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Research Report

How have three years of war changed the Russian economy?

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Ilkka Korhonen, Sinikka Parviainen, Heli Simola and
Laura Solanko

How have three years of war
changed the Russian economy?



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Ilkka Korhonen, Sinikka Parviainen, Heli Simola and Laura Solanko:
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Ilkka Korhonen, Sinikka Parviainen, Heli Simola and Laura Solanko

How have three years of war changed the Russian economy?

Abstract

Russia's war of aggression, which has brought wide destruction and loss to Ukraine, has also transformed the Russian economy in significant ways. The Russian government's role in the economy has grown, with an ever-increasing amount of economic resources allocated to the war effort. The government, abandoning long-standing conservative fiscal discipline, now regards public sector deficits as acceptable. The country has managed to cover its budget deficits by draining the country's financial reserves and increasing domestic borrowing. While the point at which Russia loses its ability to wage war remains remote, its economic troubles are likely to snowball in the longer run.

Keywords: Russia, economy, sanctions, economic policy

1. War of aggression transforms the Russian economy

Beyond bringing profound suffering to the people of Ukraine, Russia's unprovoked war of aggression has changed the European and global security environment. The attacks on Ukraine began with the annexation of Crimea in 2014, eight years before the full-scale invasion. Russia's hostile conduct and Ukraine's efforts to resist aggression have come at a huge cost to the Ukrainian economy. Ukraine managed to stay on its feet after the invasion, but only with extensive support from its global partners.

Three years of war have also transformed Russia. The government, which now plays an oversized role in the economy, has abandoned its earlier commitments to prudent economic policies. Many of Russia's former economic partners have been replaced by new alliances, with China playing an especially prominent role. At the same time, Russia's working-age population is shrinking faster than before.

This brief discusses some of the most important changes to the Russian economy since the launch of the Ukraine invasion on February 24, 2022.

2. Increased government presence, difficult business environment

War inevitably changes the economy of the war-making country, even if the fighting itself takes place mostly outside the country's own borders. This is certainly Russia's case; war has consumed vast resources – manpower, money, machinery, equipment and even explosives.

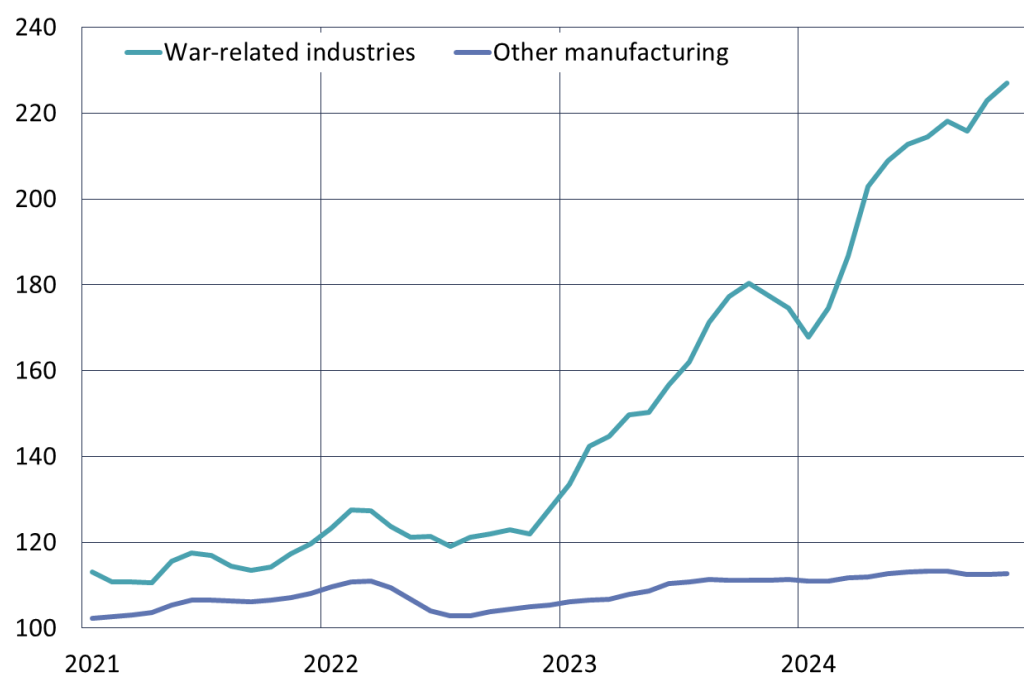
Russia's official figures show GDP recovered and exceeded its pre-invasion level in 2024. In the initial months of 2022, seasonally-adjusted GDP contracted by about 5 % y-o-y, before beginning a relatively swift recovery. GDP shrank by just 1.2 % in 2022 and grew by 4.1 %¹ in 2023. GDP, however, only measures the value of finished products produced by a national economy within a certain period of time. All the activities involved in taking a Soviet-era tank out of mothballs, equipping it with modern electronics, slapping on a layer of green paint and shipping it off to Ukraine to be blown to bits are recorded as contributions to Russian GDP. The connection between GDP growth and the actual gains in the national welfare becomes tenuous in a war setting.

The statistical data reveal many aspects of the structural changes to the economy. In the first months of the war, Russia embraced the hope that the goals of its “special military operation” would be achieved quickly and that resources mustered for that purpose would be sufficient to secure victory. By autumn 2022, however, it was clear that a swift victory was not in the cards. In September 2022, Russia declared a “partial mobilisation” of reserves to procure another 300,000 soldiers for the armed forces. In response, hundreds of thousands of Russians fled the country.

Autumn 2022 seems to be a clear turning point for many industries. Fuelled by government procurements and contracts, output in war-supporting branches soared (Figure 1). These are the very branches the government seeks to assure supplies of needed labour inputs, components and raw materials. The output of war-related branches increased by roughly 90 % between the end of 2021 and the end of 2024. Production in all other industrial branches increased by only about 4 % in the same period. Russia has rapidly reshaped its industrial base to suit wartime needs.

¹ Rosstat revised its 2023 GDP growth estimate from 3.6 % to 4.1 % in February 2025.

Figure 1. Output of war-related industrial branches and all other branches, seasonally adjusted 3-month moving average, 2019 average = 100.

