# FINANCING THE RUSSIAN WAR ECONOMY

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#### Preface

This is an update of the report <u>The Russian economy in the fog of war</u> from September 2024. It includes an update on key macro indicators and then focuses on how the Russian war economy is being financed and how other sectors are developing in this economic environment. The report ends with a discussion of the economic outlook and risks in the banking sector and some concluding remarks.

# Acknowledgements

This report has benefitted from important contributions by the team at the Kyiv School of Economics (KSE), in particular their work on the <u>Russian military industrial complex</u> but also in terms of other data and analysis. The article <u>Russia's hidden war debt</u> by Craig Kennedy is also an important source for the analysis of this report, beyond being one of the references that we cite. SITE alone is responsible for any errors as well as how the material is presented, including the analysis and conclusions in the report.

## **Executive Summary**

This report is an update of the September 2024 report, "The Russian Economy in the Fog of War." The current report evaluates the financing mechanisms sustaining Russia's war economy, analyse sectoral developments under these conditions, and assess medium-term risks. Emphasis is placed on carefully assessing official narratives and providing a critical economic appraisal of Russia's wartime financial architecture. The opacity and credibility of Russian economic statistics still remain a challenge for any analysis of the state of the Russian economy amidst the ongoing military aggression. Russia's official macroeconomic indicators suggest modest real GDP growth, high but manageable inflation, and a highly restrictive monetary policy with a central bank interest rate of 21%. However, the numbers on inflation are questionable; independent estimates suggest they are closer to 20%, than the reported 9-10%. This discrepancy has implications for the calculation of real GDP, but with the massive fiscal stimulus caused by the war economy a modest positive real growth rate is of course possible. What is far more questionable is the sustainability of that growth, and the welfare benefits from growth driven by arms production and military expenditures. The statistical opacity instead serves to bolster the domestic narrative of economic resilience and questions the effectiveness of sanctions while masking underlying fragilities. More importantly, the report emphasizes that Russia's GDP (approx. 2 trillion dollars) is dwarfed by that of the EU (18.6 trillion dollars), which is quickly becoming Ukraine's main economic partner. Even under optimistic growth scenarios, Russia's economic scale remains insufficient to match its Western adversaries' capacity in a sustained geopolitical rivalry. Sufficient western support to Ukraine to match the Russian aggression is thus not a question of resources, it is a question of political leadership and will.

Expansionary fiscal policy and Budget Reorientation. Military spending has increasingly crowded out other public expenditures. While the official budget deficit looks manageable, the authorities have increasingly turned to reserves and domestic borrowing to finance running expenses. Oil and gas revenues remain vital, but their relative contribution is declining. Other tax sources and extraordinary revenue measures have increasingly been tapped or are planned, such as windfall taxes, profit taxes, progressive income tax scales, and increased mineral extraction taxes, impacting both households and non-military production negatively.

Growing Oil and Gas Sales to Asia, EU Still Dominant Gas Buyer. Russia continues to rely on fossil fuel exports. There has been a general reorientation towards Asia and revenues are kept up through sanctions leakage and the use of the shadow fleet. However, seaborne crude exports and corresponding revenues have dropped significantly in early 2025. The share of oil transported through the shadow fleet has gone down thanks to new sanctions, and discounts on Urals and ESPO crude have widened. Pipeline gas to China and LNG exports on the other hand have increased, and in particular to the EU, that remains Russia's biggest buyer. France and Belgium are leading importers, and much of that import went to re-exporting which is now banned in the EU.

**Depletion of the National Wealth Fund (NWF).** The NWF has become a central tool in financing the war. Liquid assets in the fund (yuan and gold) have declined sharply, with gold reserves falling from over 500 tonnes in 2023 to 164 tonnes by early 2025. The liquid portion of the NWF is now under 3% of GDP, undermining its role as a buffer for the future.

Domestic Debt and Hidden War Financing. With limited foreign borrowing capacity, the state relies on domestic bond issuance and increasingly opaque off-budget financing mechanisms. A substantial rise in corporate credit, primarily targeting military and war-related sectors, is highlighted in Craig Kennedy's analysis of Russia's "hidden war debt." These loans are state-directed and implicitly guaranteed, posing systemic risk to the banking sector and/or the

government budget effectively doubling the real cost of military expenditures compared with reported budget numbers.

Expanding but Vulnerable Military-Industrial Complex (MIC). The MIC has expanded rapidly, becoming the backbone of Russia's wartime economy. Major state-aligned conglomerates such as Rostec and Almaz-Antey have ramped up production despite sanctions, facilitated by shadow procurement and international intermediaries as detailed by a study from the Kyiv School of Economics. Yet, this expansion is fraught with vulnerabilities, both financial and technological. Financing is overwhelmingly driven by direct federal budget allocations, often through classified or opaque budget lines and disbursements via state-owned banks offered on preferential terms. The lack of alternative sources of financing, amplified by the steep drop in arms exports, makes the sector vulnerable to shocks to the oil price, tighter sanctions enforcement or a general recession. Essential Western inputs in microelectronics and high-end machinery are also increasingly difficult to acquire and reliance on Chinese substitutes is costly and quality is lower.

**Diverging Performance in Non-Military Sectors.** War-related, but not directly military, industries such as manufacturing and information and communication are benefitting from the shift to the war economy. Also in the retail sector, margins have been high, and demand kept up. But high interest rates and resource reallocation have adversely affected most other non-military sectors substantially. Some sectors have also been hit by higher taxes and falling demand, or (such as the construction sector) by changes in government policies with regards to for instance mortgage subsidies.

Growing Financial Risks with a Deteriorating Medium-Term Outlook. Russia's macroeconomic outlook for 2025 is marked by deceleration relative to 2023 and 2024 (IMF projects ~1.5% growth) and heightened vulnerabilities for the longer run. With liquid reserves nearly depleted, limited investor appetite for domestic debt, and a heightened concern for a global recession and declining oil prices, financing the war will become increasingly arduous. The potential upside lies in an end to the war and the abolition of sanctions, but even so, a redirection of the economy will be difficult with high inflation expectations and an overgrown MIC fed by subsidies. The risk of a banking crisis is rising due to elevated inflation, rising housing prices, credit expansion, and high deposit rates, all known to be predictors of previous banking crises. If trust in the financial sector, or in the ability of the government to cover the losses in case of more severe problems in the subsidized MIC falters, systemic financial instability could ensue.

Conclusion: The Increasing Vulnerability of the Russian Economy. The Russian economy remains relatively stable for the moment, but it is on an increasingly precarious footing. While it is superficially resilient, underlying imbalances and structural weaknesses are growing. The fiscal stimulus of the war economy has kept the economy afloat in the short term, but the reliance on opaque financing, distortionary resource allocation, and shrinking fiscal buffers makes it unsustainable in the long term. Contrary to Kremlin narratives, time is not on Russia's side. Continued Western sanctions, military support to Ukraine, and a unified economic front are essential to constraining Russia's war machine and amplifying the economic costs of prolonged aggression.

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# 1 Background

This is an update of our report "The Russian economy in the fog of war" from September 2024. The theme of that report was to study economic developments in Russia with a critical analytical approach, considering the possibility that official Russian statistics and some of the reporting on Russia's development have become part of their war propaganda. As the previous report discussed, several standard economic indicators are no longer published by the authorities, while other indicators seem inconsistent with the policy choices that can be observed. This situation remains and is still important for understanding various narratives around how well or poorly the Russian economy is doing today.

One of the narratives tries to tell a story of how invincible Russia is and how weak Ukraine and its Western partners are. In this narrative the focus is often on real GDP growth, and as we documented in the previous report, there are reasons to question the numbers coming from official Russian sources. In particular, the measures of price levels that go into calculating real GDP from nominal GDP numbers are questionable. Inflation is likely to be underreported in official statistics, at times probably by a factor of at least two. This has serious implications for real GDP calculations. This matters for the discussion about the effectiveness of sanctions and the costs of the war, and more accurate estimates offer a dent in the rosy picture the Russian government wants to showcase.

However, even if it is the case that the real GDP numbers are not completely off, they are largely irrelevant for the bigger question of the strength of the Russian economy compared to the Western partners of Ukraine. Looking forward, it seems that the EU will have to take a leading role in the group of Western partners. Compare then an estimated Russian GDP of around 2020 billion dollars with the collective GDP of the countries of the European Union of 18600 billion dollars in 2023. This means that Russia has around 11 percent of the collective GDP of the EU. Differences in growth rates between Russia and the EU will not change this in any meaningful way in the foreseeable future, and current forecasts do not envisage that Russia will grow much faster than the EU. But even if, hypothetically, Russian growth were 3 percentage points higher than EU growth, it would still take Russia 70 years to reach the level of the EU. In other words, this focus on marginal growth rate differences has little to do with the relative economic strength of Russia compared to Ukraine's partners in the EU and beyond over any relevant time period.

