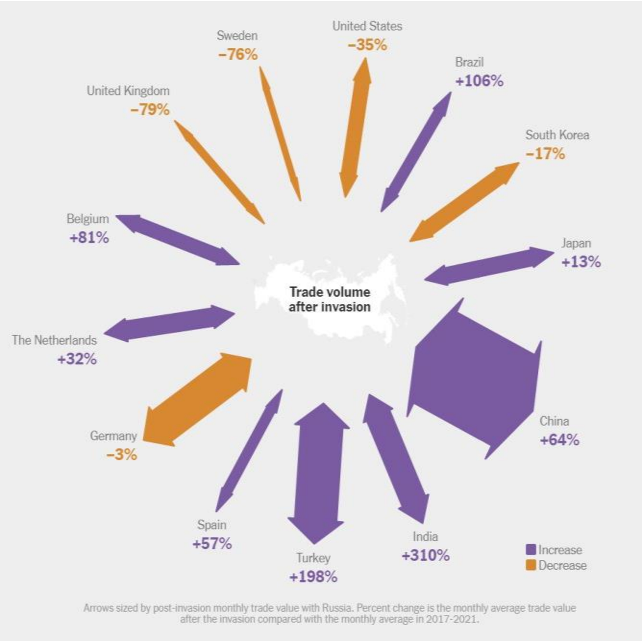
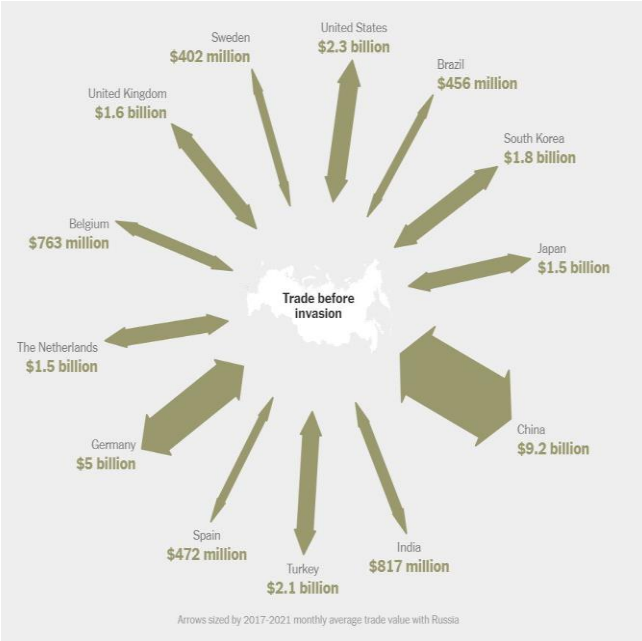
[How Russia Pays for War]

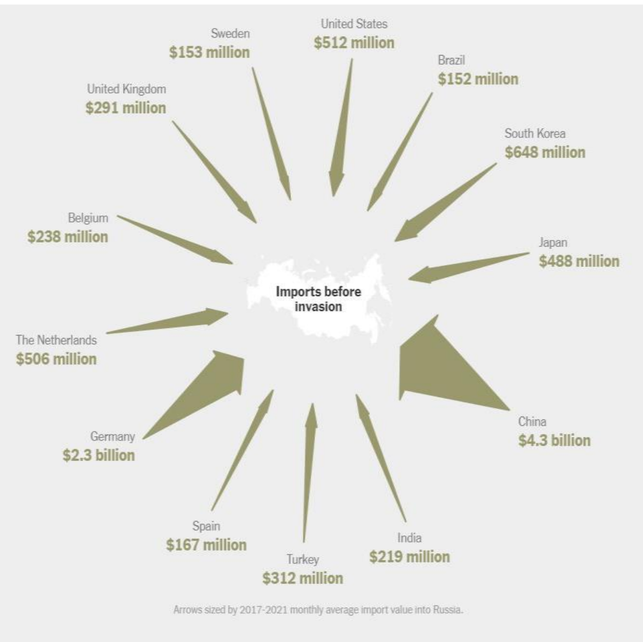
By [Lazaro Gamio] and [Ana Swanson], Oct. 30, 2022

