



## Socio-Economic Research and Applications (SERAP)

### Global Implications of the Crisis in Ukraine

**This newsletter highlights the growing global implications that have occurred as a result of the ongoing crisis in Ukraine and Russia. In the context of the global economy, where countries are linked inextricably by trade and communication, any unsettlement can have a strong ripple effect. This newsletter emphasizes the extent to which other countries are being affected by the crisis, regardless of their geographical proximity to either Ukraine or Russia.**

Over the last few decades, globalization has become a raging phenomenon without which we can no longer envision our lives. No countries today do not partake in some form of exchange or communication with either their neighbors or nations abroad. The modern timeline for global economies requires a constant stream of interaction which has facilitated interconnection to an unprecedented degree. Countries now specialize in specific sectors, ranging from agricultural to service-based economies, meaning economic diversity is relatively compromised.

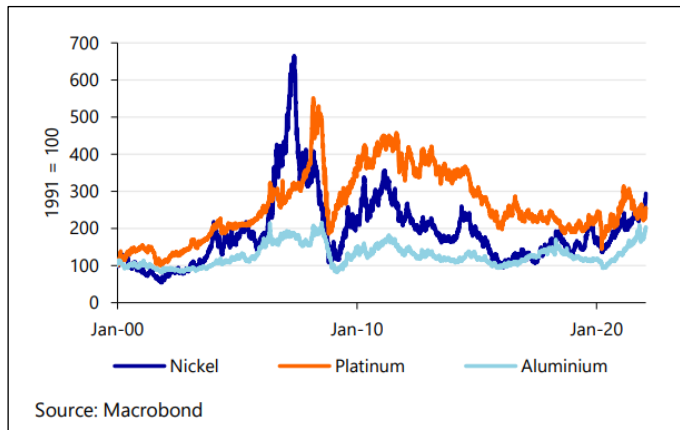
Recently, the conflict between Ukraine and Russia exposed the geopolitical risks and how interconnected the world is. Indeed, security risks have led to a drastic change in supply chains and the restructuring of the economies of developed countries. Following the Ukraine/Russia conflict, the world has witnessed supply shock, given that belligerents in the conflict are restrained or are unable to provide the services or goods that so many nations have come to depend on. On the one hand, Ukraine is considered the world's top producer of sunflower meal, oil, and seed and the world's leading exporter of sunflower meal and oil. On the other hand, Russia's Gazprom produces 12 % of world natural gas, and oil and gas accounted for 52.9% of Russian exports in 2018. Gazprom is Russia's largest company, producing 12% of the world's natural gas and the third-largest oil producer. Following the economic sanctions associated with Ukraine/Russia, the world is threatened with oil and food crises. World Bank shows that global trade will drop by 1%, and the channels through which the effects are taking place are: commodity markets, logistics networks, supply chains, foreign direct investment (FDI), and sectors such as tourism.

To this end, the following articles will highlight the different avenues affected in light of the ongoing conflict. Ranging from petroleum to bread, the impact of this conflict has already had global consequences, which will be exacerbated in the coming winter months, particularly for European countries that rely on Russian fuel to provide adequate heating. The following articles offer a variety of explanations for why the global economy has gone into a state of stagnation, if not decline. The disproportionate impact of the conflict on developing countries has also been made apparent, particularly regarding the reliability of foreign food products that form the foundation of Middle Eastern diets. Apart from price hikes and humanitarian costs, the future of national sovereignty with regard to self-sufficiency is a topic that has recently gained traction and has brought into question the direction humanity is headed towards with regards to inter-dependence.

