

İKTİSADİ İDARİ VE SİYASAL ARAŞTIRMALAR DERGİSİ

JOURNAL OF ECONOMICS BUSINESS AND POLITICAL RESEARCHES

e-ISSN: 2564-7466 https://dergipark.org.tr/tr/pub/iktisad Cilt:10, Say1:26, Şubat 2025 Vol:10, No:26, February 2025

The Effects of the Ukraine-Russia War on the Problem of Energy Resources and Agricultural Products Reflections on World and Türkiye Trade

Enerji Kaynakları ve Tarım Ürünleri Sorununa Ukrayna-Rusya Savaşının Etkileri: Dünya ve Türkiye Ticaretine Yansımaları

⁹ https://doi.org/10.25204/iktisad.1550263

Remzi BULUT*

Abstract The Soviet Union, which had underground and surface riches, disintegrated at the end of 1991. 15

republics within the Union gained their independence. However, disagreements arose among some

newly independent republics in terms of ethnic structure and borders. One of these is the escalation

of tensions between Ukraine and Russia into a war. The war between the two countries has negative

Article Info

Paper Type: Review Paper

Received: 14.09.2024

Accepted: 24.02.2025

© 2025 JEBUPOR All rights reserved.



effects on global and Türkiye trade, especially on the region and developed European countries. The aim of this study is to analyse the impact of the war between Ukraine and Russia on energy resources and agricultural product imports of the world and European countries as well as Turkey. In the study, it is seen that Ukraine and Russia have significant shares in the world energy resources and agricultural products exports. In particular, it has been found that European Union countries and Türkiye are dependent on Russia in terms of energy resources, while Ukraine is dependent on Ukraine in terms of agricultural products. In addition, the war between the two countries has negative repercussions on the world and Türkiye economies.

Keywords: Russia, Ukraine, war, energy resources, agricultural products.

Öz

<u>Makale Bilgileri</u>

Makale Türü: Derleme Makale

Geliş Tarihi: 14.09.2024

Kabul Tarihi: 24.02.2025

© 2025 İKTİSAD Tüm hakları saklıdır.



Yeraltı ve üstü zenginliklerine sahip olan Sovyetler Birliği 1991 yılı sonunda dağılmıştır. Birlik içindeki 15 cumhuriyet bağımsızlıklarına kavuşmuştur. Ancak bazı yeni bağımsız cumhuriyetler arasında etnik yapı ve sınırlar açısından anlaşmazlıklar oluşmuştur. Bunlardan biri de Ukrayna ile Rusya arasında yaşanan gerilimlerin savaşa dönüşmesidir. İki ülke arasındaki savaşın başta bölge ve gelişmiş Avrupa ülkeleri olmak üzere, küresel ve Türkiye ticaretine de olumsuz etkileri olmaktadır. Bu çalışmanın amacı, Ukrayna-Rusya arasında yaşanan savaşın başta dünya ve Avrupa ülkeleri olmak üzere Türkiye'nin de enerji kaynakları ve tarım ürünleri ithalatına etkilerine değinilmiştir. Çalışmada; Ukrayna ve Rusya'nın dünya enerji kaynakları ve tarım ürünleri ihracatında önemli paya sahip olduğu görülmüştür. Özellikle Avrupa Birliği ülkeleri ve Türkiye'nin Rusya'ya enerji kaynakları açısından bağımlı, Ukrayna'ya ise tarımsal ürün açısından bağımlı olduğu bulguları elde edilmiştir. Ayrıca iki ülke arasında yaşanan savaşın dünya ve Türkiye ekonomilerine olumsuz yansımaları görülmektedir.

Anahtar Kelimeler: Rusya, Ukrayna, savaş, enerji kaynakları, tarım ürünleri.

Atif/ to Cite (APA): Bulut, R. (2025). The effects of the Ukraine-Russia war on the problem of energy resources and agricultural products reflections on World and Türkiye trade. *Journal of Economics Business and Political Researches, 10*(26), 393-405. https://doi.org/10.25204/iktisad.1550263

^{*} ORCID Asst. Prof. Dr., Burdur Mehmet Akif Ersoy University, Faculty of Economics and Administrative Science, Department of Economics, rbulut@mehmetakif.edu.tr

