МАКРОЕКОНОМІЧНІ ТА РЕГІОНАЛЬНІ ПРОБЛЕМИ РОЗВИТКУ ПРОМИСЛОВОСТІ

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THE IMPACT OF THE WAR ON UKRAINE'S FOREIGN TRADE

The article considers theoretical and practical aspects of the war's impact on Ukraine's foreign trade. The choice of the topic is due to the need to find new ways to minimize the negative impact of the war on the country's foreign trade. In the article, general scientific methods were used: methods of synthesis and analysis; data systematization and comparison; and SWOT-analysis. The information base of this article consisted of statistical data of the State Statistics Service of Ukraine, articles by scientists, and Internet sources.

The article analyses the changes in the structure of foreign trade in goods in Ukraine in 2022 compared to 2021.

An analysis of changes in the regional structure of Ukraine's foreign trade is carried out. It was found that the exports of Vinnytsia, Volyn, Zakarpattia, Lviv, Odesa, Rivne, Ternopil, Cherkasy, and Chernivtsi regions in 2022 were higher than in 2021. These regions concentrated significant export potential during the war.

The main destructive factors of Ukraine's foreign trade development during the war were identified. These factors are: decrease in export and import volumes; negative foreign trade balance; logistical problems, restrictions on the movement of goods, destruction of infrastructure. It is predicted that as a result of the war, the commodity structure of production in Ukraine will change, preference will be given to defense industries.

Recommendations for the Ukrainian government to minimize the negative effects of the war on Ukraine's foreign trade are proposed, including: tax benefits for Ukrainian entrepreneurs, support for small and medium-sized enterprises, diversification of product sales markets, development of the domestic market and stimulation of domestic consumption, promotion of high-tech exports, reconstruction and restoration of the infrastructure of Ukraine, etc. The scientific novelty of the article lies in the improvement of ways to minimize the negative impact of the war on Ukraine's foreign trade. The practical value of the article lies in the development of relevant recommendations.

It is established that the development of foreign trade in Ukraine will contribute to the stabilization of the national economy and ensure economic growth in the post-war period.

Keywords: exports, imports, goods, regions of Ukraine, industry.

JEL: O24, P33

Russia's full-scale war against Ukraine, which began on February 24, 2022, had a negative impact on all spheres, including foreign trade. Logistic chains were interrupted, ports and supply chains were blocked, infrastructure

was destroyed, restrictions were placed on the movement of goods, security and resource issues arose (Simakhova, 2022). Thus, direct losses for Ukraine's economy from the war amounted to 135 billion US dollars, and the



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needs for reconstruction and restoration amounted to 411 billion US dollars (Погарська, 2023). The war in Ukraine had a negative impact not only on the domestic market, but also on the foreign market, as goods were not delivered in the same volume as in previous years. Due to logistical problems, there have been changes in the transportation of goods, with a 55% decrease in the transportation of exports of goods by sea in 2022 and an increase in the transportation of exports of goods by rail (by 3.4%) and truck (by 32.4%) (Погарська, 2023). The problems of the impact of the war on the global economy and trade were studied by such scientists as M. Ruta (Ruta, 2022), Z. Darvas, C. Martins (Darvas, Martins, 2022), Y. Fang et al. (Fang, 2022), who highlighted the main factors and directions of the war's impact on trade and investment. At the regional level, the impact of the war in Ukraine was studied by N. Stukalo et al. (Stukalo, Steblianko, Simakhova, Doroshkevych, 2018), who emphasised the main directions of the negative effect of hostilities on European security and socio-economic development. In the article, I. Us, N. Havrylenko analysed operational data on the value and physical volumes, as well as the geographical structure of this trade in the context of protracted military aggression and large-scale missile attacks by the Russian Federation on the entire territory of Ukraine, which are constantly continuing (Ус, Гавриленко, 2022).

The war in Ukraine, through its impact on international trade, has a negative effect on food security and global food markets, as stated in the study by Ben Hassen and H. El Bilali (Ben Hassen, Bilali, 2022). Scientists emphasize that if the war in Ukraine drags on, the food crisis will intensify, which will become a challenge for many countries, especially those that depend on food imports, such as the countries of the Middle East and North Africa. The authors emphasize that the war in Ukraine started at an unfavorable time for global food markets, as food prices were already high due to supply chain disruptions caused by the COVID-19 pandemic, high global demand and poor harvests in some countries (Ben Hassen, Bilali, 2022).

The scholars of World Bank Group analyzed the effect of the war in Ukraine for the

global trade and described the regional and global impact, global policy responses and sanctions on Russia (Guenette, Kenworthy, Wheeler, 2022). Thus, there are obviously many aspects to the impact of the war in Ukraine on the development of trade relations.

Taking into account the relevance of this issue, the *purpose of this article* is to study the impact of the war on Ukraine's foreign trade.

Analyzing the impact of the war on Ukraine's foreign trade can include various aspects. First of all, it is worth making calculations in the following areas:

- changes in trade volumes, as well as analysis by trade groups to find out which product groups or sectors were most affected or, conversely, increased due to the war;
 - changes in prices and exchange rates;
 - changes in foreign trade partners;
 - loss of foreign trade volumes;
- changes in the regional structure of foreign trade;
- to single out the main destructive factors in the development of Ukraine's foreign trade in wartime conditions;
- to assess the possibility of recovery and prospects for trade development in the future after the war.