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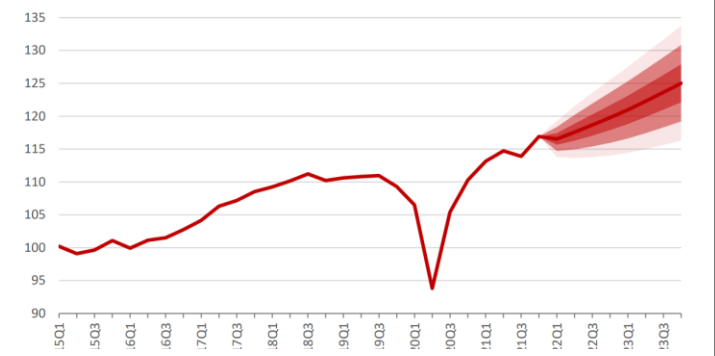
# Statistics and Graphs



Manufacturing supply chains also wouldn't be immune from conflict or sanctions against Russia. Russia's share of global nickel exports is estimated to be about 49 percent, palladium 42 percent, aluminum 26 percent, platinum 13 percent, steel 7 percent, and copper 4 percent. "Removing half of the global nickel exports for kitchenware, mobile phones, medical equipment, transport, buildings, and power; palladium for catalytic converters, electrodes, and electronics; and a quarter of aluminum for vehicles, construction, machinery, and packaging would result in huge upside pressure on prices," Rabobank warned.

**Chart 1: Volume of world merchandise trade, 2015Q1-2023Q4**

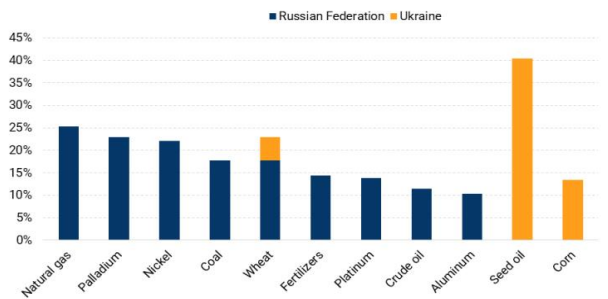
Seasonally-adjusted volume index, 2015=100



The WTO says that rising commodity prices have been the most immediate economic impact of the Ukraine conflict. The conflict also threatens supplies of essential goods from Russia and Ukraine, including food, energy, and fertilizers. The halting of grain shipments through Black Sea ports could have "potentially dire consequences" for food security in developing countries, the WTO warns.

**Figure 1. Some developing economies are heavily reliant on Russia and Ukraine for food**

Ukraine and Russia's commodity exports as a percentage of global exports

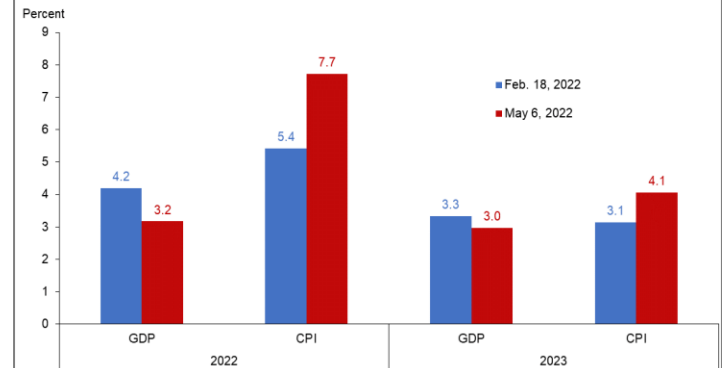


Source: Comtrade, World Bank.

BROOKINGS

Russia is also a major force in the market for energy and metals: It accounts for a quarter of the market for natural gas, 18 percent of the coal market, 14 percent of the platinum, and 11 percent for crude oil. A steep drop in the supply of these commodities would hamstring construction, petrochemicals, and transportation. It would also lower economywide growth: Estimates from a forthcoming World Bank publication suggest that a 10 percent oil-price increase that persists for several years can cut growth in commodity-importing developing economies by a tenth of a percentage point.

**Chart 1**  
2022-23 Outlook: Global Growth Weakens, Inflation Worsens After Russia Invades Ukraine



NOTES: Aggregates are generated using time-varying weights taken from the Database of Global Economic Indicators methodology. Emerging and world aggregates exclude Venezuela, Costa Rica and Nigeria due to data limitations and in 2023 India due to lack of data. Prewar forecasts were collected on Feb. 18, 2022, the last business day before the Russian government's recognition of independent states in Ukrainian territory, Feb. 21, 2022. GDP is gross domestic product; CPI is Consumer Price Index.  
SOURCES: Consensus Economics; authors' calculations.