1. Introduction

With the dissolution of the Union of Soviet Socialist Republics (USSR) at the end of 1991, 15 new republics gained independence. During the USSR period, due to the free movement of capital, goods and services between the republics and the free settlement of the population in different republics, there was a change in the ethnic structure in all republics. However, the Russian ethnic structure is present in different proportions in all republics of the Soviet Union. After the dissolution of the USSR, the republics that declared their independence decided to switch to a free market economy in order to live in a more economically and politically free and prosperous way. The USSR kept the socialist republics and the countries under the Eastern Bloc under economic and political control for a long time. Even before its dissolution, the Soviet Union was sceptical of the Central and Eastern European (CEE) countries' rapprochement and commercial relations with developed European countries (the West) and important institutions (EU, NATO, etc.). From time to time, it even imposed penal sanctions on the former Eastern Bloc countries that established close economic and political relations with European countries. The Russian Federation, which was founded on the great legacy of the USSR, wanted to gather the republics that made up the former USSR under one roof and take them under control, just like the Soviet Union. After the USSR, various economic and political organisations and formations (CIS, Eurasian Economic Union, etc.) were established under the leadership of the Russian Federation. However, the Russian Federation has always wanted to have a say in the formations due to the fact that it has important energy resources and underground riches. In the post-USSR period, Russia started to impose economic and political sanctions on the former USSR republics that became economically and politically closer to the European Union and important and strategic organisations. After the 2000s, pro-European policies and discourses increased in Ukraine, and the first sanctions were imposed on Ukraine when Crimea was annexed to the Russian Federation on 18 March 2014 (Britannica, 2024). The crisis in Crimea and eastern Ukraine. Recently, the increase in EU and NATO rhetoric in Ukraine has started to be occupied by the Russian Federation in the Donbas region in the east of Ukraine, where the Russian ethnic structure is high, on 24 February 2022, showing some artificial justifications, and it turned into a war in a short time (Matveeva, 2022: 420).

Crises and wars around European countries directly affect the European Union in terms of economic and security. Because the European Union reveals that it is a political union rather than an economic union. It is inevitable that the crises and wars on the close border will lead to migration and political problems, especially in the economy (Kesgin, 2023: 59). The stagnation of the European Union economies due to the war has a partial effect on the development and growth of the world economy.

Türkiye has mutual trade and economic relations with both Russia and Ukraine in many different fields, particularly energy resources, food and tourism. Türkiye imports agricultural products from these countries and exports them to other countries as finished products under the inward processing regime, as well as consumes them in the domestic market. In terms of energy resources (natural gas, oil and coal), Türkiye is heavily dependent on the Russian Federation, while in terms of tourism, Russian and Ukrainian visitors account for approximately 25% of total tourism in Türkiye (Türkiye Seyahat Acenteleri Birliği [TÜRSAB], 2022). The fact that these two countries are at war has a direct impact on the Turkish economy.

The effects of the Russia-Ukraine war are not limited to the countries in the region, but also to the world economy, causing millions of Ukrainians to migrate and jeopardising world food security. It causes interruption in the export and production of agricultural products of Ukraine, which is the world's major exporter of agricultural products (Harunoğulları and Ayhan, 2023: 528). As a result of the mutual sanctions between Russia and the European Union countries, there are problems in transporting energy resources to the European Union countries and Ukraine's agricultural products to the world markets.

The contractions in the global economy due to the Covid-19 pandemic were carried to a different dimension with Russia's invasion of Ukraine on 24 February 2022. With the outbreak of war between the two countries, growth projections in the world economy and trade have been in trouble and EU countries have started to be uneasy in terms of energy resources supply. Consequently, it caused fluctuations in world goods and service prices.

The impact of the war between the two countries on the global economy is estimated by some economists to be approximately 2 trillion dollars in the first place (Ozili, 2022: 2). The economies of both countries are expected to shrink and the economies of neighbouring countries, which are dependent on food and energy, are expected to stagnate or shrink. Undoubtedly, the countries that are dependent on Ukraine and the Russian Federation in terms of energy and agricultural products are the most affected.

2. Comparative Economies of Russia and Ukraine

Russia and Ukraine are the countries with the largest economies in their region and also among the republics that left the former Soviet Union. Both countries have strong and superior sectors in terms of economy. When Russia and Ukraine are compared, it is known that Ukraine is superior in agricultural production, while Russia is superior in energy resources and industrial sector. It is seen that Russia and Ukraine have a significant share in world production and trade, especially in the energy and agricultural sectors, when considered separately or together.

The Russian economy is the eighth largest economy in the world with a GDP of 2 trillion 210 billion USD according to 2022 data Russia, in general, has a high level of current account surplus, has a large amount of foreign exchange reserves and has a low external debt ratio. Covid-19 affected the Russian economy as it affected the economies of all countries in the world, and the economic growth rate in 2020 was 2.7%. In 2021, the economy started to recover again and the growth rate increased to 4.7% (T.C. Moskova Büyükelçiliği, 2023: 2). In the Russian economy, the export of raw materials and the presence and weight of heavy industry are at the forefront.

