How Best (Not) to Address the Ukraine Crisis

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Key Points

- Russia's invasion of Ukraine, at a time when global food stocks were relatively low and crop prices already high, is further exacerbating global concerns about hunger and malnutrition among poor households in low-income countries.
- The US can mitigate global food insecurity by increasing the funds available for food aid, as was done in the Ukraine Supplemental Appropriations Act, and repealing shipping and procurement mandates, allowing the US Agency for International Development to meet those needs far more efficiently.
- Other proposals, such as allowing farmers to take land out of the Conservation Reserve Program prematurely, subsidizing crop insurance for double cropping wheat and soybeans, and funding small-scale fertilizer production facilities will do little or nothing to increase the food supply and could have unintended adverse consequences.

Russia's invasion of Ukraine has disrupted global wheat, corn, and other markets. Given relatively low global stocks for major staple foodstuffs,[1] many analysts predict that food insecurity will increase among poor households in low-income countries.[2] Understandably, many world leaders, including the Biden administration, are concerned about how to best address a potential global hunger crisis. However, in the rush to "do something," leaders need to consider the most efficient policies to address the crisis and avoid ill-considered policies that may do little to address the actual problems and could result in unintended consequences that may linger well past the crisis itself.

The most effective way of addressing global food supply concerns would be an immediate end to the war and rebuilding critical infrastructures such as rail lines, storage facilities, and port facilities to allow Ukraine's agricultural sector access to global markets. To that end, the UN secretary general's efforts to end the blockade of Ukraine grain shipping and support the establishment of a blue corridor by sea or a green corridor overland to move foodstuffs from Ukraine should be supported. Unfortunately, the likelihood of a quick end to the war looks increasingly faint, and Russia has given no signs that it would consider granting safe passage of Ukraine food exports through the Black Sea.

The Biden administration has recently put forward a set of proposals aimed at increasing US agricultural production, lowering fertilizer costs, and providing humanitarian food aid to those hurt by the sharp increase in agricultural prices. Here we consider these proposals and other questionable policies such as opening the Conservation Reserve Program (CRP) and conclude by discussing policies

that could provide more immediate relief by addressing and mitigating constraints in the vegetable oil market.

Effectively Provide Humanitarian Aid

One clear policy initiative will make a major difference in addressing the widely expected increase in food insecurity among the world's poorest populations: substantially increasing the funds available for food and other forms of humanitarian aid. President Joe Biden signed the $40 billion Ukraine Supplemental Appropriations Act into law on May 21.[3] The legislation includes over $5 billion for international food aid and other forms of humanitarian assistance. The US Agency for International Development (USAID) explicitly targets over $4 billion to increase aid to low-income countries facing serious food insecurity challenges because of the Ukraine conflict.

Those funds should be used as efficiently as possible, but as Christopher Barrett and Vincent Smith recently emphasized,[4] two mandates should be suspended or, more ideally, permanently ended because for years they have substantially increased the delivery costs associated with getting food aid to where it is needed. These mandates require that 50 percent of all food aid be carried on US-flagged ships and that almost all food aid be sourced in the United States. Those mandates have wasted about 30 percent of the USAID food aid budget on unnecessarily expensive delivery costs[5] and delayed delivery of the aid to where it is needed by as much as four months.[6]

Ending, or suspending, these two mandates has recently received bipartisan support from members of the Senate Committee on Foreign Relations and the House Appropriations Committee's Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Subcommittee.[7] In addition, Secretary of Agriculture Tom Vilsack has indicated that suspending cargo preference requirements would enable humanitarian aid funds to be used more effectively. Smith and Barrett also pointed out that US international food aid efforts contribute to national security as an important form of soft power that prevents civil unrest in low-income countries with fragile political structures by reducing hunger.

