

CRAIN MARKET OBSTACLES WITHIN THE BLACK SEA REGION

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ПРЕДИЗВИКАТЕЛСТВА ПРЕД ПАЗАРА НА ЗЪРНО В ЧЕРНОМОРСКИЯ РЕГИОН

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Abstract

The Black Sea region is a major producer and exporter of wheat, in addition to being an extremely significant hub for international trade with agricultural goods. In this respect the region's influence on the global grain market is steadily increasing. Ukraine is one of the largest producers of grain commodities not only in the Black Sea region, but also in the world. The physical supply of goods, the disrupted logistics structure, the food security of the population, the damaged port infrastructure, as well as the long-term prospects are only few of the challenges, which are facing the grain market in the conditions of a military invasion. The impact of the conflict within the region is having a lasting influence on global grain trade due to the disrupted international food supply chain.

The purpose of the publication is to present key aspects of the impact of the grain market in the Black Sea region on the world economy with an emphasis on the challenges arising from the interaction between the participating countries, including Russia and Ukraine. The subject of the research are the trends and challenges facing the grain market in the Black Sea region. The subject of the publication is the Black Sea region with a focus on Ukraine.

Key words: grain, market, Black Sea region, Ukraine, influence

JEL: F1, Q02; Q17

1. Introduction

The Black Sea region is one of the most dynamically developing sectors of the world economy. The specificity of the region is that "the strategies of the big countries are concentrated on controlling small-scale, but important for world trade and communications geographical locations" (Vasilev, Zlatev, 2019).

The main objective of this report is to present the importance of the grain market in the Black Sea region on the global economy, emphasizing the challenges of interaction between the participating countries, among them Russia and Ukraine

The geographical position of the Black Sea region covers about 0.3% of the territory of the EU, stretching from "Romania and Bulgaria, through northern Turkey and reaching Georgia" (Natura 2000, 2010). The countries that are included in the region are "countries with immediate access to the Black Sea (Bulgaria, Georgia, Romania, Russia, Turkey and Ukraine), and those that are strongly influenced in

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terms of history and geography, even if they do not have direct access to Black Sea (Greece, Armenia, Moldova and Azerbaijan)" (Dimitrova et al., 2017).

The importance of the Black Sea region is due to the fact that Russia, Kazakhstan and Ukraine are the largest grain exporters in the region. In the period since the 1990s, world grain trade has increased by 10%, reaching record high levels due to increased imports from other developing countries. The main wheat importers are China and Pakistan, along with expanding imports from countries such as: Iran, Brazil, North Africa and Egypt. The development of animal husbandry in Mexico and North Africa also resulted in the increment of grain imports. Since the beginning of the 21st century, the share of the main exporting countries in the international grain trade is steadily descending, due to the constantly growing Black Sea exports, South Asia (for wheat) and Brazil (for corn). In this regard the Black Sea region influence over the global grain market is progressively perceptible (Lytvun, 2007).

The Black Sea region is a major producer and exporter of wheat, in addition to being a center from great significance in reference to world trade in agricultural goods. The region's influence on the global grain market is continuously growing. In respect of the global nourishment security of the world, Ukraine is considered as world's major granary. The weather and soil conditions are favorable for the production of numerous commodities. Ukraine has achieved a great share of the export market in the following countries – North Africa, Europe, the Persian Gulf area, etc. Between 2008 and 2010, both Russia and Ukraine exported an average of 29 million tons of wheat annually, which totaled 21.3% of the world wheat exports for the period and more than any other major exporter – USA, Canada, EU – 27 and Australia (Goychuk, Meyers, 2011).

In 2018, 49.3 million tons of grains and pulses were harvested from an area of 11.7 million hectares in Ukraine. This resulted in abundant exports of agricultural goods: wheat – 28.2 million tons, corn – 9.5 million tons, sunflower – 11.5 million tons. Further more the record grain harvests for Ukraine in 2019 (70 million tons) accounted to historic high exports of 50.4 million tons (Voicilas, Kalaman, 2020).