According to 2021 data, the Ukrainian economy has a GDP of 200 billion dollars and constitutes one of the important large economies of the region. At current prices, per capita income in 2021 was \$4882. In 2019, the International Monetary Fund (IMF) supported the Ukrainian economy and a stand-by agreement was signed. In the first stage, increasing economic efficiency, protecting unfair competition and transparency in public activities were among the expectations (T.C. Ticaret Bakanlığı, 2022: 6). The basic economic structures of both countries are summarised comparatively in Table 1 using data from the Central Bank of Russia, IMF, and Federal State Statistics Service of Russia (Rosstat).

Gauges	Ru	Russia		aine
Years	2021	2022	2021	2022
GDP (billion USD)	1,774	2,215	200	151
GDP Growth (in %)	4.7	-2.1	3.4	-30.3
National Income Per Capital (USD)	1,2165	15,444	4,882	4349
Consumer Inflation (in %)	8.4	11.9	9.4	20.2
Unemployment Rate (in %)	4.8	3.9	9.8	24.5
Population (million people)	147	147	41	34.5

Table 1. Comparative Key Economic Indicators of Russia and Ukraine

Source: Bank of Russia (2024); Rosstat, (2023)

Ukraine's economy is characterised by its fertile agricultural land, strategic geographical location and rich underground resources. Ukraine harbours great potential in terms of strategic trade between the EU and Russia. Among the determinants of the Russian economy, exports of raw

materials and energy resources come to the fore. It is also understood from the statistical data that Russia has low levels of efficiency in the production of goods and services and cannot make a leap in per capita income (Bağış, 2022: 20). When a comparison is made between the economic data of both countries, it is seen that Russia has a structure approximately 5 to 10 times larger than Ukraine in other economic areas, especially in GDP.

	Russian Federation	Ukraine
Agriculture	4.1	11.7
Industry	33.4	27.3
Service	62.5	61.0
Total	100	100

Table 2. Sectoral Breakdown of Russian and Ukrainian Economies in 2021 (in %)

Source: Foreign Economic Relations Board [DEİK] (2022), Bağış (2022)

When the economies of the two countries are compared on a sectoral basis, it is seen in Table 2 that Russia is superior in the industrial and service sectors, while Ukraine is more advanced in agricultural production. The development of the Russian industry depends on the presence of rich energy resources. According to DEİK, 2022 data, the agricultural sector is more prominent in Ukraine due to the fact that Ukraine has large and fertile lands that can be used for agricultural production. However, the food and agricultural production industry is more developed in Ukraine.

According to the Ministry of Agrarian Policy and Food of Ukraine, as of 23 March 2022, the projected area of the main spring crops in the Ukrainian-controlled territory is 5,990,000 hectares, which is 1,689,000 hectares less than in the same period last year. For example, all categories of farms have already sown spring wheat 22.5 thousand hectares (with a projected area of 157.4 thousand hectares), spring barley 74.8 thousand hectares (1,036 thousand hectares), sunflower 2.2 thousand hectares (4811 thousand hectares) and 2 thousand hectares of soya (1,041 thousand hectares) (Ukrinform, 2024).

Russia and Ukraine, the most powerful countries in the region in terms of energy resources and agricultural production, shape the world energy and food markets. The fact that these two countries, which have an important share in these two sectors, are at war has a negative impact on global trade.

2.1. Energy Resources and Agricultural Products in Russian and Ukrainian Exports

Food and energy resources are among the most important sectors of foreign trade of the two neighbouring countries of the region. Both countries have an important position in terms of food and energy supply to world trade. They play an important role in the supply of natural gas, oil, coal, sunflower oil, wheat, corn, oil seeds and other cereal crops (Öçal and Öztürk, 2022: 583-585). The war between the two countries has a direct impact on world commodity prices. While the foreign trade of the Russian Federation is mainly composed of raw materials and energy resources, Ukraine's foreign trade is mostly dominated by agricultural processed and unprocessed products. In Table 3, the exports of both countries are compared in percentage terms. However, due to the large size of Russia's economy, although the production of some products is higher than Ukraine, it is proportionally low in Russia's foreign trade.

Table 3. Energy Resources and Agricultural Products Export Items of Russia and Ukraine in 2021(as % of total exports)

Sectors	Russian exports (in %)	Ukraine's exports (in %)	
Crude Oil	30.3		
Refined Petroleum	16.3		
Natural Gas	6.5		
Coal	4.3		
Wheat	2	6	
Corn		13.5	
Vegetable fats		12.4	
Iron Ore		6.6	
Plant Seeds		8.2	
Other Vegetable and Animal Products		3.6	
Other sectors	40.6	49.7	

Source: Bağış (2022).