The relevant indicator of underlying economic power is the total size of the economy, that is, the capacity of countries to, year after year, produce economic value. This productive capacity is what ultimately funds investments in military capabilities. And when two parties compete, it is the *relative* strength in these terms that matter. Put differently, when Russia spends one additional percent of its GDP on military capacity, it is enough for the EU to collectively spend only an additional 0,11 percent of its GDP to match this. In terms of actual current military spending, if

<sup>&</sup>lt;sup>1</sup> In current US dollars according to the latest update from the World Bank, World Development Indicators in January 2025.

the EU wanted to spend the same amount as Russia -- 110 billion dollars, or about 5,5 per cent of its GDP in 2023 -- this is equivalent to just 0,6 percent of the EU's collective GDP.

There are numerous arguments surrounding how to adjust such comparisons for differences in relative costs of producing military capacity. Such calculations typically shift the balance in favor of Russia but not to an extent that alters the underlying superiority of the EU's economic strength. Using so-called military PPP adjustments to the current GDP numbers the EU as a whole still has about five times the economic capacity of Russia, implying that every additional percentage point of GDP spent on military expenditures in Russia can be matched by a 0.2 percentage point increase in the EU.<sup>2</sup> If the EU were to spend 800 billion euros on the military sector, a number that has recently been discussed, it would require Russia to spend about 24 percent of its GDP to match this, using military PPP-adjustments, or about 43 percent of GDP if we use international exchange rates. Either way, the EU is simply much larger in terms of underlying economic capacity.

The main focus of this report is on how the Russian war economy is being financed and what implications this has on different sectors. Before we go through the details of funding the Russian war economy, the report starts with a short update of the key macroeconomic indicators from our previous report in the next Section. These indicators are produced by the Russian authorities and should be treated as potentially part of the war propaganda but are included to provide a starting point for the discussions later on in this report. Section 3 then examines in depth how the war economy is structured and financed, beginning with oil and gas revenues, other financing sources, and the impact of sanctions, and including more "hidden" financing sources. It goes on to look at how this war-focused financing affects both military and non-military sectors, as well as households. Section 4 considers the outlook and primary risks that could alter the trajectory of Russia's economy in the near future. An Appendix offers an update on the latest sanctions and countermeasures, as well as an overview of more detailed developments in various sectors of the economy.

# 2 Recent developments

This section includes official statistics of key macro indicators that should be treated with some care, given the role these indicators play in the Russian propaganda war. These data are complemented with some alternative measures of inflation as well as market data. Note that even market data on exchange rates and the stock market have to be treated with some care since these markets are subject to sanctions as well as significant intervention by the Russian government. In other words, these cannot be said to represent regular prices set on a free and well-functioning market but are as close as we get to market prices for major assets in Russia today.

<sup>&</sup>lt;sup>2</sup> See, e.g. Robertson (2022). Online updates (used for the calculation here) are available at <a href="https://militaryppp.com/blog/">https://militaryppp.com/blog/</a>.

# 2.1 Real and monetary indicators

To set the stage for this report, we start with the official statistics regarding real GDP growth, inflation and the real interest rate as derived from the actual policy rate of the Central Bank of Russia (CBR). According to Rosstat, the quarterly real GDP growth rates continue to be in positive range but on a declining trajectory since the fall of 2024 (Figure 1). The latest quarterly growth rates for Q3 and Q4 are now available and for the full year of 2024 they imply an annual growth in 2024 of 4.1 percent.

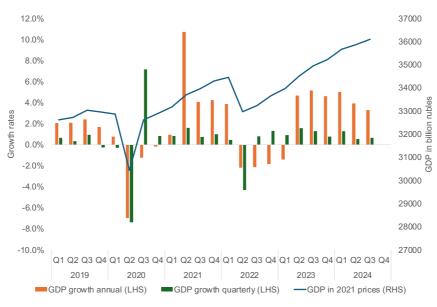


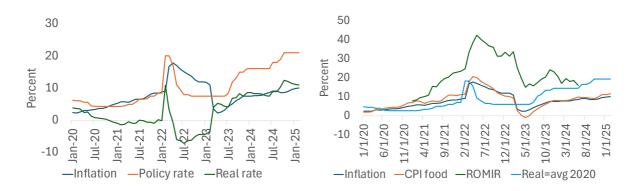
Figure 1. Real GDP, Level and Growth Rates

Source: Rosstat.

Note: Quarterly real GDP in 2021 prices seasonally adjusted. Quarterly (q-on-q) and annual (q on same q last year) growth rates computed from this series.

Despite the decline in real growth and a continued high policy rate of 21 percent, inflation has been on the rise, and full year inflation for 2024 reached 9.5 percent, going up even further at the end of the year. In the first months of 2025, inflation is running at 10 percent (Figure 2). We continue to be skeptical regarding these inflation numbers. First of all, the policy rate implies that the real interest rate is over 10 percent, which is far above what it has been historically. If we calculate what the inflation would be under the assumption that the real interest rate is at its prewar average, it would be around 20 percent. In our report from the fall of 2024, we also published the inflation rate provided by the independent survey from ROMIR, which was far above the official numbers for the entire period back then. Somewhat tellingly, this series is no longer published and even the historical time series has been removed from the ROMIR website. We can only speculate about the reasons for this, but it is clear that this series did not align with the official narrative of inflation from the Russian authorities. As we have stated before, inflation is a key variable in assessing the current state of the Russian economy as it affects the calculation of real GDP and also Russian households and companies' consumption and investments, which in turn affect future growth and welfare.

Figure 2. Inflation, interest rates, and alternative measures of inflation



Source: Rosstat, CBR, ROMIR, and authors' calculations.

Note: All monthly series that show annual inflation based on same month previous year. ROMIR has recently suspended the publication of the FMCG Index and removed archived data for previous periods from their webpage, leaving only the methodology description<sup>3</sup>.

# 2.2 Fiscal policy

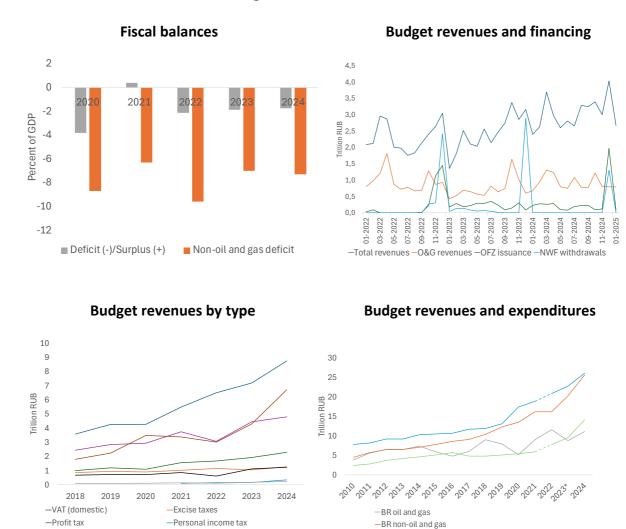
Fiscal policy is an integral part of Russia's war efforts and has to be seen through this prism when compared both to past performance of the government and its effects on future growth. If a government shifts its budgetary resources from building schools, hospitals and other productive infrastructure to the military sector, this has implications for both welfare today and also long-term, sustainable growth. Although increased military spending can raise wages for some households and stimulate investment in the defense industry—potentially contributing to short-term growth—if the resulting output is ultimately deployed and destroyed in Ukraine, it does not foster lasting economic gains. Instead, it leads to human suffering and a misallocation of government resources. In short, current priorities are not consistent with increased welfare, sustainable growth or fiscal stability.

Figure 3 shows how some fiscal indicators have developed over recent years. The budget deficit looks manageable at a first glance, but it is also clear that oil and gas revenues are crucial to finance the Russian war budget; without these, the budget deficit looks less manageable. We can also note that the savings from the National Wealth Fund (NWF), and to a smaller extent, the issuance of domestic government bonds, have been used on a regular basis to finance the budget. This will be analyzed in more detail later in the report.

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<sup>&</sup>lt;sup>3</sup> https://romir.ru/indexes\_en

Figure 3. Fiscal indicators



Source: Fiscal balances, MoF and Rosstat; Budget revenues and financing, MoF; Budget revenues and expenditures, MoF; Budget revenues by type, MoF for 2010-2021, expenditures for 2023 from Prokopenko (2023), revenues 2024 from MoF, expenditures 2024 from SIPRI estimates.

-BE (defence, security and law enforcement)

-BF other

Note: Data for budget expenditures for 2022 is unavailable (denoted as dashed lines).

