Yermak-McFaul International Working Group on Russian Sanctions & KSE | Institute

ONE YEAR OF WAR: SANCTIONS IMPACT ASSESSMENT AND ACTION PLAN FOR 2023

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This report was prepared by the KSE Institute Sanctions Team as part of our ongoing cooperation with the Yermak-McFaul International Working Group on Russian Sanctions. We seek to provide knowledge and expertise on the topic of sanctions to governments and companies around the world, assist with the design and implementation of sanctions policies that will increase the cost to Russia of invading Ukraine, as well as assess and enhance their effectiveness in achieving our mutual objective to end the war. The report takes into account discussions in the working group but should not be interpreted as endorsement by any particular member.

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ONE YEAR OF WAR:
SANCTIONS IMPACT ASSESSMENT AND ACTION PLAN FOR 2023

See also related materials:

One Year of Sanctions: Key Messages
"Sanctions Priorities 2023": Key Messages

Executive Summary

Sanctions clearly had a major impact on Russia: nearly triggering a financial crisis, squeezing oil revenues, and isolating Russia from the advanced economies. So far, they did not have the desired result of stopping the invasion, but their impact is becoming increasingly visible. In particular, the deep discount on Russian oil and the collapse in European purchases of Russian gas have eroded oil and gas revenues, which shielded the country from the effect of sanctions last year. As a result, Russia's economy has come under increasing pressure: the trade balance has narrowed sharply, the ruble has fallen 20% since November, and the deficit has widened sharply, forcing Russia to step up domestic borrowing and use of the oil fund.

Building on these growing signs of fragility, we propose a comprehensive package to help end the war and secure a just and durable peace. This package has three pillars:

1. **Constraining Russia:** This pillar squeezes Russia's oil and gas revenues further, in particular by ratcheting down the crude oil price cap to $30/bbl, together with enhanced enforcement and similar reductions to the product price caps. At this oil price, Russia will be constrained by its weak currency and banks, and wide deficit. To reinforce the impact, we propose Europe end direct purchases of Russian gas – and Japan, South Korea and Taiwan ban purchases of Russian oil, LNG and coal, with targeted exemptions if required. We further propose a price cap on nitrogen fertilizer exports, and a ban on additional goods, such as diamonds, uranium, iron ore, timber, steel products, and fish.

2. **Isolating Russia.** This pillar imposes more systematic and comprehensive sanctions, underlying that there will be no normal relations with Russia until it stops trying to redraw borders by force and withdraws from Ukraine. We propose broad sanctions on major companies in the oil and gas sector, now that the West is no longer dependent on Russian supply, and on the main metals and mining companies that supply the Russian military, while tightening financial sanctions, sanctioning Gazprombank, and requiring exit of the Western banks that remain in Russia. It sanctions every legal entity in the Russian military-industrial complex and every senior Russian official, and imposes a licensing regime on all high-technology exports.

3. **Making Russia Pay.** This pillar confiscates frozen Russian assets and starts to disburse them this year, under international governance and with transparent reporting, to pay compensation to Ukrainians killed, injured and displaced by Russia's invasion, and to finance Ukrainian reconstruction. As well as being just, this funding – including $300 bn in frozen central bank assets – provides funding for Ukraine, which may need exceptional funding of $40-50 bn pa in wartime, sufficient for the duration of any war, and thereby undermines any Russian prospect of being able to "outlast" Ukraine.

Mechanically, we estimate that this package will reduce Russia's exports by a further $70 bn, largely eliminating Russia's current account surplus; widen the budget deficit from 6% to 8-9% of GDP, consuming all liquid assets in the oil fund this year, and reduce growth by a further 2-3% of GDP from a 5% contraction to a 7-8% contraction. This economic and fiscal deterioration will put Russia's economy and budget into a fragile and constrained state, with high risks of a currency collapse and bank runs, unless policy is tightened aggressively. And tighter policy – higher rates and fiscal consolidation – will itself constrain Russian action.

Sanctions have had a major impact

Since Russia's invasion of Ukraine on February 24th 2022, an unprecedented range of sanctions have been imposed on Russia which have had a major impact. In particular:

- **Near financial crisis.** In March-April 2022, the freezing of the assets of the central bank and sweeping sanctions on Russian financial institutions, aided by the shock of the invasion, triggered a surge in demand for liquidity in Russia, leading to withdrawals, which threatened financial stability, and a sharp fall in the ruble, which threatened monetary stability. The central bank had to hike rates to 20% and impose capital controls to control the situation - and was only then able to ease rates and controls before the economy was heavily damaged because of Russia's record oil and gas revenues.

- **Squeeze on oil revenues.** Sanctions and the threat of sanctions have driven a wide discount on Russian oil, with the main benchmark Urals trading at a discount to Brent of $23/bbl on average, which has reduced Russian oil revenues by $64 bn over the year of Russia's invasion.

- **Loss of the European energy market.** Over 2022, in response to the war and Russia's cutoffs and threats, Europe has effectively ended its dependence on Russian energy. In 2021, Russia supplied Europe with 46% of coal, 27% of oil, and 41% of gas. Now, it is supplying no coal, 5% of oil, and 8% of gas, while gas prices are back to normal ranges, and gas in storage should exit winter at a record high. The IEA estimates Russia's loss of the European energy market will cost it $1 tn by 2030[1].

- **Growing isolation from the advanced economies.** Russia is being systematically excluded from the advanced economies, with leading companies pulling out of Russia, skilled experts leaving Russia, and some sectors such as aerospace and automotives, dependent on advanced economy technology, running at a fraction of capacity. Russia is becoming a commodity exporter to emerging markets, and now has little prospect of convergence with the advanced economies.

But sanctions have not achieved their ultimate goal yet.

The invasion continues. Despite defeats in Kyiv, Kharkiv and Kherson, Russia has expanded its war aims, announcing the annexation of four Ukrainian regions – none of which it fully controls –, expanded its military through mobilization, expanded its range of weapons, including through intensive use of Iranian drones, and attacked a wider range of targets, including with targeted attacks on the Ukrainian power network.

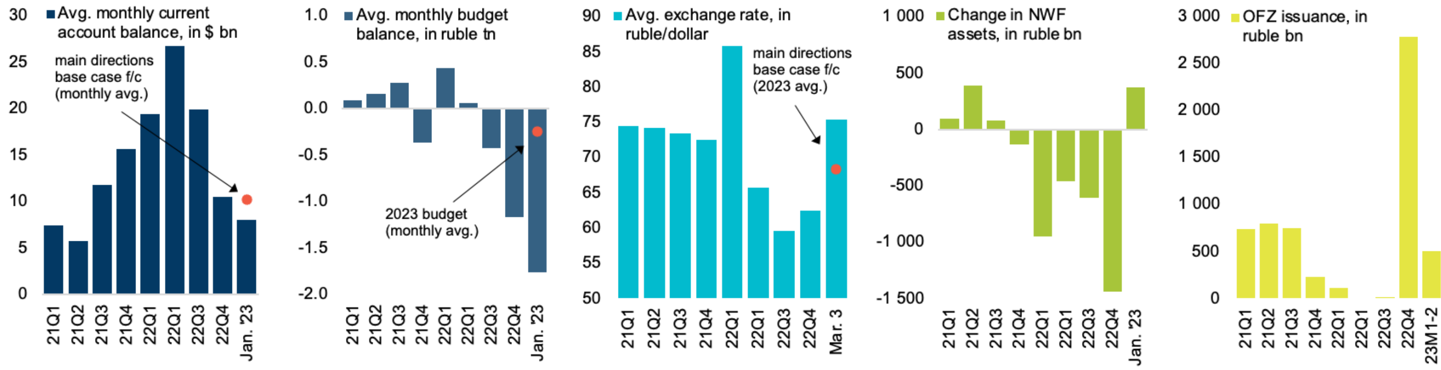
Some have called for no more sanctions to be imposed, saying that they are not working.

We disagree. Sanctions have had a significant impact. They contributed to a near financial crisis, squeezed oil revenues, deprived Russia of its largest energy market and the associated leverage, and they are isolating Russia from the advanced economies. Russia contracted last year, when oil exporting peers such as Saudi Arabia grew strongly. Still, Russia's contraction was less than originally expected by us and many others. We ascribe Russia's outperformance and initial resilience in the face of sanctions to record oil and gas revenues, which backstopped its economy. Now that this shield has been weakened – partly by a more balanced global energy market but to a larger extent by sanctions on energy and Europe largely ceasing to buy Russian gas –

[1] See WEO 2022, and related 27/10/22 tweet by Christophe McGlade, Head of Energy Supply at IEA.

Russia's vulnerabilities are re-emerging, with a widening deficit and a weakening currency, which are starting to constrain Russia's ability to fund its war (see Figure 1).

Figure 1. Trouble brewing: weaker current account, budget and RUB, rising use of NWF and OFZ issuance



Source: CBR, Russian MinFin

Sanction Priorities 2023

Our contention is that tougher sanctions will shorten the war by undermining Russia's capacity to finance the military effort – and, most importantly, in a way which causes less death and destruction. If you want peace, sanction Russia harder. To this end, we propose a package of sanction measures to constrain Russia, support victory and bring peace, defined as a just and durable end to the war.

The most important measure is to ratchet the oil price caps down. This is the key. Oil and gas is the lifeblood of Russia's economy – nearly two-thirds of exports and over 40% of federal budget revenues. Moreover, Russian oil is some of the cheapest in the world to produce – the cost of production in Russia is $10-15/bbl[2] – so the price is mainly rent. In other words, the price cap can be squeezed lower and Russian oil revenues reduced without materially undermining Russia's incentive to supply. We propose to ratchet the oil price cap down by a total of $30/bbl in steps of $10/bbl every 2 months to $15/bbl on low value products, such as fuel oil, $30/bbl on crude oil, and $70/bbl on high value products, such as diesel. If robustly enforced, this will reduce Russia's export oil price by at least $20/bbl from the current level (currently ~$50/bbl, according to the Russian MinFin) and oil revenues by at least $50 bn over the next year.

At oil prices below $40/bbl, Russia is financially constrained – facing a very wide budget deficit, a chronically weaker currency, and a live risk of a financial crisis – and will face a dilemma. To stabilize the ruble and prevent a return of high inflation at low oil prices, rates will have to rise strongly and financial conditions tighten. But to head off bank runs and to enable the banks to keep buying bonds and finance the deficit, the CBR will have to give banks additional liquidity and support, and keep financial conditions easy.

Our package has three objectives:

1. **Constrain Russia:** in particular, by further reducing export revenues, so Russia is constrained by a weaker currency and a wider deficit. In addition to the oil price cap ratchet, we propose – now that Russia is a marginal supplier of gas to the European market and European gas storage is at a record high – to end Russian gas pipeline deliveries to Europe except through Ukraine, and end Russian LNG deliveries to Europe. We also call on the East Asian democracies – Japan, South Korea, Taiwan – to

[2] The Rosneft 2021 annual report reports unit opex at $2.7/bbl and unit capex at $7.6/bbl. Rosneft accounts for just under 40% of total Russian oil production.

follow Europe's lead and stop buying Russian oil, LNG and coal, with targeted exemptions if needed. In addition, we would extend the price cap to Russian exports of fertilizer, and extend export bans to mined uranium, diamonds, fish, iron ore, timber, and steel products.

2. **Isolate Russia:** Tighten the full range of sanctions – military, corporate, financial, technological, personal, sporting – to reinforce the message to Russia that costs will rise the longer Russia persists with its attempt to redraw borders by force. We propose a more systematic approach to sanctions, including: a) now that Europe is no longer dependent on Russian supply, full sanctions on all Russian oil and gas companies, b) full sanctions on all metal and mining companies who supply the Russian military; c) in finance, tightening the sanctions regime, in particular by sanctioning Gazprombank and giving the remaining western-owned foreign banks – notably Raiffeisen and Unicredit – until year end to wind down their Russian operations; d) full sanctions on every separate legal entity in the Russian military-industrial complex, to frustrate imports of components for Russian weapons; e) a licensing system for all high-technology exports to Russia or to Russian companies; f) personal sanctions on senior Russian officials, including officials at state-owned enterprises, and on Russian officials working in occupied Ukrainian territory, including Rosatom officials, central bank officials and Rostelekom officials; g) a reinforced ban on any participation by citizens of Russia and Belarus in the Olympics or any other international sporting event until the war is over.

3. **Make Russia Pay:** to make sure that Russia takes responsibility and pays for the death, suffering and destruction it has caused, we propose to start confiscating seized Russian assets and using them, under enhanced international governance and reporting, to pay compensation to injured and displaced Ukrainians and to fund the reconstruction of Ukraine. This disbursement will also provide a backstop for the Ukrainian economy and currency for the duration of the war.

Section 1: Oil and Gas - Squeezing Russia's Key Source of Finance

Overview: The Role of Energy in Russia

Russia is a petro-state, in the sense that it is highly dependent on oil and gas revenues, which dominate both its trade (60% of exports prior to the full scale-invasion; see Figure 2) and its budget (45% of revenues; see Figure 3). This gives Russia significant leverage over customers and energy markets, but it also creates a major dependency for the country itself. In particular, when Russia has experienced a fall in oil revenues to below $150 bn per year – as it did in 2008-09, 2014-15, 2020 – it has faced economic contraction, a widening fiscal deficit, and a weaker currency (see Figure 4). This historical pattern also highlights Russia's financial fragility, reflected in sharp declines in its currency and bank runs, and having to run tight policies to maintain macro-stability, when its current account surplus has contracted sharply, even when remaining positive. Now, Russia faces a collapse in oil and gas revenues once again (see Figure 5).

Figure 2. Oil drives the external account.
Russian oil and gas exports, $ bn

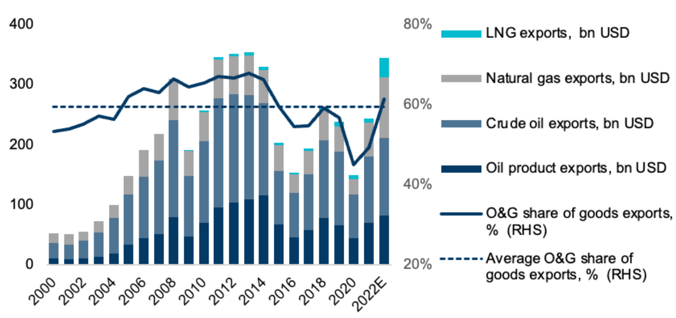


Figure 3. Oil drives the fiscal balance.
Oil and Gas budget revenues, $ bn

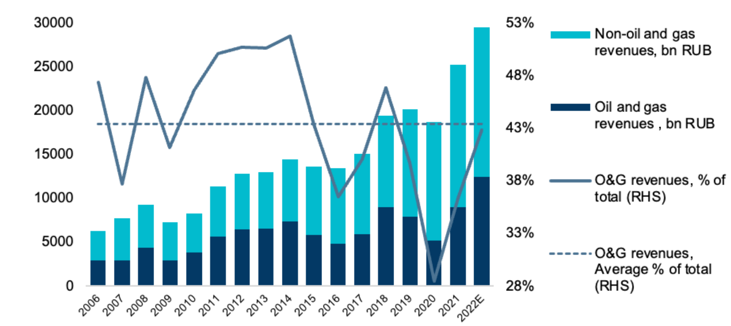


Figure 4. Oil drives economic growth.
Russian and oil growth rates, 1995-2021.

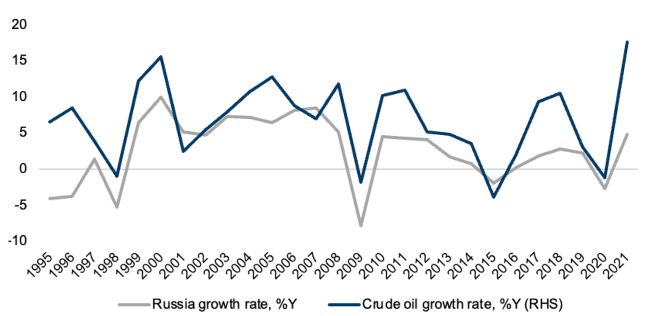
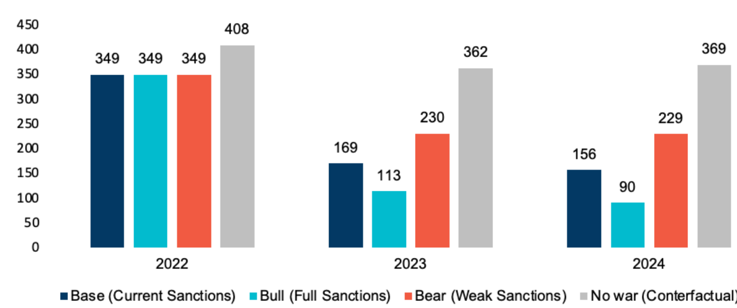


Figure 5. Now Russia faces a collapse in oil earnings.
Russian Oil and Gas Export earnings, by Scenation, $ bn.



Source: CBR, Ministry of Finance, Rosstat, KSE estimates

Summary of Existing Measures

In the first year of the war, Ukraine's allies took a gradual approach to sanctioning Russian oil and gas, mindful of their energy dependence on Russia, particularly in Europe and particularly for gas. However, by early 2023, sanctions on Russian energy have become quite broad (see Figure 6, Table 1). First, some allies who imported modest amounts of Russian oil and gas - such as the US and UK - announced embargo plans.

Second, Russia's main energy consumer – the EU – agreed in June to embargo Russian crude, from December 2022, and oil products, from February 2023, with some limited exemptions. At the time, the EU also planned to ban its shipping companies and traders from providing services for the transport of Russian oil - shipping, insurance, finance. However, after discussions with the US, where the government was concerned about the risk of weaker supply and higher prices, this turned into the price cap regime under which companies from Ukraine's allies can continue to provide services for shipping Russian oil provided it was sold below a price cap, eventually set at $60/bbl for crude, $45/bbl for low value oil products, and $100/bbl for high value oil products. These caps took effect at the same time as the respective embargoes, in December 2022 and February 2023.

Third, on gas, although some European countries did announce that they would refuse to buy Russian gas, it was generally Russia who stopped supplies, first by cutting off deliveries to those who refused to settle in rubles, and then by closing down the Yamal and Nord Stream pipelines. Limited volumes of Russian gas continue to flow through Turkstream and Ukraine, while Russian LNG deliveries to Europe actually increased.

Figure 6. Sanctions coverage of 2021 energy exports

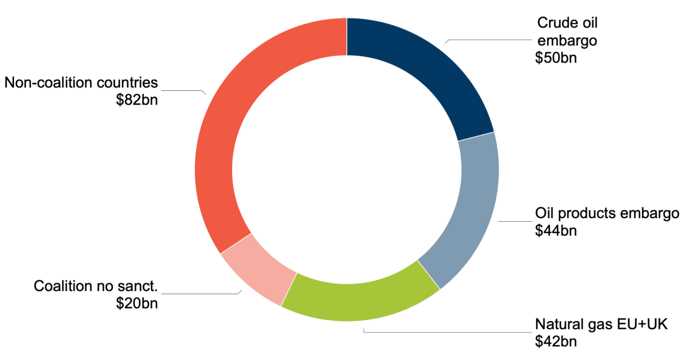


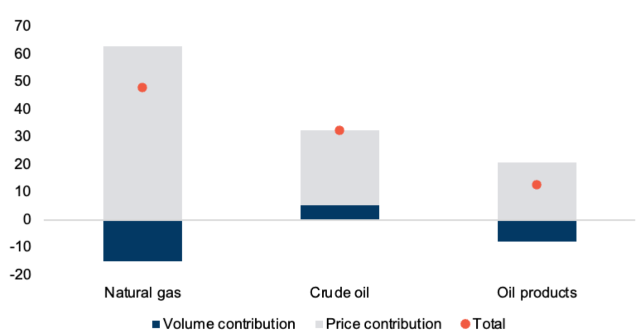
Table 1. Energy sanctions coverage: Gaps in EU gas and East Asian energy

Country	Coal	Seaborne crude	Pipeline crude	Oil products	Pipeline gas	LNG
EU	✅	☑️	☑️	☑️	❌	❌
UK	✅	✅	N/A	✅	✅	✅
Norway	✅	✅	❌	✅	N/A	N/A
Switzerland	✅	✅	✅	✅	❌	N/A
US	✅	✅	N/A	✅	N/A	✅
Canada	ℹ️	✅	N/A	✅	N/A	✅
Australia	✅	✅	N/A	✅	N/A	✅
New Zealand	✅	✅	N/A	✅	N/A	✅
Japan	❌	❌	N/A	❌	N/A	❌
South Korea	❌	❌	N/A	❌	N/A	❌
Taiwan	❌	❌	N/A	❌	N/A	❌

✅ – Sanctions are imposed, ☑️ – Sanctions are imposed with exemptions. In the case of the EU oil ban, this includes temporary derogations for seaborne crude imports into Bulgaria, and seaborne vacuum gas oil imports into Croatia, and a temporary exception for pipeline crude imports into Hungary, Slovakia and Czech Republic (southern branch of the Druzhba pipeline). ❌ – Sanctions are not imposed, N/A – not applicable, ℹ️ – Canada has not banned import of Russian coal but did not import Russian coal in 2022

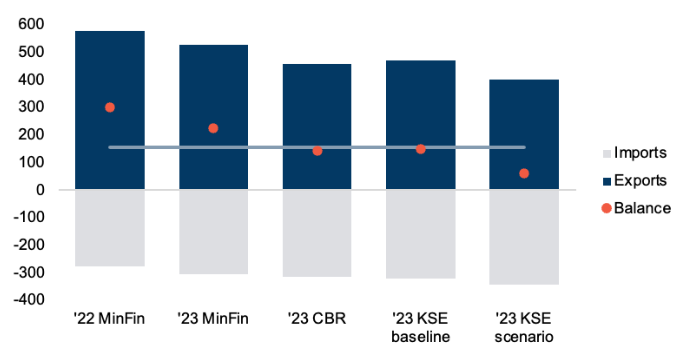
Source: Federal Customs Service, UN Comtrade, KSE Institute

Figure 7. Gas prices drove record O&G exports: Contributions to change in export value 2022 vs. 2021, $ bn.



Source: Federal Customs Service

Figure 8. Russian trade balance scenarios. Trade balance and components, $ bn.



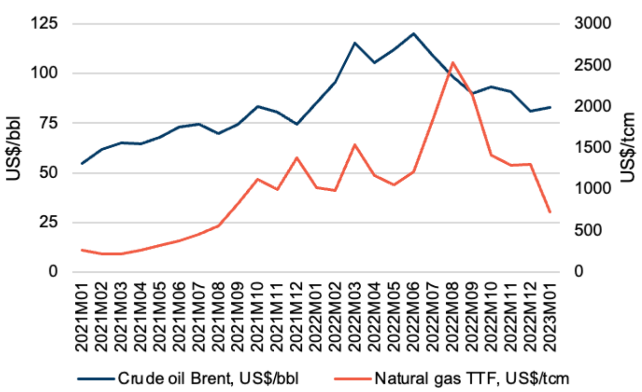
Source: CBR, Ministry of Finance, KSE Institute

Impact Assessment

Initially, Russia had the better of the energy war. Oil and gas prices rose sharply – to record levels in the case of European gas and power – driving higher inflation and rates, and an economic slowdown in Europe, while also providing Russia with record revenues, which helped to shield its economy and budget from the impact of sanctions (see Figures 7 & 8).

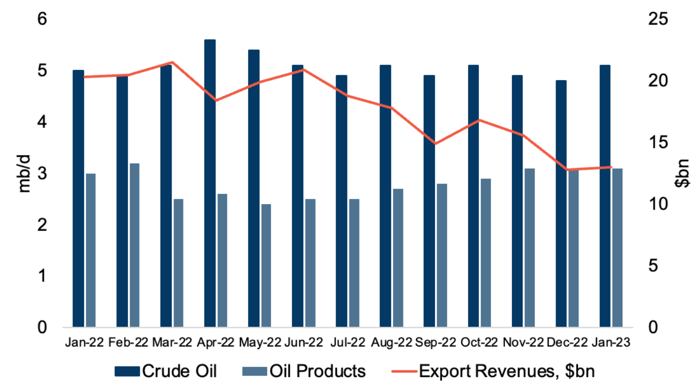
However, the balance of advantage has shifted as markets adjusted, and prices returned to pre-invasion levels (see Figure 9). In oil, sanctions, and the threat of restrictions, have driven a wide discount on Russian oil, which has averaged $23/bbl to Brent in 2022 – depriving Russia of around $64 bn in oil revenues (see Figures 10 & 11). In gas, Europe has increased imports from other sources, particularly LNG, and cut gas consumption, and has effectively completed the adjustment away from Russian gas (see Figure 12).

Figure 9. Monthly Oil and Gas Prices, 2021-2023.



Source: World Bank Commodity Price data

Figure 10. Monthly oil exports and revenues, 2022-2023.



Source: IEA

Figure 11. Urals, ESPO vs. Brent Prices, Dec.21-Jan.23.

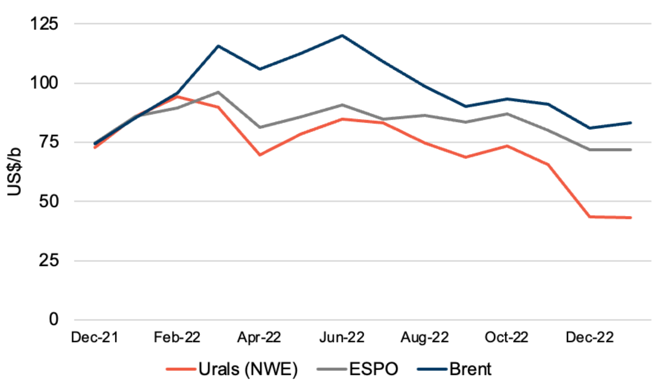
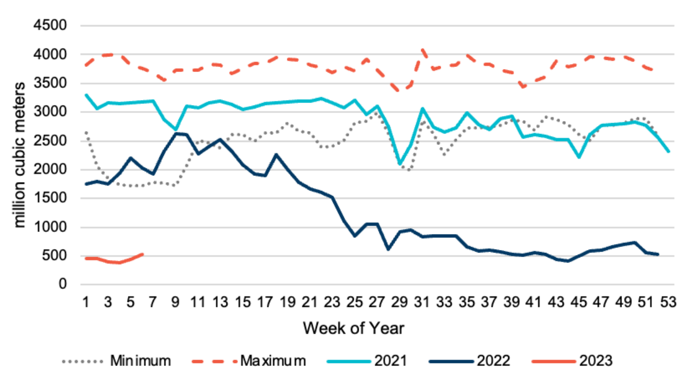


Figure 12. European Natural Gas Imports from Russia.



Source: IEA, KSE Institute estimates, Bruegel European Natural Gas Imports Datasets

As a result, the Russian deficit has widened sharply recently, driving increased borrowing and use of the NWF – and we see this challenge as becoming more acute. First, in terms of fiscal revenues, the Russian budget assumed 8,939 billion rubles in oil and gas revenues, at an average RUB/USD exchange rate of 68.3. If we assume that 78% of these revenues are from oil – as in 2022 – that implies a budget forecast of oil revenues of $102 billion. But our modeling suggests that in the base case – the $60/bbl price cap and a $35/bbl discount to Brent – Russia will raise $61 billion, even on the MinFin's proposed tax oil price, which would narrow the discount to $25/bbl, they would only raise $72 billion, while on our proposed reduction in the price cap to $30/bbl, oil revenues would collapse to $39 billion (see Figure 13).

This funding shortfall on its own will likely more than double the current deficit of just under 3 trillion RUB, accelerating consumption of the remaining liquid assets in the NWF, and putting upwards pressure on domestic rates, as domestic borrowing rises. Of course, there is a potential solution – to allow the RUB to weaken, so that the oil dollars generate more rubles, since every 1 RUB movement in the exchange rate adds 80-150 billion rubles in revenue over the year. And, indeed, since November the RUB has weakened by 20%, which implies an additional 1 trillion RUB in revenues compared to the budget forecast. However, a weak RUB strategy has risks: a) it means higher inflation and earlier CBR hikes, and b) it can herald a broader economic crisis. Notably, the economic crises in 2008-09, 2014-16 and 2020 involved the current account narrowing sharply – without going significantly into deficit – and were all marked by a sharp 10% or more fall in the currency over a 3-month period from the established level (see Figure 14).

Figure 13. Russia's 2023 shortfall in oil revenues.

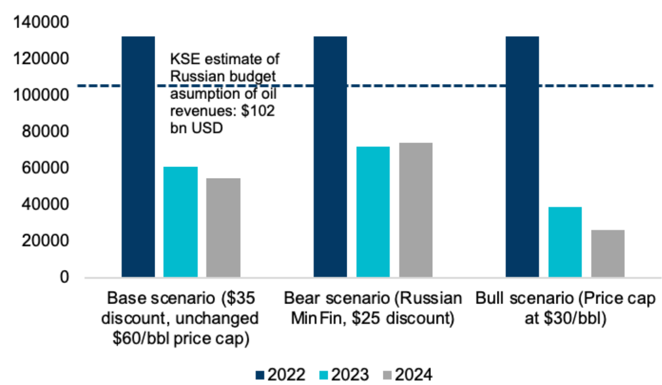
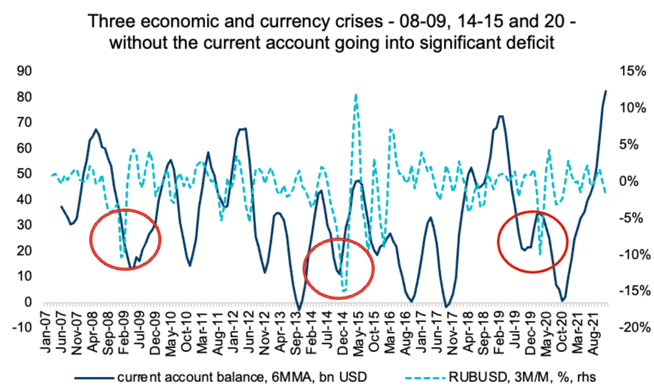


Figure 14. Crises without a current account deficit.



Source: MinFin, KSE estimates, CBR

Going forward, the effectiveness of the price cap – the main policy tool in play to reduce Russian oil revenues – depends on western firms' compliance, and Russia's ability to put together a transport offer without using Western firms for insurance and freight. We see effective enforcement as key here, and propose action to improve compliance, including by (i) confiscating Russian oil – and selling it for the benefit of Ukraine – in cases where its origin is concealed and/or it is sold in a sanctioning country; (ii) by taking action against western companies which provide services to transport Russian crude or product which is sold above the price cap; (iii) by enhanced regulations of safety standards at some key bottlenecks for Russian crude, such as the Bosphorus and the Danish Straits, to ban transport on risky old vessels. Further, to mitigate any unfair competitive advantage and maintain downward pressure on demand for Russian crude, we propose a "price cap levy" on oil product volumes in excess of 2022 levels sold from countries which are still buying russian crude – such as India and China – to Ukraine sanction coalition countries, such as the EU.

Proposed Next Steps

Stepped-up oil and gas sanctions should include:

1. **Ratchet down the oil price caps by $30/bbl, to a $30/bbl cap for crude, $70/bbl for diesel and high value products, and $15/bbl for low value oil products.** We see this as the most important single

sanction to undermine Russia's ability to finance the war: every $1/bbl off the Russian oil price is equivalent to $2.7 bn in reduced annual export earnings.

2. **End direct supply of Russian gas to the European market.** With European gas storage at a record high and prices back to near normal levels as winter ends, Russia no longer has leverage over European gas. Europe can now take the initiative. We propose to close all Russian-controlled pipelines – shutting Turkstream – and end Russian LNG delivery to Europe, thereby forcing any remaining Russian gas supply to Europe to flow through Ukraine, which has ample transport capacity.

3. **Full sanctions on Russian oil and gas companies and Gazprombank.** To date, the Russian oil and gas sector has been treated carefully, because of Western, particularly European, dependence on Russian oil and gas. With this dependence broken, Ukraine and its allies can now move to impose full sanctions on all Russian oil and gas companies – including Gazprom and Gazpromneft, Rosneft, Surgutneftegaz, Lukoil, Zarubezhneft, Tatneft, Transneft, Sibur and Novatek – with limited exemptions for oil price cap compliant transactions and for temporary exemptions to the European embargo. Similarly, full sanctions can now be imposed on Gazprombank (see also Section 3 below).

4. **Ban Russian energy in advanced economy Asia.** The democracies in advanced East Asia (Japan, South Korea, Taiwan), while aligned with sanctions coalition measures in other sectors, and reducing purchases of Russian energy, have not yet imposed any embargoes. They should follow Europe's lead and stop buying Russian energy, setting firm deadlines for ending purchases of Russian LNG, crude and coal, with targeted and time-limited exemptions, if required.

5. **Monitoring and enforcement of the price cap regime** to ensure that all companies from the price cap coalition are acting in good faith when transporting Russian oil. We propose an early focus on the Pacific Ocean port of Kozmino – at the end of the ESPO pipeline – where export prices appeared to lie above the price cap in the weeks following December 5 while a significant share of cargo is still lifted relying on Western shipping services. This should include risk-based audits of attestations, and corresponding evidence, which are required under the price cap mechanism.

Section 2: Other Exports – Restricting Russia's Earnings

Overview

Russia's economy is reliant on generating sufficient export revenues to finance its imports and budget. Oil and gas are the main source, together accounting for over 60% of exports, and therefore are the primary target of sanctions; however, sanctions on other important exports can play a useful ancillary role (see Figures 15 & 16).

Figure 15. Composition of goods exports, 2021, $ bn.

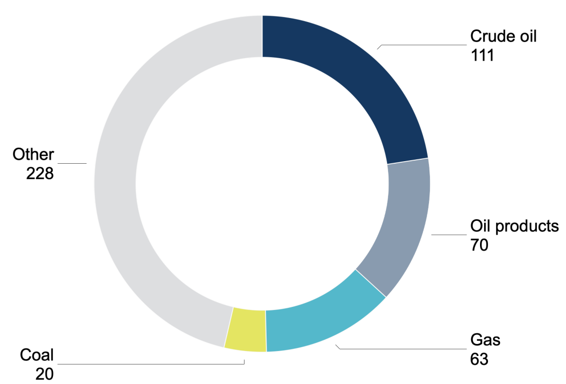
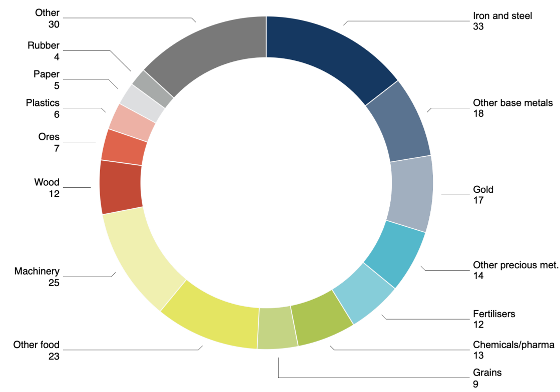


Figure 16. Composition of non-energy exports, 2021, $ bn.



Source: UN Comtrade

Summary of Existing Measures

A wide range of measures have been taken by Ukraine's allies against Russian exports beyond oil and gas, including bans on coal and gold, restrictions on iron and steel, and a ban on luxury exports. However, there continue to be large gaps in the sanctions regime. For instance, food and fertilizer exports are largely exempt as Ukraine's allies attach high importance to limiting any further impact on global food prices as Russia's invasion, occupation and blockade have already disrupted supplies of key agriculture products. Uranium has been excluded given concerns about Western dependency on Russian nuclear fuel. In other areas, interest groups – the fishing industry in Norway, the diamond industry in Belgium – appear to have successfully argued for exemptions.

Table 2. Selected import bans imposed by sanction coalition countries against Russia

Group of goods	US	CA	UK	EU	AU	JP	NZ	CH	NO
Coal	✅	❌	✅	✅	✅	❌	✅	✅	✅
Gold	✅	✅	✅	✅	✅	✅	✅	✅	✅
Iron and steel	❌	❌	⚠️	⚠️	❌	❌	❌	⚠️	⚠️
Iron ore	❌	❌	❌	❌	❌	❌	❌	❌	❌
Uranium	❌	❌	❌	❌	❌	❌	❌	❌	❌
Non-industrial diamonds	✅	✅	❌	❌	❌	❌	❌	❌	❌
Timber	❌	❌	✅	✅	❌	⚠️	❌	✅	✅
Wood pulp and paper	❌	❌	⚠️	⚠️	❌	❌	❌	⚠️	⚠️
Wheat	❌	❌	❌	❌	❌	❌	❌	❌	❌
Fertilizers	❌	❌	⚠️	⚠️	❌	❌	❌	⚠️	⚠️
Fish, seafood, and prep. thereof	⚠️	⚠️	⚠️	⚠️	❌	❌	❌	⚠️	⚠️
Alcoholic beverages, spirits, vinegar	⚠️	⚠️	⚠️	⚠️	❌	⚠️	⚠️	⚠️	⚠️
Cement	❌	❌	⚠️	⚠️	❌	❌	❌	⚠️	⚠️

Various chemicals	❌	❌	⚠️	⚠️	❌	❌	❌	⚠️	⚠️
Silver	❌	❌	⚠️	⚠️	❌	❌	❌	⚠️	⚠️
Aluminum plates, sheets and strip	❌	❌	⚠️	⚠️	❌	❌	❌	⚠️	⚠️
Rubber products	❌	❌	⚠️	⚠️	❌	❌	❌	⚠️	⚠️
Bituminous substances, min. waxes	❌	❌	❌	✅	✅	❌	✅	❌	❌
Machinery and appliances	❌	❌	⚠️	⚠️	❌	⚠️	❌	⚠️	⚠️

✅ – Sanctions are imposed on the whole (or almost whole) group of products, ⚠️ – Sanctions are imposed on some of items in the group, ❌ – Sanctions are not imposed

In addition, some countries in the sanction coalition have imposed higher import tariffs to restrict the supply of Russian-origin goods and, thus, curtail Russia's export earnings. Notably, the US recently markedly raised import tariffs on Russian metals to penal rates.

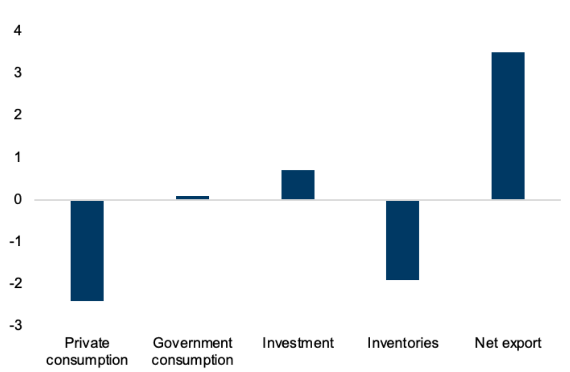
Impact Assessment

While the overall impact on Russia of sanctions in 2022 has been less than initially thought, with Rosstat's preliminary estimate suggesting a contraction of 2.1% in 2022, this figure is flattered by a) the strong 1Q22, coming in at 3.6% before sanctions started to impact the economy, and b) the strong contribution from net exports (see Figure 17), which partially offset a more depressed domestic economy, which reported declines in both consumption and investment, including a sharp decline in inventories.

As seen in Figure 18, the average contraction across the economy since the invasion has been around 4%, with most sectors contracting, and particularly strong contraction in wholesale and retail trade (-12%), as well as robust expansion in construction, finance and agriculture. Looking at the January 2023 data in Figure 19, within industry, both mining and manufacturing have contracted, but mining (-3.1%Y) slightly more than manufacturing (-2.3%Y). Within manufacturing, there have been particularly sharp falls in car production (-55%), wood processing (-22%Y) and tobacco (-17%), while drink (7%), clothes (5%), computing (5%) and food (4%) have expanded robustly.

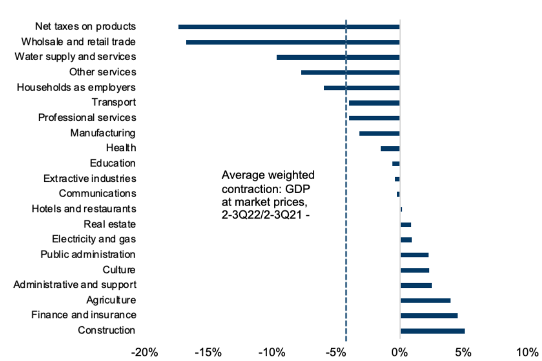
In Figure 20 below, we decompose the contributions to export value into the price and the volume effect for some of the key goods – coal, gold, steel products – which were sanctioned over the course of the year, as well as for fertilizer and nitrogen fertilizer, which saw a surge in the value of their exports last year. This shows that sanctions had an impact, since export volumes fell for all products, and particularly severely for gold, where coordinated and comprehensive sanctions were imposed. Where export earnings nevertheless increased, notably for coal and fertilizer, this reflected a price effect.

Figure 17. 2022 change in share of economy, pp of GDP.



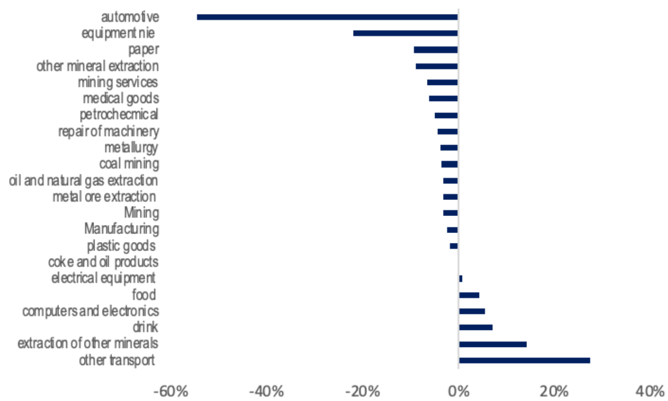
Source: Rosstat

Figure 18. GDP production account, 2-3Q22/2-3Q21.



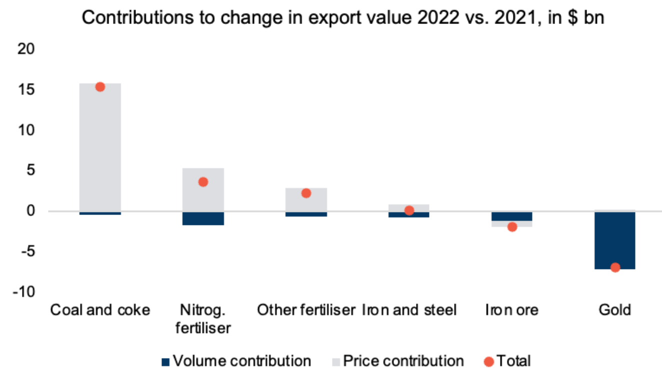
Source: Rosstat

Figure 19. GDP production account, 2-3Q22/2-3Q21.



Source: Rosstat: Omits 8 low value sectors amounting to less than 5% of total sales. Manufacturing unless mining/extraction indicated

Figure 20. Decomposition of change in export values into price and volume effects, selected goods.



Source: Federal Customs Service

Proposed Next Steps

We are skeptical of arguments advanced in favor of maintaining trade with Russia given the country's brutal war on Ukraine. For us, peace and security take precedence – and they are, ultimately, prerequisites for trade to flourish. At this critical time, peace and security require that attempts to redraw borders by force and occupy neighboring countries are defeated – using all available tools, including sanctions. Maintaining commercial relationships with Russia will inevitably have to take a step back in the interest of peace and prosperity on the European continent. We see broad scope for a meaningful extension of restrictions on other exports. At the same time, we also recognise the need to ensure sanctions are smart, and impact Russia above all, while minimizing their impact on the countries imposing them, as well as on third countries, which often include the most vulnerable.

In particular, we propose to extend sanctions that have been introduced by some countries in the sanction coalition to all its members. This logic applies for instance to diamonds (banned by US), fish (banned by UK and partially banned by EU), steel products (banned by UK and EU) and timber (banned by UK and EU). In addition, we call for a ban on iron ore, where Russian deliveries to Europe fell by 40% in 2022 even without a ban and Ukrainian producers – currently blocked from their main markets in China by Russia's blockade – can fill the gap, and on mined uranium, where Russia is a relatively small supplier.[3] Finally, we propose to impose a price cap on sales to sanction coalition countries of nitrogen fertilizer. The idea here is that the main cost of such fertilizers is the natural gas used in their production, which is very cheap in Russia, and so fertilizer exports have been generating high rents for Russia during this period of high global gas prices. To squeeze this revenue, while maintaining the incentive to supply, we propose to set a price cap consistent with the crude oil price cap ($30/bbl = $175/1000m3[4]). To encourage Russia to trade through Ukraine, we would also exclude exports through the Togliatti-Odessa ammonia pipeline from this mechanism.

[3] See International Working Group on Sanctions working group paper number 8: Rosatom and Civilian Nuclear Power, November 2022. Link here
[4] Based on the energy equivalent of 1 bbl of oil, which is approximately 6000 cubic feet of natural gas, or 170 cubic meters.

Stepped-up non-energy trade sanctions should include:

1. **Ban imports from Russia of additional goods.** Here, we propose extending restrictions that exist in some countries – on diamonds, steel products, timber, and fish – to all countries of the sanctions coalition. We further propose to ban mined uranium, where Russia is only a marginal supplier, and iron ore, where Ukraine can replace Russia as a supplier, at least in Europe.
2. **Establish a price cap on Russian nitrogen fertilizer exports.** We propose to set a price cap consistent with the crude oil price cap ($30/bbl = $175/1000m3[5]) on sales to sanction coalition countries, while excluding exports through the Togliatti-Odessa ammonia pipeline from this mechanism. A similar price cap mechanism should be explored for Russian petrochemical exports.
3. **Close important loopholes in the current sanctions regime by extending full sanctions on metals companies** which supply raw materials to the Russian military for armaments and fund the war through significant tax payments. These should include Alrosa, Evraz, Mechel, Metalloinvest, MMK, Norilsk Nickel, NLMK, Polymetal, Polyus, Rusal, Severstal, TMK, Uralsteel, and VSMPO-Avisma.

[5] Based on the energy equivalent of 1 bbl of oil, which is approximately 6000 cubic feet of natural gas, or 170 cubic metres.

Section 3: Strengthening Financial Sector Sanctions

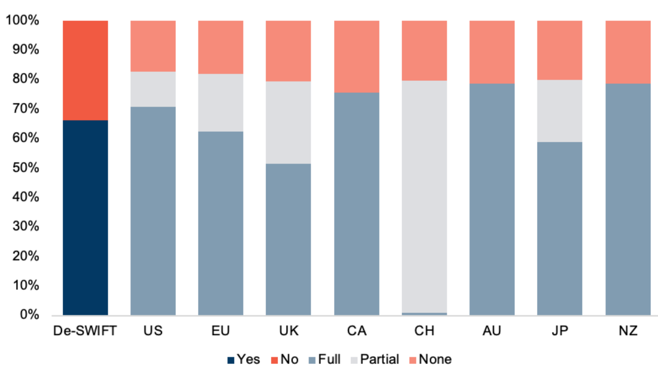
Summary of Existing Measures

Countries imposed a variety of restrictions on Russian financial institutions. As far as commercial banks are concerned, these include: i) a full ban on transactions and the freezing of assets (e.g., SDN list designation in the U.S. or comparable measures in other jurisdictions; ii) limitations on access to capital and financial markets; iii) restrictions on debt and equity; and iv) disconnection from the SWIFT financial messaging system.

Table 3 summarizes sanctions on Russian banks and illustrates that restrictions, while fairly comprehensive overall, do leave some important loopholes for cross-border transactions by these institutions (see Figure 21). Specifically, restrictions are not implemented consistently across the most important financial markets (see Figure 22). Gazprombank, the third-largest bank in asset terms, deserves special mention. It was exempted from full blocking sanctions because of its critical role in energy trade; however, with Europe's decisive move away from Russian oil and gas we do not believe that this exemption continues to be warranted.

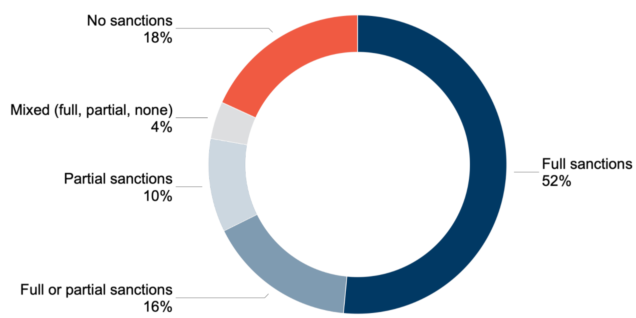
Sanctions on Russia's central bank (CBR) and the country's sovereign wealth fund (NWF) have been truly unprecedented, in particular as coalition countries froze any reserve assets under their jurisdictions. We estimate that as of end-2021, the last period for which such data is available, reserves geographically-located in the U.S, EU, or Japan amounted to $315 billion – or almost half of the pre-war total of $643 billion. These should be considered immobilized for the time being, reducing access to liquid FX significantly. To tighten the regime,we recommend extending the blocking sanction to Gokhran, the state fund for precious metals and stones managed by the Ministry of Finance, to prevent it being used as a loophole to access dollar liquidity.

Figure 21. Sanctions coverage by jurisdiction (share of total banking system assets)



Source: national authorities, banki.ru

Figure 22. Sanctions summary for US/EU/UK/JP (share of total banking system assets)



Source: national authorities, banki.ru

Table 3. Summary of financial sector sanctions by jurisdiction

Institution	SWIFT	US	EU	UK	CA	CH	AU	JP	NZ	Assets**
Sberbank	✅	✅*	✅	✅	✅	⚠️	✅	✅	✅	39.1
VTB Bank	✅	✅*	✅	✅	✅	⚠️	✅	✅	✅	19.8
Gazprombank	❌	⚠️	⚠️	⚠️	✅	⚠️	✅	⚠️	✅	8.9
Alfa-Bank	❌	✅*	⚠️	⚠️	✅	⚠️	✅	⚠️	✅	6.1

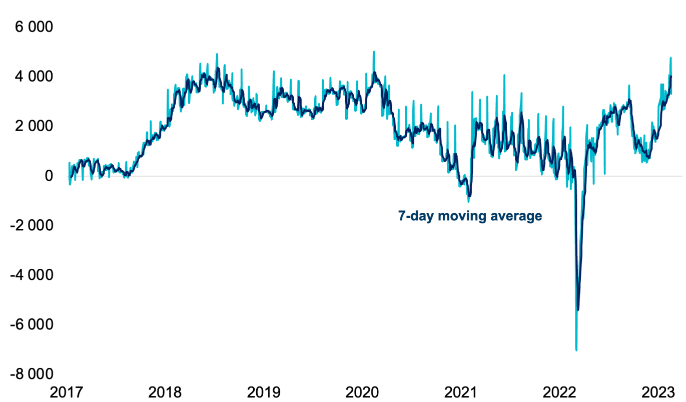
Rosselkhozbank	✅	⚠️	✅	⚠️	✅	⚠️	✅	✅	✅	4.2
Credit Bank of Moscow	✅	✅	⚠️	⚠️	❌	⚠️	✅	⚠️	✅	3.7
Bank Otkritie	✅	✅*	✅	⚠️	✅	⚠️	✅	⚠️	✅	3.4
VEB	✅	✅*	✅	✅	✅	⚠️	✅	✅	✅	3.4
Promsvyazbank	✅	✅	✅	⚠️	✅	⚠️	✅	✅	✅	2.8
Sovcombank	✅	✅	⚠️	⚠️	✅	⚠️	✅	✅	✅	2.0
Raiffeisenbank	❌	❌	❌	❌	❌	❌	❌	❌	❌	1.6
Rosbank	❌	✅*	⚠️	❌	❌	❌	❌	⚠️	❌	1.6
Tinkoff Bank	❌	❌	⚠️	❌	❌	❌	❌	❌	❌	1.3
UniCredit Bank	❌	❌	❌	❌	❌	❌	❌	❌	❌	1.2
Bank Rossiya	✅	✅	✅	⚠️	✅	⚠️	✅	⚠️	✅	1.2
Russian Reg. Dev. Bank	❌	⚠️	✅	❌	❌	✅	❌	❌	❌	1.2
Bank Dom RF	❌	❌	❌	❌	❌	❌	❌	❌	❌	0.9
Bank Saint-Petersburg"	❌	✅	❌	⚠️	❌	❌	❌	❌	❌	0.8
Novikombank	✅	✅	✅	❌	✅	⚠️	✅	⚠️	✅	0.7
PJSC "Bank Zenit"	❌	✅	❌	⚠️	❌	❌	❌	❌	❌	0.3
Far Eastern Bank	❌	✅	⚠️	❌	❌	⚠️	✅	❌	❌	0.1

Gray highlighting - banks authorized under Russian law to serve the defense sector
✅ *(full)* - complete ban on transactions and freezing of assets (such as via SDN listing); ⚠️ *(partial)* - some but not all elements of full sanctions (e.g., transaction bans, asset freezes, debt and equity restrictions, ❌ *(none)* - no restrictions
*exceptions for energy-related transactions
**in ruble trillion; as of February 2022 (2020 for VEB and Promsvyazbank)

Impact Assessment

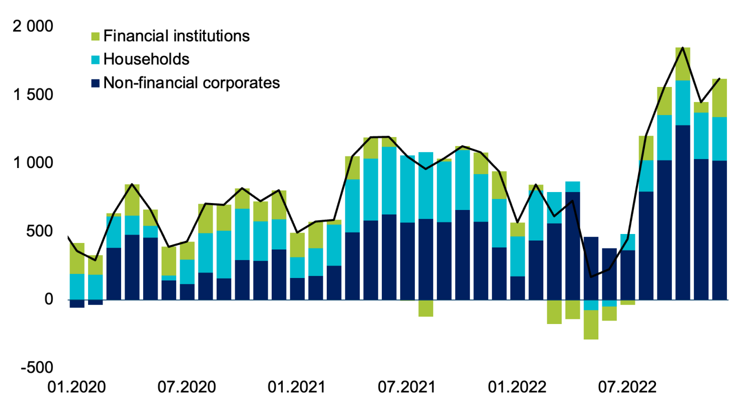
Sanctions imposed on the Russian financial system were quite comprehensive. However, after an initial surge in demand for liquidity – driving deposit withdrawals and a short-lived collapse in the ruble – the CBR was able to stabilize the situation by hiking rates and imposing capital controls, while at the same time supplying institutions with ample ruble liquidity (see Figure 23). As a result of the CBR's intervention, a systemic crisis did not occur and banks' ability to provide credit to the private sector remained intact (see Figure 24). Thus, Russia was able to avoid spillovers into the real economy. The events of March-April demonstrate, however, that financial fragilities still exist and could resurface.

Figure 23. Banking system liquidity surplus, RUB bn.



Source: Bank of Russia

Figure 24. New ruble-denominated credit, RUB bn, 3-month moving average.

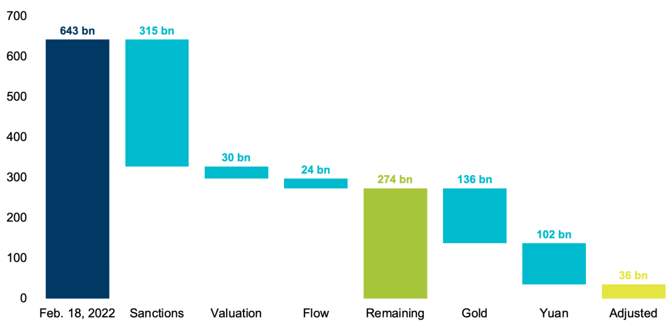


Source: Bank of Russia

As far as the de-SWIFTing of Russian banks is concerned, this may have made cross-border transactions somewhat more cumbersome and increased their costs, but they remain possible. And for domestic transactions, which relied on SWIFT to a substantial degree in the past, the CBR had developed the SPFS financial messaging system since 2014. Authorities had also established domestic alternatives to international financial services in the MIR credit card system and the CBR's own rapid payments system. This has helped Russia to minimize the negative effects of some international companies' withdrawal from the market.

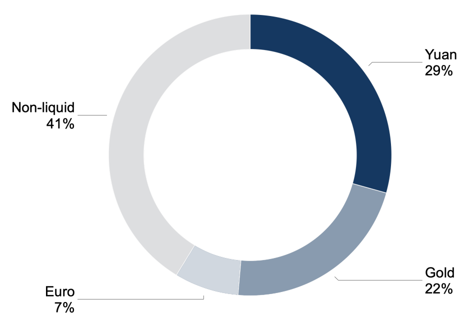
Sanctions on Russia's central bank, on the other hand, were quite effective. In our view, the combination of asset freezes (see above), outflows, and valuation changes leave Russian authorities with access to roughly $275 billion in reserves (see Figure 25). However, we estimate that the available reserves, i.e. those which have not been immobilized, are made up largely by gold and yuan, which may not be convertible to G-7 currencies for the settlement of external obligations, at least at scale. Thus, reserve adequacy is quite problematic if one looks beyond headline numbers. We find a similar situation for the NWF, where 100% of pound- and yen-denominated assets, and a large share of euro ones, were sold in recent months, leaving the fund's liquid portion largely consisting of yuan and gold (see Figure 26). With the government planning to rely further on the NWF for government financing – and deficits much larger than anticipated –, we expect liquid assets to be largely depleted this year.

Figure 25. Low quality reserve assets, ($ billion)



Source: Bank of Russia, IMF, KSE Institute

Figure 26. Liquid NWF assets running low (ruble trillion, as of end-January)



Source: Ministry of Finance, KSE Institute

Proposed Next Steps

Although, ultimately, Russia's financial system was able to cope with the initial shock from sanctions – and the resulting demand for liquidity – we think that this was largely due to record-high oil and gas exports. This supportive environment provided the CBR with room to tighten monetary policy via higher rates to stabilize the ruble and simultaneously to provide massive liquidity to banks, after aggressively easing collateral rules. Later, as the ruble recovered, backed by oil and gas earnings, the CBR was able to cut rates aggressively – and ease capital controls – before the economy and demand for private sector credit were seriously damaged.

We expect this year will be different for three reasons: First, oil and gas export earnings are set to collapse, removing the critical backstop that underpinned the financial system last year. Second, Russian authorities now face a chronic shortage in high-quality reserves, i.e., dollars and euros, making them vulnerable to a sudden surge in demand for liquidity. Third, the financial system now has a much smaller number of channels through which it can interact with the global economy.

We propose that the sanction coalition tighten sanctions on Russian banks to trigger demand for liquidity and re-expose financial fragilities in a situation where the economy lacks sufficient oil and gas revenues to easily manage these pressures. Closing loopholes in the financial sanctions regime will make it increasingly difficult and more costly for Russian financial institutions to conduct cross-border business at scale.

Furthermore, weakening Russia's banking system is critical as the burden of financing the government increasingly falls on it as budget deficits widen sharply, the National Welfare Fund is expected to be largely used up within the next 12 months, and foreigners have disappeared from the market for domestic debt. We already observe rising OFZ interest rates – as well as serious trouble attracting bids acceptable to the Ministry of Finance in some auctions –, and putting more pressure on banks will exacerbate the government's financing challenges by making domestic issuance increasingly expensive.

Stepped-up financial sanctions should include:

1. **Impose full sanctions on the remaining largest domestic institutions currently exempted from comprehensive measures, including Gazprombank, Alfa-Bank, Rosselkhozbank, Credit Bank of Moscow, and Bank Otkritie.** These are the most important banks which are currently only under partial sanctions. Altogether, we see no further justification for any energy-related exemptions as Europe is no longer dependent on Russian energy. Over time, we favor imposing a full ban on the 30 largest Russian banks in asset terms ("systemically important banks") and for restrictions to be implemented consistently across jurisdictions. We also propose other countries to follow the US example in imposing a full ban on MTS, which just received a license in the UAE, to block potential new channels for Russian banks' ability to interact with the global economy.
2. **Set deadlines for the exit of foreign financial institutions from Russia.** While many foreign banks have exited or are close to completing their exit – including Société Générale and Citibank –, several European banks remain engaged in Russia, including Raiffeisenbank, Unicredit, and Hungary's OTP. The ECB should establish processes that lead to the exit of any banks under its regulatory authority. To back up this push, we urge authorities, e.g., OFAC, OFSI, to enforce compliance with existing sanctions on the financial sector vigorously.
3. **Impose secondary sanctions on entities that undertake transactions with sanctioned Russian banks to close loopholes in the sanctions regime.** The threat of disconnection from the U.S. and European financial system should prompt institutions in financial hubs, e.g., Dubai and Hong Kong, to end relationships with Russian banks.
4. **Sanction the Ministry of Finance's State Fund of Precious Metals and Precious Stones ("Gokhran"),** which could otherwise be used to sell metals and gems to secure liquid FX assets. This is an important extension of existing sanctions on the CBR and NWF via the closing of additional loopholes that could allow Russia to buy dollars and other G10 currencies.
5. **Confiscate assets of the Bank of Russia.** As discussed in Section 5, we propose that coalition countries now move to confiscate frozen CBR assets to fund Ukrainian reconstruction.

Section 4: Systematic Isolation of the Aggressor State

Under this broad heading, we highlight three categories of sanctions: (4.1) military-related sanctions, (4.2) personal sanctions, and (4.3) technology sanctions. While we do not expect any one of these sanctions to have a pivotal effect, their consistent implementation over time will impose a growing and noticeable cost.

Section 4.1: Military and Dual-Use Goods Sanctions

Summary of Existing Measures

In 2014, some sanctions on military and dual-use goods were imposed after Russia’s annexation of Crimea and actions in the Donbass, but implementation was weak. For instance, French and German firms were subsequently involved in the transfer of sanctioned military and dual-use items to Russian entities, including high-tech components. This raised concerns about the efficacy of the sanctions regime and the need for stricter enforcement measures even before the invasion.

Since February, the sanctions coalition has made a more determined effort to limit Russia's access to advanced technology through export controls and sanctions. This has had a negative impact on Russia's weapons industry, as it has become more difficult for them to produce and store weapons – and, ultimately, to replace the ones that have been destroyed during the ongoing conflict.

The following measures have been implemented by the sanction coalition countries in response to the military activities of Russia and Belarus: (1) The sanctions list of companies operating within the defense sector of Russia and Belarus, as well as individuals involved in military production, has been expanded (see Table 4). (2) The list of dual-use goods prohibited for export to Russia has been extended. (3) Existing trade licenses for the export of dual-use goods to Russia have been suspended. (4) A ban on the SWIFT financial messaging system has been imposed on Promsvyazbank, which is designated as a pivotal bank for the execution of operations pertaining to state defense orders and large state contracts.

Table 4. Sanctions on selected defense sector enterprises by sanctioning jurisdiction.

Company	EU	UK	US	CA	SW	AU	JP	NZ
Kurganmashzavod JSC	✅	❌	✅	✅	✅	✅	✅	✅
AGAT Electromechanical Plant OJSC	✅	✅	✅	✅	✅	❌	✅	✅
Smolensk Aviation Plant JSC	✅	❌	✅	✅	✅	❌	✅	❌
State Machine-Building Design Bureau Raduga JSC	✅	❌	✅	✅	✅	❌	✅	❌
JSC "Vologda Optical and Mechanical Plant"	❌	❌	✅	❌	❌	❌	❌	❌
Experimental Design Bureau Novator JSC	✅	❌	❌	❌	✅	❌	❌	❌
JSC Design Bureau of Instrument-Making named after A.G. Shipunov	❌	❌	✅	❌	❌	❌	❌	❌
Peleng JSC	✅	❌	✅	✅	✅	❌	✅	✅
Tactical Missile Corporation, Zvezda-Strela Limited Liability Company	✅	❌	✅	✅	✅	❌	✅	❌
JSC "MOSCOW MACHINE-BUILDING PLANT "AVANGARD"	✅	❌	✅	❌	✅	❌	✅	✅
JSC "DUBNENSKY MACHINE-BUILDING PLANT" NAMED AFTER N.P. FEDOROV"	✅	❌	❌	❌	❌	❌	❌	❌
PJSC "MAK VYMPEL"	❌	❌	✅	❌	❌	❌	❌	✅
JSC "Votkinsk Plant"	✅	❌	✅	❌	✅	❌	✅	❌

JSC North Western Regional Center of Almaz Antey Concern Obukhovsky Plant	❌	❌	✅	❌	❌	❌	❌	✅

✅ *(full)* - complete ban on transactions and freezing of assets (such as via SDN listing); ❌ (*none)* - no restrictions
Note: it is not a comprehensive list of defense companies of Russia and Belarus. This is a selection of some important producers of Russian military equipment.

Impact Assessment

Although Russia has been implementing import substitution programs since 2014 with the goal of reducing the country's reliance on foreign components in its defense industry, its continued use of foreign-sourced high-tech components highlights an ongoing dependence. This dependence makes Russia susceptible to sanctions.

Consequently, the following effects have ensued: (1) The invading forces have had difficulty increasing their military production due to a lack of foreign components, resulting in temporary halts on production. (2) The cost of production has increased due to actions taken to evade/circumvent sanctions. (3) The equipment produced is of lower quality due to the inability to obtain the best available components. (4) As a result, the frequency of attacks has decreased both on the front line and throughout the territory of Ukraine.

The impact of sanctions in more detail can be analyzed by the main categories of military equipment. Also, it should be noted that it is hard to distinguish the effect of sanctions from that of physical damage or expenditure.

Tanks and other armored vehicles: production temporarily halted, now resumed but with a shortage of high-tech components.

Uralvagonzavod, the sole producer of tanks, temporarily halted production in March 2022 due to sanctions that caused a shortage of components, particularly bearings. However, production has since resumed and the plant is now operating on a 24-hour basis. In order to overcome a shortage of skilled workers, the company has implemented 12-hour shifts. Uralvagonzavod plans to address the issue of component shortages by collaborating with China to manufacture bearings. Turkey was the top supplier of bearings to Russia in 2022.

Despite Russia's large stock of tanks (10,200 according to the Military Balance 2022), the main focus of Uralvagonzavod is not production of new tanks, but rather the modernization and repair of existing stock. The shortage of Sosna-U multi-channel thermal imaging gunner's sights has been noted in the Russian press, as the majority of tanks are not equipped with this type of technology.

The production of infantry fighting vehicles (IFV) faces a similar situation, as Kurganmashzavod, the main producer, now operates on a 24-hour basis. The Military Balance 2022 estimates that there are around 8,500 IFVs in storage.

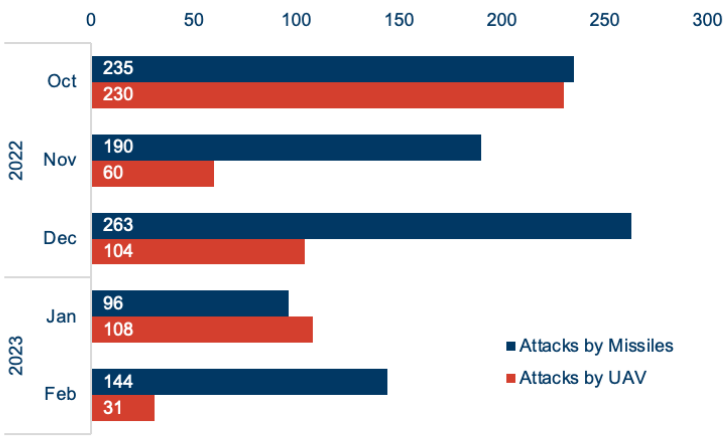
Artillery: a shortage of artillery shells caused a reduction of artillery usage on the frontline by 75%.

The Russian army is currently experiencing challenges with the supply of artillery shells. During the summer of last year in the Donbas region, the Russians were firing between 40,000 to 50,000 rounds per day. While they are now using fewer artillery rounds, they still have some reserves, although some of them are outdated and less reliable. There has been a significant reduction in artillery usage, estimated to be around 75%.

According to the Institute for the Study of War (ISW), the constraints on munitions are likely to impede the Russian forces from maintaining a high operational pace in the Bakhmut area and elsewhere in Ukraine in the near term. Depletion of ammunition stockpiles in Belarus also indicates that a large-scale Russian offensive from Belarus in the coming months is unlikely.

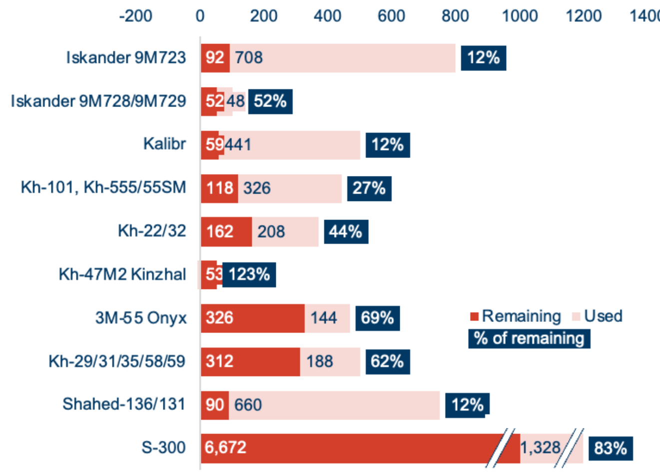
Cruise missiles, unmanned aerial strike vehicles: Russia struggles to increase production, and there are signs of low stocks. There has been a noticeable decrease in the intensity of attacks on critical infrastructure, civil, and residential buildings on the territory of Ukraine (See Figure 27 and Figure 28.)

Figure 27. Number of missiles and UAV used in attacks on Ukrainian residential buildings and critical infrastructure.



Source: Air Force Command of UA Armed Forces

Figure 28. Estimated remaining missiles and UAV in Russia.



Source: Ministry of Defense of Ukraine

Russia is currently attempting to increase its military production and is reportedly looking to purchase missiles from North Korea and cheaper drones from Iran.

It is concerning that some missiles are used in improvised ways, such as the S-400 (S-300) missiles which are designed for air defense but used for ground targets in terrorist attacks on the territory of Ukraine. This is most likely due to a serious shortage of cruise missiles in Russia's arsenal. It has also been observed that Russia used cruise missiles produced in the fourth quarter of 2022 and first quarter of 2023 during its attacks, which suggests low stocks. According to the Ministry of Defense of Ukraine, as at January, 3, 2023, there were only 12% of Kalibr missiles and 27% of Kh-101/Kh-555 cruise missiles in comparison with February, 2022 stocks.

Arms export. By the end of November 2022, Russian arms exports for 2022 reached a total of $8 billion. This indicates a significant decline in exports compared to 2021 ($14.6 billion). Out of total arms exports for 2022, 40% were attributed to aviation and 30% to arms for ground forces and navy.

However, the impact of sanctions has been mitigated by several factors. First, the number of countries in the sanction coalition is limited leaving Russia options to acquire military equipment. Despite Russia's significant dependence on high-tech components produced in Western countries, some countries with substantial military capabilities have proved willing to provide support to Russia, such as Iran, from whom Russia imports attack drones, Belarus, which provides tanks and armored vehicles, and North Korea, which supplies artillery ammunition. There is also the risk that China may lend support to Russia. Also, in past years, Russia has exported military equipment to countries including India, Algeria, and Egypt, which may now agree for Russia to repurchase its own military equipment, either in full or to acquire components that may be subject to sanctions.

Second, and related, trade flows have shifted with regard to important components/dual-use goods. There are some cases of increased trade in high-tech goods with countries outside of the sanction coalition. For example, despite sanctions, Russia has been able dramatically to expand imports of semiconductors and integrated electronic circuits. The value of Chinese semiconductor exports to Russia jumped from $200 million in 2021 to well over $500 million in 2022 – an increase greater than total semiconductor supplies from the US in 2021[6].

[6] Effectiveness of US sanctions targeting Russian companies and individuals, Free Russia Foundation

Despite the fact that, because of sanctions, Russia can only access older generation Chinese chips, they can also be used in military production, and fully cover demand.

Third, Russia possesses significant long-term stocks. It is assumed that Russia stores stocks for production for long-term contracts, which have a duration of approximately 3 years. These stocks may delay the impact of sanctions. But considering that production needs are much higher at the time of war, Russia may consume the stocks created for long-term contracts over the whole 2023-2025 period in 2023.

Finally, smuggling and other “gray schemes” are boosting Russian imports. Several cases have been discovered which testify to the existence of sanction evasion schemes. These cases include: using intermediaries in other countries, which are not under sanctions; restructuring companies to hide entities or individuals under sanctions; purchasing components for further assembly inside Russia instead of buying finished sanctioned goods. Lack of controls over sanctions and difficulties in detecting end users of the components resulted in Western components being found even in newly produced Russian military equipment[7]. Also, there is evidence of sanction evasion by Iran, since Western components were found in drones supplied to Russia[8].

Proposed Next Steps

We believe that significant room remains to strengthen restrictions on military and dual-use goods as Russia has been able to circumvent some of the measures imposed so far – and as, clearly, the country’s ability to wage its brutal war in Ukraine remains. In our view, the main focus should be on enhanced information sharing and sanction enforcement, supplemented by additional, more comprehensive, restrictions on Russia’s military-industrial complex.

Stepped-up military and dual-use goods sanctions should include:

1. **Improve cooperation among sanction coalition countries to coordinate measures on military and dual-use goods.** This should include combining different countries’ sanctions lists, including harmonized definitions of what goods are considered “dual-use”, and applying restrictions consistently across jurisdictions.

2. **Enhance export controls via strengthening of the export licensing process, increasing enforcement capabilities, and implementing stricter end-use rules** to ensure that dual-use goods do not end up in the wrong hands. Stricter KYC procedures are also needed, with high attention to products under sanctions that are sold to countries “friendly” to Russia, e.g., Georgia, Kazakhstan etc., which may act as intermediaries for Russian companies. A unified database with all sanctioned entities and institutions, including their related parties (subsidiaries, family members etc.) is one possible solution that could significantly strengthen export controls.

3. **Increase pressure on companies outside of the sanction coalition’s immediate jurisdiction that supply Russia with military and dual-use goods.** This includes imposition of secondary sanctions, i.e., the threat of disconnection from the U.S. and European financial systems, on all entities that continue to supply the Russian military sector.

4. **Extend the dual-use goods list** to include any civil goods which are, in fact, used as part of military operations, e.g., notebooks and software for drone operations etc.

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[7] Western Electronics At The Heart Of Russia’s War Machine, RUSI
[8] Dissecting Iranian Drones Employed By Russia In Ukraine, Conflict Armament Research

5. **Impose comprehensive sanctions on the Russian and Belarussian military-industrial sector**, including all subsidiaries and legal entities in every holding (e.g., Rostec) within the sector to complicate the procurement of imported components needed for weapons production.

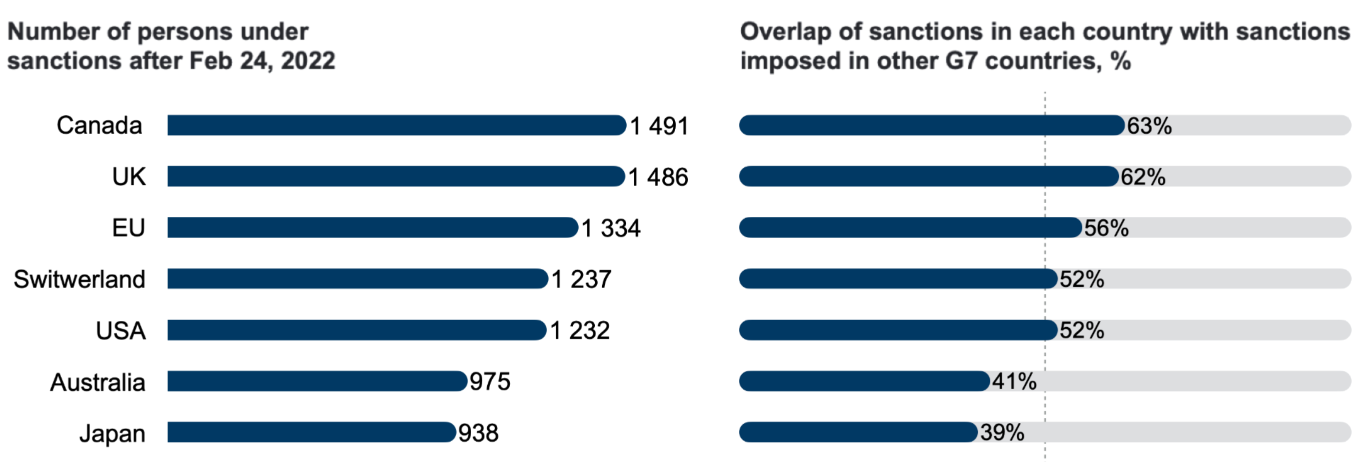
6. **Stop producing for and/or providing high-tech product features to Russia.** This includes critical elements of Russia's satellite navigation system Glonass. Furthermore, GPS continues to be used in Russian military equipment. We propose, at a minimum, that use of GPS by the Russian military should be restricted in areas – e.g., border regions in Belarus and Russia and occupied territory in Ukraine – where it may be used in support of Russia's effort to invade Ukraine.

Section 4.2: Individual Sanctions

Summary of Existing Measures

So far, sanction coalition countries have imposed measures on a total of 2,366 individuals[9], who hold positions in the Russian government, the country's defense and military sectors, as well as state-owned and private enterprises of strategic importance (see Figure 29). In most cases, asset freezes and travel bans were applied to the sanctioned persons. While the number of individuals is considerable, they only represent a minority of the 6,968 targets identified by the Russian Anti-Corruption Foundation (ACF)[10] or the 12,000 targets identified by the International Working Group on Russian Sanctions, in collaboration with the Ukrainian National Agency for Corruption Prevention (NACP)[11]. Importantly, these ACF and NACP lists do not include family members of sanctioned individuals or elected officials of Russian political parties - in particular United Russia - which support the war.

Figure 29. Personal sanctions imposed by country, and overlap with other countries



Source: NAPC

In addition, some EU countries and the UK have canceled special visa regimes which granted Russian investors a passport or right of abode in return for a certain level of investment. For instance, the UK closed the Tier 1 Investor visa route[12], while the European Parliament called on member states to suspend such programs

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[9] Meaning unique persons sanctioned at least by one country from the list (USA, EU, UK, Canada, Switzerland, Australia, Japan) according to *NACP*.
[10] See https://acf.international/list-of-war-enablers
[11] See https://drive.google.com/file/d/1NzzeTahuHB69oCgb1UBbPhi8WDzGGRaU/view
[12] Tier 1 (Investor) of the Points Based System - Policy Guidance

for Russians[13], and Ireland and Portugal abolished golden visas for non-Europeans[14]. Further, the issuance of travel visas for Russians has become much tougher. In September, 2022 the EU, Switzerland and Norway suspended the visa facilitation agreement, while the EU has allowed member states bordering Russia to apply their own restrictions, without waiting for an EU decision – and Poland, Latvia, Lithuania, Estonia, Finland & the Czech Republic have exercised this right.

Impact Assessment

Personal sanctions can have a powerful impact, especially when applied to individuals who split their assets, residences, and families between Russian and the West, as many of the Russian elite do. So far, tens of billions in private assets have been frozen, largely as a result of personal sanctions (see Table 5). For instance, 23 Russian billionaires who ranked among the world's 500 wealthiest people had a combined net worth of $339 bn on Feb. 23, 2022 – a year later they have lost $67 bn from their collective fortunes, a 20% drop.

However, in more general terms, the effect of individual sanctions is often relatively weak for several reasons: (1) Family members and close proxies generally remain unsanctioned; thus, sanctioned individuals can mitigate the impact of restrictions by transferring assets to them. (2) Personal sanctions are not applied uniformly, so many individuals are sanctioned by one of Ukraine's allies but not the others. (3) A large number of senior officials with authority and consequently personal responsibility for Russia's war in Ukraine have not yet been sanctioned. Importantly, there is a lack of comprehensive understanding regarding the exact amounts of Russian assets located in sanctions coalition countries – and to what extent these are truly frozen or immobilized.

Table 5. Information on frozen Russian assets

The data in the table does not include assets of the Bank of Russia.

Country	Frozen assets, $ bn	Frozen assets bn in national currency	Data of last public update
EU (by countries)			
Austria	1.91	€1.8	11-22-2022
Belgium[15]	3.54	€3.5	02-24-2023
Bulgaria	0.012	€0.011	12-16-2022
Cyprus	0.091	€0.086	04-21-2022
Czech Republic	0.011	€0.011	12-16-2022
Estonia	0.022	€0.021	11-23-2022
Denmark	0.005	€0.005	08-08-2022
Finland	0.21	€0.20	01-21-2023
France	1.38	€1.30	11-22-2022
Germany	5.64	€5.32	02-18-2023

[13] Texts adopted - Citizenship and residence by investment schemes - Wednesday, 9 March 2022
[14] Portugal joins clampdown on 'golden visas' for wealthy | Financial Times
[15] *On 24 February 2023, the Belgian Treasury announced that it had frozen 58 billion euros in Russian assets. This amount includes various financial assets such as money and stocks, located in the country and owned by Russian individuals and entities, such as politicians, oligarchs, banks, and companies, who were imposed with financial sanctions. And some of them were introduced after Russia's annexation of the Crimean peninsula in 2014.*

Hungary	0.98	HUF350	12-16-2022
Ireland	1.91	€1.80	11-22-2022
Italy	2.44	€2.30	12-09-2022
Latvia	0.09	€0.08	09-06-2022
Lithuania	0.02	€0.02	04-12-2022
Luxembourg	2.65	€2.5	12-09-2022
Netherlands	2.81	€2.65	09-29-2022
Poland	2.99	13 PLN	07-20-2022
Portugal	0.019	€0.018	12-02-2022
Slovakia	0.005	€0.005	12-16-2022
Spain	1.06	€1	11-22-2022
Sweden	0.03	€0.03	04-21-2022
EU (Total reported)	*23.0*	*€21.1*	*02-17-2023*
USA[16]	1.05	$1.05	08-31-202
UK	22.07	£18.39	11-10-2022
British Overseas Territories and Crown Dependencies	9	$9	10-26-2022
Switzerland	8.3	₣7.5	12-01-2022
Liechtenstein	0.21	₣0.20	08-18-2022
Kazakhstan	0.02	$0.02	05-23-2022
Canada	0.09	$0.12 CAD	12-23-2022
REPO (Russian Elites, Proxies, and Oligarchs Task Force)	58	$58	02-24-2023

Source: Information available in open media-sources. *For detailed information, please, see Appendix 1.*

Proposed Next Steps

Stepped-up individual sanctions should include:

1. **Impose personal sanctions on every senior Russian government official**, including all members of the highest categories – likely at least the top four ranks of the table of ranks.[17]
2. **Impose personal sanctions on every member of the supervisory and management boards at every state-owned enterprise with significant assets**, for instance in excess of 100 billion rubles.
3. **Impose personal sanctions on all officials working in occupied Ukrainian territories** – or any officials visiting this territory without permission of the Ukrainian government –, including officials of

[16] *This indicator shows only public communication about the frozen assets of Russians or their property. The US has not publicly communicated how much money Russians and Russian companies have frozen in total. The USA, along with Japan and Australia, are REPO members - their frozen funds will be included in the general REPO reports.*
[17] https://tinyurl.com/5n7ytnhk

Russian banks and telephone companies which facilitate Russia's usurpation of Ukrainian sovereign territory, and Rosatom officials issuing orders at ZNPP.

4. **Introduce additional scrutiny clearance procedures for Russians applying for visas**, to prevent regime supporters, such as members of Russian political parties who support the war, from securing entry to sanction coalition countries.
5. **Complete suspension of golden visa regimes for Russians.**
6. **Tighten the sporting boycott** to keep citizens of the aggressor states out of international competitions in all sports - particularly the Olympics.
7. **Sanction family members of targeted persons and related parties who can be used as proxies to transfer assets and escape sanctions.** Establish the principle in legislation that sanctions apply to any nominee owner, and that a new owner must demonstrate independence from the previous owner for any transfer of ownership to frustrate seizure of assets.
8. **Make regulatory changes to ensure transparency of ownership**, including, crucially, disclosure of information on the ultimate beneficial owners of property. Furthermore, legislate to remove any poorly-drafted privacy provisions which are being abused to evade justice.

Section 4.3: Technology Sanctions

Summary of Existing Measures

Although Russia has advanced capabilities in some areas such as space and nuclear, and a strong scientific base, it is also in many respects technologically dependent, including in areas such as electronics, computing, as well as advanced high-precision products and machines. Technology sanctions aim to exploit this dependency, and constrain the Russian economy by denying Russia access to imports of key technology.

Some measures in the field of technology sanctions were introduced following Russia's annexation of Crimea in 2014, including bans on high-technology oil field equipment and military technology, although there is some evidence that the latter was easily circumvented. Since Russia's full-scale invasion of Ukraine last year, a broad range of further technological sanctions – restrictions on the export to Russia of high-technology products – was imposed by a number of countries to deprive Russia's military and industrial complex from access to high-end and critical technical equipment and components. The restrictions target various sectors, including defense, military-industrial, mining, oil-refining, chemical, mechanical engineering, aviation and space, shipbuilding, automotive, telecommunications and IT.

Restricting Russia's access to modern technology was achieved by direct bans on the export of certain products or by establishing stricter export control measures, which practically made it impossible to export such products to Russia. Sanction coalition countries cooperated to limit the export, supply, transfer, and delivery of several types of goods/technologies to Russia, including i) aviation and space-related items; ii) goods and technologies designed for oil refining; and iii) goods and technologies meant for use on Russian-flagged vessels, and those intended for maritime navigation by Russians or for use in Russia.

The US has been particularly active in implementing technological sanctions against Russia and limiting the export of high-end US technologies to Russia. The Bureau of Industry and Security (BIS) under the US Commerce Department has expanded the license requirements for Russia under the Export Administration Regulations (EAR) to include all items on the Commerce Control List (CCL) due to Russia's aggression in

Ukraine. License applications for exports to Russia are reviewed with a "policy of denial," with limited categories available for export on a case-by-case basis. In addition, BIS has created a special “foreign direct product” (FDP) rule that applies to Russia, which requires a US license for export to Russia for foreign-made products classified under an Export Control Classification Number (ECCN) if they are a direct product of US-origin software or technology controlled under CCL or if they were created using equipment that is a direct product of such technology or software. The Russia FDP Rule covers a wide range of foreign-made products, including electronic components, computers, telecommunications equipment, production equipment, encryption software, and aircraft parts that could be supplied to Russia from other countries.

Impact Assessment

While there has been a major impact in some sectors, notably automotive production (down 45% vs. 2021), the overall impact has not been dramatic yet, with, for instance, industrial production as a whole just down 0.6% vs. 2021, and oil production marginally higher. So far, there has been little sign of disruption from a lack of computer software upgrades. Partly, this reflects the buffer of inventories, which implies the impact of these bans is set to rise as inventories are used up. However, it also reflects a technology sanctions regime which was initially too narrow – and Russia’s success in circumventing sanctions. For instance, in aviation, where an overwhelming share of planes flown by Russian carriers is of Western origin or heavily dependent on Western components, Russia has cannibalized some planes to keep others in the air and has extended maintenance intervals to keep the aviation industry operating. It has likely also been able to acquire some spare parts through third countries.

Proposed Next Steps

To make technology sanctions bite further, we propose the sanction coalition move to a special licensing regime for all technology exports to Russia and Belarus, or to Russian or Belarusian companies operating in third countries, or to countries – such as Turkey, Georgia, Armenia, Azerbaijan, Kazakhstan, Uzbekistan – which are designated as posing a high risk that they will resell any products to Russia. And to give the sanctions teeth, the coalition should launch high-profile infringement proceedings against sanction breakers.

Stepped-up technology sanctions should include:

1. **Define a comprehensive list of high-technology exports which will be subject to a special licensing regime** for all sales to Russia or Belarus, or to Russian or Belarussian companies, such as Rosatom or Rosneft, operating in third countries.
2. **Share information among sanction coalition countries, in particular the EU, and coordinate action to ensure more effective enforcement.** Pursue high-profile enforcement actions against companies who knowingly sell high-tech goods to Russia in circumvention of the sanctions regime.

Section 5: Make Russia Pay

So far, the focus of sanctions has been on measures which deprive Russia of resources and capabilities. Now, with the first year anniversary of the full-scale invasion behind us, we think it is time to use sanctions to support Ukraine directly. Specifically, we propose to confiscate frozen Russian assets, and use them to finance Ukrainian compensation and reconstruction.

We recognise that the legal position is not straightforward. Russia's attempt to annex territory undermines the basic principles of international order, and its deliberate targeting of civilian infrastructure and vicious treatment of the civilian population are clear breaches of human rights, the rules of war and the responsibilities of occupying powers. Still, the doctrine of sovereign immunity and Russia's UN Security Council veto give it powerful weapons to frustrate attempts to secure justice. Moreover, Russia is likely to seize assets in return, as it already appears to be doing with the assets of some foreign companies in Russia.

However, we see three strong reasons for starting to transfer assets from the custody of national authorities to an international body charged with financing compensation to Ukrainians displaced, killed or injured by the war, and with financing reconstruction of Ukrainian infrastructure and property. It is just, Russia has no path to a legal victory – and Russia has the weaker hand, and will have to swallow the settlement in the end.

Justice. As recognised by the UN General Assembly Russia committed an act of aggression towards Ukraine in violation of Article 2 (4) of UN Charter, which is considered "a cornerstone of the United Nations Charter". On several occasions, the International Court of Justice and International Law commision found that prohibition of aggression, genocide, crimes against humanity, and torture constitute preamptory norms of international law. Further, the principle of full reparation for internationally wrongful acts is firmly established and undisputed in international law. Further, international law contains obligations *erga omnes*, i.e., obligations of a state towards the international community as a whole. According to the International Court of Justice, *erga omnes* obligations include 'the outlawing of acts of aggression, and of genocide,...'. Pursuant to the U.N. Articles on Responsibility of States for Internationally Wrongful Acts, any state can initiate action to hold Russia responsible if "the obligation breached is owed to a group of States" or the "obligation breached is owed to the international community as a whole." Taken together, we believe G7 countries have sufficient grounds to take countermeasures against Russia in the form of confiscation of CBR funds.

Legal Wrangle. Russia has an impressive track record of defying decisions of international courts and tribunals. Further, the Russian Constitution expressly stipulates that decisions of international organizations shall not be implemented on the territory of Russia, if their interpretation contradicts the constitution. Therefore, we do not believe, absent political change, that Russia will be ready and willing to comply with any binding decision on reparations to Ukraine. However, we also do not believe that Russia will be able to win a case in international courts, given, for instance, Putin's free assertion that Russia is seeking to annex Ukrainian territory and is intentionally targeting civilian infrastructure as part of that effort.

Weaker Hand. Third, like all problems of international order, this issue is likely to be settled by a political deal which creates obligations. And here, Russia has by far the weaker hand, with its declining population, a stagnant economy dependent on the sunset industries of oil and gas, and an aging and out-of-touch dictator with no clear succession. If Russia wants a better future and to resume trade with the advanced economies, it will have to compromise and accept responsibility for making good the damage it has wrought in Ukraine.

Evolution of immunities doctrine to address gross violations of international law. Russia is not a party to the European Convention on Immunities of States and has no binding treaty with the US concerning state immunity. Therefore, sovereign immunity relations between Russia and the G7 nations are governed by customary international law, which is composed of two elements: 1) consistent and general international practice by states, and (2) *opinio juris* – an acceptance of the practice as law by the international community. We maintain that emerging state practice, such as legislative developments in Canada, will lead to formation of new rules of customary law, which would limit immunities protection when it comes to the most serious violations of international law by states. Similarly, the modern international law of sovereign immunity has evolved over time from a doctrine of absolute protection, to the current approach which does not grant protection when a state acts in a commercial capacity, and has narrowed the scope of sovereign immunity.

Moreover, we see confiscation before legal clarity as necessary for two reasons. First, Russia under the Putin regime will never agree, and so can delay any decision indefinitely if Russian consent is required. Second, confiscation will help to bring the war to an end, by making clear that Ukraine has the resources to prevail.

We would expect disbursements to be partly to citizens whose lives have been impacted by Russia's invasion, and partly to finance reconstruction of infrastructure destroyed by Russia. This should have a major macro impact. For instance, paying $1,000 to every Ukrainian – or every Ukrainian displaced by the war – would involve a disbursement of $20-40 bn. With destroyed infrastructure conservatively estimated by our KSE colleagues at $138 bn, there is also clear scope for large spending on reconstruction. An injection of $20 bn, 10% of Ukrainian GDP in 2023 would provide powerful support to the economy and budget, and help stabilize the currency.

The critical condition for this action is that the funds are spent effectively and in line with the policy intention of financing compensation and reconstruction, which will require international oversight, and strong and robust reporting and accounting – adequate to fully satisfy a future court that the funds have been spent in accordance with the appropriate purpose.

Summary of Measures

Within the first week of the full-scale invasion of Ukraine, the G7 countries froze foreign-exchange reserves of Russia's central bank within their respective jurisdictions. It is estimated that around $300 bn of CBR reserves are immobilized at this point in time.

Recently, there have been moves in some countries towards making frozen Russian assets available to Ukraine. In June 2022 Canada adopted amendments to the Special Economic Measures Act ("SEMA") to allow Canadian authorities to forfeit frozen property of foreign states and nationals, provided such assets are used for: "(a) the reconstruction of a foreign state adversely affected by a grave breach of international peace and security; (b) the restoration of international peace and security; and, (c) the compensation of victims of a grave breach of international peace and security, gross and systematic human rights violations or acts of significant corruption.' In another development, in December 2022, President Biden signed into law the Consolidated Appropriations Act 2023, which allows the transfer of the forfeited property of a "person subject to sanctions and designated" by the U.S, who seeks to avoid the sanctions. The first example of such transfer concerned the Russian oligarch Malofeev, who was charged with evasion of sanctions: after authorization by the Attorney General, around $5.4 mn are to be transferred to Ukraine.

There have also been some developments in Europe. In January 2023 the Estonian government proposed legislation allowing confiscation of the assets of Russian entities and nationals[18]. Then, in mid-February, the EU proposed to launch an ad-hoc group to find solutions to use frozen Russian assets for the support of Ukraine[19], while on 16 February 2023 the European Commission announced it will require EU member states to report any Russian central bank assets held by their financial institutions[20].

While these developments are encouraging, there are no instances yet of confiscation of Russian state-owned assets, and legislative and policy developments in the sanctioning countries, except for Canada, revolve primarily around confiscating the private assets of sanctioned Russian nationals or entities.

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[18] https://news.err.ee/1608872648/in-confiscating-frozen-russian-assets-estonia-may-follow-canadian-example
[19] https://www.reuters.com/world/europe/eu-seeks-use-frozen-russian-funds-rebuild-ukraine-2023-02-14/
[20] https://www.centralbanking.com/central-banks/reserves/7954521/eu-countries-must-report-bank-of-russia-assets-commission-says

KSE Proposal: Legal Framework for Confiscating CBR Funds, First Disbursement this Year

We call upon G7 nations to adopt legislation allowing them to override sovereign immunities in exceptional cases and confiscate the assets of states liable for gross violations of international law. We propose to stipulate that action can be taken against states, which: (i) are found to have violated the UN Charter by the UN General Assembly; and (ii) have had sanctions imposed by the nation adopting the legislation.

We propose that, similarly to the Canadian model, confiscation be initiated by a competent government authority and subject to judicial review. Upon receiving the affirmative decision of a competent court, the assets are to be transferred to a fund for compensating state and/or nationals of the state, which is an aggrieved party under the relevant UN General Assembly resolution. We further propose that the legislation – which will ideally be consistent across Ukraine's allies – should stipulate requirements for such a fund in terms of governance, oversight, and accountability.

We further call on the G7 to commit to first disbursement of compensation and funding for reconstruction, financed from confiscated Russian assets, to be implemented in the course of 2023.

Summary: 10 Point Sanctions Package

We propose an ambitious new 10 point sanctions package to constrain Russia, consisting of:

Pillar One: Constrain Russia

1. Oil. Ratchet down the crude oil price cap from $60/bbl to $30/bbl, and the product price caps by a similar amount, while strengthening enforcement, to put the Russian budget, economy and currency into a fragile state, with a wide deficit, a deep contraction and a chronically weak currency.

2. European Gas. Close the European Union to direct sales of Russian gas, preventing supplies into the EU from the Turkstream pipeline and ending Russian LNG sales to Europe. This will leave supply of gas through Ukraine as the sole remaining channel for sale of Russian gas to Europe.

3. Other exports. Japan, South Korea, and Taiwan to follow the European example and ban Russian coal, oil, and LNG, with targeted and time-limited exemptions if required. Extend the price cap mechanism to nitrogen fertilizer made with natural gas, only allowing it to be sold to Ukraine's allies if it is consistent with a gas price under $175/mcm (gas equivalent of $30/bbl), or via the Togliatti-Odessa pipeline. Extend bans to further goods, including mined uranium, diamonds, iron ore, timber, steel products, and fish.

Pillar Two: Isolate Russia

4. Oil and Gas industry. Now that the West is no longer directly dependent on Russian energy, impose full sanctions on all Russian oil and gas companies, including Rosneft, Gazprom, Gazpromrneft, Zarubzhneft, Surgutneftegaz, Lukoil, Tatneft, Novatek, Transneft, and Sibur.

5. Mining Industry. Full sanctions on the main companies in Russia's metals and mining industry who are key suppliers to the Russian military, notably MMK, NLMK, Evraz, Severstal, Mechel, Rusal, and Uralsteel.

6. Finance. Full sanctions on Gazprombank, MTS, Rosselkhozbank, Credit Bank of Moscow, Bank Dom RF, Bank St Petersburg. ECB to require Unicredit and Raiffaisen to exit Russia by year end.

7. Military. Full sanctions on every Russian and Belarussian legal entity in the military-industrial complex to complicate the smuggling of the components needed for their weapons.

8. Technology. Impose a licensing regime for all high-technology exports to Russia/Belarus or to Russian/Belarussian companies, and strengthen enforcement.

9. Personal. Sanctions (asset freeze and visa ban) on every senior Russian government official and senior SOE official, as well as on officials (e.g. CBR, Rostelekom, Rosatom) working in the occupied territories or who visit sovereign Ukrainian territory without permission of the Ukrainian government. Maintain the ban on Russian/Belarusian athletes participating in international sporting competitions, in particular the Olympics.

Pillar Three: Make Russia Pay

10. Confiscate and Disburse. Confiscate frozen Russian assets, both state and private, and start to spend them on compensation and reconstruction, with international oversight and enhanced governance and reporting. Target initial disbursement of compensation payments to Ukrainians impacted by the war this year.

Survey on "One Year of Sanctions"

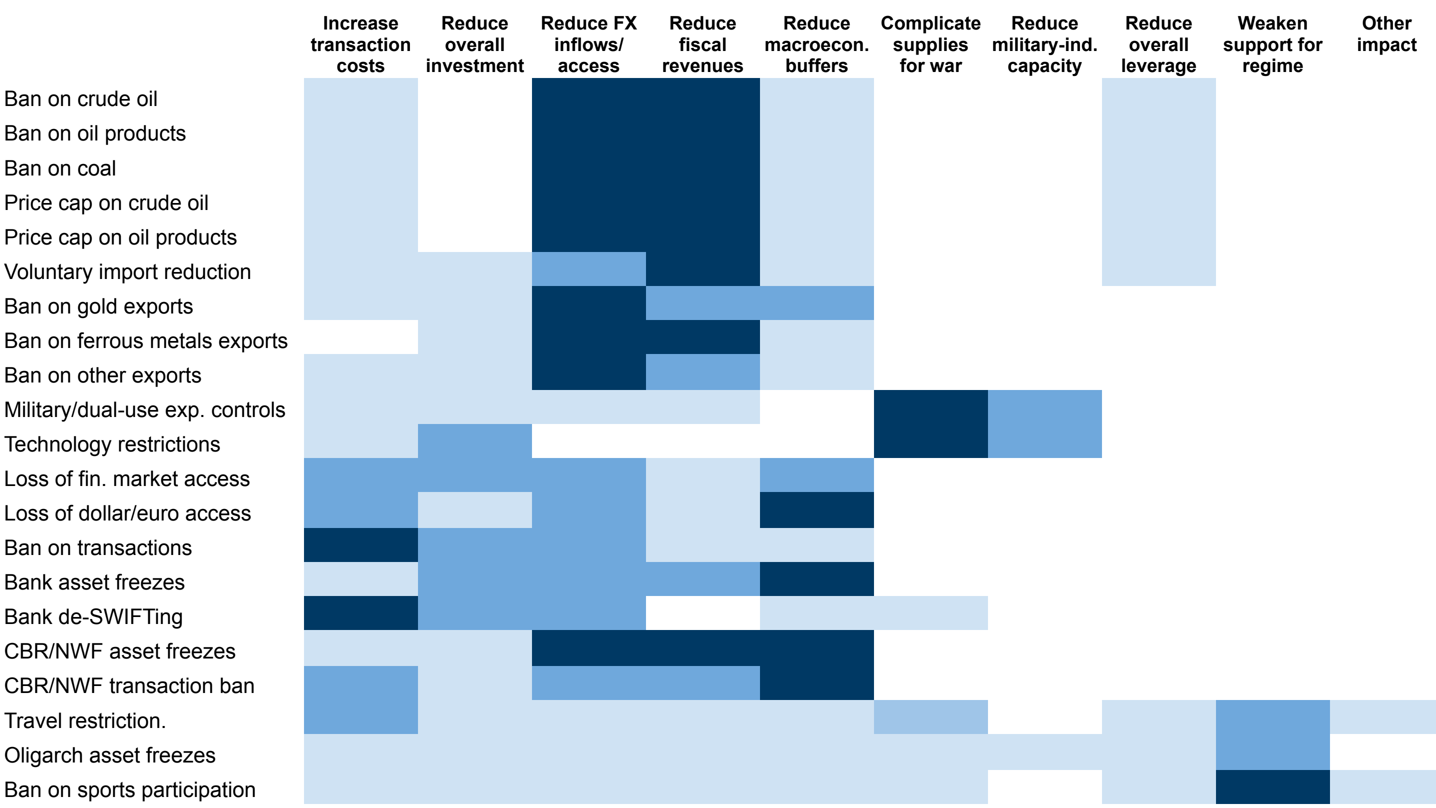
Members of the International Working Group on Russian Sanctions participated in a survey to evaluate the sanction coalition's efforts over the past year. Here, we present some key findings.

Objectives of Sanctions

We asked participants to provide input on the objectives of several specific sanctions in the areas of energy exports, non-energy trade, the financial sector, and other topics. Table 6 below shows the frequency of their responses for each individual sanction:

- **Restrictions on Russian exports** are intended to reduce inflows of foreign exchange into the country as well as limit fiscal revenues and, thus, funds available for Russia's war of aggression in Ukraine.
- **Export controls and technology restrictions** target military-industrial capacities more directly.
- **Financial sector sanctions** are intended to weaken Russia's economy in a broad way by reducing investment, FX inflows, as well as macro buffers and by increasing transaction costs. Restrictions on the central bank and Russia's oil fund target macro buffers while also reducing access to foreign currency reserves and weakening fiscal revenues.
- **Individual sanctions** are fundamentally different as they seek to limit internal support for the regime.

Table 6: Evaluation of the objectives of sanctions



Note: colors denote relative frequency of mentions by sanction.

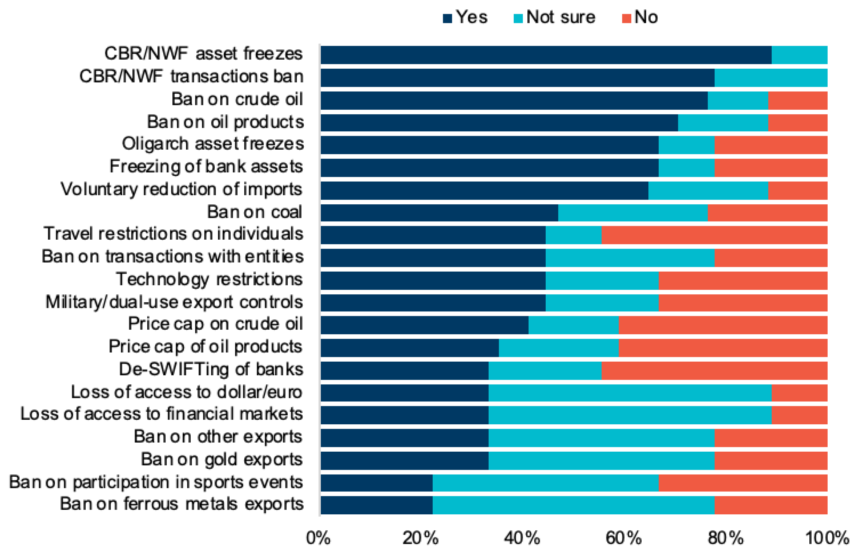
Overall Effectiveness of Sanctions

Next, we asked participants to evaluate sanctions with respect to overall effectiveness (see Figure 30). **Measures seen as most effective include those targeting Russia's central bank (CBR) and oil fund**

(NWF), embargoes on Russian crude oil and oil products exports, the freezing of assets of banks and oligarchs, as well as the voluntary reduction of energy imports from Russia, mainly those of natural gas.

On the other end of the effectiveness spectrum, survey participants place restrictions on Russian non-energy exports as well as several measures targeting the country's financial system, including banks' loss of access to financial markets and foreign currency and their de-SWIFTing. The evaluation on the G7 price caps on crude oil and oil products is effectively split. Interestingly, those measures targeting Russia's military industrial capacities more directly – export controls and technology sanctions – also rank in the middle.

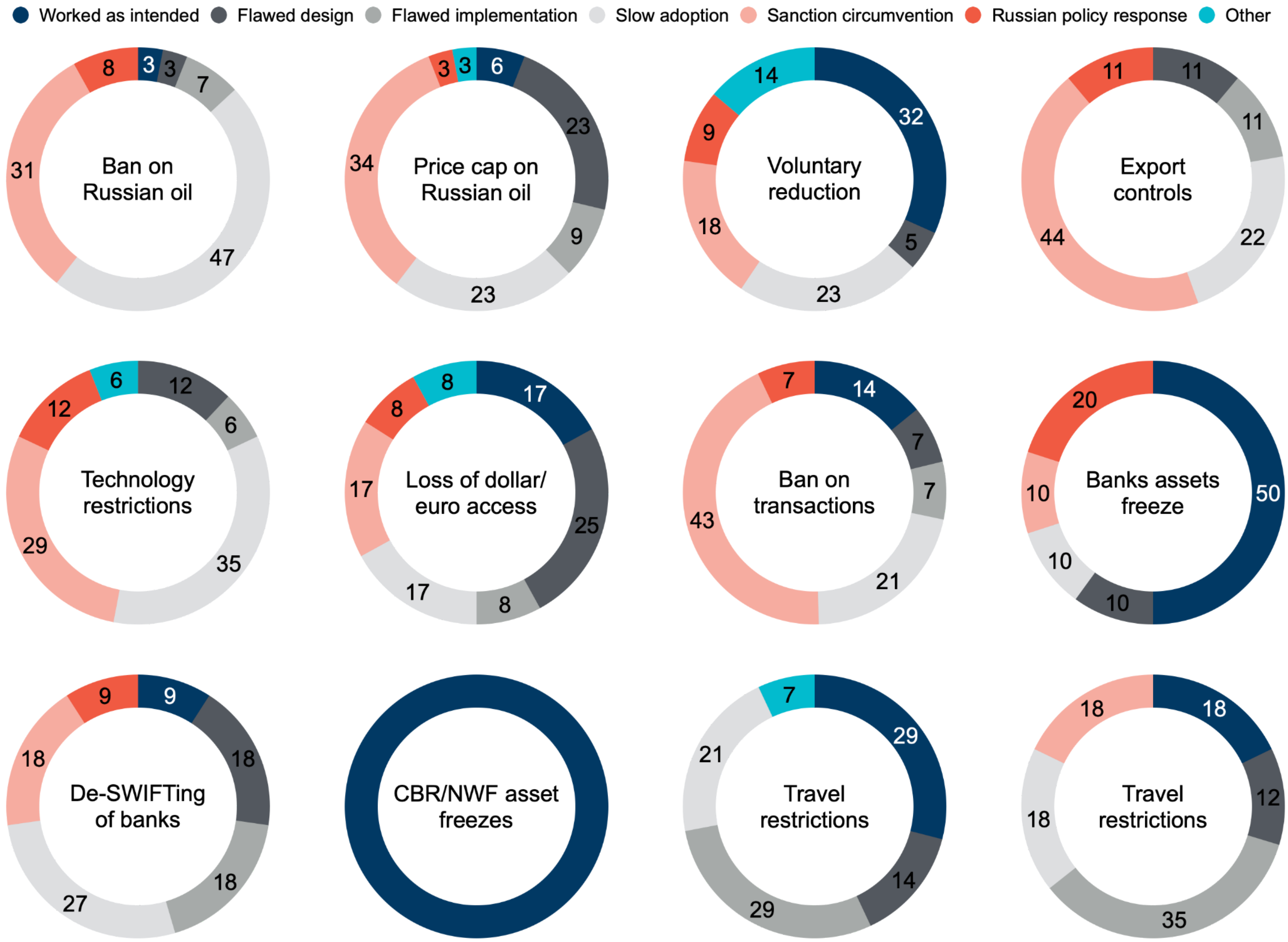
Figure 30: Evaluation of the overall effectiveness of sanctions, share of responses



Reasons for Potentially Limited Effectiveness of Sanctions

We also asked survey participants to specify the reasons for their evaluation of sanctions' effectiveness. Below is a selection of the results for some important measures (see Figure 31). Response options broadly fall into three categories: measures worked as intended (blue), deficits in the design and/or implementation of sanctions (red), and sanctions circumvention/effective policy response (yellow).

Figure 31: Detailed evaluation of sanctions, share of responses



Appendix 1. Information on freeze and seizure of Russian assets for the benefit of Ukraine.

The data in the table without taking into account the frozen assets of the Central Bank of Russia.

			Source: Information available in open media-sources		
	Country	Frozen assets $ bn	Frozen assets bn in national currency	Data of last public update	
EU (by country)	Austria	1.91	€1.8	11-22-2022	Has frozen $265,7 mln of Russian big businessmen assets - Austrian Press Agency (254 mln euro on 97 accounts linked to Russian oligarchs) (May 22). The Austrian authorities have frozen the assets of 1.5 bn euros belonging to Russian oligarchs since the beginning of the war in Ukraine (June 26) 200 Russian Bank Accounts Frozen in Austria. This means that assets of one billion euros are affected. (October 5) New figures reveal the top asset-freezing states are Belgium (€3.5bn), Luxembourg (almost €2.5bn), Italy (€2.3bn), Germany (€2.2bn), Austria and Ireland (€1.8bn each), France (€1.3bn), and Spain (more than €1bn) (November 22).
	Belgium[21]	3.54	€3.5	02-24-2023	Assets of €2.7 billion are frozen in Belgium, which consists of assets belonging to 877 people and 62 entities on the European sanctions list and subject to freezing measures (April 5) Belgium had asset freezes worth 10 billion euros. The amount includes €2.7 billion frozen in bank accounts and €7.3 billion in frozen transactions, Belga News Agency reports. (April 21) Belgium froze €50.5 bn of assets. Includes money and shares owned by 1,129 individuals and 110 companies from the rf. (Some of them were introduced after Russia's annexation of the Crimean peninsula in 2014, but most were introduced after the invasion of Ukraine in February) (August 2) Belgium leads the way with 3.5 billion euros blocked, followed by Luxembourg with 2.5 billion, Italy with 2.3 billion and Germany with 2.2 billion, according to EU statistics seen by AFP Friday (December 9). The Treasury has frozen 58 billion euros in Russian assets. That is the highest amount of all European member states. In addition, 191 billion euros in Russian financial transactions were also blocked. In total, these measures affect 1,789 Russian companies or citizens who are on the blacklist. (February 24, 2023)
	Bulgaria	0.012	€0.011	12-16-2022	According to the latest table, for example, in Italy 2.3 billion, in Germany 2.2 billion, in Austria almost 1.8 billion euros, the local authorities got their hands on Russian and partly Belarusian interests, while in Bulgaria it was 11.3 million, in the Czech Republic 10.8 million, in Slovakia amounted to 4.9 million euros (December 16).
	Cyprus	0.091	€0.086	04-21-2022	Cyprus froze €86.3mln, with some additional assets noted for which an estimated value was not given (April 21)
	Czech Republic	0.011	€0.011	12-16-2022	The Czech Republic froze Russian assets worth about 40 million euros (April 24) Czech Republic has frozen almost €41 mln worth of Russian assets in the country (May 23)

[21] On 24 February 2023, the Belgian Treasury announced that it has frozen 58 billion euros in Russian assets. This amount includes various financial assets such as money and stocks, located in the country and owned by Russian individuals and entities, such as politicians, oligarchs, banks, and companies, who were imposed with financial sanctions. And some of them were introduced after Russia's annexation of the Crimean peninsula in 2014.

					According to the latest table, for example, in Italy 2.3 billion, in Germany 2.2 billion, in Austria almost 1.8 billion euros, the local authorities got their hands on Russian and partly Belarusian interests, while in Bulgaria it was 11.3 million, in the Czech Republic 10.8 million, in Slovakia amounted to 4.9 million euros (December 16).
	Estonia	0.022	€0.021	11-23-2022	Estonia has frozen tens of millions of euros worth of Russian assets subject to European Union sanctions. More than 90 % of Estonia's frozen assets are related to two Russian oligarchs - Andrei Melnichenko and Vyacheslav Kantor. The first owns the company Eurochem, which operates mainly in Sillamäe, and the second owns the company DBT in Muuga. "Specifically, the funds frozen in credit institutions, financial institutions, bank accounts are about 11.7 million euros in total. The second section is the funds in the frozen advance accounts of the Tax and Customs Board. We are talking about 8.4 million there." (November 23).
	Denmark	0.005	€0.005	08-08-2022	More than 5 million euros of Russian assets were frozen in Denmark. (Aug 8)
	Finland	0.21	€0.20	01-21-2023	Has at their disposal frozen Russian property of at least $79,5 mln (May 22). Over €80mln in Russian assets frozen in Finland (May 24) The Finnish authorities have seized assets of embargoed Russians for around 189 million euros. According to the Bailiff's Office, the seizures concern some dozens of entities on the EU sanctions list. Both individuals and communities are involved. There are two hundred different types of temporary or permanent confiscations in force right now. The spectrum of confiscated property is wide. This includes a large number of intangible assets, such as receivables, shares and money held in accounts. Entire properties, various industrial raw materials and means of transportation have also been seized. At the beginning of summer, it was estimated that about 80 million euros worth of Russian property had been seized by the state. The amount has therefore more than doubled during the summer (September 14) Finland arrested the assets of the Rotenberg brothers and the founder of Yandex (September 22) The Management of Debt Recovery is responsible for the freezing of assets in the country. Currently, the agency has frozen assets worth 187 million euros. This includes a diverse range of valuable property - real estate, stocks, cars, yachts, and airplanes (January 21, 2023).
	France	1.38	€1.30	11-22-2022	France has frozen 22 bn euros ($24 bn) worth of assets belonging to the Russian Central Bank (March 21) France so far had frozen - 150 mln euros on private citizens' bank accounts with French financial institutions in France - 539 mln euros worth of real estate on French territory, corresponding to about 30 properties or apartments (March 22). UPD: France Freezes 31 Luxury Properties Owned By Eight Sanctioned Russian Billionaires worth nearly $1 billion (Apr 14) France's Finance Ministry published a detailed list of Russian assets worth 23.7 billion euros which it has frozen since Russia invaded Ukraine on Feb. 24. Assets belonging to the Russian Central Bank, worth 22.8 billion euros, make up the bulk of the frozen assets. The list of assets also includes - 33 real estate properties with a combined acquisition value of 573.6 million euros, including a number of addresses in Antibes, Saint-Jean-Cap-Ferrat, and Saint-Tropez on the French Riviera, - 178 million euros in frozen banking assets were also listed, - three yachts worth more than 125 million euros, - six helicopters worth more than 60 million euros, - three works of art worth 7 million euros (April 21)

					The French authorities have already blocked 1.13 billion euros of assets belonging to Russian individuals, including more than 709 million euros of real estate, 205 million euros in freighters, yachts and helicopters, 195 million euros in financial assets and 23.5 million euros in works of art (May 17). The amount of frozen assets is about 1.2 bn euros, if do not take into account those belonging to the Central Bank (August 1) New figures reveal the top asset-freezing states are Belgium (€3.5bn), Luxembourg (almost €2.5bn), Italy (€2.3bn), Germany (€2.2bn), Austria and Ireland (€1.8bn each), France (€1.3bn), and Spain (more than €1bn) (November 22).
	Germany	5.64	€5.32	02-18-2023	Has frozen almost $149,6 mln in Russian assets (May 30). The German Finance Minister put the value of assets frozen by the country alone at €4.48 bn in mid-June (July 12). "Among those are central bank deposits, corporate shareholdings and other assets" Jun 15 Germany freezes €2.2 billion worth of Russian assets (October 29) Belgium leads the way with 3.5 billion euros blocked, followed by Luxembourg with 2.5 billion, Italy with 2.3 billion and Germany with 2.2 billion, according to EU statistics seen by AFP Friday (December 9). Less than a year after the start of the Russian war of aggression in Ukraine, assets totaling 5.32 billion euros have been sanctioned in Germany. This was announced by the Federal Ministry of Finance (February 18, 2023)
	Greece	0.0002	0.0002	12-09-2022	Greece is second to last with €212,201 (December 9).
	Hungary	0.98	HUF350	12-16-2022	As of November 25, Hungary has frozen 870 million euros, or about HUF 350 billion, in Russian assets (December 16)
	Ireland	1.91	€1.80	11-22-2022	Ireland has frozen bank accounts, as well as movable and immovable property of Russian individuals and legal entities under sanctions due to the war of the Russian aggressor country in Ukraine worth $1.8 bn (June 22). Ireland has frozen €1.72bn of Russian assets through sanctions (June 21). Ireland among top EU states to freeze assets with total of €1.8bn (November 22).
	Italy	2.44	€2.30	12-09-2022	Italian authorities seized a 530 million-euro ($580 million) superyacht owned by Russian billionaire Andrey Melnichenko; Italy's Finance Police have so far frozen over 700 million euros in Russian assets, (Mar 12) Italy has already frozen Russian assets worth more than 1.7 bn euros (June 22) The total value of assets seized so far in Italy from Russian oligarchs is more than 1.7 billion euros, according to an updated official list of the Guardia di Finanza.(October 3). Belgium leads the way with 3.5 billion euros blocked, followed by Luxembourg with 2.5 billion, Italy with 2.3 billion and Germany with 2.2 billion, according to EU statistics seen by AFP Friday (December 9).
	Latvia	0.09	€0.08	09-06-2022	Latvia has frozen the real estate of Russians for more than 100 million euros (April 6) Latvia has frozen 17.5 mln euros of Russian assets (April 21) The Ministry of Justice informs about current events regarding the applied sanctions in state-maintained registers on June 10, 2022.

					The Ministry of Justice has frozen 66 real estates; 87 vehicles; 1 air transport; 11 agriculture machineries; 1 water vehicle; 4 entities; 1 farm herd. In the context of sanctions imposed on Russia and Belarus by the European Union, approximately 80.2 million euros have been frozen in Latvian financial institutions (September 6)
	Lithuania	0.02	€0.02 $0.004n 0.00413 RUB	04-12-2022	Lithuania freezes 18.2 mln euros, $3.9 mln, 3.8 mln rubles under sanctions against Russia (April 12)
	Luxembourg	2.65	€2.5	12-09-2022	Luxembourg operators have frozen the assets of sanctioned Russian individuals and legal entities worth almost $4.5 bn (June 8). Luxembourg reveals it froze €4.267 bn of Russian assets since Ukraine invasion (June 9). Luxembourg operators have frozen the assets of sanctioned persons and entities amounting to nearly 4.267 billion euros. These are bank assets as well as transferable securities. So far, more than 1,100 people and 90 legal entities have been designated. (June 7) The European Union has frozen Russian assets worth 17 billion euros. Of these, 5.5 billion euros are in Luxembourg (November 8). This amount possibly contains reserve assets Belgium leads the way with 3.5 billion euros blocked, followed by Luxembourg with 2.5 billion, Italy with 2.3 billion and Germany with 2.2 billion, according to EU statistics seen by AFP Friday (December 9).
	Malta	0	0	12-09-2022	Malta, a country that has run a controversial "golden passport" scheme for wealthy investors including Russians, is at the bottom of the list, with €146,558 blocked (December 9).
	Netherlands	2.81	€2.65	09-29-2022	Netherlands frozen russian financial assets worth € 646.4 mln (June 14). Netherlands seized 26 yachts and 5 planes, with a total value of € 2 billion (the planes are worth around EUR 400 million; 26 superyachts worth 1.6 billion euros) (September 29)
	Poland	2.99	13 PLN	07-20-2022	Poland froze €34.5 million (April 21) Poland froze Russian and Belarusian assets worth almost 3 bn USD (July 22) Poland has managed to freeze PLN 13 billion (EUR 2.73bn) in assets related to the Russian and Belarusian regimes (July 20).
	Portugal	0.019	€0.018	12-02-2022	Portugal has frozen about €18 million in assets of people on the EU's Russian sanctions list (December 2).
	Slovakia	0.005	€0.005	12-16-2022	According to the latest table, for example, in Italy 2.3 billion, in Germany 2.2 billion, in Austria almost 1.8 billion euros, the local authorities got their hands on Russian and partly Belarusian interests, while in Bulgaria it was 11.3 million, in the Czech Republic 10.8 million, in Slovakia amounted to 4.9 million euros (December 16).
	Spain	1.06	€1	11-22-2022	Spain seizes 12 bank accounts, 3 yachts, 23 properties belonging to Russians (April 26) Spain has temporarily seized a Russian oligarch's $140m (£108m) yacht in Barcelona, as two sources said the vessel belonged to the head of Russian state conglomerate Rostec Sergei Chemezov (March 15). New figures reveal the top asset-freezing states are Belgium (€3.5bn), Luxembourg (almost €2.5bn), Italy (€2.3bn), Germany (€2.2bn), Austria and Ireland (€1.8bn each), France (€1.3bn), and Spain (more than €1bn) (November 22).

	Sweden	0.03	€0.03	04-21-2022	Sweden froze €28.8 mln (April 21)
EU (total)	EU (total)	23.0	€21.1	02-17-2023	Since the start of the Ukraine war nearly a year ago, the European Union has frozen €21.5 billion ($23 billion) in Russian assets, EU Commissioner for Justice Didier Reynders (February 17)
USA	USA[22]	1.05	$1.05	08-31-202	A $325 million superyacht tied to Kerimov (June 30). $90 Million Yacht of Sanctioned Russian Oligarch Viktor Vekselberg Seized by Spain at Request of United States (April 4) Airbus A319-115 with tail number P4-MIS with serial number 3133 registered in Aruba. P4-MIS is valued at approximately $90 million. (March 11) The United States of America has been authorized to seize a Boeing 787-8 aircraft and a Gulfstream G650ER aircraft owned and/or controlled by Russian oligarch Roman Abramovich. The Boeing, bearing tail number P4-BDL and manufacturer serial number 37306, is believed to be worth approximately $350 million. The Gulfstream, bearing tail number LX-RAY and manufacturer serial number 6417, is believed to be worth approximately $60 million. (June 6) United States Obtains Warrant for Seizure of Airplane of Sanctioned Russian Oligarch Andrei Skoch, Worth Over $90 Million (August 8) United States Obtains Warrant for Seizure of $45 Million Airplane Owned by Russian Energy Company PJSC LUKOIL (August 31)
United Kingdom	United Kingdom	22.07	£18.39	11-10-2022	British authorities freeze Russian assets worth €321 billion (April 6) The Royal Court of Jersey imposed a formal freezing order on “assets understood to be valued in excess of US$7bn, which are suspected to be connected to Mr Abramovich and which are either located in Jersey or owned by Jersey incorporated entities” (Apr 13) The UK freezes the assets of three Russian airlines about 60 million euros (May 19) The UK has meanwhile said it has frozen £500 billion (€583 billion) from Russian banks or businesses, some of them partly state-owned, with an additional £150 billion (€175 billion) of oligarchs and their family member's assets also frozen (May 10). From 22 February to 20 October 2022, a total of £18.39 billion in frozen funds were reported to OFSI as being held by or on behalf of persons designated under the Russia sanctions regime. (November 10)
	British Overseas Territories and Crown Dependencies	9	$9	10-26-2022	The Overseas Territories (OTs) have frozen Russian assets with a combined estimated value in excess of $9 billion. Examples include the Cayman Islands government who publicly reported that Russian assets with an estimated value of US $8.4 billion have been frozen. The British Virgin Islands (BVI) government has also publicly reported assets with an estimated value of more than US $400 million have been frozen to date (October 26).
Switzerland	Switzerland	8.3	₣7.5	12-01-2022	SECO, the government department responsible for handling sanctions, announced that Swiss authorities have so far frozen CHF6.7 billion ($6.84 bn) of assets belonging to sanctioned Russians. This represents a CHF400 mln increase since mid-May. The total of blocked assets includes 15 properties (July 8). As of 25 November, the total of frozen financial assets amounts to CHF 7.5 billion; 15 properties in 6 cantons are also blocked (December 1).

[22] This indicator shows only public communication about the frozen assets of Russians or their property. The US has not publicly communicated how much money Russians and Russian companies have frozen in total.
The USA, along with Japan and Australia, are REPO members - their frozen funds will be included in the general REPO reports.

Liechtenstein	Liechtenstein	0.21	₣0.20	08-18-2022	VP Bank, which is registered in Liechtenstein, has frozen the assets of Russian citizens and legal entities totaling 200 million Swiss francs (about $210 million). This is stated in the report of the credit institution for the first half of 2022 (August 18)
Kazakhstan	Kazakhstan	0.02	$0.02	05-23-2022	Due to sanctions $21.6 mln has been blocked on the accounts of Russian banks subsidiaries in Kazakhstan (May 23).
Canada	Canada	0.09	$0.12 CAD	12-23-2022	From February 24 to June 7, 2022, the RCMP reports that a total approximate CAD equivalent of $123,031,866.85 of assets in Canada have been effectively frozen and a total approximate CAD equivalent of $289,090,090.74 in transactions have been blocked as a result of the prohibitions in the SEMA Russia Regulations (June 9). From February 24 to August 9, 2022, the RCMP reports that a total approximate CAD equivalent of $122,303,625.94 of assets in Canada have been effectively frozen and a total approximate CAD equivalent of $290,714,849.93 in financial transactions have been blocked as a result of the prohibitions in the SEMA Russia Regulations (August 15). Since February 24, 2022, the RCMP reports that a total approximate CAD equivalent of $121,945,874.53 of assets in Canada have been effectively frozen and a total approximate CAD equivalent of $290,582,385.59 in financial transactions have been blocked as a result of the prohibitions in the SEMA Russia Regulations (November 7). Canada seized Abramovich's assets worth $26 million (December 19) Since February 24, 2022, the RCMP reports that a total approximate CAD equivalent of $122,245,984.50 of assets in Canada have been effectively frozen and a total approximate CAD equivalent of $292,256,439.13 in financial transactions have been blocked as a result of the prohibitions in the SEMA Russia Regulations (December 23).
REPO (Russian Elites, Proxies, and Oligarchs Task Force)	REPO (Russian Elites, Proxies, and Oligarchs Task Force)	58	$58	02-24-2023	At the end of June, an international sanctions task force said its members, including several EU countries, had blocked $30 bn in assets belonging to Russian oligarchs and officials. Also, REPO said its members, who also include the US, Canada, Britain, Japan and other allies, had immobilized $300 bn owned by the Russian central bank (June 29). The EU announced in early April that its Task Force had frozen assets worth €29.5 billion, including boats, helicopters, real estate and artwork, and blocked about €196 billion of transactions (June 29). In the year since Finance, Justice, Home Affairs, and Trade Ministers and European Commissioners launched the REPO Task Force, members have Blocked or frozen more than $58 billion worth of sanctioned Russians' assets in financial accounts and economic resources (February 24,2023).