<u>Post-Black Sea Grain Deal: What's Happening to Wheat Prices?</u>

Ian Sheldon, Professor and Andersons Chair of Agricultural Marketing, Trade, and Policy, Agricultural, Environmental, and Development Economics, Ohio State University

Chris Zoller, Associate Professor and Extension Educator, Agriculture & Natural Resources
Ohio State University Extension – Tuscarawas County

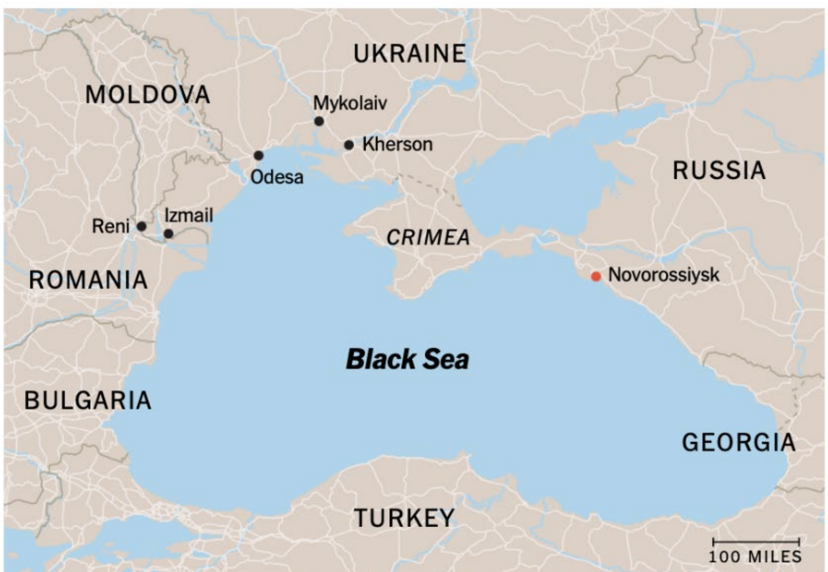
Aftermath of Grain Deal Ending

The Black Sea grain export deal originally signed by Ukraine, Turkey, Russia, and the United Nations (UN) on July 22, 2022 (USDA, Foreign Agricultural Service, *Grain: World Markets and Trade*, August 2022) was abandoned on July 17, 2023, when Russia formally withdrew from the deal (*Financial Times*, July 17, 2023). Despite bilateral diplomatic efforts by Turkey's President Erdogan to renew the deal, President Putin has continued to restate his opposition until Russian concerns about its own grain exports are addressed (*New York Times*, September 4, 2023), a position recently reinforced by Russian Foreign Minister Sergei Lavrov at the UN, where he rejected their most recent proposal on reviving the grain deal as "unrealistic" (*Reuters*, September 23, 2023). At present, it seems very unlikely that the Black Sea deal will be revived, one that saw close to 33 million metric tons of grains and oilseeds being shipped to 45 countries (*Black Sea Grain Initiative Joint Coordination Center*, July 2023). Critically, in the aftermath of the deal collapsing, a series of events have impacted wheat price volatility.

Attacks on Ukrainian Ports

There have been successive Russian attacks on Ukrainian port facilities and its grain handling infrastructure, aimed at stopping their exports. These attacks began immediately after the grain deal collapsed, with Russian shelling grain terminals in the ports of Odesa and Chornomorsk, destroying 60,000 tons of grain in the process (*Bloomberg*, July 19, 2023). At the same time, Russia resumed its blockade of Ukrainian ports on the Black Sea, warning that any vessel operators attempting to run the blockade would be considered as "potential carriers of military cargo" (*New York Times*, July 20, 2023). Not surprisingly, this was followed by a significant jump in wheat futures (*Bloomberg News*, July 19, 2023). Subsequent to this, the Russians attacked the ports of Kherson in southern Ukraine, and the ports of Reni and Izmail on the Danube River in late-July/early-August (*Reuters*, July 24, 2023; *New York Times*, July 29, 2023; *Financial Times*, August 2, 2023), the latter being a key part of Ukraine's alternative grain export route, all three attacks generating upward pressure on wheat futures (*Wall Street Journal*, July 24, 2023; *Bloomberg News*, August 2, 2023) (**see Figure 1**)