-Excise taxes on imported goods

# 2.3 Exchange rate and markets

-Other

-VAT on imported goods

-Import duties

Although the Russian economy and markets have taken a turn back towards its past of central planning and government intervention, there are still some indicators that are closer to the private market than pure state control. Two such indicators are the exchange rate and the stock market. This is not to say that the currency and shares in Russian companies are entirely free from state intervention, but rather that there is a higher degree of private sector involvement in the pricing of these assets. Figure 4 provides an overview of how the ruble and the Russian stock market indices (RTS and MOEX) have developed in relation to the oil price (here Brent) and the U.S. stock market (here SPX). As noted in previous reports, fluctuations in the international oil price remain the most significant factor influencing the Russian economy in general as a whole, and Russian asset prices in particular. The trajectories of the ruble and the RTS index illustrate

this clearly. Ever since fluctuations in international oil prices forced Russia to abandon its exchange rate peg, oil prices have continued to play a dominant role in determining the ruble's value, even under more stable conditions. The RTS index is denominated in dollars and follows the same movements, and this is then amplified by the close correlation of the ruble-denominated MOEX index. Pre-war, this used to develop in tandem with the US stock market index (SPX). In short, increasing oil prices meant increased values of Russian assets in the form of both the ruble and shares in Russian companies.

Oil and ruble Oil and stock market RUB/USD (reversed scale) USD/barrel **USD/barrel** RUB/USD Brent Brent -RTS Russian vs US stock markets Recent divergence from history Index value MOEX SPX RUB/USD

Figure 4. Market indicators

Source: CBR, US energy administration, and MOEX.

However, in the beginning of February 2025, these strong correlations began to unravel as the Trump administration launched policies that on the one hand undermine global growth (pushing down oil and the SPX), and on the other announced plans for a "peace" that would favor Russian interests. While Western markets and the oil price declined, the ruble and Russian shares increased their valuations significantly. The RTS index that combines the increased values of both shares and the currency increased by more than 30 percent in the first months of 2025. In reverse, this can also be seen as an indicator of the costs markets associated with Russia's ongoing war; when the probability of an end to the war increases, Russian markets cheer.

# 3 The Russian war economy

Reorienting an economy to fight a war has broad implications on public finances and the allocation of resources across sectors of the economy. Most of these effects are intentional, as the objective of the state has changed, but they nevertheless have consequences on households, private companies and the state of public finances in the short and long run. Some effects may also be unintentional, such as the rapidly increasing rate of inflation and labour shortages. Importantly, these effects all matter for the capacity of the economy to grow and prosper, and in the medium to long term that is also what matters for the state's ability to reach its objectives, whatever they are. To better understand the sustainability and consequences of the Russian war economy, here we take a closer look at the financing of the war machine, and how the reorientation of the economy has affected different sectors.

# 3.1 Financing the war machine

It is expensive to wage a war and Putin's Russia also has budget constraints to adhere to when it comes to financing the war machine. First, there is the fiscal budget that needs to be financed. Second, the country faces an external constraint— trade with other countries requires sufficient revenues to pay for imports. In addition to these state-level constraints, individual sectors of the economy also operate under budget limitations shaping their consumption, investment and production decisions. These budget constraints are in turn affected by the government's decisions to tax (individuals and companies), spend (on military, pensions, wages, infrastructure, etc), finance its budget deficits (with savings, or by borrowing at home or abroad), and fight inflation with higher interest rates.

In this subsection, we go through the essential revenue and spending flows that finance the war economy. We look at government revenues from oil and gas exports, other taxes and fees, and how the National Wealth Fund (NWF) and borrowing at home and abroad make up for the remaining financing of the fiscal deficit. Furthermore, we look at the role of off-balance sheet funding from banks to the military industrial complex, which adds further complexity to how the war is financed. Finally, we look at the role of sanctions in affecting the budget constraints Russia face.

## 3.1.1 Oil and gas revenues

Oil and gas revenues have been fundamental in financing heightened state spending. Oil and gas taxes made up a larger share of federal revenues (31.7% in Jan–Sep 2024 vs. 28.3% a year earlier), partially offsetting a large deficit linked to rising overall expenditures. But as we pointed out before, the revenue shares vary over time with oil prices as well as the level of activity in the domestic economy. The sector was buoyed by favorable prices for most of the period and a weak ruble. However, the outlook clearly depends on commodity prices: the Finance Ministry of Russia warned that a drop in oil prices could reverse these revenue gains. All in all, Russia's fossil fuel export revenues continued to increase at the end of 2024 but decreased during the first

months of 2025, as shown in Figure 5. The latest CREA report (Katinas, 2025) documents a drop by 3% in February 2025, averaging 640 million euros per day.

However, this aggregate trend masks important differences across fuel types. Seaborne crude oil export volumes declined by 9 percent to 2.75 million barrels per day in the beginning of 2025, the lowest level in months, with revenues down by 13 percent to 188 million euros per day, suggesting Russia is receiving lower prices, partly due to tougher sanctions introduced in late 2024, as discussed in Section 3.1.3. Urals crude discount vs. Brent increased from 10 to15–20 dollars per barrel, while ESPO crude, previously sold at near-market prices, now trades at a 6–7 dollars per barrel discount. Meanwhile, pipeline crude oil revenues saw a slight 2% increase (86 million euros per day), and LNG revenues surged 13% (52 million euros per day), with a 9% rise in volume. Therefore, Novatek is moving forward with LNG projects, and Russia's first ice-class LNG tankers are expected to be operational soon. After falling in January, pipeline gas revenues also rebounded by 5% (70 million euros per day), with volumes up 1%.

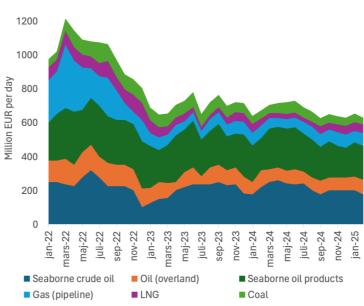


Figure 5. Russia's fossil fuel export revenues

Source: CREA based on Kpler, Marine Traffic, ENTSOG and customs data.

Note: Figure based on approximation from CREA figure.

The EU remains Russia's largest buyer of LNG, with France and Belgium leading imports, and much of this eventually going to Germany. Some of France's and Belgium's imports were reexported outside of the EU before the EU banned this type of re-exports in March 2025. A study by several environmental organizations (Coulomb et al., 2025) highlights how federally owned German company SEFE played a leading role. Hungary and Slovakia still rely heavily on pipeline gas, and both countries as well as the Czech Republic still import significant amounts of crude oil. This continued reliance on Russian fossil fuels by some EU countries sustains revenue flows to the Russian state budget and weakens the impact of EU sanctions.

## 3.1.2 Other financing sources

As for all governments and countries, when current incomes do not cover current spending, there is a choice between using savings or taking new loans to finance a deficit. This is also true for the Russian administration. In the case of Russia, savings are mainly in the NWF, which holds past excess revenues from oil sales. The fund was initially meant to safeguard future pensions, but it has increasingly been used to finance the government's current deficits driven by wartime expenditures. Figure 6 shows how the value of the NWF has developed over time in ruble terms and in percent of GDP. With the start of the war, a significant share of this fund has been used to finance Russia's war effort. Given exchange rate movements and inflation, the nominal ruble value of the NWF is relatively stable, but when this divided by nominal GDP, it is clear that the real value of the fund has been cut in half.

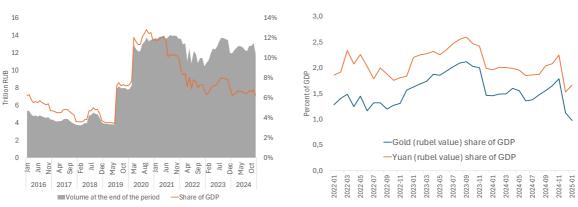


Figure 6. National Wealth Fund (NWF)

Source: MoF, IMF and CBR.

Note: In 2019, the NWF volume doubled due to the OPEC+ agreement to increase oil prices. The doubling of the NWF in 2020 was due the higher oil prices, a budget surplus and the NWF investing in Sberbank (Liik, 2020).<sup>4</sup>

However, in terms of what is available for funding the government's budget, the liquidity of the assets in the fund matter. The liquid part of the fund is assets in yuan and gold (Figure 7). The value of these assets changes in response to movements in the ruble/yuan exchange rate and the price of gold in ruble terms, which depends on both the international price of gold in dollar terms and the ruble/dollar exchange rate. As is evident in the figure, there has been a drop in the ruble value of both yuan and gold holdings. The yuan holdings are affected by movements in the exchange rate while for gold, there has been a significant sale of gold, and the amount of gold in tonnes have gone from over 500 in 2023 to 164 in the beginning of 2025. So, despite a sharp increase in gold prices, the ruble value of what remains of the gold savings has been cut in half over that period. Taken together, the liquid part of the NWF now amounts to less than 3 percent of GDP in early 2025.

ttps://www.themoscowtimes.com/2019/08/05/russias-national-welfare-fund

 $<sup>^{4}\ \</sup>underline{\text{https://www.themoscowtimes.com/2019/08/05/russias-national-welfare-fund-doubled-in-july-to-124-billion-a66714}$ 

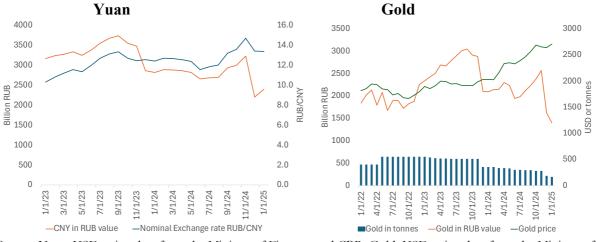


Figure 7. Liquid assets in the NWF

Source: Yuan, KSE, using data from the Ministry of Finance, and CBR; Gold, KSE, using data from the Ministry of Finance, CBR and the IMF. Note: Gold in tonnes reported on the right axis. Gold price denotes monthly dollars per troy ounce (1 tonne=32150.7466 troy ounces). All assets have been recalculated using monthly exchange rates.