2. Significance and impact of the grain market on the world economy

The Black Sea region is a major world producer and exporter of wheat, sunflower oil and, to a lesser extent, maize. Both Russia and Ukraine produce 14% of world wheat production and provide 28.5% of the annual world wheat exports. The production of wheat and corn from Russia and Ukraine for the period 2017 – 2021. and their comparison with the US is presented in Figure 1.



Figure 1. Corn and wheat production for the period 2017 – 2021
(according to data from CoBank Report (2022))

Ukraine is the second largest country in Europe after the Russian Federation with about 42.2 million hectares of agricultural land, which is 70% of the country's total area. The agricultural sector has an essential role in the country's economy, as the agricultural potential and the favorable geographical location, with access to the Black Sea and direct access to key markets in the EU, the Commonwealth of Independent States, the Middle East and North Africa, are a prerequisite for Ukraine to remain for decades among the ten largest exporters of wheat, corn and sunflower oil in the world. With the collapse of the Soviet Union and the Declaration of Independence in 1991, Ukraine began reform in terms of changing its legislation to provide private ownership of agricultural land and to favor the activities of local farmers (Nykolyuk et al., 2021).

According to Eurostat data, in 2021, Ukraine supplied more than a quarter of its total cereal imports from countries outside the EU. In addition to being one of the largest producers and exporters of grains, Ukraine is also considered key supplier of two other agricultural products – fats and oils (15% of all imports from outside the EU) and oilseeds (10%). The Ukrainian exports of grains crops and oilseeds for the period 2011 – 2021 is presented in Figure 2.

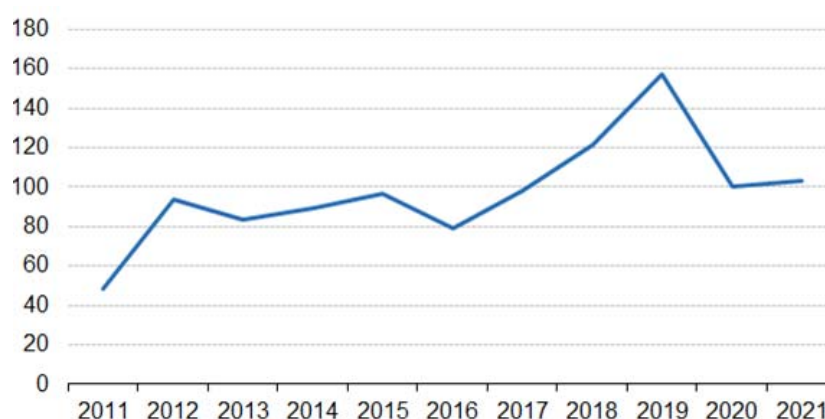


Figure 2. Export of grains from Ukraine for the period 2011 – 2021 (Eurostat)

The prices of key energy-intensive raw materials such as fuels, fertilizers and pesticides as well as the disruptive consequences of the COVID-19 pandemic had an influence on both grain production and export of Ukraine in 2021. A weak harvest in South America, strong global demand and supply chain problems reduced grain and oilseed stocks and drove prices to their highest levels since 2013 (Glauber, Laborde, 2022).

Despite the country's declining grain exports in 2021, over the past two decades, three countries in the Black Sea region – Russia, Ukraine and Kazakhstan have become global leaders in grain production and trade, displacing the US and France as the previous largest wheat exporter countries (Svanidze, Duric, 2021).

3. Grain market challenges

Other regional conflicts, namely such as the "Caucasus conflict" as well as the Russian-Georgian war since 2008 contribute to the instability of relations in the Black Sea region. This finds an indirect negative impact on the relations between Russia and Ukraine and in particular strengthens the instability of the Black Sea region and raises in conflicts between the two great powers – Russia and the USA. The main reason for the growing public attention to the region are its importance for the nourishment security not only within the EU but also globally. According to Yotsov, the factors that do not allow the countries in the region to form a common policy and identity are related to:

- The border of the Black Sea between the Caucasus and the Balkans (between Europe and Asia), which does not allow for the effective implementation of the activities of various regional organizations.
- Cultural differences between countries and professed religions.
- Tensions between Ukraine and Russia (as well as between Georgia and Russia) arising from post-Soviet relations and political arrangements.

