Vol. 8, No. 2, 2024

UDC 330.341:339.94 JEL Classification: F15

O. V. Pyroh

Lviv Polytechnic National University, Department of Management and International Business; Université de Sherbrooke, Department of Economics ORCID: 0000-0002-6714-3079

INTEGRATION UKRAINIAN ECONOMY INTO EUROPEAN VALUE CHAINS: MODELING OF ECONOMIC COMPLEXITY

http://doi.org/10.23939/semi2024.02.091

© Pyroh O. V., 2024

Purpose. The purpose of the paper is to research of the modern trends of Ukrainian integration into European value chains that based on the sectoral model and its complexity, and to identify their features during last years. Based on the latest research and publications related to this topic, it is possible to formulate the hypothesis that at the postwar period, Ukraine needs to integrate into European value chains via transformation of the sectoral model of development that will provide the status as global and competitive actor in global and European economies.

Design/methodology/approach. To research the modern trends of Ukrainian integration into European value chains, the methods of scientific research were applied (theoretical generalization, empirical method and methods of statistical analysis).

Findings. Our research observed the modern tendencies of Ukrainian economy integration into European value chains. During 2000–2021 Ukraine traded the products in such types of economic activities as agriculture, forestry and fishing; electricity, gas and water; mining and quarrying; manufacturing, and services in GVCs. There were also significant changes in the geographical structure of Ukraine's trade in GVCs, and, also, changed the direction of Ukraine's foreign economic activity: from the "Russia-CIS vector" to the "EU vector".

Practical implications. The obtained results impact to develop the recommendations for the formation and implementation of the strategy of Ukrainian integration into European value chains now and at the conditions of postwar period.

Originality/value. The research highlights the elements of the methodological system of transformation of the integration strategy of Ukraine into European value chains now and at the conditions of the postwar period, based on macro-forecasting of the country's development was carried out in accordance with strategic economic tasks.

Keywords: global value chains (GVCs), European value chains (EUVCs), economic complexity, structure of economy, Ukraine, EU.

Problem statement

Ukraine is actively developing as a strong subject of the global economy, defending its economic and political independence from the illegal and invasive actions of Russia. Since 2004, the events that took place in Ukraine (the uprising of civil society during the First Revolution, the clash between the authorities

Pyroh O. V.

and the Ukrainian nation during the Revolution of Dignity, the annexation of Crimea, the military conflict in the Eastern Ukraine (since March 2014) and Russia's war against Ukraine (since February 2022), have seriously influenced and continue to influence the economic development of Ukraine and its place in global value-added chains (GVCs). At the begging 2023, Prime Minister of Ukraine Shmyhal D. expressed interest in "cluster cooperation with the EU as a basis for the successful integration of Ukraine into GVCs" [1].

In the modern period, the economy of Ukraine is transforming from a Soviet society and dependence on Russia to a post-industrial society and participation in GVCs. In 2022, there was a complete break in production and sales chains between Ukraine and Russia, which were still formed during the times of the Soviet Union. Russia's war against Ukraine is aimed at the complete destruction of Ukraine's industrial potential, deindustrialization of cities (Maryinka, Mariupol, Irpin, Kharkiv, Chernihiv, Severodonetsk, Lysychansk, Vugledar, Sumy, Rubizhne, Izyum, Mykolaiv, Bakhmut, Volnovakha) and regions (Donetsk, Kharkiv, Luhansk, Mykolaiv, Zaporizhzhya, Kyiv and Chernihiv). As a result of military operations from February 2022, large and medium-sized industrial enterprises of Ukraine were completely destroyed:

- the metallurgy was the most affected in terms of industries: three enterprises were destroyed, which are the largest in the list of damaged/destroyed – Azovstal of the Metinvest group, MMK PrJSC named after Ilyich (both in Mariupol) and PJSC Avdiiv Coke Chemical Plant (Avdiivka);

- the Lysichansky and Kremenchutsk refineries, enterprises or their production facilities in Kharkiv, Kyiv, Chernihiv, Mykolaiv, Sumy, Okhtyrka and many other industrial cities of Ukraine were destroyed or severely damaged;

- the Kakhovskaya hydroelectric power station was exploded.