Exports of energy resources account for approximately 56 per cent of Russia's total exports. Exports of agricultural products and other manufactured products are higher in quantity than in Ukraine, but lower in percentage terms. Such differences are due to the structure of the size of the economy. In terms of financial value, the foreign trade structures of the two countries are clearly understood. The cross-cutting foreign trade partners of both countries include China, Germany, Türkiye and the USA. Recently, both Russia and Ukraine have the most trade relations with China and Germany.

	ŀ	Russia (billior	n dollars)	Ukraine (billion dollars)		
	Exports	Imports	Trade Volumes	Exports	Imports	Trade Volumes
China	79	68	147	7,1	8,4	15,5
Netherlands	45					
Germany	28	25	53	2,1	5,3	7,4
Türkiye	27,5	4,9	32,4	2,4		
Belarus	21	12,8	33,8			
USA		13			2,9	
Italy		10,9				
Poland				3,4	4,1	7,5
Russia				2,7	4,5	7,2

Source: Bağış (2022).

When the total foreign trade volume data of Russia and Ukraine are compared, it is seen that Russia is 6.5 times more than Ukraine (taking the 3-year average as a basis). According to the average of the last 3 years, Russia's foreign trade balance has an annual surplus of almost 200 billion dollars, while Ukraine's foreign trade balance has a deficit of 7 billion dollars. Such differences are due to geographical, demographic, political and strategic positions.

Equation trade	Russian Federation			Ukraine		
Foreign trade	2020	2021	2022	2020	2021	2022
Total Exports	337	492	592	49	68	44
Total Imports	232	294	259	54	73	55
Foreign Trade Volume	569	786	851	103	141	99
Foreign Trade Balance	105	198	333	-5	-5	-11

 Table 5. Foreign Trade of Russia and Ukraine (\$ billion)

Source: T.C. Moskova Büyükelçiliği (2023); T.C. Ticaret Bakanlığı (2022).

3. Reflections of Russia- Ukraine War on World Trade

When we talk about the global economy, we primarily understand the circulation of international goods and capital movements, trade and service sectors. Epidemics, natural disasters and wars are among the most important factors affecting the global economy (Bulut, 2022: 55). The war between Russia and Ukraine, which are among the important actors in the global economy, negatively affects global and regional commercial life. While a contraction of 15% to 50% is expected to be experienced in the Russian and Ukrainian economies in the first place due to the impact of the war, it is understood from statistical data that there is a contraction in the economies of Central Asian countries, stagnation in the economies of Balkan countries and slowdown in the economies of Caucasus countries. While there are limited slowdowns in other regions and countries, African and South American countries, which have small economies and are far from the war zone, exhibit the opposite situation and show growth (Türkiye İhracatçılar Meclisi [TİM], 2022: 120-122). The biggest impact of the war between the two countries is reflected in the world food and energy sectors.

National or International Markets	Country or Region Covered	Economic Expectations
War Zone	Russia – Ukraine	Russia 15 - 20 % contraction Ukraine 40 - 50 % downsizing
Neighbouring Countries	Balkan, Central Asia and Caucasus Countries	Caucasus: slowdown Balkans: stagnation Central Asia: downsizing
North America	USA – Canada	Limited slowdown
South America	Chile + Colombia and other countries	Growth
England	England	Limited slowdown
Northern Europe and the Eurozone	Sweden + Germany etc. countries	Slowdown
Central Europe and Baltic countries	Poland and other countries	Stagnation
Gulf and Middle East countries	UAE, Saudi Arabia and other countries	Limited slowdown
Asia and Pacific countries	China, India and other countries	Limited slowdown
African countries	Egypt, Morocco and other countries	Growth

Source: TİM, 2022.

Table 6 summarises the positive and negative effects and expectations of the war between the two countries on the world economy. It is expected that there will be economic slowdowns and therefore recessions in the economy, especially in the region and EU countries close to the war in terms of energy resources supply.

3.1. Impact on World Imports of Agricultural Products and Energy Resources

The biggest impact of the Russia-Ukraine war on the global market has undoubtedly been on the production of agricultural products and imports of energy resources. Due to the war, many lands in Ukraine cannot be cultivated and planted, while the harvest cannot be fully harvested in cultivated lands. When the exports of agricultural products of the two countries are considered, they account for approximately 55% of the total world sunflower production, 14% of wheat production, and 19% of rye, oats and barley (Uçak, 2022: 6). Russia's natural gas exports from energy sources to European countries have come to a standstill. Although many projects have become dysfunctional, they have led EU countries to search for alternative energy sources and markets, while Russia has started to search for markets for its resources. While the place of both countries in the world agricultural trade was not fully known before the war, it was understood that they made significant contributions to global trade after the war. Especially the fact that the problems in the shipment of Ukrainian grain

products were constantly brought to the agenda by all international media organisations once again revealed the importance of these countries in agricultural products and energy.

