S&P Global Ratings

The Global Food Shock Will Last Years, Not Months

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This report does not constitute a rating action

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Key Takeaways

- Rising food prices and diminishing supplies will last through 2024 and possibly beyond, in our view.
- Fertilizer shortages, export controls, disrupted global trade, and escalating fuel and transport costs will all exert upward pressure on the cost of staples.
- Our analysis shows low and low-to-middle income countries in Central Asia, the Middle East, Africa, and the Caucasus could be worst hit by the first-round impact.
- The food shock will drag on GDP growth, fiscal performance, and social stability, and could lead to rating actions, depending on the response by governments and international organizations.

International markets appear to be viewing the fallout of the war in Ukraine on food prices as a single-year shock. In contrast, we believe the shock to food supply will last through 2024 and beyond, with negative implications for emerging market countries, affecting GDP growth, fiscal performance, and social stability.

The potential impact of such developments on sovereign credit ratings will depend upon, among other things, the extent and severity of the food shock, the ability of governments to minimize the social and economic costs, and international efforts to help the affected countries. Although many of the sovereigns most exposed to this risk already have very low credit ratings, the negative economic or political fallout of the food shock could contribute to rating downgrades.

We see four key reasons why the food shock could drag on into next year and likely longer:

- The war in Ukraine is lasting longer than most expected;
- The disruption to the harvests of key producers this year is jeopardizing the 2023 crop. In Ukraine, in particular, the key sowing season of April-May was missed in much of the country, owing to labor and other input shortages, including of harvest machinery;
- Surging prices of fertilizers, machinery, and other inputs are placing additional costs on production for future years' crops; and
- Fertilizer and food exporters, in particular major producers such as Russia, are increasingly imposing export controls.

We expect that these factors will culminate in increasing competition for key inputs in 2022 and 2023. Food supply outside of the conflict zones is unlikely to ramp up meaningfully enough to offset the ongoing disruptions. This will mean higher prices, and hence another round of food inflation through 2024 by our reckoning.

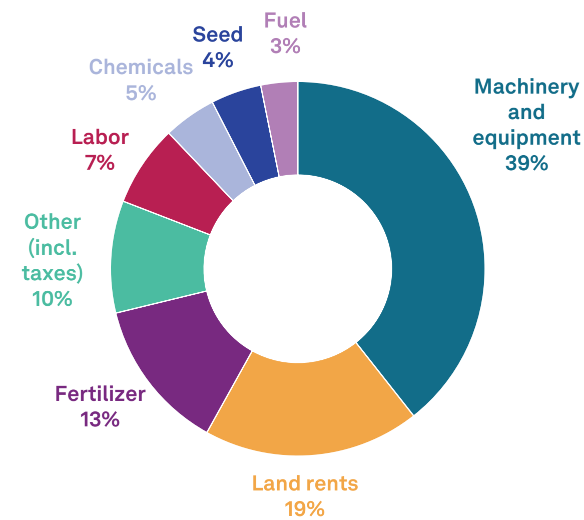
Ukraine and Russia are agricultural heavyweights, and the outbreak of war between the two has sent importers scrambling to find alternative sources. The countries (both or individually) rank among the top three global exporters of wheat, maize, rapeseed, sunflower seeds, and sunflower oil. Together, they account for 12% of all food calories traded. Russia and Belarus were the first and sixth largest exporters of fertilizers globally in 2020. Prices of ammonia, a byproduct of gas production, have soared since the invasion of Ukraine.

Food inflation and food shortages are central to demonstrators' frustrations in many regions of the world. Last month, Peru was rocked by an extended period of protests and strikes, with food, fertilizers, and fuel at the center of protesters' concerns. In Sri Lanka, ongoing protests over rising food prices and fuel shortages, although mired in broader economic malaise, have brought down the prime minister, with calls for the president to go too. These events are early political fallouts of the war in Ukraine, in our view.

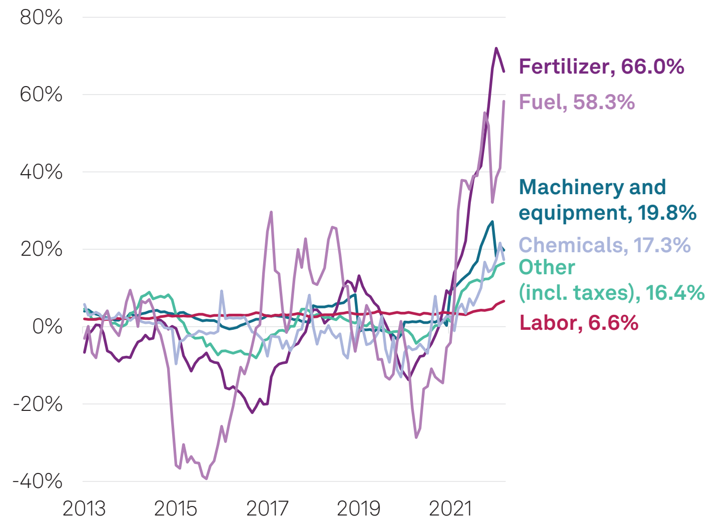
Chart 1

Inflation is driving up the cost of wheat production

Breakdown of input costs, before shipping* (U.S.)



