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Research Report

With great power comes great responsibility: The EU and the Black Sea Region take leadership of the global wheat market

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With great power comes great responsibility: The EU and the Black Sea Region take leadership of the global wheat market

Osama Ahmed Thomas Glauben Maximilian Heigermoser Sören Prehn Income growth, changing consumer preferences and technological progress are having a transformative effect on global food trade and, in particular, wheat markets. This is evidenced by two main developments: First, the growing demand for wheat in Asia and Africa is increasingly being met by the European Union (EU) and the Black Sea Region (BSR), which have replaced the United States (US) as the major players on the global wheat market. Second, and as a consequence, the Euronext futures market, which reflects the supply and demand fundamentals in the EU and the BSR, is becoming more important for international wheat price discovery. In light of these two changes, the EU and the BSR must take more responsibility for ensuring global food security and combating hunger and malnutrition. To achieve this, greater international cooperation is required, in particular between the big Western and Eastern economic powers. Unrestricted international trade is vital to ensure sufficient supply of food worldwide, while escalating economic sanctions and countersanctions endanger food security, especially in importdependent regions. Public debate on trade and economic sanctions must therefore be more objective and better take into account both regional and global needs.

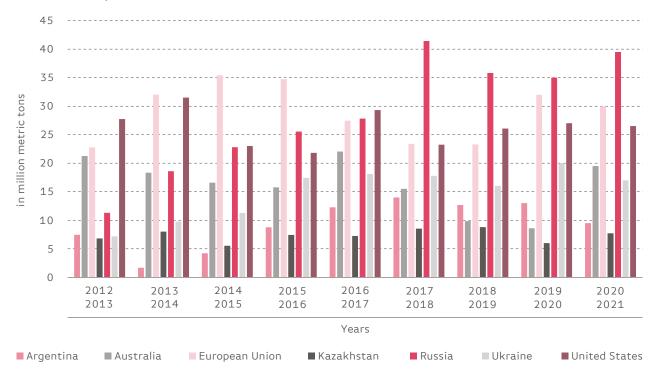
Changing patterns in global wheat trade

Wheat trade has risen sharply in recent years, with wheat imports growing 53 percent from 117 million tons in 2000 to 179 million tons in 2019 (FAOSTAT, 2020). This increase is largely driven by Asian and African countries and can be attributed to rising incomes and growing populations (FAOSTAT, 2020). Indeed, populations in developing countries have more than doubled over the past four decades. At present, the Middle East and North Africa (MENA) region imports 50 percent of its food calorie consumption (Ahmed et al., 2013) and the MENA countries are among the largest importers of grain. In

2020/2021, Egypt became the world's largest wheat importer while Algeria and Morocco ranked fourth and eighth, respectively.

Historically, these countries import wheat from the US. However Black Sea exporters, such as Russia, Ukraine, and Kazakhstan, and EU countries, such as France and Romania, have considerably expanded their wheat exports in recent years (Glauben et al., 2012; Uhl et al., 2019) and increased their share on the world wheat market (Figure 1). Russia, in particular, has seen a rapid rise in wheat exports due to improved political and food trade relations with MENA countries such as Saudi Arabia, Iran, and Turkey (Heigermoser et al. 2021); favorable climatic

Figure 1: Global wheat exports of the major exporters Source: USDA-FAS, 2021. Authors' illustration.



conditions; recent investments in storage facilities and export infrastructure; and geographical proximity to key importing countries in the MENA region (Heigermoser and Götz, 2019). Geographical proximity is particularly relevant in periods of high freight costs, which can currently be observed in international maritime trade (Heigermoser and Glauben, 2021).

Euronext futures market gaining importance

According to a recent study by Janzen and Adjemian (2017), the Euronext wheat futures market is becoming more important for international wheat price discovery. The study shows that this change is due to a closer connection between Euronext and the supply and demand conditions in the EU and the BSR. Particularly after August 2010, when supply shocks originating from Russia and Ukraine impacted wheat markets, the Euronext's share in price discovery increased substantially, potentially signaling a decline in the US's importance on the global wheat market.