Federal Reserve Bank of Dallas

Global growth projections have eroded since the beginning of the crisis. According to the Federal Reserve Bank of Dallas, forecasts had fallen by 1.0 percentage points for 2022 and by 0.4 percentage points for 2023 since Feb. 18, just before Russia's recognition of two independent republics inside Ukraine that preceded the start of the crisis. Over the same period, global CPI inflation forecasts also jumped about 2.3 percentage points for 2022 and 0.9 percentage points for 2023. growth of world merchandise trade volumes in 2022 "could be as low as 0.5% or as high as 5.5%

# Perspectives on Policy Options for similar situations

- **Developing countries should embark on alternate initiatives to enhance their self-sufficiency and mitigate dependence on other countries**
- **Developing countries should diversify their partnerships to distribute risks in the event of a similar crisis**
- **Set up emergency funds to stabilize country's economy**
- **Develop new alternatives with the country's resources**

## Key Articles on Global Implications of Russia-Ukraine Conflict



**Russia-Ukraine Conflict: Measuring Conflict's Effect on a Global Breadbasket:** NASA Harvest scientists use satellite observations and

economic data to track how the Russia-Ukraine conflict is disrupting the global food system. The researchers have also developed models, such as the Agriculture Remotely-Sensed Yield Algorithm (ARYA), that anticipate yields by blending measures of NDVI with data about environmental conditions during the growing season from NASA's MERRA-2 reanalysis dataset. The models also incorporate detailed crop maps based on MODIS, Sentinel-2, and Landsat observations and validated by field surveys.

"Taking all of that into account, the data indicate that Ukraine is on track for a winter wheat yield of about 4.1 metric tons per hectare," said Becker-Reshef. "That's not quite as high as the record-breaking wheat crop in 2021, but it's still a sizable crop given the circumstances." [Read More...](#)



**Ukraine Crisis Fuels Food Crisis in Distant Africa:**

United Nations agencies are warning that price hikes sparked by the Ukraine crisis will worsen a food crisis in Africa, where tens of millions of people have already been plunged into extreme

poverty by the COVID-19 pandemic, armed conflicts, and climate shocks, and economic turmoil. The conflict has disrupted shipping in the Black Sea, a major artery for grains and other commodities, throttling exports from Russia and Ukraine to markets including Africa. Ukraine has said the area sown with grains could fall by around a fifth this year because of the conflict. Experts say grain shortages could be particularly harsh in North Africa, where countries like Egypt import up to 80% of their wheat from Russia and Ukraine.

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**Economic Consequences of The Russia-Ukraine Conflict:**

**Stagflation Ahead:** While high commodity prices were one of the risks already identified as potentially disruptive to the recovery, the escalation of the conflict increases the likelihood that commodity prices will remain higher for much longer. In turn, it intensifies the threat of long-lasting high inflation, thereby increasing the risks of stagflation & social unrest in both advanced & emerging countries. The crisis strongly impacts an already strained automotive sector due to various shortages and high commodities. Ukrainian automotive factories supply major carmakers in Western Europe: some announced the stoppage of factories in Europe, while other plants worldwide are already planning outages due to chip shortages. Airlines and maritime freight companies will also suffer from higher fuel prices, airlines being the most at risk.

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**Russia's Invasion of Ukraine Sets Off Latin American Fertilizer**

**Race:** Some 80 percent of the 180,000 metric tons of fertilizers used annually in Venezuela are imported, mainly from Russia but also from Ukraine and Belarus, according to the Fedeaagro union of agricultural producers. Venezuela's farming sector was expecting to sow 250,000 hectares of corn, 50,000 of rice, 60,000 of sugarcane, and 70,000 of other products such as coffee and cacao, according to Fedeaagro. Farmers have asked the government to reactivate its petrochemical complex in the northern Carabobo state, which has been semi-paralyzed since 2017. According to state oil company PDVSA, it can produce 150,000 tons of nitrogenous and phosphate fertilizers a year. "We have two fundamental ingredients: urea (nitrogen) and phosphorus, and we would only need to import potassium chloride," said Fantinel.