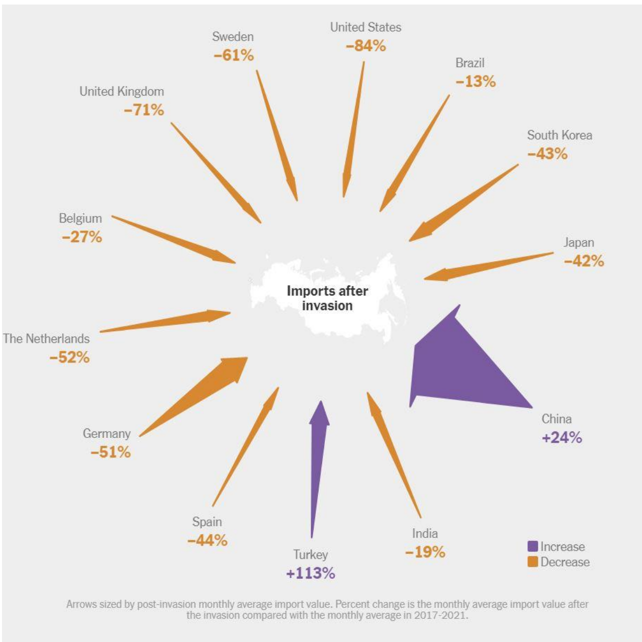
International trade with Russia boomed this year, even as countries imposed sanctions after the Ukraine invasion. As restrictions take effect, Moscow's alliances have been shifting.





Countries vowed to sever economic ties with Russia and imposed sanctions that were intended to cripple its economy after it invaded Ukraine. But as one of the world's most important producers of oil, gas and raw materials, Russia has had longstanding and lucrative trade partnerships. Breaking those ties is not easy.

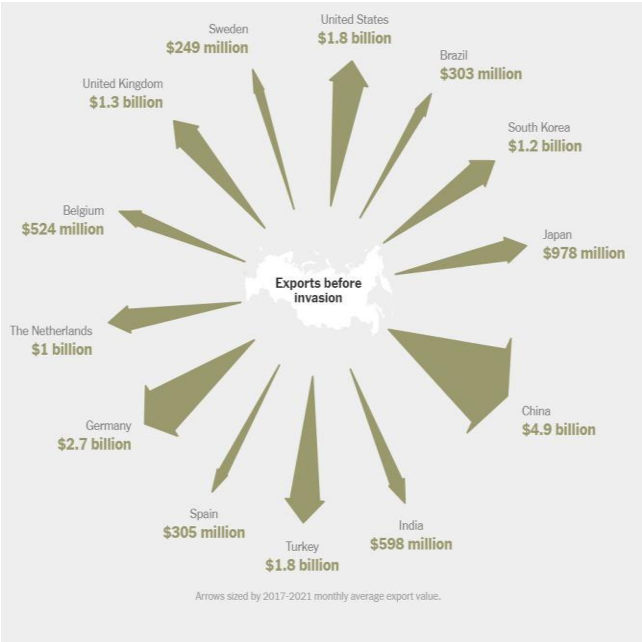


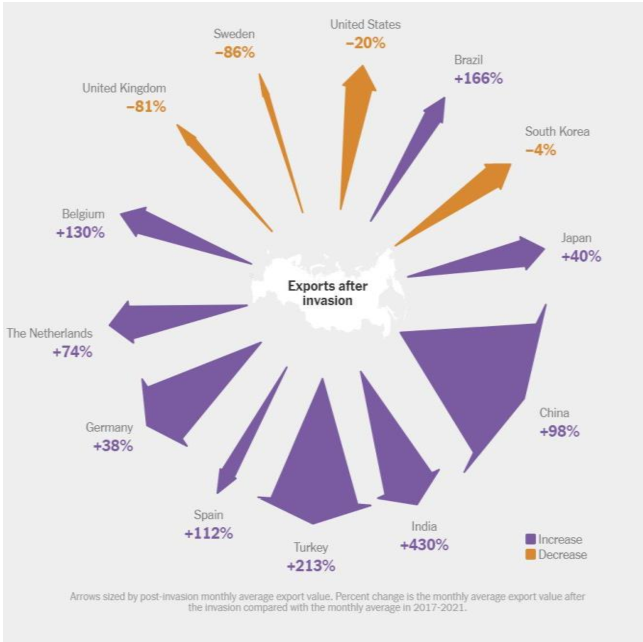


In 2020, Russia imported $220 billion of products from the rest of the world, including cars and car parts, medicine and computers, buying heavily from China, Germany, Korea and elsewhere.

