

MANAGEMENT ASPECTS OF ADAPTATION OF THE HIGH-TECH SECTOR OF THE UKRAINIAN INDUSTRY TO THE REQUIREMENTS OF THE GLOBAL ECONOMY

Vasily Shvets, Prof. Dr.-Econ.,
Yuliia Dubiei, Assoc. Prof. PhD-Econ.
Dnipro University of Technology, Ukraine

Introduction. National economies focused on global integration are developing much faster than economies that are focused only on the domestic market. The constant interaction of the subjects of integration necessitates a progressive movement towards to the market reproduction system. The main mechanism of this movement is competition. To function successfully in a competitive environment, most companies are forced to continuously improve and expand the innovative focus of the means of production, which used in manufacturing process. At the same time, the incremental level of demand increases the need to enlarge production and consumption, which leads to a new rise in manufacturing.

The research is based on methods of dialectics, which allow identifying the trends in the development of the machine-building complex of Ukraine in the direction of increasing the competitiveness of products in the international market in the context of scientific, technical integration and requirements for the sustainable development in industry. The goal of the study is to substantiate the theoretical and applied points for increasing the competitiveness of products on the international market in the context of scientific and technical integration based on the reorientation of high-tech engineering. The objectives of the study are: substantiation of the meaningful characteristics of the competitiveness of high-tech domestic products in the world market; analysis of the problems of domestic mechanical engineering that slow down its development; argumentation of the need to develop a comprehensive concept for the development of high-tech industries in Ukraine, based on the factors of ensuring sustainable development.

Presentation of the main research. The determining factor of modern economic development is the need for constant implementation at all stages of social reproduction of the

achievements of scientific and technological progress. The unprecedented growth of the impact of science and new technologies on socio-economic results has led to the formation of a new economy based on knowledge and large-scale reorientation of economic entities from resource-intensive to knowledge-intensive activities.

With the development and deepening of the processes of internationalization of the scientific and technical sphere in the world economy, the main role in increasing the effectiveness of the implementation of the strategy of innovative development of Ukraine is acquiring the use of the advantages of international scientific and technical integration. The innovative dynamics of the development of the world economy at the present stage requires from the government to choose certain models of economic growth. Consequently, the economy of our country faces a priority task – the transition to an innovative development path based on the introduction of the achievements of science, technology in all spheres of the economy, especially in the machine-building industry.

The machine-building industry is one of the science-intensive industries that have a high scientific and technological development potential in the structure of the national production of Ukraine. Due to the tendencies of globalization and sustainability of the world economy, the machine-building industry of Ukraine has worsened its performance indicators, which resulted in a significant decrease in competitiveness indicators in world markets. In general, domestic mechanical engineering has a number of problems:

1 Using of outdated equipment and technologies in the industry which leads to high maintenance costs.

2 Presence of interacting service systems of the industry, which are characterized by a high degree of obsolescence.

3 Low investment attractiveness of Ukrainian machine-building enterprises, which leads to problems with financing, what creates difficulties for restructuring and developing programs to transform the development strategy.

4 Achievement of low indicators in the direction of production cooperation in the context of globalization of economic processes.

5 Lack of qualified personnel.

Despite the negative trends, the industry remains complex and multifaceted with a proportional allocation of production facilities within the country (Pihul' & Pihul', 2018). The adaptation of the branches of the high-tech sector of the Ukrainian industry to market conditions is the most important task of the national economy. This adaptation involves the arrangement of industrial complexes to the market environment and ensuring sustainable development. At the present stage of development, the machine-building industry, as the most science-intensive direction, is characterized by the absence of stable development trends and significant disproportionality. The global market for engineering products continues to be sustainable and is constantly expanding across all sectors. In the interstate market of equipment and technology, due to the growing number of exporting countries, the competition between them is intensifying.

However, on the other hand, international technological cooperation is intensively developing in the machine-building industry. Expensive scientific and technical developments and the organization of a full production cycle lead to the specialization of science and industry in countries with this sector of the economy.

Based on the different levels of development of machine-building enterprises, there are various mechanisms for changing the structure of the industry in the direction of increasing the competitiveness of machine-building products in the world market. For highly competitive machine-building industries on the international markets, it is necessary to strengthen their competitive advantage based on science-intensive products. For subjects of machine-building enterprises that are competitive in the national market, foreign experience should be attracted in creating a unique domestic product. For potentially competitive enterprises of the machine-building complex, it is necessary to conduct research on the possibility of building production facilities on the territory of Ukraine.

The national policy of industrial integration in the machine-building industry cannot yet be recognized as optimal (Korotkyj, 2015). As a rule, the economic and organizational measures taken are not based on scientific forecast and pursue the private interests of state institutions and companies. The currently used mechanism for restructuring domestic enterprises of the machine-building complex is not systemic and does not reflect industry specific features. In this connection, it is

extremely necessary to develop a comprehensive concept for the development of science-intensive industries in Ukraine, based on taking into account all the main factors of ensuring national security and national development in the near future.

One of the most effective methods of competition in the world market for machine-building products is the implementation of integration processes to strengthen the economic stability of enterprises and increase their scientific and technical potential. The strengthening of these processes in the world economy is evidenced by the emergence of transnational integrated structures. The 5-7 of the largest transnational structures account for more than 50% of the world production of high technology products. Our state should strive to actively participate in global organizations that regulate the world economy, increasing its authority in the world community. For this, it is necessary to allocate funds for scientific research in engineering at the level up to 2-3% of GDP, as it is done in developed countries.

Conclusions. The Ukrainian machine-building complex has a number of problems that hinder its development. The industry operates in difficult socio-economic conditions associated with a lack of demand for domestic products and funding sources; the presence of an outdated base of fixed assets; lack of skilled labor; lack of implemented innovations, modernization, reconstruction and compliance with the international quality system. Further activity of the machine-building complex of Ukraine in such conditions will lead to bankruptcy. Today, the situation requires a revision of the state strategy for the development of both the industry of Ukraine in general, and the machine-building industry in particular, as one of the most important and promising areas of the economy.

References

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