

UDC 327:339.5

**Karasova N.***Doctor of Economics, Professor,**Kyiv National University of Culture and Arts, Ukraine;**e-mail: karasyova.natasha@gmail.com; ORCID ID: 0000-0002-8471-3870***Mishchenko A.***Ph. D. in Political Science, Associated Professor,**Kyiv National University of Culture and Arts, Ukraine;**e-mail: mishenko.ab@gmail.com; ORCID ID: 0000-0001-6693-6221*

## GEO-STRATEGIC INTERESTS OF UKRAINE AND ECONOMIC PARTNERSHIP WITH TURKEY

**Abstract.** Broadening the scope of economic interests, together with the involvement of the strategic partner to resolve security issues, brings the dialogue between Ukraine and Turkey to a new level. This intensified negotiations on the establishment of a free trade area and the implementation of joint projects in the defense industry, cultural and humanitarian spheres. Thus, the study of priority areas of cooperation between Ukraine and Turkey in the Black Sea region for the effective realization of Ukraine's geostrategic interests is becoming topical. The purpose of the article is to study the peculiarities of the economic partnership between Ukraine and Turkey, to calculate the impact and to determine the advantages and prospects of a deeper bilateral trade liberalization. The methodology is based on assessment of export specialization; the characterization of the relative advantages by the RXA coefficient; the impact assessment of bilateral trade on economic development through a descriptive gravity model. The study found that high tariff barriers are now applied to Ukrainian exporters in the Turkish market. Total exports from Ukraine to Turkey declined by more than 30 per cent from 2011 to 2019, while the low value-added products dominate in the highly concentrated structure of export flows. On the contrary, Turkish exports to Ukraine are quite diversified. The top ten exports include machinery, electrical equipment, vehicles and knitwear. Ukrainian grains, oilseeds and oils, iron and steel, ore and rail transport have comparative advantages in the Turkish market. The military-industrial sector and IT are promising areas for export development and investment cooperation in the Ukrainian economy. Bilateral trade surpluses are in favor of Ukraine. The economic development of Ukraine significantly influences the volume of bilateral trade, according to the results of the descriptive gravity model. A \$1 increase in Ukraine's GDP will lead to an increase in bilateral trade by \$0.8. This makes Ukraine much more interested in entering the Turkish market.

**Keywords:** strategic partnership, free trade area, international trade, exports, customs tariffs, liberalization.

**JEL Classification** F13

Formulas: 3; fig.: 4; tabl.: 2; bibl.: 21.

**Карасьова Н. А.***доктор економічних наук, професор,**Київський національний університет культури і мистецтв, Україна;**e-mail: karasyova.natasha@gmail.com; ORCID ID: 0000-0002-8471-3870***Мищенко А. Б.***кандидат політичних наук, доцент,**Київський національний університет культури і мистецтв, Україна;**e-mail: mishenko.ab@gmail.com; ORCID ID: 0000-0001-6693-6221*

## ГЕОСТРАТЕГІЧНІ ІНТЕРЕСИ УКРАЇНИ ТА ЕКОНОМІЧНЕ ПАРТНЕРСТВО З ТУРЕЧЧИНОЮ

**Анотація.** Розширення сфер реалізації економічних інтересів разом із залученням стратегічного партнера для врегулювання безпекових питань виводить сьогодні діалог між Україною і Туреччиною на новий рівень, складовою якого є активізація переговорів щодо

створення зони вільної торгівлі, реалізація спільних проектів в оборонно-промисловій, культурній і гуманітарній сферах. Актуальним постає дослідження напрямів пріоритетної співпраці між Україною і Туреччиною в Чорноморському регіоні для ефективної реалізації геостратегічних інтересів України. Мета статті — дослідження особливостей торговельно-економічного партнерства України і Туреччини з розрахунком економічного ефекту та визначенням переваг і перспектив від більш глибокої лібералізації двосторонньої торгівлі. В основі методики дослідження лежить оцінка стану спеціалізації країни, характеристика відносних переваг за допомогою коефіцієнта RХА та оцінка ефекту двосторонньої торгівлі з характеристикою взаємовпливу зовнішньоторговельних потоків на економічний розвиток країн за допомогою описової гравітаційної моделі. У результаті дослідження було встановлено, що наразі до українських експортерів на турецькому ринку застосовуються високі тарифні бар'єри. Загальний обсяг експорту з України до Туреччини за період з 2011 до 2019 рр. скоротився більше ніж на 30 %, а висококонцентрованої структури експортних потоків переважають товари з низькою доданою вартістю. Турецький експорт в Україну, навпаки, має досить високий ступінь диверсифікації, а у першу десятку експортних товарів входять машини та механічні прибори, електротехніка, транспортні засоби і трикотаж. Порівняльні конкурентні переваги на ринку Туреччини на сьогодні мають українські зернові, насіння олійних та олії, залізо і сталь, руда і залізничний транспорт. Перспективними сферами української економіки для розвитку експорту та інвестиційного співробітництва є військово-промисловий сектор та ІТ. Позитивне сальдо у двосторонній торгівлі грає на користь України. За результатами описової гравітаційної моделі економічний розвиток України значно сильніше впливає на обсяги двосторонньої торгівлі. При збільшенні ВВП України на 1 дол. США товарооборот між країнами зростає на 0,8 дол. США. Це формує з боку України значно більшу зацікавленість у виході на ринок Туреччини.