The Russian war against Ukraine has following impact to economic development of Ukraine:

- from one side - negative aspect - Ukraine has a lot of damaged and destroyed industrial enterprises, energy sector, social infrastructures and polluted land;

- from another side – positive aspect – now Ukraine has great opportunity (1) to change russian value chains to GVCs especially European value chains (EUVCs) and (2) to break all productional, logistics and energy connections with Russia that were formed during the Soviet Union.

Therefore, Ukraine faces a strategic question regarding integration into the GVCs and, accordingly, the latest placement of productive forces on the territory of Ukraine as a result of the break in value chains with Russia.

Analysis of recent research and publications

In modern globalized world, the driving force behind the growth of the economies of countries and the world economy as a whole are global value chains, in which the fragmentation of the production process (for example, division into production units), is carried out in order to optimize the use of resources.

Research by Ukrainian and foreign scientists in GVCs sphere shows that the trend of integration of TNCs into production networks and participation in GVCs is spreading. The concept of the value chains, as "a sequence of actions performed by enterprises for the development, production, sale, delivery and service of goods" [2, p. 91], was introduced by Porter M. in 1985 within the framework of the study of competitive advantages and international competitiveness of countries. The concept of GVCs was first proposed in 1994 by Gereffi G. [3], who actively develops it in his subsequent works.

Theoretical and practical aspects of functioning and features of the development of GVCs were studied by well-known foreign scientists (Gereffi G. [3], Humphrey J., Kaplinsky R., Morris M. [4], Lee J., Mamedovich O., Porter M. [2], Rodrik D. [5], etc.), as well as Ukrainian scientists (Cherkas N. [6], Duginets G.V. [7], Haustova V.E., Reshetnyak O.I., Polyakova O.I., Shlykova V.O. [8], Kravtsova I.V. [9], Mytsenko V.I. [10], Patlatoi O.E. [11], Yaroschuk D.O., Okhrimenko O.O. [12]).

Despite a significant amount of research in this direction, in the conditions of war, the prospects for the integration of national production into global value chains to require further research, which once again proves the relevance of the chosen topic of the paper.

Hypothesis formulation and presentation of goal

The purpose of the paper is to research of the modern trends of Ukrainian integration into European value chains that based on the sectoral model and its complexity, and to identify their features during last years. Based on the latest research and publications related to this topic, it is possible to formulate the hypothesis that at the postwar period, Ukraine needs to integrate into European value chains via transformation of the sectoral model of development that will provide the status as global and competitive actor in global and European economies.

Research methods

To research the modern trends of Ukrainian integration into European value chains, the methods of scientific research were applied (theoretical generalization, empirical method and methods of statistical analysis). In the research, it was used two databases (1) of the Atlas of Economic Complexity [13] that was launched in 2013 by the Harvard Kennedy School of Government, and (2) TiVA [14] that was created in 2013 by the Organization for Economic Cooperation and Development together with the World Trade Organization.

Presentation of the main material

Ukraine has always been a member of the GVCs. The dynamics of Ukraine's trade in GVCs in the period 2000–2020 is presented on Fig. 1.

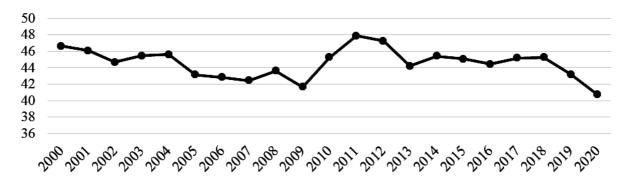


Fig. 1. The concentration of Ukraine's trade in GVCs in the period 2000–2020, in % of the total volume of foreign trade

Note: compiled by the author based on data [13].

During the research period (2000–2020), the concentration of Ukraine's trade in the GVCs almost did not change, as it was within the same limits (40–50 % of the total volume of foreign trade). Trade trends were multidirectional during this period: from 2000 (46.6 %) to 2009 (41.6 %) – downward trend; in 2011-2012 – the maximum level of Ukrainian trade (47 %) with a further decrease in the specific weight (to 40.7 % in 2020). This trajectory of Ukraine's trade in the GVCs during the research period was determined by both external (world economic and financial crises and COVID-19) and internal development factors.