Building on this study, novel IAMO research conducted by Ahmed (2021)¹ applied a complementary approach and an alternative data set to further investigate the role of the Euronext wheat market compared to the US market. The results indicate that, before 2015, wheat prices on the Euronext futures market followed past changes on the US futures markets. The transmission of shocks appeared to be largely unidirectional and the Euronext futures market adjusted to shocks on the US futures markets. However, after around 2015,

changes on the US futures markets began to react to changes on the Euronext futures market, and not the other way around. These findings (additionally) suggest the increasing importance of the Euronext for wheat price discovery over the last years.

Eurasian countries have become more competitive on the global wheat market and are able to offer more wheat at lower prices (Figure 2), causing a significant increase in trading volume on the Euronext futures market² and ultimately resulting in a greater share of wheat price discovery. This means that wheat traders and hedgers may increasingly prefer hedging based on information obtained from the Euronext market, as it provides a high degree of effective hedging due to the reductions in spatial basis risk.

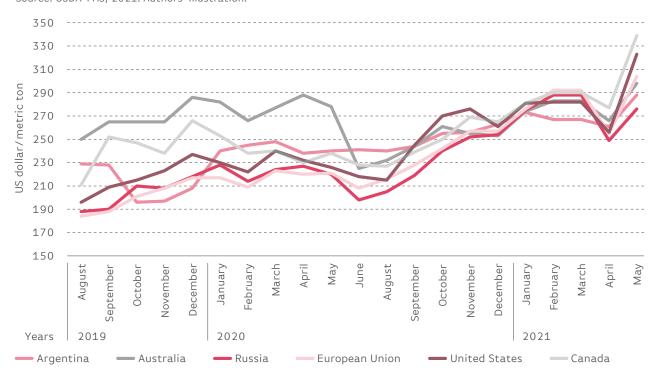
Eurasian nations need to take more responsibility for global food security

The "leadership" role of the US on the world wheat market is in decline while EU and BSR exporters and the Euronext are becoming increasingly important. These developments call for the EU and BSR countries to take greater responsibility to ensure functional and unrestricted grain markets. These countries must refrain from protective market

¹ The study investigates the long-run and short-run equilibrium relationship and causality between price discovery on the US and Euronext wheat futures markets by employing Johansen's co-integration test and error correction model (ECM).

² Despite the remarkable increase in the volume of wheat traded at the Euronext over the last decade, the trading volume at the CBOT is still much higher (Janzen, 2016).

Figure 2: Monthly mean wheat prices (FOB) for the major exporters Source: USDA-FAS, 2021. Authors' illustration.



interventions (such as the export restrictions that were observed as a response to the uncertainty of the Covid-19 pandemic (Heigermoser and Glauben, 2021)), which typically lead to sharp price increases on spot markets and above all harm import-dependent developing countries. Furthermore, market interventions also undermine the functionality of commodity futures markets, such as the Euronext, since higher risk premiums have to be priced in, leading to higher prices in the medium term.

In addition, policy measures are needed to improve the performance of the global wheat trade, such as by increasing cooperation in international

trade and eliminating trade restrictions and barriers. This is particularly necessary given that food prices reached a ten-year high in May 2021 (FAO, 2021). Tightening sanctions and counter-sanctions between the Western and Eastern economic powers should be avoided. That is why public debate on trade sanctions needs to be approached more objectively, taking into account both regional and global needs.

Finally, considerable research efforts are still required to gain a deeper and better understanding of the functioning of agricultural futures markets and their interactions with the corresponding physical/spot markets.

