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ECONOMIC INTEGRATION OF UKRAINE: CONTEXT OF THE RUSSIAN-UKRAINIAN WAR

Abstract

Integration with the large market of the EU creates additional competitive advantages for Ukraine. The Association Agreement and the Deep and Comprehensive Free Trade Area (DCFTA), the status of the candidate country and international assistance, which aim to approximate Ukraine's legislation to EU norms, have become the institutional instruments of such integration. Over the recent years, the European Union has become Ukraine's main trade and investment partner. The basis of Ukrainian exports to the EU is formed mainly by crops and metallurgical products. The main items of Ukraine's imports are supplies of machine-building equipment and fuels. In terms of grains and oil crops, Ukraine is the main supplier to the EU. Under the conditions of war, the foreign trade with the EU has proven itself to be robust in volume and, in contrast to other vectors of trade, diversified. This was facilitated by the elimination of a number of tariff and non-tariff restrictions on Ukrainian exports to the EU, as well as the realign-

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ment of the logistics infrastructure towards the West. The structure of Ukrainian exports to the EU has seen an increase in the role of a range of agricultural products, along with a sharp decline in the role of metals. On the other hand, the EU has become an important supplier of military products and fuels to Ukraine. Along with that, with the question of security unresolved, the insufficient investment attractiveness remains to be a problematic aspect for Ukraine.

Key Words:

European integration; structure of international trade; international trade regulations; international assistance; Russian-Ukrainian war.

JEL: F14, F15, F35, F51.

2 tables, 30 references.

Problem Statement and Literature Review

Since 2014, Ukraine's economic integration into the EU has been taking place in the conditions of the Russian aggression and occupation of a considerable part of the country's territory. This creates considerable problems and impediments on the path to integration, as well as significant risks for the social and economic development of Ukraine. It can also become, however, a unique case in the history of the EU's enlargement.

Integration of the Ukrainian economy into the large economy of the European Union (with the EU producing 17.8%, the United States – 23.9% and China – 18.5% of the world GDP, these three large economies accounted for 60.2% of the world's total GDP in 2021) creates **additional competitive advantages** for the country, especially in view of the stable tendency for the main world economic centres to focus on the development of their economic autonomy and assuring their economic security in strategic industries based on re-sourcing and robust regional value-added networks. Ukraine has a chance to become part of the economy which lays the foundations for **the most competitive and efficient model** of socio-economic, political and legal development amidst a variety of options that a country can implement.

The main institutional instruments of Ukraine's integration into the EU at the present stage are the EU-Ukraine Association Agreement (with Deep and Comprehensive Free Trade Area as its component) and the status of the EU candidate country. As of September 2022, Ukraine fulfilled almost 70% of its commitments made within the framework of this Agreement. The estimates of the *World Economic Forum* show that Ukraine has somewhat improved its national economic competitiveness indicators in 2013-2019, primarily in those areas that were directly linked to high levels of fulfilment of the commitments taken under the Association Agreement, and the correlation in this case is significant.

The aim of this article is to determine how trade, financial and institutional relations of Ukraine with the EU are being transformed under the conditions of the Russian-Ukrainian war of 2022-2023. The study is based on the case-study approach, with application of quantitative methods for statistical calculations of structural and dynamic indicators, as well as qualitative methods for the analysis of prior research and regulatory environment of the integration.

The dynamics and structure of bilateral trade between Ukraine and the EU and the outcomes of mutual trade integration have been studied in a number of works. For example, Melnyk et al. (2018) used gravitation modelling to analyse trade between Ukraine and the EU taking into account the prices for oil. Yatsenko et al. (2020) measured the impact of GDP on the EU-Ukraine trade. Taking into account the rather short distance between the trading countries, fuel prices were treated as not so important a factor. In the absence of war, the forecasted levels of exports from Ukraine to the EU would have been $22 billion in 2022. Before the war, the authors had considered three possible vectors along which the Association Agreement could have been updated: the deepening of sectoral integration, the increase in duty-free exports to the EU, and the removal of non-tariff barriers. Kiforenko (2022) performed an analysis of the statistical distribution of trade between Ukraine and the EU. After a temporary fall in 2014, the value of mutual trade has grown in 2015 and has continued doing so at the time the DCFTA has been enacted. Olekseyuk & Balistreri (2018) showed that the estimated gains from the EU-Ukraine DCFTA made 3% for Ukraine. However, should an assumption about monopolistic competition been implemented into the model, the positive trade effect would have been smaller compared to perfect competition. Nekhay et al. (2021) evaluated the consequences of the UA-EU integration under three alternative scenarios: unilateral trade liberalisation, bilateral trade liberalisation with exemptions from free trade, and bilateral trade liberalisation without such exemptions.

