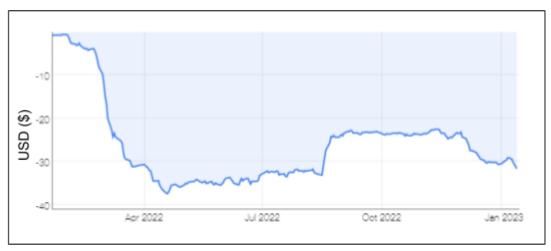
What are the most likely implications of the economic sanctions imposed on Russia?

Two wars of attrition: one fought by soldiers, the other by policy-makers. In the aftermath of Russia's 'special military operation' in Ukraine, global powers imposed heavy sanctions on Russia, targeting oligarchs, banks, monetary exchanges, businesses, and trade. The majority of sanctions discussed in this essay are sanctions imposed by the EU and the UK, due to their thematic significance and the large extent at which Europe is vested in the conflict.

Economic Sanctions on Russia

The motivation behind sanctions on Russia is bipartite: sanctions act as the materialisation of international condemnation towards Russia, simultaneously they attempt to hinder Russia's capacity to sustain a war by weakening its economy. Economic sanctions imposed by the EU mainly run along two dimensions: inhibiting production and enforcing financial isolation.

Industrial sanctions include the embargo of strategic commodities including: advanced technologies, such as semiconductors and electronics software, military materiel and aviation technology, industrial commodities, such as oil and energy related technologies and transport¹. The IMF estimates that Russia's real GDP will shrink by 2.3% in 2023², owing to Russia's dependence on low costs provided by global value chains; embargos on these strategic technologies have decreased Russia's output potential and productivity. Furthermore, other embargos in services, such as consultancies and accounting services have also left gaps in the Russian supply chain, however their effects are less visible than sanctions on goods.



Sourced from Neste.com

Fig. 1 Brent-Urals differential

¹The Council of the European Union, *EU sanctions against Russia*: https://www.consilium.europa.eu/en/policies/sanctions/restrictive-measures-against-russia-over-ukraine/sanctions-agains

² International Monetary Fund (IMF) Russian Federation profile: https://www.imf.org/en/Countries/RUS

In an effort to cut Russian export revenue, Russian imports including crude oil, coal, and steel have been sanctioned when entering the EU³. Notably, a price cap has been introduced by the EU and G7 countries, limiting any oil originating from Russia to \$60/barrel⁴, as well as a ban on Russian oil imports into the EU (and the UK). Consequently, the Urals-Brent differential (Fig.1) has fallen \$30 since February 2022⁵. While Russia's export profits have certainly fallen, the effectiveness of EU import sanctions on export revenues remain vague as India and China heavily imported discounted Russian crude at a low price in the wake of demand shortage.

Financial isolation of Russia mainly pertains to targeting Russia's financial sector. Prominently, the EU froze the foreign assets of the National Central Bank of Russia which was estimated to account for more than 50% of Russian foreign reserves⁶. Additionally, state-owned banks and several private banks were also subjected to a full transaction ban. Similarly, private banks such as SberBank and VTB were excluded from the Society for Worldwide Interbank Financial Telecommunication (SWIFT)⁷. Crucially, this cuts off Russian banks from accessing foreign currency and managing foreign assets⁸. The combination of asset freezes, SWIFT bans, and full transactional bans places complex barriers blocking Russia from accessing foreign markets and raising capital. International banking will be carried out directly from one private bank to another, incurring extra costs and disrupting Russian energy, industrial, and agricultural exports⁹. Financial isolation culminated in the 2022 Russian debt default, in which Russia was unable to make interest payments of approximately \$100m for its foreign debt, despite having the revenue to do so from "oil exports exceeding \$1bn per day"¹⁰; market analysts have alluded to the inaccessibility of foreign currency as a reason for the default.

Another significant implication of EU, US and UK sanctions was its indirect effect on Western brands and private businesses. Fuelled by a mix of public pressure and governmental signalling, over 1000 private companies suspended operations or pulled out of the Russian market¹¹. This decreases the quality and array of consumer goods and services available for Russian citizens and reduces foreign investment and capital in the country.