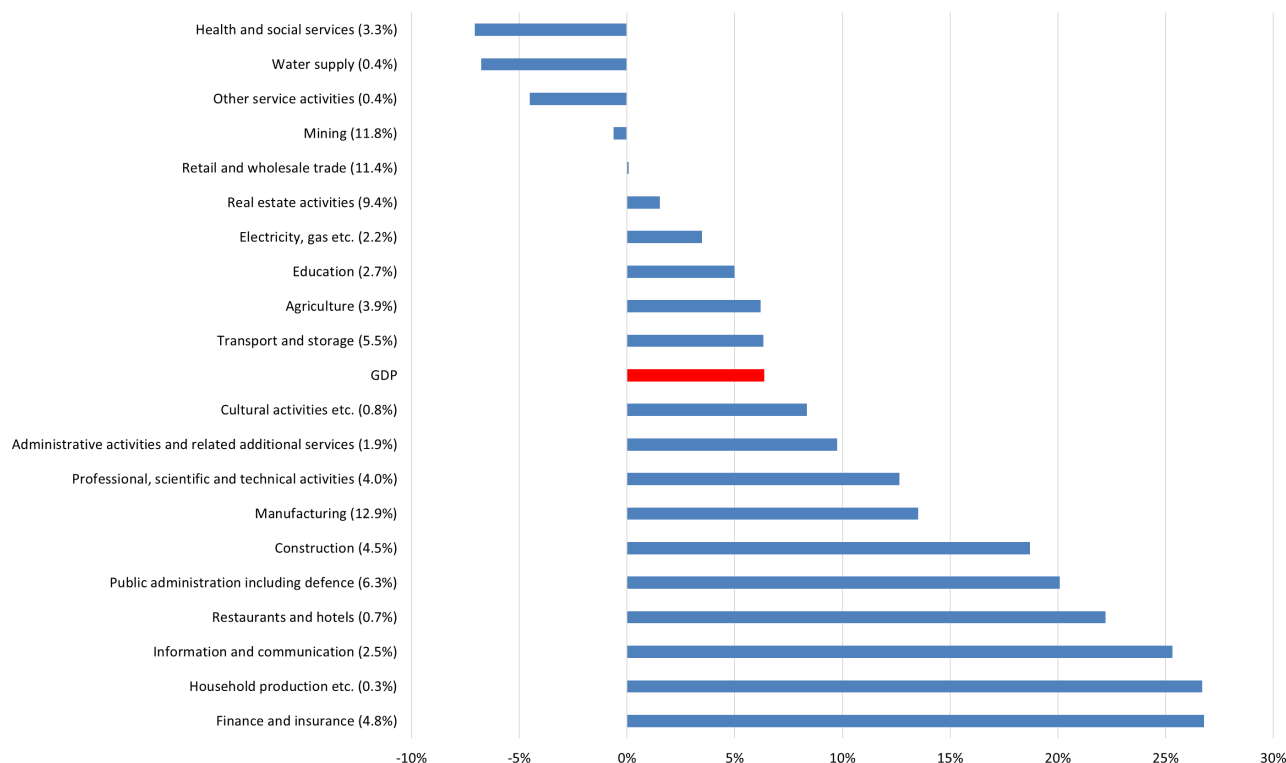


* War-related industrial branches: production of finished metal products (includes firearms and munitions), production of computers, electronic and optical products, and manufacturing of other transportation equipment (includes armoured vehicles).

Sources: Rosstat and BOFIT. War-related industrial branches, Other industrial branches

Structural changes to the Russian economy can be teased out from the national accounts data, including relevant sectoral value-added information. Between 2021 and 2024, the changes in value-added are quite heterogeneous across branches. The most robust growth was seen in public administration, which includes Russia's defence ministry and other power ministries. Manufacturing value-added has also risen with the demand for products needed for the war effort. Correspondingly, the value-added of healthcare and social services has declined substantially, while the value-added in retail and wholesale businesses has remained essentially unchanged over the three years. In a relatively short time, resources of the national economy have been redeployed to branches largely subject to state guidance. These branches profit most from the war effort.

Figure 2. Changes in value-added by branch (national accounts methodology), 2021–2024.



* Change based on first three quarters of the year, share in 2021 GDP in parentheses.

Sources: Rosstat and BOFIT.

The increased role of government and public entities can also be seen in the deterioration of Russia's business environment. In addition to a range of tax increases to pay for the costs of war, Russia's long-running corruption problems have been exacerbated by an increased reliance on spending public assets. Foreign firms find this situation especially problematic. The KSE Institute (2025) estimates that nearly 500 foreign firms have left Russia since the full-scale invasion of Ukraine, while another 1,300 firms are in the process of exiting the Russian market. This is hardly an endorsement of the Russian operating environment. In some cases, officials have even attempted to block company departures from Russia. The exit of foreign firms from the market reduces competition and the dispersion of technology in Russia.

Degradation of the business environment is manifested in many ways. Djankov and Golovchenko (2025) describe how the Russian government has nationalised or otherwise seized hundreds of firms, both Russian and foreign. In some instances, targeted firms or their parts end up under the control of entities tied closely to the administration. Government corporate seizures may also be justified as necessary for supporting military industries. In the end, this enfeebled business environment discourages private firms not involved in the war effort from making production-enhancing investments that could help grow their businesses.

3. Economic discipline ceases to be a priority

Since February 2022, Russian fiscal policy has moved away from its strong emphasis on saving and building up reserves to spending as much as it takes to feed the war's demands. Lavish spending has drained the national oil fund (National Wealth Fund), and firms have been ordered to cough up extra tax payments to cover war costs. The government's splurging on the war has fuelled inflation. Sanctions and economic support measures have also narrowed the inflation-fighting options available to the Central Bank of Russia (CBR). As a result, the CBR has been forced to rely on substantial increases in its main policy rates and abandon the exchange rate policy that allowed the ruble to float freely.

3.1 Huge increases and reallocations of government spending

Russian fiscal policies have changed radically since the invasion of Ukraine. For most of the past decade, Russian fiscal policy was quite disciplined and savings-focused. There was an effort to avoid budget deficits, and taxes on earnings from oil & gas exports were set aside in a National Wealth Fund (NWF). The government's indebtedness was quite modest by international standards.

There was a steep increase in government spending following Russia's invasion of Ukraine, with new spending mainly targeting war-related branches. Russian government spending grew at an average pace of 16 % a year between 2022 and 2024,² double the average growth of 8 % a year between 2011 and 2019.³ With a spending focus on war, an ever smaller share of spending is available for other purposes such as social services, education and healthcare.

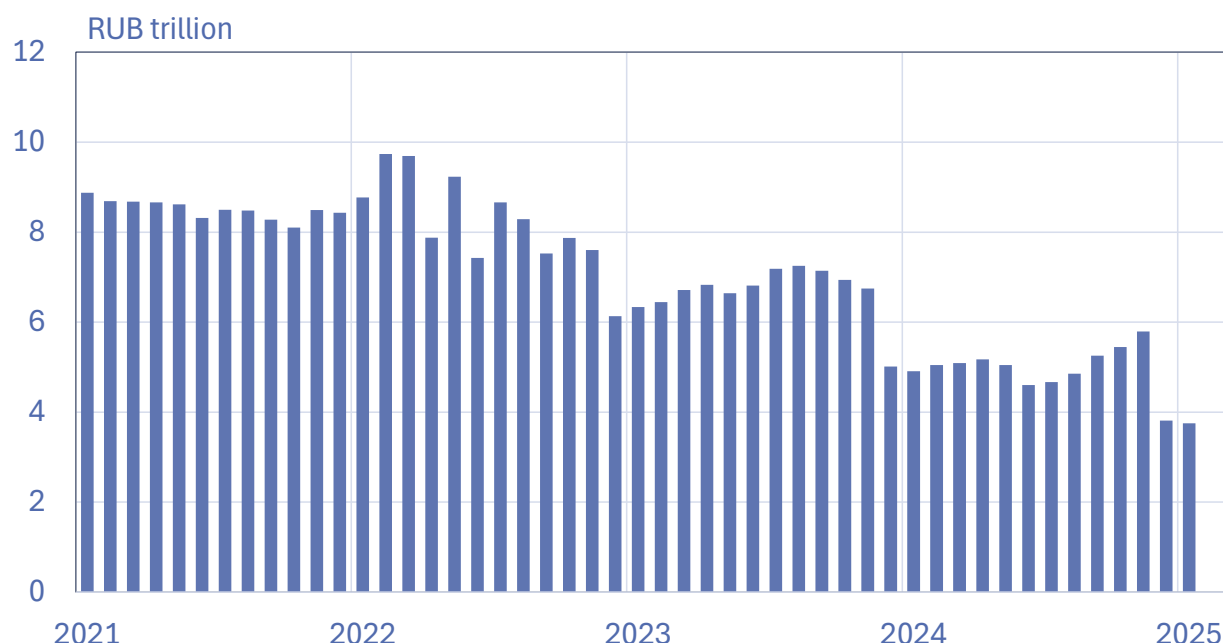
The increased spending has been largely financed with NWF assets and government debt issues. Over half of liquid (easily accessible) NWF assets have been spent since 2022. The government has also taken on more domestic debt, but it should be noted that Russian government debt remains at a very modest level by international standards.