**Ключові слова:** стратегічне партнерство, зона вільної торгівлі, міжнародна торгівля, експорт, митні тарифи, лібералізація.

Формул: 3; рис.: 4; табл.: 2; бібл.: 21.

**Introduction.** As of 2021, Ukraine has integrated into Western structures, implemented models of regulation of certain industries, created anti-corruption institutions, signed and ratified the Association Agreement, received a visa-free regime and enshrined in the Constitution the course of European and Euro-Atlantic integration. However, at the stage of implementation of the basic requirements for Ukraine to move closer to the standards of democratic and economic development, the EU plunged into its own systemic crises, which narrows the format of strategic and economic partnership of our country.

On the other hand, the aggravation of the security situation in the Black Sea region has given impetus to a new level of strategic dialogue between Ukraine and Turkey, the practical component of which today is the intensification of negotiations on a free trade zone, implementation of joint projects in defense-industrial and humanitarian spheres which in turn can become a springboard for the realization of the basic economic and geopolitical interests of both countries in the region. In this regard, it is important to study the areas of priority cooperation between Ukraine and Turkey in the Black Sea region for the effective implementation of geostrategic interests of Ukraine.

**Analysis of research and problem statement.** Theoretical foundations of liberalization of international trade in the framework of integration processes in modern scientific work were laid by such economists as B. Ballas [1], J. Weiner [2] and G. Haberler [3], T. Walras [4]. As early as the middle of the twentieth century, they described modern forms of customs unions and a deeper mechanism of economic integration, proposed methodological tools for determining the effectiveness of international trade for the national economy, including a fundamental indicator of comparative advantage and sectoral specialization of RCA and also studied the effect of reducing customs tariffs

The current place and importance of both Ukraine and its strategic partner Turkey, as well as their role in strengthening or weakening Europe were studied by Y. Bilan [5], O. Yatsenko [6—8],

O. Drozd [9], P. Oleshchuk [10], R. Ostapenko [11], O. Bazaluk [12], P. Kuzmin [13], V. Koziuk [14] and others. Political and economic aspects of Ukrainian-Turkish cooperation were studied by E. Solovykh [15], V. Matei [16], N. Nebaba [17].

**The purpose of the article is** to study the peculiarities of the trade and economic partnership between Ukraine and Turkey with the calculation of the economic effect and the definition of the advantages and prospects of deeper liberalization of bilateral trade.

**Unsolved aspects of the problem.** It should be noted that there is currently a small amount of research aimed at unlocking the potential of strategic and economic partnerships with Turkey.

**Research results.** The information base of the study consisted of macroeconomic indicators of countries, as well as indicators of international and bilateral trade for the period 2000-2019. The information source was international databases: World trade organization (2021), Trade map (2021), World bank (2021), and the State Statistics Service of Ukraine (2020).

The assessment of the state of the country's specialization in the export of groups of goods and the characterization of relative advantages was carried out using the relative export advantage coefficient (RXA) according to the formula of T. Walras (1). If the value of the index is greater than 1, then the comparative advantage is considered to be detected. An index value in the range of 2—4 means a significant advantage, more than 4 — a large one.

$$RXA = \frac{X_{ij} \cdot (X_{rw} - X_{rj})}{X_{rj} \cdot (X_{iw} - X_{ij})}, \quad (1)$$

where  $X_{ij}$  is the volume of exports of goods (or product group)  $i$  country  $j$ ;  $X_{rj}$  is total exports of the country  $j$ ;  $X_{iw}$  is the volume of exports of goods (or product group)  $i$  all countries of the world;  $X_{rw}$  is total world exports.

To assess the effect of bilateral trade and characterize the interaction of foreign trade flows on the economic development of countries, the gravity model of J. Tinberg was used [18; 19] (2).

$$\ln(F_{ij}) = \beta_0 + \beta_1 \ln(M_1) + \beta_2 \ln(M_2) + \beta_3 \ln(d_{ij}) + \varepsilon_{ij}, \quad (2)$$

where  $F_{ij}$  is trade between countries,  $M_1$  and  $M_2$  — gross domestic product of countries,  $d_{ij}$  is factor of trade costs associated with exports, including logistics costs,  $\varepsilon_{ij}$  is all other factors that affect exports but are not included in the equation,  $\beta$  is constants (model parameters).

Today, absolutely interpenetrating national security and economic factors are decisive for the national welfare of the state and one of the effective multivariate partners for Ukraine in the realization of national interests can be Turkey, cooperation with which is of strategically advantageous and rational character for our country. Turkey is an extra weight in many areas in its region with a growing population of over 80 million; high economic growth rates — about 10% of GDP annually; 11th place in the ranking of the strongest states [20], which strengthens the military potential and gives the opportunity to dominate among the countries of the Middle East, as well as to develop de facto politico-military alliances with Israel and Azerbaijan. In addition, Turkey has a favorable geographical position, has access to four seas, controls the critical for the Black Sea straits of the Bosphorus and Dardanelles, which opens a spatial channel of access not only to the ocean but also to global markets. As a member of the North Atlantic Treaty Organization (NATO), a candidate for accession to the European Union and a regional leader, Turkey offers access both to its own markets through direct business partnerships and to the markets of Central Asia and the Middle East due to the possibility of promoting joint projects.