Overall, it is likely that industrial sanctions on Russia have led to a reduction in total factor productivity due to lower quality technology and thus lower output; financial isolation strategies have

https://www.skuld.com/topics/legal/sanctions/russia/the-price-cap-on-russian-oil/#:~:text=The%20EU%2C%20G7%20and%20Australia,%22Price%20Cap%20Scheme%22), any imports using European/G7 fleets will have to adhere to the price cap.

https://www.neste.com/investors/market-data/urals-brent-price-difference

³ Ibid.1

⁴ Skuld, The Price Cap on Russian Oil:

⁵ Neste Worldwide, *Urals-Brent price difference*:

⁶ Ibid.1

⁷ Bloomberg, *EU to ban seven russian banks from SWIFT, spare key firms:*https://www.bloomberg.com/news/articles/2022-03-01/eu-agrees-to-block-russian-banks-from-swift-sparing-key-firms

⁸ Ibid.1

⁹ Hotten, BBC News, *Ukraine conflict: What is Swift and why is banning Russia so significant:* https://www.bbc.co.uk/news/business-60521822

¹⁰ May, Russian sovereign debt defaults: A disputes perspective: https://www.mondaq.com/russianfederation/commoditiesderivativesstock-exchanges/1236202/russian-sovereign-debt-defaults-a-disputes-perspective

¹¹ Yale School of Management, *Over 1,000 companies have curtailed operations in russia—but some remain*: https://som.yale.edu/story/2022/over-1000-companies-have-curtailed-operations-russia-some-remain#main-content

crippled Russia's credibility and ostracised the country from international markets. Yet it is difficult to pinpoint the exact effectiveness of these sanctions as Russia continuously comes up with methods to bypass EU and UK sanctions, such as using 'shadow fleets' and switching to the Chinese Yuan for international transactions¹³. Needless to say, the Russian populace bears the brunt of the sanctions with a loss in welfare and living standards.

Hitherto, we considered the implications of economic sanctions on Russia, the target country, yet the global effects of sanctions are equally important. Moreover, implications of economic sanctions may inspire geopolitical changes in our globalised world; unintended socioeconomic consequences may arise from the effort to economically cripple Russia.

Global Implications of Economic Sanctions

Comparative advantage and globalisation introduced humanity to low costs and significant welfare gains through transnational supply chains. By specialisation and trade, we unlock surplus through economies of scale and relative productive efficiency. We can model the production of two countries with perfectly elastic Production Possibilities Frontiers (PPF):

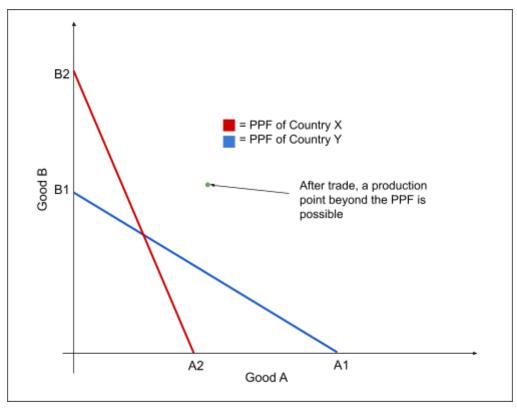


Fig.2 Comparative advantage

¹² Wittels, Bloomberg, *Where will Europe get its diesel from in 23 days' time?*https://www.bloomberg.com/news/articles/2023-01-13/where-will-europe-get-its-diesel-from-in-23-days-time#xi4v7vzkg

¹³ Reuters, *Russia's VTB launches transfers in Chinese yuan bypassing SWIFT*: https://www.reuters.com/markets/currencies/russias-vtb-launches-transfers-chinese-yuan-bypassing-swift-2022-09-06/#:~:text=Sanctions%20have%20increased%20the%20use,developed%20by%20Russia%27s%20central%20bank.

In Fig.2, country X is able to produce good B at a lower opportunity cost than country Y, and country Y is able to produce good A at a lower opportunity cost than country X. The theory of comparative advantage posits that countries should specialise in producing the most productive efficient goods and trade to maximise aggregate world output, thus achieving returns greater than what was possible in an autarky. Looking at a simplified domestic market of a country for example (Fig.3), comparative advantage increases world output, therefore decreases price below autarky level assuming perfectly elastic supply. Notably, QT to CT is made up by imports, and society benefits from welfare gain:

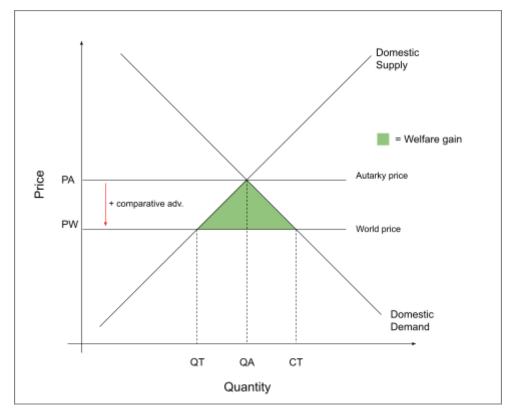


Fig.3 Welfare gain

After imposing economic sanctions on Russia, welfare surplus disappears as the country no longer benefits from comparative advantage and international trade. Embargos on oil and technology removes the welfare surplus completely while tariffs decrease the welfare gain. According to the World Bank, energy prices rose more than 60% in 2022 and the resulting inflationary pressure from higher prices has been rife among global economies¹⁴. (PW to PA)

The shunning of world's third largest energy producer, coupled with the EU's reliance on imported Russian gas and oil¹⁵ and a post-COVID demand surge resulted in an energy shortage and skyrocketing gas and electricity prices. This effect was exacerbated as many EU member countries switched to unreliable renewable energy as their primary domestic source after the European Green Deal; the UK experienced the same effects, having to implement a price ceiling¹⁶ to make energy

¹⁵ Eurostat: https://ec.europa.eu/eurostat/web/energy/data/database

¹⁶ London School of Economics, *Why have energy bills in the UK been rising?*: https://blogs.lse.ac.uk/politicsandpolicy/why-have-energy-bills-in-the-uk-been-rising-net-zero/#:~:text=Inflation %20rates%20are%20soaring%20to,on%20gas%20supplies%20into%20Europe.

affordable to households. Higher energy prices create ripple effects in economies, as businesses in industries such as transport, services, and industrial production require energy to operate, hence raising the cost of living overall¹⁷. It is important to note that policy-makers in the EU and the UK are acutely aware of the double-edged nature of sanctions, as it shapes the degree of aggression in sanctions and their consequences. Quintessentially, one of Russia's three biggest banks:

Gazprombank, was excluded from the SWIFT sanctions as it handles energy payments¹⁸ as Europe works to phase out dependency on Russian oil and gas.

Even in the midst of the negative-sum game of war and sanctions, winners emerge from the crisis. The IMF predicts that exporters of oil and gas in the Middle East and Central Asia will earn over \$1 trillion as a result of the energy crisis caused in part by sanctions on Russia. Members of the Gulf Council, such as Qatar, Saudi Arabia, and the United Arab Emirates are the biggest winners, experiencing unprecedented economic growth in 2022¹⁹.

Geopolitical implications resulting from sanctions are also important to consider as Russia moves away from Europe to new trade partners in the East. Crucially, Russia's diplomatic relations with China has been at its best since the 1950s, with China becoming the biggest importer of Russian exports such as crude oil and raw materials making up 15% of Russian export revenue²⁰; as aforementioned, China has been helping Russia bypass EU financial sanctions and trade barriers. The economic sanctions may accelerate a shift away from the Western-dominated global paradigm, as the Eastern powers of Russia and China form a closer alliance while antagonising the West. This dichotomy takes us further away from cooperating on global initiatives such as climate change and peace. Yet it is not the fault of economic sanctions which pushed Russia away from international cooperation, but Putin's misconduct which violated international law.

Closing remarks

In a war, soldiers bleed; in a trade war, economies bleed. Globalisation has brought the faraway war to our homes. Economic sanctions have had multifaceted implications on the Russian economy and the rest of the world. Individuals and businesses have felt the supply chain shocks caused by trade sanctions and the war through shortages and high energy prices. Russia is ostracised from Western financial markets and begins to look East. Oil and gas monoliths in the Middle-East enjoy their windfall profits. And the majority of the world bleeds from a war of attrition—one with no clear end.

¹⁷ IMF, *How war in ukraine is reverberating across world's regions*: https://www.imf.org/en/Blogs/Articles/2022/03/15/blog-how-war-in-ukraine-is-reverberating-across-worlds-regions-031522

¹⁸ Financial times. *EU plans to evict largest Russian lender from Swift but spare energy bank:* https://www.ft.com/content/deb36bec-41df-44eb-83fd-cbfbce7aac2b

¹⁹ Bloomberg, *IMF sees \$1 trillion oil exporter windfall, bigger Gulf savings*: https://www.bloomberg.com/news/articles/2022-10-31/imf-sees-1-trillion-oil-exporter-windfall-bigger-gulf-savings

²⁰ World Bank, Russia Trade: https://wits.worldbank.org/countrysnapshot/en/RUSSIA

References

- Council of the European Union. (n.d.-a). *EU response to Russia's invasion of Ukraine*. European Council. Retrieved January 14, 2023, from https://www.consilium.europa.eu/en/policies/eu-response-ukraine-invasion/
- Council of the European Union. (n.d.-b). *EU sanctions against Russia explained*. European Council.