Inflation rate for input costs (U.S.)



*Share of the total cost of producing one acre of wheat in the U.S. Note: We have excluded inflation data for land rents and seeds. Land rent inflation is highly dependent on assumptions of opportunity cost. Seeds make up a small percentage of total cost of producing wheat in the U.S.
Sources: USDA for all data except hourly wages, calculated using data from the Federal Reserve Bank of Atlanta, and the U.S. Bureau of Labor.

The current situation has parallels with the situation in 2010 when, after a drought in the Black Sea region, Russia banned wheat exports and Ukraine's exports were severely hit. Those supply and price disruptions and the ensuing Arab Spring protests, starting 2011, threw the Middle East and North Africa region into political turmoil. How different are things this time?

Immediate Shocks

Our analysis of sovereigns' food import exposures suggests that low and low-to-middle income countries in Central Asia, the Middle East, Africa, and the Caucasus would be worst hit by the first-round impact. We examined which rated sovereigns are the largest cumulative importers, relative to their own GDP, of the key grain and seed-oil items most significantly affected by the conflict (see chart 2).

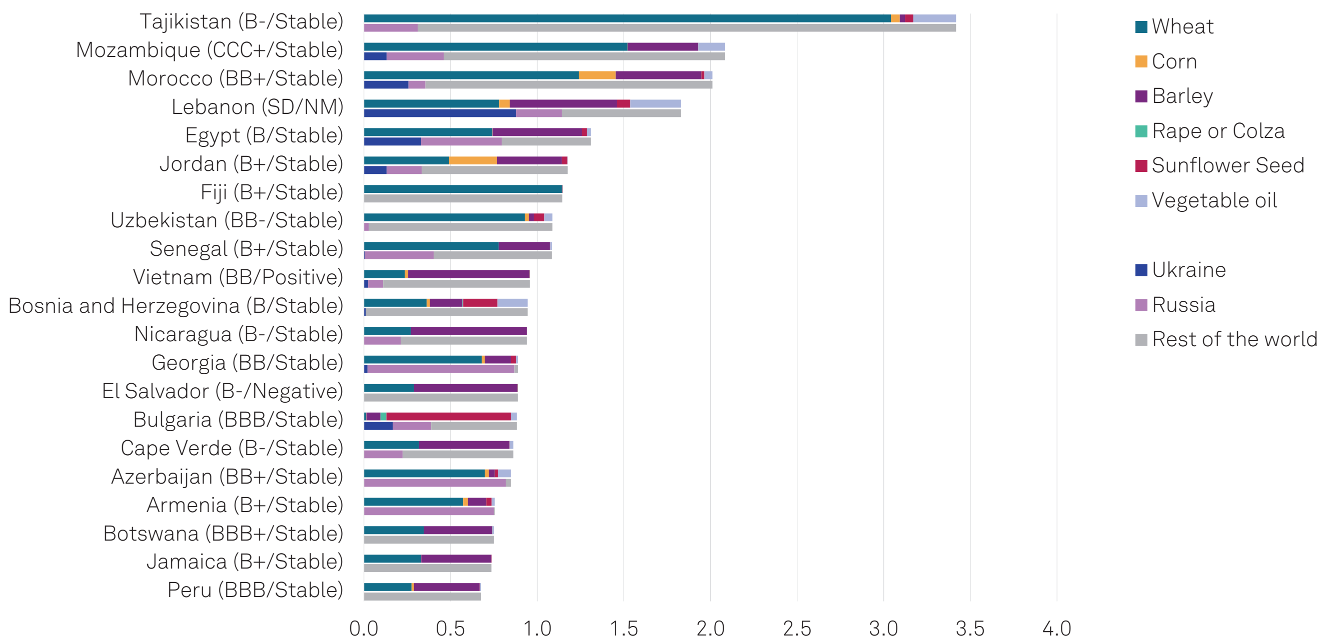
Given that emerging markets have limited capacity to replace these imports with substitutes, adjustment to the price shock will translate to lower consumption for the 770 million people that the Food and Agricultural Organization of the United Nations (FAO) had already stated were undernourished before the conflict. That could, under some scenarios, raise the risk of social instability in countries that are large importers in relation to their GDP.