International experts [15] admit that Russia's military aggression against Ukraine affected Ukraine's foreign trade: if Ukraine exported about 25 % of goods both to Russia and to European Union (EU) in 2013 (Fig. 2-a); while in 2014, exports to Russia fell by about a third from 2013 levels, and as of 2021, only 5.2 % of Ukrainian goods are exported to Russia, while more than 45 % of goods are exported to EU (Fig. 2-b).

Changes in the orientation of Ukraine's foreign trade from Russia to EU markets also occurred as a result of the Association Agreement (2014) and its creation of Ukraine-EU free trade zone, which liberalized mutual access to the markets of goods and services.

The sectoral structure of Ukraine's trade in the GVCs by types of economic activity in the period 2000–2020 is presented on Fig. 3.

Pyroh O. V.

Russia	Italy	Poland		Belarus	Turkey		Chi	na	Egypt	
	4.20% Germany	3.77% etherlands Moldova		3.05% Czechia	G. Kazakhstan	6.57% Azerbaijan Sat		.16% Iraq	4.32%	
	2.92% F Hungary	1.57%	1.35% omania 0.90%	United Kingdom 0.83%	3.24%	1 29% Iran Japar United Arab 1.13%		Syria	0.46%	
23.58%	2.44%	lovakia <u>1.16%</u> ulgaria 0	2.4996	0.09%	India	1.1.3% Israel 0.63% Turkment 0.92% Georgia South			0.42% Pres United States of America 1.33% 0.59%	
23.38%0	1.99%		tug		2.84%	0.84% 0.59%				

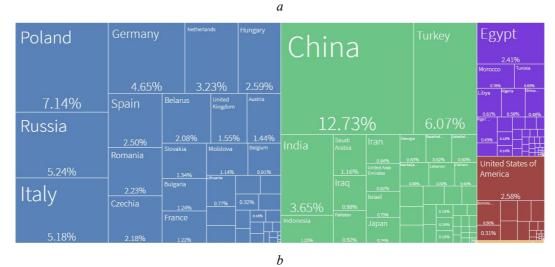


Fig. 2. Trade partner structure of Ukraine in 2013 (a) and 2021 (b) [14]

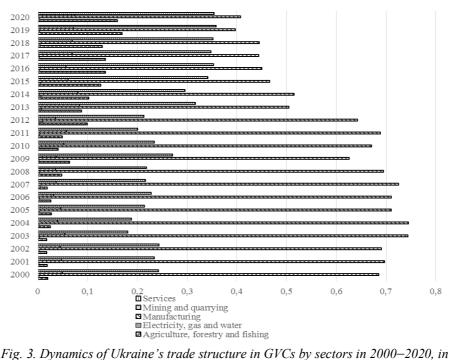


Fig. 3. Dynamics of Ukraine's trade structure in GVCs by sectors in 2000–2020, in % Note: compiled by the author based on data [13].

Trade liberalization had the positive effects on the export of goods of the following economic activities of Ukraine (Fig. 4-a):

1) agriculture and manufacture of food products, which were able to double the volume of exports by the group of food products and increase almost 2.5 times the export by the group of animal and vegetable oils and fats (mainly due to sunflower oil);

2) ferrous metallurgy, which is caused by a structural imbalance (excess of supply over demand) in the world market of ferrous metals;

3) mechanical engineering, the volume of exports of which grew moderately and steadily.

The import of goods from EU to Ukraine was characterized by the following trends (Fig. 4-b):