Latkovskyi & Marushchak (2019) point to structural changes that have taken place in the mutual trade of Ukraine and the EU after enactment of the

DCFTA. Ukrainian exports have seen an increase in the share of machines and equipment, vegetable and animal fats, finished food products, and animal products, with a simultaneous decrease in the role of mineral products and non-ferrous metals. The structure of imports shifted in favour of mineral goods, machines and equipment at the cost of decreasing shares of agricultural products, chemical products and products of pulp and paper industry. Yatsenko et al. (2020) pointed to sectoral asymmetries in the bilateral trade, effective demand, technological sophistication of products, and trade deficit with the EU. Another problem was posed by tariff quotas that have exhausted frequently, while exports in excess of the quotas were subject to full customs duties.

Some attempts to measure the economic effects arising from the loss of territories and hybrid aggression were made following the war back in 2014-2015. For example, Olekseyuk & Schürenberg-Frosch (2019) have found that the annexation of Crimea has generated disproportionately high losses for Ukraine compared to the size of the region's economy. The DCFTA with the EU could compensate for these losses. Sologoub (2022) points out that, starting from 2014, the EU has become Ukraine's main trade partner and major destination for Ukrainian labour migrants. Given low probability for economic relations between Ukraine and Russia to be restored, the significance of the EU market is growing, which will contribute to economic and logistical integration of Ukraine and the EU.

However, due to newly emergent quality of the problematics of the effects of the Russian-Ukrainian war of 2022-2023, there are a limited number of scientific publications regarding its impact on the process of economic integration between Ukraine and the EU. The extraordinary military events were calling for extraordinary response. Bergmann & Romanyshyn (2022) suggested a range of necessary measures that the EU could implement in order to assist with Ukraine's recovery:

- A two-stage approach to reconstruction: the first stage should provide for the emergency reconstruction of residential areas and critical transport, energy and social infrastructure during the wartime; at the second stage, the financing of modernisation should be conditioned upon strengthening of the quality of public financial management and the rule of law in the country;
- management and supervision over the reconstruction process should be performed jointly by Ukraine and the donor countries;
- a comprehensive agreement should be concluded with the EU, stipulating for provision of assistance to Ukraine in the forms of the EU member-states' contributions, attracting debt capital on behalf of the EU, providing guarantees to private investors, redirecting sanctioned Russian assets for the recovery of Ukraine;
- continued military support to Ukraine.

Sapir (2022) indicated that Ukraine had had only minor chances to quickly obtain the status of the EU candidate country before the Russian-Ukrainian war has broken out in 2022. However, Ukraine's being a victim of military aggression changed the situation. Subsequently, in the scenario where Ukraine wins the war, the main obstacles for its entry into the EU – such as partially occupied territory and faulty governance – could be disregarded. Massive reconstruction would promote better governance, as it was the case in the post-war Western Europe. In the scenario where Ukraine's victory is incomplete, however, the prospects for its membership in the EU are murkier: a long time may pass before the country joins the Union.

Welfens (2022) draws attention to the extensive political support for Ukraine's future accession that exists in the EU today. On the other hand, he expresses concerns that the main challenges for Ukraine include relatively low earnings of the population, oligarchic structures, corruption and problems with the rule of law, and mass migration, which can lead to weakening of such support. Moreover, some member countries might even risk exiting from the Union, as it happened with Brexit, if Ukraine's rapid accession is not properly prepared.

Welfens et al. (2022) suggest that the EU may gain benefits from Ukraine's accession over the long run, but only if three conditions are met:

- Ukraine's financial benefits from the EU membership in proportion to GDP should be smaller than those received by the new member countries that have joined the EU in 2004 and 2007; otherwise, the voices of Eurosceptics in the EU's major net contributing countries will sound louder.
- The minimum level of majority requirements should be increased in relation to the share of the EU population represented in the EU institutions.
- In what concerns the opening of the EU labour market for the Ukrainian citizens, a transition period should be implemented in those member countries that deem it necessary. On the one hand, this will limit the bilateral mobility of the labour force. On the other hand, this will contribute to mutual trade and investment in Ukraine as an alternative to migration, and thus, to convergence of our country with the EU in terms of economic development.

If Ukraine fails to restore its territorial integrity in the nearest future, its EU accession scenario might resemble the situation with the FRG, which joined the EEC leaving the GDR behind.

Sologub (2022) elaborates on the possible advantages for the EU arising from cooperation and accession of Ukraine in the fields of food security, energy, human capital, entrepreneurship, IT sector, industry, and culture.

Research Results

The **mutual trade** between the EU and Ukraine amounted to €52.4 billion in 2021, which has been a two-fold increase since 2016. Trade with the EU has become an important foreign-economic **factor of the resilience of the country's open economy** under conditions of the Russian occupation of the part of its territory and in view of considerable socio-economic losses. In 2021, the country's GDP has reached more than $200 billion compared to $90.6 billion in 2015 at nominal exchange rate (World Bank, 2022).