Further Information

Literature

Ahmed, G., Hamrick, D., Guinn, A., Abdulsamad, A., Gereffi, G. (2013): Wheat Value Chains and Food Security in the Middle East and North Africa Region, Duke University, Center on Globalization, Governance and Competitiveness (Duke CGGC), North Carolina, USA.

Ahmed, O. (2021): Assessing the Current Situation of the World Wheat Market Leadership: Using the Semi-Parametric Approach. Mathematics 9, 115. URL: https://doi.org/ 10.3390/math9020115 (status: 29 June 2021).

FAOSTAT (2020): Food and Agriculture Organization of the United Nations, Dataset. URL: http://www.fao.org/faostat/en/#data/TP (status: 29 June 2021).

FAO (2021): World Food Situation. FAO Food Price Index

URL: http://www.fao.org/ worldfoodsituation/ foodpricesindex/en/ (status: 8 June 2021).

Glauben, T., Pall, Z.,
Perekhozhuk, O., Prehn, S.,
Teuber, R. (2012): International grain markets: Russia as a new power? IAMO
Policy Brief No. 6, Halle (Saale).
URL: https://www.iamo.de/fileadmin/documents/
IAMOPolicyBrief6_en.pdf

Heigermoser, M., Glauben, T. (2020): COVID-19, the oil price slump and food security in low-income countries. IAMO Policy Brief No. 37, Halle (Saale).

(status: 29 June 2021).

URL: https://www.iamo.de/fileadmin/documents/ IAMOPolicyBrief37_en.pdf (status: 29 June 2021).

Heigermoser, M., Glauben, T. (2021): Covid-19, unequal economic recovery and maritime food trade. IAMO Policy Brief No. 40, Halle (Saale).
URL: https://www.iamo.de/

URL: https://www.iamo.de/fileadmin/user_upload/IAMOPolicyBrief_40_en.pdf (status: 29 June 2021).

Heigermoser, M., Jaghdani, T., Götz, L. (2021): Russia's Agri-Food Trade with the Middle East and North Africa. In: Russia's Role in the Contemporary International Agri-Food Trade System; S. K. Wegren and F. Nilssen (Eds.). Palgrave Macmillan.

Heigermoser, M., Götz, L. (2019): Russia's Rise To Become the World's Largest Wheat Exporter: Implications for the Global Grain Trade. Russian Analytical Digest No. 244. URL: https://css.ethz.ch/content/dam/ethz/special-interest/gess/cis/center-for-securities-studies/pdfs/RAD244.pdf (status: 29 June 2021).

Janzen, J. P. (2016): Is world wheat price discovery shifting toward Europe? AGECONMT, Montana State University. URL: http://ageconmt.com/world-wheat-pricediscovery-shifting-toward-europe-part-1-trading-

volume/ (status: 29 June 2021). Janzen, J. P., Adjemian, M. K. (2017): Estimating the Location of World Wheat Price Discovery, American Journal of Agricultural Economics 99, 1188–1207.

OECD (2020): Agricultural Policy Monitoring and Evaluation 2020. OECD Publishing, Paris. URL: https://doi.org/10.1787/928181a8-en (status: 29 June 2021).

Uhl, K. M., Perekhozhuk, O., Glauben, T. (2019): Russian market power in international wheat exports: Evidence from a residual demand elasticity analysis, Journal of Agricultural & Food Industrial Organization, Vol. 17, No. 2, pp. 1–13.

USDA-Foreign Agriculture Service (USDA-FAS) (2021): Grain: World Markets and Trade. Online database, U.S. Department of Agriculture. URL: https://www.fas. usda.gov/data/grain-worldmarkets-and-trade (status: 29 June 2021).

USDA Global Market Analysis (2021): Wheat Prices Overview for 2020/21, U.S. Department of Agriculture.

WTO (2020): World Trade Statistical Review 2020: Highlights of world trade in 2019. URL: https://www.wto.org/english/res_e/statis_e/wts2020_e/wts2020chapter02_e.pdf (status: 29 June 2021).

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