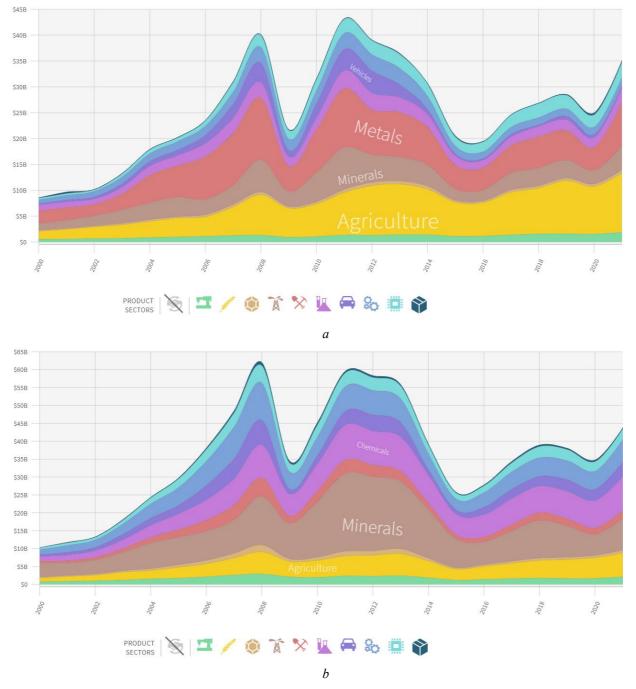


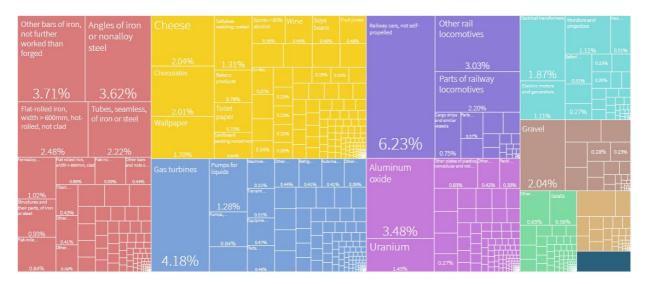
Fig. 4. Export (a) – Import (b) structure from Ukraine to EU during 2000–2021 [14]

Pyroh O. V.

1) in fact, all the main groups of goods imports from EU experienced a period of significant decline under the influence of the collapse devaluation of the hryvnia in 2014–2015, a significant drop in income and the compression of solvent demand during this period (Sectorial Integration of Ukraine into the EU, 2021);

2) the association agreement did not cause a significant increase in the import of goods from EU to Ukraine. Also, the creation of a free trade zone with EU did not become a systemic factor in the suppression of Ukrainian production, since in general, imports from EU in 2021 exceeded this indicator for 2013 by only 4.2 %.

So, as a result of the long-term influence of external factors, there was a reorientation of Ukraine's foreign economic activity from Russia and CIS countries to EU, which has a positive effect on the level of economic complexity of goods and services exported from Ukraine. Traditionally, Ukraine exported to Russia its most complex goods, such as cars, trains, planes, and electronics (Fig. 5); while to EU, on the contrary, – mainly agricultural goods and basic industrial products (Fig. 6).





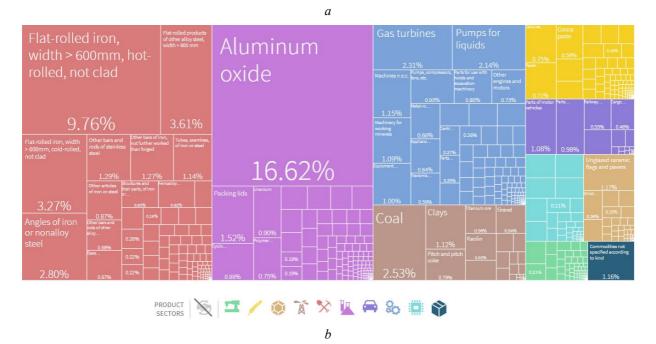
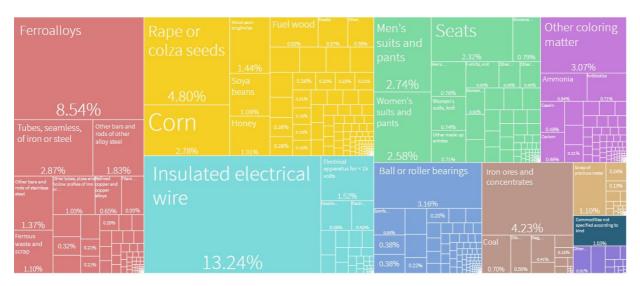


Fig. 5. Economic complexity from Ukraine to Russia in 2013 (a) and 2021 (b) [14]