 Retrieved January 14, 2023, from

 https://www.consilium.europa.eu/en/policies/sanctions/restrictive-measures-against-russia-ov
 er-ukraine/sanctions-against-russia-explained/
- Council of the European Union. (n.d.-c). *Impact of sanctions on the Russian economy*. European Council. Retrieved January 14, 2023, from https://www.consilium.europa.eu/en/infographics/impact-sanctions-russian-economy/
- Hotten, B. R. (2022, February 25). *Ukraine conflict: What is Swift and why is banning Russia so significant?* BBC News. https://www.bbc.co.uk/news/business-60521822
- How war in ukraine is reverberating across world's regions. (n.d.). IMF. Retrieved January 15, 2023, from https://www.imf.org/en/Blogs/Articles/2022/03/15/blog-how-war-in-ukraine-is-reverberating-
- London School of Economics, & Valero, A. (2022, October 20). Why have energy bills in the UK been rising? British Politics and Policy at LSE.

 https://blogs.lse.ac.uk/politicsandpolicy/why-have-energy-bills-in-the-uk-been-rising-net-zero
- May, D. (2022, October 4). Russian sovereign debt defaults: A disputes perspective. *Herbert Smith Freehills* .
 - https://www.mondaq.com/russianfederation/commoditiesderivativesstock-exchanges/1236202/russian-sovereign-debt-defaults-a-disputes-perspective

across-worlds-regions-031522

- Nardelli, A., Chrysoloras, N., & Follain, J. (2022, March 1). EU to ban seven russian banks from SWIFT, spare key firms. *Bloomberg*.

 https://www.bloomberg.com/news/articles/2022-03-01/eu-agrees-to-block-russian-banks-from -swift-sparing-key-firms
- Omar, A. A. (2022, October 31). IMF sees \$1 trillion oil exporter windfall, bigger Gulf savings.

 Bloomberg.

 https://www.bloomberg.com/news/articles/2022-10-31/imf-sees-1-trillion-oil-exporter-windfa
 - https://www.bloomberg.com/news/articles/2022-10-31/imf-sees-1-trillion-oil-exporter-windfa ll-bigger-gulf-savings
- Reuters. (2021, November 5). UK seeks long-term gas deal with Qatar, asks to become 'supplier of last resort' -FT. *Reuters*.

 https://www.reuters.com/business/energy/uk-seeks-long-term-gas-deal-with-qatar-asks-becom e-supplier-last-resort-ft-2021-11-05/
- Reuters. (2022, September 6). Russia's VTB launches transfers in Chinese yuan bypassing SWIFT. *Reuters*.
 - https://www.reuters.com/markets/currencies/russias-vtb-launches-transfers-chinese-yuan-bypa ssing-swift-2022-09-06/
- Skuld. (2022, December 9). *The Price Cap on Russian oil*. Skuld. https://www.skuld.com/topics/legal/sanctions/russia/the-price-cap-on-russian-oil/
- *Urals-Brent price difference.* (2015, February 19). Neste Worldwide.
 - https://www.neste.com/investors/market-data/urals-brent-price-difference
- Walker, O. (2022, May 4). EU plans to evict largest Russian lender from Swift but spare energy bank. Financial Times. https://www.ft.com/content/deb36bec-41df-44eb-83fd-cbfbce7aac2b
- Wittels, J., & Prem, P. (2023, January 13). Where will Europe get its diesel from in 23 days' time? *Bloomberg*.
 - https://www.bloomberg.com/news/articles/2023-01-13/where-will-europe-get-its-diesel-from-in-23-days-time#xj4y7vzkg
- World Bank. (n.d.). *RUSSIA Trade*. WITS Data. Retrieved January 15, 2023, from https://wits.worldbank.org/countrysnapshot/en/RUSSIA

World Bank Group. (2022, October 26). Currency depreciations risk intensifying food, energy crisis in developing economies. *World Bank Group*.

https://www.worldbank.org/en/news/press-release/2022/10/26/commodity-markets-outlook

Yale School of Management. (n.d.). Over 1,000 companies have curtailed operations in russia—but some remain. *Yale School of Management*. Retrieved January 15, 2023, from https://som.yale.edu/story/2022/over-1000-companies-have-curtailed-operations-russia-some-remain#main-content