

## **Peculiarities of Manufacturing Policy in Uzbekistan in the Conditions of Modernization of the Economy**

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### **Abstract**

An important component of the country's development strategy is the support of domestic producers that produce products for export in the real sector of the economy, in particular, knowledge-intensive industries that form the basis of economic modernization. In order to modernize and transfer the economy to an innovative path of development, it is necessary to develop a mechanism for improving the structure of the economy, a set of long-term measures aimed at strategic regulation of economic processes for the development of priority sectors. There are numerous publications on this topic. However, they do not sufficiently disclose the features of manufacturing policy in the context of economic liberalization, implementation of the development strategy in Uzbekistan. There is an acute need to develop a concept and mechanism for the realization of manufacturing policy in order to implement structural changes and transfer the economy of Uzbekistan to an innovative path of development. The purpose of the study is to develop scientific proposals and practical recommendations aimed at increasing the efficiency of the mechanism for implementing of the manufacturing policy in the context of modernization of the economy of Uzbekistan. Research methods: ascent from the abstract to the concrete, the unity of the logical and the historical, the systems approach, economic and statistical methods of analysis, grouping and comparative economic analysis, structural and functional analysis. The hypothesis of the research is that the developed scientific proposals and practical recommendations make it possible to formulate possible scenarios for the development and implementation of manufacturing policy in Uzbekistan for the medium-term perspective. Scientific conclusions and practical recommendations of the

work develop and deepen the relevant, insufficiently developed in economic theory scientific direction. They also identify the priority areas of the economic mechanism for the implementation of manufacturing policy in modernization of the economy, the optimal ratio for the effective functioning of investment, structural, industrial and innovation policies in Uzbekistan and can be used as a base for further special deep scientific researches devoted to the priority areas of manufacturing policy development. The results of the study can be used in further improvement of the legal institutional framework regulating the economic mechanism for the implementation of manufacturing policy, as well as in the development of state target programs, alternative scenarios for the modernization of the country's economy and in the process of using indicative planning.

### **Keywords**

Manufacturing Policy, Modernization of the Economy, Innovative Development, Structural Changes, Industries, Balanced Economic Development, Basic Industries, Diversification, Electric Power Industry, Technological Structure of Investments, High Technology Products.

### **Introduction**

Modernization of the economy fundamentally changes the character, form, strategy and key factors of implementation of manufacturing policy. The focus on sustainable growth is combined with an increased focus on innovative development of the economy. Corresponding changes are taking place in the structure, functions and forms of interaction between the subjects of manufacturing policy. The functions of all subjects of manufacturing policy become significantly more complicated, and the forms of their interaction are diversified.

In the second decade of the 21st century, there has been a tendency in the economy to reduce the potential and rates of reproduction of fixed assets in industry. A high degree of wear and tear of basic production and industrial assets, a decrease in the rate of renewal and the aging trend of production equipment are clearly observed. For example, the average age of manufacturing equipment in emerging market economies is about 17 years old, at norm of 10 years old in an innovative economy versus 6.6 years old in the United States (Alekseyev, 2010).

One of the important components of the country's development strategy is to support domestic commodity producers that produce products for export in the real sector of the economy, in particular, science-intensive industries that form the basis of economic modernization.

In order to modernize and transfer the economy to an innovative path of development, it is necessary to develop a mechanism for improving the structure of the economy. That may include a set of long-term measures aimed at strategic regulation of economic processes for the development of priority sectors, stable growth rates of investments in fixed assets, mainly of an innovative nature, contributing to the accelerated implementation of modernization, technical and technological renewal of production, increasing the competitiveness of domestic goods in the domestic and foreign markets. The implementation of an effective innovation policy in the republic should be closely related to changes in the structure of leading industries and the scale of qualitative changes in the economy. Manufacturing policy is aimed to solve namely these problems.