The volume of its imports has since plunged as sanctions and trade limits went into effect, according to a New York Times analysis of trade data. But a few countries, including China and Turkey, have deepened their relationships with Russia since the war began.

Many countries have found living without Russian raw materials incredibly difficult. More than two-thirds of Russia's exports by value before the war were oil, gas and key metals and minerals, which help to power cars, warm homes and supply factories all over the globe.





That has led to a frustrating reality for Western officials who had hoped to undercut Russia's war effort by punishing its economy: The value of its exports actually grew after it invaded Ukraine, The Times analysis shows, even in many countries that have taken an active role in opposing Russia.

Russia's relationship with the world is continuing to evolve rapidly. To assess the global shifts, The Times analyzed years of country-level trade data compiled by the Observatory of Economic Complexity, an online data platform. Because the data is published with a lag, the picture it provides is inherently backward looking. Russia's ability to trade with the rest of the world could be further curtailed in the coming months as the West introduces new restrictions.

But so far, the data underscores how deeply intertwined Russia is with the global economy, allowing Moscow to generate substantial sums of money as it enters its ninth month of war. Attempts by Western nations to use sanctions and other measures to cripple Russia's economy have so far had limited effects.

"It's very difficult to live without Russian resources," said Sergey Aleksashenko, the former deputy finance minister of Russia and deputy chairman of its central bank. "There is no substitute."

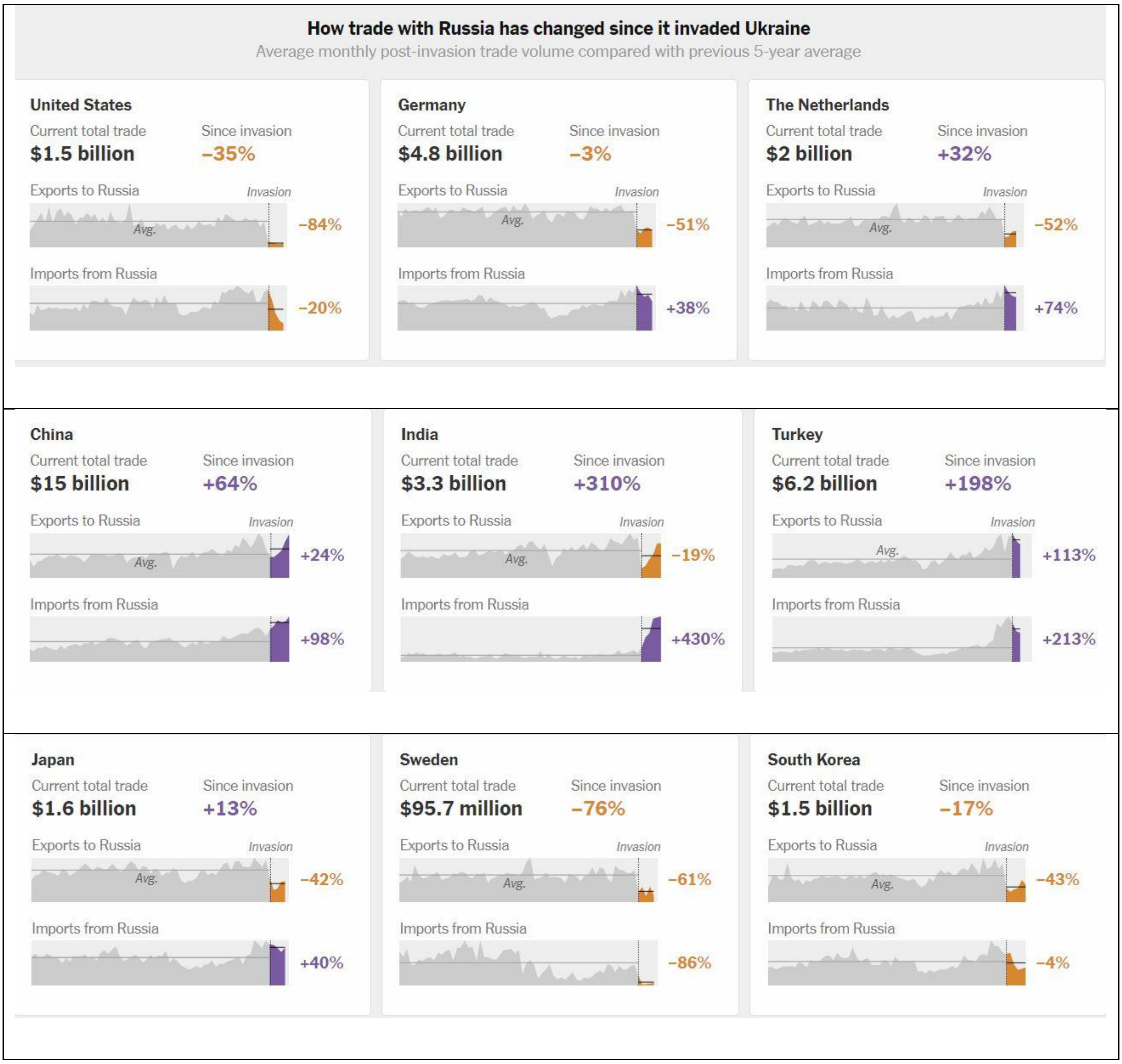
As it drags on, the war, and the world's response to it, are bringing about a remarkable change in international trade flows. Food is in short supply in many countries that rely on wheat and other staples grown outside their borders. Prices for fuel and other products have risen at a time of record inflation. And Russia's long-standing economic ties with Europe are gradually being unknotted, and new alliances are forming as goods are rerouted to other countries, the data shows.