Tax hikes have been needed to cover higher budget expenditures as Western sanctions have reduced Russia's budget revenues from oil. Companies are forced to shoulder larger tax burdens to finance the war through e.g. increases in the corporate profit tax and additional payments of profit and export taxes.

² Consolidated budget spending gives an indication of government spending overall. The consolidated budget includes the federal budget, regional budgets, and off-budget public funds such as the National Wealth Fund.

³ The difference is somewhat larger in real terms. Consolidated budget spending adjusted with the public sector consumption deflator used in the national accounts grew on average by 4 % a year in 2022–2024, and by just 0.5 % a year in 2011–2019.

Figure 3. Liquid assets in Russia's National Wealth Fund (oil fund).



Source: Russian Ministry of Finance.

3.2 Stringent interest-rate policies and tight capital controls

Russian monetary policy has been substantially impacted by war and sanctions. Measures to support economic activity have made it more difficult to rein in inflation. Sanctions have limited the CBR's options for implementing monetary policy and reduced the scope of its operating environment.

Russia embarked on gradual adoption of a market economy model following the collapse of the Soviet Union. The aim was to end capital controls and introduce a free-floating exchange rate for the ruble. This policy framework was fully embraced at the end of 2014 and remained in place even through economic crises.

Following the invasion of Ukraine, Russia's exchange rate policy reversed completely. In response to sanctions, the CBR found itself without access to a large part of the foreign currency reserves it normally relied on in forex market interventions. Without this possibility, the CBR was reduced to defending the exchange rate through the imposition of capital controls and ending free-convertibility of the ruble. Large export firms were forced to convert a significant share of their repatriated foreign-currency export earnings into rubles and exports of capital to "unfriendly" countries were banned.

The vast increase in Russia's war spending is also reflected CBR interest rate policy. Inflation has accelerated and the 12-month rise in consumer prices reached 10 % at the start of this year. To restrain inflation the CBR has raised its key rate to a historically high level of 21 %. Real interest rates have also climbed to historical highs. These moves represented exceptional departures from policy in normal business cycles. For the first time since the adoption of its current monetary policy framework, the CBR found itself taking measures to deal with an overheated economy. Earlier rate hikes had involved financial market stabilisation in the wake of large shocks. In the current environment, the effectiveness of interest-rate policy signals to the economy has been weakened by the enormous growth of subsidised lending programmes. Inflation-fighting has become more difficult due to the easing of macro-prudential regulation and ruble depreciation.

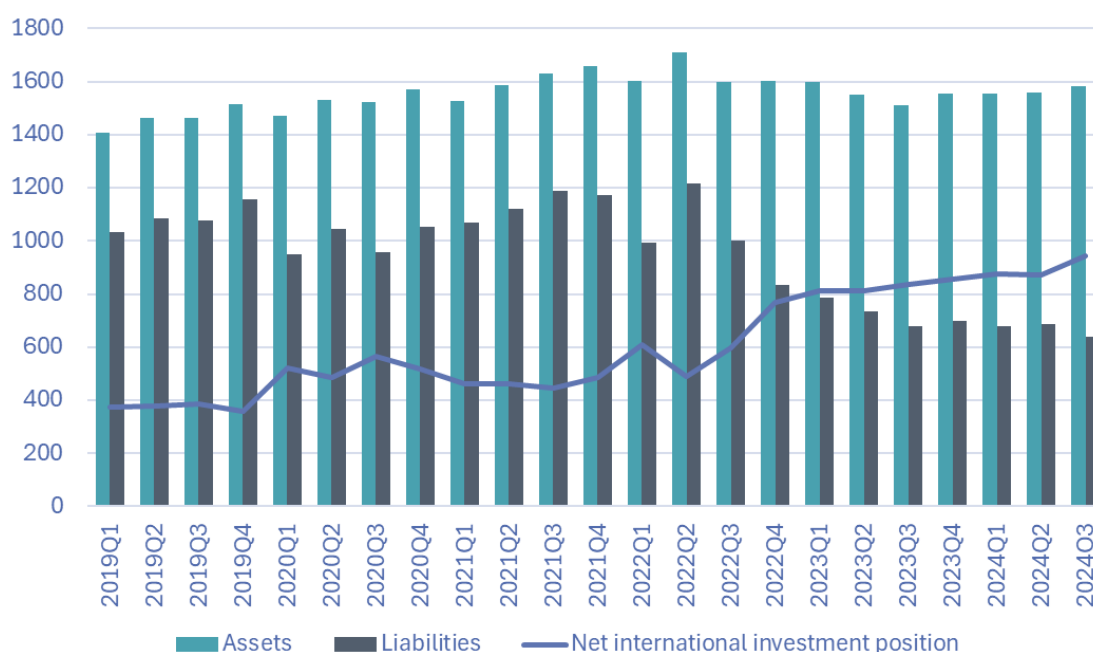
4. Isolated financial markets

The invasion of Ukraine and resulting sanctions are reflected strongly in the functioning of Russia's financial markets. Access to many foreign sources of financing has ceased and the bulk of foreign investors have abandoned the Russian market. As a result, domestic financing also became increasingly important for large Russian corporations. Use of the dollar and euro declined substantially. The give and take of war and sanctions naturally directly affects Russia's exchange rates, government bond yields and equity prices. Our discussion here is limited to the recent structural adjustments of Russia's financial markets.

