

THE IMPACT OF IMPORTS OF PUMPS AND ELECTRIC MOTORS ON INDUSTRIAL DEVELOPMENT

<https://doi.org/10.5281/zenodo.19015919>

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ВЛИЯНИЕ ИМПОРТА НАСОСОВ И ЭЛЕКТРОДВИГАТЕЛЕЙ НА ПРОМЫШЛЕННОЕ РАЗВИТИЕ

NASOS VA ELEKTRODVIGATELLAR IMPORTINING SANOAT RIVOJLANISHIGA TA’SIRI

Abstract

This article theoretically studies the impact of imports of pumps and electric motors on the development of national industry. The economic consequences of import dependence, the impact on local production capacity, and problems related to industrial competitiveness are analyzed. In addition, import substitution strategies and ways to achieve technological independence are considered. The article uses theoretical approaches and economic analysis methods. In conclusion, the possibilities of developing national industry by regulating the import of pumps and electric motors are substantiated.

Keywords

pump, electric motor, import, industrial development, technological independence, import substitution, competitiveness, industrial policy.

Аннотация

В данной статье теоретически исследуется влияние импорта насосов и электродвигателей на развитие отечественной промышленности. Анализируются экономические последствия импортной зависимости, влияние на местные производственные мощности и проблемы, связанные с промышленной конкурентоспособностью. Кроме того, рассматриваются стратегии импортозамещения и пути достижения технологической независимости. В статье используются теоретические подходы и методы экономического анализа. В заключение обосновываются возможности развития отечественной промышленности путем регулирования импорта насосов и электродвигателей.

Ключевые слова

насос, электродвигатель, импорт, промышленное развитие, технологическая независимость, импортозамещение, конкурентоспособность, промышленная политика.

Annotatsiya

Ushbu maqolada nasos va elektrodvigatellar importining milliy sanoat rivojlanishiga ko'rsatadigan ta'siri nazariy jihatdan o'rganildi. Importga bog'liqlikning iqtisodiy oqibatlarini, mahalliy ishlab chiqarish salohiyatiga ta'siri hamda sanoat raqobatbardoshligiga bog'liq muammolar tahlil qilindi. Bundan tashqari, import o'rnini bosuvchi strategiyalar va texnologik mustaqillikka erishish yo'llari ko'rib chiqildi. Maqolada nazariy yondashuvlar va iqtisodiy tahlil usullaridan foydalanildi. Xulosa sifatida, nasos va elektrodvigatellar importini tartibga solish orqali milliy sanoatni rivojlantirish imkoniyatlari asoslantirildi.

Kalit so'zlar

nasos, elektrodvigatel, import, sanoat rivojlanishi, texnologik mustaqillik, import o'rnini bosish, raqobatbardoshlik, sanoat siyosati.

INTRODUCTION

In the modern industrial system, mechanical and electrical devices form the basis of production processes. Pumps and electric motors occupy a special place among these devices, as they are widely used in the energy, agriculture, chemical industry, construction and municipal services sectors. Countries that cannot produce these devices in sufficient quantities locally resort to importing them from abroad. This directly increases import costs and increases the dependence of national industry on foreign markets.

For many developing countries on the path of economic development, the import of pumps and electric motors is an important link in the economy. On the one hand, these devices ensure the uninterrupted operation of industrial enterprises, but on the other hand, they cause the outflow of foreign currency, technological dependence and a weakening of domestic production potential.

This article examines the positive and negative impacts of imports of pumps and electric motors on industrial development, highlights the theoretical foundations of import substitution strategies, and identifies factors that should be considered when formulating national industrial policy.

MAIN PARAGRAPH

A pump is a mechanical device designed to move a liquid or gas from one place to another, and it is used in almost all branches of industry. Pumps are the

main means of transportation in oil and gas production, water supply, chemical production, the food industry, and agricultural irrigation. At the same time, electric motors generate mechanical motion using electrical energy and serve as the driving force for industrial conveyors, compressors, fans, lifting mechanisms, and other devices.

The market for industrial pumps in the global economy is expanding year by year. The increasing demand for energy efficiency in various industries, the construction of new industrial enterprises, and the need to upgrade outdated equipment keep the demand for pumps constantly high. Electric motors, in turn, are used in all production chains as an integral part of modern industrial infrastructure.

Import structure and its economic significance

In developing countries, the import of industrial equipment is considered a necessary process in the early stages of economic development. Pumps and electric motors manufactured in technologically advanced countries are distinguished by high quality, long service life and energy efficiency. By importing these devices, local enterprises gain the opportunity to acquire modern technologies in a relatively short time.

