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

The Threat of the Economic Sanctions on Russia

Russia's unique position within the global economy means it is governed by the complex interplay of deep and enigmatic forces. Thus, the effect of sanctions placed on Russia cannot be accurately judged by cautionary tales of other 'sanctioned' countries or through the blurry lens of history. This presents a problem. If unable to make comparisons, it is tempting to disregard these sanctions as ineffective. However, the barrage of sanctions unleashed on Russia after its invasion of Ukraine in February 2022 will have tangible repercussions for the Russian people and state. Despite the delay in their manifestation, the implications of economic sanctions combined with the crushing pressure of the war, will severely wound Russia's economy, as I argue below. As one of the instrumental BRIC countries, these adverse effects on Russia will inevitably spread through the global economy, paradoxically even harming the West, where their very inception took place.[1] Under the political doctrine, these sanctions also demonstrate to Russia that the West is capable of multilateral cooperation in the face of an aggressor. The West's economic retaliation to Russia's 'eat or be eaten' motto that has dictated its foreign policy may prove to be fatally consequential.

In this essay, I will explore the financial and export sanctions on Russia after February 2022, evaluating their effectiveness and implications in the local and global context.

1. Implications of Financial Sanctions

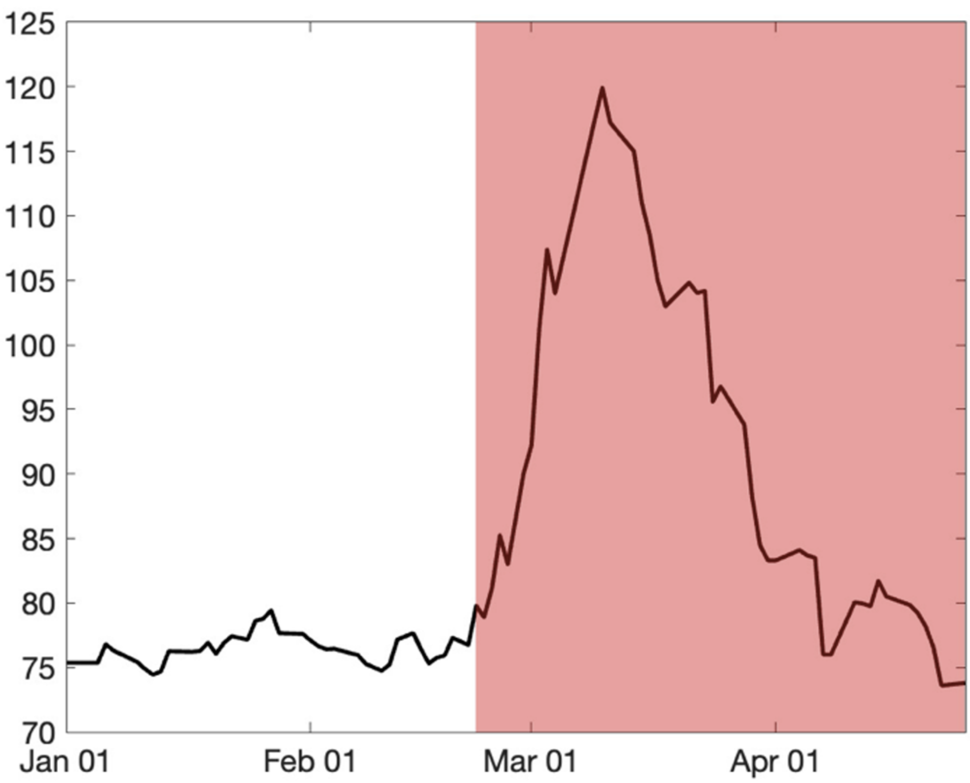
1.1 Exchange rate and the rouble

Since the 2014 annexation of Crimea, Russia has made attempts to shield their financial plumbing against sanctions, entailing an accumulation of $630 billion in central bank reserves. With the aim to nullify this shield, Western countries immobilised $300 billion of these foreign reserves. This substantial amputation meant it was difficult for the Central

[1] BRIC (Brazil, Russia, India and China) are the dominant developing countries in the global economy as key suppliers of manufactured goods, services and raw materials.