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### Implications of the Ukraine Crisis for Global Trade and



**Development:** Russia and Ukraine are also key providers of inputs into industrial value chains. Russia is one of the leading suppliers globally of palladium

and rhodium, key inputs in the production of catalytic converters in the automotive sector and the manufacture of semiconductors. Semiconductor production also depends to a substantial extent on neon supplied by Ukraine, which further provides a number of low-tech products to the European automobile value chain, such as wire harnesses. Prolonged disruptions in the supply of these goods could harm the recovery of automobile manufacturing.

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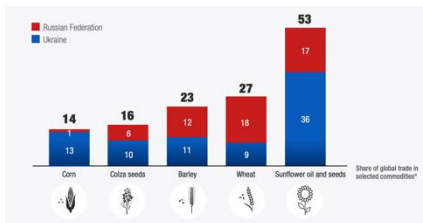
### Russia/Ukraine Crisis Puts the Energy Transition in Danger:



As the world tries to shift to renewable energy, the conflict in Ukraine has underscored the struggle for the minerals and metals required. The conflict illustrates that nations that pursue net-zero

strategies will have to contend and account for "greenwalls," energy-transition deterrents created by crises or geopolitical events. Currently, the Russian/Ukrainian conflict is disrupting minerals and metals (energy-transition commodities) used for electric vehicles (EVs) and affecting oil prices for ICE vehicles. For example, a month after Russia invaded Ukraine, Tesla's CEO said the cost increase for materials was affecting the company. Shortly thereafter, the price for Tesla's entry-level sedan rose by more than 20% compared with February 2021, a rise attributed to energy transition commodities. [Read More...](#)

### The Impact of the Conflict on Trade and Development

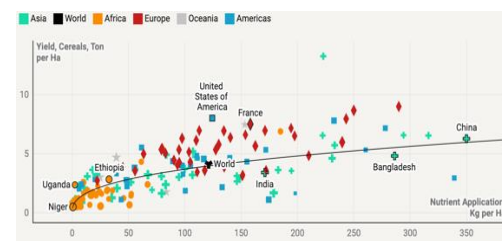


UNCTAD has prepared a rapid assessment of the impact of the conflict in Ukraine on trade and development and interrelated issues in

finance, technology, investment, and sustainable development. The results confirm a rapidly worsening outlook for the world economy, underpinned by rising Food, fuel, and fertilizer prices, heightened financial volatility, sustainable development divestment, complex global supply chain reconfigurations, and mounting trade costs. This rapidly evolving situation is alarming for developing countries, especially African and least developed countries, some of which are particularly exposed to the conflict in Ukraine and its effect on trade costs, commodity prices, and financial markets. The risk of civil unrest, food shortages, and inflation-induced recessions cannot be discounted, particularly given the fragile state of the global economy and the developing world due to the COVID-19 (coronavirus disease) pandemic.

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### Short-Term Policy Considerations to Respond to Russia-Ukraine



### Crisis Disruptions In Fertilizer Availability And Affordability

Fertilizer prices have increased

drastically, +230%, since May 2020. Now—driven upward by supply disruptions stemming from the Russia-Ukraine conflict—they are nearing the peak reached in August 2008 during the last major food price crisis. Spiking fertilizer prices are likely to have significant impacts on agriculture and food production—and thus, food security—worldwide, as farmers struggle to pay for key input and face potential supply disruptions, and governments look for ways to cushion the economic blow. How should policymakers respond to this complex emerging situation in fertilizer markets—in particular, to reduce impacts on food security?

In this post, we set forth some considerations for policymakers and other stakeholders as they put short-term solutions into place to address fertilizer availability and affordability concerns. [Read](#)

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### Russia-Ukraine Conflict: Implications of Disruptions in Global Food Supply Chains for Food Trade in Africa: The developments in