The other way of financing a deficit is by borrowing money, abroad or at home. Since Russia is still running a current account surplus, the relevant deficit to finance currently is the government's budget deficit. That said, even if the country collectively is not in deficit, companies in Russia have historically funded some of their operations on international markets.

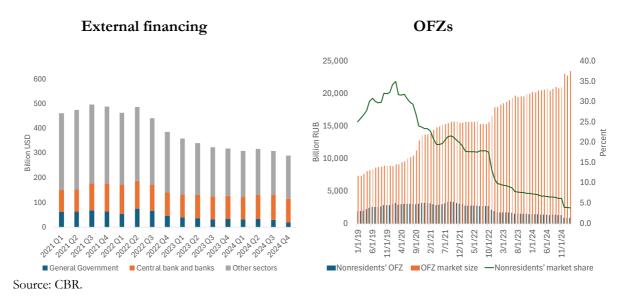


Figure 8. External and domestic borrowing

Figure 8 shows external debt for the whole economy and domestic government borrowing (OFZs). In terms of external financing, the government has little external debt, while banks and other companies used to have more significant funding from non-residents. Since the start of the war, external financing of other sectors has gone down by around 40 percent, or by 120 billion dollars. The government on the other hand issued bonds on the domestic market (OFZs). Historically, a relatively large share of this was held by non-residents, but since the start of the

war, foreign investors have been shying away from this market, and only a small fraction (less than 5 percent) is now held by non-residents. Domestic investors are also not very keen on buying these bonds, and recent issues have not been fully subscribed, despite the fact that the yield on these bonds are over 15 percent. This means that this is an unreliable and expensive way of financing the government's deficits going forward.

With limited access to foreign and domestic borrowing, the remaining source for financing spending at current levels (beside hoping for higher oil prices) is to increase taxes. As was shown in Figure 3, non-oil and gas revenues have increased in recent years in nominal terms as a result of increased levels of activity and high inflation. In addition to these automatic increases, the government resorted to windfall taxes, export taxes and cuts in mortgage subsidies (that were introduced to offset the high interest rates) during 2024. A number of other measures to improve the government's finances are planned for 2025 (see Box). Although this can help improve the fiscal stance, it may also backfire depending on how activity level in other sectors of the economy responds.

To summarize, the Russian government will have difficulties financing its war budget with traditional means of using savings (that will run out), borrowing (with few interested investors), or with tax increases (without undermining other sectors of the economy). Time is clearly not on the side of the Russian government in this regard.

#### Box. Selected tax and subsidy changes in 2024 and 2025

#### 2024

**A windfall tax** on companies making a profit of over 1 billion rubles which came into effect on January 1, 2024, but was not extended to 2025.

A temporary exchange rate duty on exports was in place from October 1, 2023, until the end of 2024. This brought 287 billion rubles in revenue Jan-Nov 2024.

Cancelling a subsidized non-targeted mortgage program for purchase of newly built apartments with an interest rate of 8% (stopped July 1, 2024). Some other subsidized mortgage programs continue, but they are more targeted (e.g., families with two kids, IT specialists, etc.)

#### 2025

**Profit tax** goes from 20% to 25%

• Individual tax increases for natural oil transporting monopolies such as Transneft: from 20% in 2024 to 40% for the next 6 years.

Mineral extraction tax (MET) on iron ores, coal, gold, etc. (no change for oil extraction)

- MET for iron ore mining has been increased from 4.8 to 6.7%
- A surcharge of 10% of the excess of the world gold price over 1,900 dollars per troy ounce has been introduced to the MET calculation formula for gold (The MET on gold was already temporarily increased for a period of six months.)
- The MET rate for diamonds has been increased from 8 to 8.4%.

#### Small and medium-sized businesses

- increase in the thresholds for using simplified tax payment procedure
- decrease in the tax rates applied in the simplified tax payment procedure for high enough revenues, introduced in 2021 (from 8% to 6% for profits, and from 20% to 15 % for revenues, where 6%/20% are the rates that simplified procedure was applying to lower end of revenue distribution)
- VAT payment for SME with revenues above 60 mln Rub

#### Excise tax

• Increased range of products/increased excise rates.

#### Income taxes for individuals

- Before there was a flat tax of 13%, this changes to a progressive scale from 13% (below 2.4 mln Rub) to 22% (above 50 mln Rub).
- According to MinFin, the progressive part will concern around 3.2% of the working population
- The income tax deduction for low-income families with 2 or more children will decline from 13% to around 6%.
- No progressive scale for SVO participants

Investment deductible. Federal investment tax deduction of up to 3% off the federal profit tax for companies that reinvest in production (only covers selected sectors, excluding, e.g., financial organizations).

## 3.1.3 The impact of sanctions on war financing

The section above highlights how the Russian fiscal outlook has changed with the turn to a war economy. This is driven by intentional change in priorities, but Western sanctions have also played an important role in constraining the Russian state's ability to fund its war and sustain its economy through normal means. This subsection examines how sanctions have limited energy revenues, access to financing, the effectiveness of monetary policy, and war-related production capacity — all of which contributed to tightening the government's budget constraint.

Since late 2024, Western sanctions against Russia have intensified with the adoption of the 15<sup>th</sup> and 16<sup>th</sup> EU sanction packages, additional US sanctions before the administration change, as well as coordinated measures by the UK and G7 in January 2025. The primary objectives remain severing Russia's financial lifelines, tightening restrictions on military-related trade, and closing enforcement loopholes. Russia's countermeasures during the same period reflect an effort to redirect capital inward, protect domestic businesses, and reduce dependence on Western markets. The extensive scope of these countermeasures indirectly underscores the significant economic challenges posed by sanctions, as the government intervenes more aggressively to stabilize key sectors and shield the economy from external pressures. The Russian Central Bank is very open in its communication that many of the challenges facing the economy have been caused by the sanctions. The fact that the Kremlin, during the March talks in Riyadh, posed the removal of some U.S. sanctions as a condition for entering a ceasefire agreement also underscores the significance of these sanctions.

Sanctions continue to impact Russia's oil revenues and energy sector operations, not only by restricting sales but also by limiting servicing, maintenance, and investment capabilities. As reported by CREA (Katinas, 2025), the beginning of 2025 saw a notable shift from shadow fleet tankers to G7+ owned or insured vessels, indicating the impact of sanctions. Oil shipments via shadow fleet dropped by 21 percent, while exports using G7+ owned or insured vessels rose by 15 percent. This suggests that the reduction in volumes and revenues mentioned in Section 3.1.1 are likely driven by improved sanctions enforcement. Moreover, several sanctioned firms are redirecting more supply to the home market, further sacrificing economic margins. Stepping up pressure on the shadow fleet and tightening enforcement of circumvention measures will be crucial to further weakening Russia's energy revenues.

On the other hand, the increases of revenues from pipeline oil and gas as well as LNG, also mentioned above, imply that Russia still benefits from gaps in EU policy, which continue to provide a financial lifeline. In particular, Hungary, Slovakia, and the Czech Republic still rely on pipeline oil and gas while Germany imports large volumes of LNG (through France and Belgium). Switching supplier might seem like a straightforward solution, in line with the

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<sup>&</sup>lt;sup>5</sup> A list of main sanctions and countersanctions is presented in the Appendix.

<sup>&</sup>lt;sup>6</sup> The RCB's Financial Stability Review, covering Q2 and Q3 of 2024, notes explicitly the broad effects of sanctions on cross-border settlements, logistics costs, and the financial/technical constraints that Russian companies have to navigate. https://www.cbr.ru/eng/analytics/finstab/ofs/2q\_3q\_2024/

RepowerEU plan that aims to phase out Russian fossil fuels by 2027. Several European governments are anticipating new LNG supplies from U.S. and Canadian projects, expected to come online by 2025 (Dodonov and Shapoval, 2025). Donald Trump has even threatened that the U.S. may impose tariffs on the EU unless it increases LNG imports<sup>7</sup>. However, the EU cannot buy directly or do much beyond nudging member countries in different ways. Any attempt to include LNG export in a new EU sanctions package would likely face a veto from Hungary and Slovakia. Tariffs, on the other hand, could be implemented without requiring unanimous approval.

