Inducing New Bilateral Oil Interdependencies

The Unintended Impact of 2014 US-led Sanctions on Russia

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Abstract

Russia’s annexation of Crimea, which began in late February 2014, was met with economic sanctions by a US-led coalition. These measures included a ban on the provision of technology for oil and gas exploration and a ban on the provision of credits to Russian oil companies and state banks. These sanctions were intended to affect the Russian national budget immediately and thereby “punish” Russia through nonmilitary means. However, sanctions have also led to consequences that were likely unintended and potentially undesirable. As Russia was being pushed to find new customers for its fuel exports, China was also increasing its investments abroad to secure its energy needs. The result has been to drive China and Russia into a highly interdependent relationship initiated by oil trade. Moreover, this increasing interdependency between Russia and China has been accompanied by decreasing oil interdependency between China and Iran. Finally, we use limited data to speculate on impacts of the recent 2022 sanctions on Russia and find that, in contrast, these newer sanctions have increased interdependence between the EU and China.

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Imposing sanctions rather than direct military interference has become an increasingly popular instrument for US policy making since it avoids the destruction caused by military action.¹ The Russian annexation of Crimea and use of force in eastern Ukraine via supporting Russophile separatists in 2014 led to one instance of US-led Western sanctions. These sanctions started in March 2014 following the annexation and were expanded in April, May, July, and

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September 2014.² The progression of their severity moved from adopting Tier 1 (diplomatic) sanctions to Tier 2 (individuals/entities) sanctions, and finally Tier 3 (economic) sanctions.³ The latest round announced by the US Treasury imposed sanctions on the “Financial Services and Energy Sectors of Russia, Against Arms or Related Materiel Entities.”⁴ Energy-related sanctions were included to stop the export of goods and services in support of the exploration or production of oil for Russian deepwater, Arctic offshore, and shale projects. The sanctions specifically targeted five Russian energy companies: Gazprom, Gazprom Neft, Lukoil, Surgutneftegaz, and Rosneft.⁵

At the time the sanctions were imposed, oil and gas exports accounted for approximately two-thirds of Russia’s total exports, and their revenues comprised around half the country’s national budget.⁶ Moreover, Russia’s fuel exports had been on an upward trend. Russia was the world’s largest producer of crude oil, including lease condensate, and the third-largest producer of petroleum and other liquids (after Saudi Arabia and the United States) in 2014, with average liquids production of 10.9 million barrels per day (b/d).⁷ Russia was also a considerable oil and natural gas producer and exporter, but it had an important vulnerability, which was a lack of diversification of export destinations. By 2014, more than 70 percent of Russia’s crude exports and almost 90 percent of Russia’s natural gas exports went to Europe. However, Russia’s dependency on European consumption was reciprocal: 30 percent of European crude oil supplies were coming from Russia. Europe’s heavy dependency on Russian gas was already well-known. Thus, there was a high level of bilateral interdependency between Europe and Russia at the time.

How Did Sanctions Affect the Russian Oil Sector?

Given oil revenue's big share of Russia's national budget, the 2014 sanctions would ideally work at undermining Russia's actions. However, the scope of sanctions was not aimed at an immediate or a mid-term impact. Exploring and producing in the Arctic and deep offshore and shale oil requires long-term planning and efforts. Thus, the sanctions' impact on the Russian economy would mainly be in the long term. Moreover, 2014 was the year that the oil market started experiencing oversupply and underdemand, which meant decreasing oil prices (see fig. 1). The price of USD 115 a barrel in June 2014 decreased to USD 60 by December 2014. Regarding its impact on the Russian economy, a USD 1 fall in the oil price per barrel cuts federal tax revenue by about USD 1.4 billion. In other words, the fall in oil prices would have as great an effect as sanctions. The decline in oil prices also had a direct impact on the economy, which shrank by 3.8 percent in 2015. The ruble lost its value against the dollar by around 60 percent. However, monetary and fiscal policies followed to counter the situation. The ruble's decreased value helped Moscow discourage imports and lower the costs of domestic supplies, which are the key to energy production. Financial reserves previously strengthened were used to help the energy sector. It was the breaking point for the Russian oil sector.