The Impacts of Recent Crop Subsidy Proposals

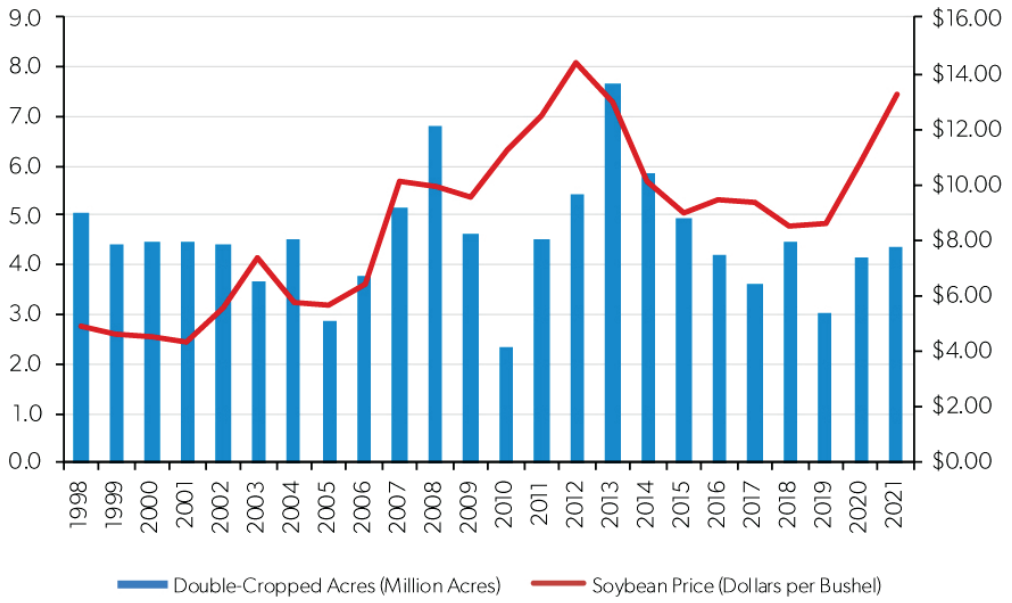
It is increasingly likely that supplies of key commodities from Ukraine and, potentially, Russia will be severely disrupted throughout 2022. In response, countries are seeking ways to boost global supplies to compensate for those losses. But wheat and other prices are high, and producers already have sufficient incentives to plant crops. In a planting intentions survey conducted by the US Department of Agriculture (USDA) in early March (after the Russian invasion had started), producers indicated they would plant 318 million acres in 2022, the highest level since 2018.[8] The USDA projects that the global area outside Ukraine for wheat, feed grains, and soybeans in 2022–23 will increase by 4.4 million hectares, almost offsetting the projected loss of 4.7 million hectares in Ukraine.[9]

Policymakers should take care to ensure that any emergency measures they take do not lead to additional problems in the short run or long run. Like previous food price crises, the current one will also pass, and agricultural prices will retreat to their longer-term dynamics. For example, recent Biden administration proposals included an initiative to provide farmers a $10 per acre supplemental subsidy payment for crop insurance for a second crop (soybeans) planted in the same growing season after their wheat crop has been harvested. The idea is to encourage producers to plant more wheat this fall in anticipation of double cropping those acres with soybeans in spring 2023.

Since 1998, double-cropped soybeans have averaged about 4.5 million acres, or about 11 percent of winter wheat plantings. In fact, double-cropped soybean plantings have generally followed soybean prices (Figure 1). Wheat and soybean prices are at record highs. Thus, US producers have strong incentives to double crop wheat and soybeans where the practice is feasible. In 2013, for example, producers double cropped 7.7 million acres following then–record high soybean prices in 2012–13. The likelihood that providing additional crop insurance subsidies for second-crop soybeans would encourage additional wheat plantings and US wheat production this year seems extremely small.

Further, providing additional subsidies through the crop insurance program could encourage many

Figure 1. Double-Cropped Soybean Area (Million Acres)



Source: US Department of Agriculture, National Agricultural Statistics Service, Quick Stats, https://quickstats.nass.usda.gov/.

farmers to engage in moral hazard behaviors, especially with the second crop. When a crop is insured and could have low yields, as is common for second crops, it is often in the farmer's financial interest to reduce input costs (for example, by reducing the use of fertilizers and pesticides) and lower yields even further to obtain larger indemnity payments for crop losses.