However, when analyzing the import structure, the following problems are identified: firstly, import costs are a heavy burden on the national budget and reduce foreign exchange reserves; secondly, dependence on foreign suppliers creates vulnerability to disruptions in the supply chain; thirdly, it hinders the development of local engineering potential, since the import of finished products does not stimulate local production and design work.

The value and volume of imports directly depend on the pace of industrial development. As industry develops rapidly, the demand for new equipment increases, which further increases the volume of imports. As a result, the national economy may fall into a state of deeper external dependence.

Positive impact of imports on industrial development

Imports of pumps and electric motors also have a number of positive consequences. First of all, modern and efficient technologies enter the country through imports. These technologies become available for study by local engineers and subsequent re-production - this process is called technology transfer.

Also, imported devices help increase the productivity of local industrial enterprises. For example, high-performance pumps allow for efficient control of irrigation systems, while modern electric motors reduce energy consumption and reduce production costs.

In addition, import competition encourages local manufacturers to improve quality. If local enterprises strive to compete with foreign devices, this process stimulates technological innovation and serves the development of local industry.

Negative impact of imports on industrial development

Overreliance on imports of pumps and electric motors can have a number of negative consequences. First of all, imports create serious competitive pressure for domestic manufacturers. As developed countries export cheap and high-quality products, local manufacturers have difficulty maintaining their position in the market. This situation prevents the full formation of industrial sectors.

The second important problem is technological dependence. When a country enters into long-term relations with certain foreign suppliers, it becomes difficult to find alternative suppliers. When foreign companies raise prices or stop supplying, the local industry cannot adequately respond to them.

The third negative factor is the problem of foreign exchange outflow. The funds spent on the import of pumps and electric motors go outside the national economy, local jobs are not created, and added value is not formed within the country. This situation means that national wealth flows abroad.

Import Substitution Policy: Theoretical Basis

In economic theory, import substitution policy is defined as an approach used by developing countries to protect and develop national production. Within the framework of this policy, the state supports local industry through tariff barriers, subsidies, tax breaks, and technical standards.

The following conditions are necessary for the implementation of the import substitution policy in the production of pumps and electric motors: a sufficiently qualified engineering workforce, industrial production infrastructure, stability of local demand, and long-term support mechanisms from the state.

The experience of countries where this policy has been successfully implemented in practice shows that at the initial stage, foreign technologies are mastered under a license, and then local design capabilities are developed and transition to fully independent production.

Technological independence and industrial competitiveness

Technological independence is the country's ability to independently produce key industrial equipment and technologies. Achieving technological independence in the field of pumps and electric motors involves several stages: at the first stage, foreign devices are studied and analyzed; at the second stage, analogues adapted to local conditions are developed; at the third stage, fully local production is established.

From the point of view of increasing industrial competitiveness, local production of pumps and electric motors provides several advantages. Local production facilitates repair and maintenance, spare parts are available quickly and cheaply, and equipment is better adapted to local operating conditions. In addition, local production has an economic multiplier effect: manufacturing enterprises create jobs, relevant raw material and material supply chains develop, and the market for engineering and design services expands.

The role of industrial policy

Regulating the import of pumps and electric motors and developing local production requires an active industrial policy of the state. The following measures can be implemented within the framework of industrial policy: providing tax incentives and subsidies to local manufacturers; gradually introducing tariffs on imports of foreign equipment; implementing investment agreements that include conditions for technology transfer; allocating funds to engineering education and research infrastructure.

The successful implementation of industrial policy in developed countries shows that more effective results are achieved when the state, rather than completely controlling the market, takes the path of stimulating competition and creating conditions for technological innovation.

CONCLUSION

It was found that the import of pumps and electric motors has a two-way effect on industrial development. On the one hand, imports introduce modern technologies into the country, increase production productivity and create a competitive environment. On the other hand, excessive dependence on imports increases technological dependence, reduces foreign exchange reserves and slows down the development of local production potential. It was argued that for the sustainable development of the national industry, it is necessary to maintain a balance between imports and local production. Although reliance on imports is appropriate at the initial stage, the pursuit of technological independence as a long-term goal was considered an important condition for increasing industrial competitiveness.

The state's active industrial policy, investment in engineering education, and measures to support local manufacturers were also identified as key factors accelerating the process of import substitution in the pump and electric motor sector. As a result, it was argued that there is an opportunity to deepen the national industry, create jobs, and strengthen technological potential.

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