Beyond energy, sanctions increasingly disrupt Russia's financial markets, severing access to many foreign financing sources and driving most foreign investors out of the Russian market. This makes domestic financing increasingly critical for large Russian corporations, placing additional strain on local capital markets, which are increasingly exposed to risk. According to the Central Bank, sanctions are the main reason for the deterioration of corporate finances. Russian banks have increasingly concentrated their loan portfolio in a small number of very large Russian companies. The Central Bank considers this concentration to be a potential threat to the stability of the financial system, in line with the arguments in the Kennedy report discussed in next Section.

The Central Bank also faces growing constraints, as sanctions and state-led economic support measures narrow its options for managing inflation. Sanctions have driven the volatility in exchange rates, government bond yields, and equity prices. Additionally, sanctions have also disrupted Russia's access to critical imports, reshaping its trade relationships and adding pressure on key industries. The latest update of the Russian foreign trade tracker by the think tank Bruegel<sup>8</sup>, covering data up to December 2024, shows that Russia's imports of selected categories—including goods subject to export bans—from sanctioning countries declined toward the end of the year. Meanwhile, imports from non-sanctioning countries dipped briefly before partially rebounding. The share of China in Russia's import value continued to grow, while the share of the EU declined further. These shifts in trade patterns raise import costs, contributing to inflation—particularly for technology and military-relevant inputs. Alternatives through circumvention efforts, especially via China<sup>9</sup>, and substitutes come at higher costs and lower quality. As a result, inefficiencies have grown within Russia's industrial and defense sectors (see Section 3.2 below), further straining its economy. Nevertheless, as discussed more below, production capacities and investments are expanding in the prioritized Russian military industrial complex notwithstanding supply chain disruptions, and many key entities remain unsanctioned three years into the full-scale invasion (Shkurenko et al., 2025).

<sup>&</sup>lt;sup>7</sup> https://www.ft.com/content/e33d9eec-b34c-4afc-8948-dda91ccbb70d?utm\_source=chatgpt.com

<sup>8</sup> https://www.bruegel.org/dataset/russian-foreign-trade-tracker

<sup>&</sup>lt;sup>9</sup> Transshipment of Western components to Russia through China remains a problem, according to Shkurenko et al. (2025)

#### 3.1.4 Russia's Hidden War Debt

To understand the costs and the sustainability of the war economy it is essential to have a full picture of the expenditures and liabilities of the Russian government. This is complicated by the fact that part of the war financing is kept outside of the official budget and operates through less transparent channels. In a recent report, Craig Kennedy has looked more in detail into what he refers to as "Russia's hidden war debt". <sup>10</sup>

Behind the analysis lies the observation that Russia's corporate credit has surged dramatically since mid-2022 despite a rapid increase in interest rates. The increase corresponds to roughly 35 trillion roubles during the period July 2022 to November 2024. This is almost twice the size of the official defence budget during that same period, or 21,3 % of GDP in 2023. Not all of this surge is taking place in the military or related sectors, but most of it. Kennedy identifies 4 core arms manufacturing and 11 other war-related sectors in his data and contrasts them to the remaining 63 non-war related sectors. He finds that the growth in credit moves in tandem in the core arms and other war-related sectors, and that they on average outpace the growth in credit for the non-war related sectors by a factor of 2.7. In other words, the sudden surge in credit is overwhelmingly driven by the war-related economy.

In principle it is not surprising that firms borrow to finance investments and an increase in production as the demand for their products goes up. If the firms borrowing have solid credit histories and this is taking place in a transparent market economy with little government intervention, then this may have no implications for government finances. What rises red flags in this case, though, is a combination of a recent history of government bailouts of arms manufacturers and evidence of government pressure on the financial sector to lend at suppressed interest rates.

The Russian arms industry has been weak, insolvent, and ridden with credit problems for decades due to a combination of underpriced state contracts and corruption. To compensate for the underpriced contracts, the state has leaned on banks to issue sizeable state-guaranteed loans directly to arms manufacturers. Underlying the whole scheme has been a notion that the state would bail out the bad debt if necessary to avoid bankruptcies in the arms industry and a potential banking crisis, causing a moral hazard problem. This is indeed what started to happen already in 2016, with the costs of the bailouts hidden out of sight in classified parts of the state budget.

In 2022 the scheme was levelled up with new legislation obliging banks to lend at rates and terms entirely decided by the state. The rapid rise in interest rates did therefore not put a lid on credit growth to priority sectors, putting further pressure on the CBR as it fuelled inflation and made the traditional tools of a central bank less effective.<sup>11</sup> Banks played along, as the state was the

<sup>&</sup>lt;sup>10</sup> The full report can be found at <a href="https://navigatingrussia.substack.com/p/russias-hidden-war-debt-full-report">https://navigatingrussia.substack.com/p/russias-hidden-war-debt-full-report</a>.

<sup>&</sup>lt;sup>11</sup> Kennedy makes reference to the head of the CBR, Elvira Nabiullina, identifying corporate credit growth as the primary driver of Russia's high inflation, and state-directed preferential lending as the main driver of corporate credit growth.

official (or un-official, based on recent history of bailouts) guarantor of these credits. This whole system builds on a moral hazard problem where banks too big to fail know that bad credit to the war-related industry will eventually be picked up by the state. The state is thus de facto the borrower in this scheme.

What is then the value of this scheme to the regime? Kennedy argues that it is a way to hide the true cost of the war expenditures both to an internal audience and the external world. Official figures support the impression that military expenditures are high enough to sustain a strong military power and deterrence, while not so high as to be unsustainable in the longer run. In the war of attrition between Russia, on one hand, and Ukraine and its supporters, on the other, the latter is critical. Kennedy estimates that Moscow's off-budget war debt is roughly the size of its official budgetary defence allocation. If that debt instead had been part of the official budget, budget deficits would have been roughly 5.5% in 2023 and 6.2% in 2024. This also has implications for total defence spending that we discussed in the background section, since most sources only include what goes through the official budget. In other words, the need to support Ukraine militarily to balance the spending of Russia is likely higher than what official Russian budget numbers would imply.

But this off-budget scheme also implies risks for the regime. As mentioned above, it contributes to inflationary pressure and hampers the effectiveness of combatting inflation with interest rate hikes. Further, it adds to the general risk of unsustainable state expenditures the threat of undermining the stability of the financial sector, by saddling banks with a growing portfolio of high-risk loans. If the ability or readiness of the state to bailout bad debt comes into question for any reason, the solvency of the banks involved can also come into question, undermining the credibility of the banking sector as such. In section 4 we discuss in more details the risk of a banking crisis.

# 3.2 Effects on key sectors of the economy

A reorientation into a war economy means that the state dictates that war relevant production should have much higher priority relative to non-war related sectors compared to before. The official statistics on how gross value added has changed over time is presented in Table 1. This breakdown does not lend itself directly to a classification into war related versus other production (except for some sectors like the one labelled "O" that includes military security), but given the massive spending on the war machine, high growth rates in a sector likely means that it is part of Russia's war effort. In the Kennedy study discussed above, more granular sectoral data was used to provide an estimate of how new bank lending went to sectors that are part of the military sector. The next section provides an even more detailed account of the military industrial complex.

Table 1. Gross value-added growth by sector

Industry	2019	2020	2021	2022	2023	2024
A. Agriculture, forestry etc.	2,9	0,4	1,1	5,7	0,2	-1,4
B. Mining	2,6	-6,5	3,3	0,9	-2,1	-0,3
C. Manufacturing	2,7	0,4	5,2	-0,6	5,8	7,2
D. Electricity, gas and steam supply	-0,9	-2,9	5,9	0,3	0,2	2,9
E. Water supply, sanitation, waste etc.	3,5	0,3	10,5	-4,2	-3,4	1,7
F. Construction	-1,3	-3,5	5,5	6,3	7,3	3,1
G. Wholesale and retail trade, motor repairs	0,3	-1,2	5,5	-12,7	6,4	7,6
H. Transportation and storage	1,6	-10,8	8,0	0,1	3,1	2,3
I. Hotels and catering	2,7	-24,7	27,2	5,2	10,0	6,7
J. Information and communication	6,1	2,0	12,1	2,0	9,1	13,9
K. Financial and insurance	12,0	12,9	14,5	2,2	8,7	16,1
L. Real estate	2,6	-1,9	4,5	1,0	0,8	-0,2
M. Professional, scientific and technical	4,2	0,4	5,4	1,9	5,3	5,6
N. Administrative and related services	-0,2	-7,6	9,6	0,3	7,4	3,7
O. Public adm. and military security; social security	0,5	2,2	4,3	9,3	5,4	5,2
P. Education	-0,9	-2,9	0,0	1,9	1,7	1,1
Q. Health care and social services	2,4	0,0	9,4	-4,4	-0,1	0,2
R. Culture, sports, leisure and entertainment	0,8	-10,9	14,9	8,0	1,0	3,1
S. Provision of other types of services	3,7	-7,2	8,4	-1,3	-3,1	-1,0
T. Households as employer activities	-2,5	-25,4	-2,4	14,8	6,4	-5,5

Source: Rosstat.