Pragmatization and economization of relationships have always been the key to strong partnerships. Turkey as a trading partner of Ukraine in 2019 ranked 4th, or 5.2% of total exports of goods and services (Fig. 1). For comparison, the 3rd place was taken by the Russian Federation (6.5%), the second place — Poland (6.6%) and the first place — China (7.2%). Ukraine ranks only 18th in Turkey's total imports with a market share of 1.3%. Turkey's largest partners remain the Russian Federation (11.2%), China (9.2%) and the United States (5.5%).

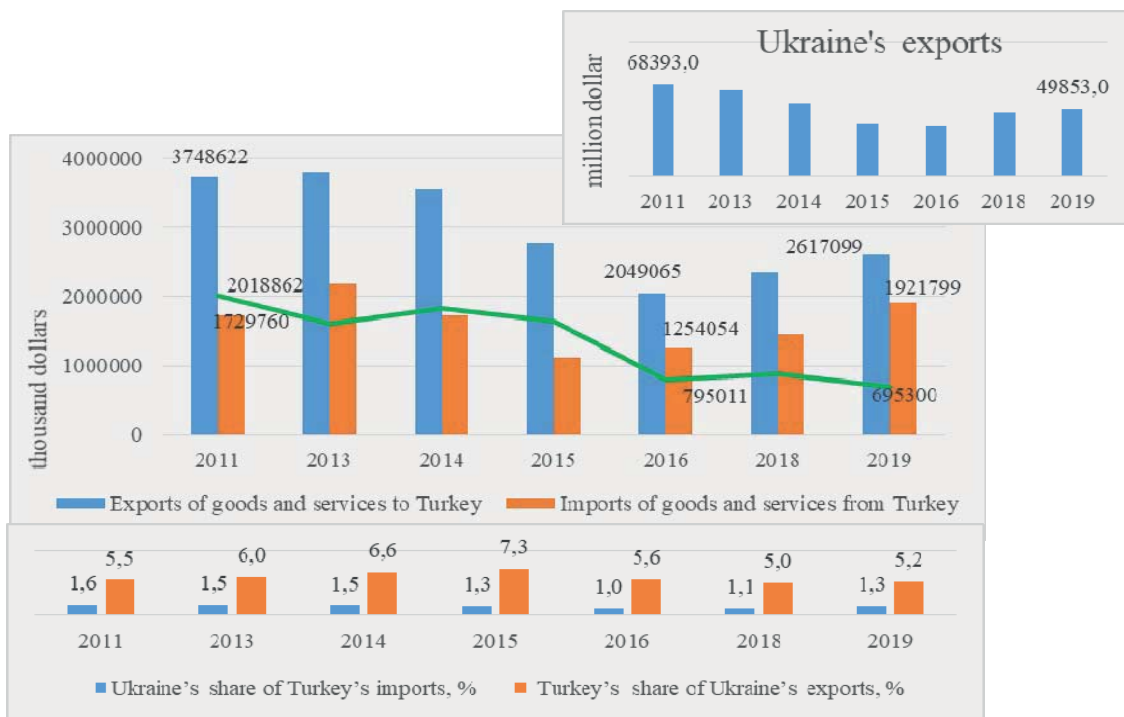


Fig. 1. The share and volume of Ukraine's foreign trade with Turkey

Source: based on data (Official website of the State Statistical Service of Ukraine, 2020; Trade Map, 2021; World trade organization, 2021).

The volume of exports from Ukraine to Turkey for the period from 2011 to 2019 decreased by more than 30%. Obviously, the reason for this is both the general economic recession and the qualitative deterioration of the export structure. Positive Optimistic characteristic of trade relations is a significant positive balance of bilateral trade, which, other things being equal, is an advantage in the liberalization process.

The Herfindahl concentration index is 2014.5, which indicates a high level of concentration and, consequently, a low degree of commodity diversification of export flows. As can be seen from Fig. 2 «core of exports» for Ukrainian goods are 4 items with a low degree of processing and low added value: iron and steel, grain, oilseeds, food industry waste. Over the last ten years, the structure of exports has not improved. On the contrary, the share of such high-margin goods as oils and fats, plastic and iron products, fruits and nuts has significantly decreased. In addition, all this took place against the background of declining absolute exports to Turkey.