In this study, general scientific methods were used: methods of synthesis and analysis; data systematization and comparison. The study used the SWOT analysis method to identify the threats of the war in Ukraine to foreign trade. The information base of this study consisted of statistical data of the State Statistics Service of Ukraine, articles by scientists, and Internet sources.

According to the available statistical information, the export of goods in Ukraine in 2022 amounted to 44.1 billion dollars, which is only 64.9% of the indicator of 2021. The import of goods in Ukraine in 2022 amounted to 55.3 billion dollars, which was only 75.9% of the 2021 level (State Statistics Service of Ukraine, 2022). Thus, the foreign trade balance in 2022 was negative.

The commodity structure of Ukraine's foreign trade in 2022 also underwent significant changes compared to 2021 (Table 1).

Table 1 – Commodity Pattern of Foreign Trade of Ukraine in 2022

| Table 1 – Commodity Pattern of Foreign Trade of Ukraine in 2022 | | | | | | | | |
|---|------------|-------------|----------|------------|-------|----------|--|--|
| Commodity code and title | E | xports | | Imports | | | | |
| by Ukrainian Classification | thsd. | in % | % of the | thsd. | in % | % of the | | |
| of Commodities in Foreign | USD | to | total | USD | to | total | | |
| Trade | USD | 2021 | volume | USD | 2021 | volume | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |
| Total | 44148774.6 | 64.9 | 100.0 | 55273492.5 | 75.9 | 100.0 | | |
| of which | | | | | | | | |
| I. Live animals and livestock | | | | | | | | |
| products | 1472435.5 | 109.5 | 3.3 | 1174848.8 | 73.7 | 2.1 | | |
| II. Plant products | 13478480.9 | 86.7 | 30.5 | 1926622.1 | 90.4 | 3.5 | | |
| III.15 Animal or plant fats and | | | | | | | | |
| oils | 5949360.7 | 84.5 | 13.5 | 293881.0 | 66.2 | 0.5 | | |
| IV. Finished food industry pro- | | | | | | | | |
| ducts | 2496966.0 | 6.9 | 5.7 | 2554735.0 | 71.4 | 4.6 | | |
| 16 preparations from meat, fish | 30841.0 | 106.8 | 0.1 | 142617.1 | 78.2 | 0.3 | | |
| 17 sugar and sugar confectionery | 299610.7 | 121.5 | 0.7 | 70192.2 | 40.9 | 0.1 | | |
| 18 cocoa and cocoa preparations | 147032.8 | 65.6 | 0.3 | 246432.9 | 55.8 | 0.4 | | |
| 19 preparations of grains | 251824.6 | 60.7 | 0.6 | 246362.6 | 84.7 | 0.4 | | |
| 20 products of vegetables pro- | | | | | | | | |
| cessing | 222609.7 | 111.0 | 0.5 | 214903.8 | 82.1 | 0.4 | | |
| 21 other mixed foodstuffs | 119729.7 | 675 | 0.3 | 415140.3 | 74.0 | 0.8 | | |
| 22 alcoholic and non-alcoholic | | | | | | | | |
| beverages. vinegar | 204708.1 | 65.9 | 0.5 | 489771.2 | 68.1 | 0.9 | | |
| 23 remains and wastes of food | | | | | | | | |
| industry | 1081952.8 | 62.4 | 2.5 | 362018.5 | 104.4 | 0.7 | | |
| 24 tobacco and industrial substi- | | | | | | | | |
| tutes of tobacco | 138656.6 | 30.6 | 0.3 | 367296.4 | 61.0 | 0.7 | | |
| V. Mineral products | 4323469.3 | 51.4 | 9.8 | 13112098.6 | 87.6 | 23.7 | | |
| 25 salt, sulphur, soil and stones | 202740.9 | 39.7 | 0.5 | 224579.7 | 83.4 | 0.4 | | |
| 26 ores, slags, ashes | 3080548.5 | 43.3 | 7.0 | 87166.8 | 23.6 | 0.2 | | |
| 27 mineral fuel, petroleum and | | | | | | | | |
| petroleum distillation products | 1040179.9 | 132.6 | 2.4 | 12800352.1 | 89.3 | 23.2 | | |
| VI. Products of chemical and al- | | | | | | | | |
| lied industries | 1287184.2 | 45.7 | 2.9 | 6302747.3 | 64.7 | 11.4 | | |
| VII. Polymeric materials, plas- | .= | | | | · | - 0 | | |
| tics and articles of them | 470206.4 | 42.6 | 1.1 | 3247150.3 | 67.4 | 5.9 | | |
| VIII. Raw leather and curry | 4044020 | 60.1 | 0.0 | 240404 | 00.4 | 0.4 | | |
| leather | 104482.9 | 63.1 | 0.2 | 240494.2 | 80.1 | 0.4 | | |
| IX. Wood and articles of wood | 1885422.0 | 94.0 | 4.3 | 197576.6 | 44.7 | 0.4 | | |
| X. Paper bulk from wood or | 2775141 | 50 0 | 0.6 | 7602454 | 60.3 | 1.4 | | |
| other vegetable fibres | 277514.1 | 52.0 | 0.6 | 760245.1 | 68.3 | 1.4 | | |
| XI. Textiles materials and arti- | (71545.0 | 77. | 1.7 | 2492090 1 | 02.2 | 4.5 | | |
| cles of textiles | 671545.0 | 77.6 | 1.5 | 2482989.1 | 93.3 | 4.5 | | |
| XII. Footwear, hats umbrellas | 175073.2 | 92.2 | 0.4 | 570744.7 | 99.0 | 1.0 | | |
| XIII. Products from stone, gyps, | 200657.0 | 52.0 | 0.7 | (50010.0 | (0.0 | 1.2 | | |
| cement | 300657.0 | 52.9 | 0.7 | 659019.0 | 69.8 | 1.2 | | |

