## PRODUCTION POTENTIAL ASSESSMENT OF THE MACHINE BUILDING INDUSTRY OF THE REPUBLIC OF BELARUS TO ENSURE INDUSTRIAL SAFETY

### O. S. Bliznyuck

PhD in economics, Belarusian State University, Minsk, Republic of Belarus, e-mail: olgabliznyuck@yandex.by

The issues of industrial safety are now closely intertwined with the issues of the efficiency of the functioning of key sectors of the national economy, in particular, mechanical engineering of the Republic of Belarus. Mechanical engineering is the main «initiator» of technological innovations, which are reflected both in new forms of production and in increasing the level of technological efficiency of the entire economy, contributing to the acceleration of scientific and technological progress and the transition of the national economy to a new stage of development. Thus, the study of the issues of assessing the production potential of mechanical engineering is very relevant.

*Keywords:* machine-building complex; assessment of production capacities; export of machine-building of the Republic of Belarus; industrial safety.

# ОЦЕНКА ПРОИЗВОДСТВЕННОГО ПОТЕНЦИАЛА МАШИНОСТРОЕНИЯ РЕСПУБЛИКИ БЕЛАРУСЬ ДЛЯ ОБЕСПЕЧЕНИЯ ПРОМЫШЛЕННОЙ БЕЗОПАСНОСТИ

#### О. С. Близнюк

кандидат экономических наук, Белорусский государственный университет, г. Минск, Республика Беларусь, e-mail: olgabliznyuck@yandex.by

Вопросы промышленной безопасности в настоящее время тесно переплетаются с вопросами эффективности функционирования ключевых отраслей национальной экономики, в частности, машиностроения Республики Беларусь. Машиностроение является основным «инициатором» технологических инноваций, которые находят свое отражение как в новых формах производства продукции, так и в повышении уровня технологичности всей экономики, способствуя ускорению научно-технического прогресса и переходу национальной экономики на новый этап развития. Таким образом, исследование вопросов оценки производственного потенциала машиностроения являются весьма актуальными.

*Ключевые слова:* машиностроительный комплекс; оценка производственных мощностей; экспорт машиностроения Республики Беларусь; промышленная безопасность.

**Introduction.** Modern economic conditions pose questions to the country's economy about the need to ensure the operation of all critical and key industries. The machine-building complex directly relates to the most important sectors of the economy, on the success of the functioning of which national security issues directly depend.

**Materials and methods.** When writing the article, the method of analogies, analysis, and synthesis were used.

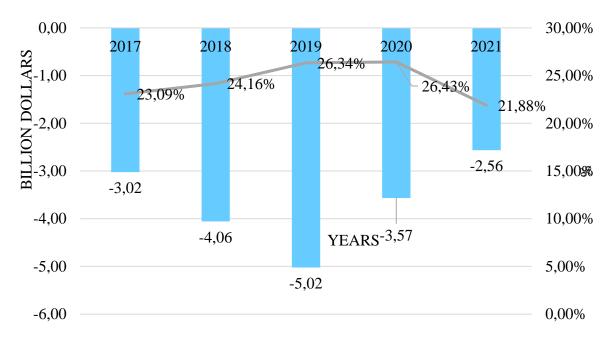
Results and discussion.

The issues of ensuring national security have always been directly strongly related to the issues of competitiveness.

One of the most important indicators of the competitiveness of the economy in foreign markets, and the machine-building complex in particular, is the market share, as well as the indicator of the export-import balance.

It should be noted that for 5 years from 2017–2021, there was a significant gap in the export-import balance of indicators of the functioning of the machine-building complex of the Republic of Belarus.

Thus, the largest gap in the export-import balance was observed in 2019 and amounted to -5.02 billion dollars. Since 2020, there has been a positive tendency to reduce the gap between exports and imports of mechanical engineering of the Republic of Belarus. Thus, in 2021, the balance of exports and imports of mechanical engineering amounted to -2.56 billion dollars, which is almost 0.46 billion dollars higher than the same indicator in 2017. Nevertheless, the share of mechanical engineering imports in the total imports of mechanical engineering is 21.88 % by the end of 2021. It is worth noting that this indicator for 2019 amounted to 26.34 % (figure 1). Thus, the analysis of statistical data suggests the need to maximize the efficiency of the machine-building complex of the Republic of Belarus to ensure national and industrial safety.



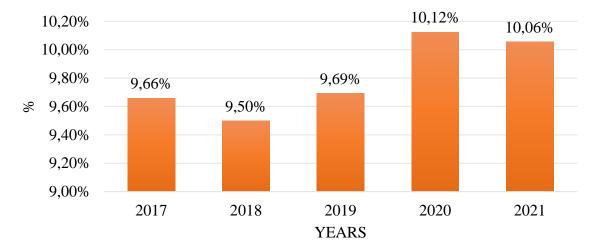
THE BALANCE OF EXPORTS AND IMPORTS OF MACHINE-BUILDING OF THE REPUBLIC OF BELARUS, BILLION DOLLARS.

### THE SHARE OF MACHINE-BUILDING IMPORTS IN THE TOTAL IMPORTS OF THE REPUBLIC OF BELARUS, %

Fig. 1. Dynamics of the share of machine-building imports in the total imports of the Republic of Belarus, the balance of exports and imports of machine-building of the Republic of Belarus, billions of dollars, % from 2017–2021 The author's self-development based on [1–3].

It is worth noting that the Republic of Belarus has huge production resources and a production base created during the Soviet Union. In particular, for machine-building organizations of the Republic of Belarus, the total volume of industrial organizations of the Republic of Belarus is almost 10 % (figure 2), which provide more than 15 % of the total output of industrial products in the Republic of Belarus (figure 3).

Conclusion. Thus, it should be noted that the Republic of Belarus has a good production potential of the machine-building complex of the Republic of Belarus, which is expressed both in the availability of production capabilities and human resources, which together can ensure the uninterrupted and sustainable functioning of domestic machine-building, which is a guarantee and guarantee of industrial safety.



*Fig.* 2. Dynamics of the share of machine-building organizations in the total number of industrial organizations of the Republic of Belarus, % from 2017–2021 The author's self-development based on [1–3].

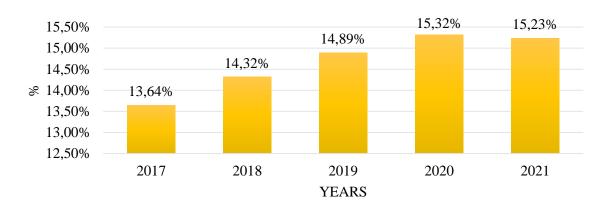
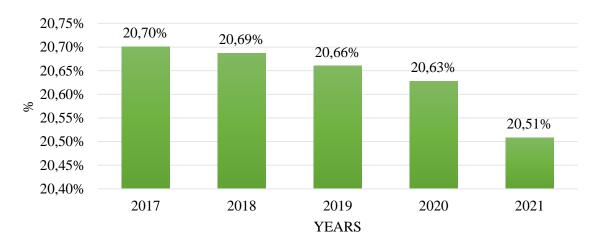


Fig. 3. Dynamics of the share of machine-building production in the total volume of industry of the Republic of Belarus, % from 2017–2021 The author's self-development based on [1–3].

In addition, almost 20 % or 1/5 of all workers employed in the industry of the Republic of Belarus are involved in the machine-building sector of the economy (figure 4).



*Fig. 4.* Dynamics of the share of the average number of machine-building workers of the Republic of Belarus in the total number of industrial workers, % from 2017–2021 The author's self-development based on [1–3].

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