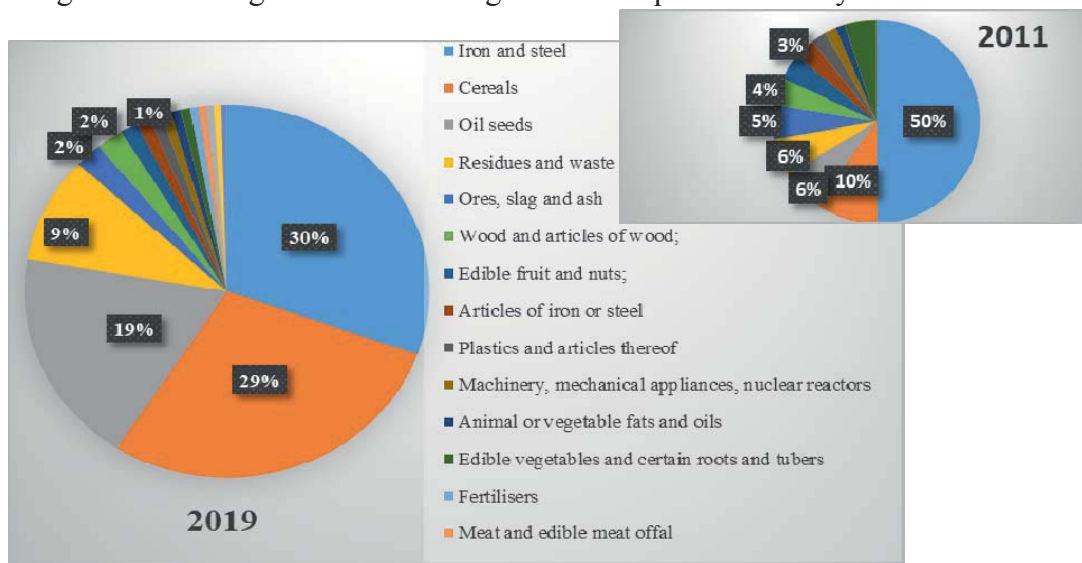
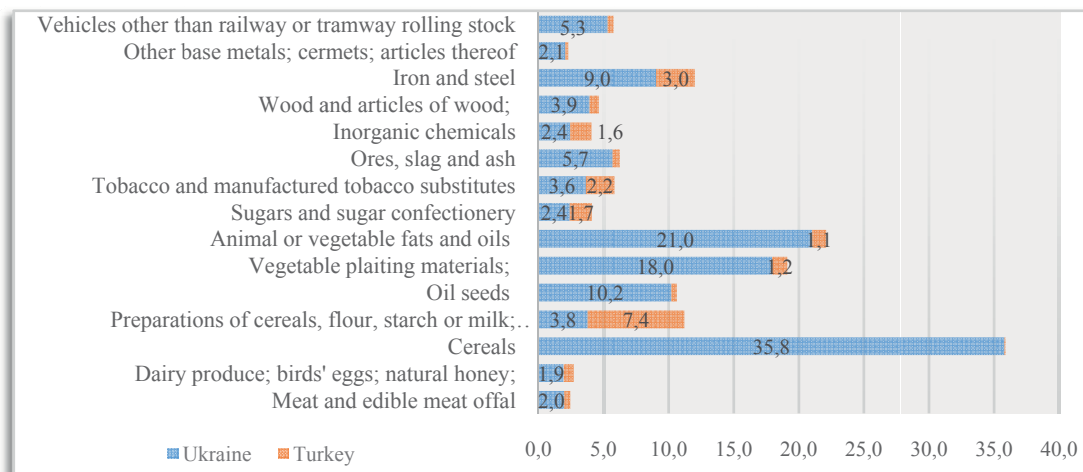


Fig. 2. Structure of exports to Turkey

Source: based on data (Official website of the State Statistical Service of Ukraine, 2020).

Turkish exports to Ukraine, on the other hand, have a fairly high degree of diversification (Herfindahl Index — 483.8). The top ten exports include goods with high added value, namely: machinery and mechanical appliances, electrical engineering, vehicles, mineral fuels, fruits and nuts, plastic and cast-iron products, knitwear and clothing.

For a more detailed understanding of the peculiarities of bilateral trade, it is necessary to determine the relative advantages of goods. From Fig. 3 it follows that at the moment Ukrainian grain, oilseeds and oils, iron and steel, ore and rail transport have a large export advantage in the Turkish market. Wood products, chemical products, tobacco, sugar and meat products are also significant.



**Fig. 3. Coefficient of relative export advantage of Ukrainian goods on the Turkish market, 2019**

Source: calculated on the basis of data (Official website of the State Statistical Service of Ukraine, 2020; Trade Map, 2021; World trade organization, 2021).

The economic effect of the liberalization of bilateral trade is demonstrated by the descriptive gravity model calculated on the basis of statistical data (Table 1) (3) (Fig. 4).

$$(F_{ZTO}) = -4.890 + 0.803 \cdot \ln(M_1) + 0.280 \cdot \ln(M_2) - 0.989 \cdot e(t - 1). \quad (3)$$