Note: Gross value-added growth is estimated year over year for all years except for 2024 for which Q4 data is unavailable. 2024 growth rates reflect Q1-Q3 growth over the previous corresponding time period.

## 3.2.1 The Military-Industrial Complex

Since the start of its full-scale invasion of Ukraine, Russia has rapidly expanded its military-industrial complex (MIC), transforming it into the backbone of the war-economy. The KSE Institute's recent report "Disassembling the Russian War Machine: Key Players and Nodes" (Shkurenko et al., 2025) provides a granular analysis of the sector, exposing the scale, structure, and resilience of the system sustaining Russian military production. It paints the picture of a surprisingly resilient and adaptive sector, while at the same time identifying clear vulnerabilities.

The MIC remains deeply integrated with the Russian state. Financing is overwhelmingly driven by direct federal budget allocations, often through classified or opaque budget lines and disbursements via state-owned banks. Central to this ecosystem is a handful of corporate groups with strong government ties, such as Rostec, Almaz-Antey, KTRV, Roscosmos, and Rosatom, state-owned conglomerates that coordinate hundreds of subsidiaries and serve as the principal channel for government defense funding. Many of these entities operate across both civilian and

military markets, enabling them to access less restricted international financial and technological systems under the guise of civilian production.

Key production facilities—particularly those focused on missiles, drones, and armored vehicles—have significantly increased output. This acceleration is taking place despite extensive international sanctions, which Russia has managed to partly circumvent through a combination of domestic adaptation and global evasion strategies. Shadow procurement networks, front companies, and rerouted imports via countries like China, Türkiye, the UAE, and several post-Soviet states have been instrumental in maintaining a steady flow of dual-use components and technologies. Remarkably, several major entities within the Russian MIC—such as Roscosmos and Rosatom—have not even been sanctioned by the US or EU, despite their strategic importance to Russia's military capabilities.

Yet the sector's ability to sustain itself is under mounting pressure. Sanctions have introduced severe bottlenecks in areas such as microelectronics, optics, and high-end machinery. Russia's attempts at import substitution in these more technologically advanced segments have met with limited success. Moreover, sanctions have driven up operating costs in general, by disrupting supply chains for MIC producers and by requiring compensating layers of intermediaries engaged in the circumvention of export controls. While China still provides a crucial lifeline—supplying substitutes for Western goods and facilitating access to restricted technologies through transshipment or through Chinese subsidiaries—this support comes at a price. Chinese goods often come with a cost in quality, whereas Western goods come with added transaction costs to circumvent sanctions and export control regimes.

Funding, although currently abundant, is not unlimited. The financing model's heavy reliance on federal budget spending—whether directly or indirectly through quasi-fiscal liabilities tied to state-owned conglomerates like Rostec—may be sustainable in the short term, particularly while oil and gas revenues remain high. However, it lacks flexibility and leaves the sector vulnerable to broader macroeconomic shocks. If state revenues decline—due to better enforced sanctions, falling energy prices, global decarbonization trends or recessions—there is little room for alternative sources of funding, as discussed in Section 3.1. Moreover, if a part of the MIC faces operational or procurement shocks, the financial burden is likely to fall back on the central government, further straining the state budget. Arms export—long a key source of MIC revenues, much more lucrative than government contracts—are faltering due to reputational damage, battlefield underperformance, and delayed deliveries, with buyers like India scaling back procurement. Furthermore, Russian MIC companies are increasingly relying on direct lending from banks and bond issuance on domestic capital markets, which makes their financial sustainability intertwined with the stability and risk levels of the broader financial sector.

While short-term prospects for Russia's MIC remain strong, supported by state subsidies and the urgency of wartime production, its long-term outlook is far more precarious. The sector continues to innovate in lower-cost, high-impact domains such as drone warfare and electronic countermeasures. However, without access to global supply chains and cutting-edge technologies, and in the absence of internal reform, its capacity for sustainable growth and

genuine innovation is severely constrained. In the long run, the resilience of the Russian MIC will depend not only on the durability of its sanctions evasion networks, but also on broader structural constraints linked to the overall health of the Russian economy, including its isolation from global technological and financial systems, and unfavorable macroeconomic conditions such as labor shortages<sup>12</sup>, regional inequalities, and rising borrowing costs.

#### Box. Recruitment and payments for military

Success in warfare also depends on the number of soldiers that can be deployed, and Russia's significantly larger population compared to Ukraine's is sometimes cited as a decisive advantage. Although Russia's numerical superiority, combined with a disregard for human life, enables it to wage a protracted war of attrition, the associated costs of recruitment and soldier compensation impose significant financial burdens on the regime. Compensation to soldiers exceed average Russian salaries almost by a factor of 2.5, on average roughly 200 000 rubel. In addition, soldiers receive a substantial sign-up bonus. This bonus was initially set at 195 000 rubel but was increased to 400 000 rubel by a presidential decree from July 2024. In addition to that, different Russian regions top up the bonuses substantially; Moscow offers an enlistment bonus of 1.9 million rubles, Chelyabinsk Region offers around 705,000 rubles, and Yamal-Nenets Autonomous District offers 1.1 million rubles (The Moscow Times). Furthermore, compensation for injured soldiers and families of those killed in action is substantial—initially around 30,000 dollars per injured soldier (a figure later adjusted to compensate only the seriously injured) and up to 130,000 dollars for families of fallen soldiers (War on the Rocks). According to Kirill Rogov, between July 2023 and June 2024, the combined costs of soldier salaries and compensation for casualties amounted to 1.5 percent of Russia's GDP (Newsweek).

There are also some signs that recruitment is getting more difficult and that the high costs are being felt by the state. Overall spending on military sign-on bonuses dropped in the third quarter of 2024 despite the doubling of the individual bonuses. Calculating what this implies in terms of new recruits suggests that recruitment is barely keeping pace with battlefield losses. It is also noteworthy that, despite these challenges, as of January 1, 2025, the Russian government has revoked one-time monetary payments to prisoners who sign military service contracts (Meduza).

#### 3.2.2 Non-military sectors

From late 2024 into early 2025, the Russian economy has shown signs of a war-driven reorientation, both intentional and because of strains. This section summarizes the main trends<sup>13</sup>.

Despite its pivotal contribution to the federal budget, discussed in Section 3.1.1, Russia's oil and gas sector is grappling with sanctions, price swings, and an uncertain global outlook heading into 2025. Major companies—Gazprom, Gazprom Neft, Rosneft, and Lukoil—have all posted

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<sup>&</sup>lt;sup>12</sup> The MIC has remained competitive by offering twice the average market salary, particularly in IT, logistics, and research sectors. As a result, even as employee numbers fluctuated, up by 7% in 2022 and down by 1,6% in 2023, the total wage bill continued to rise, increasing by 24% in 2022 and 22% in 2023.

<sup>&</sup>lt;sup>13</sup> The Appendix reports a more detailed overlook of the recent developments.

significant drops in net profit, reflecting production cuts, sanctions-related discounts, and shifting tax policies. In 2024, the government increased certain levies (including a one-time windfall profit tax) that ultimately were not renewed for 2025, but it also raised the baseline profit tax on all sectors from 20% to 25%, intensifying pressure on the sector. Under these circumstances, officials face the challenge of extracting vital fiscal revenue from oil and gas without undermining the industry's long-term viability.

Meanwhile, machinery and equipment manufacturing have thrived on military procurement and state-led import substitution. Output jumped ~15% in 2024 after an even stronger ~20% rebound in 2023, surpassing Soviet-era production levels for the first time since 1990. Russia's defense spending for 2025 is set at nearly four times the 2021 level, fueling demand for tanks, aircraft, and other hardware—making machinery manufacturing a standout growth sector amid broader economic pressures. The Economy Ministry's optimistic baseline forecast sees machinery output rising another 27% cumulatively by 2027 (versus 2024). However, business surveys indicate a possible cooldown in early 2025: the manufacturing Purchasing Managers' Index<sup>14</sup> slid to 50.2 in February 2025, its lowest since September 2024, signaling a sharp slowdown in growth momentum. This dip suggests that capacity constraints or supply bottlenecks (e.g. shortages of certain high-tech components) may be emerging after two years of rapid expansion. Additionally, high interest rates make financing new factories costly – a concern voiced by industrialists in late 2024.

Conversely, construction and steelmaking face headwinds from higher interest rates, waning consumer demand, and sanctions, demonstrating how resources and financial support are increasingly channeled toward the sectors deemed critical for war needs.