4.1 Foreign financing dries up

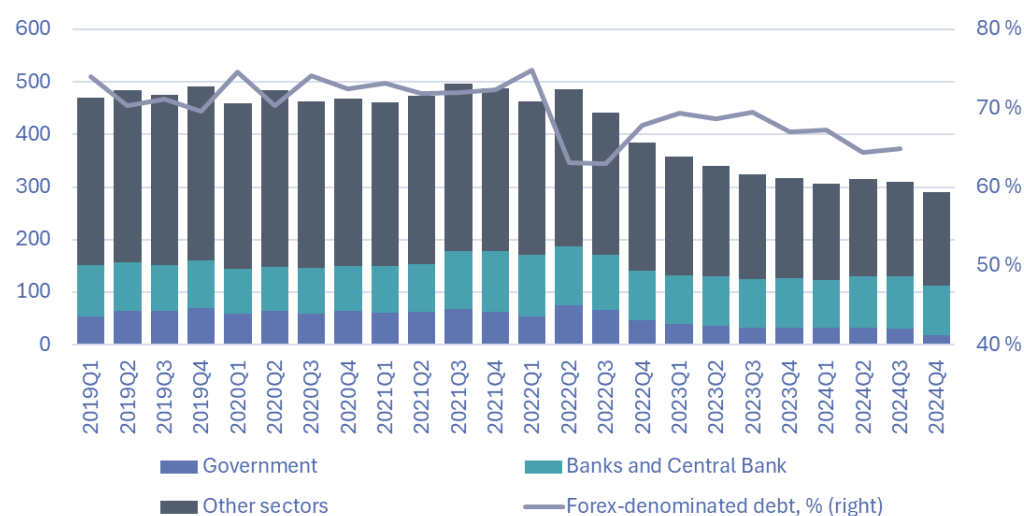
During the past three years, Russia's net international asset position has strengthened, mainly due to reductions in the international borrowing of Russian firms and decline in inward foreign direct investment to Russia. Since the end of 2021, Russia's foreign debt has shrunk by about \$200 billion. In other words, Russian firms have been unable to renew or roll over their old foreign loans and no significant amounts of new debt have been issued. Russian firms have instead paid off their old foreign loans using company cash flows or replaced them with domestic loans. Foreign investors have largely vanished from Russian security markets. Despite capital controls, Russia's balance-of-payments figures show that roughly \$100 billion in foreign direct investment and portfolio investment has departed Russia since the invasion.

Figure 4. Russia's net international investment position, USD billion.



Source: Central Bank of Russia.

Figure 5. Russia's external debt by sector, USD billion.



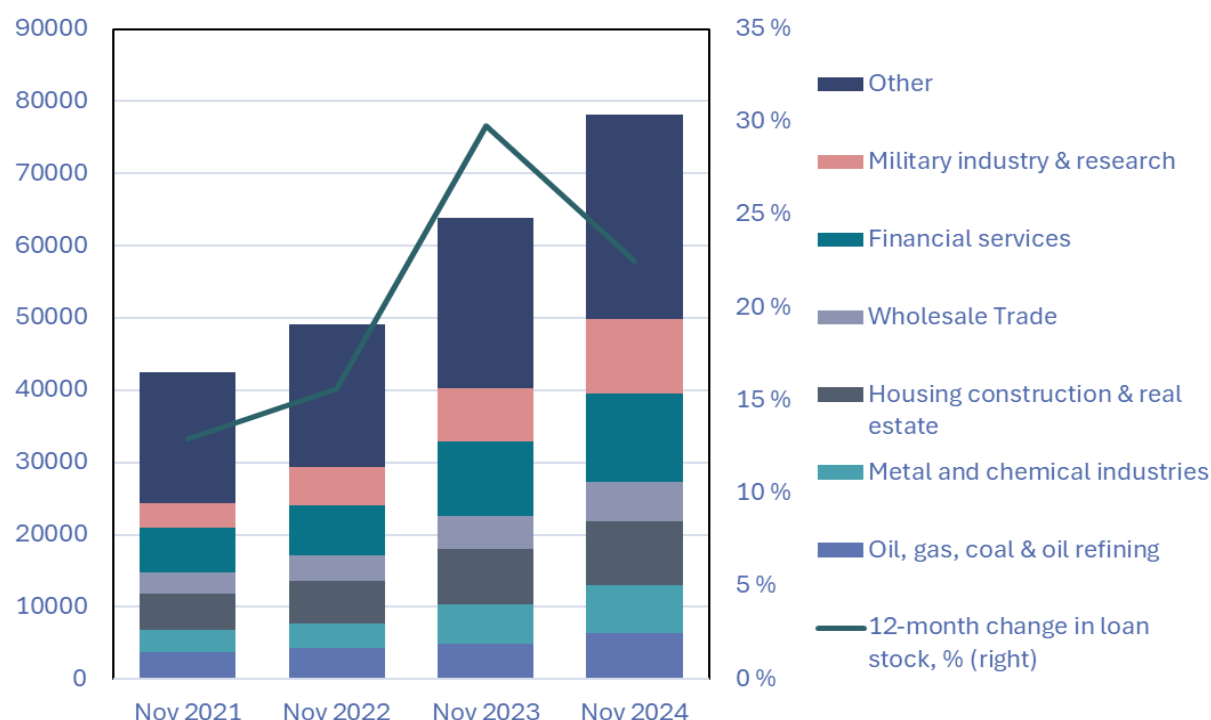
Source: Central Bank of Russia.

Russia's foreign assets have been quite stable since 2022. In part, this reflects the freezing of Russian assets in Western countries, making them hard to access. Russia has also significantly restricted outward-bound capital movements, making the possibilities for households and firms to acquire foreign assets more difficult.

4.2 Rapid growth in domestic bank lending

The lack of access to foreign financing sources has driven even Russia's large firms to the domestic credit and bond markets. The corporate loan stock began to increase rapidly around mid-2022, and by the end of 2024, the bank lending to firms had increased by 70 %, an increase of roughly 37 trillion rubles (370 billion euros) from the end of 2021. Growth in the loan stock has been supported by a rapid increase in domestic demand and a variety of state subsidy programmes. While lending has grown fastest for borrowers directly involved in the war effort (military-industrial branches and certain branches involved in research & development), they represent only a small share of the total loan stock. About 9 % of new corporate bank loans went to such firms last year. In addition, many firms still enjoy loan extensions granted in 2022 that postponed the paying down of loan principal.

Figure 6. Structure of corporate loan stock by sector, RUB billion.



* Military industry & research includes OKVED economic activity categories 25, 26, 30 and 71.

Sources: Central Bank of Russia and BOFIT.

Household borrowing has also grown exceptionally fast, particularly in 2023. Much of the growth in lending to households reflects growth in housing loans. Housing loan growth was initially fuelled by generous government interest-subsidy programmes, many of which were terminated in July 2024.

Rapid growth in the credit stock may signal snowballing economic risks. The CBR has attempted to quell the rapid growth in lending with actions in pursuit of macroeconomic stability and overtly criticism of some housing loan programmes. Banking sector risks have been exacerbated by the rapid growth in state supports and targeted lending, as well as the relaxation of corporate reporting requirements. While high interest rates and slowing economic growth can lead to significant credit losses, the banking sector's capital adequacy and financial standing are currently at reasonable levels.

On the other hand, Russia's most important banks are directly or indirectly owned by the state. When called upon, the state is expected to offset corporate loans granted to firms in branches that support the war effort. Because the government serves as lender of last resort, big firms in particular must stay cozy with the country's leadership.

4.3 The Chinese yuan's growing importance

The status of foreign currency, particularly the US dollar, as a means of payment, store of value and unit of account has been significant for Russia. While the international significance of the ruble has increased in recent decades, in end-2021, about 20 % of corporate loans and 70 % of foreign trade invoices were still made in foreign currencies (mostly dollars or euros), and the traditional Moscow Exchange's RTS index was denominated in dollars. Most wealthy Russians maintained convertible dollar and euro deposit accounts in domestic and international banks.