Consequently, the theoretical understanding of the fundamental and applied aspects of manufacturing policy and the mechanism of its implementation in the condition of economic modernization acquire a special scientific and practical significance, which determines the relevance of the research topic.

## **Literature Review**

In the scientific economic literature, the foundations of traditional and industrial societies were studied by the following scholarly economists: P. Krugman, M. Obsfeld (Krugman, Obsfeld, 2005), E.B. Atkinson, B. Anthony (Anthony et al., 2015), J. Galbraith (Galbraith, 1972; Galbraith, 1988), I.V. Poberezhnikov (Poberezhnikov, 2006) and others.

The problems of the development of competition in industry have been widely studied in the research papers of M. Best (Best, 2007), M. Porter (Porter, 1998), G. Saidova (Saidova, 2003), R. Kaplan, D. Norton (Kaplan, Norton, 1996), V. Polterovich, V. Popov (Polterovich, Popov, 2006), R.B. Carson (Carson, 1990) and others.

Peculiarities of modernization of the economy and ways of its innovative development are studied in the works of the following economists: E. Yasin (Yasin, 2005), R. Nureyev (Nureyev, 2005), S. Chepel, A. Sindikov (Chepel, Sindikov, 2009) and others.

Specific features of manufacturing policy, as well as its world experience are considered in the works of Ch. Macmillan (McMillan, 2012), D. Rodrik (Rodrik, 2004), A. Tatarkin (Tatarkin et al., 2006), I.V. Lipsits, A.A. Neshadin. (Lipsits, Neshadin, 2002), L.G. Xodov (Xodov, 1997), L. Valinurova, O. Kazakova (Valinurova, Kazakova, 2006), T.M. Akhmedov, D. Muinov (Axmedov, Muinov, 2005; Axmedov, Muinov, 2005; Muinov, 2008), A. Rasulev (Rasulev, Pavlov, 2018), A.K. Bedrensev (Bedrensev, 1998) and others.

Naima Khashimova notes in her research that «The terminological space of the theory of investment in research is represented very widely, which means that further research should be based on a clear and unambiguous conceptual apparatus. Therefore, to reveal the essential role of investment potential, it seems necessary to formulate a different approach to this category. In it, unlike the existing interpretations, two sides of investment activity should be reflected - the availability of investment resources (sources) and the effectiveness of their investments» (Khashimova et al., 2020).

In the book of A. Vaxabov and G. Razykova "Modernization of the economy" the following definition of manufacturing policy is given. "Manufacturing policy is a set of measures of state influence on the distribution of resources of the society in order to improve the structure of the national economy, maintain the competitiveness of individual industries and enterprises, as well as the economy as a whole in world markets, and correction of the negative consequences of the market mechanism." (Vaxabov, Razykova, 2014).

Sherzod Juraev affirms that «Sectors differ from each other in terms of production, technical and structural-technological specifics, fuels, energy, sources of raw materials, areas where labor is concentrated, consumption of finished products, their location» (Juraev et al., 2020).

In the context of economic liberalization, implementation of the development strategy in the country, there is an acute need to develop a concept and mechanism for the realization of manufacturing policy for the implementation of structural changes and transfer of the economy of Uzbekistan to an innovative path of development. The relevance of the topic, insufficient study of the issues of the economic mechanism for implementing the manufacturing policy of modernizing the economy, as well as the theoretical and practical significance of solving these problems, determined the choice of the research in this direction.

## **Methods**

The purpose of the study is to develop scientific proposals and practical recommendations aimed at increasing the efficiency of the mechanism for implementing manufacturing policy in the context of modernization of the economy of Uzbekistan.