Construction downsized sharply as high interest rates and the end of subsidized mortgages in late 2024 caused a sharp drop in housing demand. Mortgage issuance fell 37% compared to 2023, and new housing starts declined by over 20% in early 2025. With credit conditions tightening, many developers have delayed or canceled projects. The construction slump has

tightening, many developers have delayed or canceled projects. The construction slump has ripple effects across related industries, such as building material producers and freight rail companies. By early 2025, the cement industry entered a "recession," according to the Cement Producers Association, as demand from developers waned. Reduced construction activity also left trains less loaded, leading one columnist to dub it "unburdened railroads".

Weakened domestic demand (especially from the slowing construction sector) and sanctions on exports led to reduced steel output—down around 7% in 2024 year-over-year. Higher resource taxes also weighed on margins, though the sector's overall budget contribution is small relative to oil and gas. Still, the industry's fundamentals are likely strong enough to weather a tougher domestic market in 2025, remaining profitable and comparatively less impacted by sanctions than other sectors.

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contraction.

<sup>&</sup>lt;sup>14</sup> PMI is a monthly survey-based indicator that reflects the health of the manufacturing sector, based on factors such as new orders, production, employment, supplier deliveries, and inventories. A PMI reading above 50 typically indicates expansion in the manufacturing sector (compared to the previous month). A reading below 50 signals a

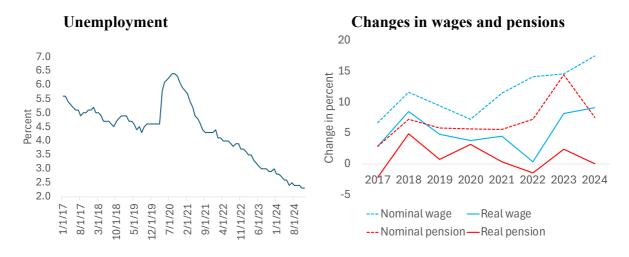
Throughout 2024, Russia's retail sector—especially in food retail—enjoyed strong gains, driven partly by inflation. Major chains like X5 Group (operator of Pyaterochka, Perekrestok, and the Chizhik discounter chain) posted impressive full-year results. A defining feature of this growth was the surge in discount formats (X5's budget chain "Chizhik" in particular), indicating a broader consumer shift toward cheaper outlets as inflation eroded purchasing power. By late 2024, however, higher interest rates and slowing real income growth began to weigh on consumers. Management pointed to narrowing margins: operating costs, particularly labor, rose faster than sales after staff shortages prompted significant wage hikes. Borrowing costs also increased. Even so, nominal sales remained buoyant—partly because inflation allowed retailers to pass along cost increases. Heading into 2025, retailers face a balancing act: continued expansion and a positive dividend outlook on one hand, versus mounting cost pressures and increasingly cautious consumer behavior on the other.

The banking sector navigated a challenging climate in the second half of 2024 and into early 2025, shaped by high inflation and elevated interest rates. With the Central Bank of Russia keeping its key rate at 21%, credit activity cooled notably: mortgage lending growth decelerated to 1.5% by late 2024, consumer loans contracted 2% year-over-year, while foreign currency lending plunged 12.8%, reflecting sanctions-related pressures and banks' cautious stance. Corporate loans kept expanding, continuing the trend described in Section 3.1.4 spurred by government-backed or government-mandated credit programs, but only by 2.9%. A cautious optimism pervades the sector: household deposits grew significantly at the end of 2024, and banks increased investments in securities. However, the sector-wide profit forecast for 2025 (3.0–3.5 trillion rubles) is down from 3.8 trillion in 2024, indicating concerns about credit risks and muted lending. Overall, while banks remain well-capitalized, the tighter monetary environment—alongside government focus on financing strategic sectors—hints that credit will stay selective, reinforcing the broader shift toward sectors deemed most critical under Russia's war economy priorities.

#### 3.2.3 Households

There is a significant divergence in how household incomes evolve. For households with working age members, unemployment is at record low levels and there has been significant real income growth if official statistics are to be trusted (Figure 9). As discussed above, it is highly likely that inflation is understated in official statistics, and this would of course make a difference when calculating real wages from nominal wages. The real wage growth of 8-9 percent in 2023 and 2024 would be closer to zero if actual inflation was around 20 percent rather than the official 8-9 percent. Retired persons have not seen any significant increases in real pensions over this period according to official numbers. In 2024 there was no increase in real pensions even using the official numbers for inflation to discount nominal pensions.

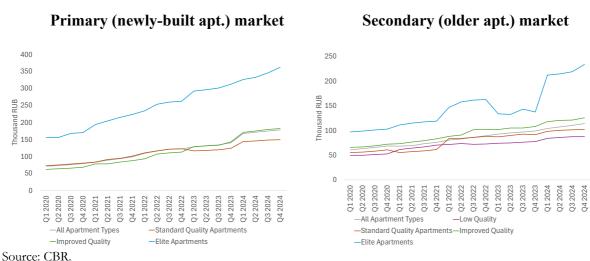
Figure 9. Unemployment rate and incomes



Source: Rosstat.

Given that official statistics on inflation are questionable and the alternative numbers that were produced by ROMIR are no longer available, it is hard to get an independent view of the spending power of households. However, price data on apartments provide an indicator on how the cost of housing has increased (Figure 10).

Figure 10. Increasing costs of housing



Note: Average price per square meter.

Data for the rental market from Cian, one of Russia's online real estate platforms, state that the year over year change from 2022 to 2023 for a 1-bedroom apartment to be about 15 percent<sup>15</sup>. The corresponding figure for a 2-bedroom apartment stood at about 14 percent, with Moscow's figure at almost 12 percent. In 2024, rents have increased more rapidly; by about 31 and 26

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<sup>15</sup> https://www.cian.ru/

percent, respectively, for 1- and 2-bedroom apartments. Rents for a 1-bedroom apartment in Moscow increased by about 43 percent from 2023 to 2024<sup>16</sup>.

On the buyer market, newly built (or primary) housing dominates the market – partly due to the preferential mortgages offered for these dwellings, offering a 6 percent rate rather than the 16-20 percent rate for normal mortgages. While this policy was in place (introduced during Covid-19 in 2020 and running until July 2024) it drove up prices in the primary market so that they are now roughly 1.5 times higher than in the secondary market. In the Moscow city market, the index for a primary apartment increased by almost 50 percent between January 2022 and January 2025. Prices in the secondary market have also increased, albeit not markedly since the full-scale invasion. 50 percent of potential borrowers were refused a loan in 2024, which had a cooling effect on the market. Half of those borrowers that got a loan in the last quarter of 2022 use currently 80 percent of their income on loan payments<sup>17</sup>. The cooling was also evident in the construction sector as noted above with significant falls in volumes of new housing brought to the market in the large cities.

# 4 Economic outlook and financial sector risks

Many forecasters of the Russian economy see a sharp decline in growth in 2025 compared to previous years. The IMF, for instance, predicts growth of around 1.5 percent. We will not go into a specific forecast here but it is clear that the usual story about Russian growth remains valid. What happens to the price Russia can get for its oil exports will have a significant impact on growth year to year. For Russia, this has become a bit more complicated than just reading off the international market price of oil since there are now sanctions and sanctions-evading strategies to add to this. Given recent moves by the Trump administration, there may well be a sharp downturn in global demand for oil during 2025. This would put Russia in a very problematic situation since the government will then likely both exhaust the liquid parts of the NWF and face serious constraints in raising money by issuing bonds. Turning to the printing press of the CBR would be an alternative that quickly would cost more than it brings in terms of revenues. All of this is speculation currently, but it highlights the uncertainty all policy makers are currently facing.

On top of this, Russia has very little to show when it comes to structural growth factors such as innovation, capital investments, and increases in labor supply. Instead, all these factors spell more problems and risks when it comes to the growth outlook of Russia. The only real upside to Russian growth is if the war ends, and in this process, some sanctions are lifted. We have already seen how the talks about a ceasefire in February led to a sharp increase in the value of the ruble and Russian shares. This is basically the only significant growth factor that Russia itself has a reasonable way of affecting through policy choices. Perhaps with reserve funds running out and

<sup>&</sup>lt;sup>16</sup> https://www.themoscowtimes.com/2025/01/13/rental-prices-in-russia-rose-31-in-2024-experts-say-a87587

<sup>&</sup>lt;sup>17</sup> https://wavellroom.com/2024/06/20/russias-collapsing-housing-market/

if oil prices decline further, this may tip the scale in favor of more significant steps from Russia to end the war. Yet, redirecting the economy back from war will not be easy. The MIC will immediately struggle if demand and preferential treatment ceases, and this will spill over into the banking sector as we discuss in Section 3.1.4. This will likely force the government to bail out the banking sector as in 2016, but at a much larger scale.