For some of those countries, the reliance on Ukraine and/or Russia within their supply chains will amplify the disruption. The three Caucasus nations, for example—Tajikistan, Uzbekistan, and Armenia—look particularly exposed through their almost complete reliance on Russia for these five key food commodities, should sanctions or self-sanctioning complicate trade. Similarly, the four Arab states—Morocco, Lebanon, Egypt, and Jordan—each rely nontrivially on Ukraine for their food supply and are therefore susceptible to war-induced disruption to ports and processing activities.

Chart 2

Food shock: the most vulnerable economies are in Central Asia, Middle East, Africa, and Caucasus

Largest importers of six key commodities (% of GDP)



Note: All ratings and outlooks refer to foreign currency long-term sovereign credit ratings.
Sources: COMTRADE, S&P Global Ratings.

Fertilizer Scarcity

Even for countries that are either net food exporters or are self-sufficient in food production, problems may yet be on the horizon. World fertilizer supply is heavily concentrated among a few big players, with Russia and Belarus (the two countries at the center of sanctions imposed by the EU and U.S.) both being large exporters.

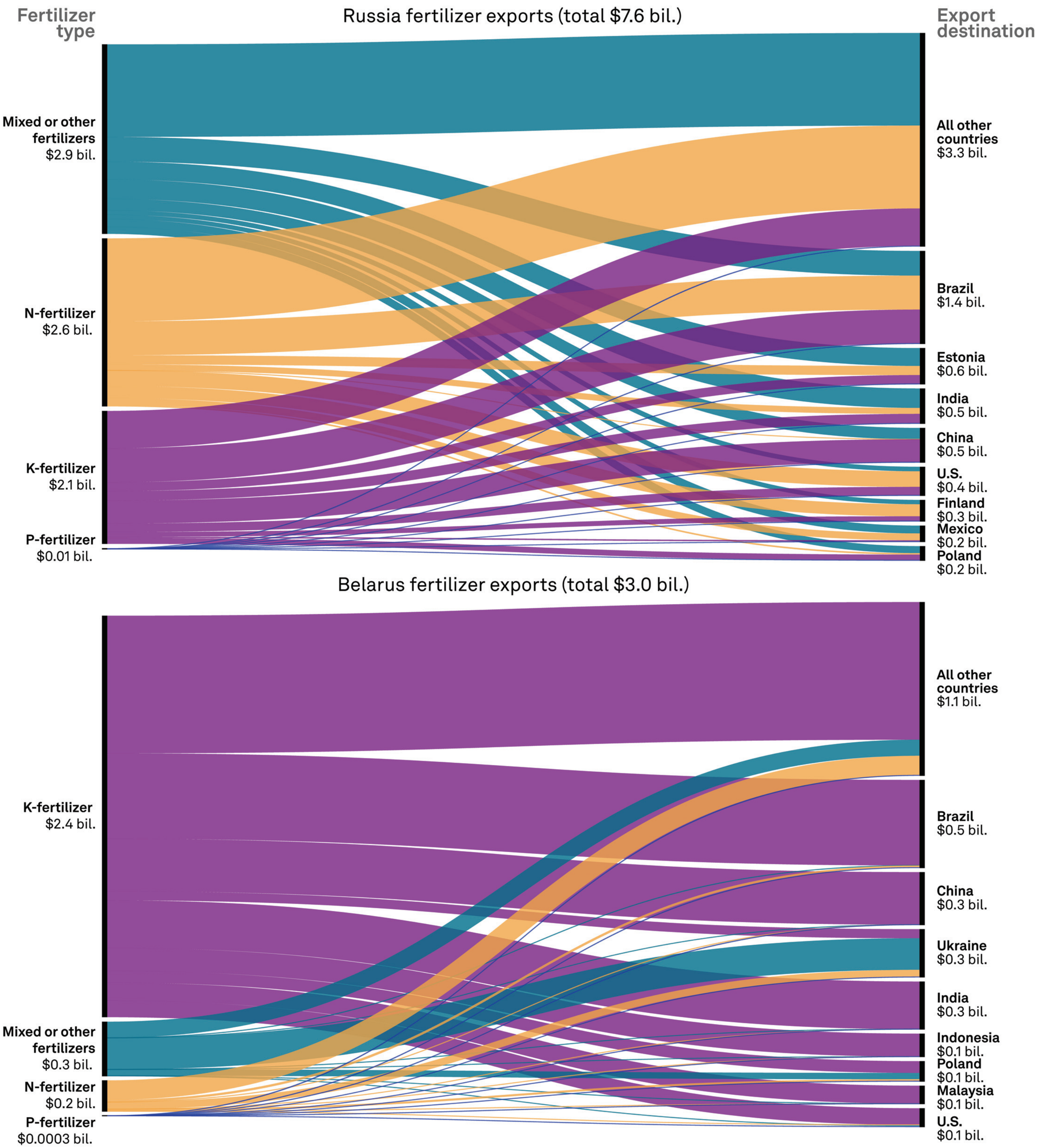
Russia, the world's largest exporter of fertilizer products, is a primary producer of all three main fertilizer nutrients, nitrogen, phosphate, and potassium (NPK; see chart 3a). It also has a dominant market share of various subcategories, including ammonium nitrate (45% of global exports) and compound NPK fertilizers (33% of global exports). Russia's phosphate rock and potash reserves across its vast territory, and ready access to hydrocarbons and associated byproducts such as sulfur (which are essential for the end production of nitrogen and phosphate fertilizers), have allowed the country to develop a globally systemic downstream fertilizer production sector.