Oil prices and investment in wells are proportional in free-market dynamics because higher prices mean potentially higher profits, which make the risk of investing in wells worthwhile. While the sanctions were stopping the "exportation, or reexportation of goods, services (not including financial services), or technology," they were also blocking foreign private investors who had already become jittery in 2015 due to global oil prices. As a result, Russian state-owned oil companies boosted their investments. Thus, the sanctions did not reduce Russia's oil production; on the contrary, they kept its investments afloat when oil prices fell (see fig. 2). The question then arises: If Russian oil production did not suffer despite the sanctions and continued to maintain its important position in the global market, what was the outcome of US-led Western sanctions on Russia's

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9 Rutland, “The Impact of Sanctions on Russia.”
13 Coote, Impact of Sanctions on Russia’s Energy Sector.”
oil export destinations? Two factors are critical: first, Europe, which was the biggest buyer of Russian oil at that time, also participated in these sanctions, and second, Russia’s “Pivot to Asia,” announced in 2012, pursued economic and foreign policy diversification. Specifically, the latter also invokes the “Pivot to China” debate.14

Figure 1. Global oil prices per barrel, January 2014–December 201515

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Two emerging economic powers, China and India, which needed the energy for industrial production influenced the global oil market. To continue growing economically, New Delhi and Beijing needed to diversify energy types and suppliers to secure their energy markets. In China's case, diversification away from coal led to increases in oil and gas imports. These policies worked; while China imported 4,766 b/d of crude oil in 2010, that rate increased to 10,852 in 2020.\(^{17}\) China still relies on fuel imports now, and capital expenditures (CAPEX) of China's national oil companies was projected to increase by 4.6 percent in 2022 compared with 2021.\(^{18}\) However, supplier countries and supplier routes also needed diversification because China has historically relied heavily on oil imports by sea, which decreases the security of these energy supplies.\(^{19}\) Russia was one of the options to alleviate this problem. Trade between China and Russia increased by the mid-2000s, and subsequent Sino-Russian energy cooperation witnessed major increases during 2013–14 via signed deals.\(^{20}\) The US-led coalition applied

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sanctions at a key time, when Russia was already considering Asia, and specifically China, as an opportunity for market expansion and diversification. However, sanctions rendered this a necessity more than an opportunity. As a result, China, which accounted for only 1 percent of Russian oil exports in 2000 and 6 percent in 2010, grew to become Russia’s top importer, accounting for 34 percent of Russian oil exports by 2020 (see fig. 3).

![Figure 3. Russia’s oil export destinations, 2000–2020. Source: UN Comtrade (HS Code 2709). See data description below for more detail.](image)

How to Understand What Has Happened?

Did the 2014 sanctions work as intended? Apparently not (see fig. 2). As Thijs Van de Graaf and Jeff D. Colgan argue, sanctions were not as extensive as the ones imposed on Iran from 2012 to 2016, which also discouraged third countries from

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21 Data Description: The data used in figures 3 and 4 come from the United Nations (UN) Comtrade database. UN Comtrade data includes international trade of goods and services. The goods and services are categorized according to the Harmonized System (HS). The HS Code used for figures 3 and 4 is 2709, “Petroleum oils and oils obtained from bituminous minerals; crude.” The data used in this analysis was retrieved 15 August 2022. In UN Comtrade data, both importers and exporters can submit data. However, submitted data are not always in agreement. In instances where one country reports trade while the other does not, the reported data are used. In instances where both can submit data but the values disagree, the average of the two values is taken. The value used here is the dollar amount of trade converted to shares of exports (fig. 3) or imports (fig. 4).
buying Iranian oil.22 Further, the EU was dependent on Russian oil and did little to decrease imports. Thus, the sanctions did not work as intended, but led to unintended consequences (see fig. 3).23 Russia did not lose momentum in oil production and export, rather Moscow diversified its customer countries. China’s trade and political interaction with Russia also became much stronger due to how the US-led West positioned itself relative to Russia. This happened as a result of the connection between Crimea’s annexation and Russia’s shift eastward for energy.24 In parallel to this, some argue that the outcomes of sanctions may prove to be far different than those intended.25 On the other hand, others argue that the annexation did not lead to a sudden strengthening of Sino-Russian relations but rather represented an international context increasingly conducive to cooperation between China and Russia, a relationship that had already been growing in the preceding decades.26 It remains an open topic of debate; however, figure 3 shows how much the strengthening of Sino-Russian relations accelerated after 2014 in the context of oil trade.