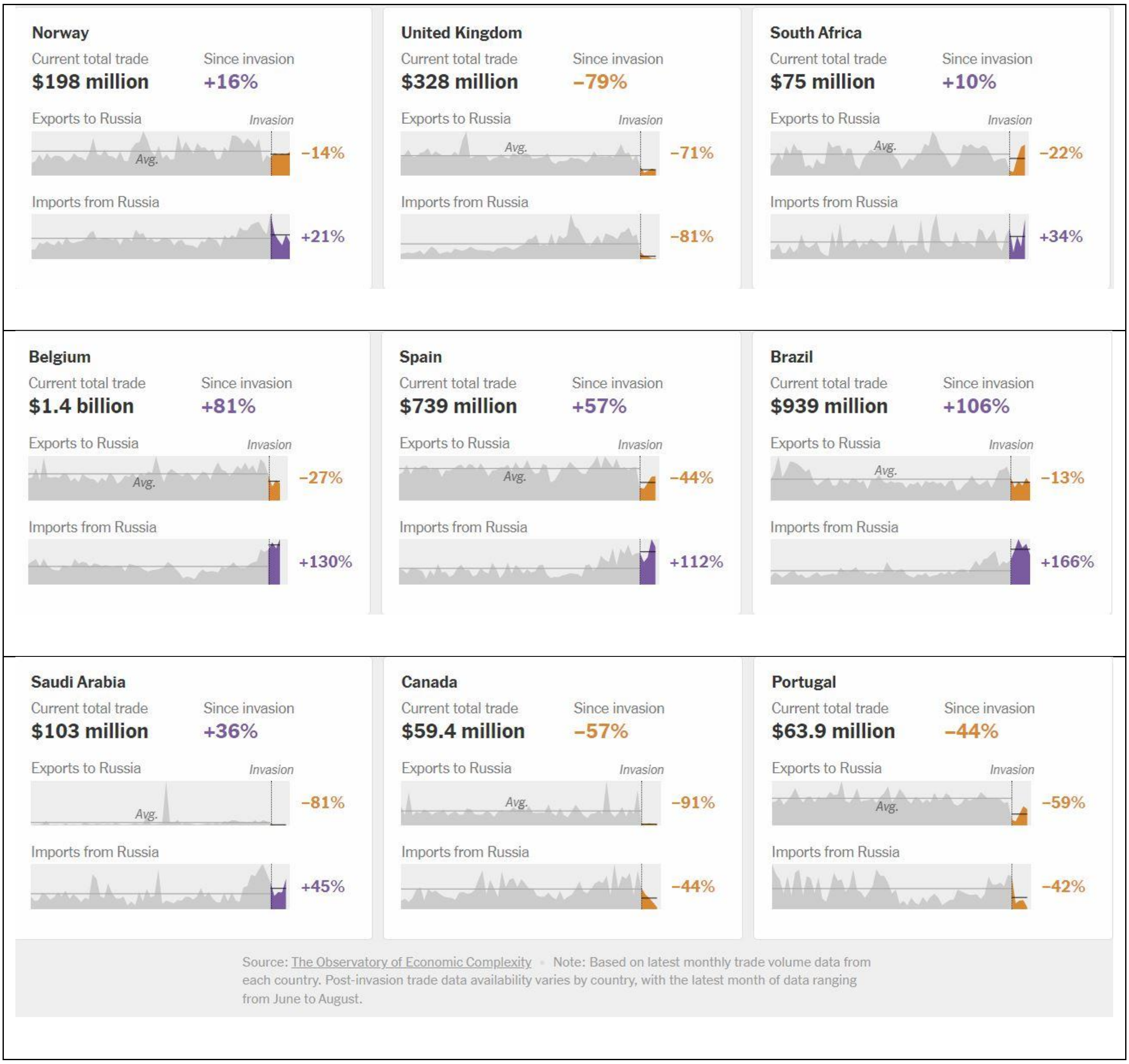
The European Union, the United States and the United Kingdom have imposed harsh economic penalties on Russia, sanctioning hundreds of wealthy citizens and government officials and largely cutting the country off from the international financial system. They also vowed to stop sending advanced technology and banned Russian airlines from flying to the West.