Ending of table 1

| | | | | | 2 | g of thore I |
|----------------------------------|-----------|------|------|-----------|------|--------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| XIV. 71 Natural or cultured | | | | | | |
| pearls, precious stones, metals | | | | | | |
| and preparations thereof | 40989.1 | 31.9 | 0.1 | 70187.8 | 32.0 | 0.1 |
| XV. Base metals and prepara- | | | | | | |
| tions thereof | 6004098.5 | 37.5 | 13.6 | 2590689.1 | 59.2 | 4.7 |
| XVI. Machines, equipment and | | | | | | |
| mechanisms, electric and tech- | | | | | | |
| nical equipment | 3735990.3 | 71.0 | 8.5 | 9181622.5 | 64.6 | 16.6 |
| XVIII. Optical, cinematographic | | | | | | |
| apparatus | 121538.2 | 71.1 | 0.3 | 1172074.3 | 77.1 | 2.1 |
| XX Different industrial products | 972465.3 | 77.8 | 2.2 | 713212.8 | 53.1 | 1.3 |
| XXI. 97 Art articles | 1113.3 | 41.7 | 0.0 | 478.3 | 7.3 | 0.0 |

Source: (State Statistics Service of Ukraine, 2022).

Statistical information is given in table. 1 shows that in 2022 the volume of the following goods increased in the export of Ukraine compared to 2021: Live animals and livestock products (109.5% to the level of 2021), preparations from meat, fish (106.8 %), sugar and sugar confectionery (121.5%), products of vegetable processing (111%), mineral fuel, petroleum and petroleum distillation products (132.6%). These are agricultural products and mineral resources. For all other types of goods, Ukrainian exports fluctuated at the level of 30-60% of the level of 2021, that is, the world market did not receive these goods from Ukraine. Regarding imports, in 2022, for all types of goods, except for remains and wastes of food industry, the level of imports in Ukraine was lower than in 2021.

Exports of the following goods decreased the most in 2022: ferrous metals - by USD 9.4 billion (by 67.5% compared to 2021); ores, slag and ash - by USD 4 billion (by 57.6% compared to 2021); and grain crops - by USD 3.2 billion (by 26.2% compared to 2021) (Xapaxypcax, 2022).

Certain changes in foreign trade in services also occurred in Ukraine during 2022 (Table 2).

Table 2 – Structure of foreign trade by types services in 2022

| | Exports | | | | | | | |
|-----------------------------|----------|------|-----------|---------|-------|-----------|----------|--|
| According to Classification | thsd. | in % | in % of | thsd. | in % | in % of | Balance | |
| of External Economic | USD | of | the total | USD | of | the total | Balance | |
| Services | USD | 2021 | volume | USD | 2021 | volume | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | |
| Total | 9166030 | 71,7 | 100 | 3015093 | 37,8 | 100 | 6150937 | |
| of which | | | | | | | | |
| Services for the processing | | | | | | | | |
| of material resources | 921943,8 | 59,9 | 10,1 | 4228,1 | 42,3 | 0,1 | 917715,7 | |
| Services for the processing | | | | | | | | |
| of goods in the domestic | | | | | | | | |
| economy | 1609,3 | 24,7 | 0,2 | 1181,6 | 170,7 | 28 | 427,7 | |
| Services for the processing | | | | | | | | |
| of goods abroad | 920334,5 | 60,1 | 99,8 | 3046,5 | 32,8 | 72,1 | 917288 | |
| Services for repair and | | | | | | | | |
| technical maintenance not | | | | | | | | |
| related to other categories | 129879 | 42,9 | 1,4 | 47042,9 | 61,4 | 1,6 | 82836,1 | |