Figure 1: Key Black Sea Ports



By The New York Times

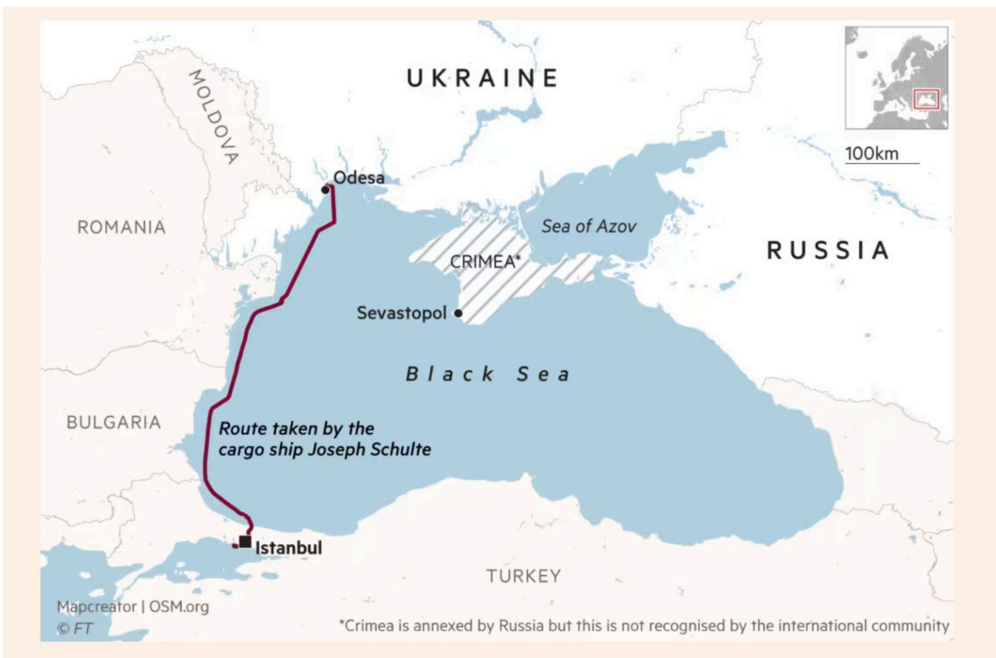
Retaliatory drone attacks by Ukraine on a Russian naval vessel near the port of Novorossiysk (*Bloomberg News*, August 4, 2023), and an oil tanker in the Kerch Strait near Crimea (*Financial Times*, August 5, 2023) in early-August only served to ratchet up tensions in the Black Sea, wheat futures rising in both instances (*Bloomberg News*, August 4 and 7, 2023), with observers suggesting that "…the Black Sea has become an increasingly dangerous cauldron of military and geopolitical tensions…" (*New York Times*, August 9, 2023). This pattern has continued, a Russian naval vessel firing a warning shot at a cargo ship in the southwestern Black Sea (*Reuters*, August 14, 2023), as well as drone strikes on grain elevators at the ports of Reni and Izmail (*Reuters*, August 16, 2023; *Reuters*, August 2023), all three attacks causing wheat futures to push up (Bloomberg News, August 14, 16, 23, 2023). Most recently, the Russians repeated their attacks on the ports of Odesa (*Financial Times*, September 25), and Izmail (*New York Times*, September 26, 2023).

Efforts to Maintain Ukrainian Exports

While Russia has been attacking Ukrainian port facilities, there has been an effort to establish a safe corridor for merchant shipping from Ukrainian ports of Pivdennyi, Odesa, and Chornomorsk through the Black Sea and onward. Moves to develop a "humanitarian" corridor for merchant shipping began in early-August with the objective of allowing the exit of vessels trapped in Ukraine's ports since Russia's invasion, and not covered by the Black Sea grain deal. These efforts were initially seen as a test of Ukraine's ability to reopen sea lanes given Russia was re-imposing a blockade, and also uncertainty as to whether shipowners, marine insurers, and ship captains would be willing to participate in the plan (*Wall Street Journal*, August 11, 2023; *Reuters*, August 10, 2023).

Based on this corridor, the first vessel, a German/Chinese-owned cargo ship the *Joseph Schulte*, made safe passage from Odesa to Istanbul (*Financial Times*, August 18, 2023), followed by a Liberian flagged ship the *PRIMUS* (*Reuters*, August 27, 2023). The corridor itself is based on vessels hugging the coastline of Romania, Bulgaria and Turkey, all members of NATO, which is expected to act as a deterrent against Russia attacking merchant shipping in their territorial waters (see **figure 2**). More recently, merchant vessels have begun entering the Black Sea using the corridor in order to load Ukrainian grain for export (*Reuters*, September 16, 2023), two vessels leaving Chornomorsk in quick succession loaded with wheat bound for Asia and Egypt respectively (*Financial Times*, September 19, 2023; *Reuters*, September 22, 2023). Although wheat futures softened after the first vessel sailed, it is still too early to evaluate whether this will have a significant impact on Ukrainian grain exports, with markets waiting to see the Russian response (*Bloomberg News*, September 19, 2023)