Bank of Russia (CBR) to intervene in the currency market to protect a sagging rouble, causing the sharp depreciation in the exchange rate shown in Figure 1, with the rouble shedding half its value. However, the CBR's decisive action to increase interest rates meant the rouble subsequently rebounded to pre-war levels. Counterintuitively, making it one of the best performing currencies this year, commonly cited to prove sanctions are futile (Ivanova, 2022). However, the strong short-term appreciation of the rouble was only driven by import sanctions and the financial repression, elucidated in Itshkoshi & Mukhin's simple equilibrium model of exchange rate determination (Mukhin & Itskhoki, 2022). Thus, these exchange rate dynamics do not equate to sanctions being ineffective. Despite the rouble's initial survival, the CBR's ability to defend the rouble will continually be tested, and any hard currency shortages will lead to crippling nationwide bank runs (Vallée, 2022). As summarised by Janet Yallen, US Treasury Secretary, the immobilisation of reserves will *"begin the process of dismantling the Kremlin's financial network"* (Reuters, 2022a).

Figure 1: Daily rouble exchange rate (per US dollar) in 2022



Source: Rate Oleg Itskhoki and Dmitry Mukhin Working Paper 30009

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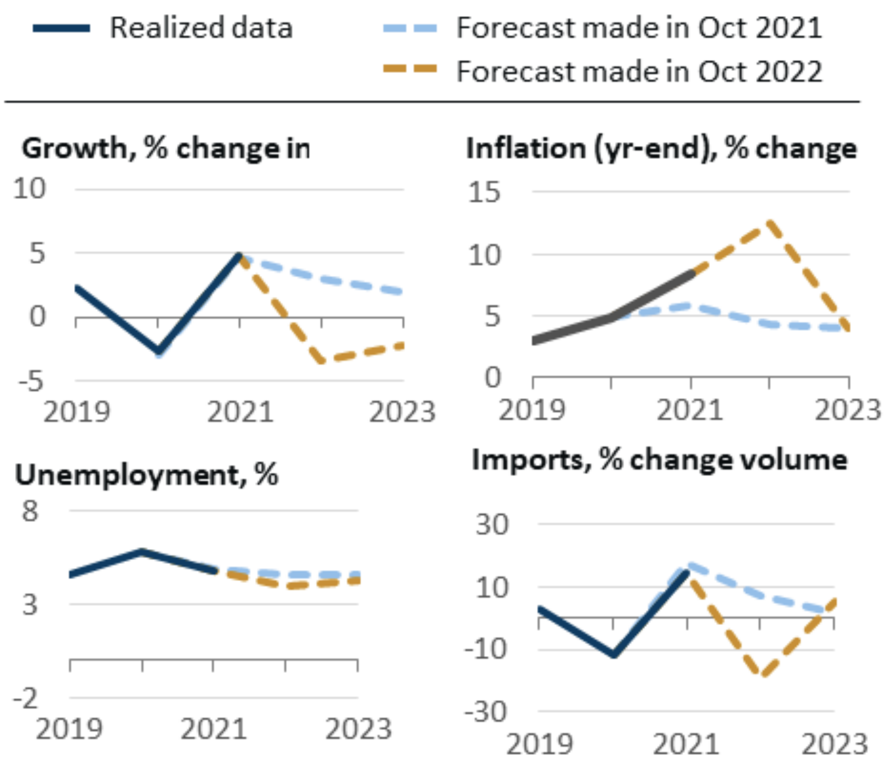
1.2 Inflation