Continuation of table 2

| | , | 1 | | | | ontinuatio | on of table 2 |
|---|----------|-------|------|----------|-------|------------|---------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Transport services | 2963197 | 63,6 | 32,3 | 1040300 | 58,5 | 34,5 | 1922897 |
| Sea transport services | 256081,2 | 41,5 | 8,6 | 416961,6 | 69,8 | 40,1 | -160880 |
| River transport services | 48438,8 | 133 | 1,6 | - | - | ı | - |
| Air transport services | 374149,2 | 35,8 | 12,6 | 171404,2 | 30,2 | 16,5 | 202744,9 |
| Rail transport services | 145433,9 | 31,5 | 4,9 | 116790,9 | 43,2 | 11,2 | 28643 |
| Motor transport services | 406670,3 | 98,4 | 13,7 | 223767,9 | 94,6 | 21,5 | 182902,4 |
| Other auxiliary and addi- | | | | | | | |
| tional transport services | 202608 | 57,7 | 6,8 | 82365,9 | 169,9 | 7,9 | 120242,2 |
| Services connected with | | | | | | | |
| travels | 146248,6 | 42,6 | 1,6 | 188331,9 | 11,8 | 6,3 | -42083,3 |
| Services for construction | 26247,4 | 44,7 | 0,3 | 17871,9 | 26,5 | 0,6 | 8375,5 |
| Services for construction | | | | | | | |
| abroad | 22242 | 46,4 | 84,7 | 7991,2 | 19,4 | 44,7 | 14250,8 |
| Services for construction | | | | | | | |
| in domestic economy | 4005,4 | 37,1 | 15,3 | 9880,7 | 37,8 | 55,3 | -5875,3 |
| Services for insurance | 22727,3 | 18,3 | 0,3 | 68923,8 | 50,5 | 2,3 | -46196,5 |
| Services connected with fi- | | | | | | | |
| nancial activity | 162411,1 | 176,7 | 1,8 | 366659,3 | 71,7 | 12,2 | -204248 |
| Royalties and other ser- | | | | | | | |
| vices connected with usage | | | | | | | |
| of intellectual property | 31681,5 | 51,3 | 0,4 | 292952,8 | 46,8 | 9,7 | -261271 |
| Franchise services and | | | | | | | |
| trademark use | 4071 | 44,9 | 12,9 | 113365,1 | 48,9 | 38,7 | -109294 |
| Licensing services | 19044,3 | 47 | 60,1 | 137700,1 | 47,3 | 47 | -118656 |
| Services for patent activi- | | | | | | | |
| ties | 1355,8 | 35,3 | 4,3 | 236,8 | 32 | 0,1 | 1119 |
| Other royalties | 7210,3 | 86,6 | 22,8 | 41650,9 | 41 | 14,2 | -34440,6 |
| Services in the sphere of | | | | | | | |
| telecommunications, | | | | | | | |
| computer and information | | | | | | | |
| services | 3712947 | 92,1 | 40,5 | 414222,2 | 58,1 | 13,7 | 3298725 |
| Telecommunications | | | | | | | |
| services | 124207,7 | 121,7 | 3,4 | 91177,2 | 85 | 22 | 33030,6 |
| Computer services | 2751703 | 87 | 74,1 | 239966,2 | 59,8 | 57,9 | 2511737 |
| Information services | 837036,6 | 109 | 22,5 | 83078,8 | 40,6 | 20,1 | 753957,8 |
| Business services | 1026021 | 68,2 | 11,2 | 537301,2 | 47 | 17,8 | 488720,1 |
| R&D services | 98222,5 | 63,6 | 9,6 | 23273,2 | 64,3 | 4,3 | 74949,3 |
| Professional and consul- | | | | | | | |
| ting services | 540703,7 | 70,6 | 52,7 | 378035,8 | 58,6 | 70,4 | 162668 |
| Scientific and technical | | | | | | | |
| services | 212095,1 | 64,3 | 20,7 | 48070,9 | 36,5 | 9 | 164024,2 |
| Services for treatment and | | | | | | | |
| depollution | | | | 21,9 | 13,4 | 0 | -21,9 |
| Agriculture and mining | | | | | | | |
| 1 1011111111111111111111111111111111111 | | | | | | | |

Ending of table 2

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|----------------------------|----------|------|------|---------|-------|------|----------|
| Services for operational | | | | | | | |
| leasing | 25839,3 | 52,1 | 2,5 | 49356,8 | 21,5 | 9,2 | -23517,5 |
| Services related to trade | | | | | | | |
| and intermediary services | 31569,1 | 60,6 | 3,1 | 12852,1 | 52,4 | 2,4 | 18717 |
| Other business services | 115616,3 | 78,5 | 11,3 | 23911,9 | 33,9 | 4,5 | 91704,4 |
| Services rendered to indi- | | | | | | | |
| vidual persons, cultural | | | | | | | |
| and recreation services | 21487,4 | 43,6 | 0,2 | 17257,6 | 79,1 | 0,6 | 4229,8 |
| Audio-visual and related | | | | | | | |
| services | 11471,7 | 60,2 | 53,4 | 12256,9 | 77,5 | 71 | -785,2 |
| Cultural and recreational | | | | | | | |
| services | 1663,3 | 84,2 | 7,7 | 3476,2 | 128,9 | 20,1 | -1812,9 |
| Other individual services | 8352,4 | 29,6 | 38,9 | 1524,5 | 46,3 | 8,8 | 6827,9 |
| State and government ser- | | | | | | | |
| vices | 1238,6 | 13,3 | 0 | 20000,9 | 1,8 | 0,7 | -18762,4 |

Source: (State Statistics Service of Ukraine, 2022).