Table 1

**Initial data for building a gravity model**

| Year | Foreign trade operations, thousand dollars USA | GDP of Ukraine, million dollars USA | Turkey's GDP, million dollars USA | Oil price, USD US / barrel |
|------|--|-------------------------------------|-----------------------------------|----------------------------|
| 2000 | 1227654  | 31261.5                             | 274303.0                          | 28.3                       |
| 2001 | 1147478  | 37972.3                             | 201753.3                          | 24.8                       |
| 2002 | 1430411  | 42351.6                             | 240249.0                          | 25.3                       |
| 2003 | 1214406  | 50084.2                             | 314595.4                          | 28.5                       |
| 2004 | 2225085  | 64819.7                             | 408865.3                          | 38.4                       |
| 2005 | 2634424  | 86057.9                             | 506314.6                          | 55.9                       |
| 2006 | 3159120  | 107647.9                            | 557076.0                          | 66.7                       |
| 2007 | 4617543  | 142579.6                            | 681321.2                          | 74.7                       |
| 2008 | 6582949  | 179816.8                            | 770449.3                          | 97.7                       |
| 2009 | 3078766  | 117113.4                            | 649289.3                          | 61.9                       |
| 2010 | 4324883  | 136013.2                            | 776967.6                          | 79.6                       |
| 2011 | 5229841  | 163159.7                            | 838785.7                          | 112.4                      |
| 2012 | 5636971  | 175781.4                            | 880556.0                          | 121.4                      |
| 2013 | 5658438  | 183310.1                            | 957799.4                          | 108.56                     |
| 2014 | 4859593  | 133503.4                            | 938934.4                          | 98.9                       |
| 2015 | 3623499  | 91031.0                             | 864314.3                          | 55.27                      |
| 2016 | 3147616  | 93356.0                             | 869683.1                          | 47.5                       |
| 2017 | 3774750  | 112190.4                            | 858988.6                          | 55.23                      |
| 2018 | 4066655  | 130901.9                            | 778381.9                          | 68.76                      |
| 2019 | 4961390  | 153781.1                            | 761425.5                          | 58.48                      |

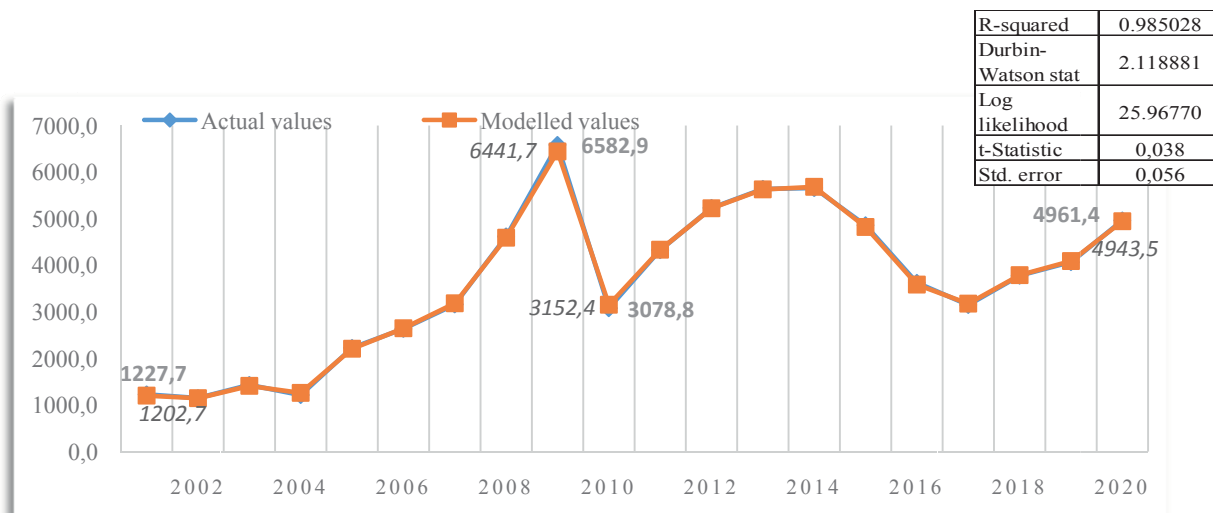


Fig. 4. Actual and simulated values of foreign trade turnover of Ukraine and Turkey, thousand dollars USA

This model allows us to draw the following conclusions:

- with an increase in GDP of Ukraine by 1 US dollar trade between the countries increases by \$ 0.8;
- with an increase in Turkey’s GDP by \$ 1 turnover increases by \$ 0.28;
- with an increase in oil prices by \$ 1 bilateral trade increases by \$ 0.98 USA.

Thus, despite the much larger size of the Turkish economy, Ukraine’s economic development has a much stronger impact on bilateral trade. This creates a much greater interest for Ukraine in entering the Turkish market.

Judging by the volume and structure of trade flows, Ukraine, which is approaching the signing of a free trade agreement with Turkey, is not in the best position. It is obvious that in the process of negotiations and discussion of the terms of the agreement it is necessary to proceed from the key aspects of protecting the domestic producer from the growth of imports. There is particularly much concern about the issue of maintaining and increasing high-margin exports of those sectors in which intersectoral foreign trade with Turkey is taking place. This primarily applies to agriculture, textiles, metallurgy and mechanical engineering. Also, due to weak positions in foreign markets, it is not expected that most industries will be in a winning position, which as a result of signing an agreement without consistently defending strategic industry interests may provoke a negative trade balance for some time.

Turkey has significantly higher tariff protection in international trade than Ukraine, which currently puts the national economy in discriminatory conditions, especially in the export-oriented agricultural sector. In particular, according to the results of trade in 2019, the average customs tariff for Ukrainian exporters was 20.4%, while Turkish importers paid an average of only 5.7%. (Table 2). Turkey is interested in importing textile industry products and certain groups of machine-building products to Ukraine. It is wary of competition from agricultural products, as well as certain groups of food and textile industry products.