Decisions by global companies to halt operations in Russia have also had a major impact. Container ships filled with foreign goods are no longer streaming into the port at St. Petersburg, a main point of connection with the rest of the world. And inflation and economic uncertainty are causing Russian consumers to cut back on buying the products still on store shelves.

But sanctions on the Russian energy that helps power Western economies have been slower to take effect. The United States has already cut off purchases of Russian oil, and the United Kingdom will do so by the end of the year. But neither country is a major buyer.

The European Union — which is heavily dependent on Russian energy, and, like many countries, is already struggling with inflation — has been slower to act. Europe stopped importing Russian coal in August. It will ban all imports of oil shipped by sea from Russia in December, and all petroleum products in February. Russia, in turn, has banned some of its own exports, including agricultural and medical products.





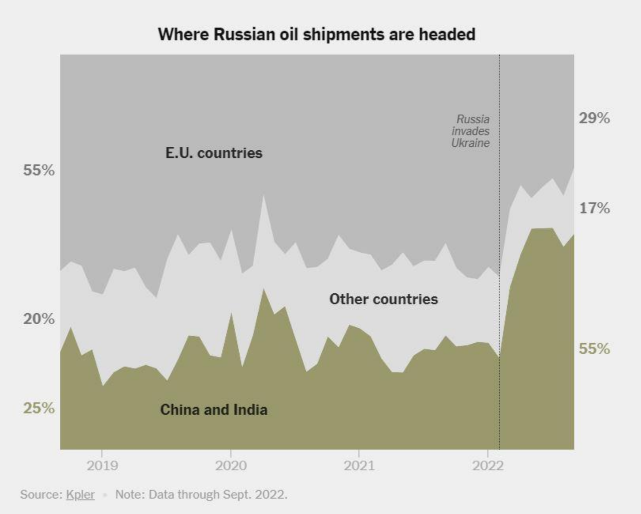
Source: The Observatory of Economic Complexity • Note: Based on latest monthly trade volume data from each country. Post-invasion trade data availability varies by country, with the latest month of data ranging from June to August.

Oil and gas are Russia's most important exports by far, and a major source of government funding. The high price of oil and gas in the last year has inflated the value of its exports, which has helped Moscow offset revenue lost because of sanctions. Gazprom, the state-run Russian energy giant, posted a record profit in the first half of this year, even as shipments to Europe began to slump.

The International Monetary Fund has repeatedly revised its forecasts this year for the Russian economy, saying it would contract by less than the organization had anticipated. The I.M.F. said in October that it expected the Russian economy to shrink by 3.4 percent this year, a much smaller contraction than the 6 percent it forecast in July and the 8.5 percent it expected in April.

"Russia has withstood the economic sanctions better than anticipated, aided by high oil and gas prices and our dependence on fossil fuels," said Gilberto Garcia-Vazquez, chief economist at Datawheel, the company that operates the Observatory of Economic Complexity.