However, one point needs clarification. As an outcome of the sanctions, this newly emerging energy interdependency between Russia and China is different from the one between Russia and Europe. While Moscow gained political influence in Europe by selling Russian oil there, Chinese dominancy in economic, political, and military prowess did not provide the same space for Russia.27 This brings the interdependency debate to the center of the discussion. Both the decreasing oil interdependency of Russia–Europe and the increasing oil interdependency of Russia–China represent bilateral interdependencies mentioned in liberal international relations theory.28 Bilateral relationships can characterize the power and vulnerability of states. It is based on mutually advantageous interactions, but

26 Indra Overland and Gulaikhan Kubayeva, “Did China Bankroll Russia’s Annexation of Crimea?: The Role of Sino-Russian Energy Relations,” in Russia’s Turn to the East: Domestic Policymaking and Regional Cooperation, ed. Helge Blakkisrud and Elana Wilson Rowe (Cham: Palgrave Pivot, 2018), 95–118.
both sides’ powers are shaped by their dependency and vulnerability in relation to one another.\textsuperscript{29} It means there are reciprocal rather than one-sided vulnerabilities. Liberals have argued that such reciprocal dependence would make coercive strategies less effective.\textsuperscript{30} Through time, these symmetries are ideally expected to be less effective. In addition to liberal accounts, the interdependency of network structures has also been highlighted recently.\textsuperscript{31} This approach is based on prioritizing network structures rather than solely bilateral connections and aims to analyze via “nodes” and “ties.” \textit{Nodes} are the hubs of networks, and \textit{ties} are the connections between nodes, which channel information, resources, or other forms of influence. As a common point for bilateral relations and networks, interdependency can always be “weaponized.” In other words, more powerful/less vulnerable states can use their power as leverage.

Since oil has a global market, which always creates options for buyers and sellers, there is no single control point. Thus, there cannot be a weaponization of network structures, but states can use oil as a “stick” in bilateral relationships. In fact, it has been used as a “weapon” since the 1973 oil crisis. The historical evolution of the fuel market marks an interesting point here. Initially, oil producers and then gas producers have used their position to gain an advantage during the bargaining process of international politics. As the power of interdependency is defined by dependency and vulnerability, US policy makers have discussed whether they are dependent or vulnerable in terms of oil since the crisis. \textit{Energy independence} is one of the most frequent terms of rhetoric in US politics since the Nixon administration.

**Discussion and Conclusion**

Sanctions, however, have their own dynamics regarding weaponized interdependency. When the US Treasury becomes a part of the process, sanctioned states are not the only target. Washington’s privileged position and US dominancy over the global financial market lead to threats to global private actors active in sanctioned countries.\textsuperscript{32} In the 2014 case, international private actors—including Russian oil producer companies that were planning to be part of Russian oil production (e.g.,


service or technology providers)—were affected. For example, projects that Rosneft and ExxonMobil were developing, such as offshore drilling projects on the Arctic shelf, Sakhalin Island and the Black Sea were suspended.\textsuperscript{33} Russian companies needed new partners. In the aftermath of the sanctions, China was not only part of Russian fuel production but also bankrolled Russian fuel companies.\textsuperscript{34} Thus, the sanctions’ impacts went well beyond Russian oil production and the Russian economy, as they touched on global private actors and Russia’s approach to China.