- Differences in the political and military forces of individual countries.

Russia's invasion of Ukraine in 2022 changes all grain exports in the Black Sea region, with global implications as well. The physical supply of goods is not the sole problem for Black Sea trade, as ports remain closed and logistics infrastructure in Ukraine is expected to be severely damaged. The long-term prospects for the grain market in Ukraine are also uncertain, due to the fact that a large number of grain producers have ceased operations due to their inclusion in the Ukrainian army. According to World-grain data, the country needs 9-10 million tons of wheat for domestic consumption. In the fall of 2021, the wheat crop in Ukraine was sown on a total of 6.5 million hectares. Expectations are for a harvest of 16 to 17 million tons. If initial forecasts come true, the country could be exporting 6-7 million tons of wheat in the marketing year 2022 – 2023. In reference to corn exports, expectations are for 37 million tons from a total of 5.5 million hectares, as domestic consumption of the country is amounting 7 million tons. Production problems in Ukraine may cause a food supply crisis in countries that traditionally rely on Ukrainian grain, with countries in the Middle East and North Africa already looking for alternative grain suppliers (World-grain, 2022).

Regardless of when the military tensions in the region end, its impact on global grain trade will have a lasting impact, mainly due to expected grain shortages and supply shortages. The CoBank report states that extreme price volatility is expected in the cereal market, with "high fertilizer prices, crop chemical shortages and ongoing supply chain issues" undoubtedly having influence (Zuckerberg, 2022). The conflict in Ukraine is further exacerbating existing tensions in the agricultural commodity market. Since the end of 2021, prices of commodities such as grains and vegetable oils have reached record highs, surpassing even the levels of the global food price crises of more than a decade ago. Black Sea export disruptions and high prices further destabilize food security not only in these regions but globally. However, global demand for wheat is expected to be met in the current marketing year as countries such as Australia, Brazil and the US increase exports to make up for the lack of exports from Russia and Ukraine. It is difficult to predict what will happen after this marketing year, as it will be determined by the development of the current conflict in addition to agricultural fundamentals in key cereal supply and demand regions. Currently, Ukrainian corn and wheat cannot be transported across the Black Sea. Although efforts are being made to increase exports by rail and/or trucks traveling through the country's western borders, overall cereal export volumes from the country are likely to be comparatively low, largely due to significant logistical challenges (Glauben et al, 2022).

After the annexation of Crimea in 2014, Russia gained full control of the naval base in Sevastopol, with the aim not to develop the port as a commercial enterprise. Several of the enterprises involved in transporting grain from Crimea are subsidiaries of Russian state-owned enterprises. Russia's main goal is to promote trade

through Sevastopol in order to integrate Crimea into the rest of the country and build international acceptance of its occupation of the region. As a deep-water port that can accommodate large ships, Sevastopol is the foremost port in respect of grain export. Since the beginning of the invasion of Ukraine, Sevastopol has become the closest major port to much of the newly occupied parts of Ukraine. Grain trucks are reported to be heading to Crimean depots and silos from occupied Ukrainian territory (Cook et al., 2022).

The Russian-Ukrainian crisis poses serious global and regional challenges for food security. Russia's invasion of Ukraine has displaced millions and disrupted agricultural production and trade from one of the world's major export regions. The overall impact of the Russian-Ukrainian military invasion of global food markets, both directly and indirectly through fertilizers and energy, is unparalleled in at least the last half century. Global food markets registered a significant price spike immediately following Russia's invasion of Ukraine on February 24, 2022. The FFPI food price index reached its highest recorded level since its inception in 1990 in March 2022, averaging 159.3 points, and 12.6 percent higher than February 2022. The Russian-Ukrainian crisis and related sanctions against Russia are cutting off fertilizer supplies, accelerating the rise in fertilizer prices. In addition to the direct impacts, the Russian-Ukrainian crisis has significantly increased global uncertainty for all market participants. This uncertainty, which is both reflected and caused by increasing price volatility in internationally traded commodities, affects production and marketing decisions and stimulates speculative market behavior of other participants. With these price fluctuations, it is difficult for farmers to make decisions about what to produce and how much to trade; firms are more cautious to invest in agriculture (Abay et al., 2022).