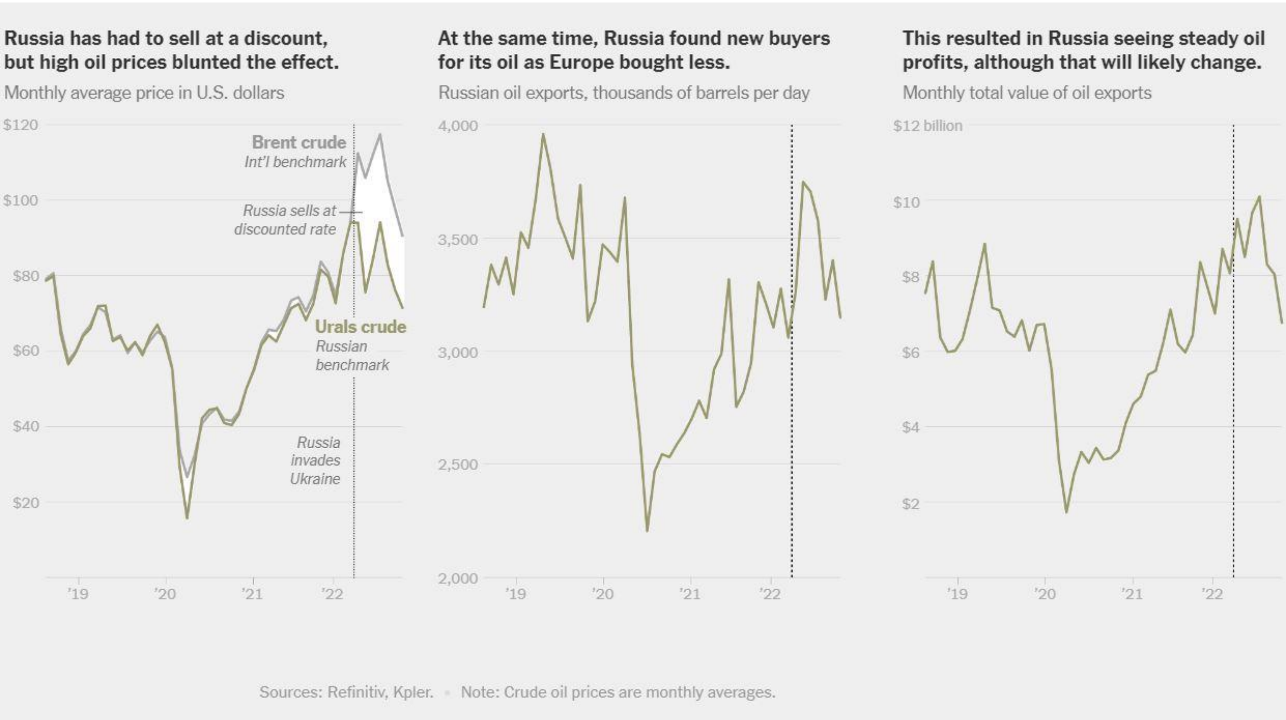
The new bans on oil and petroleum products that European officials will introduce in coming months could represent a major loss for Russia. But the oil that leaves Russia on ocean-going vessels will probably find its way to new markets. Since the invasion of Ukraine, India and China have emerged as much bigger buyers of Russian crude.



In turn, the countries that used to sell more oil to India and China — like Saudi Arabia, Iraq or Angola — may sell more oil to Europe. That would lead to a global "reshuffling of the energy market," Mr. Aleksashenko said, in which Russian oil is merely diverted to new markets rather than being cut out.

How much money Russia will ultimately generate from its oil sales remains unclear. As demand for its products elsewhere has fallen, Moscow is being forced to sell its oil to India and China at a discounted rate. Western countries are now trying to introduce a price cap that will further limit how much revenue Moscow can earn from each barrel of oil sold.

So far, higher energy prices have offset those effects. Prices for benchmark oils like Brent crude and Urals — heavily traded varieties of crude oil that serve as global reference prices for buyers and sellers of oil — have fallen in recent months. But because energy prices were elevated for much of this year, Russia actually received more money from oil and gas sales in dollar terms from March to July than it had in previous years, according to the International Energy Agency.



In the longer run, Russia's prospects for selling its gas look dimmer. Unlike its oil exports, where the majority is carried by tankers at sea, much of Russia's gas leaves the country through pipelines that take years to construct, making it hard for Moscow to shift to new markets.

By July, Germany had cut the amount of natural gas it imported from Russia by half and turned to importing more from Norway and the United States. In September, the primary pipelines that carry gas from Russia to Germany were damaged in explosions.