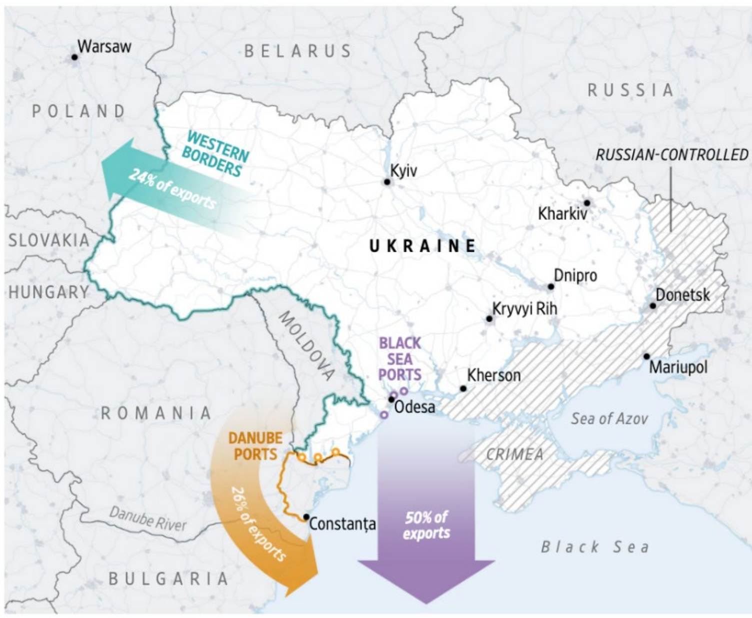
Figure 2: "Humanitarian" Shipping Corridor



Along with establishing a "humanitarian" corridor, there have been efforts to maintain the so-called "Solidarity Lanes" originally established on the border between Ukraine and the European Union after the Russian invasion and predating the Black Sea grain deal. One lane consists of use of the inland Danube River ports of Izmail and Reni, which lie across the river from the Romanian port of Constanta, some bulk carriers subsequently sailing back out to the southwestern Black Sea. The second lane is via rail and road through the eastern EU member countries of Bulgaria, Poland, Hungary, Romania and Slovakia. Between July 2022 and July 2023, 50 percent of Ukraine's exports were from their Black Sea ports under the grain deal, the remainder being 26 percent via the Danube ports, and 24 percent via the land routes (*Wall Street Journal*, July 28, 2023) (see figure 3). At the same time, 95 percent of Russian grain exports came from their Black Sea ports of Taman, Novorossiysk, and Tuapse (USDA, Foreign Agricultural Service).

Figure 3: Black Sea Grain Export Routes

Share of grain exports, July 2022-July 2023



Source: Ukrainian Grain Association (grain exports); Institute for the Study of War and AEI's Critical Threats Project (Russian-controlled areas)
Jake Steinberg/THE WALL STREET JOURNAL

Not surprisingly, the cost of exporting grain via the Danube River or over land is four to five times greater than via the Black Sea ports, (*Wall Street Journal*, August 26, 2023). Therefore, without expansion of capacity of the land routes, and if Russian attacks on the Danube River ports continue, Ukrainian farmers are likely to face further downward pressure on their margins.

The situation has not been helped by rekindling of tensions between the EU and its eastern member countries over the land routes. Earlier this year, with grain exports affecting farm revenues in Poland, Romania, Slovakia, Hungary and Bulgaria (*Bloomberg News*, April 2, 2023), pressure was placed on the EU for tariffs to be restored on imports from Ukraine (*Reuters*, March

31, 2023). The response of the EU was to permit these countries to ban domestic sales of Ukrainian wheat, corn, rapeseed and sunflower seeds, while permitting their transit for export elsewhere (*Reuters*, September 18, 2023). Despite pressure from these countries, the European Commission chose to end the grain import ban on the grounds that "… 'market distortions' in the member states bordering Ukraine had 'disappeared' since the temporary ban was introduced in May…" (*Financial Times*, September 15, 2023). In addition, Ukraine agreed to take steps to avoid a surge in grain exports to the EU (*Wall Street Journal*, September 16, 2023).