**The objectives of the research are:**

- Clarification of the categories "manufacturing policy" and "industrial policy", classification of scientific concepts on manufacturing policy, development of a more perfect definition.
- Revelation of the place of manufacturing policy in the implementation of structural policy and the implementation of deep structural changes in the economy.
- Analysis of the state and structure of the economic mechanism for the realization of manufacturing policy and the levers of its implementation.
- Determination of the place of manufacturing policy in the modernization of the economy and the transition to an innovative path of development.
- Study of the state, structure and development trends of industry over the years of independence.
- Analysis of world experience in the development and implementation of manufacturing policy and its role in the modernization of the economy of individual countries.
- Determination of the place of the state in the implementation of manufacturing policy in the context of the realization of the country's anti-crisis program.
- Determination of factors, assessment of the state and development of promising scenarios for the implementation of economic modernization for the medium-term period.
- Development of scientific proposals and practical recommendations for improving the mechanism for implementing and increasing the efficiency of manufacturing policy in Uzbekistan for the medium-term period.

The object of the research is the socio-economic and institutional aspects of the functioning of industry. The subject of the research is the totality of economic relations formed during the implementation of manufacturing policy in the context of modernization of the economy of Uzbekistan.

Research methods: ascent from the abstract to the concrete, the unity of the logical and the historical, the systems approach, economic and statistical methods of analysis, grouping and comparative economic analysis, structural and functional analysis.

The hypothesis of the research is that the developed scientific proposals and practical recommendations make it possible to formulate possible scenarios for the development and implementation of manufacturing policy in Uzbekistan for the medium-term perspective.

**The scientific novelty of this research are:**

- The concept of the economic mechanism as a system of interrelated, interdependent forms and methods of managing of economic processes and their structural components to achieve the set goals has been clarified.
- The concept of manufacturing policy has been clarified, which is considered as a system of interrelated state policy measures implemented in order to increase the efficiency and competitiveness of domestic industry and, on this basis, the formation of a modern structure of the economy.
- The role of manufacturing policy in the implementation of modernization of the economy, the correlation and interconnection with other forms and types of economic policy of the state is revealed.
- The innovative component of the manufacturing policy implementation mechanism is argued.
- The prerequisites and factors for the development of industry in Uzbekistan in the context of economic liberalization are identified.
- Alternative scenarios have been developed for further improving of the mechanism for implementing of the manufacturing policy in Uzbekistan for the medium-term period of development.

The scientific significance of the research results lies in the fact that the scientific conclusions and practical recommendations of the work develop and deepen the current, insufficiently developed in economic theory, scientific direction. They also identify the priority areas of the economic mechanism for the implementation of manufacturing policy in modernization of the economy, the optimal ratio for the effective functioning of investment, structural, industrial and innovation policy in Uzbekistan and can be used as a base for further special in-depth scientific research devoted to the priority areas of manufacturing policy development. Certain scientific conclusions and practical recommendations of the study can be used in further improvement of the legal institutional framework regulating the economic mechanism for the implementation of manufacturing policy, as well as in the development of state target programs, alternative scenarios for the modernization of the country's economy and in the process of using indicative planning.

## **Data Analysis and Discussion of Results**

In the economic literature, there are different points of view regarding the understanding of the economic mechanism. In our opinion, the economic mechanism, as an economic category, performs the following functions:

- Ensures the interconnection, balance of all structural elements of social production as an integral system.
- Coordinates the economic interests of all subjects of society. The ability to coordinate economic interests and bring them into balance can serve as a criterion for its perfection.
- Implements the economic policy of the state, its strategic goals and objectives.

Consequently, state regulation of the economy and its individual structural links is carried out using the economic mechanism, which is a system of forms and methods of organizing and regulating the economic life of society. Such forms and methods are, in particular, the economic policy of the state, which is implemented through the achievement of certain goals.

When determining the mechanism of state manufacturing policy, we share the point of view of those economists who believe that this is a whole set of legal and organizational forms of its implementation, general economic and specific methods and tools of influencing industry.

In the economic literature, the concept of state manufacturing policy is interpreted from various positions (Bogomolov, 1996; Yasin, 2002; Gurvich, 2001; Popov, 1998; Illarionov, 2000). In a narrow sense, manufacturing policy is understood as sectoral policy, the essence of which is to concretize the general structural and economic policy in relation to individual industries. State manufacturing policy, studied in a broad aspect, goes beyond the sectoral problems (Vakhabov et al., 2006).