Sanctions have forced Russians to give up use of the dollar and euro in many contexts. Foreign-currency bank loans have been changed to ruble-denominated loans, and use of the dollars and euro

as invoicing currencies has collapsed. Russians have had to resort to complex arrangements to circumvent sanctions. Foreign trade payments often involve snafus or delays.

While Russia's stated policy goal is to move permanently away from dollar-based trade, such a shift does not come without risks. The yuan is not a free-floating currency and not fully convertible. Moreover, the market for yuan-denominated financial instruments traded on the Moscow Exchange is quite thin. The dollar, the world's most liquid and secure payment currency, has been replaced by second- or third-best options. Reduced financial system efficiency is part of the price of sanction avoidance and dogmatic pursuit of geopolitical goals.

5. Dwindling labour force

Even before the invasion of Ukraine, Russia's unemployment level was already exceptionally low due to its shrinking working-age population and low retirement ages. While precise data on the numbers of soldiers recruited for the war effort is unavailable, most estimates of Russian losses during the war range between 100,000 and 200,000, and approximately three times more in terms of wounded. In total, perhaps 1–2 million men are absent from the regular labour force due to war operations.

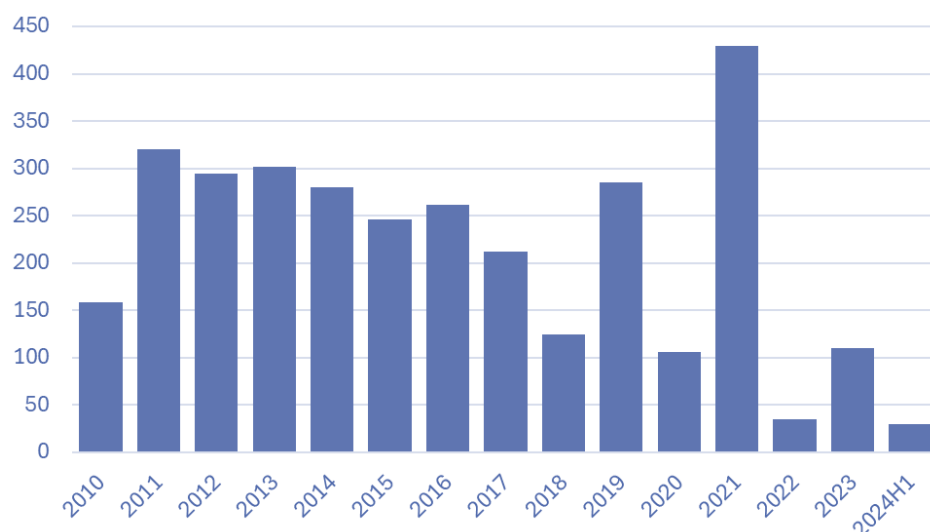
War has fuelled labour demand and decreased the supply of workers to such an extent that many branches are experiencing labour shortages. At the end of 2024, unemployment reached a post-Soviet low of 2.3 %. A recent enterprise CBR survey indicated that the availability of labour had also reached a record low.⁴

In every year of this century, net immigration to Russia has been greater than net emigration from Russia. In the period 2010–2021, net immigration averaged 251,000 people a year. In the wake of the invasion of Ukraine, immigration numbers remained stable, while emigration numbers increased. The decline in net migration to Russia from around 250,000 a year to roughly 60,000 a year has exacerbated Russia's labour scarcity. Compared to the average of 2010–2021, Russia has "lost" over a half million people since the start of 2022, mostly working-age individuals.

War and increased xenophobia have made Russia a less desirable destination for migrants, especially those from Central Asia. Migration flows to Russia appear to have dwindled significantly in the first half of 2024. If that lower pace continued for all of 2024, net in-migration to Russia in 2024 would have been less than in 2022. The decline in immigration flows is expected to tighten an already tight labour market and make labour shortages in some branches more acute.

⁴ The Central Bank of Russia has monitored the adequacy of the labour supply available to firms since 2020. For details, go to <https://www.cbr.ru/Collection/Collection/File/54927/1224.pdf>.

Figure 7. Net immigration to Russia, thousands of persons.



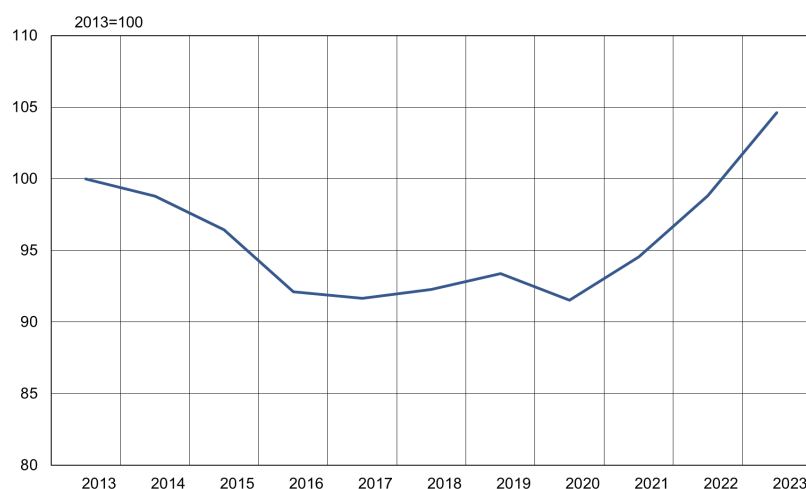
Sources: Rosstat, CEIC and BOFIT.

6. Real household incomes increase in post-pandemic era

6.1 Real disposable incomes reach the 2013 levels in 2023

The combination of tight labour markets and government stimulus spending has accelerated the rise in Russian nominal and real wage levels, especially in 2023. The trends for Russian wages and income levels had been weak in the previous decade. Between 2014 and 2021, real incomes declined on average by 0.5 % a year. Official figures show real disposable incomes (inflation-adjusted income minus mandatory payments) only recovered in 2023 to the level of a decade earlier (Rosstat, 2025a).