Russia ships grain from Black Sea ports, which is also a major channel for international grain shipments from Ukraine. Major grain export ports include Chernomorsk, Kherson, Mykolaiv, Odessa and Yuzhny. Disruption of logistics activities and normal functioning of Black Sea ports affects exports from Russia, Ukraine and neighboring countries, in this number Bulgaria, Kazakhstan and Romania. After the invasion it is common practice export shipments to be canceled or significantly delayed. Disruptions in the normal functioning of Black Sea ports and grain exports from the Black Sea region have a notable impact on global food supplies, and limited global supplies further strengthen the price of global food. Ukrainian cities, particularly port cities, are key to the country's agricultural exports. The conflict has limited exports from one of the world's largest grain suppliers by damaging its ports (Nhemachena et al., 2022).

Despite the tension in the export market, no deficits in wheat supply are currently expected on a global scale. Russia has largely resumed its Black Sea exports. However, as a result of sanctions, the US Department of Agriculture predicts that Russian wheat exports will decrease by 8.6% (three million tons). However, agricultural

products are exempt from the latest sanctions announced by the European Commission, related to the ban on transport through the EU territory and access to EU ports. Accordingly, Russian wheat supplies are expected to be around 32 million tonnes, which is slightly lower than export volumes in 2018/2019 and 2019/2020, but still higher than the highest export volumes in the last 15 years. Ukrainian corn and wheat are currently prevented from being transported across the Black Sea (Thomas et al., 2022).

Russia is the world's largest exporter of wheat, ahead of the US and Canada. Ukraine is fourth in the global ranking and while India is relatively small in comparison, the shipment ban reduces alternative sources for importers in terms of both food and livestock, which favors India.

Ukraine can produce up to 26.7 million tons of wheat per year in the short term; although there is great potential for higher production values. Access to international grain markets is one of the main motivations for increasing productivity (Ryabchenko, Nonhebel, 2016). Therefore the lack of such access could be negatively influencing the productivity of the country in the following years.

In summary of the data presented in the publication, the challenges facing the grain market in the Black Sea region are the following:

First: The military invasion in the region puts the world trade in cereals at risk and leads to endangering the food security of the population, since the Black Sea region is a major producer and exporter of grains, as well as an important strategic center for the world trade with agricultural goods.

Second: The Russian-Ukrainian crisis poses serious global and regional food crisis challenges.

Third: Disrupted logistics for exports from the Black Sea region leads to instability and increases in cereal prices, further destabilizing global food security.

4. Conclusion

The Black Sea region is an important center for global food production and trade. Russia and Ukraine are major global producers and exporters of major grain crops such as wheat, barley, corn, and vegetable oils. Volatility in food production and trade (especially exports) has far-reaching implications for food supplies, prices and food security in import-dependent countries. Given that Russia and Ukraine are the dominant exporters, finding replacement suppliers is extremely difficult in the short term. Shortages in global food supply production due to drought conditions, mainly affecting regions in South America such as Argentina, Brazil and Paraguay, make it difficult to increase imports from alternative sources. In addition, increased demand from countries seeking alternative suppliers and any restrictive export measures by major exporting countries will significantly affect global food supplies and maintain pressure on food prices. The disruptions in food production caused by the military conflict will further affect future food supplies from conflict-affected

areas such as the eastern parts of Ukraine, which is the breadbasket of the country. Most of Ukraine's wheat is grown in the east, where fighting has taken place since the war broke out.

The unfolding crisis in Ukraine comes at a time when global food markets are already reeling from rising prices, supply chain disruptions and the ongoing effects of the COVID-19 pandemic. As the world's largest and fourth largest exporters of wheat, Russia and Ukraine are essential to ensuring global food security. Any major disruption to production and exports further contributes to price escalation and undermines food security for millions of people already subject to high levels of global food inflation. Beyond these immediate effects, the crisis risks having negative consequences for next season's harvest as it affects the supply and prices of natural gas and fertilizers, of which Russia is a key exporter. As farmers prepare for the new planting season, a sharp rise in commodity prices could lead to lower yields, lower quality produce, and less planted area.

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