We expect a meaningful amount of this trade could be disturbed by the ongoing fallout of Russian actions in Ukraine. This includes:

- Direct sanctions placed on Russia, including those listed in the EU's fifth round of sanctions that specified import quotas on various fertilizer products;
- Various broader logistic measures, such as the prohibition of access to EU ports from Russian-flagged vessels. Estonia and Finland are both top importers of Russian fertilizers, reflecting their ports' role as entry points to the EU single market (see chart 3); and
- The ban of road-transported goods.

Chart 3

Developing economies depend on Russia and Belarus for fertilizer
Fertilizer exports by type and destination, 2020 (bil. $)



Source: BACI

Additionally, various firms have been self-sanctioning, i.e., not buying from Russian suppliers due to uncertainties over payments, concerns over Russian counterparties' ability to physically supply (for example, due to the risk that the counterparty is later subject to sanctions), and legal or reputation risks associated with doing business with Russian firms.

Separately, Belarus, responsible for 16% of world potash fertilizer exports, has reportedly almost entirely shut down its mining and manufacturing activity in recent months. The country is subject to sanctions from the U.S., EU, and U.K. on potash exports, mostly imposed as a result of Belarus' role in buttressing Russia's aggression against Ukraine. Legacy financial sanctions imposed by the U.S. in August 2021 as a consequence of Belarusian President Lukashenko's alleged oppressive actions against his people ultimately led to the loss of Belarus' key rail transit route through Lithuania in January 2022. This had already made it near impossible for firms globally to transact with Belarusian fertilizer exporters or export materials out of the country. Now, the conflict has disrupted other viable routes. A small amount of fertilizer from Belarus has reportedly made its way to China via rail as an experiment to understand the viability of this route. Nevertheless, it seems likely that much of the Belarusian fertilizer export will be blocked for the foreseeable future, placing immediate pressure on import partners to find alternative suppliers.

Export Restrictions Exacerbate The Shock

In recent months, policymakers in various countries have imposed export restrictions on food in response to escalating food prices. India's recent decision to impose wheat export sanctions following a drought has dashed hopes it could become a stopgap for lost Ukrainian output. The ban of palm oil exports from Indonesia is another example, although Indonesia has since announced a reversal of most, but not all, restrictions. This will have reverberations beyond food markets because palm oil is used for a wide array of goods and Indonesia has a 60% market share of world supply. According to the International Food Policy Research Institute, other export restrictions are also currently being applied in Russia (various grains and sugar), Ukraine (most food products have restrictions, with the intention to secure domestic supply amid the war), Argentina (soybean products), as well as in Egypt, Serbia, Turkey, and Kazakhstan (banning an assortment of grains and cooking oils). Each of these countries are meaningful exporters of foodstuffs.

Furthermore, export restrictions are also in place in several fertilizer-exporting nations. On May 31, 2022, Russia announced a further extension of existing export quota restrictions on nitrogen and complex nitrogen containing fertilizers until December. China, the world's second-largest fertilizer exporter in a normal year, is the other prominent example. Since summer 2021, the Chinese government has ordered its firms to stop selling fertilizer abroad to preserve supplies at home.

Absent more forceful action from the World Trade Organization, it seems there will be little effective pressure to eliminate these export restrictions from further disrupting global food and fertilizer markets.

Lingering Impact

Already, we have seen various governments across regions step in to provide support to offset the rapidly escalating worsening in food prices. As our analysis confirms, absent remedial measures, the countries worst affected are likely to be some of the world's poorest. While even a one-year shock of the magnitude observed would be likely to cause malnourishment and increase food poverty, if our thesis of fertilizer shortage and export restriction-driven multiyear shock plays out, the impact could be catastrophic, absent remedial measures. These negative developments will make it harder for governments to contain, let alone reverse, the weakening of public finances that has taken place since the advent of the COVID-19 pandemic. The combination of slower economic growth and rising public pressure to increase subsidies could contribute to larger fiscal deficits and worsening government debt burdens. Rising inflation, especially in food prices, could pose serious political challenges for governments, as the Arab Spring showed.

Related Research

- Economic Research: Food Price Shock Reverberates Through MENA Economies, May 26, 2022
- Which Emerging Markets Are Most Vulnerable To Rising Food And Energy Prices?, April 21, 2022

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