Table 2

**Tariff protection of the domestic market, 2019**

| Countries                | Average bound tariff, % | Average RNS tariff, % | Average tariff by trade results, % |
|--------------------------|-------------------------|-----------------------|------------------------------------|
| <b>Ukraine</b>           | 5.8                     | 4.5                   | 2.9                                |
| - agricultural goods     | 11.0                    | 9.2                   | 5.7                                |
| - non-agricultural goods | 5.0                     | 3.7                   | 2.6                                |
| <b>Turkey</b>            | 28.9                    | 10.0                  | 4.5                                |
| - agricultural goods     | 61.8                    | 42.3                  | 20.4                               |
| - non-agricultural goods | 17.3                    | 4.5                   | 3.3                                |

Source: based on data (World trade organization, 2021).

Within the framework of strategic partnership development, it is necessary to strive not only to increase trade flows, but also to implement joint investment and production projects. In particular, one of the areas of investment is the launch of free (special) economic zones in the framework of joint projects of Ukraine and Turkey. SEZ for Ukraine, in theory, is not a new tool for attracting investment, but in practice, due to the declarative nature and the actual absence of any direct and indirect stimulus instruments, the national economy has not received any effect from their operation. The opposite situation is in Turkey, where FEZ incentives are used to boost entrepreneurship and create jobs in regions that are not attractive enough without additional incentives. With experience in implementing relevant joint projects in the Middle East, Turkey has repeatedly stressed its interest in negotiating projects to create a number of functional units of such special economic regimes as technology parks and industrial parks in Ukraine, counting accordingly on special attractive conditions for its investors. So far, as of 2019, Turkey accounted for only 2%, or \$ 320 million, of total foreign investment in Ukraine.

Further active cooperation in the defense-industrial complex can become a locomotive for the development of production of high-tech goods. The presence of unique technologies in Ukraine in this area allows Ukrainian companies to cooperate with Turkish in such areas as: supply of a wide range of spare parts and components for weapons and military equipment; overhaul of helicopters, training and advanced training of specialists; equipping Turkish-made combat modules with guided missiles; manufacture and supply of turboprop engines; production of active protection complexes. In 2019 and the first half of 2020, the total volume of exports of Ukrainian military goods to Turkey amounted to 40 million dollars USA [21]. Significant reserves for Ukraine in the sphere of services lie also in the IT sector. A large percentage of qualified programmers, a steady increase in investment in this area and increasing interest from around the world in moderate prices form a competitive advantage of Ukrainian services compared to Turkish.

**Conclusions.** The aggravation of the security situation in the region and the economic recession in the country push Ukraine to economize its partnership with the regional leader — Turkey and sign an agreement on a free trade zone. The prospect of concluding an agreement promises to reduce tariff barriers and improve access to the capacious Turkish market and creates the possibility of diversifying trade flows in general.

In addition to the fact that at this stage there are high tariff barriers for Ukrainian exporters in the Turkish market, the volume and structure of bilateral trade does not provide opportunities for the development of effective partnerships under the old model. In particular, Ukraine is characterized by a high degree of concentration of export flows, in which there are 4 «core» items of goods with low added value. Against the background of deteriorating export structure, the expected decline in total volumes is taking place. Ukrainian grain, oilseeds, iron and steel, ore and rail transport have comparative competitive advantages in the Turkish market today. Wood products, chemical products, tobacco, sugar and meat products are also significant. Prospective areas of the Ukrainian economy for the development of exports and investment cooperation are the military-industrial sector and IT.

The positive balance in bilateral trade still plays in Ukraine's favor, and according to the results of the descriptive gravity model, Ukraine's economic development has a much stronger impact on bilateral trade. Consequently, Ukraine is generating much more interest in entering the Turkish market.

Pragmatization and economization of relations are crucial for the development of a strong and long-lasting partnership. The agreement on a free trade zone is in fact an unalterable option in the current conditions of aggravation of the security situation in Ukraine and the long-term economic recession. However, at the stage of negotiations with a strategically important and multivariate partner, the main task should be to develop a program of measures to support and stimulate the entry of Ukrainian producers into the Turkish market, especially for innovative and high-margin goods and ensure investment programs in priority sectors on mutually beneficial terms.