Ukraine's foreign trade in services in 2022 declined significantly compared to 2021, but the trade balance was positive. According to Table 2, exports of services decreased by 29.3% compared to 2021, while imports decreased by 62.2%. As for exports of services, public and governmental services and insurance services decreased the most in 2022 compared to 2021. However, exports of the following services increased significantly in 2022: financial services (by 76.7%), river transport services (by 33%), telecommunications services (by 21.7%), and information services (by 9%).

As for the structure of imports of services, in 2022, imports of such services as public and government services, travel services, and services for treatment and deportation decreased significantly. In 2022, the following services increased significantly in imports: Services for the processing of goods in the domestic economy (by 70.7%), other support and transportation services (by 69.9%), cultural and recreational services (by 28.9%). Such changes in foreign trade in services are related to changes in the transportation of goods abroad and domestic restrictions on the processing of resources due to the war in Ukraine.

In the regional structure of foreign trade of Ukraine, Kyiv, Volyn, Lviv regions and the city of Kyiv had the largest negative foreign trade balance, which imported more

than they exported (Table 3). The vast majority of regions of Ukraine had a positive foreign trade balance. Moreover, the export of Vinnytsia, Volyn, Zakarpattia, Lviv, Odesa, Rivne, Ternopil, Cherkasy, and Chernivtsi regions in 2022 was greater than in 2021. This is due to the fact that these regions are mainly border regions and therefore carried out more active export activity. Imports in 2022 were higher than in 2021 in the Volyn, Zhytomyr, Lviv, Khmelnytskyi, and Chernivtsi regions (Table 3).

Poland (more than 5.6 billion dollars or 15.4%), Romania (8.2%), and Turkey (6.6%) became the leading countries in Ukrainian exports in 2022. China dropped from the first step in 2021 immediately to the fourth (5.3% of Ukraine's total exports) (State Customs Service of Ukraine, 2022). China (15%), Poland (9.9%), Germany (8.3%) became the leading countries in terms of imports to Ukraine in 2022 (State Customs Service of Ukraine, 2022). In general, in the regional context, exports of goods from Ukraine to the CIS countries decreased by 2.9 times, to Africa by 2.6 times, to Asia by 2.3 times, but increased by 4.8% to Europe (Погарська, 2023). It is obvious that as a result of the war, Ukraine has reoriented itself towards its Western partners, who are supporting it in this difficult time, as well as problems with the transportation of goods over long distances.

Table 3 – Regional volumes of foreign trade in Goods in 2022

| | Exports | | | Im | | | |
|-----------------|------------|-------|-------|------------|-------|-------|-------------|
| | | | % of | | • | % of | |
| | 41 1 | in % | the | 41 1 | in % | the | D-1 |
| | thsd. | to | total | thsd. | to | total | Balance |
| | USD | 2021 | volu- | USD | 2021 | volu- | |
| | | | me | | | me | |
| Ukraine | 44148774.6 | 64.9 | 100.0 | 55273492.5 | 75.9 | 100.0 | -11124717.9 |
| of which | | | | | | | |
| Vinnytsya | 1601459.6 | 122.3 | 3.6 | 622548.2 | 89.1 | 1.1 | 978911.4 |
| Volyn | 1066621.4 | 128.1 | 2.4 | 2032337.8 | 112.0 | 3.7 | -965716.4 |
| Dnipropetrovsk | 6250731.5 | 51.4 | 14.2 | 3948305.9 | 67.2 | 7.1 | 2302425.6 |
| Donetsk | 284077.6 | 4.0 | 0.6 | 139077.3 | 7.4 | 0.3 | 145000.3 |
| Zhytomyr | 718104.3 | 93.1 | 1.6 | 1205918.2 | 175.0 | 2.2 | -487813.9 |
| Zakarpattya | 1970465.4 | 117.0 | 4.5 | 1645390.6 | 97.0 | 3.0 | 325074.8 |
| Zaporizhzhya | 2808726.3 | 59.2 | 6.4 | 1195329.3 | 58.4 | 2.2 | 1613397.0 |
| Ivano-Frankivsk | 684595.4 | 58.8 | 1.6 | 597917.0 | 60.1 | 1.1 | 86678.4 |
| Kyiv | 2098829.7 | 82.3 | 4.8 | 3620712.1 | 64.7 | 6.6 | -1521882.4 |
| Kirovohrad | 873374.2 | 85.5 | 2.0 | 249461.6 | 85.3 | 0.5 | 623912.6 |
| Luhansk | 8704.4 | 5.2 | 0.0 | 12316.8 | 4.7 | 0.0 | -3612.4 |
| Lviv | 3025192.9 | 103.2 | 6.9 | 5387862.1 | 113.3 | 9.7 | -2362669.2 |
| Mykolayiv | 1643333.9 | 47.5 | 3.7 | 733328.5 | 61.4 | 1.3 | 910005.4 |
| Odesa | 2400406.4 | 141.4 | 5.4 | 2121488.8 | 91.8 | 3.8 | 278917.6 |
| Poltava | 1866989.1 | 58.5 | 4.2 | 1201028.2 | 63.9 | 2.2 | 665960.9 |
| Rivne | 744198.0 | 105.7 | 1.7 | 550203.5 | 95.4 | 1.0 | 193994.5 |
| Sumy | 723998.6 | 68.2 | 1.6 | 582510.9 | 67.9 | 1.1 | 141487.7 |
| Ternopil | 780476.4 | 115.0 | 1.8 | 518197.6 | 97.7 | 0.9 | 262278.8 |
| Kharkiv | 880120.7 | 48.9 | 2.0 | 1251005.0 | 52.1 | 2.3 | -370884.3 |
| Kherson | 56990.5 | 13.8 | 0.1 | 36982.8 | 13.8 | 0.1 | 20007.7 |
| Khmelnytskiy | 780233.2 | 85.0 | 1.8 | 707660.5 | 112.6 | 1.3 | 72572.7 |
| Cherkasy | 1295560.3 | 146.5 | 2.9 | 606709.6 | 57.6 | 1.1 | 688850.7 |
| Chernivtsi | 286688.7 | 138.3 | 0.6 | 486152.0 | 249.9 | 0.9 | -199463.3 |
| Chernihiv | 717543.8 | 60.3 | 1.6 | 300378.9 | 62.1 | 0.5 | 417164.9 |
| Kyiv city | 10467803.9 | 68.3 | 23.7 | 22003142.0 | 70.9 | 39.8 | -11535338.1 |