Manufacturing policy, as the core of the state economic policy, is primarily associated with the implementation of innovative, investment and structural restructuring of industrial production. Manufacturing policy has the main goal of economic growth with a dynamic change in the structure and increased efficiency of industrial production and the competitiveness of products.

Manufacturing policy cannot be aimed only at solving the problems of individual industries or their combination. It should help to improve the efficiency of the economy

through optimizing the allocation of resources and allow a prompt and adequate response to external shocks, being the basis for sustainable economic growth.

Manufacturing policy is often viewed as a strategy for the development, optimization and increase of the efficiency of industrial production, the growth of the competitiveness of industries and enterprises, both in the external and internal markets. Consequently, manufacturing policy, as a lever of structural transformations in the economy, is capable and can have an impact on economic growth in the long-term perspective.

As world practice shows, various models of manufacturing policy, despite their national characteristics, can be effectively combined to achieve the goals of balanced economic development. In such situations, long-term efficiency determines an integrated approach to work out a long-term development strategy based on identifying and defining development priorities, on the formation of institutions for the implementation of this strategy and ensuring macroeconomic stability. The problem of manufacturing policy development is a multilevel and multifactor optimization problem. Determination of priorities based on the selected criteria is a key stage in the development of manufacturing policy, which imposes the most stringent requirements on the methodological base.

The experience of designing and implementing of manufacturing policy in various countries shows that it should be based on theoretical research and include a set of long-term and medium-term statistical observations and econometric calculations. The lack of a clear concept of manufacturing policy, definition of tools for its implementation, development of directions and definition of priorities for manufacturing policy is one of the main obstacles to its effective implementation.

In the context of the implementation of the country's anti-crisis program, it is impossible to consider manufacturing policy in isolation from the modernization processes, which includes the structural restructuring of the economy.

The Structural Change Policy should be supplemented by measures to overcome the main problems in specific, most significant sectors of the economy. Structural reforms in Uzbekistan included the following tasks:

- Accelerated development of basic industries in order to achieve energy independence.
- Development of the national economy through import substitution.
- Ensuring sustainable high rates of economic growth with the priority of instruments of export-oriented manufacturing policy.



It is known that the structure of GDP shows the degree of participation of industries in the national economy and can serve as an indicator of its development. The most important criterion for the level of economic development is the dynamics of the decline in the share of agriculture in the structure of GDP with a gradual increase in the share of the service sector. At the same time, the material basis for the development and implementation of modernization of the economy remains the sustainable development of industry, its diversification, the availability of high-tech industries and products with a high degree of processing, the share of which should not decrease.

In accordance with the development strategy, the task is to ensure in the next five years the growth rate of industrial production by at least 60%, to increase its share in the GDP structure from 28% in 2017 to 40% in 2020<sup>1</sup>.

As the analysis shows, the share of the electric power industry, the fuel and food industries in the gross output, despite the global economic downturn, has been preserved, and in some sectors, even growth can be noted. At the same time, the share of extractive industries prevails in the gross structure of industry in relation to processing industries (Table 1). Changing the existing correlation for the medium term should become the most important priority for the development of industry.