During the period the DCFTA has been in force, the EU has become **the main trading partner of Ukraine.** For example, in 2013-2021, the share of the EU in the foreign trade of Ukraine has increased from **32.1% to 39.2%**, in particular from 26.5% to 39.4% in exports and from 35.1% to 39.8% in imports, respectively (Ministry of Economy of Ukraine, 2023). This is a major shift in the geographical structure of Ukraine's foreign trade over a relatively short period of time. The number of Ukrainian exporters to the EU has grown from 10,002 in 2014 to 14,545 in 2019 (AgroPolit.com, 2021). Along with that, the mutual trade between the EU's member countries over the recent years has accounted for 60% to 65% of their total external trade. Indicators for the majority of the EU member countries vary between 50% and 75%, which attests to high level of self-sufficiency demonstrated by the intra-Union trade. Furthermore, in 2022, due to external aggression and sea blockade, the share of the EU in our country's total foreign trade has increased dramatically – the EU accounted for **78%** of Ukrainian exports in the second quarter and **63.3%** over the year in total. Moreover, over the first three quarters of 2022, the volume of Ukraine's exports to the EU was greater than over the same period of 2021, although the country's total volume of exports has decreased almost by half (Ministry of Economy of Ukraine, 2022).

Ukraine, in its turn, was the 15th largest trade partner of the EU, accounting for 1.2% of its foreign trade. Out of the 36 product groups that constitute **critical imports** to the EU from third countries, before 2022 Ukraine ranked high (20% to 33% of the EU's total imports) in two product groups – iron ore and concentrate; and iron, steel and semi-finished products. This year, the EU replaced its quota for Ukraine with a global quota because our country was not able to fill it due to Russia's military aggression.

The trade effects arising from the EU-Ukraine free trade area were observed to have **multi-directional dynamics** in 2013-2021. Inter-industry trade remained to be the main form of trade: in 2021, Ukrainian exports were mainly composed of ferrous metals and products (20.3%), ores and slag (11.2%), fats and oils (8.8%), electric machines (9.6%), and cereals (7.2%); whereas Ukraine's imports from the EU were dominated by the products of machine-building industry, including nuclear reactors, boilers, machines (13.3%), road vehicles (11.3%), electrical machines (7.0%), energy and fuels (11.0%), and pharmaceutical products (7.0%) (Ministry of Economy of Ukraine, 2023). At the same time, the indicators for intra-industry trade have demonstrated a clear, albeit slow, tendency to growth.

The balance of trade index has only slightly improved, whereas the negative balance of mutual trade in goods has not been overcome. The terms-of-trade index of Ukraine over this same period has deteriorated. The product concentration of the total Ukranian exports has grown, but the concentration decreased in case of Ukraine's exports to the EU. Diversification of the product structure of exports to the EU was most noticeable for products with small value of trade.

In 2021, the EU accounted for 34.2% of Ukraine's exports of services and 42.6% of Ukraine's imports of services. Unlike merchandise trade, our country had a positive balance of trade in services. During this period of time, the EU has also accounted for **a major share of foreign direct investments** (up to 78%), although their volume was relatively small, reflecting the potential probability of continued Russian aggression and the outcomes of the COVID-19 pandemic. The structure of foreign transfers to Ukraine has seen a significant increase in the share of private remittances from the EU countries – from 31.2% up to 65.4% (in 2019). Finally, the aid and grants of the EU and its financial institutions to Ukraine in 2014-2021 were estimated to reach €17 billion (European Commission, 2022, July 22).

After the active phase of Russia's aggression has started **in 2022**, **new tendencies** have been observed in the economic relations between Ukraine and the EU. During this period, it has become vitally important for Ukraine to preserve its macroeconomic stability under the conditions of growing military expenses, plummeting budget revenues, the need to support social expenditures at a certain level, considerable fall in the country's export potential, and partial blockade of the country's infrastructure by Russia. That is why **financial assistance** comes to the foreground of Ukraine's economic relations with the EU in 2022.

After the start of the active phase of Russia's invasion in 2022, over the period from March to November, the EU and its financial institutions have urgently mobilized more than **€22 billion** worth of support for the economic, social and financial resilience of Ukraine in various forms of macro-financial assistance, budgetary support, as well as emergency, anti-crisis and humanitarian aid. Thus, €12 billion were contributed by the EU and its financial institutions, €7.3 billion by the EU's member-states, and €3.1 billion by the European Peace Facility (National Security and Defence Journal, 2022).

In June, the European Commission proposed and the European Council approved the allocation of €9 billion of macro-financial assistance to Ukraine for 2022. Another grant of €120 million was provided in the form of State and Resilience Building Contract. The EIB provided €668 million for emergency financial needs of the state. Within the framework of the world-wide **«Stand Up for Ukraine»** initiative, budget assistance of €500 million was approved in July. The EBRD also issued loans in the value of €1 billion for support of people displaced by the war. With a budget of €5.69 billion for 2021 to 2027 and an annual ceiling from €420 million to €1.132 billion, the **European Peace Facility** provided Ukraine with six tranches of financial assistance worth €3 billion overall (Bilquin, 2022).

