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THE ROLE AND IMPORTANCE OF THE MULTIFACTOR DEVELOPMENT MODEL IN THE ECONOMIC DEVELOPMENT OF THE INDUSTRIAL SECTOR

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Abstract. This article examines the role and significance of the multifactor development model in ensuring the economic development of the industrial sector. It explores the sequence of measures required to achieve this objective and analyzes the mechanisms applied by foreign countries to support this process. Furthermore, the study assesses opportunities for improving the economic efficiency of industrial enterprises through the sustainable development of the industrial sector. Based on an analysis of international experience, the article proposes recommendations for enhancing the effectiveness of organizing and managing the economic development of the national industrial sector.

Keywords: industry, model, industrial sector, multifactor development, industrial enterprises, industrial potential, efficiency of industrial enterprises, economic development, industrial production.

Аннотация. В данной статье рассматриваются роль и значение многофакторной модели развития в обеспечении экономического развития промышленного сектора. Исследована последовательность мер, необходимых для достижения данной цели, а также проанализированы механизмы, применяемые зарубежными странами для содействия данному процессу. Кроме того, оценены возможности повышения экономической эффективности промышленных предприятий на основе устойчивого развития промышленного сектора. По результатам анализа международного опыта предложены рекомендации по повышению эффективности организации и управления экономическим развитием национального промышленного сектора.

Ключевые слова: промышленность, модель, промышленный сектор, многофакторное развитие, промышленные предприятия, промышленный потенциал, эффективность промышленных предприятий, экономическое развитие, промышленное производство.

INTRODUCTION

It is well known that the economic development of the industrial sector has a direct and positive impact on the population's standard of living. An analysis of developed countries with high-performing economies shows that they have achieved strong indicators of industrial growth. In recent years, the activities of various industrial enterprises in Uzbekistan have produced positive results. At the same time, based on international experience, it is evident that the further economic development of Uzbekistan's industrial sector remains an important factor in strengthening national competitiveness and ensuring sustainable growth.

In recent years, global economic transformation, resource scarcity, increasing geoeconomic competition, and rapid technological change have turned the industrial sector into a strategic driver of national economic development. In 2024, the value added by the global manufacturing industry exceeded USD 16 trillion, with high-tech production accounting for a significant share of this figure. During the same period, global CO₂ emissions reached 37.8 billion tons, with the industrial sector responsible for approximately 25% of total emissions. These trends demonstrate the need to improve resource efficiency and promote technological modernization while ensuring economic growth in the industrial sector.

High energy intensity in the industrial sector, the presence of technologically outdated production capacities at certain enterprises, regional disparities in infrastructure, and differences in investment efficiency highlight the need to improve mechanisms for the sector's economic development. In particular, increasing competition in foreign markets and changes in global supply chains require the national industrial sector to strengthen its adaptability and competitiveness. This confirms the relevance of the research topic.

LITERATURE REVIEW

A number of foreign and domestic scholars have conducted research on the role and significance of the multifactor development model in the economic development of the industrial sector, both in the Republic of Uzbekistan and abroad.

In particular, foreign scholars such as A. Szirmai, M. McMillan, D. Rodrik, J. Felipe, A. Mehta, K. Lee, Z. Onis, and M. Fujita have developed well-founded theoretical approaches to the development of the industrial sector in their scientific works.

Among scholars from the Commonwealth of Independent States (CIS), A. Belyak, N.P. Fedorenko, and P.V. Aristarkhov have carried out scientific research related to this topic.

In Uzbekistan, domestic economists such as B. Salimov, A. Yadgarov, N. Makhmudov, R. Nazarova, I. Khotamov, J. Fayzullayev, A. Qosimov, B. Tojimatov, U. Mukhitdinov, J. Imamov, Kh. Ishbutayeva, R. Zayniddinov, Sh. Nizomova, and E. Makhmudov have also conducted a number of studies aimed at improving mechanisms for the economic development of the industrial sector [1].

A. Szirmai's research substantiates that industrialization is one of the key drivers of economic growth in developing countries. Developing this approach, it should be noted that industrial sectors are not passive elements of the economic system; rather, they represent an active mechanism that determines its internal structural dynamics [2].

The studies of M. McMillan and D. Rodrik demonstrate that increasing labor productivity through structural transformation is one of the main sources of economic growth. Based on this approach, it can be argued that industrial sectors improve economic efficiency by reallocating labor resources from low-productivity sectors to high-productivity manufacturing sectors [3]. This process has a two-way interaction mechanism: increased efficiency in industry strengthens investment attractiveness, while investment, in turn, accelerates technological modernization. As a result, industrial sectors develop into a self-reinforcing economic system.