Agriculture	Production (%) Export (%)					
Products	Russian Fed.	Ukraine	Total	Russian Fed.	Ukraine	Total
Sunflower	25	30	55	25	50	75
Wheat	10	4	14	17	12	29
Rye	14	5	19	12	40	52
Oat	17	2	19	6	1	7
Barley	12	7	19	13	18	31
Corn	1	4	5	2	17	19

Table 7. 2020 Share of Russia and Ukraine's Agricultural Products in World Trade (in %)

Source: FAO, 2022.

When the two countries are considered together, the share of agricultural products, especially sunflower, wheat, rye, barley and maize in world trade is quite significant. Both countries supply the main agricultural products of many African and Middle Eastern countries. The 2008 global crisis and the price increase in agricultural products caused by the 2019 COVID-19 pandemic have once again increased with the war between the two countries. According to the global food report jointly released by the United Nations (UN), the World Food and Agriculture Organization (FAO) and the World Food Programme (WFP), approximately 10% of the world's population will suffer from hunger in 2021 (FAO, 2022). Hunger and access to foodstuffs, as well as the devastating effects of wars, bring to mind that the same situation will be experienced again.



Figure 1. Shares of Russia and Ukraine in Selected Exports of Certain Agricultural Products (2016-2020 average) Source: Aliyev, 2023.

In another report prepared by FAO, it states that food production should increase by at least 60 per cent in the next decade. However, it argues that factors such as crises and armed conflicts, especially wars and armed conflicts in the world make this situation more complicated. Many researches and studies reveal that wars and armed conflicts are closely related to food security and supply (Aliyev, 2023: 40).

Similar to the rise in world wheat prices during the First and Second World Wars, the Covid-19 pandemic and the war between Russia and Ukraine, which have an important place in world wheat production, bring the rise in wheat prices to the agenda again. According to 2022 data, Ukraine realises approximately 10% of the world's total wheat exports. Of the total 33 million tonnes of wheat produced, 24 million tonnes were exported (Polat, 2022: 2).

Since the beginning of the war, Russia's natural gas exports from energy resources to European countries have come to a standstill due to the Ukrainian obstacle. Although many projects have become dysfunctional, EU countries have turned to alternative energy resources markets, while Russia has started to search for markets for its resources. The war has once again brought to the agenda the importance of Türkiye, which is on its way to becoming a world energy corridor.

In the 2000s, approximately 95% of Russia's natural gas exports to the EU countries took place through the territory of Ukraine (Kesici, 2022: 49). Today, with the commissioning of the North Stream and South Stream projects, the need for Ukraine has started to decrease. With the outbreak of the Ukraine-Russia war, as a result of the mutual sanctions between the EU countries and Russia, a natural gas shortage started to occur in the EU countries. In the face of sanctions, Russia started to use energy resources, especially natural gas, as a strategic weapon. According to the data published by the International Energy Agency (IEA) for 2021, Germany ranks first with 56.2 billion cubic metres of Russian natural gas. Germany is followed by Italy with 29.2 billion cubic metres and the Netherlands with 13.2 billion cubic metres (IEA, 2022. Due to the war, the Ukraine and Nord Stream pipelines have become dysfunctional.



Figure 2. Shares of Russia and Ukraine in Selected Exports of Certain Agricultural Products (2016-2020 2. Dependency Rates of EU Countries on Russian Natural Gas (in %) Source: IEA (2022).

According to IEA data, it can be said that the highest energy use worldwide is in EU countries. It is inevitable that a slowdown in production, where the EU leads the world economy and trade, will have a negative impact on world trade. Graphic 2 shows the dependence of some selected EU countries on Russian natural gas. It is seen that economically small countries are more dependent. However, it is understood that countries with large economies are less dependent and supply alternative energy sources. For example, although Germany, Italy and the Netherlands import the highest amount of natural gas from Russia, their dependence on Russia varies between 13 per cent and 30 per cent.

4. Türkiye's Trade relations with Russia and Ukraine

Although trade relations between Türkiye and Russia have a long history, the most important and comprehensive commercial agreement started during the Soviet Union. The 'Natural Gas Agreement' signed between the Soviet Union and Türkiye in 1984 and put into practice in 1987 was the basis for the commercial relations between the two countries and gave momentum (Aksel, 2019: 49). After the dissolution of the Soviet Union, trade relations continue separately with the new independent republics. The Russian Federation, which has a large part of the legacy of the Soviet Union, and Türkiye have started to experience continuous increases in trade relations and in different sectors of the economy. While the total trade volume between Türkiye and Russia was 4.5 billion dollars in

2000, it increased to 37.8 billion dollars in 2008 and according to the data of 2022, it is seen that it is 68.1 billion dollars (T.C. Moskova Büyükelçiliği, 2023: 4).