Russia and Ukraine are piling pressure on already constrained



### Global Impact of Conflict In Ukraine, on Food, Energy And Finance



<p>global food markets. African countries should swiftly seek alternative import sources to fill the gap created by restricted exports from Russia and Ukraine. African countries should transform their food systems and increase investments in local food production, value addition, and intra-regional food trade, taking advantage of the African market facilitated by the AfCFTA. African governments must ensure a transparent and predictable agriculture policy environment to boost domestic agriculture production investments. African countries should strengthen regional integration and cooperation through intra-Africa agricultural trade. This is an opportunity for African countries to deepen intra-Africa regional food trade to meet domestic food consumption needs. <a href="#">Read More...</a></p>	<p><b>Systems:</b> Ukraine and the Russian Federation are among the world's breadbaskets. They provide around 30 percent of the world's wheat and barley, one-fifth of its maize, and over half of its sunflower oil. At the same time, the Russian Federation is the world's top natural gas exporter and second-largest oil exporter. Together, neighboring Belarus and the Russian Federation also export around a fifth of the world's fertilizers. As a result, commodity prices are reaching record highs across the board. Food prices are 34% higher than last year and have never been this high since FAO started recording them. Similarly, crude oil prices have increased by around 60%, and gas and fertilizer prices have more than doubled. Vulnerable populations in developing countries are particularly exposed to these price swings, as they dedicate a larger share of their income to food and energy. <a href="#">Read More...</a></p>
<p><b>The Importance of Ukraine and The Russian Federation for Global Agricultural Markets and The Risks Associated with The Conflict in Ukraine:</b> Many Food- and fertilizer-importing countries, many of which fall into the Least Developed Country (LDC) and Low-Income Food-Deficit Country (LIFDC) groups, rely on Ukrainian and Russian food supplies to meet their consumption needs. Many of these countries were already grappling with the negative effects of high international food and fertilizer prices before the conflict. In Ukraine, the current crisis raises concerns over whether crops will be harvested. It has already led to the closures of ports and oilseed crushing operations, affecting products intended for the export markets. These are taking a toll on the country's exports of grains and vegetable oils. Russian export prospects are also uncertain, given the economic and financial sanctions imposed on the country. <a href="#">Read More...</a></p>	<p><b>Russia-Ukraine Conflict's Impact on Fertilizer Supply and Use in Bangladesh:</b> Bangladesh consumes approximately 6 million metric tons of chemical fertilizers annually, of which about 80 percent are imported. The four major imported chemical fertilizers in Bangladesh are urea, triple super phosphate, diammonium phosphate, and muriate of potash (MOP). Russia and Belarus were the dominant suppliers of MOP in Bangladesh. Most sources indicate that the Russia-Ukraine crisis could result in a MOP supply shortage and higher domestic prices of fertilizer in the upcoming Boro/Rabi crop season in Bangladesh. Crop yields depend highly on the timely and adequate application of chemical fertilizers. Bangladesh consumes approximately 6 million metric tons (MT) of chemical fertilizers annually. In Bangladesh fiscal year (FY) 2021/22 (July to June), the GoB increased its fertilizer subsidy by BDT 20 billion (\$232.5 million) to a total of BDT 300 billion (\$3.49 billion). <a href="#">Read More...</a></p>
<p><b>Global-Economic-Prosppects June 2022:</b> This World Bank report offers fresh insights on how the conflict's effects on energy markets cloud the global growth outlook. The conflict in Ukraine has led to a surge in prices across a wide range of energy-related commodities. Higher energy prices will lower real incomes, raise production costs, tighten financial conditions, and constrain macroeconomic policy, especially in energy-importing countries. Growth in advanced economies is projected to decelerate from 5.1 percent in 2021 to 2.6 percent in 2022—1.2 percentage points below projections in January. Growth is expected to further moderate to 2.2 percent in 2023, mainly reflecting the further unwinding of the fiscal and monetary policy support provided during the pandemic. <a href="#">Read More...</a></p>	<p><b>Implications of the Crisis in Ukraine for the Global Economy:</b> The crisis has triggered global ripple effects through multiple channels, including commodity markets, trade, financial flows, displaced people, and market confidence. A large wave of refugees in the surrounding region will pressure essential services. The damage to Russia's economy will weigh on remittance flows to neighboring countries. Disruptions to regional supply chains and financial networks, as well as heightened investor risk perceptions, will weaken regional growth. In many emerging markets and developing economies (EMDEs), rising food and energy prices exacerbate poverty, and, in some cases, food insecurity and heightening inflation pressures are already building. Financial markets have been volatile amid increased uncertainty and geopolitical tension. <a href="#">Read More...</a></p>

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