The CBR's controversial implementation of increased interest rates altered the supply and demand of money, causing systemic inflation which has started to come to fruition. As of December, inflation was 12.7%, down from the 17.8% peak in April (CBR, 2022). Although inflation is above the 2021 prediction, the CBR may largely rein in inflation in 2023 (see Figure 2), convincing some commentators that Russia is unscathed. However, in the short-term, the purchasing power of the Russian population would decrease, leading to paralysing economic difficulties for Russians on fixed incomes or with money saved as cash or non-inflation indexed financial instruments. Moreover, expensive borrowing costs may appear, as lenders require compensation owing to erosion of their loan repayments. Even once Russia's inflation is controlled, this will not undo the crippling short-term ramifications on the population.

Figure 2: Economic Trends in Russia

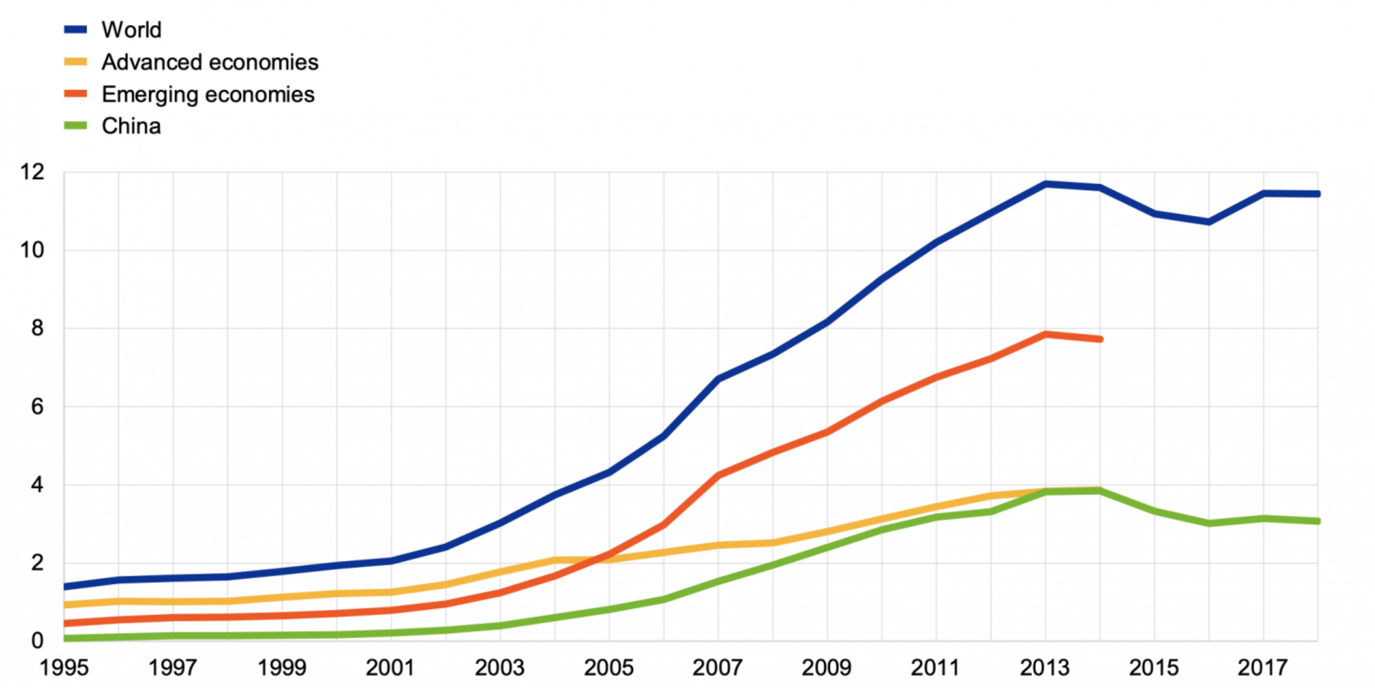


Source: Created by Congressional Research Service from IMF World Economic Outlook Database.
https://crsreports.congress.gov/product/pdf/IF/IF12092