Source: (State Statistics Service of Ukraine, 2022).

Despite the full-scale war and economic losses, inflation was 20.2% due to a set of anti-crisis measures taken by the Ukrainian government and the National Bank of Ukraine, as well as actions taken by international institutions to support Ukraine's economy. Fixing the hryvnia exchange rate was important in keeping inflation under control. Maintaining the exchange rate stability not only directly restrained the growth of inflation, the cost of goods and services (Погарська, 2023).

According to the Table 4 the main destructive factors of Ukraine's foreign trade in 2022 were: decrease in export and import volumes; negative foreign trade balance; logistical problems, restrictions on the movement of goods, destruction of infrastructure. As a result of the war, the commodity structure of production in Ukraine will change; preference will be given to defense industries. The war also affects the environment, which is also affected by other man-made factors (Popov, Iatsyshyn, Kovach, Artemchuk, Kameneva, Radchenko, Nikolaiev, 2021), which has a negative impact on the quality of agricultural products.

Table 4 – SWOT-analysis of the war impact on Ukrainian foreign trade

| Strengths | Weaknesses |
|--|---|
| 1. Growth in the transportation of exports by rail (by | 1. Reduction in the transportation of |
| 3.4%) and truck (by 32.4%). | goods by sea (by 55% in 2022). |
| 2. Positive trade balance in services in 2022. | 2. The export of goods to Ukraine in |
| 3. Exports of the following services increased signifi- | 2022 amounted to only 64.9% of the |
| cantly in 2022: financial services (by 76.7%), river | indicator of 2021. The import of |
| transport services (by 33%), telecommunications ser- | goods to Ukraine in 2022 amounted |
| vices (by 21.7%), and information services (by 9%). | to only 75.9% of the 2021 level. |
| 4. Growth in exports of goods to European countries | 3. Decrease in exports of goods in |
| (by 4.8%). | 2022: ferrous metals (by 67.5% by |
| | 2021); ores, slag and ash (by 57.6% |
| | by 2021); cereals (by 26.2% by |
| | 2021). |
| Opportunities | Threats |
| 1. Increased exports of agricultural products. In 2022, | 1. New losses from the war for |
| exports of live animals and livestock products increased | Ukraine's economy (currently |
| (109.5% compared to the level of 2021), preparations | amounting to 135 billion US dollars). |
| from meat, fish (106.8%), sugar and sugar confection- | 2. Negative foreign trade balance. |
| ery (121.5%), and vegetable processing products | 3. Exports and imports of services, |
| (111%). | public and governmental services, |
| 2. Prospects for the development of transport and tour- | travel services, and insurance ser- |
| ism services (in 2022, imports of the following services | vices decreased the most in 2022 |
| increased: other support and transportation services (by | compared to 2021. |
| 69.9%), cultural and recreational services (by 28.9%). | 4. Decrease in exports of goods to |
| 3. Formation of regional centers of foreign trade (the | Asia (by 2.3 times) and Africa (by |
| exports of Vinnytsia, Volyn, Zakarpattia, Lviv, Odesa, | 2.6 times). |
| Rivne, Ternopil, Cherkasy, and Chernivtsi regions in | 5. Rising inflation (in 2022, inflation |
| 2022 were higher than in 2021. Imports in 2022 were | was 20.2%). |
| higher than in 2021 in the Volyn, Zhytomyr, Lviv, | |
| Khmelnytskyi, and Chernivtsi regions). | |

Source: summarized by the author according to Tables 1-3.

The WTO noted that the war in Ukraine had a negative impact on the world food market and increased food prices (WTO, 2022).