Russia is trying to find buyers elsewhere for its gas. Its exports to China have increased, but it has only one existing pipeline to China that can move a fraction of the volume of its pipelines to Europe. To move gas by ship, Russia would need to build new facilities to liquefy the gas, an expensive and time-consuming process.

Apart from energy, Russia also continues to be a leading exporter of other essential commodities, ranging from fertilizer and asbestos and nuclear reactors to wheat. International car makers still depend on Russia for palladium and rhodium to make catalytic converters. French nuclear plants rely on Russian uranium, while Belgium is still playing a key role in Russia's diamond trade.

Russia's ample trade, and the war chest it has generated, could start to dwindle in the next year as more sanctions bite.

Alexander Gabuev, a senior fellow at the Carnegie Endowment for International Peace, said that he expects the volume of Russian exports to drop significantly in the longer run as Europe gradually turns to new sources of energy, and as further sanctions, including a potential oil price cap, take effect.

Commodities for which Russia has been a leading exporter

EXPORT RANK	PRODUCT	VALUE	SHARE OF GLOBAL EXPORTS
1	Asbestos	$178 million	60%
1	Pig iron	$1.3 billion	28%
1	Nuclear reactors	$870 million	26%
1	Iron reductions	$944 million	24%
2	Linseed	$230 million	24%
1	Raw nickel	$2.3 billion	20%
1	Wheat	$10.1 billion	20%
2	Nickel mattes	$1.2 billion	19%
1	Semi-finished iron	$4.5 billion	19%
2	Seed oils	$2.5 billion	18%
2	Railway passenger cars	$194 million	17%
2	Platinum	$10.5 billion	17%
2	Ammonia	$1 billion	16%
3	Coal briquettes	$14.5 billion	15%
2	Lignite	$458 million	15%
3	Potassic fertilizers	$2.1 billion	14%
3	Mixed mineral or chemical fertilizers	$2.9 billion	13%
2	Carbon	$481 million	13%
3	Asphalt mixtures	$216 million	13%
3	Sunflower seeds	$589 million	12%
3	Radioactive chemicals	$1.3 billion	12%
2	Barley	$905 million	12%
3	Other metals	$149 million	12%
2	Crude petroleum	$74.4 billion	12%
2	Nitrogenous fertilizers	$2.6 billion	12%
2	Sawn wood	$4.2 billion	11%
1	Aluminium wire	$416 million	11%
1	Non-fillet frozen fish	$2.6 billion	11%
3	Calcium phosphates	$325 million	11%
2	Refined petroleum	$48 billion	11%
2	Sulphur	$238 million	11%
2	Coal tar oil	$1.9 billion	9%
3	Plywood	$1.3 billion	9%
2	Raw aluminium	$4.5 billion	9%
3	Precious metal ore	$816 million	8%
3	Copper wire	$1.3 billion	8%
3	Rough wood	$1 billion	8%
3	Rapeseed oil	$602 million	8%
2	Bran	$163 million	7%
3	Refined copper	$5 billion	7%
3	Starch residue	$306 million	6%

Source: The Observatory of Economic Complexity · Note: Based on 2020 trade volume.

Developments in the war, where Russia has recently suffered a series of setbacks, could also influence economic relations. This weekend, it withdrew from a global agreement that would have allowed grain to be exported from Ukrainian ports. If Russia were to use nuclear weapons in Ukraine, for example, that could galvanize more global sanctions that could cut Russia off from trade with Asia, Mr. Gabuev said.

"We're going to see probably a different picture next year," Mr. Gabuev said.

Methodology

The Times analyzed country-level trade data from the Observatory of Economic Complexity, which collects national-level data from government sources in a selection of countries. The Times used data from countries that had sufficient data from after Russia's invasion of Ukraine to enable a fair comparison to pre-invasion trade value.

Crimea was invaded and annexed by Russia in 2014. The action was widely condemned, and the territory remains disputed. For trade activity, Russia includes Crimea in its tallies, according to the Observatory of Economic Complexity.

The comparisons between pre-invasion and post-invasion trade were calculated using averages of monthly trade value. Data from Jan. 2017 to Dec. 2021 was used for the pre-invasion average. For the post-invasion average, we used all available data from March 2022 and onward. Trade values in local currencies were converted to U.S. dollars using an average exchange rate for 2022.