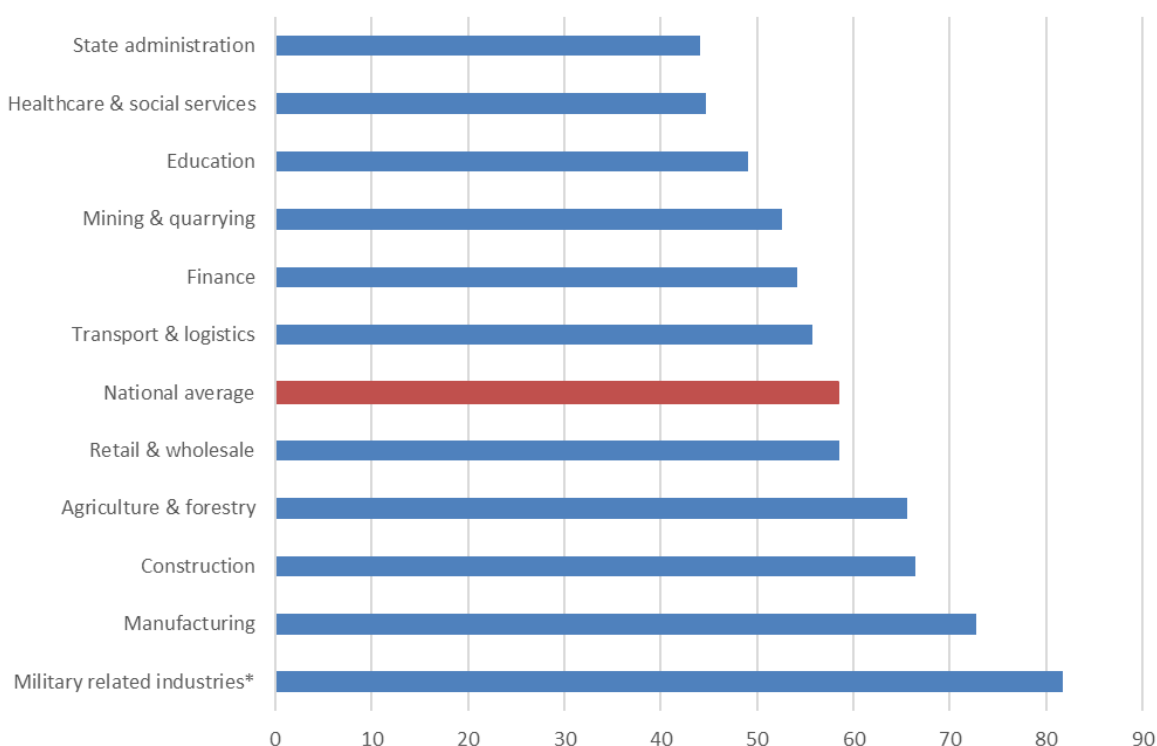
Figure 8. Real disposable incomes (2013=100).



Sources: Rosstat, BOFIT.

Wage trends have been the main drivers of changes in income levels. At the end of 2023, wage income accounted for about 60 % of total household income, a near 5-percentage-point increase from 2013. In 2022, real wages rose by just 0.3 %, but the following year real wage growth accelerated to around 8 % due to lower inflation. In the first ten months of 2024, real wage level growth accelerated to around 9 % a year. The fastest wage rises were seen in manufacturing, and more specifically, in manufacturing jobs in military-related industrial branches.

Figure 9. Change in the average nominal monthly wage between October 2021 and October 2024 (%).



*Military related industries: production of finished metal products (includes firearms and munitions), production of computers, electronic and optical products, and manufacturing of other transportation equipment (includes armoured vehicles).

Sources: Rosstat and BOFIT.

6.2 Highest income growth in military related sectors

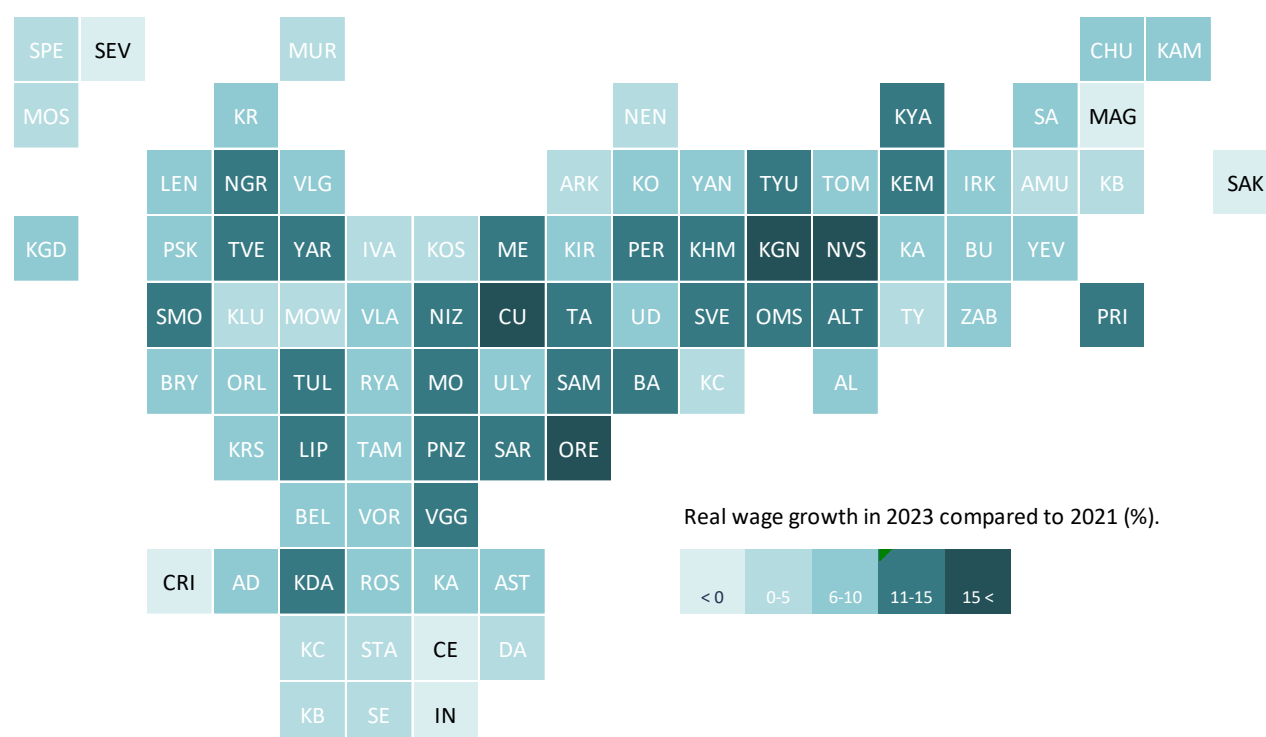
In 2022–2023, Russian savings grew at an average pace of 8 % a year (Rosstat, 2025a). Similar strong savings rates were registered in 2020 during the Covid-19 pandemic and during the crisis years of 2015–2016. The attractiveness of saving has been enhanced by high deposit interest rates, that make bank deposits a particularly attractive form of saving. In 2022, growth in the cash holdings of households nearly matched the pace of previous pandemic years, indicating a substantial increase in the level of economic uncertainty among households. With the economic situation stabilising in subsequent years, the amount of savings began to shrink, particularly in 2024.

The rapid growth of real incomes in Russia and high levels of consumer confidence has not translated into a similar increase in spending on investment goods. Purchases of durable consumer goods are burdened by the scarcity of familiar foreign brands on the Russian market due mostly to sanctions. Regional differences, however, are significant. In the major metropolis regions of St. Petersburg and Moscow, which traditionally consume the most Western products, household

consumption fell more in 2022 compared to other regions. In contrast, foreign car sales increased in the Far East Federal District, where most cars come from Asia (Re:Russia, 2023).

In regional terms, the highest growth in real wages in 2023 compared to the pre-war levels (2021) occurred in the Urals, Volga and Siberia Federal Districts, with official figures (Rosstat, 2025b) showing that the average real monthly wages were 12% higher on average in 2023 compared to 2021. Notably, the Urals and Volga Federal Districts are home to much of Russia's military-industrial production. In the Siberian Federal District, real wage growth rates vary considerably across regions. Official figures show highest growth was posted in the Novosibirsk region (NVS in figure) and the Kemerovo region (KEM). NVS is important for the defence industry, particularly manufacturing of shells and munitions. KEM is known for its defence industries and coal production.

Figure 10. Real on-month change in monthly wages (%), 2021-2023.



Note. Sevastopol (SEV) and the Crimean peninsula (CRI) are part of Ukraine. Russia illegally annexed Crimea and Sevastopol in 2014. See Appendix for list of ISO codes for Russian regions.

Sources: Rosstat and BOFIT.

Trends in real wages have remained flat or even contracted in regions of the North Caucasus Federal District, which includes some of Russia's poorest regions. However, even the Central Federal District, which is the most affluent part of Russia and embraces the City of Moscow (MOS), and the Northwestern Federal District have experienced real wage growth below the national average. The economy of Northwest Russia has been oriented to Western exports that have declined since Russia's full-scale war on Ukraine. A notable exception is the Novgorod region (NGR), a major provider of fertiliser exports, where wage levels have risen faster than the national average (up by 14 % in 2023 compared to 2021).

7. Russia's new top trading partners

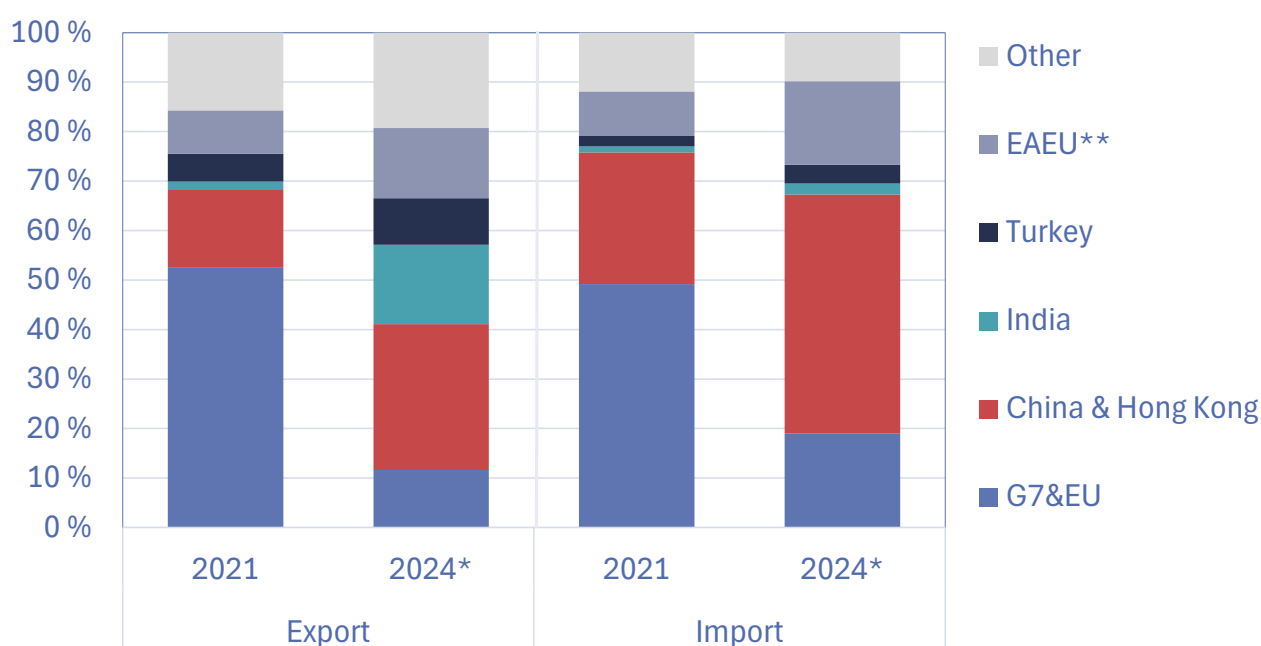
War and sanctions have reshaped Russia's foreign trade. Besides limiting Russian trade with sanctioning coalition countries, restrictions on Russian shipping and international payments traffic have complicated Russian foreign trade for goods not under sanctions and countries otherwise not participating in sanctions regimes.

Russia's foreign trade has generally contracted since the February 2022 invasion of Ukraine. Sanctions have hurt both Russia's imports and exports. Between 2018 and 2024, the contribution of goods and services exports to Russian GDP contracted from 30 % to 23 %, while imports of goods and services declined from 21 % to 18 %. Russia has become more isolated from the global economy.

The structure of Russian foreign trade has also changed significantly as a result of war and sanctions. Russia's share of foreign trade with countries participating in the sanctions coalition has diminished sharply, while the share of Asian countries has grown. China has emerged as Russia's most important single trading partner. China last year accounted for about 30 % of Russian exports and supplied half of Russia's imports. At the same time, Russia's dependence on China has grown significantly.

Russia's position in the international distribution of labour, however, showed virtually no change. Russia continues to export commodities and import machinery & equipment. Russia appears to be extremely dependent on imports of high-tech products. The sanctions coalition has forced Russia to import most of high-tech products from China.

Figure 12. Geographical breakdown of Russian foreign trade.



*2024 covers January-September.

** EAEU refers to Eurasian Economic Union that consists of Russia, Armenia, Belarus, Kazakhstan and Kyrgyzstan. Shares calculated from mirror statistics, i.e. the official export and import figures reported by Russia's trading partners. Source: IMF DOTS.

8. Changes in Russia's energy sector

Global energy markets have been in flux in recent decades. Over the past ten years, natural gas and crude oil production has increased rapidly, particularly in the United States, Qatar, China and Australia. Energy demand has also shifted strongly to emerging economies. As a result of these global changes, Russia's dominant role as a supplier of hydrocarbon commodities has contracted. By 2021, Russia's exports of energy commodities no longer provided similar geopolitical clout they did two decades earlier. The days of speaking of Russia as an energy superpower had subsided even before Russia's full-scale invasion of Ukraine.

8.1 Energy exporting gets harder, but still plays a large economic role

According to estimates from over a decade ago, the oil & gas sector accounted for about 20 % of Russian GDP (Simola and Solanko, 2021). No newer estimate is available, but it seems unlikely that this contribution has grown. Over the past three years, the energy sector has grown more slowly than the rest of the economy.

There is also a lack of accurate information on the share of oil & gas in goods exports. Rosstat reports that the share of mineral products (oil, petroleum products, natural gas and coal) has not changed much in recent years. If so, hydrocarbon commodities would currently make up about 60–65 % of the value of Russia's total exports.

War and sanctions have dramatically altered the geographic emphases of energy exports. Exports of pipeline gas, crude oil and petroleum products to the EU has largely ceased. Russia's largest buyers of energy products are now found in China, India and Turkey. The last remaining direct natural gas pipeline from Russia to the West was closed at the start of January 2025. It is highly unlikely that Russia returns to its lost Western markets anytime soon. Crude oil is still transmitted via the Druzhba pipeline to Hungary, Slovakia and the Czech Republic, but export volumes are minute from the Russian perspective.

Russia's role in its new export markets is different than in it was in Europe. Transport distances are longer and products are sold at discounts acceptable to buyers. Russian energy companies play no role in Chinese oil refining or natural gas markets. For China, Russia is nothing more than one of many raw-material suppliers, and not a significant energy power. In India and Turkey, access to Russian inputs grants competitive advantages to refineries, but in their markets Russia's direct role in production is minimal. Rosneft has a 49 % stake in the large Vadinar refinery in western India.

8.2 Sanctions limit the operations of energy companies

Even if its position in European gas markets had began to erode a decade ago, changes have hit gas giant Gazprom especially hard. Pipeline gas exports to Europe have declined to about half of their peak in 2018–2019. Demand for Russian gas in EU countries dried up after 2021 due to Russian demands for payment in rubles and the desire of EU countries to end their dependence on Russian energy imports. The result was a collapse in Russian energy exports to the EU. Gazprom lost a huge revenue stream that had traditionally been used to finance a myriad of domestic investment projects and support subsidised gas rates for residential and commercial users in Russia.

Russian oil production currently remains around pre-war levels. Exports of petroleum products are limited due to increased domestic demand and problems at Russian refineries. In addition to refinery damage from Ukrainian drone strikes, sanctions have hampered routine servicing and

maintenance at refineries. The listing of Russia's biggest oil companies on sanctions lists has complicated both the exporting of crude oil and the importing of critical components used in production and field development.

Even with an optimistic draft energy strategy (BOFIT Weekly 34/2024), Russia's ability to wield energy as a tool of foreign policy has weakened due to global trends, war and sanctions. While Russia believes strongly in its plans to increase production and exports of liquefied natural gas (LNG), its ability to develop appropriate LNG production in Arctic areas without foreign partners is limited at best. For the moment, US sanctions have been effective in slowing the progress of Russian LNG projects. A new round of sanctions invoked in January 2025 further restricts Russia's possibilities to export oil and LNG.

9. What happens next?

Russia's unprovoked and illegal war of aggression has generated huge shifts in the Russian economy. In some case, the changes simply amplify existing trends. For example, the effects of population decline have been felt more strongly due to reduced immigration. Russia's challenging business environment has continued to deteriorate, creating an even harsher business climate for companies without direct connections to the leadership.

There are also qualitative changes. Russia has become a much more closed economy. Its new dependence on China is manifold and deep. Its once conservative economic policies have been sacrificed on the bonfire of war.

Changes in economic policy also explain why Russia's official GDP only contracted slightly in 2022 and has since risen. The state remains ready to increase spending significantly to fund the war. The resulting deficits are funded in part with domestic borrowing and in part with revenues from the National Wealth Fund, the sovereign fund for saving oil earnings during good times. The adjustment of the Russian economy to this new reality has been helped by the fact that much of the economy still operates according to market principles. Companies have been quick to recalibrate their operations to the new reality, and many countries (China in particular) have shown willingness to keep trading with Russia.

Adaptation has its limits, of course. The new reality for the Russian economy implies lower long-term growth and less progress in improving living standards. War consumes vast amounts of money that could otherwise be used to lay the groundwork for sustainable economic growth and better living standards.

At the current level of intensity, Russia still can produce the necessary amounts of war materiel to conduct its war in Ukraine. War also remains Russia's top economic policy priority, so problems in other branches or the country's long-term economic outlook are seen as lesser matters of concern. Providing support to Ukraine should thus remain a top priority for Western countries until Russia ceases its war.

References

- BOFIT (2024). Russia lays out hydrocarbon-based energy strategy. [BOFIT Weekly Review 43/2024](#).
- Djankov, Simeon and Anastasiia Golovchenko (2025). Expropriation, Russian style. [Expropriation, Russian style | CEPR](#) (Last visited 2.2.2025).
- KSE Institute (2025). Over 160 international companies left Russia in 2024. <https://kse.ua/about-the-school/news/160-international-companies-left-russia-in-2024/> (Last visited 2.2.2025).
- Re: Russia (2023). Consumption Inertia: Russians are spending far less on durable goods than they could, an important feature of the current economic crisis, 20.4.2023. <https://re-russia.net/en/review/245/> (Last visited 15.1.2025).
- Rosstat (2025a). Уровень жизни. <https://rosstat.gov.ru/folder/13397#> (Last visited 16.1.2025).
- Rosstat (2025b). Рынок труда, занятость и заработная плата. https://rosstat.gov.ru/labor_market_employment_salaries# (Last visited 16.1.2025).
- Simola, Heli and Laura Solanko (2021). Venäjän öljy- ja kaasusektori globaalien energiamarkkinoiden murroksessa. BOFIT Policy Brief 6/2021.

Appendix

Table A1. Regional ISO codes in alphabetical order.

ISO code	Region	ISO code	Region	ISO code	Region
AL	Altai	KIR	Kirov oblast	SAK	Sakhalin oblast
ALT	Altai krai	KO	Komi	SAM	Samara oblast
AMU	Amur oblast	KOS	Kostroma oblast	SAR	Saratov oblast
ARK	Arkhangelsk oblast	KDA	Krasnodar oblast	SEV	Sevastopol
AST	Astrakhan oblast	KYA	Krasnoyarsk oblast	SMO	Smolensk oblast
BA	Bashkortostan	CRI	Crimea	STA	Stavropol krai
BEL	Belgorod oblast	KGN	Kurgan oblast	SVE	Sverdlovsk oblast
BRY	Bryansk oblast	KRS	Kursk oblast	TAM	Tambov oblast
BU	Buriatia	LEN	Leningrad oblast	TA	Tatarstan
DA	Dagestan	LIP	Lipetsk oblast	TY	Tyva
KHA	Khabarovsk oblast	MAG	Magadan oblast	TYU	Tyumen oblast
KK	Khakassia	ME	Mari El	TOM	Tomsk oblast
KHM	Khanty-Mansisk aut.okrug - Yugra	MO	Mordovia	ZAB	Transbaikali oblast
IN	Ingushetia	MOS	Moscow	CHE	Chelyabinsk oblast
IRK	Irkutsk oblast	MOW	Moscow oblast	CE	Chechenia
IVA	Ivanovo oblast	MUR	Murmansk oblast	CHU	Chukotka autonominen piiri
YAN	Yamalo-Nenets aut. okrug	NEN	Nenets aut. Okrug	CU	Chuvashia
YAR	Yaroslavl oblast	NIZ	Nizhnyi Novgorod oblast	TUL	Tula oblast
YEV	Jewish aut. Okrug	NGR	Novgorod oblast	TVE	Tver oblast
KB	Kabardino-Balkaria	NVS	Novosibirsk oblast	UD	Udmurtia
KGD	Kaliningrad oblast	OMS	Omsk oblast	ULY	Ulyanovsk oblast
KA	Kalmykia	ORE	Orenburg oblast	VLA	Vladimir oblast
KLU	Kaluga oblast	SPE	St. Petersburg	VGG	Volgograd oblast
KAM	Kamtšatka krai	SE	North-Osetia - Alania	VLG	Vologda oblast
KC	Karatchai-Cherkessia	RYA	Ryazan oblast	VOR	Voronezh oblast
KR	Karelia	ROS	Rostov oblast		
KEM	Kemerovo oblast	SA	Sakha (Yakutia)		

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