## Література

- Balassa B. Trade Liberalisation and Revealed Comparative Advantage. *The Manchester School of Economic and Social Studies*. 1965. № 33. P. 99—123.
- Viner J. The Customs Union Issue. New York : Carnegie Endowment for International Peace, 1950. 221 p.
- Haberler G. The Theory of Comparative Costs and its Use in the Defense of Free Trade. *Selected Essays*. 1930. P. 3—19.
- Vollrath T. Theoretical Evaluation of Alternative Trade Intensity Measures of Revealed Comparative Advantage. *Review of World Economics (Weltwirtschaftliches Archiv)*. 1991. Vol. 127. Is. 2. P. 265—279.
- Bilan Yu. V., Nitsenko V. S., Samoilyk Iu. V. Conceptual modeling of agri-food market development under economy's globalization. *Scientific Bulletin of Polissia*. 2017. Vol. 3 (11/1). P. 54—61.
- Yatsenko O., Nitsenko V., Mardani A., Tananaiko T. The impact of global risks on the world trade and economic environment. *Financial and credit activity: problems of theory and practice*. 2018. Vol. 4 (27). P. 435—444.
- Yatsenko O., Nitsenko V., Mardani A., Streimikiene D., Tananaiko T. Global Risks of Trade and Economic Cooperation of Ukraine with Countries of the Northern American Region. *Montenegrin Journal of Economics*. 2019. Vol. 15 (3). P. 217—225.
- Yatsenko O. M., Yatsenko O. V., Nitsenko V. S., Butova D. V., Reva O. V. Asymmetry of the development of the world agricultural market. *Financial and credit activity: problems of theory and practice*. 2019. Vol. 30 (3). P. 423—434.
- Drozd O. Cooperation between Ukraine and Kazakhstan in the Space Sector: Background, Regulatory Framework, and Further Development. *Advanced Space Law*. 2020. Vol. 5. P. 25—33.
- Oleshchuk P. Political Franchising as a Modern Political Technology. *Ukrainian Policymaker*. 2020. Vol. 7. P. 35—42.
- Ostapenko R., Herasymenko Y., Nitsenko V., Koliadenko S., Balezentis T., Streimikiene D. Analysis of Production and Sales of Organic Products in Ukrainian Agricultural Enterprises. *Sustainability*. 2020. Vol. 12 (8). P. 3416.
- Bazaluk O., Yatsenko O., Zakharchuk O., Ovcharenko A., Khrystenko O., Nitsenko V. Dynamic Development of the Global Organic Food Market and Opportunities for Ukraine. *Sustainability*. 2020. Vol. 12 (17). P. 6963.
- Kuzmin O. Ye., Stanasiuk N. S., Yastrubskiy M. Ya., Mohylevska O. Yu., Artiushok V. S. Industrial potential: assessment, modeling and administration under the condition of sustainable development. *Naukovyi Visnyk Natsionalnoho Hirnychoho Universytetu*. 2020. Vol. 6. P. 128—135.
- Koziuk V., Hayda Yu., Dluhopolskyi O., Martynyuk V., Klavkiu Yu. Efficiency of environmental taxation in European countries: comparative analysis. *Naukovyi Visnyk Natsionalnoho Hirnychoho Universytetu*. 2020. Vol. 5. P. 115—121.
- Соловух Е. Україна — Туреччина: політико-економічні аспекти взаємовідносин і перспективи розвитку. *Вісник Харківського національного університету імені В. Н. Каразіна. Міжнародні відносини. Економіка. Країнознавство. Туризм*. 2019. № 8. 80—87.
- Матей В. Оцінка перспектив економічного співробітництва України та Туреччини. *Інвестиції: практика та досвід*. 2019. № 8. С. 29—36.
- Небаба Н., Колпіна А. Особливості лібералізації торгово-економічного співробітництва між Україною та країнами близького сходу. *Економіка та держава*. 2020. № 4. С. 210—214.
- Насадюк І. Гравітаційна модель міжнародних економічних відносин України. *Вісник соціально-економічних досліджень*. 2012. № 1 (44). С. 94—99.
- Reva N. Logic, Reasoning, Decision-Making. *Future Human Image*. 2018. Vol. 10. P. 76—84.
- Military Strength Ranking 2021. *GFP*. 2021. URL : <https://www.globalfirepower.com/countries-listing.php>.
- Зосименко Т. Україна — Туреччина. Найперспективнішим напрямом двосторонньої співпраці з точки зору зацікавлення виробничого потенціалу та модернізації української промисловості є військово-технічне співробітництво. *Українська призма*. 2021. 23 січня. URL : <http://prismua.org/ukraine-turkey>.

Статтю рекомендовано до друку 24.03.2021

© Карасьова Н. А., Міценко А. Б.

## References

- Balassa, B. (1965). Trade Liberalisation and Revealed Comparative Advantage. *The Manchester School of Economic and Social Studies*, 33, 99—123.
- Viner, J. (1950). The Customs Union Issue. New York: Carnegie Endowment for International Peace.
- Haberler, G. (1930). The Theory of Comparative Costs and its Use in the Defense of Free Trade. *Selected Essays*.
- Vollrath, T. (1991). Theoretical Evaluation of Alternative Trade Intensity Measures of Revealed Comparative Advantage. *Review of World Economics (Weltwirtschaftliches Archiv)*, 127, 265—279.
- Bilan, Yu. V., Nitsenko, V. S., & Samoilyk, Iu. V. (2017). Conceptual modeling of agri-food market development under economy's globalization. *Scientific bulletin of Polissia*, 3 (11/1), 54—61. [https://doi.org/10.25140/2410-9576-2017-1-3\(11\)-54-61](https://doi.org/10.25140/2410-9576-2017-1-3(11)-54-61).
- Yatsenko, O., Nitsenko, V., Mardani, A., & Tananaiko, T. (2018). The impact of global risks on the world trade and economic environment. *Financial and credit activity: problems of theory and practice*, 4 (27), 435—444. <https://doi.org/10.18371/fcaptop.v4i27.154279>.
- Yatsenko, O., Nitsenko, V., Mardani, A., Streimikiene, D., & Tananaiko, T. (2019). Global Risks of Trade and Economic Cooperation of Ukraine with Countries of the Northern American Region. *Montenegrin Journal of Economics*, 15 (3), 217—225. <https://doi.org/10.14254/1800-5845/2019.15-3.16>.
- Yatsenko, O. M., Yatsenko, O. V., Nitsenko, V. S., Butova, D. V., & Reva, O. V. (2019). Asymmetry of the development of the world agricultural market. *Financial and credit activity: problems of theory and practice*, 30 (3), 423—434. <https://doi.org/10.18371/fcaptop.v3i30.179821>.
- Drozd, O. (2020). Cooperation between Ukraine and Kazakhstan in the Space Sector: Background, Regulatory Framework, and Further Development. *Advanced Space Law*, 5, 25—33. <https://doi.org/10.29202/asl/2020/5/3>.
- Oleshchuk, P. (2020). Political Franchising as a Modern Political Technology. *Ukrainian Policymaker*, 7, 35—42. <https://doi.org/10.29202/up/7/5>.
- Ostapenko, R., Herasymenko, Y., Nitsenko, V., Koliadenko, S., Balezentis, T., & Streimikiene, D. (2020). Analysis of Production and Sales of Organic Products in Ukrainian Agricultural Enterprises. *Sustainability*, 12 (8), 3416. <https://doi.org/10.3390/su12083416>.