Another ill-advised policy initiative is the administration's proposal to double its investments in fertilizer production from $250 million to $500 million to "lower costs and boost availability for farmers."[10] First, it takes a while (typically several years) for new chemical fertilizer plants and plant expansions to obtain planning approval and be built. Second, new plants that substantially contribute to US production capacity typically involve investments of billions of dollars, not millions of dollars.[11] The administration's proposed funding level is therefore a proverbial "drop in the bucket" that would do nothing to increase access to fertilizers in the next few months. Third, natural gas accounts for about 80 percent of the costs of producing a ton of nitrogen fertilizer, and until natural gas prices fall, nitrogen fertilizer prices are not likely to decline.[12]

Several agricultural interest groups have proposed allowing farmers with land currently enrolled in the CRP to end their contracts early without facing penalties. These contracts typically involve a 10-year commitment by the farmer. The CRP is an environmental program that aims to reduce soil erosion and mitigate climate change–related greenhouse gas emissions.[13] As a practical matter, usually it takes at least a year to put CRP land back into crop production because of cultivation challenges (for example, plowing under existing covers such as native grasses and land preparation requirements), and it would likely require extensive fertilizer applications at a time when fertilizer prices are at record levels. Thus, in terms of expanding this year's output of staple crops such as corn and wheat, the approach is a nonstarter. A longer-run perspective on this approach involves weighing the trade-offs between environmental impacts and wheat and corn production.

Actions That Could Make a Difference

The impacts on food prices of tight crop supplies are being exacerbated by strong demand, driven partly by biofuel production. The USDA estimates that about 37 percent of the 2022–23 corn crop will go to ethanol production.[14] This is equivalent to almost 21 million acres (netting out the role of by-products of ethanol production such as dried

distillers grains, which are important feedstuffs). The use of soybean oil for biodiesel production is also growing as US exports of soybean oil have declined. The USDA estimates that over 45 percent of soybean oil now goes toward biodiesel production.[15]

The growth in biofuel production is driven largely by regulations under the federal Renewable Fuel Standard (RFS),[16] which sets mandated biofuel levels for vehicle fuel consumption, and state initiatives such as California's Low Carbon Fuel Standard (LCFS),[17] which mandates reductions in carbon emissions from fuel use. In addition, federal tax credits allow blenders of biodiesel (and renewable diesel) to claim a $1 per gallon credit against their US federal tax liability.[18]

Biofuels could see further growth in such mandates over the next several years. Last month, the Iowa House of Representatives passed legislation that would mandate fuel blends containing 15 percent ethanol. (Most grades of gas currently sold in the US contain 10 percent ethanol blends.)[19] Last September, the Biden administration proposed new tax credits for biofuels to produce 35 billion gallons of sustainable aviation fuel to meet 100 percent of US aviation fuel demand by 2050.[20]

How would waiving those mandates affect biofuel production? For ethanol, the impacts would likely be small, at least in the short run. Ethanol is used as a low-cost octane enhancer that improves engine performance. Eliminating the mandates would let market forces, not mandates, determine how much ethanol was blended in the fuel supply.[21] Biodiesel, on the other hand, is not commercially viable without the mandates and the $1 per gallon tax credit.[22] Suspending both regulations would allow vegetable oil to go toward food uses such as cooking oils and salad dressings and provide needed supplies to foreign markets.

Proponents of ethanol assert that it is an important tool in reducing greenhouse gas emissions, enhancing energy security, and providing jobs in rural communities, but these claims have been disputed. For example, recent research published in the *Proceedings of the National Academy of Sciences* concludes that the carbon intensity of corn-based ethanol is no less than gasoline and likely at least 24 percent higher.[23] Analysis by the USDA's Economic Research Service suggests that jobs connected to ethanol plants are far less than industry-sponsored studies claim.[24] The energy security argument is undercut by the fact that the US is now a significant exporter of ethanol, shipping 1.2 billion gallons to other countries in 2021.[25]

Conclusions

Russia's invasion of Ukraine will likely mean that high agricultural prices will continue through 2022 and well into 2023. Unfortunately, most policy responses, however well-meaning, are unlikely to provide much short-term relief and could exacerbate global crop and food price increases and instability in crop markets. The best approach may be the simplest: Allow markets to work by removing distortions and support the most vulnerable countries and households via social safety nets and, where most needed, humanitarian assistance.

The current crisis presents a number of immediate humanitarian challenges, but over time, markets should eventually return to normal patterns. In the meantime, as countries like the United States respond to high prices and other consequences of the crisis, they should take care to avoid exacerbating the impacts on others.

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Notes

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