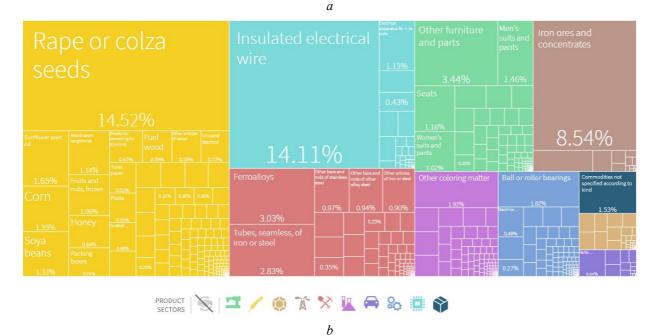


Fig. 6. Economic complexity from Ukraine to Germany in 2013 (a) and 2021 (b) [14]

According to the position of scientists from Razumkov center [17, p. 50], the implementation of the Association Agreement during 2015–2020 revealed a very insignificant impact of European integration measures on the acceleration of technological progress in the Ukrainian economy, which demonstrates a structural drift towards simplification and, obvious deindustrialization.

It should be noted that during 2013–2021, there are positive changes in Ukrainian exports to EU: the export of electronics, which is part of the supply chain serving the European production centers of EU, is constantly expanding. The dynamics of the electronics export, which are medium and high-tech goods, from Ukraine to Germany is growing rapidly (Fig. 7), which is evidence of the integration of the national economy of Ukraine into EU value chains.

During the research period, the structure of trade by sector in the GVCs significantly changed from the industrial model (during 2000–2008) to the post-industrial model with the expansion of agriculture (2013–2020). Based on the results of structural analysis of Ukraine's trade in GVCs, we can highlight the following trends:

Pyroh O. V.

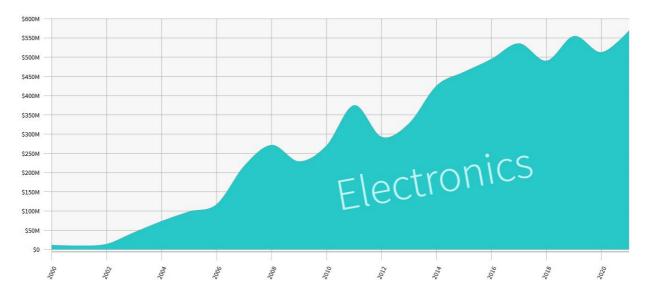


Fig. 7. Dynamics of electronics exports from Ukraine to EU during 2000–2021 [14]

- in GVCs, Ukraine trades products in such types of economic activities as agriculture, forestry and fishing; electricity, gas and water; mining and quarrying; manufacturing, and services;

- the trajectory of trade in agriculture, forestry and fishing of Ukraine in the GVCs has an increasing trend: during the period of the research, the concentration increased in 9 times (from 2.02 % in 2000 to 15.96 % in 2020) and reached its maximum value in 2019–2020. Since 2009, there has been a steady trend towards an increase in the concentration of trade in agricultural products in the GVCs, and since 2014, the concentration has become significant for Ukraine (more than 10 %). This situation is due to the concluded Association Agreement (2014) and the creation of the Ukraine-EU free trade zone;

- the products of the manufacture are the priority in the trade of Ukraine in the GVCs, but, during the research period, it is characterized by a downward trend: during the period of the research, the specific weight decreased almost 2 times (from 68.55 % in 2000 to 40.76 % in 2020) and reached the minimum value in 2019–2020. Until 2011, the concentration remained stable in the range of 68–74.4 %, since 2013, there has been a tendency to rapidly decrease the concentration of trade in the GVCs. This trend is explained by the change in the direction of Ukraine's foreign economic activity: from the "Russia-CIS vector" to the "EU vector";

- trade in services of Ukraine in the GVCs is characterized by a growing trend: during the research period, the concentration increased almost 2 times (from 24.23 % in 2000 to 35.42 % in 2020) and reached its maximum value in 2018–2020. In 2013, a steady trend towards growth in the concentration of trade in services was observed;

- trade in such types of economic activity as the electricity, gas and water, and mining an quarrying has not changed, the concentration of which remains unchanged (0.27-0.4% and 5.39-7.46%, respectively);

- during the research period, there were also significant changes in the geographical structure of Ukraine's trade in GVCs;

– to determine the difference in the structure of trade by sector in the GVCs, the index of A. Salai was used, which made it possible to establish the periods in which there were significant structural shifts in trade in the GVCs. So, in 2003–2004, 2008–2009 and 2013 there were significant changes in the sectoral structure of Ukraine's trade in GVCs (in the indicated periods, the index of A. Salia was more than 0.9 -almost 1).

