What are the Implications of the Black Sea Grain Deal Breaking Down?

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

The Black Sea Grain Deal So Far

The Black Sea grain export deal 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 originally extended for four additional months in November 2022, followed by further extensions in March and May 2023 respectively, the most recent being for only two months up to July 17, 2023. During that time-period, 32.7 million metric tons of grains and oilseeds have been shipped to 45 countries from the Ukrainian ports of Chornomorsk, Odesa and Pivdennyi (Yuzhny), the percentage breakdown of the cargo totals being corn (51%), wheat (27%), sunflower meal (6%) and sunflower oil (5%), and other (11%) (*Black Sea Grain Initiative Joint Coordination Center*, July 2023).

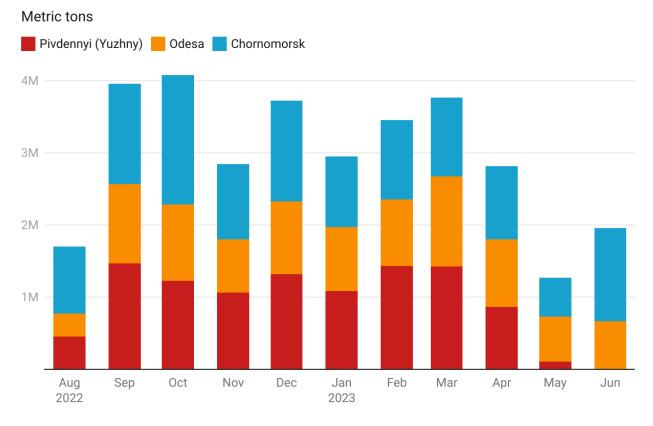
Resumption of Ukrainian sea exports over this time-period has helped in reversing the spike in global food prices that occurred after the Russian invasion of Ukraine, the FAO Food Price Index dropping by almost 39% since March 2022 (*World Food Situation*, FAO/UN, July 7, 2023). However, as of July 17, 2023, Russia has ended its participation in the deal, which brings with it increased uncertainty about available global grain and oilseed supplies as well as the potential for greater price volatility and/or increased food prices (*New York Times*, July 17, 2023).

Even before Russia pulled out of the grain deal, the rate of exports from the three Ukrainian ports was already declining (see Figure 1), the latest export tonnage being just over 0.2 million metric tons as of July 7, 2023 (*UN Black Sea Grain Initiative Joint Coordination Center*). This

slowdown in exports also shows up in the average number of ships being cleared under the deal falling from a peak of 11 in October 2022 to 3 in May 2023 *UN Black Sea Grain Initiative Joint Coordination Center*). At this point, the Black Sea Corridor is no longer the dominant route for exports, with more crops being shipped through ports on the Danube, as well as by rail and road (*Bloomberg News*, July 6, 2023). Essentially, the deal allowed Ukraine to export the grain stockpiles that it had accumulated with the closing of its ports post-invasion, but in the view of some observers, the deal was already essentially "defunct" (*Bloomberg News*, July 6, 2023).

Figure 1:

Agricultural exports under the Black Sea Grain Initiative by port of departure



Data as of June 30, 2023

Chart: Joseph Glauber • Source: UN Black Sea Grain Initiative Joint Coordination Centre

What are Russia's Concerns with the Deal?

Russia's unwillingness to renew the grain deal has been brewing for some time, Ukraine previously accusing it of trying to undermine the deal by dragging out and even preventing the required restrictions of Black Sea shipments before two previous renewals of the deal (*Financial Times*, March 19, 2023; *New York Times*, May 18, 2023). Even though U.S. and European Union (EU) economic sanctions against Russia exclude trade in agricultural commodities such as grain fertilizers (*Congressional Research Service*, December 13, 2022), Russia has repeatedly complained about the Black Sea grain export deal since its inception (*New York Times*, July 17, 2023). Even though the UN struck a deal with Russia in July 2022 to help it overcome obstacles to grain and fertilizer shipments, Moscow claims that restrictions on payments, logistics and insurance have been a major barrier to its agricultural exports (*Reuters*, June 16, 2023).

However, since the grain deal was last renewed in May, Russia's concerns seem to have intensified, Moscow expressing two main demands as a pre-condition for renewing the grain deal (*Reuters*, June 16, 2023). The first relates to reconnection of the Russian agricultural bank Rosselkhozbank to the SWIFT international payment network (*Reuters*, July 12, 2023). Following the Russian invasion of Ukraine, the EU cut off Russia from the SWIFT network in June 2022, placing a major constraint on the processing of grain export payments to Russia (*Reuters*, July 13, 2023). It has been reported that the EU has been considering allowing a subsidiary of Rosselkhozbank to connect to SWIFT, UN Secretary-General Antonio Guterres asking President Putin to extend the grain deal, thereby giving the EU time to make the connection (*Reuters*, July 12, 2023).