J. Felipe and A. Mehta emphasize that a transition to the service sector without fully passing through the traditional stages of industrialization may reduce overall economic efficiency [4].

According to the local scholar M. Mukhtarov, the development of the industrial sector is primarily characterized by structural complexity and the diversification of production areas. In other words, as the dependence of the industrial structure on a single direction decreases, the level of economic stability and flexibility increases [5].

D.F. Ziyayeva's scientific research highlights territorial specialization and the geographical concentration of production as important features of industrial development [6].

F. Asimova argues that the development of the industrial sector is closely linked to innovation processes, and the introduction of modern technologies is a key condition for improving production efficiency. In this regard, innovations enable the transition of industry from a traditional production model to a model based on high added value [7].

Summarizing the above approaches, it can be stated that although they comprehensively cover specific aspects of industrial development, they do not sufficiently consider this process as an integrated system. However, practical experience shows that the sustainable development of the industrial sector is formed through the interaction of diversification, regional factors, and innovation. Therefore, an integrated analysis of these factors in the study of industrial development makes it possible to reveal its essence more fully and objectively.

RESEARCH METHODOLOGY

This article provides an in-depth study of the scientific research conducted by foreign scholars on the selected topic. The practical analysis is based on official statistical data and applies methods such as statistical observation, comparative analysis, synthesis, logical reasoning, graphical analysis, and comparative evaluation.

ANALYSIS AND RESULTS

As a result of analyzing the role of the multifactor development model in the economic development of the industrial sector, a multifactor adaptive model was formulated. In this model, the level of industrial sector development is determined by the interdependence of resource efficiency, technological innovation, the institutional environment, and infrastructural support factors (Figure 1).

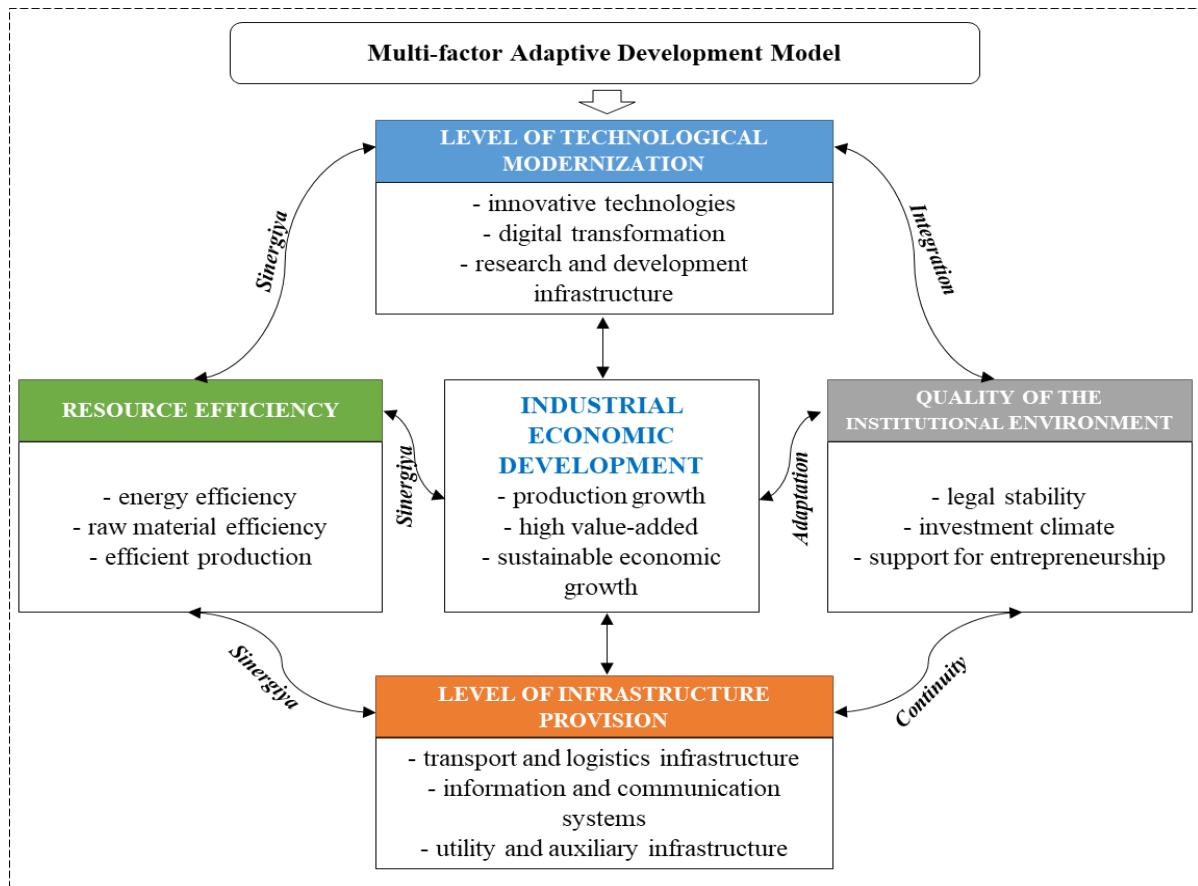


Figure 1. Multifactor adaptive development model of the industrial sector¹

As can be seen from the above data, many scholars have studied the economic development of industry based on factors such as resource efficiency, the level of technological innovation, the institutional environment, and infrastructural support. Unlike development models that analyze the economic development of the industrial sector through its individual components, the proposed approach emphasizes the importance of synergy, that is, the joint and interrelated development of these factors. In this regard, the number and activity of enterprises operating in the country can also serve as an important analytical indicator.

This model makes it possible to describe the development of Uzbekistan's industry as a complex and relatively unbalanced system, taking into account its current institutional and technological conditions. This, in turn, requires moving away from standard approaches to industrial development management and forming a differentiated and adaptive industrial policy.

The theoretical study of the specific features of industrial sector development contributes to understanding the internal laws of the economic system. From a practical perspective, it serves as an important scientific basis for improving the effectiveness of industrial policy and ensuring sustainable economic growth.

The specific features of industrial sector development include structural development, innovative and technological renewal, digitalization, institutional improvement, investment activity, territorial development, cluster and cooperative relations, human capital formation, the knowledge ecosystem, market and competition mechanisms, global integration, economic impact, and systemic and integrated development.

As is known, the principles of industrial development constitute a conceptual framework that guides the management of economic processes. Their proper selection and consistent application are of decisive importance in accelerating industrial development, ensuring the efficient use of resources, and achieving sustainable economic growth.

To implement a multifactor adaptive development model for the industrial sector, the following stages should be carried out in Uzbekistan.

First, at the stage of analyzing and assessing the current situation, the existing state of the industrial sector should be examined. In this process, resource efficiency, technological level, the condition of the

¹ Author's own design.

institutional environment, and the level of infrastructure development should be identified and systematized in a table.

Second, at the stage of forming a system of indicators, assessment indicators for each factor should be determined, normalized, and compared.

Third, at the stage of integral assessment, the interdependence of the factors should be studied, and a general integral index of industrial development should be developed.

Fourth, at the stage of identifying priority areas, the factors limiting development should be determined based on the results of the analysis, and high-priority policy areas should be developed.

Fifth, at the stage of introducing implementation mechanisms, institutional reforms, investment programs, and innovation policies should be carried out in a coordinated manner.

Sixth, at the stage of monitoring results and ensuring feedback, the achieved results should be comprehensively evaluated, and the parameters of the model and the directions of industrial policy should be adjusted accordingly.

These growth indicators have contributed to the timely and systematic implementation of programs aimed at constructing modern enterprises, re-equipping production facilities with advanced technologies, developing the industrial raw material base, and expanding the processing of industrial raw materials. In this regard, it is important to note the commissioning of the metallurgical plant in Tashkent, photovoltaic power plants based on renewable energy technologies in Navoi and Samarkand regions, textile enterprises, petrochemical and cement production facilities, as well as a number of other industrial projects. Positive changes have also been observed in the export and import sectors.

The research results show that the sustainable development of the industrial sector is achieved not only through the improvement of individual factors, but also through ensuring their effective interdependence. In this regard, the proposed multifactor adaptive development model serves as a basis for forming a new conceptual approach to industrial development management.

The transformation processes taking place in the world economy in recent decades require not merely the revision of traditional models of industrial development, but their elevation to a qualitatively new level. In particular, the expansion of digital technologies, the intellectualization of production processes, and the fragmentation of global value chains have created the need to transform industrial economic development from a consistent and unidirectional process into a multilevel, self-transforming dynamic system. This, in turn, requires a comprehensive combination of interrelated priorities within industrial policy, including increasing resource efficiency, institutionally stimulating innovative activity, and ensuring economic stability.

In developing economies, the institutional structure of industrial development and its functional mechanisms usually rely not on the spontaneous evolution of market mechanisms, but on a development paradigm purposefully directed and coordinated by the state.