The EU has also provided €880 million worth of humanitarian assistance for assuring access of the civilian people affected by the Russian aggression to essential products and services in both the EU countries and Ukraine. Such support is provided through different EU programmes and instruments with the purpose of providing access to water, food, medicine, healthcare services, medical equipment, and education; providing support for small and medium enterprises, agriculture, ensuring energy security, cyber security, freedom of media, reconstruction of small infrastructure facilities, etc. On March 4, the EU has activated the temporary protection mechanism for refugees from Ukraine who were granted a permission to stay in the member countries for less than one year with a possibility of prolongation. Besides, the mechanism provides access to the labour market, accommodation, social protection, healthcare services, and education. Over the course of 7 months, 7.2 million Ukrainian citizens have entered the EU. In April, telecom operators based in the EU and Ukraine signed a Joint Statement on providing affordable or free roaming and international calls between the EU and Ukraine, which was signed by 70 European operators. In September, a Joint Statement was issued by the money transfer service providers, which announced reduced commissions for money transfers into Ukraine and transfer fees applied to the euro or hryvnia exchange rates (Directorate-General for Financial Stability, Financial Services and Capital Markets Union, 2022).

The future development of foreign trade in Ukraine in general and with the EU countries in particular will largely depend on the degree of reconstruction of the destroyed export structure of the country and access to the seas. In view of this, the EU's decision to launch a special **«Ukraine Reconstruction Platform»** under the leadership of the European Commission and the Government of Ukraine is fundamentally important. In order to support Ukraine's reconstruction, the Commission also proposed to create a «Rebuild Ukraine» Facility. The Facility is viewed as the EU's main legal instrument for Ukraine's recovery, which will be integrated **into the EU budget**, provide loan and grant financing with its financial management linked to investments and reforms. Its activity will be based on the experience of the EU Recovery and Resilience Facility, which has practical experience in mitigating crisis situations in the entire EU and its member states (European Commission, n.d.-c).

The EU's **second** important component of economic assistance to Ukraine is further broadening of the scope of trade **liberalization**. A Special regulation of the European Parliament and the Council entered into force on June 4, suspending most tariffs and quantitative restrictions on imports from Ukraine for one year and factually introducing the **EU internal market treatment** for Ukrainian products with certain reservations. Thus, in particular, the Regulation stipulates for temporary suspension of the following measures:

- customs duties on imports of industrial products;
- application of the entry-price system with regard to imports of fruits and vegetables;
- all tariff-rate quotas on agricultural products;
- anti-dumping duties on imports originating in Ukraine;
- application of global safeguard measures to Ukrainian products.

Such liberalization is **conditional** in nature and will operate if Ukrainian exporters comply with the rules of origin, if Ukraine complies with the main provisions and principles of the Association Agreement, if Ukraine refrains from introducing any new restrictions on imports from the EU, and if imports under the new regulation do not cause or cannot cause serious damage to national producers in the EU countries. In case of non-compliance with respective provisions, the European Commission may apply corrective measures.

The framework of the EU-Ukraine DCFTA stipulated for 36 tariff-rate quotas applied to agricultural products from Ukraine, of which Ukrainian exporters used only 32 quotas, of which only 11-12 quotas were used in full (in total of up to 15% of total exports to the EU). The suspension of anti-dumping and safeguard duties has provided some support to exporters of industrial products, in particular, the exporters of products made of steel and metal, exports of which reached 40% to 45% of total exports of ferrous metals and products thereof to the EU, and 10% to 13% of Ukraine's total exports into the EU (Kinakh, 2022). There were 11 individual quotas and 1 global quota applied to Ukraine, with the duty in excess of the quota being 25% – meaning that it was actually **prohibitive in nature**. Of course, the requirement that such products comply with sanitary, phytosanitary rules and technical regulations of the EU remains mandatory. Every year, the EU collects €31 million of import duties and €35 million of anti-dumping duties from imports of Ukrainian goods to the EU. The suspension of customs duties and quotas will provide an opportunity, other things being equal, to increase exports, exporters' profits and budget revenues in Ukraine. Thus, the last months of this year have seen a significant increase in the exports of agricultural products including those with a higher level of processing such as dairy and meat products. This proves that the trade in this sphere progresses from the model based on trade in raw materials to the model based on trade in agri-food products.

We should also mention the decision of the European Commission which gives member countries the right to temporarily – from February 24 until December 31 – suspend the imposition of **the customs duties and VAT** on imports of certain products (food products, blankets, tents, electricity generators, etc.) from third countries if they are supplied to war-affected Ukrainian citizens who are located in the EU countries or migrated within Ukraine (more than 14 million people).

Let us consider the main **structural transformations in merchandise trade of Ukraine and the EU over the period of the Russian-Ukrainian war in 2022**. For this purpose, we will calculate the shares of particular product groups in the structure of Ukraine's total bilateral trade with the EU, as well as in the structure of the EU's foreign trade with the third countries (the roles for Ukraine and the EU, respectively). Available data cover the period from March to October 2022 (wartime period). We will also compare these shares with the respective data for the same period in 2021, i.e. also from March to October, (pre-war period) in order to remove the impact of the seasonality factor.