	Total Export	Total Import	Volume	Share in export (%)	Share in Import (%)
2012	6,0	24,0	30,0	4.4	11.3
2013	6,7	26,6	33,3	4.6	10.0
2014	7,0	25,1	32,1	3.8	10.4
2015	5,9	25,3	31,2	2.5	9.8
2016	3,6	20,4	24,0	1.2	7.6
2017	1,7	15,2	16,9	1.7	8.3
2018	3,4	22,3	25,7	2.0	10.0
2019	4,2	23,1	27,3	2.3	11.0
2020	4,5	17,8	22,3	2.7	8.4
2021	5,8	29,0	34,8	2.6	10.7
2022	9,3	58,8	68,1	3.7	16.2
2023	10,9	45,6	56,5	2,3	11,15

Table 8. Türkiye's Foreign Tra	de Indicators with the Russian Federation (in billion dollars and %)
--------------------------------	---	---------------------------

Source: T.C. Moskova Büyükelçiliği, (2023: 4).

When the mutual foreign trade between Türkiye and Russia is compared by years, it is seen that Russia is significantly superior. It is understood from the data that the global pandemic and the crises between the two countries had a negative impact on mutual foreign trade. Most of Türkiye's imports from the Russian Federation are energy resources and agricultural products. The share of the Russian Federation in Türkiye's imports has been between 7 and 11 per cent over the years. However, with the outbreak of the Russia-Ukraine war in February 2022, imports from Russia increased by approximately 98% compared to the previous year, and the share of Russia in imports increased to 16.2% (T.C. Moskova Büyükelçiliği, 2023). An important point is that although Russia is at war, Türkiye's dependence on Russia has increased. In 2021, Russia ranked second in Türkiye's imports, while in 2022 it ranked first. Such a situation brings to mind the questions of which countries and country groups are harmed by the war.

Relations between Türkiye and Russia are not only limited to trade, but also continue with service trade and investments. Service trade includes contracting services, tourism, health tourism and investments in different sectors. Global pandemics, wars and mutual political crises directly affect these sectors. In 2019, the bilateral service sector trade volume was approximately \$ 9 billion, while it decreased to approximately \$ 6 billion in 2021. Türkiye is by far superior in mutual services trade. Between 2019 and 2021, Türkiye's total service exports to Russia amounted to 13 billion 911 million dollars, while total service imports amounted to 3 billion 464 million dollars (T.C. Moskova Büyükelçiliği, 2023).



Figure 3. Türkiye's Total Trade in Services to Russia between 2019 and 2021 (USD billion, in %) Source: Created by the author from the data provided by the T.C. Moskova Büyükelçiliği (2023).

Türkiye is one of the most preferred countries by Russian tourists. One out of every 6 tourists visiting Türkiye is Russian. Russian tourists are the second country in the ranking of countries visiting Türkiye.

Trade relations between Türkiye and Ukraine have been steadily increasing since the dissolution of the Soviet Union. Mutual trade relations, which were almost non-existent before the 2000s, increased to a total trade volume of 1 billion 289 million dollars in 2002. By 2022, the total trade volume between the two countries reached 7 billion 674 million dollars. The foreign trade balance between the two countries has always been against Türkiye, and Türkiye has always had a deficit in comparative trade relations (T.C. Moskova Büyükelçiliği, 2023: 14).

	Export	Import	Volume	Balance
2002	310	978	1289	-668
2005	821	2651	3472	-1830
2010	1260	3833	5093	-2572
2015	1121	3448	4570	-2327
2020	2090	2590	4681	-500
2021	2901	4525	7426	-1624
2022	3222	4452	7674	-1230
2023	3442	3692	7134	-250

Table 9. Türkiye's	Trade with Ukraine	(million dollars)
--------------------	--------------------	-------------------

Source: T.C. Ticaret Bakanlığı (2024).

Ukraine is an important country for the Turkish economy. Türkiye imports iron and steel and cereals from Ukraine. Türkiye is partially dependent on Ukraine for agricultural products. In 2021, the trade deficit between Türkiye and Ukraine was 1.62 billion dollars in favour of Ukraine (Kılıç and Mammadov, 2022: 687). In 2022, the trade deficit between the two countries decreased to 1.23 billion dollars in favour of Ukraine.



Source: T.C. Ticaret Bakanlığı (2024).

According to Türkiye's data for 2022, imports from Ukraine totalled 4 billion 453 million dollars. The value of agricultural products in total imports reaches 3 billion 213 million dollars. The share of agricultural products in total imports exceeds 72%.