The integration of Ukraine's economy into European value chains should become one of the country's priority tools for economic development in the post-war period. Cabinet of Ministers of Ukraine defined five sectors that are the most perspective for integration into GVCs: energy, military and

manufacture sector, agriculture, natural resources and IT [1]. Before the start of the full-scale invasion of Russia on the territory of Ukraine (until February 2022), economic entities of various types of economic activity were integrated into European value chains:

– the agro-food industry and agriculture, which during 2008–2022 were the basic spheres of economic activity in Primary sector (S_I), are gaining new importance for the national economy of Ukraine in the context of the country's recovery in the post-war period. Precisely, as a result of the military conflict in the East part of Ukraine and the temporary occupation of the AR Crimea (2014–2024), there was a sharp drop in industrial production, which led to structural changes and a significant increase in the importance of agriculture in the sectorial structure of development model of the national economy and exports;

- IT industry, 70 % of whose exports are software development services - outsourcing [16]. Ukrainian IT companies provide services such as software development, design, and data analysis to EU clients;

- manufacture, in particular, with a focus on the production of machinery, transportation equipment, and consumer goods. According to the results of the research [10, p. 34], one of the main directions of modernization of the economy of Ukraine is a decrease in export volumes and an increase in domestic consumption of ferrous metals as raw materials for the production of engineering products, in particular, electric machines.

Based that the export of machinery and equipment positively impacted on the economic growth of Ukraine, the use of metallurgical production as a base for the machine-building industry and the establishment of the production of competitive machine-building products will provide the opportunity for domestic enterprises to participate in the higher stages of the GVCs in this sphere [10, p. 33]. The research [15] presented that the Western part of Ukraine had a higher level of integration into EU value added chains due to its geographical proximity to EU than the Northern, Central and Eastern parts, where powerful industrial enterprises operated. Thus, the Western part of Ukraine (Lvivska, Ternopilska, Rivnenska, Zakarpattia regions) should become the basic industrial hub of Ukraine in the post-war integration into European value chains [18, p.11]. Enterprises from the Eastern part of Ukraine, which lost the opportunity to carry out production activities due to the invasion of Russia, are already transferring their production facilities to these areas.

Conclusions

Ukraine has industrial, resource and intellectual potential for integration as the industrial and technological hub into European value chains. It is the formation and implementation of the development model of Ukraine in the European value chains that will ensure Ukraine's competitiveness and drive to economic growth. The agro-food industry and agriculture of Ukraine is the main component of Primary sector (S_1) of the national economy, should ensure food security for Ukraine and the world, and become the locomotive of development capable of taking Ukraine to a leading position in the modern globalized world, even under modern conditions of war.

Thus, Ukraine should form a development strategy in the GVCs, in general, and trade, in particular, to ensure the recovery and modernization of the country's economy and to promote economic growth. It should be noted that the Association Agreement (2014) and the creation of the Ukraine-EU free trade zone had a positive effect on Ukraine's level of trade in the GVCs.

Prospects for further research

The specific measures for integration Ukrainian manufacture and agriculture into EUVCs at the postwar period, and elaboration of national strategy for future development can be research objects in furthers research.

1. Кабінет Міністрів України: офіційний сайт. Шмигаль. Д.: Відбудова України – найамбітніший проект XXI ст., який відкриває незліченні перспективи для бізнесу. URL: https://www.kmu.gov.ua/news/denys-shmyhal-vidbudova-ukrainy-naiambitnishyi-proekt-khkhi-st-iakyi-vidkryvaie-nezlichenni-perspektyvy-dlia-biznesu.

2. Портер М. Конкурентна перевага. Як досягати стабільно високих результатів / пер. з англ. Київ : Наш Формат, 2019. 624 с.

3. Gereffi G. *Global value chains and development: Redefining the contours of 21st century capitalism.* Cambridge : Cambridge University Press, 2018. 494 p.

4. Kaplinsky R., Morris M. A Handbook for Value Chain Research. IDRC, 2000. 113 p.

5. Rodrik D. *New technologies, global value chains, and developing economies* (No. w25164). National Bureau of Economic Research. 2018. URL: https://www.nber.org/system/files/working_papers/w25164/w25164.pdf.