Table 1 shows that the most important product groups in Ukraine's exports to the EU are grains, oil crops, vegetable oil, ore, ferrous metals, wood, electrical machinery and equipment. During the war time, the role of the exports of grains and oil crops has increased. The role of ferrous metals has sharply decreased (it is almost 3 times smaller than before). The Herfindahl-Hirschman index used to assess the degree of export diversification according to the two-digit commodity classification was 990 in the pre-war period and 780 during the wartime period. This means that the level of product diversification of Ukraine's exports to the EU has increased due to destruction or disruption of the normal production activity of the metal industry of Ukraine. At the same time, in absolute terms, the overall bilateral exports over the analysed period increased by 6%, that is, there was a reorientation of exports of other products from other directions to the EU.

Ukraine is a significant supplier on the EU market of grains, oil crops, vegetable oil, and wood (more than 10% of imports of the relevant product group in the EU). During the war, the importance of Ukraine as the EU's supplier of grains, oil crops, non-meat products of animal origin, cereals, and milling industry products has increased. The role of Ukraine as a supplier of ferrous metals and non-metal mineral products has weakened.

Table 2 shows that the most important product groups for imports from the EU to Ukraine are fuel, vehicles, electrical appliances and equipment. The role of the imports of fuels, arms and ammunitions has become stronger under the conditions of war and shortages of fuel from traditional sources. The role of the supplies of machines and equipment has decreased. The Herfindahl-Hirshman index used to assess the degree of diversification of imports was 630 in the pre-war period and 800 during the war time. This means that the level of product diversification of imports into Ukraine from the EU has decreased, primarily because of the fuel component. Along with that, the overall bilateral import measured in absolute terms has remained almost the same during the analysed periods.

Table 1

Major structural transformations in Ukraine's exports to the EU

Product group	Share of product exports in Ukraine's total exports to the EU, %, March-October 2022	Change in the share of product exports in Ukraine's total exports to the EU, pp, March-October 2022 to March-October 2021	Share of Ukraine's exports in the EU's total product imports from third countries, %, March-October 2022	Change in the share of Ukraine's exports in the EU's total product imports from third countries, pp, March-October 2022 to March-October 2021
Meat and edible meat offal	1.32	0.6	5.9	1.0
Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere specified or included	0.98	0.6	8.2	4.4
Cereals	12.67	6.9	27.6	3.8
Products of the milling industry; malt; starches; inulin; wheat gluten	0.17	0.1	8.0	4.2
Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder	12.23	6.7	15.7	5.9
Vegetable plaiting materials; vegetable products not elsewhere specified or included	0.11	0.0	7.7	1.7
Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	11.14	2.8	13.8	-0.2
Sugars and sugar confectionery	0.48	0.2	5.0	0.9
Salt; sulphur; earths and stone; plastering materials, lime and cement	0.63	-0.9	2.3	-4.4
Ores, slag and ash	10.15	-3.3	7.8	-1.6
Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	5.42	2.8	0.2	0.0

Product group	Share of product exports in Ukraine's total exports to the EU, %, March-October 2022	Change in the share of product exports in Ukraine's total exports to the EU, pp, March-October 2022 to March-October 2021	Share of Ukraine's exports in the EU's total product imports from third countries, %, March-October 2022	Change in the share of Ukraine's exports in the EU's total product imports from third countries, pp, March-October 2022 to March-October 2021
Wood and articles of wood; wood charcoal	7.71	1.7	12.0	1.9
Iron and steel	8.70	-14.6	3.6	-7.2
electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	7.46	-0.2	0.5	-0.2
Total			0.8	-0.3

Source: calculated by the authors based on the data of Eurostat (n.d.).

Table 2

Major structural transformations in Ukraine's imports from the EU

Product group	Share of product imports in Ukraine's total imports from the EU, %, March-October 2022	Change in the share of product imports in Ukraine's total imports from the EU, pp, March-October 2022 to March-October 2021	Share of Ukraine's imports in the EU's total product exports to third countries, %, March-October 2022	Change in the share of Ukraine's imports in the EU's total product exports to third countries, pp, March-October 2022 to March-October 2021
Coffee, tea, mate and spices	0.60	0.2	4.7	0.5
Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	21.78	12.1	3.2	0.5
Fertilisers	1.13	-0.7	3.4	-5.8
Headgear and parts thereof	0.21	0.2	5.2	3.7
Nuclear reactors,	7.50	-8.0	0.6	-0.7

Product group	Share of product imports in Ukraine's total imports from the EU, %, March-October 2022	Change in the share of product imports in Ukraine's total imports from the EU, pp, March-October 2022 to March-October 2021	Share of Ukraine's imports in the EU's total product exports to third countries, %, March-October 2022	Change in the share of Ukraine's imports in the EU's total product exports to third countries, pp, March-October 2022 to March-October 2021
boilers, machinery and mechanical appliances; parts thereof				
Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	8.29	-0.8	1.1	-0.3
Vehicles other than railway or tramway rolling stock, and parts and accessories thereof	10.50	0.2	1.2	-0.2
Arms and ammunition; parts and accessories thereof	3.92	3.8	18.8	18.0
Total			1.1	-0.2

Source: calculated by the authors based on data from Eurostat (n.d.).