**Table 1 Sectoral structure of industry, in %<sup>2</sup>**

Sectors	2015	2016	2017	2018
<b>Industry - total, incl.:</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Mining and quarrying</b>	<b>9,7</b>	<b>8,1</b>	<b>10,3</b>	<b>12,3</b>
<b>Processing industry</b>	<b>80,4</b>	<b>81,8</b>	<b>81,1</b>	<b>80,6</b>
Manufacture of food, beverages, tobacco products	22,4	23,9	18,9	13,5
Manufacture of textiles, clothing, leather products	16,0	16,7	16,3	14,5
Manufacture of wood and cork products, products from straw and plaiting materials, paper and paper products, furniture	2,0	2,6	2,4	2,1
Printing and playback of recorded materials	0,6	0,8	0,8	0,5
Production of coke and refined petroleum products	3,2	2,6	2,5	2,4
Manufacture of chemical products, rubber and plastic products	7,1	8,9	8,8	8,7
Manufacturing of basic pharmaceutical products and drugs	0,8	1,1	0,9	0,7
Manufacture of other non-metallic mineral products	5,0	5,7	5,1	5,2
Metallurgical industry	8,7	8,7	10,4	13,3
Production, repair, installation of machinery and equipment, production of vehicles, trailers and semi-trailers, other finished metal products	14,2	9,8	14,3	19,2

<sup>1</sup> <https://stat.uz/uz/438-biulleteny-uz/5331-press-relizlar2019>

<sup>2</sup> Industry of Uzbekistan. 2015-2018. Statistical collection. Tashkent. 2019. - P.24-25.

In accordance with the development strategy, high-tech industries such as mechanical engineering and automotive, chemical, food, pharmaceutical, building materials and others will receive priority development with more than 2 times growth.

The purpose of industrial development within the framework of the implementation of structural policy is to increase the competitiveness of products and the technical level of production, ensure the release of innovative products and high technologies to the domestic and foreign markets, replace imported products and transfer, on this basis, innovatively active industrial production in the stage of stable growth.

The development strategy of Uzbekistan involves the implementation of large-scale modernization. The objective need for this is dictated by such reasons as the presence of a significant fleet of obsolete equipment and a relatively low rate of renewal of fixed production assets.

As the analysis shows, the degree of depreciation of fixed production assets in the industry of Uzbekistan for the period from 2016 to 2018 almost did not change from 35.7 to 35.8%. A comparative sectoral analysis of the degree of depreciation of fixed assets showed that relatively favorable dynamics is observed only in the mining and quarrying industry, where this indicator decreased from 34.1% in 2016 to 31.1% in 2018. At the same time, the overall dynamics by industry shows an increase in this indicator. A relatively difficult situation is developing in the mechanical engineering, chemical, petrochemical and food industries, metallurgy and electric power industry, where this figure exceeds 50% (table. 2).

**Table 2 Degree of depreciation of fixed production assets by type of economic activity, in % <sup>3</sup>**

	<b>2016</b>	<b>2017</b>	<b>2018</b>
Fixed assets - total	35,9	34,9	29,6
including			
Fixed assets of industries producing goods	29,7	35,0	34,7
of them:			
Agriculture, forestry and fisheries	24,4	22,4	16,5
Industry	35,7	35,5	35,8
including			
Mining and quarrying	34,1	31,0	31,1
Processing industry	36,1	37,0	37,1
Power supply, gas, steam supply and conditioning of air	36,5	37,5	39,2
Water supply, sewerage, waste collection and waste utilization	37,9	34,3	33,2
building	39,0	38,1	38,8
Fixed assets of industries providing services	36,3	34,7	27,6

<sup>3</sup> Fixed assets of Uzbekistan. 2016-2018 - Statistical collection. Tashkent 2019. - P. 100-109.

It should be noted that the predominant share of this indicator falls on the basic, high-tech sectors of the economy, capable and designed to ensure the modernization of the economy, and together they can significantly affect the economic security of the country.

The coefficient of renewal of fixed production assets remains low. In the industry as a whole, it grew from 8.4% in 2015 to 12.5% in 2018. At the same time, despite the growth in non-ferrous metallurgy, building materials industry, food industry, in general, it remains at a relatively low level (Table 3).