While sanctions have been used as a weapon due to Russia’s dependency on oil revenue, Russia has proved able to find alternative markets and investors. In other words, when states use oil interdependency as a tool, outcomes may include the creation of new interdependencies (see fig. 3). However, unintended consequences abound. China, as mentioned above, had been trying to diversify its oil imports away from sea route transportation, such as those from Iran. Further, when Moscow joined the discount price providers because of sanctions, Russian oil could be substituted for others (e.g., Iran). These two reasons (i.e., transportation routes and discount prices) created danger for Iran, which had previously been one of the largest suppliers of oil to China. Consequently, a rise in oil interdependency between Russia and China has led to a decrease in oil interdependency between China and Iran (see fig. 4). In the aftermath of Russia’s 2022 invasion of Ukraine and a new regime of Western sanctions, this induced Iran to cut prices even further.\textsuperscript{35}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure4.png}
\caption{Share of Chinese oil imports, 2000–2020. Source: UN Comtrade (HS Code 2709).}
\end{figure}

\textsuperscript{33} Anastasia Nevskaya, “US sanctions on Russian energy sector: first results and side effects” (working paper, 2022), https://www.imemo.ru/.
\textsuperscript{34} Overland and Kubayeva, “Did China Bankroll Russia’s Annexation of Crimea?”
In this study we have used rich historical data to assess the impact of the 2014 sanctions on Russia. Unfortunately, the typical lag in publication of this type of data precludes a similar analysis at this time of sanctions imposed on Russia in 2022 following its latest invasion of Ukraine. However, we may use various emerging anecdotal data to at least speculate on two possible impacts of the ongoing sanctions. First, these data hint at limited success of current sanctions, just as in 2014. For example, a primary target of the 2022 sanctions was Russia’s energy sector. However, due to impacts of the war, energy prices at the end of 2022 were 10-percent higher than at the beginning of 2022.\textsuperscript{36} This positively impacted Russia’s revenues, generating a surplus for the period January–September 2022 that was roughly USD 120 billion higher than for the same period in 2021.\textsuperscript{37} Realizing this, the European Council established a price cap for oil exported from Russia at USD 60 per barrel.\textsuperscript{38} The current sanctions have also created an unexpected interdependence outcome. EU imports of photovoltaic solar panels from China has more than tripled since the war began, and China now accounts for 90 percent of the EU’s total panel imports.\textsuperscript{39} Thus, the EU has seemingly replaced energy dependence on Russian hydrocarbons with dependence on Chinese raw materials. While the 2014 sanctions induced unexpected interdependence between Russia and China, the 2022 sanctions have induced strong interdependence between the EU and China. Second, there appears to again be a fracturing of the global energy trade network, but this time with the EU disconnecting from Russia in favor of the United States. After Russia invaded Ukraine, Moscow dramatically reduced gas exports to Europe.\textsuperscript{40} The threats at the initial invasion prompted the EU to work to build liquified natural gas (LNP) ports that could accept gas from any exporter, not just those connected via pipeline.\textsuperscript{41}

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biggest share of new supply. In essence the energy trade network has effectively been rewired with the link between the United States and the EU replacing the link between Russia and the EU.

In summary, sanctions could not affect the Russian oil sector directly and immediately, instead they pushed Moscow to concentrate more on finding new oil export destinations. Here, Beijing’s increasing investments abroad, including those in the oil sector, rendered China an attractive alternative market for Russian exports. Old bilateral fuel interdependency (i.e., between Russia and Europe) could now be replaced with the new one (i.e., Russia and China). However, the domino effect of sanctions did not stop there. Increasing Russian oil imports to China helped Chinese national oil companies to reduce their imports from Iran. This study has shown that sanctions designed to increase or decrease specific bilateral oil interdependencies can induce long-term changes in complex trade networks. Some of those changes may be unforeseen and unintended. Thus, it is likely that the application of network analysis prior to sanction enforcement may better inform future policy decisions by anticipating how sanctions might impact global trade networks.

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