Conclusions. Thus, we can conclude that the war had a significant negative impact on Ukraine's foreign trade. In addition, the war also affects the food security of countries that depend on Ukraine's agricultural products. The scientific novelty of the article lies in the improvement of ways to minimize the negative impact of the war on Ukraine's foreign trade. The practical value of the article lies in the development of recommendations to minimise the outlined negative consequences of the war in Ukraine. For this purpose, the Government of Ukraine, in particular the Ministry of Economy and the Ministry of Strategic Industries of Ukraine, is suggested to take the following steps:

- 1. Tax benefits for Ukrainian entrepreneurs, as well as support for small and mediumsized enterprises.
- 2. Diversification of product sales markets. This is necessary to reduce dependence on certain countries and markets in certain circumstances.
- 3. Development of the domestic market and stimulation of domestic consumption.
- 4. Diversification of production industries.
- 5. Promoting the export of high-tech goods. The production and export of high-tech



goods, such as software, aviation and space products, and other innovative products, will further strengthen Ukraine's position in foreign markets.

An important aspect of the development of foreign trade in Ukraine is a well-developed infrastructure, so the government, together with local authorities, needs to reconstruct and restore the infrastructure of Ukraine in those areas affected by hostilities and enemy attacks.

The outlined directions will have a positive impact on Ukraine's foreign trade and the stabilisation and strengthening of the national economy in the post-war period.

Literature

- Погарська О. (2023). Економіка України в умовах війни. Національний банк України. URL: https://bank.gov.ua/admin up loads/article/Poharska pr 01-02.06.2023. pdf? v=4
- Ус І., Гавриленко Н. (2022). Вплив війни на зовнішню торгівлю України (за підсумками першого півріччя 2022 р.). URL: https://niss.gov.ua/sites/default/files/2022-08/ us-gavrilenko-tablici merged 0.pdf
- Харахурсах М. (2023). Як війна вплинула на зовнішню торгівлю України. Підсумки 2022 року. URL: https://thepage.ua/ua/ news/pidsumki-2022-roku-yak-vijna-vpli nula-na-zovnishnyu-torgivlyu-ukrayini
- Ben Hassen T., Bilali. H. El. (2022). Impacts of the Russia-Ukraine War on Global Food Security: Towards More Sustainable and Resilient Food Systems? Food. № 11 (15). P. 2301. URL: https://doi.org/10.3390/ foods11152301
- Darvas Z., Martins C. (2022). The impact of the Ukraine crisis on international trade, Working Paper 20/2022, Bruegel.
- Fang Y. et al. (2022). The Russia-Ukraine conflict and volatility risk of commodity markets. Finance Res. Lett.
- Guenette J. D., Kenworthy P. G., Wheeler C. M. (2022). Implications of the War in Ukraine for the Global Economy. URL: https://thedocs.worldbank.org/en/doc/5d903e848db1 d1b83e0ec8f744e55570-0350012021/rela

- ted/Implications-of-the-War-in-Ukraine-forthe-Global-Economy.pdf
- Popov O., Iatsyshyn A., Kovach V., Artemchuk V., Kameneva I., Radchenko O., Nikolaiev K. et al. (2021). Effect of power plant ash and slag disposal on the environment and population health in Ukraine. Journal of *Health Pollution*, № 11 (31), Art. 210910. DOI: https://doi.org/10.5696/2156-9614-11.31.210910
- Ruta M. (ed.) (2022). The Impact of the War in Ukraine on Global Trade and Investment. Washington, DC. URL: http://hdl.handle. net/10986/37359. License: CC BY 3.0 IGO
- Simakhova A. (2022). Post-War Socialization of the Economy: Ukrainian and European Security. Proceedings of 3rd International Conference CNDGS'2022. P. 71-75. DOI: https://doi.org/10.47459/cndcgs.2022.9
- State Customs Service of Ukraine (2023). Statistics. URL: https://customs.gov.ua/en/ statistika-ta-reiestri
- State Statistics Service of Ukraine (2022). Commodity and Service Pattern of Foreign Trade of Ukraine. URL: https://ukrstat.gov. ua/operativ/operativ2022/zd/tsztt/arh tsztt2 022 u.html.
- Stukalo N., Steblianko I., Simakhova A., Doroshkevych V. (2018). Trends in economic and social security at national and European level: interrelationships, threats and opportunities, Journal Security and Sustainability 8 (2). P. 99-208. Issues. No DOI: https://doi.org/10.9770/jssi.2018.8.2(7)
- WTO (2022). WTO Secretariat note examines impact of the crisis in Ukraine on global trade and development. URL: https://www.wto.jorg/english/news e/news 22 e/devel 08apr22 e.htm

References

- Pogarska, O. (2023). Economy of Ukraine in the conditions of war. National Bank of Ukraine. Retrieved from https://bank.gov. ua/admin uploads/article/Poharska pr 01-02.06.2023.pdf? v=4 [in Ukrainian].
- Kharakhursakh, M. (2023). How the war affected Ukraine's foreign trade. Results of 2022. Retrieved from https://thepage.ua/