**Table 3 The coefficient of renewal of industrial and production fixed assets by type of economic activity, in % <sup>4</sup>**

	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>All industry</b>	<b>8,4</b>	<b>19,1</b>	<b>10,5</b>	<b>12,5</b>
Including				
Mining and quarrying	9,6	11,5	20,7	16,6
Processing industry	7,6	29,4	6,8	12,8
Power supply, gas, steam supply and conditioning of air	7,0	18,4	4,5	6,5
Water supply, sewerage, waste collection and waste utilization	5,3	11,6	15,8	11,3

Analysis of the state of the technological structure of investments in the Republic of Uzbekistan showed that in the period from 2015 to 2017, the share of investments in construction and installation works clearly prevailed in comparison with the spending on machinery and equipment. The modernization of the economy is possible only with technical renewal, with an increase in investments in the active part, which can ensure an increase in the share of finished products with high added value.

To increase the share of costs for machinery and equipment in comparison with investments in construction and installation work and gradually bring it to the level of developed countries in order to implement the policy of modernizing the country's economy (Table 4).

**Table 4 Technological structure of investments, in % <sup>5</sup>**

<b>Investments</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Investment in construction and installation work	51,0	52,0	53,4	44,6
Machine and equipment costs	31,6	34,4	32,9	43,8
Other costs	17,4	13,6	13,7	11,6

<sup>4</sup> Industry of Uzbekistan. 2015-2018. Statistical collection. Tashkent. 2019. - P. 74.

<sup>5</sup>Construction in Uzbekistan. 2015-2018. Statistical collection. Tashkent. 2019. - P.34.

The concept of modernization of the economy should also include an increase in the share of the knowledge economy (science, education, information technology, biotechnology, and health care) in the GDP that provides innovative activity. Innovative development is the most important condition for increasing the competitiveness of the national economy.

According to the international classification of "manufacturability" of industries, they are divided into:

- High-tech: aerospace, pharmaceuticals, production of computer technology and communications equipment, production of medical instruments.
- Relatively high-tech: automotive, electrical, chemical, general mechanical engineering.
- Relatively low-tech: shipbuilding, plastics production, oil refining, metallurgy and metalworking.
- Low-tech: other manufacturing industries, woodworking, food, light and textile (Kondratev, 2007).

The share of mechanical engineering in the volume of industrial production is growing in Uzbekistan. Over the period from 2015 to 2018, it increased from 14.2% to 19.2%, which can be noted as a positive trend. However, it is necessary to increase this indicator, since from the point of view of economic security it should be at least 25%. At present, in Uzbekistan, this problem is being solved by increasing the share of imports of machine-building products in the total volume of merchandise exports, where it is 55% (Table 5).

**Table 5 Share of engineering products in industrial production, in % <sup>6</sup>**

	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>Industry</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
including:				
Production, repair, installation of machinery and equipment, production of vehicles, trailers and semi-trailers, other finished metal products.	14,2	9,8	14,3	19,2

The solution of these tasks depends on the introduction of systematized tools and management methods, therefore, the theoretical and methodological foundations of effective investment management in the reproduction of fixed capital within the national

<sup>6</sup> Industry of Uzbekistan. 2015-2018. Statistical collection. Tashkent. 2019. - P.24-25.

economy should be based on the concept of effective management of investment processes and should represent one of the options of its modification.

Based on the correlation and regression analysis carried out in the course of the study, the relationship between the reproduction structure of capital and the rate of economic growth was established and a time lag was set between the implementation of investments and changes in economic growth. Calculations indicate that there is a time lag that determines the change in economic growth, including: due to new construction with a duration of 5 years, due to expansion - 4 years, due to technical re-equipment and reconstruction - 3 years. The values of the calculated correlation coefficients close to 1 allow us to conclude that the economic growth of the national economy and the efficiency of its development are determined by the reproduction structure of capital (Table 6).