Under such conditions, the state acts not only as an economic agent, but also as an institutional coordinator that determines the direction of the industrialization process, provides targeted support to priority sectors, and strategically redistributes investment flows. In this regard, industrial development is carried out within the framework of a "directed development" model, in which state policy focuses on managing the processes of attracting foreign investment, localizing production, and assimilating technologies in an interconnected manner.

A comparative analysis of foreign countries' experience in industrial economic development was also conducted. In particular, innovation and engineering potential in Germany, the mechanism for commercializing high technologies in the United States, quality and technological discipline in Japan, strategic state coordination and export-oriented policy in South Korea, clustering and small business activity in Türkiye, and the resource base combined with a high level of state participation in Russia are considered the main drivers of industrial growth.

It should be noted that in developing economies, industrial development is often ensured through the active participation of the state, targeted industrial policy, and the attraction of foreign investment flows. Therefore, the institutional structure of industrial development and its functional mechanisms are generally based not on the spontaneous evolution of market mechanisms, but on a development paradigm purposefully guided and coordinated by the state.

Based on this, it can be argued that it is appropriate to form a flexible development mechanism for Uzbekistan's industry that combines innovative activity, technological modernization, institutional efficiency, and national resource capabilities.

CONCLUSION AND RECOMMENDATIONS

Based on the research conducted, it can be stated that the main tasks and measures required to ensure the economic development of the industrial sector in Uzbekistan are as follows:

First, it is necessary to clarify the role and practical significance of the multifactor development model in ensuring the economic development of the industrial sector.

Second, in the coming years, a comprehensive ecological and economic analysis of local raw materials should be conducted. This includes the efficient allocation of resources in production processes, the use of environmentally friendly technologies, the import and creation of necessary technical and technological products, and their effective placement based on the state of infrastructure.

Third, it is important to create broader opportunities for attracting investment aimed at importing modern technologies, studying international experience, and introducing advanced, energy-efficient production solutions.

Fourth, it is necessary to strengthen research and development activities, support scientific work aimed at creating modern technologies, economically analyze engineering and technological solutions, and improve institutional mechanisms in this area.

In general, the proposed model for the economic development of the industrial sector is an important factor in ensuring the sustainable and effective development of industrial enterprises in accordance with modern requirements. The economic development of the industrial sector, along with reducing environmental challenges, plays a significant role in increasing economic efficiency and strengthening the global competitiveness of enterprises. At the same time, the economic development of the industrial sector is of strategic importance for enterprises and creates a solid basis for long-term sustainable development.

Achieving such results largely depends on the synergy reflected in the proposed model. If these factors do not develop in an interconnected manner, certain obstacles to the economic development of the industrial sector may remain.

The development of the national industrial sector through economic modernization can help reduce the impact of global crises on industrial enterprises. Innovative technologies, including environmentally friendly and energy-saving technologies introduced in recent years, contribute to increasing the efficiency of industrial development.

In recent years, the opportunities created for the economic development of industrial enterprises and the reforms implemented in the Republic of Uzbekistan have contributed to the creation of new jobs, the expansion of production potential, and the gradual improvement of economic well-being.

REFERENCES

1. Kasimov, A.A. (2024). *Improving the Methodology for Increasing the Economic Efficiency of the Industrial Sector*. Doctor of Science (DSc) Dissertation. Tashkent: Tashkent State University of Economics. 264 p.; Madrahimova, G.R. (2024). *Improving the Methodology for the Economic Development of the Textile Industry*. Doctor of Science (DSc) Dissertation. Tashkent: Tashkent State University of Economics. 301 p.
2. Szirmai, A. (2012). Industrialization as an Engine of Growth in Developing Countries, 1950–2005. *Structural Change and Economic Dynamics*, 23(4), 406–420.; Rifkin, J. (2014). *The Third Industrial Revolution: How Lateral Power Is Transforming Energy, the Economy, and the World*. Moscow: Alpina Non-Fiction.
3. McMillan, M., & Rodrik, D. (2014). Globalization, Structural Change, and Productivity Growth, with an Update on Africa. *World Development*, 63, 11–32.
4. Felipe, J., & Mehta, A. (2016). Deindustrialization? A Global Perspective. *Economics Letters*, 149, 148–151.
5. Mukhtarov, M.M. (2025). Specific Features of the Development of the Industrial Sector. *Marketing: Scientific, Practical and Popular Journal*, 12, 47–55.
6. Ziyayeva, D.F. Structural-Functional Analysis of Theories of Industrial Development. *Digital Economy: Scientific Electronic Journal*, 10, 367–374.
7. Asimova, F. (2023). Development Indicators of Innovative Activity in Industrial Enterprises. *Digital Technologies in Industry*, 1, 139–143.

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