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WORLD

Russia-Ukraine War Adds Pressure to Already High Food Prices, Threatening Food Security for Millions

Both countries are top grain exporters and supply disruption is only part of the war's impact on food

By <u>Nate Rattner</u> and <u>Andrew Barnett</u>

March 19, 2022 8:00 am ET

Russia's <u>invasion of Ukraine</u> threatens a significant portion of the world's food supply when prices were already at their highest level in years.

The two countries are among the globe's top grain exporters, according to the Harvard Growth Lab's Atlas of Economic Complexity, making up a combined 26% and 20% of global wheat and barley exports in 2019, respectively. The conflict <u>has sent wheat futures prices</u> <u>soaring</u> and is putting pressure on a still-recovering global supply chain, setting the stage for an increase in already inflated consumer prices.

Share of global exports by value, top 10 countries 2019

WHEAT AND MESLIN

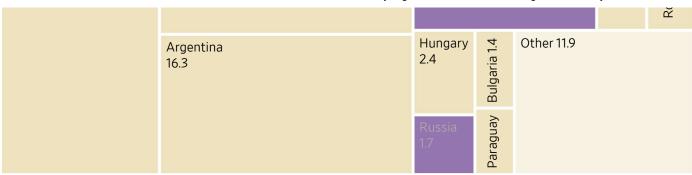
Russia 16.4%	The world's No. 1 exporter of wheat and meslin	Canada 13.5	Ukraine 9.4 Around 24% of Ukraine's wheat and meslin exports go to Egypt			Australia 5.3	Argentina 5.1	
U.S. 16.4		France 10.9	Romania 3.2			Other 14.4		
			Germany 3.1					

BARLEY

France 22.9%	Ukraine 10 The world's No. 3 exporter of barley	Argentina 9	Germany 4.7	Kazakhstan 4.6
	Russia 9.9 Around 35%	Canada 7.7	Other 12.5	
Australia 10.7	of Russia's barley exports go to Iran	U.K. 5.4	Romania 2.7	

CORN





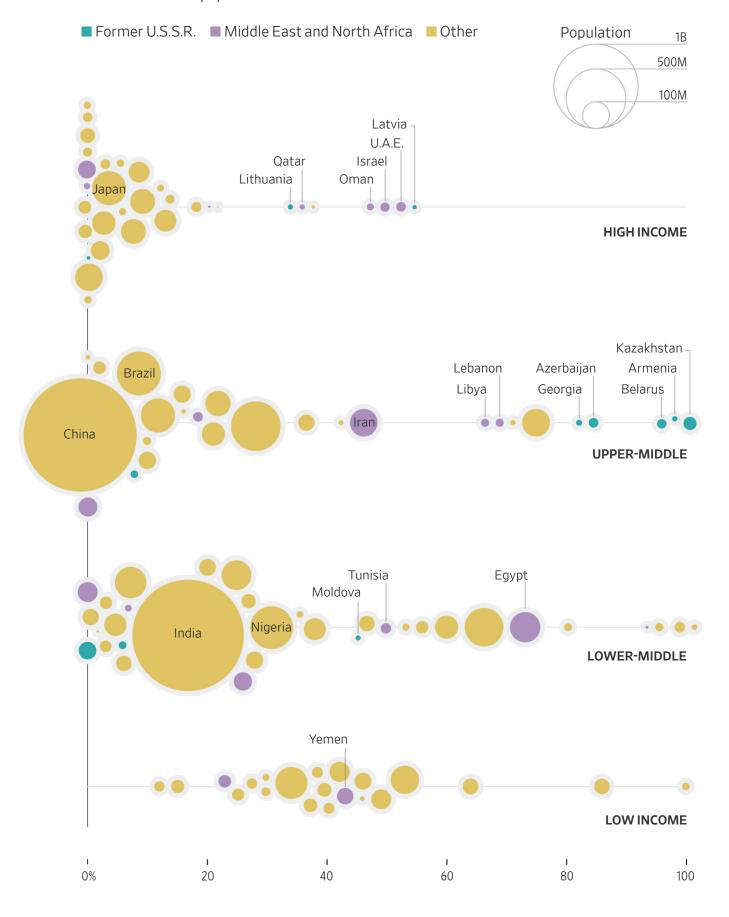
Note: Percentages are rounded. Source: Growth Lab, Harvard University

The potential pain from a loss of agricultural exports, however, is likely to be felt disproportionately world-wide. Countries in the Middle East and North Africa rely on the nearby Black Sea as a trading route and source of imports from Russia and Ukraine. The war has hamstrung shipping there, stranding ships and sailors across the globe and putting countries such as Egypt, the world's largest importer of wheat, at risk of losing a critical food source. Egypt gets about 70% of its total wheat imports from Russia and Ukraine.

Historical ties and geographic proximity mean that former Soviet Union countries, such as Armenia, Belarus and Kazakhstan, tend to import a lot of their wheat products from the region.