12. Bazaluk, O., Yatsenko, O., Zakharchuk, O., Ovcharenko, A., Khrystenko, O., & Nitsenko, V. (2020). Dynamic Development of the Global Organic Food Market and Opportunities for Ukraine. *Sustainability*, 12 (17), 6963. <https://doi.org/10.3390/su12176963>.
13. Kuzmin, O. Ye., Stanasiuk, N. S., Yastrubskiy, M. Ya., Mohylevska, O. Yu., & Artiushok, V. S. (2020). Industrial potential: assessment, modeling and administration under the condition of sustainable development. *Naukovyi Visnyk Natsionalnoho Hirnychoho Universytetu*, 6, 128—135. <https://doi.org/10.33271/nvngu/2020-6/128>.
14. Koziuk, V., Hayda, Yu., Dluhopolskyi, O., Martynyuk, V., & Klapkiv, Yu. (2020). Efficiency of environmental taxation in European countries: comparative analysis. *Naukovyi Visnyk Natsionalnoho Hirnychoho Universytetu*, 5, 115—121. <https://doi.org/10.33271/nvngu/2020-5/115>.
15. Solovykh, E. (2019). Ukraina — Turechchyna: polityko-ekonomichni aspekty vzaiemovidnosyn i perspektyvy rozvytku [Ukraine — Turkey: political and economic aspects of relations and prospects for development]. *Visnyk Kharkivskoho natsionalnoho universytetu imeni V. N. Karazina. Mizhnarodni vidnosyny. Ekonomika. Krainoznavstvo. Turyzm — Bulletin of VN Karazin Kharkiv National University. International relations. Economy. Local lore. Tourism*, 8, 80—87 [in Ukrainian]. <https://doi.org/10.26565/2310-9513-2018-8-08>.
16. Matei, V. (2019). Otsinka perspektyv ekonomichnoho spivrobitnytstva Ukrainy ta Turechchyny [Assessment of prospects for economic cooperation between Ukraine and Turkey]. *Investytsii: praktyka ta dosvid — Investments: practice and experience*, 8, 29—36 [in Ukrainian].
17. Nebaba, N., & Kolpina, A. (2020). Osoblyvosti liberalizatsii torhovo-ekonomichnoho spivrobitnytstva mizh Ukrainoiu ta krainamy blyzkoho skhodu [Features of liberalization of trade and economic cooperation between Ukraine and the Middle East]. *Ekonomika ta derzhava — Economy and state*, 4, 210—214 [in Ukrainian]. <https://doi.org/10.32702/2306-6806.2020.4.210>.
18. Nasadiuk, I. (2012). Hravitatsiina model mizhnarodnykh ekonomichnykh vidnosyn Ukrainy [Gravitational model of international economic relations of Ukraine]. *Visnyk sotsialno-ekonomichnykh doslidzhen — Bulletin of socio-economic research*, 1 (44), 94—99 [in Ukrainian].
19. Reva, N. (2018). Logic, Reasoning, Decision-Making. *Future Human Image*, 10, 76—84. <https://doi.org/10.29202/fhi/10/8>.
20. Military Strength Ranking 2021. (2021). *GFP*. Retrieved from <https://www.globalfirepower.com/countries-listing.php>.
21. Zosymenko, T. (2021, January 23). Ukraina — Turechchyna. Naiperspektyvnishym napriamom dvostoronnoi spivpratsi z tochky zoru zadziannia vyrobnychoho potentsialu ta modernizatsii ukraïnskoi promyslovosti ye viiskovo-tekhniche spivrobitnytstvo [Ukraine — Turkey: The most promising area of bilateral cooperation in terms of using the production potential and modernization of Ukrainian industry is military-technical cooperation]. *Ukrainska pryzma — Ukrainian prism*. Retrieved from <http://prismua.org/ukraine-turkey>.

*The article is recommended for printing 24.03.2021*

© Karasova N., Mishchenko A.