1.3 Global implications of frozen reserves

The pivotal impact of the immobilisation of Russia's foreign reserves is not contained within its expansive borders. Currently, under the dominant currency paradigm, the dollar is indispensable as a medium of exchange and vehicle currency, as well as being an undeniably safe asset (Gopinath, 2016). This weaponization of Russia's reserves could prompt a reconsideration of holdings of the dollar by China, who has $3.4 trillion in reserves (Economist, 2022a). Pertinently, the constant increase in foreign exchange reserves has plateaued since 2015 (see Figure 3). Thus, this sanction could catalyse a decline in the number of reserves held globally, potentially destabilising the position of the dollar as the world-reserve currency (Wheatley & Smith, 2022). In response to this sanction, the international monetary system may adjust to reduce financial integration between countries, meaning the need for reserves will be smaller, and less dollar dominated.

Figure 3: Global foreign currency reserves (USD trillions)



Source: ECB Economic Bulletin issue 7/2019.

1.4 SWIFT international payment system

To isolate Russia's financial system further, several Russian banks were cut off from the SWIFT payment system.[2] The heterodox theory of using cryptocurrencies to continue operation, as used by Venezuela, is unlikely because of the size of the Russian economy, and the lack of volume and liquidity of cryptocurrency markets (Makhlouf & Selmi, 2022). Alternative methods of payments involve many frictions, such as Russia's SPFS set up in 2014, which only works domestically (Srinivas, 2022).[3] Admittedly, Gazprombank not being severed from this international payment system still allows abundant fuel payments, meaning the sanction is not a fatal blow, while China's homegrown payment system may gain traction (Dias, Vieira, & Pereira, 2022). However, a $100 million default in payments to bondholders has already occurred, meaning the overall probability of defaulting on foreign-currency obligations is now much greater (Smith, 2022). The increased caution in dealings accelerates the future decline of the Russian banks, firms and government on the international stage.