6. Черкас Н. Концепції глобальних мереж та ланцюгів створення вартості. *Вісник Київського національного торговельно-економічного університету.* 2018. 3. 60–70. URL: http://nbuv.gov.ua/UJRN/Vknteu_2018_3_6.

7. Дугінець Г. В. *Глобальні ланцюги вартості* : монографія. Київ : Київ. нац. торг.-екон. ун-т., 2018. 412 с.

8. Хаустова В. Є., Решетняк О. І., Полякова О. Ю., Шликова В. О. Оцінка участі галузей промисловості України в глобальних ланцюгах створення доданої вартості. *Проблеми економіки*. 2020. 3 (45). 73–85.

9. Кравцова І. В. Методика дослідження глобальних ланцюгів доданої вартості. *Науковий вісник Міжнародного гуманітарного університету.* 2016. 16. 39–44.

10. Миценко В. І. Перспективи залучення промисловості України у глобальні ланцюги доданої вартості та їх вплив на економічне зростання. *Економічний вісник Донбасу*. 2022. 3 (69). 31–35.

11. Патлатой О. Є. Розвиток участі економіки України в глобальних ланцюгах доданої вартості в умовах повоєнного відновлення. *Ефективна економіка*. 2023. 6. URL: https://nayka.com.ua/index.php/ee/article/view/1711/1724.

12. Ярощук Д. О., Охріменко О. О. Інтеграція вітчизняних наукомістких виробництв у глобальні ланцюга доданої вартості. *Актуальні проблеми економіки та управління*. 2020. 14. URL: http://ape.fmm.kpi.ua/article/view/190757.

13. OECD. Trade in Value Added. URL: https://www.oecd.org/sti/ind/measuring-trade-in-value-added.htm.

14. The Atlas of Economic Complexity. URL: https://atlas.cid.harvard.edu/.

15. Hartog M., Lopez-Cordova J. E., Neffke F. Assessing Ukraine's Role in European Value Chains: A Gravity Equation-cum-Economic Complexity Analysis Approach. *Harvard Growth Lab.* 2021. URL: https://growthlab.cid.harvard.edu/publications/assessing-ukraines-role-european-value-chains-gravity-equation-cum-economic.

16. Integration into Global Value Chains. URL: https://www.industry4ukraine.net/digest-6/#2.

17. Sectorial Integration of Ukraine into the EU: Prerequisites, Prospects, Challenges. URL: https://razumkov.org.ua/uploads/article/2021 sektor eu ukr.pdf.

18. Pyroh O. V., Shpak N. O. Transformation of Sectorial Model of Development in the Western part of Ukraine in the terms of Instability. *Economy and State*. 2020. 6. 6–12.

1. *Cabinet of Ministers of Ukraine*: the official site. (2023). Shmyhal. D.: Reconstruction of Ukraine is the most ambitious project of the 21st century, which opens countless prospects for business. Retrieved from https://www.kmu.gov.ua/news/denys-shmyhal-vidbudova-ukrainy-naiambitnishyi-proekt-khkhi-st-iakyi-vidkryvaie-nezlichenni-perspektyvy-dlia-biznesu (in Ukrainian).

2. Porter, M. (2019). *Competitive advantage. How to achieve consistently high results /* trans. from english Kyiv : Nash Format (in Ukrainian).

3. Gereffi, G. (2018). *Global value chains and development: Redefining the contours of 21st century capitalism.* Cambridge : Cambridge University Press (in English).

4. Kaplinsky, R., & Morris, M. (2000). A Handbook for Value Chain Research. IDRC (in English).

5. Rodrik, D. (2018). *New technologies, global value chains, and developing economies* (No. w25164). National Bureau of Economic Research. Retrieved from https://www.nber.org/system/files/working_papers/w25164/w25164.pdf (in English).

6. Cherkas, N. (2018). Concepts of global networks and value chains. *Bulletin of the Kyiv National University of Trade and Economics*, 3, 60–70. Retrieved from http://nbuv.gov.ua/UJRN/Vknteu_2018_3_6 (in Ukrainian).