Wheat imports from Russia and Ukraine as a percentage of each country's total wheat imports, by income group

Circle size reflects population



Note: All data as of 2019 and includes meslin. Plotting of some circles approximated due to spacing. Sources: Growth Lab, Harvard University (share of imports); World Bank (population and income groups)

The 2019 trade data compiled and analyzed by the Harvard Growth lab, which is based on countries' reporting to the United Nations and represents the latest complete trade data available, covers an estimated 95% of global goods trade.

Country-specific dynamics will affect how they are able to handle the loss of a critical source of wheat imports, according to David Laborde, a senior research fellow with the International Food Policy Research Institute. Egypt's relatively diversified food basket and its strategic wheat reserves can help it cope in the near term, he said, while a more economically vulnerable country such as Yemen is likely to struggle making up the imports gap.

SHARE YOUR THOUGHTS

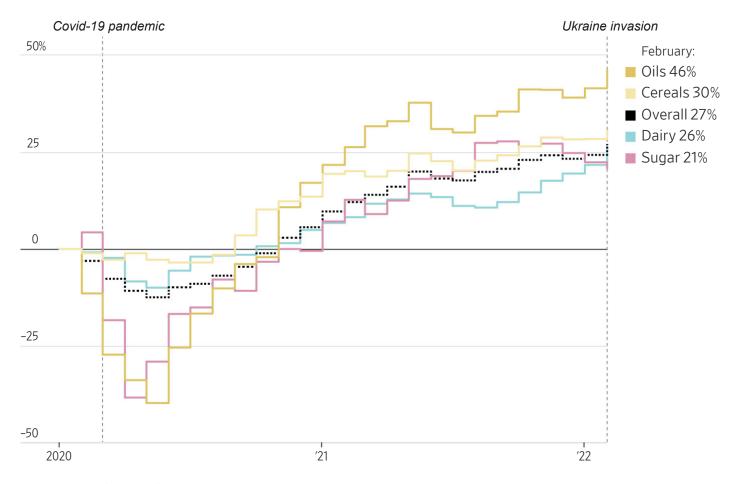
Are you concerned about food-price inflation? Why or why not? Join the conversation below.

Surging fuel prices can also give oil-exporting countries such as Iraq more flexibility to pay for wheat—even at higher costs.

Global food prices were rising before Russia's invasion of Ukraine. The conflict sent shock waves through a system already challenged by disruptions in production and supply chains that were caused by the pandemic, among other factors.

"Normally our food systems are very resilient, and certainly more resilient today than they were 40 years ago," Mr. Laborde said. "It's really when we have a succession of problems that we start to suffer."

Food prices, change since January 2020



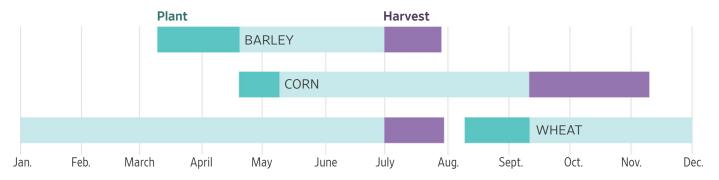
Note: FAO Food Price Indexes

Source: Food and Agriculture Organization

Ukraine and Russia's agricultural exports face different challenges. Ukraine has endured weeks of heavy shelling, with some residential areas and civilian infrastructure taking heavy damage.

Most wheat, barley, and sunflower exports are complete by February, according to the food policy and research institute, but Ukrainian maize exports typically remain heavy through the spring into the early summer. Crops grown in the 2022 season are at risk, with barley planting starting in March and maize in April. Winter wheat isn't typically planted until late summer.

Ukraine's crop calendar



Note: Approximate time frames are for Ukraine's northern and southern steppes, including areas near Donetsk, Kharkiv and Odessa.

Source: U.S. Department of Agriculture

Russia, on the other hand, has been the subject of harsh economic sanctions from the international community, and hundreds of businesses <u>have said they are pausing or ending operations</u> there.

German agricultural giant <u>Bayer</u> AG said Monday it had stopped all spending in Russia and Belarus <u>that wasn't directly related to supplying products essential for civilians</u> such as health and agriculture products; it warned that it could withhold seeds for crops in Russia next year if the war in Ukraine continues.

The company said it had already provided "essential agricultural inputs" to Russian farmers for this year's planting "to alleviate additional pressure on the global food system" and would be making a decision about 2023 at a later date.

Bayer added that it hoped Ukrainian farmers would be able to secure the 2022 harvest "as the window for planting is closing in only a few weeks."

Even if Russia can pull off this year's harvest, the sanctions make it nearly impossible for many Western companies to do business there. It remains to be seen, however, whether the countries most reliant on Russia's agricultural products will continue to import as usual or seek goods from elsewhere.

The conflict also has secondary effects on prices people pay for food, such as higher transportation costs because of fuel-price inflation. Even before the invasion, farmers were struggling to handle higher fertilizer costs. Russia, a major supplier of fertilizer to the world, recently cut exports to guarantee supplies for farmers at home.

Aside from supply, the war and <u>the humanitarian crisis</u> also pose a threat to regional food security. Food and basic supplies are running low in besieged Ukrainian cities. More than three million people have fled Ukraine since Feb. 24, according to the U.N. High Commissioner for Refugees, as of mid-March. About half the refugees are children.

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