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A GAME OF CAT AND MOUSE
HOW RUSSIA IS CIRCUMVENTING SANCTIONS

Iwona Wiśniewska
co-operation: Filip Rudnik

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CONTENT EDITORS
Wojciech Konończuk, Marek Menkiszak

EDITOR
Matylda Skibińska

CO-OPERATION
Tomasz Strzelczyk, Katarzyna Kazimierska

TRANSLATION
Magdalena Klimowicz

CO-OPERATION
Nicholas Furnival

CHARTS
Urszula Gumińska-Kurek

GRAPHIC DESIGN
OSW

DTP
Wojciech Mańkowski

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OSW

Centre for Eastern Studies
ul. Koszykowa 6a, 00-564 Warsaw, Poland
tel.: (+48) 22 525 80 00, info@osw.waw.pl
www.osw.waw.pl

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MAIN POINTS

- Over the past three years, the Western coalition has invested a significant effort, funds, and time to support Ukraine in its defence against Russian aggression. Due to the rising costs of the war, the economic sanctions imposed on Russia as part of the West's response to the invasion are increasingly destabilising the Russian economy, posing serious challenges for the Kremlin.

- The sanctions are having an effect – this is evident in sectors that serve civilian needs, which are unable to meet growing domestic demand. However, despite numerous challenges, Russian exporters, especially in the oil sector, have managed to find buyers outside Western countries. Consequently, they provide the state with a key source of foreign currency and still play a significant role in supporting the Kremlin's ability to finance the war.

- The West – particularly the European Union, which was Russia's largest trading partner until 2022 – has not shown sufficient determination in enforcing the sanctions. Russia still retains many avenues for accessing the goods and technologies it needs. While it is impossible to completely shut down all the channels used to circumvent restrictions, it is possible to limit this activity, raise the related costs for Russia, and increase delivery times. Efforts should therefore focus on improving the effectiveness of the sanctions regime.

- Future actions by the West should focus on three main areas: tightening the financial restrictions (this primarily refers to the EU) which have so far proven to be the most effective, including through the application of secondary sanctions against third-country entities that violate the financial restrictions; prioritising the implementation and enforcement of restrictions within the EU, especially by closing loopholes and reducing the number of supply channels for goods and technologies essential to Russia's arms production; and further reducing Russia's export revenues – particularly those generated by the oil sector – by combating sanctions evasion and fully eliminating the West's dependence on Russian raw materials.

- Although openly anti-Western states, such as Iran and North Korea, as well as China, which is the West's major rival, may be assisting Russia to evade sanctions for ideological reasons, other third countries are doing this for profit. Many of these countries – for example Turkey – derive their greatest economic benefits from cooperation with the West and are generally reluctant to take on the risks associated with enhancing their ties with Russia. Consequently, pressure from Washington and the European capitals on these states has largely been effective. Therefore, it is essential – primarily for the European Union – to intensify its efforts targeted at these countries, including expanding the use of secondary sanctions. As the US experience has shown, the mere possibility of imposing such measures can be an effective deterrent against engagement with Moscow.

- The Kremlin remains willing to finance the rising costs of the war, which now account for over 40% of the state budget, because it believes that the West's willingness to continue supporting Kyiv will end sooner than Russia's ability to fund its aggression. However, the Russian government is facing increasing difficulties in securing the necessary funds and is already being forced to cut spending on non-war-related areas, including social welfare policy. The situation on the global oil market poses another serious threat to Moscow's financial stability. According to the International Energy Agency, the oversupply of oil relative to demand is expected to continue in 2025, mainly due to increased production in non-OPEC+ countries (including the United States and Brazil), which could lead to falling prices. Russia's low level of government reserves means it has limited resilience to a drop in oil revenues. This makes it even more important for the West – especially the European Union – to step up their efforts to further restrict Russian exports, which could significantly hinder the Kremlin's ability to finance the war.

INTRODUCTION

In March 2022, 141 countries condemned Russia's invasion of Ukraine by voting in favour of a United Nations General Assembly resolution.[1] However, not all of these states took actions that visibly demonstrated their opposition to the Kremlin's aggressive policy. A mere 39 countries imposed economic restrictions targeting Russia's financial and technological capacity to wage war.[2] European Union members and the G7 nations, particularly the United States, the United Kingdom, Canada and Japan, have formed the core of the sanctions coalition. Most other capitals have sought to maximise the benefits of cooperation with Russia without openly clashing with the West. While governments that did not join the sanctions regime officially did not endorse the violations, they typically failed to act on their own to prevent these practices – only pressure from the initiators of the restrictions caused them to move to halt suspicious transactions and tighten supply routes to Russia.

In 2021, the countries that would later impose economic sanctions on Moscow accounted for nearly 55% of Russia's exports and around 50% of its imports primarily involving high-value-added and technologically advanced goods. The scope of the measures introduced by individual countries varied significantly, as did the determination of governments to implement and enforce them. The strictest restrictions were adopted by the United States, which, in addition to financial, trade and individual sanctions directly targeting Russian entities, also imposes secondary sanctions against third-country entities that fail to comply with US measures.

However, it is important to remember that the West's primary response to Russia's invasion was to support Kyiv, particularly in military terms. More than 50 countries, grouped together in the so-called Ramstein Group, committed to supplying Ukraine with military equipment and ammunition. In addition, some states – including EU members, the United States, and the United Kingdom – have provided financial assistance, helping to stabilise Ukraine's budget and supporting refugees. Aside from demonstrating opposition to the aggression, economic sanctions were intended to weaken Russia's military capability, thereby supporting Ukraine's defensive efforts.

1 Aggression against Ukraine: resolution / adopted by the General Assembly, United Nations, 2 March 2022, digitallibrary.un.org.
2 'Preventing Russian Export Control and Sanctions Evasion: Updated Guidance for Industry', European Commission, 24 August 2024, finance.ec.europa.eu.

However, the restrictions were not intended to lead to the collapse of the Russian economy, since this could have destabilising effects on the global economy and negatively impact the West as well. It was therefore crucial that the sanctions regime was aimed at inflicting damage on Russia's economy while minimising the negative consequences for the countries imposing the restrictions. Before the invasion of Ukraine, Russia ranked 11th globally in terms of nominal GDP, accounting for approximately 2% of the world economy. However, its position on certain commodity markets was significantly stronger. For example, Russia was the third-largest oil producer, responsible for about 12% of global output, and the second-largest gas producer, accounting for roughly 17% of global production. It was also the leading exporter of both resources. Additionally, Russia controlled nearly half of the world's uranium enrichment capacity and accounted for approximately 40% of global production of palladium, as well as 13% of titanium and platinum. Western countries, especially the European Union, were the primary market for Russian raw materials.

From the very beginning of the implementation of Western sanctions, the Kremlin has sought ways to circumvent them. Hundreds of investigative reports have surfaced, exposing entities involved in sanctions evasion. Numerous anomalies in trade statistics, including those compiled by the European Union, further confirm the challenges in enforcing these restrictions.

This report lists and describes the methods Russia uses to circumvent the restrictions imposed on it. Not all of these practices represent violations of sanctions, as some are aimed at avoiding so-called corporate boycotts, wherein international businesses distance themselves from cooperation with Moscow mainly for reputational reasons.

The study analyses three categories of restrictions: those imposed on imports to Russia, on Russian exports, and on the country's financial sector. It also examines the Kremlin's response to these measures. (OSW covered personal sanctions against Russian individuals, including billionaires, in March 2023, and the conclusions presented in that analysis remain valid).[3] The report outlines the consequences Russia faces due to the imposed restrictions and recommends actions that could enhance the effectiveness of the sanctions regime.

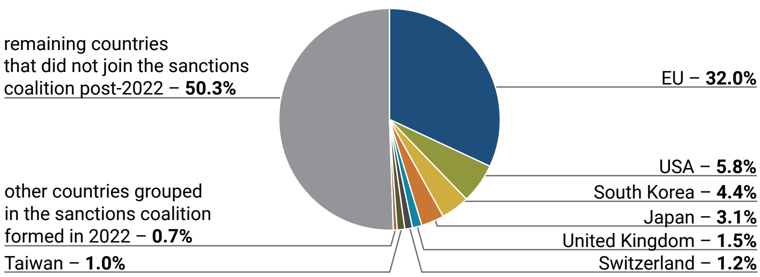
[3] I. Wiśniewska, '"The silence of the lambs'. Russian big business in wartime', *OSW Commentary*, no. 503, 28 March 2023, osw.waw.pl.

It is important to note that assessing the impact of economic sanctions on the Russian economy is challenging. Following the invasion of Ukraine, the Kremlin ceased publishing many datasets, including detailed foreign trade statistics. Russia's customs service – similarly to its central bank – now only provides aggregated figures on total export and import volumes. The geographic breakdown of Russian exports is available only by continent. Consequently, when analysing these issues one needs to refer to mirror data compiled by Russia's key trading partners. However, many countries – such as Kazakhstan and Kyrgyzstan – have also withheld detailed statistics on trade in specific goods.

I. WESTERN RESTRICTIONS IMPOSED ON RUSSIA'S IMPORTS

The imposition of import restrictions on Russia as part of coordinated action by the Western coalition was aimed at reducing the country's production capacity primarily in the defence and energy sectors, which are key to sustaining its war effort. These restrictions were intended to weaken Russia's economic potential, especially over the long term, with a particular focus on cutting it off from Western technologies. Consequently, the sanctions were designed to limit production capabilities – especially in the armaments industry – and to constrain Russia's ability to strengthen or restore its military potential in the future. Thus, the coalition placed particular emphasis on controlling dual-use goods. In 2021, the countries that decided to adopt regulations targeting exports to Russia accounted for approximately 50% of its total imports.

Chart 1. Geographical structure of Russian imports in 2021



Source: Federal Customs Service of the Russian Federation.

1. Introduced regulations

The Western coalition imposed numerous restrictions on its own exports to Russia, aiming primarily to cut the country off from the technologically advanced goods on which it was heavily dependent. Consequently, the sanctions targeted the supply of the machinery, equipment, technologies and services used mainly in the following sectors:

- **armaments** – the existing ban on the supply of military equipment and ammunition, already in place before the invasion, was expanded to include the components and machinery needed for arms production. At the same time, the countries grouped in the sanctions coalition coordinated their efforts and committed to halting exports of goods they considered particularly important to Russia's defence industry. The first joint version of the list of these items (Common High Priority Items) was compiled on

3 March 2022 (supplies to Russia of many of these products were already subject to EU and US restrictions at the time). In the following months, the list was expanded, and more countries committed to enforcing the ban. By December 2024, the sanctions coalition included 39 countries, and the list contained 50 product categories, each defined by 6-digit customs codes (Harmonized System, HS).[4] The list mainly includes technologically advanced goods such as electronic integrated circuits (as well as the machines and devices used to manufacture them), drones, optical equipment, communication technologies, and bearings. It is worth noting that the EU's arms and military equipment embargo, as well as restrictions on certain dual-use goods, has been in place since July 2014. The United States had not supplied arms to Russia since the Cold War, and after the annexation of Crimea in March 2014, Washington also prohibited US companies from cooperating with many Russian defence companies;

- **energy** – the sanctions included a ban on the supply of technologies necessary for gas liquefaction, as well as on the provision of services related to the development of oil and gas fields;

- **aviation and space** – the sanctions prohibited the supply of fuel, aircraft and helicopters, as well as parts for them, along with the provision of maintenance services;

- **transport** – the restrictions also banned the supply of railway rolling stock (including locomotives) and other means of transport, such as lorries, as well as their maintenance and servicing;

- **IT** – the sanctions prohibited the supply of electronic and optical components, cameras and production management software, as well as the provision of related services.

The embargo also covered the export of **luxury goods**, including watches, alcoholic beverages and jewellery.

In addition, **specific companies and entire investment projects** (such as Arctic LNG) were placed on sanctions lists, mainly from the armaments and energy sectors, along with the businesses cooperating with them. This resulted

[4] 'List of Common High Priority Items (Version of February 2024)', European Commission, 22 February 2024, finance.ec.europa.eu.

in the freezing of their assets in Western countries and a ban on Western entities performing transactions with them.[5]

The scope of restrictions continues to expand. To date, the European Union – previously Russia's largest trading partner before the invasion – has imposed sanctions on goods accounting for 50% of the value of its 2021 exports to Russia, amounting to nearly €48 billion.[6] These measures have been introduced across 16 sanctions packages, the most recent of which was adopted in February 2025. The United States, for its part, regularly adds new entities to its sanctions lists. What makes the European approach unique is the requirement for the regular renewal of sanctions, based on consensus, either every six months or annually, depending on the type of restriction.

2. Russia's methods for dealing with the restrictions

In response to the import restrictions imposed on Russia and to corporate boycotts, the country's authorities and businesses began seeking ways to gain access to the necessary goods, technologies, and services.

Evasion of sanctions related to the import of arms, military equipment, dual-use goods, and many key investment goods, components, machinery, and machine tools has involved not only private entrepreneurs but also the entire state apparatus. Deliveries of these goods were actively sought by Vladimir Putin and the Russian government, as reflected in numerous meetings with representatives of countries that did not join the sanctions regime, mainly China, Turkey, North Korea, and the Central Asian states. Russian intelligence services were engaged in locating suppliers and facilitating financial transactions, including through the use of cryptocurrencies.[7] Putin even tasked the Federal Security Service (FSB) with countering sanctions targeting major investment projects.[8]

With regard to consumer goods, the Kremlin's priority was to prevent a rise in public discontent due to shortages and high prices. Consequently, in the early

5 Council Regulation (EU) No 833/2014 of 31 July 2014 concerning restrictive measures in view of Russia's actions destabilising the situation in Ukraine, European Union, 31 July 2014, eur-lex.europa.eu.
6 'EU sanctions against Russia explained', Council of the European Union, consilium.europa.eu.
7 The FSB's activity in the area of cryptocurrencies and their trading platforms was covered, among others, by A. Berwick and T. Wilson. See *idem*, 'How crypto giant Binance built ties to a Russian FSB-linked agency', Reuters, 22 April 2022, reuters.com.
8 M. Humpert, 'Putin Asks FSB for Help to Avoid Western Sanctions as Rosneft Begins Construction on Vostok Oil Pier', High North News, 28 August 2024, highnorthnews.com.

months of the war, the authorities relied on the resourcefulness of citizens and businesses, while also supporting their adaptation to the new economic conditions and the restoration of supply chains, including through **legal changes**. To achieve this:

- In April 2022, the **duty-free allowance for goods brought into the country by individuals** was **doubled** to €1,000. In response, people began importing household appliances, electronics, and perfumes on a large scale – not only for personal use but also for resale;

- Depending on the market needs, **customs duties on selected goods** were **reduced** – sometimes to zero – including on electronic components, construction materials, pharmaceutical raw materials and paper.[9] This helped not only to fill supply gaps but also to curb price increases;

- On 30 March 2022, Russia legalised **parallel imports** – that is, the import of lawfully manufactured goods without the consent of the trademark owner. This move was a direct response to the withdrawal of foreign companies from the Russian market. Under this mechanism, only goods and brands listed in a decree by the Ministry of Industry and Trade of the Russian Federation may be imported.[10] Not all of them are subject to Western sanctions. Initially, the ministry's list included around 1,300 items (some of them involve selected car brands and components, electronics, household appliances, perfumes, while others are customs codes from the harmonised system covering entire product categories, such as furniture). The list has been updated regularly: new entries have been added, while others – under pressure from domestic producers facing strong competition – have been removed (e.g. certain clothing or alcoholic beverages; the automotive lobby is also pushing for cars to be excluded). According to Russian estimates, in the first two years of its operation, goods worth a total of around $70 billion were imported through this mechanism.[11] Parallel imports were conducted from or via countries that did not join the sanctions coalition – mainly China (where most Western brands have production facilities) as well as Hong

[9] 'Нулевые ставки ввозных таможенных пошлин на комплектующие для ручных электроинструментов будут продлены на один год', Eurasian Economic Commission, 16 August 2022, eec.eaeunion.org.

[10] Приказ Министерства промышленности и торговли РФ от 19 апреля 2022 г. N 1532, Гарант, base.garant.ru.

[11] С. Ермакова, 'Белоусов оценил объем параллельного импорта за два года в $70 млрд', Ведомости, 21 December 2023, vedomosti.ru.

Kong, Turkey (for clothing), and Singapore (for electronics).[12] By mid-2022, the United States had identified the countries that were most frequently used to circumvent trade restrictions imposed on Russia and Belarus. In addition to the four countries mentioned above, the list included Armenia, Brazil, Georgia, India, Kazakhstan, Kyrgyzstan, Mexico, Serbia, South Africa, Taiwan, Tajikistan, the United Arab Emirates (UAE), and Uzbekistan.[13] In many instances, goods were not necessarily physically transported through these countries, as Russian entities applied various mechanisms to bring them into the country.

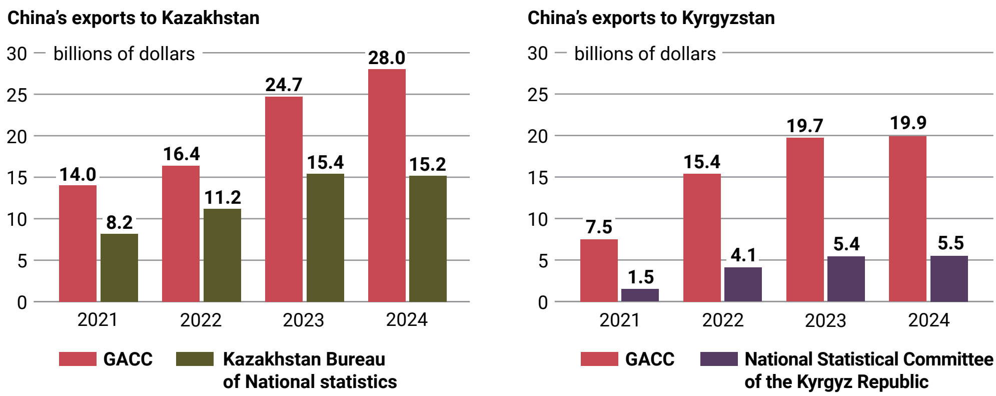
Initially, **third countries were primarily used as transit points for goods subject to sanctions**, allowing the true end recipient to be concealed and reducing logistics costs. Turkey – an important logistics hub in southern Europe – was seen as a key route, but in March 2023, under Western pressure, Ankara banned the transit of embargoed goods.[14] In Central Asia, where EU exports were typically routed through Russia, shipments officially declared for companies in Kazakhstan or Kyrgyzstan often remained in Russia.[15] However, this pathway became less functional after 2023, when the EU began tightening its sanctions and prohibited the transit of restricted goods – particularly dual-use items – through Russian territory. Nevertheless, China continues to use the Central Asian countries to conceal the delivery of sensitive goods to Russia. Transit states generally do not inspect the contents of shipments or verify their final destination. Consequently, data pertaining to trade between China and Central Asia often shows major discrepancies. This trend has intensified during Russia's ongoing war.

Companies based in third countries were also used for the re-export of sanctioned goods. These businesses, which are often owned or controlled by Russian entities, were established to import goods from the West and then deliver them to Russia (the number of companies with Russian capital grew rapidly in all of Russia's neighbouring countries following the invasion). This method of import, however, increases costs due to the need to pay taxes and customs duties in the intermediary country, as well as the possible requirement to obtain a local certificate of origin. As with transit, this process most commonly relies on Russia's neighbours and other countries offering convenient

12 'Из каких стран идет параллельный импорт в Россию?', Таможенный Транзит, t-transit.world.
13 'Великий тернистый путь', Коммерсантъ, 20 August 2024, kommersant.ru.
14 A. Michalski, I. Wiśniewska, 'Turkey: the transit of goods subject to Western sanctions face restrictions', OSW, 15 March 2023, osw.waw.pl.
15 'Luxury car smugglers bypass Russian sanctions via Finland', Yle News, 2 October 2023, yle.fi.

logistics, where authorities have not actively cracked down on such practices. The mechanism also involved shell companies registered in Western countries or Western businesses seeking profit or unaware of the sanctions regime. The sharp increase in trade between the mentioned countries, Western states and Russia, as well as numerous expert and journalistic investigations confirm that this model of import is in operation.[16]

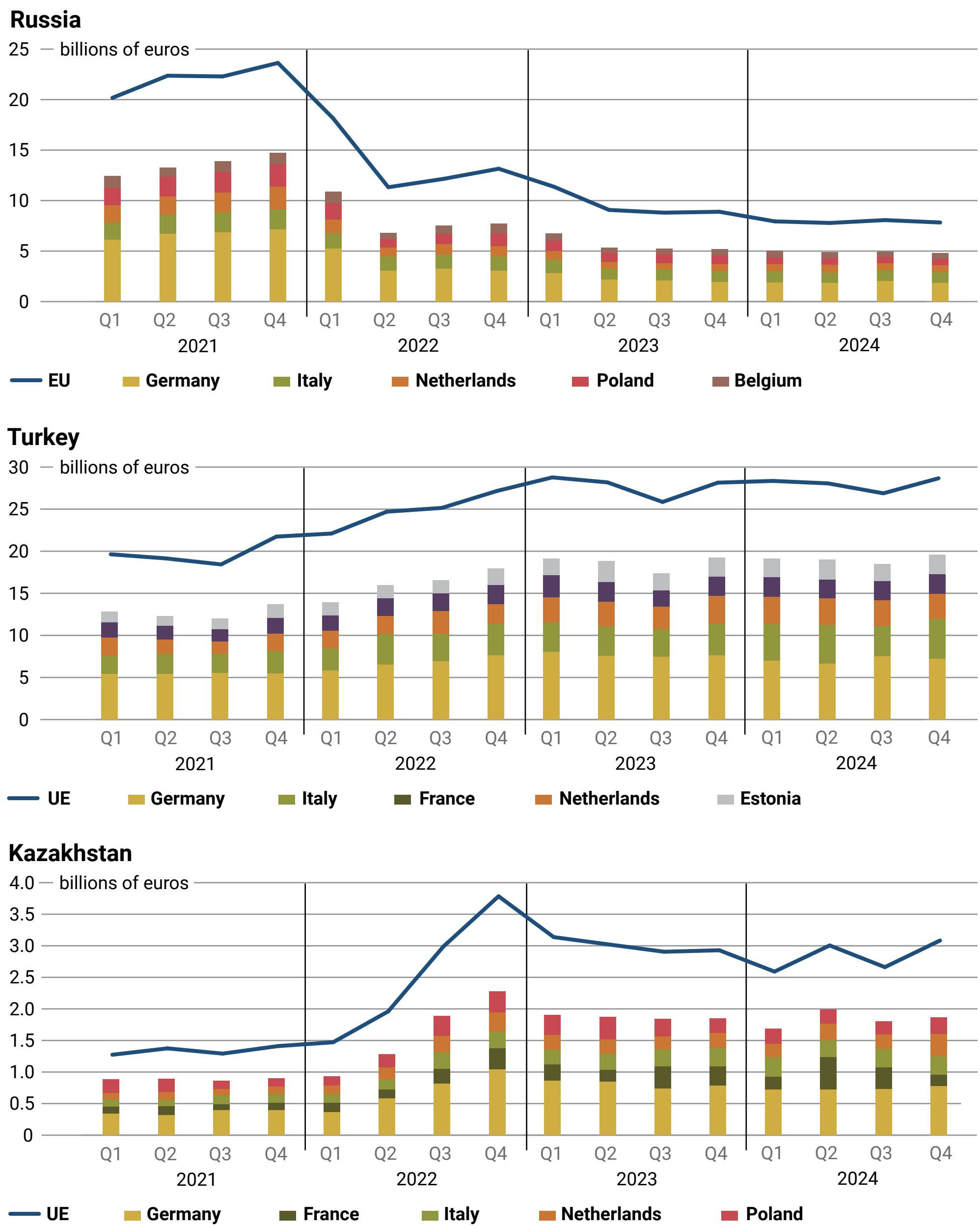
Chart 2. Volume of China's exports according to Chinese statistics and figures compiled by the statistical offices of Kyrgyzstan and Kazakhstan



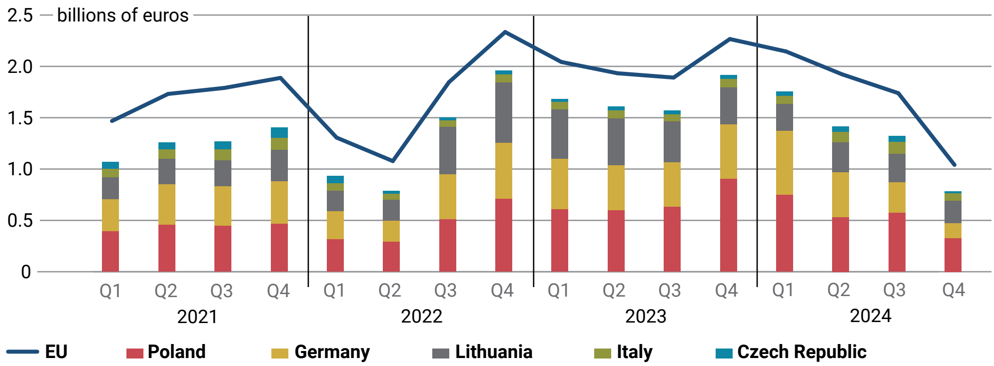
Source: national statistical offices and General Administration of Customs of China.

[16] M. Chupilkin, B. Javorcik, A. Plekhanov, 'The Eurasian roundabout: Trade flows into Russia through the Caucasus and Central Asia', *EBRD Working Paper*, no. 276, European Bank for Reconstruction and Development, February 2023, ebrd.com.

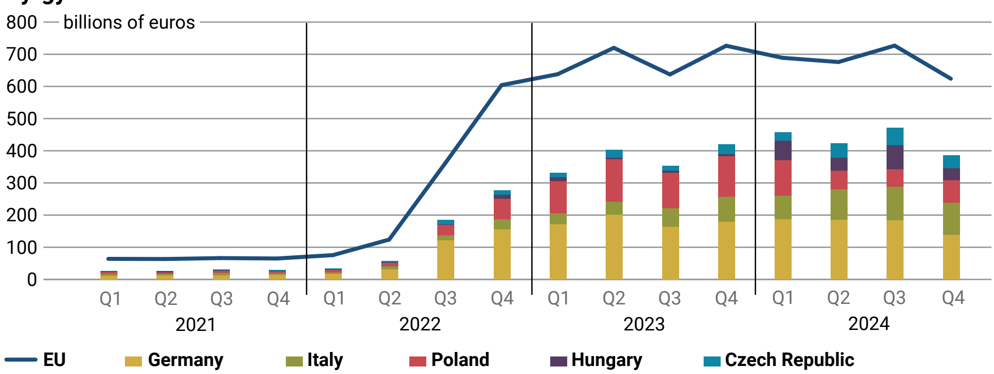
Chart 3. Exports to Russia and its neighbours from the European Union as a whole and five biggest EU exporters according to figures for 2024



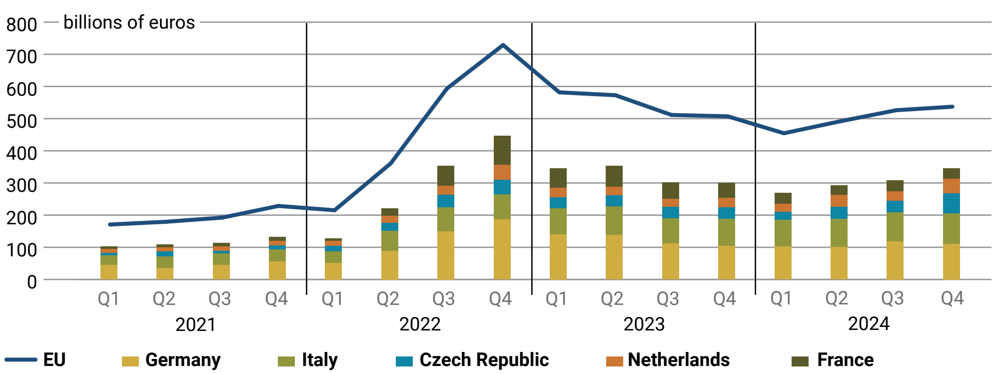
Belarus



Kyrgyzstan



Armenia

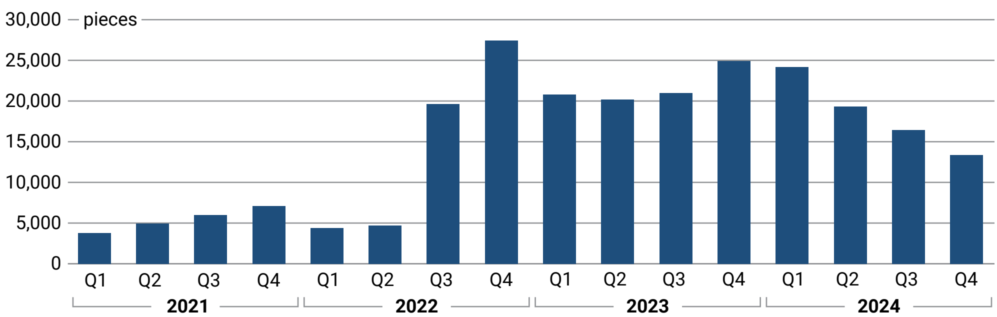


Source: Eurostat.

Chains of intermediary entities spanning several countries were often established, particularly for the delivery of sensitive goods, including dual-use items.[17] Through such arrangements, Russia has managed to import components from the United States and the European Union, which are later assembled into weapons used against Ukraine.[18] With regard to the EU, exports of goods from the Common High Priority Items list to destinations outside the sanctions coalition have increased most significantly to Southeast Asia, Turkey, the Gulf States, and Kazakhstan.[19]

Moscow also took advantage of the lack of harmonisation between the sanctions regimes imposed on Russia and Belarus. For example, the large-scale export of cars from the EU to Belarus, recorded until mid-2024, when the EU introduced a ban on such sales, was most likely intended primarily for the Russian market.[20]

Chart 4. Export of vehicles from the European Union to Belarus in 2021–2024



Source: Eurostat.

Fraudulent practices were also used in the classification of goods subject to sanctions or export controls under the Harmonized System (HS) **customs codes**. Restricted items were deliberately mislabelled under incorrect codes that were not on the sanctions lists.

17 C. Cook, M. Seddon, 'The shadowy network smuggling European microchips into Russia', Financial Times, 12 November 2023, ft.com.

18 A. Tkachova, 'Sanctions Against Russia: the Coalition Can Do Better – for Ukraine and Global Order', Just Security, 23 April 2024, justsecurity.org.

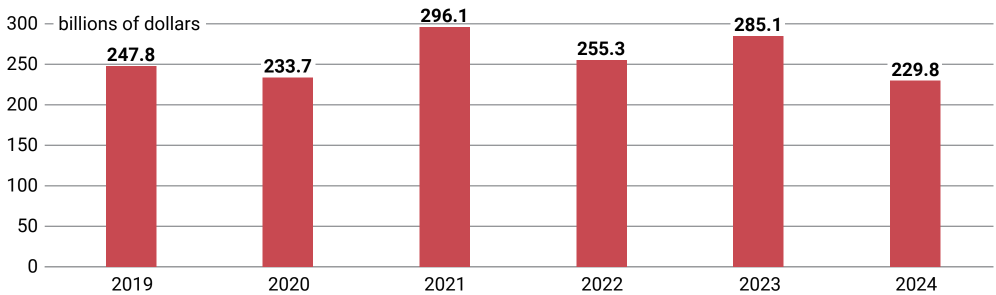
19 For more see B. Pierzchała, 'Finding Our Bearings: Tracking Circumvention of EU Dual-Use Sanctions to Russia, OSW data spotlight', osw.waw.pl/sanctions.

20 K. Kłysiński, S. Matuszak, 'Dynamic imports vs. dwindling exports. Belarus–EU trade in 2023', OSW, 11 March 2024, osw.waw.pl.

3. The consequences for Russia of the introduction of sanctions

Three years after the start of the full-scale war, the value of Russian imports has declined only slightly compared to pre-invasion levels – by approximately 3%. **However, the geography of those imports has shifted significantly**.

Chart 5. Russia's commodity imports in 2019–2024

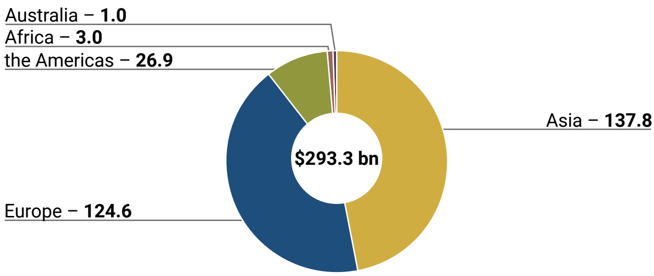


Source: Federal Customs Service of the Russian Federation.

After February 2022, Asian countries – particularly China – emerged as the largest suppliers of goods to Russia. According to the limited Russian statistics available, in 2024 nearly 68% of Russia's imports came from this region, with China alone accounting for almost 40 percentage points (detailed figures are unavailable). In 2021, the corresponding shares were 47% and 25 percentage points. However, Russia's current dependence on China is likely even greater, as some Chinese goods reach the Russian market through third countries.

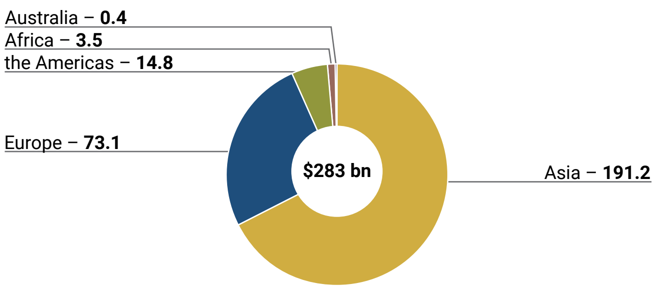
At the same time, imports from Europe declined significantly – from 42% in 2021 to 26.5% – primarily due to reduced trade with the EU. By mid-2024, the EU's share in Russian imports had fallen to around 14%, down from 32% in 2021. In contrast, Belarus's share nearly doubled, rising to almost 10% compared to 5% in 2021.

Chart 6. Geographical structure of Russia's imports in 2021 by continent



Source: Federal Customs Service of the Russian Federation.

Chart 7. Geographical structure of Russia's imports in 2024 by continent



Source: Federal Customs Service of the Russian Federation.

According to Eurostat, between 2022 and 2024 the European Union's exports to Russia declined by over €55 billion – approximately 60% – and have continued to fall year by year. Over the same period, exports from the United States and the United Kingdom to Russia dropped by more than 90%, although their overall trade volume with Russia was significantly smaller than that of the EU.

The significant weakening of economic ties with Russia has been significantly influenced by **corporate boycotts of its market**. International companies scaled back their operations there due to logistical and cross-border payment challenges, the risk of engaging with local entities (particularly the threat of secondary sanctions), and concerns over the impact on their reputation among Western customers – the main buyers of their goods and services. Research conducted since February 2022 by Yale School of Management shows that over 1,000 of the 1,500 tracked companies have reduced their cooperation with Russia, although fewer than 550 have fully exited the market.[21] Data from the Kyiv

[21] 'Over 1,000 Companies Have Curtailed Operations in Russia—But Some Remain', Yale School of Management, 6 March 2024, som.yale.edu.

School of Economics (KSE), whose database is synchronised with Yale's, indicates that only 467 foreign companies have completely withdrawn from Russia, while 1,345 have reduced their presence[22] (the discrepancies are due to differing methodologies – for example, in how a company is defined as 'foreign' or the number of companies tracked). The KSE monitors over 4,000 companies, of which 1,500 held assets in Russia at the time of its invasion of Ukraine.

The recovery of Russian imports over the past three years has been driven primarily by an increase in their value. While **the prices of imported goods have risen**, the **volume of most deliveries has remained below pre-invasion levels**.[23] Due to changes in the structure of imports (for example involving the replacement of previously imported parts and components for car or household appliance production with finished products) and a general shift towards lower-quality, less technologically advanced goods, import volumes must be analysed separately for each sector.

As a result of the measures taken, Russia was able to fairly quickly regain partial access to goods, although citizens generally had to adjust to **new brands – primarily from China** (covering a wide range of products from cars and smartphones to household appliances), and also from Turkey (especially in the clothing sector).

Research shows that in the first half of 2023, the value of deliveries to Russia of goods essential for arms production fell by around 40% (with volumes likely dropping even more sharply),[24] while the value of dual-use item deliveries declined by approximately 30%. At the same time, an increase in the value of luxury goods imports was recorded, most likely linked with rising prices in that category. The most difficult items to replace from Western sources included aircraft and space navigation instruments, voltage measurement and

[22] 'Stop Doing Business with Russia', KSE Institute 2024, leave-russia.org.

[23] А. Кнобель, А. Фиранчук, 'Предварительные итоги внешней торговли России в 2023 году. Товарооборот с Китаем', *Мониторинг экономической ситуации в России*, no. 10 (175), December 2023, iep.ru.

[24] Statistics compiled before the full-scale war indicated that the armaments sector was less than 10% dependent on imports however, this concerned the most technologically advanced segments, namely electronics and optical systems. In July 2015, following the introduction of the first sanctions targeting the arms industry, Russia's then deputy prime minister Yuri Borisov (responsible for armaments-related issues) mentioned 826 products from this segment, which required parts and technology imported from NATO states, the EU and Ukraine to be manufactured.

control devices, base stations for data transmission and reception, and integrated circuits. The value of these imports fell by over 50%.[25]

Sectors serving civilian consumers were most affected by the imposed restrictions. In contrast, the defence industry has experienced a dynamic increase in production.

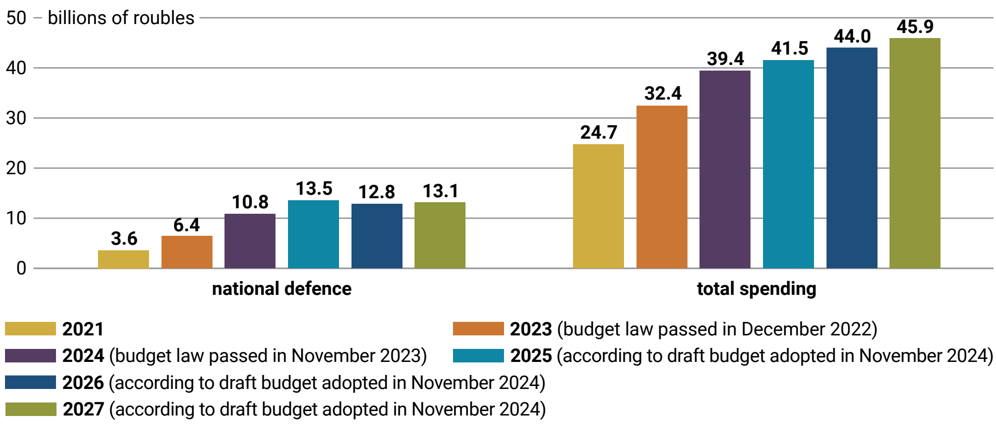
With regard to the **goods and technologies used by the defence sector**, which are subject to special supervision by the sanctions coalition, Russia has intensified cooperation with countries that did not join the sanctions regime, primarily China and, to a lesser degree, Hong Kong. Other countries, including Turkey and Malaysia, have also played a notable role.[26] Western products, in limited quantities, are still imported via neighbouring states, especially Kazakhstan, Kyrgyzstan, and Armenia.[27] However, analyses indicate that Moscow has not succeeded in fully replacing Western imports of these items, which have dropped to near zero due to sanctions.[28] Russia carefully conceals information about its domestic defence sector. According to SIPRI estimates, in 2022 and 2023 the value of imported arms and military equipment stood at approximately $130 million, less than the peak in 2014 (approximately $200 million), but significantly more than in the years immediately preceding the invasion, when such imports were minimal.[29]

Moscow's massive spending on armaments is driving rapid growth in the defence sector. In 2025, the Kremlin has planned to allocat around $135 billion for national defence (a budget category that includes state armaments procurement), amounting to nearly 33% of all government spending. The industry also benefits from preferential loans and off-budget support from Russia's National Welfare Fund. Although Russian statistics do not separately report on the defence industry, sectors considered part of it – those that publish data on the performance of specific production facilities – are showing double-digit growth. For example, in 2024, the production of 'other means of transport' (which includes ships, aircraft, spacecraft, and tanks) increased by

25 H. Simola, 'Latest developments in Russian imports of sanctioned technology products', *BOFIT Policy Brief* 2023, no. 15, 29 November 2023, publications.bof.fi.
26 N. Sher, 'Behind the Scenes: China's Increasing Role in Russia's Defense Industry', The Carnegie Russia Eurasia Center, 6 May 2024, carnegieendowment.org.
27 B. Pierzchała, 'Finding Our Bearings: Tracking Circumvention of EU Dual-Use Sanctions to Russia', *op. cit.*
28 I. Korhonen, H. Simola, 'High-priority battlefield items and television sets: How sanctions reduced Russians' access to goods', *BOFIT Discussion Papers* 2024, no. 3, econstor.eu.
29 'SIPRI Arms Transfers Database', Stockholm International Peace Research Institute, sipri.org.

nearly 30%, while the manufacturing of finished metal products (a category that includes ammunition) rose by over 35%. It is important to note, however, that defence enterprises operate outside the market economy. The prices of their products are set arbitrarily, and the companies are paid in advance from the state budget. Due to the military's enormous demand, it currently accepts everything the sector can produce, regardless of the quality of the equipment.

Chart 8. Russia's government spending on national defence



Data on actual spending on national defence in 2022 has not been made public.

Source: State Duma of the Russian Federation and Ministry of Finance of the Russian Federation.

The sectors most severely affected by sanctions – those producing goods for civilian use – continue to face serious challenges. This is particularly true of the **aviation industry**, which heavily depended on support from Western partners and has now been almost entirely cut off from cooperation with them. Replacing Western products with alternatives from countries outside the sanctions coalition has proven risky, and developing domestic production without access to Western technology remains extremely difficult. To keep aircraft operational, spare parts are often sourced by stripping components from other planes. The strain on the industry is reflected in the sharp rise in aviation incidents in the country – in 2023, the number of incidents more than tripled year-on-year. Domestic aircraft manufacturing has also been severely curtailed. From the start of the invasion through the end of 2024, only seven of the 108 Sukhoi Superjet 100 passenger planes promised in July 2022 were delivered. These were largely built using stockpiled Western components,[30] as well

[30] П. Аксенов, 'Полет вправо. Сможет ли Россия опять строить пассажирские авиалайнеры?', BBC News Русская Служба, 12 December 2024, bbc.com/russian.

as parts illegally imported via third countries, including China, Tajikistan, Kyrgyzstan, Turkey and the UAE.[31] Russia has also succeeded in acquiring complete aircraft, particularly small training planes (such as Cessnas), and also passenger jets (e.g. Bombardier). According to research by the Russian website Verstka, in 2024 at least 28 aircraft were imported into Russia, mainly via Turkey (11), but also from Western countries, including Germany and Sweden.[32]

Problems with the aircraft fleet and the reduction in international flights led to a decline of over 80% in Russian air freight volumes by 2023 compared to 2021, dropping to 1.7 billion tonne-kilometres. At the same time, Russian airlines carried only approximately 5% fewer passengers than before the invasion. This was primarily due to the support provided by foreign carriers, whose share in international passenger traffic increased to 40%, up from around 25% before the pandemic.

Russia's **liquefied natural gas (LNG)** sector has so far been unable to overcome the impact of losing access to Western technologies and the strict enforcement of sanctions by the US administration. Consequently, its further development now looks uncertain. In 2023, the energy company Novatek managed to complete the first (of a planned three) production lines under the Arctic LNG 2 project, though with a one-year delay. When sanctions were introduced, this line was already about 85% complete. However, the company is unable to export LNG due to difficulties accessing gas carriers,[33] as sanctions targeting the facility itself have effectively deterred foreign companies from cooperating on LNG transport and have complicated the acceptance of its output at terminals in third countries. The delivery of Russian-built LNG carriers has also been repeatedly delayed, following the withdrawal of international partners from cooperation.[34] Construction of the remaining two production lines is similarly behind schedule and, in the current situation, the economic viability of the entire venture is increasingly being called into question.[35]

31 D. Gauthier-Villars, G. Stolyarov, 'How Russia keeps its fleet of Western jets in the air', Reuters, 23 August 2023, reuters.com.
32 Д. Осинников, '«Можем помочь и привезти»: кто ввозит в Россию запрещённые санкциями самолёты', Вёрстка, 26 December 2024, verstka.media.
33 The construction of gas carriers in Russia ceased entirely once foreign partners from South Korea and France withdrew from these projects.
34 Т. Дятел, 'До танкеров, как до «Звезды»', Коммерсантъ, 30 October 2024, kommersant.ru.
35 F. Rudnik, 'The effects of the sanctions: the Russian LNG sector's problems', *OSW Commentary*, no. 578, 7 March 2024, osw.waw.pl.

Russia's automotive sector – one of the hardest hit by sanctions and corporate boycotts – collapsed following the invasion. In 2022, its production dropped by around 70%. Over the next two years, it partially recovered through cooperation with China, and by 2024, output was still down by 'just' 55% compared to three years earlier. However, the nature of production has fundamentally changed. Russia has effectively regressed to the 1990s, as Chinese companies agreed only to the assembly of vehicles fully manufactured in China, sometimes rebranded under Russian names. Previously, a few parts would be removed and reinstalled in Russian plants. Chinese companies have been reluctant to establish component factories within Russia. Local manufacturers such as AvtoVAZ, GAZ, and KamAZ have also resumed production, relying heavily on components imported from China.[36]

Consumer demand in Russia was largely met through imports of finished vehicles from China. According to Chinese customs statistics, in 2023 the value of cars exported to Russia rose roughly sevenfold year-on-year, reaching $11.5 billion, and in 2024 it increased by a further 30% to $15.2 billion. This made Russia the largest buyer of Chinese car brands and helped China to secure the position of global leader in car exports. At the same time, according to the industry analytics agency Autostat, the average price of a car in Russia doubled over the first two years of the invasion, reaching 3 million roubles in 2023, with prices continuing to rise in 2024. While the number of new cars sold in 2024 returned to pre-invasion levels (similar to 2021), the market saw a dramatic shift: Chinese brands accounted for over 60% of all new car sales (compared to just 9% in 2021), while domestic manufacturers held 30% of the market (up from around 25% three years earlier).

The remaining 10% of new car sales in Russia (approximately 160,000 vehicles) were imports from countries grouped in the sanctions coalition.[37] However, by the end of February 2024, South Korea introduced a ban on exporting passenger cars with engine capacities of over two litres to Russia, and Japan imposed similar restrictions (for engines over 1.9 litres) starting from September 2024. In 2023, both countries had already halted exports of luxury vehicles valued over $50,000. Until July 2024, these cars were primarily brought into Russia via Belarus, with intermediaries in Central Asian countries also playing a role. For particularly expensive vehicles, buyers often relied on channels going

[36] В. Парцвания, 'Китай рулит. Чем страшно засилье китайских автомобилей на российском рынке', The Insider, 21 August 2024, theins.ru.
[37] А. Грамматчиков, 'Покупай, подорожало', Коммерсантъ, 12 December 2024, kommersant.ru.

through the Gulf states, mainly the UAE, as well as Turkey. Each year, fewer vehicles from sanctions coalition countries are entering Russia. This is due not only to tighter restrictions but also to the rising cost of maintaining these cars, limited access to spare parts, and the Kremlin compelling citizens to purchase domestically produced vehicles.[38] Similar trends can be observed with regard to other consumer goods.

Over the past two years, Chinese manufacturers have also come to dominate the Russian **smartphone and laptop markets**. In 2023, imports of smartphones from China accounted for 79% of the total. Samsung held a 10% share (around 3 million units), while Apple had 8% (around 2.5 million units, marking a 50% drop in volume compared to 2021, although the total value of Apple devices fell by only 30%). Overall smartphone deliveries in 2023 returned to their 2021 level (approximately 30 million units) but, interestingly, the total value of imported devices was roughly 15% lower. This indicates that imports largely consisted of cheaper, lower-quality models.[39] Russian consumers are not only seeking to save money on purchases of electronic devices, they are also trying to ensure access to servicing and warranty support, which is increasingly difficult for Western brands. Additionally, illegal imports of these goods are on the rise (currently estimated at over 30%), leading to a growing presence of counterfeit products,[40] particularly in online stores.

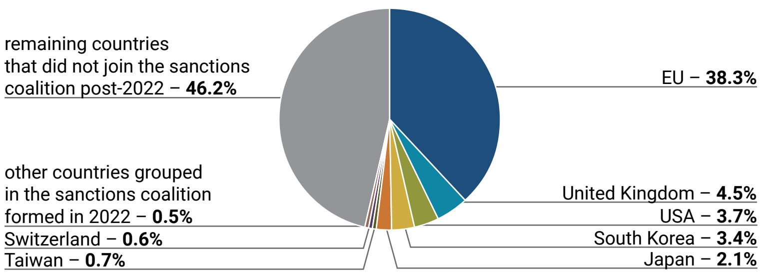
Parallel imports were originally intended as a temporary solution to fill gaps in the market, to be phased out once local production had recovered or foreign manufacturers returned. However, the continued operation of this mechanism has become a significant barrier to the development of domestic production in Russia. Given the rising costs of manufacturing – driven by labour shortages, limited access to technology and capital, and high interest rates – importing goods, often under preferential terms, has proven to be significantly easier and cheaper than producing them locally. Various sectors, such as furniture manufacturing, and individual companies, like AvtoVAZ, have attempted to combat parallel imports, but so far with little success.

38 Д. Александров, 'Утильсбор на машины в России вырос на 80%: чем это грозит автомобилистам', Autonews, 1 October 2024, autonews.ru.
39 Д. Чупров, 'Оборот российского рынка смартфонов в 2023 году достиг 711 млрд рублей', Телеспутник, 26 February 2024, telesputnik.ru.
40 'В России растет серый рынок смартфонов', Финмаркет, 21 November 2024, finmarket.ru.

II. WESTERN RESTRICTIONS IMPOSED ON RUSSIA'S EXPORTS

The main objective of the sanctions targeting Russian exports was to reduce the country's revenues and, consequently, its budget income, thereby limiting its ability to finance the invasion. Abandoning Russian energy resources also served to increase the EU's energy security and deprive Moscow of a key tool for exerting pressure on member state governments. Before the outbreak of the war, the EU was heavily dependent on Russian gas and, in Central and Eastern Europe, Russian oil also played a crucial role.[41] In 2021, 55% of Russia's total exports went to countries that later imposed sanctions, with more than 38 percentage points of that volume going to the EU.

Chart 9. Geographical structure of Russia's exports in 2021



Source: Federal Customs Service of the Russian Federation.

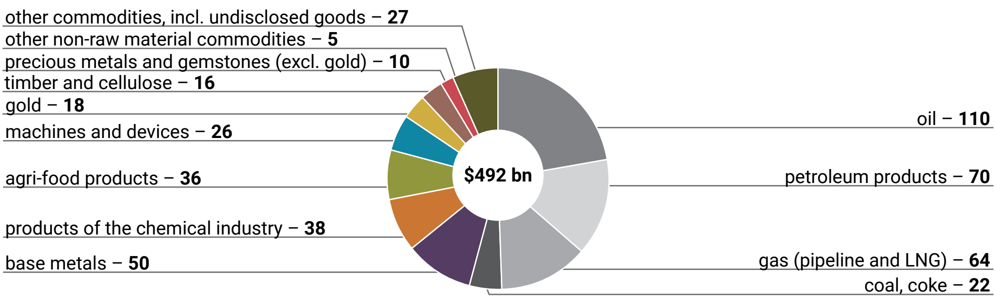
1. Introduced regulations

In 2021, Russia exported primarily raw materials, which accounted for around 85% of its total foreign sales. Crude oil and petroleum products alone made up nearly 37%. The sanctions coalition introduced an **embargo on the import of most Russian raw materials**, including coal, timber, gold, construction materials, metals and metal products. After a considerable delay (negotiations lasted more than nine months), restrictions were extended in December 2022 to cover seaborne oil exports from Russia and, in March 2024, oil derivatives. In 2023, sanctions were also imposed on Russian diamonds. At present, some commodities of strategic importance to the Kremlin remain outside the sanctions regime, such as pipeline natural gas, liquefied natural gas (LNG), oil delivered

[41] For more on the EU's dependence on Russia see A. Łoskot-Strachota, *The unfinished de-russification. The remnants of energy ties between the EU and Russia*, OSW, Warsaw 2024, osw.waw.pl.

via the southern line of the Druzhba pipeline, and uranium.[42] With global food security in mind, no restrictions have been introduced on agri-food and fertiliser imports. According to EU estimates, the sanctions have led to Russia losing 58% of the revenue it had been earning from exports to the EU in 2021, equivalent to approximately $91 billion.

Chart 10. Commodity structure of Russian exports in 2021



Source: FTS.

The imposition of restrictions on the export of oil and petroleum products from Russia had a significant impact not only on the country itself but also on the global market. The sale of these goods was a major source of revenue for the state budget. The oil and gas sector accounted for around 30% of Russia's total revenue, with the lion's share coming from crude oil and its derivatives. At the same time, in 2021 Russia was the world's third-largest oil producer – after the United States and Saudi Arabia – and the leading exporter.[43]

Therefore, the restrictions on Russian oil and petroleum product exports were composed of two key elements. First, Western countries – within the G7 framework – imposed an **embargo** on these goods. Initially, the European Union banned the import of Russian oil only by sea, because some member states had limited or no access to alternative sources, due to the limited infrastructure.[44] Second, the coalition introduced a **price cap mechanism.**[45]

[42] Council Regulation (EU) No 833/2014 of 31 July 2014..., *op. cit.*; 'EU sanctions against Russia explained', *op. cit.*
[43] Before 2022, Russia's oil and fuel exports accounted for 13% and 11% of global sales respectively.
[44] This particularly concerns countries which receive gas via the southern line of the Druzhba pipeline, namely Slovakia, the Czech Republic and Hungary.
[45] For oil, the price cap was set at $60 per barrel, while fuels were split into two groups: high profit margin products (such as diesel), which can be sold at a price below $100 per barrel, and low profit margin products (such as heating oil) – $45 per barrel.

The price cap was designed to achieve two seemingly contradictory goals. The first was to avoid a sharp reduction in the global supply of oil. Such a drop could have occurred if Russian oil and fuels could not be shipped from ports due to a blanket ban preventing Western shipowners and insurance companies from servicing Russian exporters. Given the importance of Russian oil exports to the global market balance, this scenario would likely have triggered another surge in prices. The second goal was to lower the prices of Russian oil and petroleum products. Before the invasion, Russia's export routes were heavily dependent on Western companies. The continued reliance on service providers from G7 countries – who were bound by the price cap – was intended to pressure Russian exporters into selling their products at a discount. This, in turn, was expected to reduce the Kremlin's budget revenues.

2. Russia's methods for dealing with the restrictions

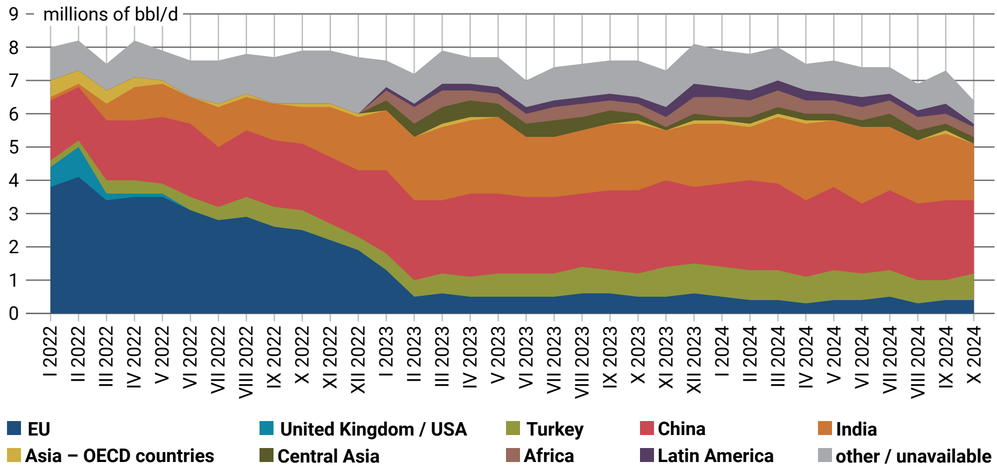
The EU ban on seaborne imports of Russian oil, along with embargoes imposed by other G7 members, effectively eliminated approximately 40% of Russia's total external oil sales,[46] forcing the country to redirect its exports elsewhere. Even before these sanctions were implemented, Russia had begun actively working to mitigate the potential consequences of such restrictions. The Russian oil and fuel sector had already faced difficulties accessing Western markets from the early days of the war, due in part to boycotts by certain companies (such as the UK-based Shell), which made it necessary to seek out new buyers, particularly in Asia. This allowed Moscow to build its presence on markets that had previously been less explored.

Purchases of crude oil previously destined for the West were taken over primarily by two countries: **China and India**. This situation has made Russia significantly dependent on this duopoly. According to Deputy Prime Minister Aleksandr Novak, in 2023 – the first year the sanctions were in effect – as much as 90% of crude oil exports was delivered to those two nations. In contrast, the sale of refined fuels is much more diversified, with buyers spread across Asia, Africa, and even South America. The **ability to find new clients** enabled Moscow to maintain relatively stable levels of production and exports. The drop in the latter recorded at the end of 2024 resulted from declining global demand and corresponding actions by the OPEC+ cartel (in the second

46 In 2021, the G7 states imported approximately 100 million tonnes of oil from Russia, with EU member states accounting for approximately 76 million tonnes.

half of the year, Russian producers began reducing production volumes in line with the quotas agreed upon within the group).

Chart 11. Destinations of Russian oil and petroleum product exports between January 2022 – October 2024



Source: author's own calculations based on figures published by the International Energy Agency.

At the same time, Russia sought to **reduce its dependence on Western companies for the transportation** of exported crude (before the invasion, over 80% of such services were provided by Western contractors). This was part of an effort to build resilience against the price cap mechanism. Western trading houses that had previously intermediated in transactions with Russia's oil and fuel sector were replaced by companies from third countries, primarily Hong Kong and the UAE. These entities are often linked with Russian exporters and are part of longer chains involving several companies to more than ten, making it difficult to identify the actual owner of the company who could be held accountable for the sanctions evasion.

A similar practice occurs in the **insurance of exports**. Media reports indicate that vessels involved in this trade often carry fake insurance policies, while documents issued by Russian companies include clauses that void compensation claims for oil spills if the transported crude was sold above 60 dollars per barrel (thus violating the G7 price cap mechanism). These tankers also lack coverage from Western P&I (Protection and Indemnity) clubs, which insure against environmental damage, among other things. All of this indicates a low likelihood that these policies would be honoured or that compensation would be paid in the event of a spill in the open sea or damage from a collision, increasing the risks associated with maritime transport.

However, what most strengthens Russia's resilience to the sanctions regime is the operation of the so-called **'shadow fleet' that transports Russian oil and fuels** in defiance of efforts by the Western coalition. It is estimated that there are between 400 and 600 of these tankers,[47] although analysts note that the degree of involvement varies by vessel. According to the Kyiv School of Economics (KSE), the stable 'backbone' of this fleet, dedicated solely to Russian exports, consists of around 90 ships. Over more than a year of war, unidentified buyers purchased 187 used tankers, including from European shipowners, for a total of $3.8 billion.[48]

It should be noted that the 'shadow fleet' is not a homogeneous group of vessels. The ships associated with it differ in terms of their level of wear and tear, the legality of their insurance, and their shipping practices. This fleet is generally divided into two categories: 'grey' and 'dark'. The 'grey' fleet includes ships whose compliance with the sanctions regime is difficult to verify. Their ownership structures are vague, and the validity of their insurance policies is questionable. According to the Windward platform,[49] the emergence of such vessels, operating in parallel to those insured and owned by Western entities, is a practice that arose in response to the Western sanctions. The 'dark' fleet, by contrast, is not a new phenomenon. Such tankers have previously been used to transport oil from Venezuela and Iran. These vessels engage in outright illegal activities, such as turning off their transponders to avoid detection, broadcasting false signals to mislead tracking systems, or conducting risky ship-to-ship transfers in open waters to obscure the origin of their cargo. It is worth noting that both these categories fall within the definition of the 'shadow fleet' as recognised by the International Maritime Organization.[50]

Traders dealing in Russian oil and petroleum products also use other methods to circumvent sanctions during transport. Vessels that continue to cooperate with Western entities (such as service providers, insurers, and ports)

[47] In June 2024, the S&P Global agency assessed the number of the 'shadow fleet' vessels at 591, and the KSE put it at 435.
[48] A. Nightingale, J. Lee, S. Cho, 'How an Aging Armada and Mystery Traders Keep Russian Oil Afloat', 12 May 2023, bloomberg.com.
[49] 'Illuminating Russia's Shadow Fleet', Windward, windward.ai.
[50] 'Urging member states and all relevant stakeholders to promote actions to prevent illegal operations in the maritime sector by the «dark fleet» or «shadow fleet»'; Resolution A.1192(33), International Maritime Organisation, 11 December 2023, wwwcdn.imo.org.

sometimes disable their transponders or transmit false location signals to conceal their connection to Russian-origin cargo. In some cases, they receive deliveries via ship-to-ship transfers in the open sea. Additionally, Urals crude is often blended with other oil grades aboard large tankers to obscure its origin. The European Commission has classified such practices as violations of the sanctions regime.[51]

Russian companies have also been lowering the official price of oil in documentation to avoid triggering sanctions. However, this practice significantly increases the actual transaction costs for buyers, as intermediaries linked to the sellers absorb a large portion of the profits.[52]

According to estimates, in November 2024 around 34% of the oil and petroleum products exported from Russia by sea were transported by tankers owned by Western entities (usually European) or insured by them, compared to over 80% before February 2022.[53] Some of these shipments may have violated the price cap.

When exporting other raw materials – **such as coal, gold, diamonds, timber, and metals** – Russian companies primarily use similar sanction-evasion practices as importers. First and foremost, they rely on intermediaries based in third countries (see Chapter I.2).

Before 2022, the EU was Russia's second-largest **coal** export market after China, receiving about a quarter of its coal exports. Following the introduction of the EU embargo, these deliveries dropped to nearly zero, forcing Russia to redirect its sales primarily to China and India, and to a lesser degree to Turkey. Attempts were also made to continue supplying coal to the EU by disguising its origin through Kazakh or Kyrgyz companies. After the West imposed sanctions, these countries significantly increased their exports to EU member states, especially Poland and Lithuania. In 2022, Kazakhstan increased its coal exports to the EU almost 29-fold, from 56,000 tonnes in 2021 to over 1.6 million tonnes. However, by 2023, this volume had decreased to 1 million tonnes. Most of the coal went to Poland (50% in 2022 and 60% in 2023). Kyrgyzstan's exports were much smaller, reaching approximately 54,000 tonnes in 2023. It is worth

51 For more see I. Wiśniewska, 'Tightening restrictions: the EU's eleventh package of sanctions against Russia', OSW, 26 June 2023, osw.waw.pl.

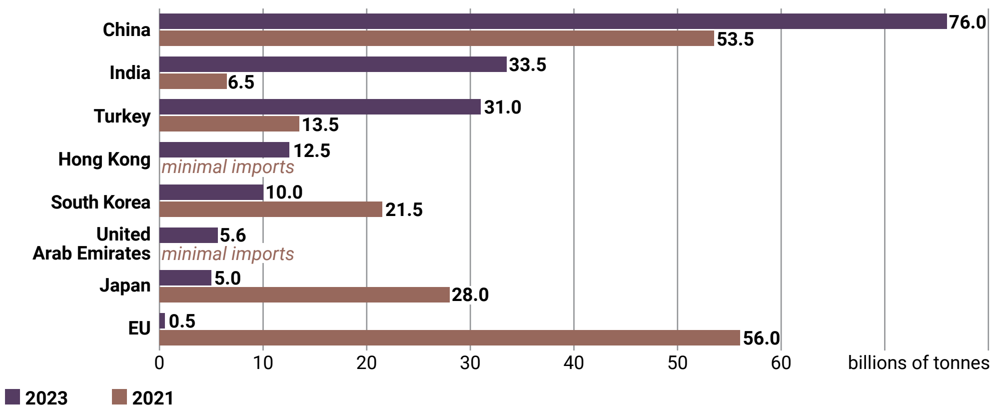
52 A. Caprile, G. Leclerc, 'Russia's 'shadow fleet': Bringing the threat to light', European Parliamentary Research Service, November 2024, europarl.europa.eu.

53 V. Raghunandan, P. Katinas, 'December 2024 – Monthly analysis of Russian fossil fuel exports and sanctions', Centre for Research on Energy and Clean Air (CREA), 10 January 2025, energyandcleanair.org.

noting that this country never supplied coal to Europe before the war. Both countries need to use Russian territory for transit. Notably, Kazakhstan also exported coal to Russia itself, with these deliveries falling by 12% in 2023, to 17.7 million tonnes.

It appears that a much greater threat to the integrity of the embargo comes from Russian coal exports to countries that had not previously purchased it, such as Hong Kong, the UAE, Colombia, and South Africa. In 2022, coal exports from these countries to the EU increased, but in 2023, they declined.

Chart 12. The largest importers of Russian coal



Source: 'Итоги работы угольной промышленности России за 2023 г.', Уголь, 26 April 2024, eruda.ru.

With regard to Russian **gold** exports, investigative journalists have revealed (as official statistics on this market in Russia are not publicly available) that in 2022, it was primarily shipped to the UAE, Hong Kong, and Turkey, whereas before the invasion, it mostly went to the United Kingdom, where it was sold through the London Bullion Market Association (LBMA). Starting in April 2023, the logistics of these shipments changed. Gold began reaching those countries via the Eurasian Economic Union, including through Armenia. In the first five months of 2024, Armenia imported 68 tonnes of gold from Russia, worth a total of $4 billion (compared to 17 tonnes and $1 billion for the whole of 2023).[54]

[54] А. Заякин, С. Ергнян, 'Золотые происки. Как Россия в обход санкций вывозит через Армению золото на миллиарды долларов', The Insider, 22 November 2024, theins.ru.

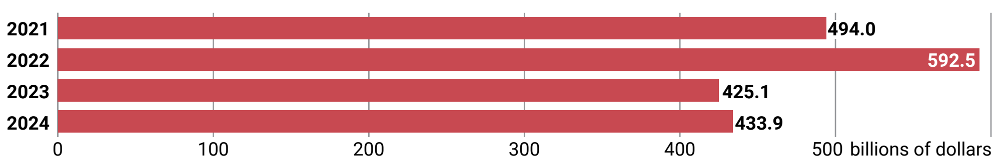
Significant discrepancies can be observed between the trade statistics published by the two sides. The gold is likely being exchanged for cash and securities to avoid using the banking system.

The noticeable surge in gold shipments to Switzerland and the United Kingdom (usually the largest buyers of Russian gold) from Uzbekistan and Kazakhstan in recent years is most likely another method Russia uses to circumvent sanctions. In 2023, the UK imported 220 tonnes of gold from Kazakhstan and 40 tonnes from Uzbekistan, while Switzerland received 59 and 100 tonnes respectively. For comparison, Kazakhstan's annual gold production at the time stood at approximately 130 tonnes, and Uzbekistan's at 100.[55] Armenia has also served as a route for Russian **diamond** exports to the UAE. It exported 30 times more (4.5 million carats) than it actually produced.[56] India remains another key destination. In the first half of 2024, Russian diamond exports to India rose by 22% year-on-year, reaching 4.1 million carats.[57]

3. The consequences for Russia of the introduction of sanctions

Three years into the full-scale invasion, the **value of Russian exports has contracted** by around 15% compared to 2021. The anomalous spike in revenue recorded in 2022 was driven by high oil prices, which were in part caused by the outbreak of the war itself (in 2022, the average price of a barrel of Brent crude exceeded $100). By the end of that year, prices began to decline (in 2024, a barrel of Brent crude cost just under $80) which, combined with a drop in export volumes, contributed to reduced budget revenues.

Chart 13. The value of Russian commodity exports in 2021–2024



Source: Federal Customs Service of the Russian Federation.

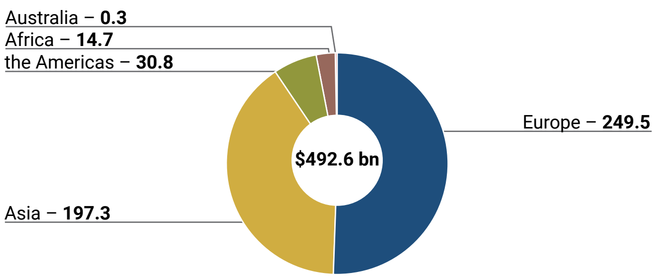
[55] D. Soguel, P. Turuban; 'The mystery of Switzerland's surging imports of Uzbek and Kazakh gold', SWI, 3 September 2024, swissinfo.ch.

[56] А. Мгдесян, 'Армянский транзит: реэкспорт золота и алмазов из России', Deutsche Welle, 1 June2024, dw.com.

[57] S. Collins, 'Russian diamond shipments to India up 22% in 1H', Eurasia Business News, 2 September 2024, eurasiabusinessnews.com.

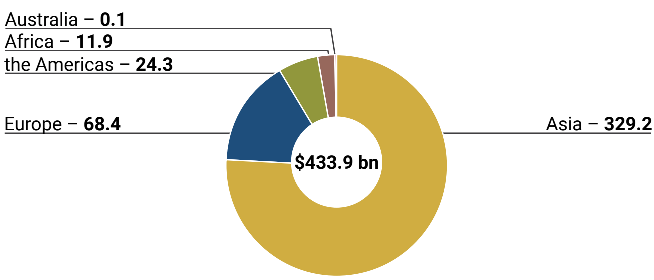
At the same time, the **destinations of Russian exports changed**. In 2024, nearly 76% of shipments went to Asia (compared to 40% before the invasion), with China alone accounting for 30 percentage points (up from 14 percentage points in 2021). Europe's share dropped to just under 16% (down from over 50% in 2021), with a large portion of that – around $25 billion, or 6 percentage points – attributable to Belarus.

Chart 14. Recipients of Russian commodity exports in 2021



Source: Federal Customs Service of the Russian Federation.

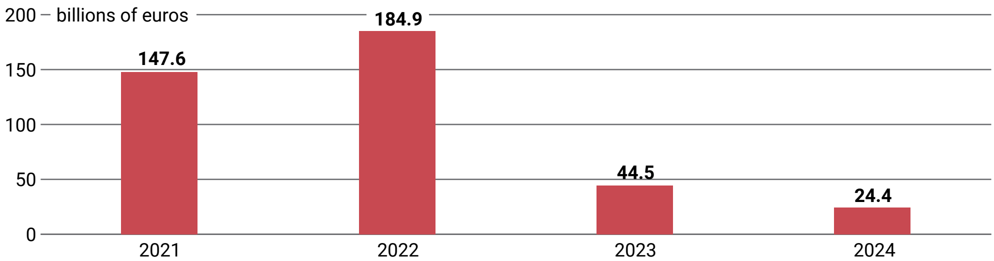
Chart 15. Recipients of Russian commodity exports in 2024



Source: Federal Customs Service of the Russian Federation.

In 2024, imports to the EU from Russia shrank by nearly 80% compared to 2021, amounting to a drop of over €115 billion. During this time, the bloc managed to secure new suppliers, even in the energy sector, where it had been most dependent on Moscow. Overall, the value of EU imports in 2024 was about 14% higher than in 2021. However, it should be noted that some Central and Eastern European countries (including Austria, the Czech Republic, Slovakia, and Hungary) continue to import oil and gas from Russia via pipelines, while several Western European states – such as France, Italy, Belgium, and Germany – are still purchasing Russian LNG. Consequently, the EU remains the fourth-largest buyer of Russian fuels, paying approximately €24 billion to the country in 2024.[58]

Chart 16. EU imports from Russia in 2021–2024



Source: Eurostat.

The impact of Western sanctions shifts over time and varies significantly across different sectors. The ability of Russian companies to adapt to the new conditions in part depends on the situation on the global commodity markets.

Two years after the introduction of sanctions targeting Russia's oil and fuel sector, a decline in the export price of **crude oil** and a slight (around 1%) reduction in its production are visible. The size of the 'shadow fleet' and the degree of its involvement in Russian exports directly affect Russia's ability to sell oil and fuels at prices close to the global benchmarks, which in turn benefits the state budget revenues.[59] The creation of alternative export infrastructure helps to reduce discounts.[60] There is data confirming this: according to Argus, the discount on Russian Urals crude in the FOB formula from Baltic ports fell from a record $38 per barrel in January 2023 to approximately $14 in January 2025. This shift can be linked to the growing role of the 'shadow fleet'. Since the second half of 2023, the price of Russian crude has seen two sharp drops relative to other grades. This occurred in response to the US Department of the Treasury's imposition of sanctions on specific tankers violating the price cap (in October 2023), and after the adoption of the Biden administration's 'farewell' sanctions package (in January 2025), which featured an unprecedented

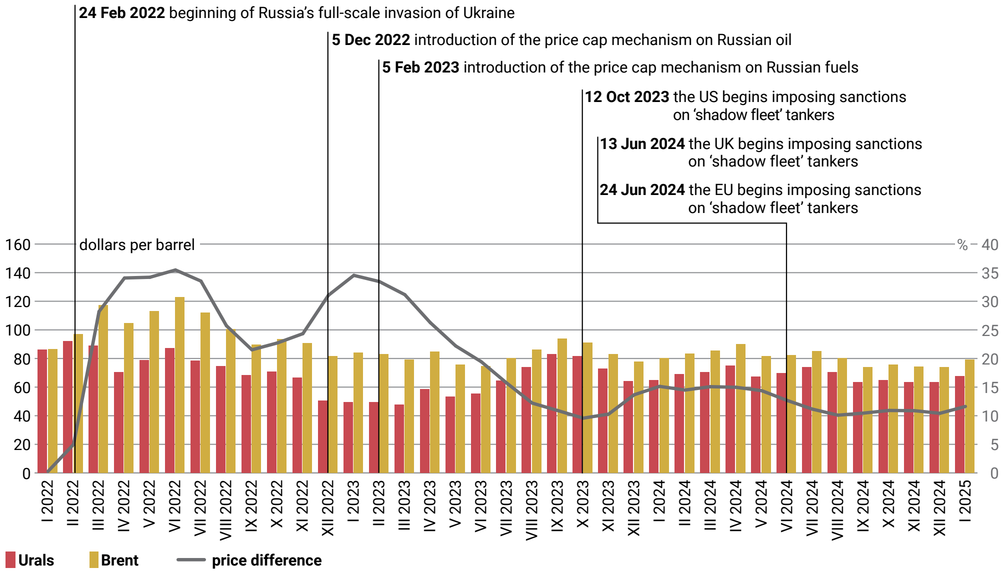
58 V. Raghunandan, P. Katinas, 'December 2024 – Monthly analysis of Russian fossil fuel exports and sanctions', *op. cit.*

59 V. Raghunandan, 'November 2024 — Monthly analysis of Russian fossil fuel exports and sanctions', Centre for Research on Energy and Clean Air (CREA), 10 December 2024, energyandcleanair.org.

60 It is worth adding that Russia attempts to repeat the relative success of the 'shadow fleet' for LNG exports, which is partly sanctioned by the US. However, this is much more difficult, as the gas carrier market is different. For more see F. Rudnik, 'Russia: Novatek is creating a 'shadow fleet' of LNG carriers', OSW, 2 September 2024, osw.waw.pl.

number of tanker designations.[61] This demonstrates that the active enforcement of the regime against violators is effective.

Chart 17. Average monthly price of Russian Urals crude and the Western Brent crude benchmark between January 2022 – January 2025



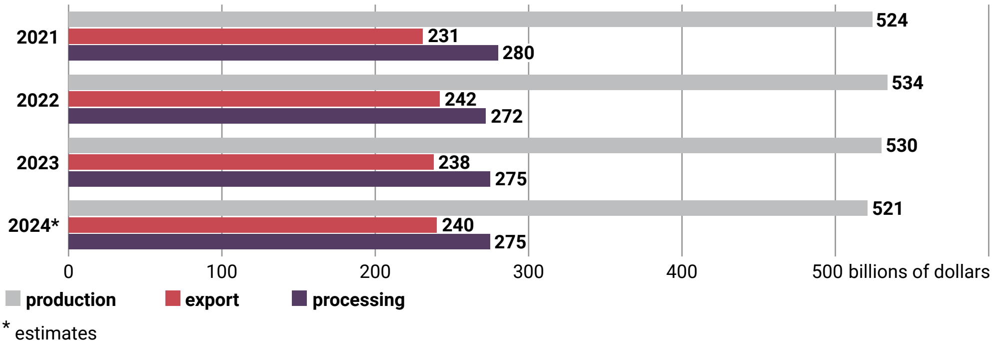
Source: author's own calculation based on figures published by the Ministry of Finance of the Russian Federation, the Ministry of Economic Development of the Russian Federation, and Energy Information Administration.

By redirecting volumes to new markets and reducing their dependence on Western transport infrastructure, Russian oil companies have largely managed to adapt to the new regulations. The oil sector avoided significant declines in production and exports, and since the second half of 2023, budget revenues from oil sales have begun to recover. However, during Russia's invasion of Ukraine, some investment projects experienced delays.[62] The withdrawal of Western service companies involved in the development of new oil fields represented a particularly significant challenge.

[61] For more see F. Rudnik, 'Sanctions on Russia: the Biden administration's parting blow', OSW, 13 January 2025, osw.waw.pl.

[62] 'Russia Says It Can't Build All the Vessels It Needs for Arctic Shipping Route', Bloomberg, 24 October 2024, bnnbloomberg.ca.

Chart 18. Oil production, export and processing in Russia 2021–2024



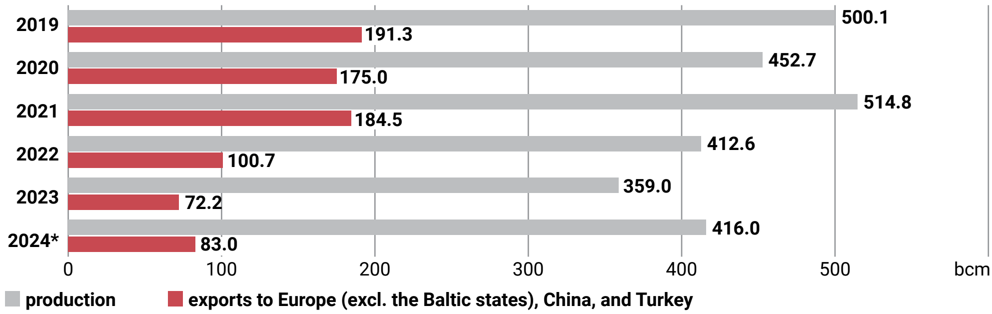
Source: the government of the Russian Federation.

Sanctions on Russian exports have only had a limited impact on the state budget. The government has sought to stabilise public finances partly by increasing the tax burden on the oil sector. Companies in this industry are increasingly required to pay a tax on excess profits.[63] Moreover, the average export price of oil – which serves as the basis for calculating this tax – is now set by the government and does not necessarily reflect the actual earnings of the companies.

The decline in export revenues (resulting from Western sanctions) along with rising war-related expenses, has forced the Kremlin to seek new sources of funding. This policy has hit the **gas sector** the hardest, particularly its dominant player, **Gazprom**. In 2022, the company paid a one-time additional tax of 1.2 trillion roubles (around $17.5 billion), and its annual fiscal burden was increased by 600 billion roubles for the 2023–2025 period (approximately $6.5 billion in 2024 alone). Although the gas which Gazprom exports has not been directly sanctioned, the company has borne the brunt of the costs of Russia's aggression. As a result of the Kremlin's gas blackmail, it has lost most of its European market share. In 2024, its output was down 19% compared to 2021, and exports dropped by 55%. Consequently, in 2023, Gazprom posted a loss for the first time in its history (0.6 trillion roubles, or approximately $6.5 billion), following a profit of 1.2 trillion roubles (approximately $17.5 billion at 2022 exchange rates) one year earlier. The company also ended the first three quarters of 2024 in the red, with a deficit of 300 billion roubles (approximately $3 billion).

[63] In 2024, this tax was imposed on approximately half of the produced oil. The tax on excess profits is 50% of company proceeds from a specific oil field minus production and logistical costs.

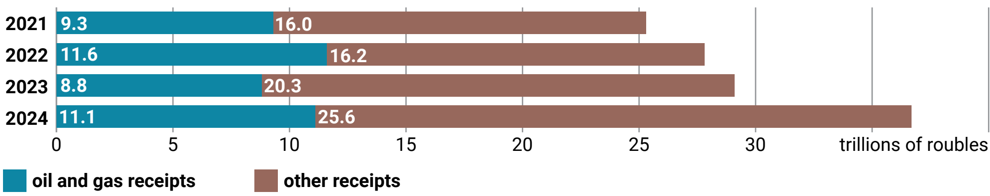
Chart 19. Gazprom's gas production and exports in 2019–2024



* estimates

Source: Gazprom.

Chart 20. Russia's oil and gas receipts in 2021–2024



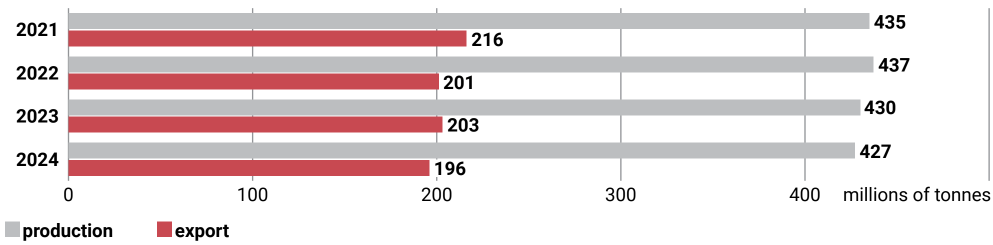
Source: Ministry of Finance of the Russian Federation.

Coal production in 2024 was only 2% lower than in 2021, amounting to approximately 427 million tonnes – of which approximately 7 million tonnes were extracted in the occupied Donetsk Oblast. Exports, however, fell by more than 9%, down to approximately 196 million tonnes. The biggest declines were recorded in 2024, primarily due to reduced purchases by China (down 10%), India (down 23%), and Turkey (down 35%). It is important to note that Russia's coal exports are dominated by a narrow group of buyers, giving them strong negotiating power and enabling them to demand discounts,[64] a factor that cuts into the earnings of Russian companies. This is especially true given the sharp drop in global commodity prices, which had peaked at exceptional levels in 2022. For example, in January 2022 the price of thermal coal (Newcastle FOB) was approximately $100 per tonne, it surged to $400 after the invasion, and fell to just approximately $130 in 2024.

64 In autumn 2022, the discount on Russian coal was approximately 35%. In 2023, it decreased to almost zero. However, in 2024 Russian companies were forced to offer discounts again (no information on their size is available). For more see И. Круглей, 'Экспорт падает, убытки растут — главные проблемы угольной отрасли РФ', Нефть и Капитал, 8 November 2024, oilcapital.ru.

Due to the need to redirect coal shipments to Asia, Russia had to overhaul the logistics infrastructure originally developed to serve flows to Europe. The capacity of the rail network in the Asian part of the country proved insufficient to handle such large volumes.[65] Although coal transport is treated as a priority, the government allocated shipping quotas to exporters to ensure them access to key routes and introduced subsidies to offset rising freight tariffs. Nevertheless, many Russian mining companies – particularly smaller ones – faced serious financial difficulties. Over the first eleven months of 2024, more than 53% of companies operating in the sector (out of approximately 600) recorded deficits (compared to approximately 30% in 2023). Consequently, the industry recorded a total loss of 68 billion roubles.[66]

Chart 21. Russia's coal production and export



Source: Rosstat.

[65] I. Wiśniewska, *Pivot to the east. Russia's transport policy*, OSW, Warsaw 2024, osw.waw.pl.
[66] 'Социально-экономическое положение России 2024 года', Rosstat, 7 February 2025, rosstat.gov.ru.

III. WESTERN RESTRICTIONS IMPOSED ON THE RUSSIAN FINANCIAL SECTOR

Before the invasion, Russia was deeply integrated with Western financial markets, and Western capital served as a primary source for financing the modernisation of the Russian economy. Both foreign direct investment from multinational corporations and loans taken out by Russian companies played a key role in the country's development. Additionally, over the 30 years since the collapse of the USSR, Russian oligarchs widely invested earnings generated from commodity exports in Europe and the United States, while ordinary citizens regarded convertible foreign currencies as a safe store of value. Although the Kremlin had been preparing for harsh Western sanctions since 2014 and attempted to reduce its dependence on the West – for example, by reducing the share of US dollars in the Central Bank of Russia's reserves or pressuring billionaires to repatriate capital – the country remained vulnerable to decisions made in Brussels and Washington. The purpose of financial sanctions is to cut off selected sectors of the Russian economy and specific companies from access to Western markets. Their implementation amplifies the effectiveness of trade and technology restrictions by hampering cross-border transactions, which directly affects foreign trade performance and domestic investment in Russia.

1. Introduced regulations

Western countries have been imposing financial sanctions on the Russian Federation since mid-2014. These involve restricting access to financial markets (notably through bans on lending) for Russia's largest banks, energy conglomerates, and companies operating in the armaments sector. Following the outbreak of full-scale war, the scope of these restrictions expanded significantly. The introduced measures included:

- the freezing of approximately $300 billion of the Central Bank of Russia's foreign currency reserves held in foreign accounts;[67]
- the disconnection of 23 commercial banks (including the ten largest in Russia and 13 regional banks) from the SWIFT interbank communication system, headquartered in Brussels;

[67] I. Wiśniewska, 'The economic consequences of the war: a profound crisis looming for Russia', *OSW Commentary*, no. 434, 23 March 2022, osw.waw.pl.

- the inclusion by the G7 countries (primarily the United States) of a large portion of Russian banks and their affiliated foreign entities on sanctions lists, effectively blocking them from cooperating with Western partners;

- subjecting other financial institutions to sanctions, including the Saint Petersburg Stock Exchange and the Moscow Exchange alongside its subsidiaries: the National Clearing Centre and the National Payment Card System, which (among other functions) issues the MIR bank card;

- closing access for Russian entities to Western stock and commodity exchanges;

- pressure by the US administration exerted on financial sector entities from third countries to discourage them from aiding Russia in circumventing restrictions. Instruments of pressure include not only diplomatic efforts but also the threat and application of secondary sanctions (i.e. banning cooperation with the US financial market);[68]

- the withdrawal of international payment card operators (Visa, Mastercard, JCB, etc.) from Russia. Cards issued by Russian banks under these brands stopped working abroad, while foreign-issued cards are no longer accepted within the country;

- cutting off Russian entities from cryptocurrency exchanges and placing restrictions on numerous companies involved in crypto mining and trading.

2. Russia's methods for dealing with the restrictions

In the first weeks following the invasion, the Russian market experienced a shock caused by the outbreak of full-scale war and the imposition of sweeping sanctions. This led to a collapse in the prices of Russian securities (resulting in the closure of the Moscow Exchange for over a month), the devaluation of the rouble by more than 30% in March 2022, and a surge in monthly inflation to over 7.5%.

[68] In December 2023, the US Department of the Treasury was granted authorisation to impose secondary sanctions on entities from third countries, which are involved in servicing transactions linked with providing dual-use goods and technology to Russia. See 'Russian Harmful Foreign Activities Sanctions/1147', US Department of the Treasury, 22 December 2023, ofac.treasury.gov.

However, Russia began to adapt to the new economic conditions relatively quickly. Initially, the **Central Bank of Russia (CBR)** played a key role by raising the key interest rate from 9.5% to 20% and introducing currency controls (particularly in the financial sector) to keep foreign currencies within the country. Limits were announced on foreign currency transfers abroad and on cash exports. Additionally, exporters were required to sell 80% of their foreign currency revenues on the domestic market to sustain the supply of foreign exchange and thus halt the rouble's further depreciation. Access to foreign currency and its outflow from Russia was also restricted for foreign entities (effectively preventing Western investors in the country from repatriating their profits). The CBR also changed the composition of the National Welfare Fund, eliminating convertible currencies and replacing them with yuan and gold.[69]

Russian banks attempted **to replace Western bank cards with the domestic MIR card**, while also intensifying cooperation with the Chinese company UnionPay. However, UnionPay cards were not widely accepted globally and were only supported by selected banks and points of sale, primarily in China, Turkey and the Central Asian countries. At the same time, under Western pressure, some institutions in third countries – including Turkey, Kazakhstan and Kyrgyzstan – withdrew from cooperation with MIR. Due to limited access to the components necessary for producing payment cards (including chips), banks indefinitely extended the validity of cards already in circulation.

To gain significantly greater freedom in accessing financial resources abroad, it began to be widespread to see entities from the Russian Federation – both companies and individuals – opening **bank accounts in financial institutions located in third countries**, particularly in Turkey, Kazakhstan, Uzbekistan, Kyrgyzstan and Armenia. In the first months of the invasion, capital was moved out of the country on a large scale to protect it from sanctions and potential actions by the Kremlin.

A rise in **domestic companies offering financial services** (such as KoronaPay, Unistream, and Contact) was recorded, alongside a growing market share of Chinese applications like Alipay and WeChat Pay, which partially filled

[69] According to information provided by the Ministry of Finance of the Russian Federation, on 1 January 2025 the National Welfare Fund's liquid assets were worth 3.8 trillion roubles (approximately $38 billion) and included 164 billion yuan, 188 tonnes of gold and 1.4 billion roubles, and on 1 February 2022 they were worth the equivalent of approximately $112 billion (€38.6 billion, £4.2 billion, ¥600 billion, 226.7 billion yuan, 405.7 tonnes of gold and 226 million roubles). See 'Минфин: объем ФНБ на 1 января составил 11,88 трлн рублей', ТАСС, 16 January 2025, tass.ru.

the gap left by firms that withdrew from Russia as part of the boycott following its invasion of Ukraine (including Western Union, PayPal and Wise).[70]

To handle large trade operations, particularly those tied to energy contracts, Russia had to **move away from using convertible currencies**, which had become toxic for its entities, as any transaction involving them could be blocked at any time. Consequently, deals began to be conducted primarily in roubles, Chinese yuan, UAE dirhams, and Indian rupees. As of October 2024, the share of the rouble in imports of goods and services was as high as 49.5%, while convertible currencies accounted for approximately 20%, and other national currencies (mainly the yuan) made up the remaining 30%. On the export side, 43% of transactions were settled in roubles, 37% in yuan and other national currencies, and 20% in dollars, euros etc.[71] Russia's Prime Minister stated that around 95% of transactions between Russia and China were now conducted in roubles and yuan,[72] with approximately three-quarters of that amount in the latter currency. The previously popular method of accepting payments for oil exports to India in rupees proved problematic in 2023. Due to restrictions on the transfer of rupees abroad, roughly $40 billion became stuck in Russian companies' accounts in Indian banks. According to reports from both sides, most of these transactions were eventually cleared in 2024, partly through investments in India and by using third-party currencies (especially dirhams), though the exact mechanism was not disclosed.

In response to intensifying US financial sanctions in 2024, the Kremlin eased previously imposed regulations on exporters requiring them to repatriate any foreign currency earned from commodity sales. The original 2022 requirement, which obliged exporters to return 80% of their revenue to Russia, was reduced to 60% in June 2024 and further lowered to 40% in October. The rationale was that it would allow Russian companies to retain more funds abroad for settling import transactions during 2024.

There has also been a noticeable **increase in the presence of Chinese banks** on the Russian market. As of October 2024, the Industrial and Commercial Bank of China ranked 25th among Russia's largest financial institutions by

70 I. Wiśniewska, 'Rosyjskie sposoby na obejście bojkotów korporacyjnych', OSW, 17 August 2022, osw.waw.pl.

71 Е. Чернышова, И. Ткачёв, 'Доля рубля при расчетах за импорт с Азией поднялась выше 40%', РБК, 16 November 2024, rbc.ru.

72 'Доля рубля и юаня во взаимных расчетах РФ и КНР превысила 95%', Интерфакс, 21 August 2024, interfax.ru.

assets, while the Bank of China was in 33rd place. Smaller Chinese banks are also operating in the Russian Federation. In November 2024, the Central Bank of Russia ceased publishing their financial reports.

Russia is also attempting to carry out **transactions through small regional banks** that are not involved in international cooperation and would therefore be only marginally affected by potential secondary sanctions. Operations of this kind are particularly common in trade with China.

Russian companies have been attempting to **settle transactions** for goods and services subject to sanctions **by using gold**.[73] In 2022, approximately 90% of domestically mined gold (approximately 344 tonnes) was exported.[74] However, after the imposition of sanctions, that figure dropped to approximately 50%. Demand among individual buyers significantly increased, with around 75 tonnes purchased in 2024 (compared to 95 tonnes in 2023, 100 tonnes in 2022, and only approximately 5 tonnes before the invasion).[75] This trend was driven in part by a sharp discount on gold within Russia in 2022, when it was about 15% cheaper than on the global markets (prices had aligned by 2023, likely due to the opening of new export channels), and in part by the perception of gold as a safer alternative to foreign currencies which had become increasingly risky to hold or invest in under the prevailing sanctions.

To encourage gold purchases, the Russian government implemented several incentives, including a zero VAT rate on gold transactions and an exemption from personal income tax on profits from its resale. Estimates suggest that in 2022 alone, an additional 20–25 tonnes of gold left the country outside of official export channels.[76] Since the imposition of sanctions, the main destinations for Russian gold include the UAE, Turkey and China (see the consequences for Russia of the introduction of sanctions), where it is likely partially sold for convertible currencies, often in cash.[77] Despite the restrictions, between

73 M. Hunter, 'Going for gold. Russia, sanctions and illicit gold trade', Global Initiative Against Transnational Organized Crime, *Policy Brief*, April 2022, globalinitiative.net.

74 In 2022, Russia mined 371 tonnes of gold. In subsequent years, it made its statistics regarding gold mining and trade classified.

75 'Физлица в РФ в 2023 году приобрели около 95 тонн инвестиционного золота', ТАСС, 1 February 2024, tass.ru.

76 'Рынок золота в России: итоги 2022 года', Добывающая промышленность, 4 June 2024, dprom.online.

77 'Russian Banks May Be Engaging in Cash-For-Gold Scheme to Obtain Foreign Currency', Sayari, January 2024, sayari.com.

March 2022 and mid-2024, the equivalent of an estimated approximately $2.4 billion was brought into Russia in this manner.[78]

Cryptocurrencies are another important instrument Moscow uses for cross-border settlements to circumvent sanctions**.** Russia is among the world's largest producers – in 2023, it mined approximately 54,000 bitcoins worth a total of $3 billion. The authorities have long been trying to regulate this market and bring it under control. For many years, it developed freely, and in Siberian regions with surplus electricity production, cryptocurrency mining became a common source of supplementary income for citizens. Despite legal ambiguities, the number of large-scale farms and the infrastructure necessary for cryptocurrency trading and exchanging it for fiat money grew rapidly. Significant capital was invested in the process. One of the world's largest crypto mining farms, located in Bryansk, is managed by the Moscow-based company BitRiver, which is linked to Oleg Deripaska, who is listed under Western sanctions.

In 2024, Putin signed a law allowing the use of cryptocurrencies for international settlements.[79] Despite the lack of formal regulation, this practice had already been in use beforehand. Between October 2023 and March 2024, the CBR recorded a 16% increase in activity by Russians on crypto exchanges compared to the previous six months. The total value of transactions they conducted was estimated at 4.5 trillion roubles (approximately $45 billion). Although China banned cryptocurrency payments in 2021, Russian companies can still work with intermediaries based in Hong Kong, where the restrictions have not been introduced. However, this increases the transaction costs.[80]

One of the largest illegal cryptocurrency-to-fiat exchange mechanisms involving Russian entities (the Moscow-registered companies, Smart and TGR) was dismantled in 2024 by the UK authorities in cooperation with partners from other countries. The mechanism facilitated transactions worth billions of dollars, including those aimed at circumventing sanctions, funding spying operations, and laundering money from drug and arms trafficking. Russian crypto companies involved in the practice cooperated, among others, with

[78] G. Stolyarov, F. Lebedev, A. Marrow, 'Exclusive: Billions in dollar and euro notes reach Russia despite sanctions', Reuters, 12 August 2024, reuters.com.
[79] Федеральный закон от 8 августа 2024 г., N 223-ФЗ, „О внесении изменений в отдельные законодательные акты Российской Федерации", after: alta.ru.
[80] B. Savic, 'Russia's digital assets challenge Western sanctions', Geopolitical Intelligence Services, 21 November 2024, gisreportsonline.com.

the Kinahan cartel originating from Dublin. The network spanned over 30 countries and involved hundreds of individuals, including couriers delivering cash to clients.[81]

To overcome the difficulties associated with cross-border settlements, companies registered in Russia also make limited use of **barter.** In January 2024, Russia's Ministry of Economic Development even prepared guidelines on how to conduct such exchanges,[82] effectively marking a return to practices from the 1990s. This not only increases transaction costs but also extends processing times.[83] China has been using similar arrangements in its trade relations with Iran for many years.[84]

At the same time, for several years now, the CBR has been working on introducing a **digital version of the rouble** (the so-called CBDC), which could systemically help Russia to reduce its dependence on Western financial market intermediaries. For now, it is being tested by several large banks within the country. The Kremlin is encouraging its partners **to create a settlement system based on central bank digital currencies, using distributed ledgers** not requiring intermediaries), known as **blockchain** (the topic was most recently raised at the BRICS forum in October 2024).

The Russian banking sector has also adapted to being cut off from the SWIFT standard. This was mainly due to the fact that not all its banks were disconnected from it, as in mid-2024 around 200 institutions in the country were still able to use the system and carry out transactions through it. Additionally, Russian entities use the domestic **Financial Messaging System (SPFS)** as an alternative, which facilitates domestic operations as well as transactions with connected foreign institutions (mainly those from Central Asia and the South Caucasus). Due to sanctions, it is not used for cooperation with Western entities. Some banks in Russia have also joined **CIPS**, the Chinese cross-border yuan settlement system (which includes around 5,000 institutions from approximately 130 countries), although it relies on SWIFT for

81 'Operation Destabilise: NCA disrupts $multi-billion Russian money laundering networks with links to, drugs, ransomware and espionage, resulting in 84 arrests', National Crime Agency, 4 December 2024, nationalcrimeagency.gov.uk.
82 'Минэкономразвития России разработало Навигатор по внешнеторговым бартерным сделкам', Ministry of Economic Development of the Russian Federation, 31 January 2024, economy.gov.ru.
83 'Привет из 90-х: Минэкономразвития выпустило для бизнеса методичку по бартеру', Новые Известия, 19 September 2024, newizv.ru.
84 In 2021, a Chinese company exported spare parts for cars worth a total of $2 million to Iran in exchange for pistachios.

interbank communication. Other standards are also used, such as the Faster Payments System (SPB) and Cyber FT, but their effectiveness and reach are rather unsatisfactory.[85]

3. The consequences for Russia of the introduction of sanctions

The financial restrictions imposed on the Russian Federation have proven to be the most effective. Their enforcement is primarily the responsibility of banks involved in international cooperation; this a relatively small number of institutions that are closely interconnected. These institutions are subject to strict regulations, including anti-money laundering requirements, and have extensive legal departments and compliance systems in place to ensure adherence to the law. Among other things, they use the 'know your customer' (KYC) procedure. Engaging in risky operations can be very costly for them[86] and may even lead to disconnection from the Western financial system, which still holds a dominant position on the global market. The vast majority (around 90%) of central banks' reserves worldwide (excluding, for example, Russia, which is cut off from Western currencies) are held in convertible currencies (approximately 60% in US dollars and 20% in euros), while only around 2% are in yuan. In May 2024, 47% of international trade settlements carried out via SWIFT were in US dollars, 22% in euros, and around 5% in yuan. While the Chinese central bank has stated that approximately 25% of its global transactions are conducted in yuan, this mainly involves operations with Hong Kong and countries that are in conflict with the West, including Russia (where this share may be as high as 75%).

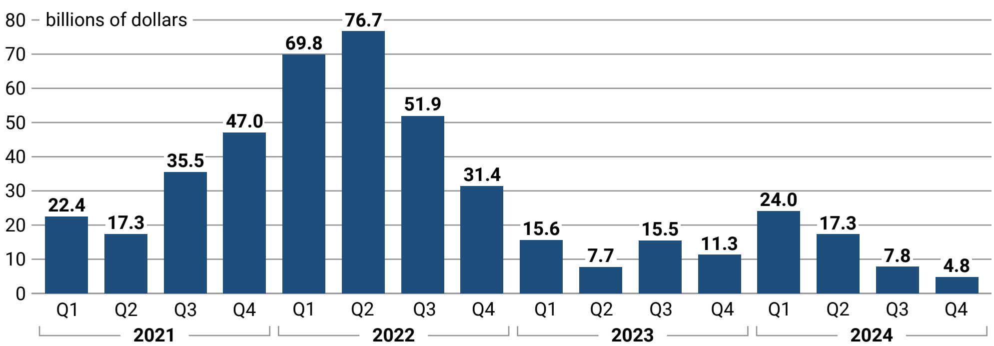
The effectiveness of financial sanctions became clear in the first months following the invasion. Particularly severe was the freezing of the Central Bank of Russia's foreign currency reserves in February 2022, which caused a significant devaluation of the rouble and provoked chaos on the Russian financial market – most notably, **capital flight abroad**. Within the first two and a half years of full-scale war (up to July 2024), approximately $340 billion in net capital was moved out of the country, 70% of which occurred in 2022. The EU's delay in announcing an embargo on Russian oil, combined with rising oil prices during the first year of aggression, resulted in a large inflow of foreign currencies into

85 'Альтернативы SWIFT-переводам', ВТБ, 25 October 2023, vtb.ru.
86 Danske Bank, which was found to be carrying out transactions with high-risk clients in Russia and other countries, had to pay a $2 billion fine and its branch in Estonia was closed. See S.N. Lynch, 'Danske Bank pleads guilty to resolve long-running Estonia money-laundering probe', Reuters, 13 December 2022, reuters.com.

Russia, which helped the country to partially adapt to the new conditions. However, from 2023 onwards, the tightening of financial restrictions by the United States made cross-border operations significantly more difficult for Russian entities. Foreign banks have grown increasingly reluctant to cooperate with their Russian counterparts (even those not directly subject to sanctions), and they began conducting meticulous customer due diligence procedures focused on Russian customers, which **prolonged transaction processing times** and led to the **rejection of some payments**, even in cases of minor suspicion. This cautious approach was also adopted by major financial institutions from China, Turkey and the Gulf States involved in international cooperation, for whom potential US secondary sanctions would pose a serious threat.

The financial challenges – particularly the aforementioned settlement issues – seriously hindered Russia's ability to conduct foreign trade, resulting in disruptions to both export and import operations. These, in turn, negatively affected the country's balance of payments. In Q4 2024, Russia's **current account balance** fell to just $4.8 billion, and in December its value dropped below zero, to -$1.3 billion.

Chart 22. Russia's current account balance in 2021–2024



Source: CBR, cbr.ru.

Consequently, the weaker inflow of foreign currencies negatively affected the Russian foreign exchange market and led to a **depreciation of the rouble** (in January 2025, one US dollar cost around 100 roubles). From the end of January, driven by seasonal factors (such as lower import volumes and tax payments by companies) as well as political factors (talks initiated between the new US administration and the Kremlin and expectations of sanctions relief), the Russian currency bounced back somewhat. Given the country's disconnection from foreign capital markets, the rouble's exchange rate has become almost entirely dependent on the performance of foreign trade. A positive commodity trade balance is now effectively the only source of foreign currency inflows. It helps to offset the negative services trade balance (mainly linked to international tourism) and the demand for foreign currency from businesses and private citizens. Due to the serious difficulties in carrying out cross-border transactions, the Central Bank of Russia (CBR) has had very limited capacity to influence the situation on the currency market. It should also be noted that after the Moscow Exchange was placed on US sanctions lists in June 2024, the **official exchange rate of the rouble is no longer set by market mechanisms**, but rather by a decision of the CBR based on foreign currency transactions conducted by selected commercial banks. Both importers and exporters are losing out, as these institutions impose exorbitant margins on currency exchanges and an unfavourable exchange rate, stemming from a large gap between buy and sell prices.

Chart 23. Dollar to rouble exchange rate

Source: CBR, cbr.ru.

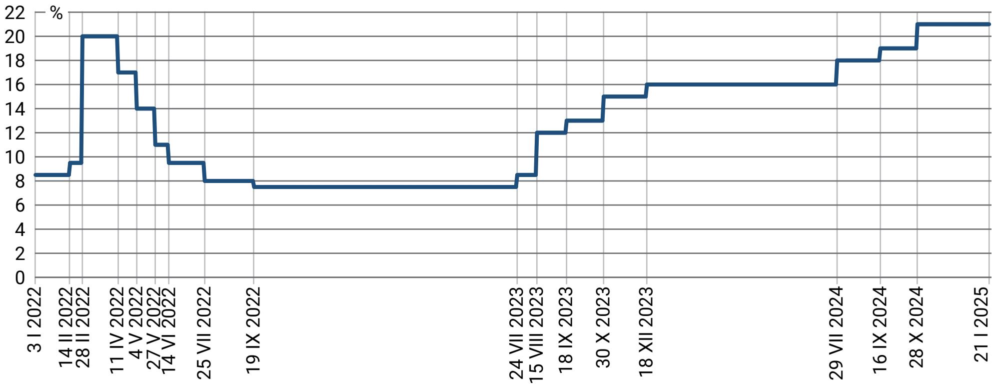
One further consequence of the existence of numerous barriers to cross-border operations and the weakness of the rouble was a **rise in import prices**, which contributed to further increases in domestic prices. In 2024, the official **inflation** rate exceeded 9.5%, but according to residents, the cost of living rose significantly more. This is confirmed by research conducted by non-governmental organisations. An analysis of consumer spending by the Romir Institute suggests that the prices of goods may have increased by around 20% over the past year.[87]

High inflation, in turn, forced the CBR to **raise the base interest rate** from 7.5% in July 2023 to 21%. Despite such a restrictive monetary policy, the institution

[87] Data from the Romir report for September 2024 indicate an approximate 22% price increase year-on-year. Until October 2024, this institution published its monthly estimates on this subject, which throughout 2024 differed considerably from the official statistics compiled by Rosstat, undermining the latter's credibility.

remains largely powerless in combating rising prices, mainly because inflation is being driven by the government's fiscal policy, particularly the massive war-related spending.

Chart 24. The CBR's base rate in 2022–2024



Source: CBR, cbr.ru.

High interest rates, combined with the country's isolation from the international markets, have limited businesses' investment capacity. Following the invasion of Ukraine, **foreign capital engagement in Russia plummeted**. According to CBR data, the total value of accumulated foreign direct investment, which stood at around $498 billion on 1 January 2022, fell to $235 billion just three quarters later. This sharp decline stemmed not only from the withdrawal of investors but also from currency fluctuations. The share of non-residents holding government bonds also shrank significantly: in December 2024, it stood at around 6% (approximately $13 billion), compared to 20% (around $45 billion) in January 2022.

Interestingly, even Chinese companies are approaching the Russian market with caution, due to the risk of secondary sanctions. The automotive sector provides a clear example. Despite the rapid growth in sales of Chinese-made vehicles, including those partially assembled in Russia, factories are typically established by local Russian entities, with a low level of local production. Similarly, large Chinese banks, which had been significantly expanding their presence in Russia since mid-2022, began scaling back their assets in response to tightening US financial sanctions. Between April and July 2024, the Russian branch of the Bank of China reduced its net assets by approximately 40%, down to $3.5 billion. After the US sanctioned the Moscow Exchange (MOEX), the bank also withdrew from its role as the clearing institution for transactions in yuan. It was replaced by the local branch of the Industrial and Commercial

Bank of China (ICBC), which also reduced its assets in Russia – by 27%, down to 462 billion roubles (approximately $4.5 billion). In contrast, smaller players such as the China Construction Bank and the Agricultural Bank of China expanded their operations during the same period.[88]

This situation has led to a slowdown in the growth rate of core capital investment. In Q3 2024, its value rose by just 5% year-on-year, compared to as much as 14% just two quarters earlier. Today, companies find it more profitable to keep their own funds (which constitute the main source of investment in the civilian sector) in deposits rather than invest them in projects with significantly lower returns.

Since the outbreak of the full-scale war, a significant proportion of projects has been carried out by the domestic armaments industry and major corporations (such as Gazprom and Russian Railways), which invested capital in infrastructure aimed at reducing dependence on the West. These entities had access to preferential loans. Developers also benefited from subsidised mortgage lending programmes (although these were partially phased out in July 2024). Government data indicates that as much as 70% of investment funds were allocated to adapting to new economic conditions, including replacing Western machinery and trade partnerships, while only 30% went towards expanding production.[89]

[88] As of October 2024, Chinese banks ceased publishing their financial reports. See Т. Воронова, А. Румянцева, 'Дочки китайских банков сокращают активы на фоне проблем с платежами', Frank Media, 5 September 2024, frankmedia.ru.

[89] An interview with Russia's Deputy Prime Minister Andrei Belousov '«Думаю, точку равновесия мы найдем»', Коммерсантъ, 29 December 2023, kommersant.ru.

IV. SUMMARY AND RECOMMENDATIONS

In the face of rising war costs, Western sanctions are increasingly destabilising the Russian economy with each passing month, posing the Kremlin significant economic challenges. The government is finding it increasingly difficult to raise funds to meet its budgetary needs. Relatively favourable macroeconomic indicators, mainly the approximately 4.1% GDP growth recorded in 2024, are largely the result of massive military spending and say little about the actual state of the economy or the standard of living of the population. For example, according to Rosstat, annual inflation in 2024 stood at 9.5%, while research by the Romir Institute (which monitors retail receipts) suggests that it was actually around 18% during that period.

These macroeconomic indicators are being driven by public spending and the activity of sectors engaged in supporting the war effort, with the latter growing at a double-digit rate. Officially, in 2024, Russia allocated approximately 40% of its budget expenditures, equivalent to 10% of its GDP, to national defence and internal security, including the National Guard and the Federal Security Service (FSB). Consequently, the government's prioritisation of war-related expenditures is consuming material, production and human resources, weakening industries that serve civilian needs. These expenditures are being financed by draining resources from businesses and citizens. Increasing labour shortages, technological regression and a growing dependence on China are becoming increasingly apparent.

The sanctions are working and, in most cases, have achieved their intended effects, which involved weakening the Russian economy, increasing the costs borne by Moscow in waging war, and reducing its revenues. However, **it is essential to enhance the effectiveness of these restrictions** so as not to waste the considerable effort the West is making by militarily and financially supporting Ukraine. Therefore, **the coalition of sanctioning countries should focus its next steps on the issues outlined below.**

1. Restrictions imposed on Russian imports

- **The countries of the EU should focus on implementing sanctions and ensuring compliance.** Entities that deliberately violate restrictions must be penalised, and such instances should be publicised to deter others from engaging in similar practices. This should also apply to subsidiaries of European companies operating in third countries. Merely requiring EU member states to make 'every effort' to ensure affiliated companies comply with sanctions is insufficient. Although the European Commission has presented its vision of desirable behaviour, it is not legally binding, and each member state is free to interpret the phrase 'every effort' differently.[90] Finland serves as a positive example, as it has succeeded in identifying and prosecuting non-compliant companies.[91] However, it is still the case that not all EU countries currently recognise sanctions evasion as a criminal offense. A directive mandating this was only adopted in April 2024, and member states have one year to implement it. Even where this activity is criminalised, efforts to prosecute and penalise offenders often prove ineffective;

- **A detailed monitoring and analysis of trade statistics, especially those concerning Russia's neighbouring countries, are essential.** It is thus necessary to enhance the use of available technologies and allocate more time to data analysts capable of quickly identifying anomalies in trade flows. This significantly reduces the number of transactions requiring inspection, shortens the time needed to detect non-compliant companies, and narrows the scope of the personnel required to carry out these operations. The analysis conducted by the Centre for Eastern Studies (OSW) provides a relevant example;[92]

- **Identifying legal loopholes and tightening restrictions.** Russian entities are adapting relatively quickly to sanctions and establishing alternative supply channels. Constant pressure must therefore be maintained. The expansion of sanctions should continue on a regular basis. The slowdown in the introduction of new EU restrictions observed since 2023 gives Russian companies time to adjust and stockpile goods. Given that a significant proportion of EU exports to Russia is already subject to sanctions, efforts must now increasingly focus on combating circumvention mechanisms – an approach already reflected in the most recent sanctions packages;

- **The harmonisation of restrictions imposed on Russia and Belarus.** The two countries are closely economically intertwined; the regime of Alyaksandr Lukashenka receives political and economic backing from

90 P. Amberg *et al.*, 'EU Russia and Belarus sanctions: New guidance on "best efforts" obligations and reminder on introduction of enhanced due diligence obligations', Global Sanctions and Export Controls Blog, 26 November 2024, sanctionsnews.bakermckenzie.com.

91 See E. Tammela *et al.*, 'EU sanctions violations in Finland: navigating corporate criminal liability', Castrén & Snellman, 6 February 2024, castren.fi.

92 B. Pierzchała, 'Finding Our Bearings: Tracking Circumvention of EU Dual-Use Sanctions to Russia', *op. cit.*

the Kremlin, and the authorities of both states coordinate their actions. The example of EU sanctions on car deliveries to Russia demonstrated the extent to which Minsk assists Moscow in circumventing these measures. After Belarus was cut off from exporting potash fertilisers through the ports of the Baltic states, Russia provided it with access to foreign buyers;

- **The cooperation and coordination of activities between institutions** and customs services **of the sanctioning coalition countries** with the European Commission and EU agencies such as OLAF and Frontex.[93] This helps to reduce the workload of the enforcement bodies (by lowering the risk of duplicating efforts) and improves their effectiveness. When one supply channel is closed to Russian companies, they often attempt to replicate the same mechanism elsewhere;[94]

- **Cooperation with the business sector**, which ultimately has the biggest impact on the effectiveness of the imposed restrictions. A clear communication policy is essential, including the creation of an authority or online platform that would collect information on the sanctions regime, provide guidance on its implementation[95] and clarify any ambiguities in this area. Some entities enabling Russia to access restricted goods may not even be aware that they are engaging in risky transactions. Small and medium-sized enterprises often lack legal departments to monitor sanctions policies;

- **Communication with third countries.** Many states that assist the Kremlin in circumventing restrictions maintain strong ties with their Western partners – whether through trade, technological dependence, or investments. The EU does have leverage over third countries but needs to act more assertively in defending its interests. As US financial sanctions have shown, the mere threat of secondary sanctions is often sufficient to deter companies from doing business with Russia. The appointment of David

[93] The coordination of the actions of the customs services of border states such as Poland, Lithuania, Latvia, Estonia, Finland and Norway is a positive example in this context. For more see 'Uniform sanctions implementation at the core of the 2nd Border States' meeting in Vilnius', Ministry of Foreign Affairs of Finland, 23 October 2023, um.fi.

[94] Following a dynamic increase in the volume of ball bearings (HS 848210) exported from Poland and the Baltic states to Kazakhstan in 2023, in the first half of 2024 a drop in this volume was recorded. At the same time, Italy recorded an increase in the export of ball bearings to that country. It cannot be ruled out that this practice is linked with sanctions evasion and the opening of new supply channels.

[95] The European Commission publishes various materials regarding sanctions but some of these are insufficiently visible in the general information overload. For example see *Guidance for EU operators: Implementing enhanced due diligence to shield against Russia sanctions circumvention*, European Commission 2023, finance.ec.europa.eu.

O'Sullivan as EU Sanctions Envoy at the end of 2022 was an important step by the European Commission in this regard. Acting on behalf of the EU, he liaises with the governments of its member states. However, it is essential to elevate his political stature, ensure close cooperation with individual countries, and support him with the intelligence on illicit practices provided by each country's investigative bodies. Diplomatic engagements should more strongly emphasise the negative consequences that may befall entities from third countries circumventing restrictions. For example, the governments of the Central Asian states tend to perceive representatives of EU member countries as key decision-makers with influence over the investment policy of entrepreneurs, while EU officials are seen as lacking authority. Investment projects currently under consideration by EU member states, which could incentivise cooperation with the West, remain insufficiently backed by specific actions. Moreover, the **diplomatic presence** of EU countries – and the EU itself – must be **enhanced** in those states most closely cooperating with Russia. This includes increasing embassy staffing to more thoroughly monitor shifting trends in trade and investment;

- In the case of the Central Asian countries, especially Kyrgyzstan and Kazakhstan, it is necessary to **clarify the significant discrepancies between the trade statistics** from Europe and China and local data.[96]

2. Restrictions imposed on Russian exports

- **Tightening efforts to combat sanctions evasion – particularly by identifying entities that benefit from these practices – is essential**, especially regarding the export of oil, gas, coal and other raw materials. To this end, EU agencies, in cooperation with member states, should establish a joint body or platform responsible for monitoring the transport of these substances (primarily oil). This initiative should also involve non-governmental organisations conducting independent investigations and raising awareness of the related risks, especially the environmental ones, posed by the 'shadow fleet';

- **Increasing the designation of tankers and traders involved in sanctions evasion is essential.** The EU has also been increasingly imposing restrictions on entities from third countries – one good example being

[96] 'SIFMANet – 2025 Recommendations. A Sanctions Strategy for Europe', Sanctions and Illicit Finance Monitoring and Analysis Network (SIFMANet), ik.imagekit.io.

the 15th sanctions package adopted in December 2024.[97] Secondary sanctions have been successfully applied by the United States, effectively halting the development of LNG projects in Russia. Although in the case of oil transport, which involves significantly more less technologically advanced vessels, a complete blockade of exports seems unlikely, it is still possible to discourage certain buyers from cooperating with Russia. That will lead to increase of transport costs and extend delivery times. This approach is particularly effective in mitigating the risk of environmental disasters caused by ageing tankers and their inexperienced crews;

- **Intensifying diplomatic pressure on countries** where sanctioned vessels are registered **is essential to strip these ships of the ability to sail** under those national flags;

- **Directly punishing Western companies** that violate the price cap;

- **A gradual reduction of the oil price cap** – in line with the mechanism's original intent (it was meant to be subject to regular revisions by the G7 to maintain flexibility in applying pressure on the Russian Federation). Currently, the limited involvement of Western entities in servicing Russian exports reduces the risk of a major supply shock from such measures and simultaneously facilitates the identification of actors violating the price cap and sanctions regulations;

- **More frequent inspections of insurance policies and vessels** transiting through sensitive waters such as the Baltic Sea (including the Gulf of Finland and the Danish straits), the North Sea and the English Channel. This is crucial for ensuring environmental safety;[98]

- **The complete withdrawal of EU member states from purchasing Russian fuels** – including the prompt phasing out of derogations for Central and Eastern European countries allowing purchases via the southern line of the Druzhba pipeline, as well as the introduction of an embargo on the import of both pipeline and liquefied natural gas (LNG) from the Russian Federation;

[97] 'EU adopts 15th sanctions package against Russia for its continued illegal war against Ukraine', European Commission, 16 December 2024, ec.europa.eu.

[98] 'Group of coastal states around Baltic Sea and North Sea to take targeted measures against Russian shadow fleet', Finland Abroad, 16 December 2024, finlandabroad.fi.

- **A further reduction of EU cooperation with Russia in the field of nuclear energy, leading to a complete severance of ties.** Currently, 19 nuclear reactors built with Russian technology are operating within the EU, most of which are still supplied with fuel from the Russian Federation. However, intensive efforts are underway to replace it with European alternatives. Following the invasion, Finland ceased cooperating with Rosatom, but the French nuclear sector still maintains ties, including in the construction of the Paks II nuclear power plant in Hungary. In 2023, over 23% of the uranium sold to the EU originated from Russia, with deliveries increasing by as much as 73% compared to 2022. This temporary and marked rise was linked to European buyers stockpiling it in anticipation of plans to reduce the dependence on Russia.[99] According to available Eurostat data, in 2024 the EU maintained high imports of natural uranium while simultaneously reducing imports of enriched uranium from Russia by approximately 40%. However, it is important to note that some trade statistics related to uranium (as well as gas) remain classified;

- **Exploring other ways to target the Russian economy.** It would be advisable to regulate certain restrictions on the access of Russian companies to the EU market through the use of **tariffs**. In May 2024, the EU introduced protective tariffs on grain and oilseed imports from Russia and Belarus. It is worth considering the implementation of restrictions on the import of fertilisers, on which Russia earned approximately €0.7 billion in the EU in the first half of 2024, according to Eurostat (and €1.4 billion throughout 2023).

3. Sanctions targeting the Russian financial sector

- **Disconnecting a significantly larger number of Russian banks from the SWIFT system.** Around 200 of them still have access to it;

- **Expanding – especially the EU – the number of banking institutions placed on sanctions lists**, including Rosselkhozbank, which is currently taking on the role of a key settlement centre;

- Following the example of the US, the EU should also introduce **sanctions against other financial institutions**, such as the Moscow Exchange;

[99] A. Łoskot-Strachota, *The unfinished de-russification…*, *op. cit.*

- Forcing **European financial institutions** (such as Raiffeisen Bank, UniCredit, and OTP Bank), which assist in cross-border settlements, to **withdraw from the Russian market**;

- **Increasing the monitoring of European companies** and their subsidiaries, **as well as tightening penalties for EU member states** failing to comply with the sanctions regime;

- Imposing EU restrictions on **institutions – primarily banks – from third countries that support the Russian Federation in processing transactions involving sanctioned Russian companies.**