Ukraine is an important sales market for exporters of arms and ammunitions from the EU (Ukraine accounts for one-ninth of total EU exports of these products to third countries), as well as for exporters of headgear, coffee and tea. Supplies of arms from the EU to Ukraine have increased by a factor of 24. The role of Ukraine as a sales market for fertilizers has decreased, now only amounting to one-third of what it had used to be.

The **third** important and relevant issue for the economic relations between the EU and Ukraine is the construction of an actually new logistics structure for exports and imports of merchandise, primarily with third countries. Russia's partial blockade of the Sea of Azov since 2014, almost complete blockade of the Black Sea and the Sea of Azov since 2022, and factual blockade of trade with

Central Asian countries through Russian territory produce considerable negative consequences for the entire foreign trade of Ukraine. Before the war, 90% of Ukrainian exports of grain crops, which generated 20% of total annual export revenues, have taken place via the ports of the Black Sea.

The rebuilding of logistics under the conditions of war is taking place based on the EU Action Plan «**Solidarity Lanes**» as of May 12, 2022. The plan stipulates for increasing the capacity of the existing transport corridors, putting in place new logistics routes for delivering export and import products for Ukraine, searching for new partners in the EU and third countries, and simplifying the respective procedures. In particular, the plan also provides for additional freight capacity of the road and water transport in the EU, transhipment terminals, storage facilities, as well as maximum flexibility in the process of carrying out formalities at border crossing points (European Commission, n.d.-a).

This has already provided an opportunity to export 14 million tons of Ukrainian wheat through European logistics routes and to increase the volumes of other export and import operations. The current focus of consideration is on finding ways to increase the number of grain wagons by 3,640 units in addition to 22,400 units located in Ukraine and approximately 12,000 units in the EU; building a cross-border pipeline for vegetable oils; using freight wagons modified to meet the European rail standards; increasing rail capacity to the ports of Gdansk, Rostock, Hamburg; and extending rails of various widths to terminals in Ukraine and the neighbouring countries (Latifundist.com, 2022). In this regard, Ukrainian exporters will find it very useful to use the European Commission-supported platforms for finding partners and optimizing the supply routes, such as the Enterprise Europe Network and the EU Clusters Support Ukraine, and for example, the NAZOVNI system of the Ministry of Foreign Affairs of Ukraine.

The European Commission has also decided in July to update the indicative maps of the Trans-European Transport Network:

- the North-Baltic Corridor was extended through Lviv and Kyiv to Mariupol;
- the Baltic–Black Sea–Aegean Corridor was extended through Lviv, Chernivtsi (Romania and Moldova) to Odesa;
- the Baltic Sea–Adriatic Sea Corridor and the Rhine–Danube Corridor will pass through Lviv.

In this context, the **Agreement on Freight Transportation by Road**, which was signed in June for the duration of one year, becomes of principal importance. This agreement abolishes the need for Ukrainian carriers to obtain respective permits and facilitates the recognition of Ukrainian drivers' licenses. During the first month of aggression, Ukraine managed to agree on the elimination of permits with 12 member countries of the EU. The quotas and permits, which had been requested from Ukrainian carriers previously, significantly limited the profitgenerating capabilities of Ukrainian transport companies and increased the price of products exported by Ukrainian producers to the EU market.

The integration of Ukraine's infrastructure into the EU will be greatly facilitated by the **synchronisation since March 2022 of the country's electricity network** with the European electrical transmission system ENTSO-E, the preparation for which had lasted since 2017. This synchronisation ensures high stability and reliability of electricity supplies to Ukraine (especially after massive Russian attacks against objects of energy infrastructure in our country) and some EU member countries of the EU Energy Union, contributing to energy security of the country, overall decarbonisation of the national economy, demonopolization of industry, and growth of revenues from electricity exports. In June-September, the volume of Ukrainian electricity exports has increased from 0.5 to 3GWs. Taking into account the currently existing five-to-seven-fold differential in the prices for electricity in Ukraine and the importing countries, Ukraine could have generated up to €9.5 billion of export revenues per year. On the other hand, imports of Ukrainian electricity would have provided the EU member countries with an opportunity to save 5 to 7 billion cubic meters of gas per year, which is also a very important factor under conditions of the Russian hybrid energy war against Europe. However, after significant destructions of energy infrastructure have taken place in Ukraine due to Russian attacks, at the end of 2022-early 2023, the country no longer has this opportunity. Moreover, it has started to import 0.6-0.7 GWs of electricity from the EU, even though its need is 2 GWs. The disintegration of Ukrainian electrical power network with the Russian and Belarusian networks produces not only economic effects, but also political and security effects in view of the Russian aggression (Government Portal, 2023).