2. Implications of Trade and Export Sanctions

2.1 Energy sanctions

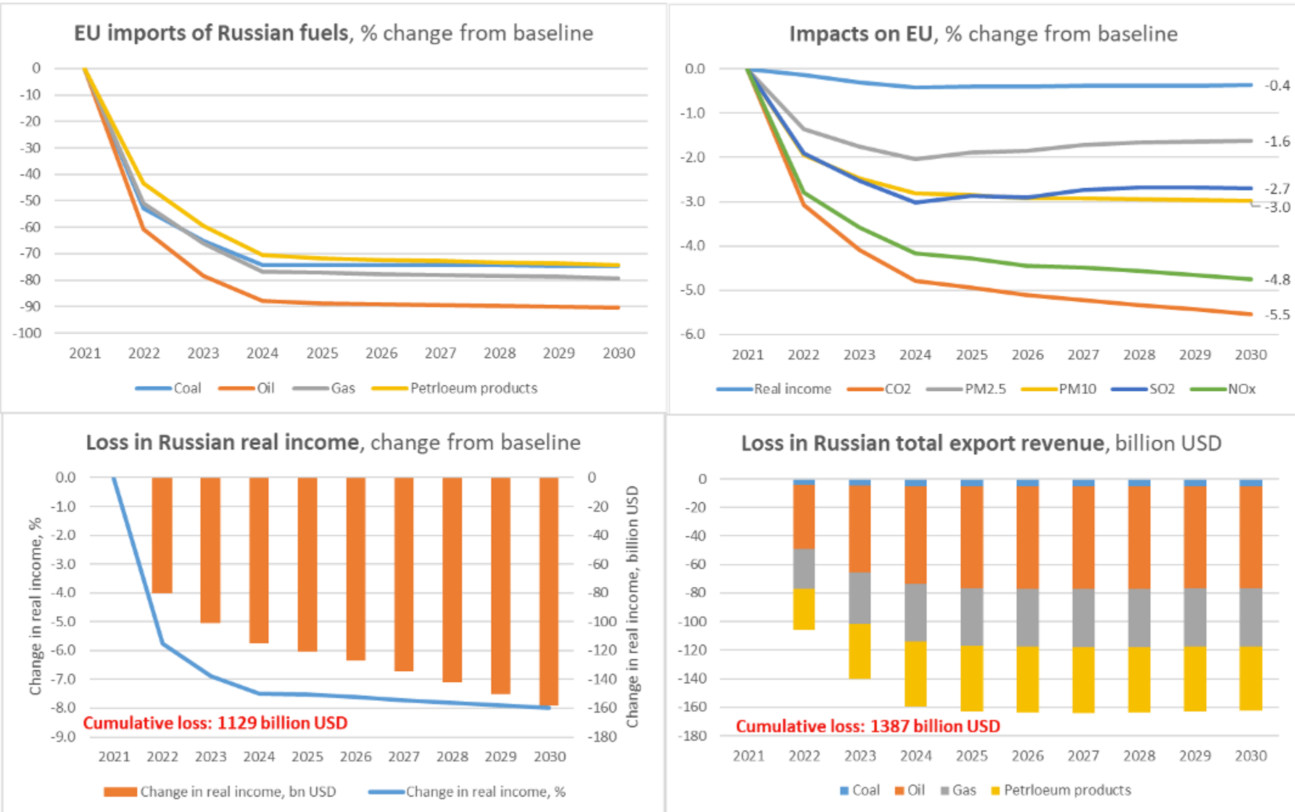
The EU27 and UK account for over 63% of Russia's fossil fuel exports (Chepeliev, Hertel, & Van der Mensbrugghe, 2022). Thus, to limit Russia's earnings which bolster the war effort, the EU banned imports of seaborne crude oil and G7 countries implemented a $60 price cap on purchases of Russian oil.

One commonly enacted argument is that economic powers such as China, India and Turkey will avoid the price cap as non-enforcers of sanctions, allowing Russia to redirect large volumes of exports to negate any losses. In rebuttal, constructing alternative logistics chains is an expensive and cumbersome solution and companies in India and China will likely not

[2] Society for Worldwide Interbank Financial Telecommunication (SWIFT)
[3] Financial Messaging System of the Bank of Russia (SPFS)

pay the full market price for Russian oil, using these macroeconomic conditions to negotiate a lower price (Demertizis & Hilgenstock, 2022). Currently, China is recovering from the fallout of COVID-19, so may not provide the necessary increase in demand to maintain levels of exports out of Russia. Notably, the current account surplus of $220 billion is not a source of comfort; the drastic reduction of imports conceals the dire situation of reduced exports (Darvas & Martins, 2022). Overall, Russia will earn a significantly reduced amount, with the estimated cumulative export revenue loss from the 'ENVISAGE' model shown in Figure 4 amounting to almost $1.4 trillion by 2030 (Chepeliev, Hertel, & Van der Mensbrugghe, 2022).[4]

Figure 4: Impacts of restrictions of export sanctions on the economies of Russia and the EU



Source: From ENVISAGE model
https://cepr.org/voxeu/columns/cutting-russias-fossil-fuel-exports-short-term-pain-long-term-gain

[4] 'ENVISAGE' is a global computable general equilibrium model. It was used in this case by first developing a baseline scenario of macroeconomic, energy, and emission profiles of Russia based on the continuation of current trends until 2030. Then, a scenario whereby the EU and other high-income countries impose restrictions on imports of fossil fuels from Russia starting from 2022 was stimulated.