How the risk of a banking crisis in Russia is evolving is an important question more generally. Banking crises are one of the most fast-moving and costly crises a country can face.<sup>18</sup> History has shown that economist and policy makers often have failed to accurately predict the timing of crises. However, there is a large literature on the factors that increase the risk of a banking crisis, even if the exact timing is difficult to pin down. The list of factors that are correlated with banking crises include:<sup>19</sup> fluctuations in exchange rates or commodity prices; high inflation; large departures from long-run trends in housing and stock markets; changes in domestic credit-to-GDP ratios; high interest rates on bank deposits with increases in deposits.

Below we show how some of these factors have developed in Russia. Again, rather than being a prediction of a timing for a banking crisis in Russia, it provides an indication of how the risks of a banking crisis has evolved in the Russian war economy. In Section 2.3 we showed the fluctuations in the exchange rate, with the ruble moving from 75 to 120 ruble per dollar in the beginning of 2022 to then strengthen to 55 as oil prices spiked in the beginning of the war to then fall back down to 110 ruble per dollar to most recently be back at around 85. The relevant commodity price for Russia is obviously the oil price, which has also seen massive volatility as shown above. Going back to the covid pandemic, the oil price has fluctuated from 20 dollars per barrel to around 130 before a slide to around 70 and shortly back to 100 and now back at around 70. In short, if fluctuations in exchange rates and commodity prices are predictors of problems in the banking sector, this is not good news for financial stability in Russia.

Inflation is another factor that continues to be far above desired levels and significantly higher over the last years compared with before the full-scale invasion. This has also led to record policy rates that are now fueling growth in deposits (Figure 11). If people put money in accounts that carry a high interest rate today and banks later have trouble getting paid by borrowers, this inflow of deposits will first be expensive and then unsustainable and risk a sharp reversal in deposits. Remember that the government subsidized (nearly) all new mortgage loans to households until the summer of 2024, which led to strong growth in mortgage lending (Figure 11). The question is what happens to the interest margins and profitability of banks when these schemes are wound down, in particular since some companies also received subsidized lending. Although the growth in mortgages was halted when subsidies were removed, the stock of mortgages is still significantly higher than it was before the war. The growth in mortgages has also been accompanied with strong growth in property prices (Figure 11), as discussed in Section 3.2.3. The Russian stock market has also shown very high volatility (as shown in Section 2.3) but

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<sup>&</sup>lt;sup>18</sup> See for example Becker and Mauro (2006).

<sup>&</sup>lt;sup>19</sup> See for example Laeven (2011), Manasse, Savona and Vezzoli (2013 and 2016), and Eberhardt and Presbitero (2018).

the lack of foreign investors may reduce risks with sharp swings in the stock market. In addition to increased lending to households, we have already discussed the significant increase in lending to the military industrial complex, so it is no surprise that credit to GDP has increased by more than 10 percentage points during the war (Figure 11).

Companies' and individuals' deposits **Household mortgages (total debt)** 160 25 140 20 120 Trillion RUB 80 100 Trillion RUB 10 40 5 20 0 01/02/2020 01/06/2015 01/02/2016 01/10/2016 01/06/2019 01/06/2013 01/02/2014 01/10/2014 01/02/2018 01/10/2018 01/10/2020 01/06/2017 01/06/2023 01/02/2022 01/10/2022 01/06/2023 01/02/202 21/10/202 01.01.2019 01.05.2019 01.09.2019 01.05.2020 01.01.2020 01.09.2020 01.01.2023 01.05.2023 01.09.2023 01.01.2025 01.01.2022 01.05.2022 01.09.2022 01.01.2024 01.05.202401.01.202 01.05.202 01.09.202 **Credit to GDP Housing index in Moscow** 200 190 66% 180 170 64% 62% 150 140 60% 58% 120 110 56% 54% July 2021 52%

Figure 11. Correlates of banking crises

Source: Deposits and mortgages, CBR; Price index for the Moscow primary market based on median prices in nominal terms, DOM.rf. The primary market denotes newly built 1-3 bedroom buyer apartments; Credit-to-GDP, CBR and Rosstat.

50%

2022 Q1

2022 Q3

2023 Q1

2023 Q3

2024 Q1

One factor that could potentially reduce the risk of a crisis in the financial system is that sanctions have reduced borrowing from abroad and cut many financial links to the rest of the world. This also reduces the risk of major movements of capital out of the country in response to an increase in perceived uncertainty regarding financial stability. However, if a banking crisis in Russia happens, sanctions and Russia's reputation in the rest of the world will make it very unlikely that the country could count on any external help to deal with such a crisis. In sum, although banking crises are inherently hard to predict with any precision, it is clear that the risk in the financial system has increased and if there is a crisis, the effects will be serious and hard to deal with for the Russian government within the limited fiscal space they have.

# 5 Concluding remarks

Russia continues to use all means to promote the narrative of being strong and having time on its side. This even though its economy is a small fraction of the Western allies of Ukraine and reserves are running out in the next year or so. Although the Russian economy may be able to muddle through for years, the risks of a more disruptive crisis that would end this muddle through scenario are getting higher for each month the war continues, and sanctions remain in place. Time will only be on Russia's side in its war against Ukraine if the collective West does not understand or take responsibility for its role in supporting Ukraine and limiting the resources available to the Russian war machine. This means for example that sanctions should remain in place, and if anything, be strengthened further. If sanctions are lifted prematurely this will only provide Russia with a window of time for arming itself both with fresh reserves and more weapons. In the meantime, we need to develop new tools and data sources to better be able to understand the true state of the Russia economy that is still partly hidden behind the fog of war.

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# Appendix – update on sanctions and countermeasures

The main categories of measures included in the latest sanction packages from the West include:

- 1. Energy and shipping restrictions
  - Expanded bans on Western LNG and oil services, along with financing restrictions for Russian energy firms.
  - Stricter oversight on LNG transshipment via European ports.
  - Extended sanctions on Russia's "shadow fleet" vessels used to bypass the oil price cap.
- 2. Disrupting military and high-tech supply chains
  - Expanded export bans on dual-use technologies (electronics, drones, machine tools), including in third countries.
  - Stricter controls on critical raw materials (lithium, rare earth elements, aerospace metals) to weaken Russia's defense production.
  - Increased pressure on Russia-China trade, particularly in high-tech components and industrial goods.
- 3. Tightening financial restrictions and targeting sanctions evasion
  - Secondary sanctions on banks suspected of facilitating Russian payments, including efforts to limit SWIFT alternatives.
  - Crackdowns on Russian-controlled entities in third countries involved in sanctions evasion.
  - Continued EU freezing of Russian assets (around 190 billion euros), after Hungary withdrew its veto, further strengthened by the ban on the recognition or enforcement of Russian court rulings.
- 4. Expanded personal and entity sanctions, including North Korean defense minister, generals and senior officials.

After the change of administration, the U.S. continued to uphold strong sanctions policies, generally speaking. However, the disbanding of the KleptoCapture Task Force (KCTF) on February 5, while not necessarily constituting a major setback, could significantly weaken enforcement efforts and reduce the effectiveness of tracking sanctions evasion. Russia may perceive this as a sign of waning U.S. commitment to economic warfare against the Kremlin, while Ukraine might view it as a decline in Western resolve to hold Russian oligarchs accountable. In response, it is crucial that the EU, UK and other allies intensify their enforcement efforts to compensate for the reduced U.S. focus.

## Russia's main economic and trade countermeasures during the same period include:

- 1. Sanctions & Restrictions on Foreign Companies
  - Increased discount (from 50% to 60%) and mandatory budget contribution (from 15% to 35%) for foreign companies exiting Russia.
  - Obligation for state corporations to transfer 50% of the value of nationalized assets to the treasury in 2025.
  - Central Bank approval required for payments related to non-resident company property.

- Extension of restrictions on foreign co-owners' voting rights in strategic companies until end of 2025.
- Closed procurement procedures for key customers prioritized for Russian manufacturers.
- Updated bans on purchases of foreign software, services, and databases.
- Information blackout on securities, holders, and credit institutions.

#### 2. Trade and Export Controls

- Export quotas for sunflower oil, ferrous scrap, mineral fertilizers, and grain crops.
- Temporary restrictions on export of enriched products (until Dec 31, 2025).
- Certain goods (e.g. sapphires, fish, potassium phosphate) exempt from export duties.
- Reduced administrative burden for exporters of crude oil, LNG, and condensate.

#### 3. Import Substitution and Tariffs

- Ban on imports of agricultural goods and raw materials from "unfriendly" countries extended through 2026.
- Increased import duties on meat, fish, confectionery, pasta, fruits, and vegetables from "unfriendly" countries.
- Simplified import procedures extended for electronic devices and equipment.
- Extension for simplified medicine registration procedures until Jan 1, 2028.

#### 4. Support to Domestic Industries

- Concessional lending:
- 18.5 billion RUB to electronics manufacturers.
- