ECONOMICS AND MANAGEMENT OF NATIONAL ECONOMY TRANSFORMATION

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SUSTAINABLE DEVELOPMENT OF THE PRODUCTION ENTITIES IN THE CONDITIONS OF MACROECONOMIC INSTABILITY

The main engine of economic development in an economically prosperous country is the production of both tangible and intangible goods (services) consumed within the country and abroad. The analysis of statistical data indicates that Ukraine has been a supplier of resources and raw materials in foreign markets for a long time, proving the low development of production technologies and the urgent need for innovative transformations of the production sector of the economy. In particular, the dynamics of industrial production in Ukraine and exports for 2014–2019 is shown in Fig. 1. The largest share of industrial products of metallurgy and agro-industrial complex (Table 1). Analysis of the data indicates a significant share of

metal exports from the total production, which during the analysed period ranges from 77% to 86%, the dynamics of domestic consumption fluctuates, respectively, from 23% to 14% [6]. Thus, most of the production is exported, which is explained by the relatively small domestic consumption volumes in the presence of a strong production base. The importance of the metallurgical industry and agriculture as the main component of the agro-industrial complex in the structure of the national economy of Ukraine is determined by the main indicators given in Table 1.

Table 1

Year	GDP, million \$	Gross value of products produced in the agro- industrial complex, million \$	The share of agriculture in GDP	Gross value of manufactured metallur- gical products, million \$	The share of metallurgy in GDP	Chain increase in the share of metallurgy in GDP	Chain increase in the share of agro-industrial complex in GDP
2012	175781	34742,9	19,8%	23795,2	13,5%	-	-
2013	183310	35996,0	19,6%	21445,8	11,7%	-14%	4%
2014	131805	29021,2	22,0%	17941,2	13,6%	16%	-19%
2015	90615	24464,5	27,0%	11046,5	12,2%	-10%	-16%
2016	93270	23195,8	24,9%	10000,0	10,7%	-12%	-5%
2017	112154	25307,6	22,6%	12784,8	11,4%	6%	9%
2018	130832	27465,3	21,0%	14871,8	11,4%	0%	9%
2019	153781	28365,2	18,4%	13246,8	8,6%	-24%	3%

Comparative analysis of the importance of metallurgy and agro-industrial complex in the GDP of Ukraine

Source: created according to [1; 3; 4]



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- - Mining and quarrying (outside the country) B
- --- Manufacturing (outside the country) C

Figure 1. Dynamics of production and exports of industrial production of Ukraine,

UAH million

Source: created according to [3]

The metallurgical industry and agro-industrial complex are important sectors of the national economy, which together make up about 27% of the country's GDP and largely form the overall structure of the national economy. The study of the correlation between the value of output in the metallurgical industry and the country's GDP (Fig. 2) showed a direct and significant relationship, which confirms the value of the correlation coefficient -0.876.

The study of the correlation between the cost of production in the agro-industrial complex with the country's GDP (Fig. 3) showed a direct and significant relationship, which confirms the value of the correlation coefficient of 0.95. Based on the calculated correlation coefficients, we can say that the development of agriculture and the metallurgical industry directly affect the well-being of the national economy.



Gross value of manufactured metallurgical products, million \$

Figure 2. Model of correlation dependence of GDP on the value of metallurgical products

Source: created according to [1; 4]



Figure 3. Model of correlation dependence of GDP on the produced value of agricultural products

Source: created according to [1; 4]

The leading companies in the metallurgical industry of Ukraine actually fully operate in foreign markets, exporting up to 90% of all products, which indicates their almost complete export orientation. Agricultural enterprises, in turn, export about ³/₄ manufactured products, which also confirms its export orientation. Unfortunately, Ukrainian steelmaking capacity has hardly been replaced over the last 10 years. The reduction in the production of metal products has led, accordingly, to a reduction in the level of their loading. However, such large industry-forming enterprises as the Mariupol Metallurgical Plant and Azovstal use almost all their capacity (over 75%), ArcelorMittal Kryvyi Rih – over 70%, which indicates a structural redistribution of market share by metal products [4; 5].

Instead, the enterprises of the agro-industrial complex only increase their production capacity, which is manifested in the growth in recent years of exports of agricultural products [6]. The level of depreciation of fixed assets of the agro-industrial complex is about 38%, which is one of the lowest indicators in the economy of Ukraine. The low level of depreciation of fixed assets is caused by the emergence of new enterprises in the industry, which is a consequence of favorable foreign trade policy in the agro-industrial sector between Ukraine and the EU. Given the active development of the agro-industrial sector and the increase in the structural share in exports of goods, which occurs both in absolute and relative terms, it can be argued that the products of the sector are competitive in the international market. Analysis of analytical data shows that in conditions of fierce competition, companies seek to ensure their solvency in the short term. The COVID-19 pandemic is a significant negative factor that has affected both the social and economic life of society. A large number of business entities were forced to cease their activities due to the inability to operate in these conditions. Therefore, we believe that in order to ensure the balanced development of all subjects of the economic system, a national development strategy should be developed. This strategy should be based on four components of sustainable development: economic, social, environmental and innovative. It is in the context of rapid changes in the information society of Industry 4.0 that the necessary additional element of sustainable development is to consider the potential of innovative development of the business entity and the adaptation of its activities to macroeconomic instability. This approach will

ensure the balanced development of the national economy and all its economic actors.

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