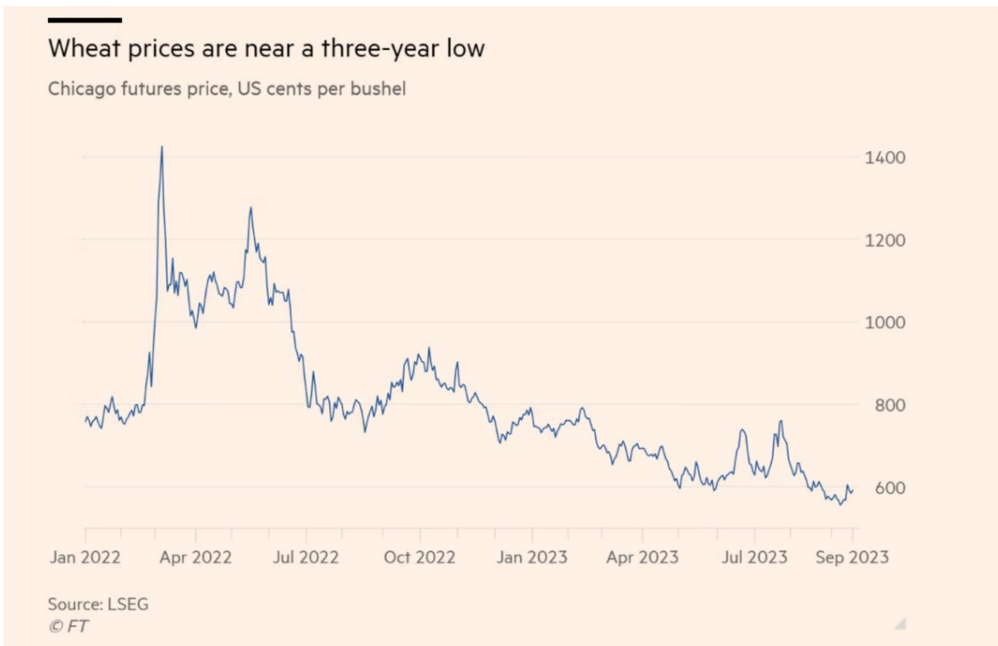
The immediate response by Poland, Hungary, and Slovakia was to introduce their own unilateral import bans (*New York Times*, September 17, 2023), with Ukraine moving to file a complaint against all three countries at the World Trade Organization (WTO) (*Bloomberg News*, September 18, 2023). While this has created tension, particularly between Poland and Ukraine (*New York Times*, September 31, 2023), the EU also faces a dilemma over application of its common trade policy. On the one hand, Germany, France, and Spain have all pointed out that the actions of Poland, Hungary, and Slovakia are in violation of core EU rules (*Financial Times*, September 18, 2023), but at the same time the European Commission, who represents the bloc at the WTO, have been placed in a difficult position about whether or not to defend the unilateral policies of three of its member states (*Financial Times*, September 20, 2023). Recently though, efforts by Ukraine to license its grain exports to both Slovakia and Poland have lowered the temperature, Ukraine subsequently halting its action against Slovakia at the WTO (*Washington Post*, September 22, 2023).

What's Happening to Grain Prices?

There is no doubt that since the breakdown of the Black Sea grain deal, increased uncertainty has affected grain markets. Focusing on options prices, the implied volatility for wheat has risen from

40 to 50 percent, where implied volatility is the market's measure of expected risk of price changes embedded in options prices (Carter and Steinbach, *ARE Update*, July/August 2023). However, despite the increased volatility, wheat futures have fallen by more than a fifth since the grain deal ended and are now at a three-year low (*Financial Times*, September 20, 2023) (see figure 4).

Figure 4: Wheat Futures Prices



Prices have fallen with Russia set to have a large wheat harvest, and the expectation it will account for 22.5 percent of global exports in 2023/24, making it the world's largest exporter (*Bloomberg News*, September 16, 2023; *Financial Times*, September 2021). But optimism may be short-lived given the potential for tensions in the Black sea region to escalate further, and the weight of derivatives bets on falling prices. Commodity market analysts have pointed out that the wheat futures price is currently below its underlying value, raising the risk that if there were an unexpected supply shock, wheat prices would jump as traders buy futures contracts to cover their losses (*Financial Times*, September 21, 2023).

Use of the Black Sea "humanitarian" shipping corridor appears to be gaining momentum, the Ukrainian navy recently reporting 12 new vessels entering and 10 leaving (*Reuters*, October 4), with full war risks coverage being offered by major marine insurance broker Miller (*Bloomberg News*, October 2, 2023). However, safety concerns remain an issue, British intelligence sources indicating Russia has clear capability of laying mines in the approaches to Ukraine's Black Sea ports (*The Guardian*, October 4, 2023). Bottom line: expect wheat and other grain prices to remain volatile in the current geopolitical environment.

This article reiterates what we've always known – agriculture competes in a global environment and many factors impact prices. While some of these factors are outside your control, we encourage farmers to focus on those that can be controlled. Develop, evaluate, and reevaluate production, financial, and marketing plans as you navigate these continued uncertain times.