**Table 6 Assessment of the impact of the structure of capital investments on economic growth <sup>7</sup>**

	Period (years)					
	0	1	2	3	4	5
New construction	-	0,0497738	- 0.0054299	0.0696833	0,2751 13	0.610860
Reconstruction and modernization	-	0.257172	-0,3125	0.625	0,322746	0,107582
Expansion	-	0.0873048	0.175811	0,226272	0.252339	0,228274

The study shows that for effective management of investments in fixed assets in order to increase the return on the use of investments, it is advisable to use the multifactorial dynamic model of the dependence of the rates of economic growth on the reproduction structure of capital investments developed in the study:

$$Y = -9,6 + 0,18 * X_1 + 0,22 * X_2 + 0,06 * X_3; \text{ (1)}$$

Where

**Y** - the economic growth.

**X<sub>1</sub>** - share of investment in new construction.

**X<sub>2</sub>** - share of investments directed to reconstruction and technical re-equipment.

**X<sub>3</sub>** - share of investment in expansion.

So, from the calculations performed, it can be seen that investments directed to technical re-equipment and new construction are an important factor in ensuring sustainable rates and quality of economic growth. Based on this regression analysis, we can conclude that the reproduction structure of capital determines the rate of economic growth, therefore, it

<sup>7</sup> Calculated by the authors

seems appropriate to use the constructed dependence to determine the optimal structure of reproduction of fixed capital in industry.

Modeling changes in the rates of economic growth shows that with a reduction in the reproduction structure of capital, the share of expanding production by increasing the share of technical re-equipment and reconstruction can lead to a change in the rate of economic growth. In our opinion, economic growth can reach its optimal value with approximately the same shares of investments in new construction, technical re-equipment and reconstruction at the level of 42.5% and investments in the expansion of existing enterprises at the level of 15%.

The implementation of the main goal of industrial development will be carried out in the following directions:

- Ensuring sustainable growth rates of industrial production.
- Positive structural changes associated with an increase in the share of products of processing industries compared to extractive industries and the share of high-tech and science-intensive products and services in GDP.

Anti-crisis measures to support real sector enterprises in the economy of Uzbekistan boil down to the following:

- Support and ensure the stable operation of exporting enterprises.
- Non-inflationary stimulation of domestic demand for the products of domestic producers of goods and services.
- Expanding the resource base and ensuring the growth of investment activity in the real sector of the economy.
- Modernizing the electric power industry, reducing energy intensity and introducing an energy saving system.
- Stimulating the development of small business and private entrepreneurship.

The main directions of the development of innovation activity, the priorities of the innovation policy and the stages of its implementation are determined by the needs of industrial production for technological re-equipment and the availability of investment resources. Creation of favorable conditions for the development of innovations will make it possible to modernize the technological base and radically raise the competitiveness of the national economy.

## **Conclusion**

The analysis of the functioning of the economic mechanism for the implementation of manufacturing policy in the context of the modernization of the economy of Uzbekistan allowed the author to obtain the following scientific conclusions.

1. In modern economic theory, there are various approaches to determining the mechanism for implementing manufacturing policy, however, in the context of economic modernization and the implementation of structural changes, they have not yet been sufficiently studied.
2. The concepts of industrial development are decisive in the development of economic policies in developed countries. One of the central links of economic policy is manufacturing policy in its various forms of manifestation and implementation mechanisms. In each country, due to the peculiarities of internal and external factors affecting the economy, various models of manufacturing policy are developed and implemented.
3. The manufacturing policy of economically developed countries is characterized by the absence of strict sectoral priorities, due, first of all, to a highly diversified business structure. The study of the experience of implementing manufacturing policy in countries with different levels of economic development makes it possible to note that the state mechanism of economic influence operates under certain conditions. Many countries (Japan, the Republic of Korea, Chile, Brazil), through the creation and state support of competitive industries, were able to solve the problem of industrialization and find their place in the international division of labor. The competitiveness of industries is inherently an indicator of the effectiveness of the implementation of manufacturing policy.
4. The state should help in determining the key directions of technological development in the long term. So, in Japan, for this, a forecast is being developed of what new products, what technologies will provide access to the forefront of technological progress in 10 years. In France, for the same purpose, the opinion of leading scientific centers on key technologies for the next 5-10 years is generalized. Such forecasts subsequently become the basis for the formation of priorities for which the state provides support to enterprises.
5. Economic growth in modern conditions is provided by various factors, but the process of dynamic development is possible in the context of modernization, which takes place in all key spheres of society and is characterized by structural and functional differentiation and the formation of appropriate forms of integration and innovations are the key link in modernization.