7. Duginets, G. V. (2018). *Global value chains*. Kyiv : Kyiv National Trade and Economy University (in Ukrainian).

8. Haustova, V. E., Reshetnyak, O. I., Polyakova, O. Yu., & Shlykova, V. O. (2020). Assessment of the participation of Ukrainian industries in global value chains. *Problems of economics*, 3 (45), 73–85 (in Ukrainian).

9. Kravtsova, I. V. (2016). Research methodology of global value chains. *Scientific Bulletin of the International Humanitarian University*, 16, 39–44 (in Ukrainian).

10. Mytsenko, V. I. (2022). Prospects for the involvement of Ukrainian industry in global value chains and their impact on economic growth. *Economic Bulletin of Donbas*, 3(69), 31–35 (in Ukrainian).

11. Patlatoi, O. E. (2023). The development of the participation of the Ukrainian economy in global value chains in the conditions of post-war recovery. *Effective economy*, 6. Retrieved from https://nayka.com.ua/index.php/ ee/article/view/1711/1724 (in Ukrainian).

12. Yaroschuk, D. O., & Okhrimenko, O. O. (2020). Integration of domestic knowledge-intensive industries into global value chains. *Actual problems of economy and management*, 14. Retrieved from http://ape.fmm.kpi.ua/article/view/190757 (in Ukrainian).

13. *OECD*. Trade in Value Added. Retrieved from https://www.oecd.org/sti/ind/measuring-trade-in-value-added.htm (in English).

14. The Atlas of Economic Complexity. Retrieved from https://atlas.cid.harvard.edu/ (in English).

15. Hartog, M., Lopez-Cordova, J. E., & Neffke, F. (2021). Assessing Ukraine's Role in European Value Chains: A Gravity Equation-cum-Economic Complexity Analysis Approach. *Harvard Growth Lab*. Retrieved from https://growthlab.cid.harvard.edu/publications/assessing-ukraines-role-european-value-chains-gravity-equation-cum-economic (in English).

16. Integration into Global Value Chains. Retrieved from https://www.industry4ukraine.net/digest-6/#2 (in English).

17. Sectorial Integration of Ukraine into the EU: Prerequisites, Prospects, Challenges. Retrieved from https://razumkov.org.ua/uploads/article/2021_sektor_eu_ukr.pdf (in English).

18. Pyroh, O. V., & Shpak, N. O. (2020). Transformation of Sectorial Model of Development in the Western part of Ukraine in the terms of Instability. *Economy and State*, 6, 6–12 (in English).

О.В.Пирог

Національний університет "Львівська політехніка", кафедра менеджменту і міжнародного підприємництва; Університет Шербрука, кафедра економіки, olha.v.pyroh@lpnu.ua

ІНТЕГРАЦІЯ УКРАЇНСЬКОЇ ЕКОНОМІКИ В ЄВРОПЕЙСЬКІ ЛАНЦЮГИ ДОДАНОЇ ВАРТОСТІ: МОДЕЛЮВАННЯ ЕКОНОМІЧНОЇ СКЛАДНОСТІ

© Пирог О., 2024

Досліджено сучасні тенденції інтеграції України в європейські ланцюги доданої вартості та виявлено її особливості протягом останніх років (2000–2021 рр.). На основі останніх досліджень та публікацій щодо глобальних ланцюгів доданої вартості (ГЛДВ) можна сформулювати гіпотезу про те, що в післявоєнний період Україні доцільно інтегруватися в європейські ланцюги доданої вартості шляхом трансформації галузевої моделі розвитку, яка забезпечить статус глобального та конкурентоспроможного актора у світовій та європейській економіках. Протягом 2000–2021 років в ГЛДВ Україна торгувала продукцією в таких видах економічної діяльності, як сільське, лісове господарство та рибальство; електроенергія, газ і вода; добувна промисловість і розроблення кар'єрів; переробна промисловість та послуги. Встановлено, що відбулись суттєві зміни в географічній структурі торгівлі України в ГЛДВ, а також змінився напрям зовнішньоекономічної діяльності України: з "вектора Росія-СНД" до "вектора ЄС". Отримані результати можуть бути використані під час розробки рекомендацій щодо формування та реалізації стратегії інтеграції України в європейські ланцюги доданої вартості в умовах війни та післявоєнний період.

Ключові слова: європейські ланцюги доданої вартості, економічна складність, структура економіки, Україна, ЄС.