Earlier, the Verkhovna Rada of Ukraine has adopted the Law «On the regime of joint transit and introduction of the national electronic transit system», which stipulates for the implementation of the provisions of the **Convention on a Common Transit Procedure** in accordance with the commitments made by Ukraine under the EU–Ukraine Association Agreement. This common transit procedure brings together 35 countries that introduced unified rules on declaration and control over transit movement of goods with application of the joint IT product (NCTS). The common transit procedure and the use of the NCTS system will allow Ukraine to introduce a real-time exchange of customs data on freight in transit, to use a single customs declaration and a single financial guarantee for the movement of goods from the country of departure to the country of destination; to receive true information about goods in transit towards Ukraine; and to introduce special transit simplifications (comprehensive financial guarantee, waiver of guarantee, status of Authorised Consignor/Authorised Consignee, use of seals of special type). On September 25, the Joint Committee for the Convention on a Common Transit Procedure and the Convention on the Simplification of Formalities in Trade in Goods approved an official decision to invite Ukraine to join the

Conventions starting from October 1, 2022, even though one year earlier they had planned to issue such an invitation in 2023.

The **fourth** direction in the development of economic integration of Ukraine into the EU at the present stage is the attainment of **the status of EU accession candidate country**. The very fact of granting such a status to the country that is falling victim to military aggression is unique in the history of the EU. It confirms the Union's resolute political and economic support for Ukraine, as now the Russian aggression is being committed against the country that applied for membership in the EU. The practice of the countries that had this status earlier or are having it now shows that new economic opportunities emerge for candidate countries, in particular: 1) trade concessions and better access to the internal market of the EU; 2) access to loans and grants for implementation of reforms through special instruments for candidate countries; 3) access to other funds and programmes of the EU; 4) growth of investment attractiveness.

The implementation of the DCFTA between Ukraine and the EU, the expansion of Ukraine's participation in the Pan-Euro-Mediterranean Convention on the Rules of Origin, integration of Ukraine into the air, energy, customs, industry, digital European associations, and further liberalisation of trade in 2022 have already significantly lowered the barriers on the way of Ukrainian goods and services to the EU. Upon completion of special procedures, Ukraine will have an opportunity to join a special instrument created for candidate countries – **the Instrument for Pre-Accession Assistance – IPA III** and, if that is provided for, to other funds and programmes of the EU, such as the European Peace Facility, External Action Guarantee, European Union Recovery Instrument (COVID-19), Erasmus+, Invest EU Fund, Creative Europe, European Fund for Sustainable Development, and others.

Thus, the overall volume of financing for the IPA-III in 2021-2027 has been set at €14.2 billion allocated to five candidate countries and two potential candidates. The 20 priority areas for reforms in candidate countries under this instrument include, in particular, the rule of law, fundamental rights, democracy; governance and approximation of rules, standards and policies to Acquis Communautaire of the EU; environmental protection, low-carbon economy; competitiveness, inclusive growth, digital economy; and cross-border cooperation (European Commission, n.d.-b).

In what concerns the economic sphere directly, the following issues are being considered:

- strengthening the tax and economic governance, macroeconomic stability, social cohesion, sustainable development, development of the market economy that would be capable of sustaining competitive pressures in the Union; and alignment with the common regional market;

- ensuring the alignment of the rules, standards, policies, and practices with the **Acquis Communautaire**, including in the spheres of public procurement and state aid rules;
- assistance with **employment;**
- development of infrastructure, including **energy security and diversification**;
- improving the business environment for the private sector, including **SMEs**;
- better access to **digital technologies and innovations**;
- **environmental** protection;
- using **nuclear energy** for peaceful purposes.

All these directions and priorities are obviously important and relevant for Ukraine. Although the overall volume of IPA-III, especially when considered on the by-objective and by-country basis, is considerably less than the volume of financial assistance provided by the EU to Ukraine in both 2014-2021 and 2022, the realisation of this instrument is very important because it provides for a clear system of controls over reforms on the way to the EU based on special indicators used by the European Commission, the Delegation of the EU, Eurostat, the World Bank, the European Environment Agency, the Regional Cooperation Council, and others.

