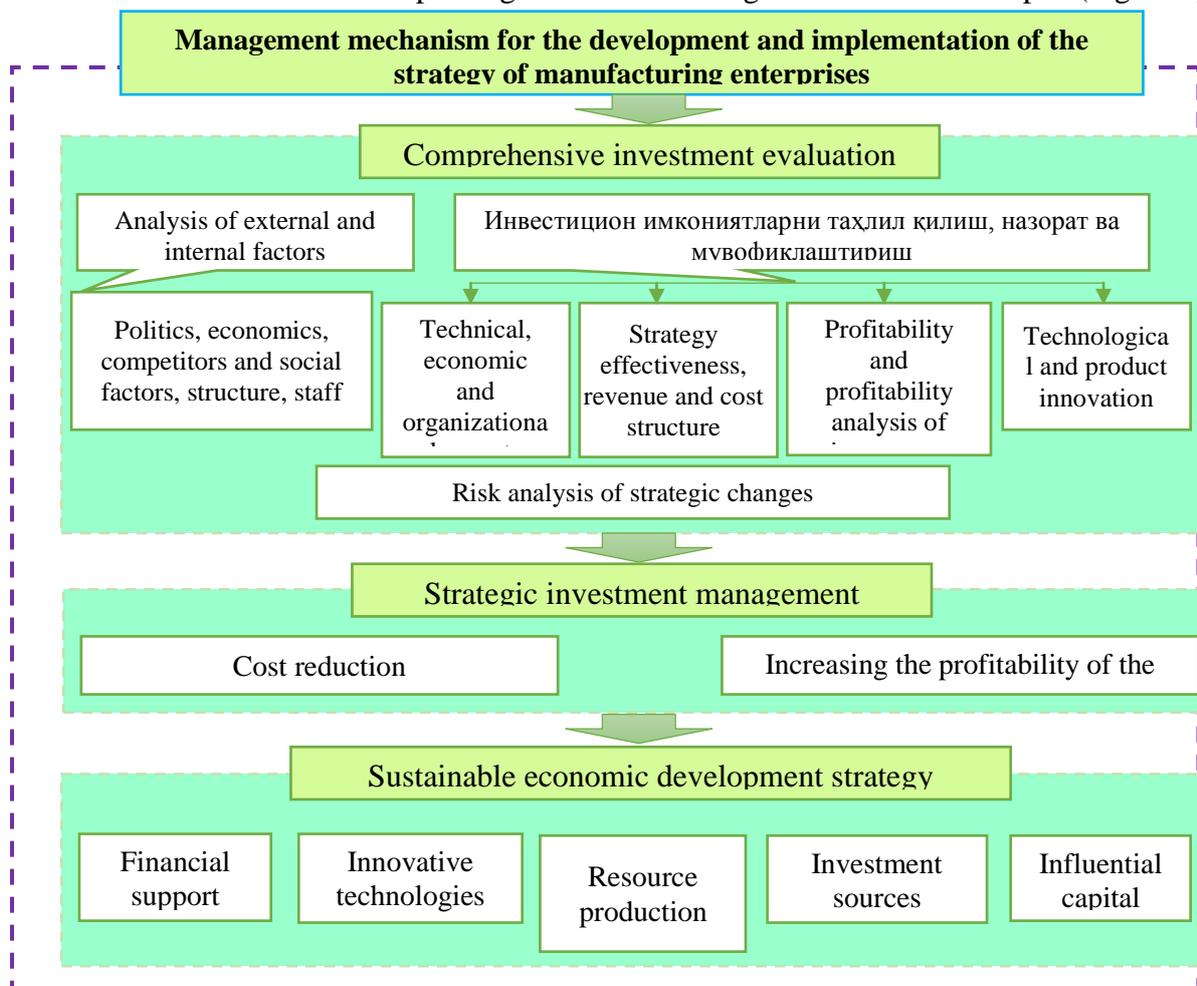


Figure 23. Sustainable economic development strategy and improved investment management mechanism

In many ways, the sustainable, balanced development of an organization is determined by optimal investment management. The company's management should think through a long-term investment policy aimed at defining clear long-term goals of the enterprise, selecting the most effective directions of capital investment (gives a serious competitive advantage in entering prestigious capital markets), evaluating alternative investment projects and developing the right investment strategy.

The external environment of a manufacturing enterprise is characterized by a large number of rapidly changing parameters. This requires urgent measures, which objectively confirms the problem of achieving sustainable economic development [16].

The presented model shows that the activity of manufacturing enterprises depends on the influence of external and internal environmental factors [17]. Sustainable economic development can be considered as a process characterized by key indicators of economic efficiency, technological excellence, optimization of business processes and improving product quality.

Competent management of strategic investments and crisis risk assessment can and should contribute to the growth of indicators of economic efficiency and technical excellence [18].

Based on the simulation model, the statistical probability of the onset of a crisis is assessed, taking into account changes in environmental parameters specific to the industry, the occurrence of possible losses at the end of a given period of enterprise activity. This model presents three areas of enterprise sustainability: from the transition area to the area of possible bankruptcy in unsatisfactory management behavior during the management of the enterprise to the required bankruptcy area.

5. DISCUSSION

Based on the results of the analysis, the following targets are expected to be achieved in the industrial sector by 2030:

1. Increase the share of industry in GDP from 30% in 2019 to 33.8% in 2030, the share of manufacturing in industry from 79.9% to 89.6%;
2. It is planned to increase the level of deep processing of cotton to 100%.

In order to achieve the goals of industrial modernization, it is necessary to increase the role of industrial production in the structure of the national economy in terms of value added, defining the role and place of the state in this program, taking into account the main directions of state action.

1. Ensuring the required amount of investment in industrial modernization (investment policy).
2. Assistance to industrial enterprises to achieve positions in domestic and foreign markets (export-oriented production and import substitution).
3. Elimination of internal infrastructure and resource constraints (spatial planning and logistics).
4. Maintaining a balance between economic and social development goals (social aspects of industrial policy).

6. CONCLUSION/RECOMMENDATIONS

Each area of stability is characterized by corresponding values of dynamic and static indicators. Dynamic indicators provide that the change in total monetary debt provides an average daily rate, which decreases when the company enters the transition zone, and then falls into the required bankruptcy zone when the company's assets are sharply reduced and the company suffers losses. This model also takes into account risks and a more accurate assessment of the business. Through this, the model allows the enterprise management to identify, analyze and take into account the risks that may arise in the implementation of investment strategies, as well as the impact of these aggressive negative impacts on the sustainable operation of the industrial enterprise.

The presented management mechanism also allows to integrate in the sustainable development of the industrial enterprise within the framework of strategic actions, strategic marketing research, company investment policy, control measures, risk detection and accounting, strategy evaluation and implementation of management decisions.

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