How the Ukraine crisis is disrupting international trade

Blog post by Associate Alexander Bobroske, 4 March 2022

Russia's full-scale invasion of Ukraine has triggered a humanitarian and refugee crisis. The war is acutely impacting access to medicine, food, and cash in Ukraine while the ramifications of Western sanctions on Russia and Belarus are having a profound effect on these economies and more widely. While there is an inevitable focus on the implications of the conflict for trade in hydrocarbons, both Russia and Ukraine are part of important global supply chains for other goods that are heavily exposed to disruption in the weeks ahead. Among many potential issues, several stand out.

First, agricultural supply chains may face particularly acute challenges come autumn if planting and harvesting seasons are significantly disrupted. Ukraine is a major grain producer and the largest global exporter of sunflower oil, a ubiquitous in food manufacturing. Big markets for these goods in China, the Middle East and North Africa could be both disrupted and destabilised by this, given sensitivities to food price increases. For Ukraine, this is a vital source of export earnings.

Ukraine: Select agri-food exports (2020)

Commodities	Share of global exports	Ranking in global exports
Sunflower oil	39.5%	1
Maize/corn	13.2%	4
Barley	11.8%	4
Wheat and meslin	8.0%	5
Sunflower seeds	1.4%	15

Source: International Trade Centre (2022)

An important set of non-agricultural commodities are also heavily exposed to both Western sanctions on Russia and potential Russian counter measures. The palladium used for chemicals and automotive catalysts, titanium for medical applications and aerospace and defence, and phosphate rock for fertilisers are all major exports from Russia and could be impacted by either import or export restrictions. Phosphate is a key concern for India and Brazil and supply issues could strain their commitment to ongoing economic pressure against Russia. Global production of neon gas used for semiconductor manufacturing is almost entirely concentrated in Ukraine and Russia according to

Techcet, which could further squeeze an industry already under strong demand pressures. Additionally, recently imposed EU import restrictions on wood, potash, minerals, metals and other products from Belarus will hit roughly 10% of the country's total global exports, and drive upward cost pressure for inputs used in EU manufacturing and agri-food production.

Russia: Critical raw materials production

Raw materials	Share of global production	Ranking in global production	Selected uses
Palladium (processing)	40%	1	Electrical applications; fuel cells; chemical and automotive catalysts
Scandium (processing)	26%	2	Solid oxide fuel cells; lightweight alloys
Titanium (processing)	22%	2	Lightweight high-strength alloys (for aeronautics, space and defence); medical applications
Vanadium (processing)	19%	3	High-strength low-alloys (for aeronautics, space, nuclear reactors); chemical catalysts
Coking coal (extraction)	7%	3	Coke for steel; carbon fibres; battery electrodes
Phosphate rock (extraction)	6%*	4	Fertilizer; Phosphorous compounds
Germanium (processing)	5%	3	Optical fibres; infrared optics; satellite solar cells; polymerisation catalysts
Antimony (extraction)	4%	3	Flame retardants; defence applications; lead-acid batteries
Hafnium (processing)	3%	3	Super alloys; nuclear control rods; refractory ceramics

Source: European Commission, Study on the EU's list of Critical Raw Materials – Final Report (2020)

**20% of EU sourcing of phosphate rock is from Russia*

Second, following export controls on semiconductors, advanced technologies and dual-use items to Russia, a worsening crisis will only see non-energy exports from Russia impacted further. Many non-Russian firms are already withdrawing from Russian suppliers. A combination of sanctions on intermediating banks, sanctions on insurance of maritime and aviation cargoes and sanctions of economic transactions with Russian entities – paralleling the model of previous Iranian sanctions – is likely to have a profound effect on Russia's industrial capacity and ability to modernise.

Calls in the US Congress to withdraw Russia's most favoured nation (MFN) status – a move recently carried out by Canada against Russia and Belarus – are largely symbolic given the US's wider obligations to extend MFN treatment to Russia under its WTO commitments. But in practice, these obligations are unlikely to stop the Biden administration choosing to tax Russian imports if its wishes, just as the previous administration did for China in the context of its Section 232 and Section 301 measures. Sufficiently broad sanctions could in any case supress the ability to source goods from Russia.

With the evolution of the crisis in Ukraine highly uncertain and forms of economic sanction on Russia potentially enduring, the impact on supply chains for the kinds of goods noted here is likely to also be long-lasting. Many Western businesses are disengaging from Russia for reputational reasons as well expectation of restrictions. They may be calculating that this could be a temporary withdrawal from the market. There is a good chance it will not be.