6. New knowledge and new technologies created on its basis give up to 90% of the gross product growth in developed countries. Those countries that manage to create and export new technologies are today world leaders and have significant competitive advantages in the international division of labor.
7. As the analysis shows, there are some elements of imperfection in the legislative framework for the implementation of manufacturing policy in Uzbekistan. In particular:
  - There is no law on innovation and economic modernization so it is necessary to bring the depreciation policy in line with the goal of modernization;
  - It is necessary to conduct a manufacturing policy with an emphasis on increasing the share of processing industries in relation to extractive industries;
  - Cardinal revision of the technological structure of investments;
  - Accounting of the reproduction structure of investments aimed at modernization of the economy.

Based on the results of the study, the following scientific proposals and practical recommendations were developed to improve the economic mechanism for implementing manufacturing policy in the context of modernization of the economy of Uzbekistan:

1. In order to improve investment policy in the context of modernization of the national economy it is necessary:
  - To pursue a policy to further improve the mechanism for the implementation of state investment programs;
  - To improve the mechanism for joint participation of the state and private business in financing investment projects in priority industries;
  - To strengthen the emphasis on resource conservation based on active structural, investment and innovation policies, creating conditions and factors that stimulate the development of high-tech industries with a focus on science-intensive and energy-saving industries;
  - To increase expenditures on R&D (Research and Development) and bring this indicator to the level of 1.0-1.5% of GDP.
2. As the world experience shows, the modernization of the economy in developed countries was carried out with a sufficiently high investment rate at the level of 30-45%. In 2018, this figure in Uzbekistan was 24.9%. Consequently, the investment rate in the context of modernization and implementation of investment Programs in the economy, taking into account the reduction in energy intensity, capital intensity,



material intensity and the transition to resource-saving technologies, must be maintained and brought to 28-30%.

3. In Uzbekistan, there is a cause-and-effect relation between the reproduction structure of investments and the rate of economic growth. According to our calculations, the optimal reproduction structure of investments is observed with a decrease in the share of investments for expanding production and with a simultaneous increase in the share of investments in the modernization and reconstruction of operating enterprises. Economic growth can reach its optimum value with approximately the same shares of investments in new construction, technical re-equipment and reconstruction at the level of 42.5% and investments in the expansion of existing enterprises at the level of 15%.

An important element of ensuring sustainable economic growth and modernization of the economy should be a flexible depreciation policy that stimulates the processes of technical and technological renewal. In modern conditions, it has become an important means of stimulating investment, as evidenced by the increase in the share of depreciation deductions in the total amount of capital investments in developed countries. This share in 1960-1990 increased in the USA from 36.3 to 60.6%, in France - from 64.2 to 73.3%, in Germany - from 44.5 to 73.2%, in Japan from 32 -35 to 45-50%. Russia finances 20-25% of investments in fixed assets at the expense of depreciation deductions. In Uzbekistan, depreciation rates for machinery and equipment are 15%, and for the passive part of fixed assets - 5%. In our opinion, bringing the norms of depreciation deductions to the level of industrially developed countries will make it possible to renew fixed assets and reduce the average age of operating equipment to 10 years, which are necessary in conditions of innovative development.

4. In the economy of Uzbekistan, there is a correlation relationship between the coefficient of renewal and the share of innovative products in the volume of industrial production. We have calculated that in order to ensure sustainable economic growth and modernization of the economy with an investment rate of 30%, the coefficient of industrial equipment renewal should be at least 18-22%.

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