4.1. The Effects of the War on Türkiye's Energy Resources and Imports of Agricultural Products

After the Soviet Union, Türkiye has signed many protocols and agreements with Russia and Ukraine in the fields of economy. With the two powerful countries of the region, mutual trade relations in all sectors of the economy continue steadily. Except for the global crisis and epidemics, there has been a continuous increase in trade relations. Russia and Ukraine, the two largest countries of the former USSR, have a significant weight in the global economy and trade, as well as an important position in Türkiye's foreign trade. In the last 30 years, the economies and trade of Türkiye, Russia and Ukraine have been complementary. Türkiye, which has geopolitical importance, is one of the most important trade partners of Russia and Ukraine.

Türkiye has undoubtedly been one of the countries most economically affected by the Russia-Ukraine war. Due to the fact that all three countries are close neighbours, they have mutual trade dependence in energy, food, agriculture, tourism and other service sectors. Russia and Ukraine are the most populous countries in the region in terms of population, the largest in terms of surface area and the two strongest countries in terms of underground and surface wealth. Both countries have significant shares in Türkiye's foreign trade. Russian and Ukrainian visitors constitute a significant proportion of Türkiye's tourism. While Türkiye is dependent on Russia and Ukraine for energy resources and agricultural products, Ukraine and Russia are also dependent on Türkiye for tourism, spare parts and accessories, fruit and other agricultural products (Bulut, 2022: 57).

According to Turkish Statistical Institute (TÜİK) data for 2022, it is seen that Türkiye, which has serious trade relations with Russia and Ukraine, has increased import figures and foreign deficit due to the war (TÜİK, 2022). Türkiye's high trade with these two countries in both agricultural products and energy resources is inevitably affected by the increase in energy resources and agricultural product prices in the global market. The war has directly affected Türkiye's grain and sunflower oil imports, vegetable and fruit exports, Turkish tourism, business world, logistics and transport sectors.

The crisis and conflicts between Russia and Ukraine, which started in 2014, turned into a war in 2022. With the war, legal and illegal migration from Russia and Ukraine to Türkiye started. Therefore, the migration wave caused an increase in housing and rent problems in Türkiye. Rent increases and housing prices have increased substantially in big cities, especially in Antalya. Rent and housing increases have also affected the Turkish economy in different ways.

5. Conclusion and Evaluation

Russia and Ukraine are the strongest economies of the Soviet Union. While the energy-oriented heavy industries of the USSR period are located in today's Russian Federation, agricultural products and light-scale industrial establishments are located in Ukraine. The economic, geographical, strategic and political positions of both countries are important. Both countries undertake important tasks in the supply of world energy resources and agricultural products. Russia and Ukraine have a large share in the world in the production and trade of cereals and sunflowers, especially energy. The fact that the majority of these products and resources, which constitute the basic food source of the society, are produced in these two countries is important in the world food supply.

The war between the two countries affects Ukraine's agricultural production and exports and Russia's exports of energy resources. Due to the war, Ukraine's agricultural production and exports decreased in the first half of 2022 compared to the same period of the previous year. In the same situation, as a result of the sanctions between EU countries and Russia, decreases in the exports of Russian energy resources have caused a decrease in the production of goods and services in EU countries that are in shortage of energy resources.

The Russia-Ukraine war was not only limited to its impact on agriculture and energy resources, but also had an impact on the global financial sector. In the first place, uncertainties increased in the world financial sector and economic growth data were revised downwards by the IMF. Consequently, expectations of contraction in world trade volume started.

Türkiye has serious commercial relations with Ukraine and Russia. The fact that these two countries are at war causes Türkiye's import figures to increase in oil, natural gas, wheat and other agricultural products. The ongoing war between the two countries creates an environment of uncertainty in Türkiye's foreign trade. In particular, the interruption of imports of agricultural products from Ukraine has caused price increases in wheat and sunflower products processed in the Turkish domestic market.

Türkiye's dependence on Russia and Ukraine for some agricultural products, especially energy, and the fact that these two countries are at war directly affects the Turkish economy as well as the global economy. When the data after the 2000s are analysed, economic crises, epidemics, wars and political crises between Türkiye and Russia have had an impact on foreign trade.