– Економіка промисловості 🕏 Economy of Industry -

- ua/news/pidsumki-2022-roku-yak-vijnavplinula-na-zovnishnyu-torgivlyu-ukrayini [in Ukrainian].
- Us, I., & Havrylenko, N. (2022). The impact of the war on Ukraine's foreign trade (based on the results of the first half of 2022). Retrieved from https://niss.gov.ua/sites/defa ult/files/2022-08/ us-gavrilenko-tablici mer ged 0.pdf [in Ukrainian].
- Ben Hassen, T., & Bilali, H. El. (2022). Impacts of the Russia-Ukraine War on Global Food Security: Towards More Sustainable and Resilient Food Systems? Food, 11 (15), 2301. DOI: https://doi.org/10.3390/foods 11152301
- Darvas, Z., & Martins, C. (2022). The impact of the Ukraine crisis on international trade, Working Paper 20/2022, Bruegel.
- Fang, Y. et al. (2022). The Russia-Ukraine conflict and volatility risk of commodity markets. Finance Res. Lett.
- Guenette, J.D., Kenworthy, P.G., & Wheeler, C.M. (2022). Implications of the War in Ukraine for the Global Economy. Retrieved from https://thedocs.worldbank.org/en/doc/5d90 3e848db1d1b83e0ec8f744e55570-035001 2021/related/Implications-of-the-War-in-Ukraine-for-the-Global-Economy.pdf
- Popov, O., Iatsyshyn, A., Kovach, V., Artemchuk, V., Kameneva, I., Radchenko, O., Nikolaiev, K. et al. (2021). Effect of power plant ash and slag disposal on the environment and population health in Ukraine.

- Journal of Health Pollution, 11 (31), 210910. DOI: https://doi.org/10.5696/2156-9614-11.31.210910
- Ruta, M. (ed.) (2022). The Impact of the War in Ukraine on Global Trade and Investment. Washington, DC. Retrieved from http://hdl.handle.net/10986/37359. License: CC BY 3.0 IGO
- Simakhova, A. (2022). Post-War Socialization of the Economy: Ukrainian and European Security. Proceedings of 3rd International Conference CNDGS'2022. pp. 71-75. DOI: https://doi.org/10.47459/cndcgs.2022.9
- State Customs Service of Ukraine (2022). Statistics. Retrieved from https://customs.gov. ua/en/statistika-ta-reiestri
- State Statistics Service of Ukraine (2022). Commodity and Service Pattern of Foreign Trade of Ukraine. Retrieved from https://ukrstat.gov.ua/operativ/operativ202 2/zd/tsztt/arh tsztt2022 u.html
- Stukalo, N., Steblianko, I., Simakhova, A., & Doroshkevych, V. (2018). Trends in economic and social security at national and European level: interrelationships, threats and opportunities, Journal Security and Sustainability Issues, 8(2), pp. 199-208. DOI: https://doi.org/10.9770/jssi.2018.8.2(7)
- WTO (2022). WTO Secretariat note examines impact of the crisis in Ukraine on global trade and development. Retrieved from https://www.wto.org/english/news e/news 22 e/devel 08apr22 e.htm

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ВПЛИВ ВІЙНИ НА ЗОВНІШНЮ ТОРГІВЛЮ УКРАЇНИ

Розглянуто теоретичні та практичні аспекти впливу війни на зовнішню торгівлю України. Вибір теми зумовлений необхідністю пошуку нових шляхів мінімізації цього впливу. Використано загальнонаукові методи синтезу та аналізу, систематизації та порівняння даних. Інформаційну базу статті становлять статистичні дані Державної служби статистики України, публікації науковців, інтернет-джерела.

Проаналізовано зміни в структурі зовнішньої торгівлі України у 2022 р. порівняно з 2021 р., а також у регіональній структурі зовнішньої торгівлі України. Виявлено, що обсяг



експорту Вінницької, Волинської, Закарпатської, Львівської, Одеської, Рівненської, Тернопільської, Черкаської та Чернівецької областей у 2022 р. був більшим, ніж у 2021 р. Саме в цих регіонах під час війни був сконцентрований значний експортний потенціал.

Визначено основні деструктивні чинники розвитку зовнішньої торгівлі України під час війни: зменшення обсягів експорту та імпорту; від'ємне сальдо зовнішньої торгівлі; логістичні проблеми, обмеження на переміщення товарів, руйнування інфраструктури. Спрогнозовано, що внаслідок війни зміниться товарна структура виробництва в Україні, перевага надаватиметься оборонним галузям.

Запропоновано рекомендації для уряду щодо мінімізації негативного впливу війни на зовнішню торгівлю України, серед яких: податкові пільги для вітчизняних підприємців, підтримка малого та середнього бізнесу, диверсифікація ринків збуту продукції, розвиток внутрішнього ринку та стимулювання внутрішнього споживання, сприяння високотехнологічному експорту, реконструкція та відновлення інфраструктури України тощо.

Встановлено, що розвиток зовнішньої торгівлі в Україні сприятиме стабілізації національної економіки та забезпеченню економічного зростання в післявоєнний період.

Ключові слова: експорт, імпорт, товари, регіони України, промисловість. JEL: O24, P33

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