The other Russian demand relates to the ammonia pipeline from Tolyatti to the Ukrainian port of Pivdennyi (Yuzhny) (*IFPRI*, June 13, 2023). The pipeline has been closed since the Russian

invasion and has reportedly suffered war damage. Given the significant impact of the closure on Russia's exports of anhydrous ammonia, it is perhaps not surprising Russia has tied recent restrictions on the registration of grain shipping at Pivdennyi to reopening of the pipeline (*IFPRI*, June 13, 2023).

Breakdown of the Deal

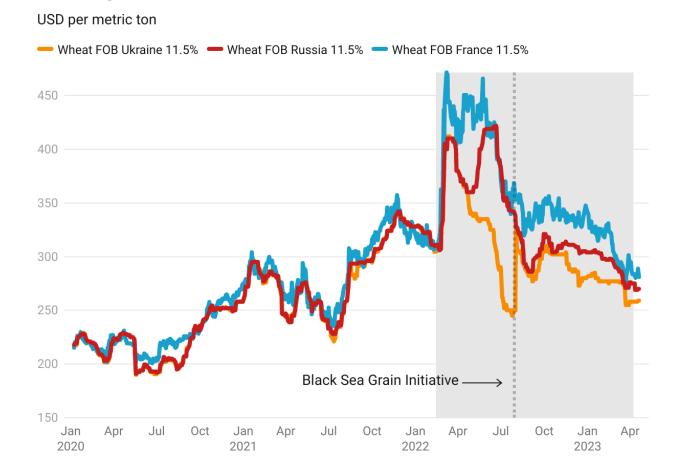
Despite the best efforts of the UN Secretary-General Guterres and Turkey's President Erdogan, Russia has not renewed the grain deal, its Foreign Ministry issuing a statement that, "...Only upon receipt of concrete results, and not promises and assurances, will Russia be ready to consider restoring the deal..." (*New York Times*, July 17, 2023). Not surprisingly, the markets reacted to the deal not being extended, wheat futures rising 4.2% on the Chicago Board of Trade (*Bloomberg News*, July 17, 2023), but what are the longer-term implications of the breakdown?

Even though the grain deal has been critical to relieving pressure in the world market over the past year, Ukrainian grain and oilseed production are expected to decline in 2023/24 due to the ongoing impact of the war, with disruption of ongoing planting and harvest of multiple crops including wheat, barleycorn, rapeseed and sunflowers. The latest estimates for Ukraine's major crops indicate significant reductions are expected in harvested acreage in 2023 compared to 2021 — wheat (-42%), sunflower seeds (-20%), corn (-38%), and barley (-33%) (*USDA*, *Foreign Agricultural Service*, June 2023). It should be noted these data do not include those parts of Ukraine either in the war zone or occupied by Russian Forces (*UC-Davis ARE Update*, May/June, 2023). In terms of the potential impact on world food prices, Ukrainian grain shipments are forecast to decline by about 36% in the 2023/24 marketing year (*Bloomberg News*, July 6, 2023).

With expected declines in Ukrainian grain production, and the closing of the Black Sea Corridor, two price effects can be expected: world grain prices will increase with the reduction in Ukrainian exports, but at the same time Ukrainian domestic grain prices will likely fall. This is precisely what happened after the Russian invasion: in the case of wheat, when Ukrainian ports were blockaded, a wedge was driven between other comparable and Ukrainian prices, the wedge declining after the grain deal was struck in July 2022 (see Figure 2). Since then, Ukrainian wheat prices have tracked other wheat prices, although a gap was starting to open-up again recently, and it can be expected to widen, reducing Ukrainian farmers' incentives.

Figure 2:
Wheat prices

Chart: Joseph Glauber • Source: Bloomberg



It is also likely grain price volatility will be exacerbated, markets already being very sensitive to regional shocks even before the deal ended. When the Nova Kakhova dam in southern Ukraine was destroyed in early June, wheat futures prices immediately rose 2%, raising concerns of an escalation in the war between Russia and Ukraine (*Reuters*, June 6, 2023), which was followed by a second market shock in late-June after the armed uprising in Russia, wheat futures prices increasing by 3% (*Bloomberg*, June 23, 2023). (For a detailed discussion of price volatility see the companion article to this one on *Ohio Ag Manager*: "What factors are driving the current grain market volatility?" by Seungki Lee).

There is a sense that it may be very difficult to revive the Black Sea deal at this point, with the likelihood grain and oilseed prices will rise, which will then impact the number of undernourished people globally (*The Guardian*, July 17, 2023). At the same time, even though grain continues to be exported westwards from Ukraine through Poland, Hungary, Bulgaria, Romania, and Slovakia, this has created political tensions in those countries, farmers facing lower prices and reduced revenues. (*Bloomberg News*, April 1, 2023). Even though the EU suspended its tariffs and quotas on imports from Ukraine after the Russian invasion, Poland and Hungary blocked imports from Ukraine in April in a response to farmer protests (*New York Times*, April 20, 2023). This was followed on May 2 by the EU introducing a temporary ban on grain imports by these countries from Ukraine until June 5, while maintaining transit routes into the rest of the EU, the restrictions being subsequently extended until September 15 of this year (*Reuters*, June 5, 2023).