2.2 Global implications

Global oil shortages of some magnitude are a likely implication of these major sanctions on Russia's energy exports, with EU shortages outlined in Figure 4. Indeed, the International Energy Agency (IEA) announced in March 2022 that member countries have committed to release 60 billion barrels of crude oil buffer stocks from strategic reserves (IEA, 2022). With OPEC countries not meeting production quotas, Western countries must find alternative ways to quench the thirst for oil or suffer greatly increased prices, with average energy prices for EU households already increasing by 6.7-8%, worsening Europe's recession (Chepeliev, Hertel, & Van der Mensbrugghe, 2022)[5]. To combat shortages, there may be an increased investment into US shale basins, or a reduction in the US sanctions on Iran to boost supply into the global oil market. If efforts to find sufficient volumes of oil to cover shortages are not fruitful, the energy sanctions on Russia may alarmingly backfire.

2.3 Industrial sanctions

Russia's productive capacity is dependent on vital imports. To manipulate this vulnerability, Western governments implemented an embargo on technology and dual-use products, with licences for western industries to sell to Russia rarely being granted. Hence, in comparison to the no-war counterfactual, aggregate Russian imports in March-August 2022 were down 40% (Conteduca, Mancini, & Borin, 2022). These new supply restrictions deprive Russian manufacturers of imported components that are critical to assembling their final products. Russia's car production, for instance, plummeted by 91% year-on-year and by 2025, a fifth of civil aircraft may be unable to fly for dearth of spares (Kantchev & Kostov, 2022). There will also be acute difficulties in finding replacements for high-end electronic components as Russia has no advanced domestic semiconductor industry, further heightened by the Taiwan Semiconductor Manufacturing Company participating in sanctions (Economist, 2022b). Over

[5] Organisation of Petroleum Exporting Countries (OPEC)

time, if reserves of vital components are exhausted, draconian sanctions against imports means Russia's dependent sectors will largely be incapacitated.

As put by Olaf Scholz, Chancellor of Germany, "*Sanctions must not hit European states harder than Russian leadership"* (Arnold & Miller, 2022). Accounting for the Input-Output linkages, 'Quantitative Trade Models' of the bans on exports into Russia shows that the welfare loss is typically 100 times larger for Russia than for the sanctioners and even revealed a scope for increasing the damage to Russia by expanding the set of sanctioned products (Hausmann, Schetter, & Yildirim, 2022).[6]

2.4 Implications on employment

To the casual observer, the low unemployment rate of 3.8% means impacts on Russia's labour force are limited, despite the collapse of manufacturing industries brought about by economic sanctions. However, Russia has nearly 10 million migrant workers, particularly from Central Asia (Reuters, 2022b). For fear of the spike in unemployment rate; such workers are not registered as unemployed, but simply deported and firms are urged to keep workers employed, even if on lower or no pay, including policies of 'part-time working weeks' or various forms of downtime' (Milov, 2022). In fact, as a result of sanctions on industries and imports and the flight of foreign firms, there will be dire labour shortages, exacerbated by the loss of human capital and destruction of agricultural infrastructure in the war. The following mass exodus of skilled workers leaves already encumbered industries with a pressing skills shortage (Bloomberg, 2022).

Conclusion

The gradual degradation of Russia's economic potential is not a phenomenon which can be discerned in a short period of months, or by nebulous macroeconomic parameters. Russia, as the ninth largest economy with low external debt and fresh flows of hard currency daily,

[6] Quantitative trade models have been used to assess the effects changes in policy and shocks in the US-China trade war, Brexit and the Russian annexation of Crimea in 2014. This model aggregates export bans of 5000 products at the 6-digit HS level to the 15 World Input-Output Database (WIOD) manufacturing industries.

may never succumb to a financial stroke, but this was never the intention. Instead, the effects of the sanctions on Russia are insidiously cancerous and intended to only be potent in combination with the self-inflicted ramifications of the war, which will unbundle years of economic growth. Over time, this prolonged asphyxiation of the Russian economy may alter the Kremlin's incentives to cease the unprovoked war in Ukraine.

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