References

- Aksel, E. (2019). *The process of transition to a market economy and then Turkey- Russia economic relationships*, (Unpublished Master Thesis). Burdur Mehmet Akif Ersoy University, Institute of Social Science. Burdur, Türkiye.
- Aliyev, P. (2023). Rusya–Ukrayna savaşı ve Afrika'da gıda güvenliği. *Africania, 3(1),* 36-50. https://dergipark.org.tr/tr/pub/africania/issue/75710/1226840
- Bağış, B. (2022). Rusya–Ukrayna savaşının küresel ekonomiye ve Türkiye'ye etkileri. SETA Yayınları. https://www.setav.org/assets/uploads/2022/07/R199.pdf
- Bank of Russia. (2024). Центральный Банк России. https://www.cbr.ru
- Britannica. (2024, 12 Ağustos). The crisis in Crimea and eastern Ukraine. *Encyclopedia Britannica*. https://www.britannica.com
- Bulut, R. (2022). Rusya Federasyonu–Ukrayna savaşının küresel ve Türkiye ekonomilerine etkileri. *Göller Bölgesi Ekonomi ve Kültür Dergisi, Ayrıntı, 10*(113), 54-58.
- Coimex. (2024). Ukrayna gıda ithalatı ve ihracatı. https://coimex.co/blog/ukrayna-gida-ithalati-veihracati
- Federal State Statistics Service of Russia (Rosstat). (2023). Федеральная служба государственной статистики. https://www.gks.ru
- Foreign Economic Relations Board (DEİK). (2022). Ukrayna bilgi notu. https://www.deik.org.tr/turkiye-avrasya-is-konseyleri-...
- Harunoğulları, M., and Ayhan, G. (2023). Rusya–Ukrayna krizinin dünya gıda güvenliğine etkileri. *Turkish Journal of Geographical Sciences, 21(2),* 525-556. https://doi.org/10.33688/aucbd.1324325
- International Energy Agency (IEA). (2022). A 10-point plan to reduce the European Union's reliance on Russian natural gas. IEA, Paris. https://www.iea.org/reports/a-10-point-plan-to-reduce-theeuropean-unions-reliance-on-russian-natural-gas
- Kesgin, S. (2023). Ukrayna krizi çerçevesinde gelişen enerji sorunu: Türkiye ve Avrupa üzerine bir inceleme. *Düşünce Dünyasında Türkiz*, 14(1), 57-79. https://doi.org/10.59281/turkiz.1221609
- Kesici, G. E. (2022). Rusya-Ukrayna savaşının AB'nin enerji politikalarına yansıması. *EURO Politika*, 15, 46-54. https://dergipark.org.tr/tr/pub/europ/issue/75914/1255195
- Kılıç, R., and Mammadov, T. (2022). Türkiye'nin Rusya ve Ukrayna ile ticari ilişkileri (Pandemi, savaş ve son gelişmeler). *International Journal of Disciplines Economics & Administrative Sciences Studies*, 8(46). 687-696. http://dx.doi.org/10.29228/ideas.63803
- Matveeva, A. (2022). Donbas: The post-Soviet conflict that changed Europe. *European Politics and Society, 23*(3), 410-441. https://doi.org/10.1080/23745118.2022.2074398

- Ozili, P. K. (2022). Global economic consequence of Russia invasion of Ukraine. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.4064770
- Öçal, B., and Öztürk, M. S. (2022). Rusya-Ukrayna savaşının Türkiye ile Ukrayna arasındaki dış ticarete etkisi. *Karadeniz Sosyal Bilimler Dergisi*, 14(27), 577-596. https://doi.org/10.38155/ksbd.1189716
- Polat, K. (2022). *Durum ve tahmin buğday 2021/2022*. Tarımsal Ekonomi ve Politika Geliştirme Enstitüsü Müdürlüğü (TEPGE), Yayın No: 362. https://tinyurl.com/bdz4cdf6
- T.C. Moskova Büyükelçiliği (2023). Rusya Federasyonu ülke raporu (2023). https://tinyurl.com/2bbmtavv
- T.C. Ticaret Bakanlığı. (2022). Ukrayna Ülke Profili. https://ticaret.gov.tr
- T.C. Ticaret Bakanlığı. (2024). Ukrayna Ülke Profili. https://ticaret.gov.tr
- The World Food and Agriculture Organization (FAO). (2022). The importance of Ukraine and the Russian Federation for global agricultural markets and the risks associated with the current conflict. Rome.
- Turkish Statistical Institute (TÜİK). (2022). *Dış ticaret istatistikleri, Ocak 2022*. https://data.tuik.gov.tr/Bulten/Index?p=Dis-Ticaret-Istatistikleri-Ocak-2022-45536
- Türkiye İhracatçılar Meclisi (TİM). (2022). İhracat 2022 Raporu: Yeni vizyon, yeni yol haritası. https://tinyurl.com/3nu2c5d8
- Türkiye Seyahat Acenteleri Birliği (TÜRSAB). (2022). Ziyaretçi sayıları 2022. https://www.tursab.org.tr
- Uçak, H. (2022). Ukrayna savaşının ekonomik etkileri: Tarım. Ankara Yıldırım Beyazıt University Institute for International Relations and Strategic Research (IRSR).
- Ukrinform. (2024, August 15). Sowing campaign launched in 11 regions of Ukraine. https://www.ukrinform.net/rubric-economy/3439930-sowing-campaign-launched-in-11regions-of-ukraine.html