A more problematic issue for Ukraine from the standpoint of realization of the advantages of its candidate status under the conditions of war remains the problem of **investment attractiveness**. Foreign direct investments from the EU were at the level of €18.8 billion in 2018, increasing to €25.8 billion in 2020 and decreasing back to 21.9 billion in 2019 (European Parliament, 2022). According to the *Global Competitiveness Report 2017-2018*, Ukraine already ranked 122nd out of the total of 137 countries by the criterion of business losses due to terrorism (World Economic Forum, 2017). After the active phase of the Russian aggression has started, the country's investment attractiveness indicators have deteriorated even further. From February 2022 to August 2022, the international rating agency *Fitch* has downgraded Ukraine's rankings from B to CCC and C (pre-default level). Later Ukraine managed to agree with the owners of the Eurobonds issued in 2015-2021 on the postponement of €17 billion worth of respective payments for 24 months. Along with that, it is understandable that during the wartime, foreign investment cannot be attracted unless there is a possibility of insurance against war risks. Such a pilot project is currently being developed together with the Multilateral Investment Guarantee Agency of the World Bank Group. Thus, foreign investments from the EU and other countries to Ukraine will largely be put on hold during the wartime.

The structure of trade and investment between Ukraine and the EU countries shows that Ukrainian enterprises have been very slow at integrating into the European value added networks. Such integration took place primarily at the initial (exports of raw materials) and final (imports of finished products) ends of value chains, with only minor concentration of value added at Ukrainian companies. This was due to slow processes of economic reforms in other areas, such as rule of law.

This can be explained by the risks that European partners have stumbled across when trying to determine the place of Ukraine in the **European geo-economic space** and the Russian position on this matter. Such risks have increased after 2014, whereas the Russian military aggression of 2022 has factually broken such networks of well-known European companies. For example, *BMW* and *Volkswagen* were forced to close down some of their plants in Europe due to temporary lock-down of Ukrainian plants that supplied electrical wiring harnesses for vehicles: Ukraine accounted for nearly 20% of such exports, supplying them to other countries of Eastern Europe and Northern Africa as well. The EU has also been dependent on imports of such products as iron ore and steel products from Ukraine – for these products the EU was forced to switch from Ukrainian quotas to global quotas. The group of «risky» products from Ukraine also includes the neon gas – Ukraine accounted for 55% of its exports to the world market before the war. Apparently, the war is disintegrating the Ukraine's economy with that of the European Union in separate industries (steel products, electrical machinery and equipment) (European Parliament, 2022, April 1).

On the other hand, the war accelerates the institutional, sectoral and product (in some industries) integration of the national economy into the internal market of the EU, transforming the structure of exports through product differentiation. The liberalisation of trade relations with the EU creates opportunities for a higher degree of raw materials processing being performed at Ukrainian enterprises, in particular processing of dairy and meat products. The IT sector is generally retaining its positions in Ukrainian exports – although the United States is the main consumer of digital products produced by the Ukrainian companies, their exports to the United Kingdom, Germany, the Netherlands, Malta, and Cyprus have grown over the recent years. Ukrainian producers have also been provided a chance to fill the **additional product niches** appearing in the EU market. This tendency can enhance as Russian and Belarusian exporters leave their positions in the EU markets due to imposition of economic sanctions against them by the EU and other developed countries.

Conclusions

The conclusion of the Association Agreement between Ukraine and the EU has become an important instrument of institutionalization of the Eurointegration strategic vector in our country, as well as deepening the trade and economic co-operation between the contracting parties, in particular thanks to the launch of the Deep and Comprehensive Free Trade Area.

Over the recent years, the EU has become one of the main trade and investment partners of Ukraine, whereas the peculiar role of migration links has become an important source of remittances from abroad. The main items of Ukraine's exports to the EU include agrigultural crops and metallurgy products in exchange for supplies of vehicles, equipment, appliances and fuels. In terms of grain crops and oil seeds, Ukraine is a critically important supplier to the EU. Under the war conditions, Ukraine's foreign trade with the EU turned out to be sufficiently robust in volumes, unlike other directions of trade under the collapse of trade in the Eastern direction and a partial blockade of sea transportation. Ukraine's exports of goods have become more diversified in structure. The role of exports of a range of Ukrainian agricultural products to the EU has increased against a simultaneous sharp decrease in the exports of metal. In its turn, the EU has become an important source for supplies of the products of military-industrial complex and fuels, which are products of critical imports under the conditions of armed conflict.

Amidst the ongoing full-scale war, the international assistance from the EU has taken the centre stage, especially in what concerns humanitarian support, macroeconomic stabilization and reconstruction of infrastructure. As part of further steps towards broadening the scope of trade liberalisation, the EU has cancelled the remaining tariff and non-tariff restrictions on Ukrainian exports to the EU (in fact, except for sanitary and phytosanitary requirements and technical standards). Given the collapse in trade with the enemy, partial blockade of the Ukrainian ports, the formation of a new logistics system for Ukrainian exports through the EU has become a major concern. The attainment of the EU candidate status has become a new instrument of integration, fundraising and implemention of reforms in Ukraine, and approximation to the EU legislation. Investment attractiveness remains to be a problem because, with full-scale war ongoing, foreign investments have been put on hold.

Future research could examine the long-term efficiency of the support and assistance measures implemented by the EU, as well as new initiatives and structural transformations in the sphere of mutual trade and financial relations in the context of post-war development of Ukraine.

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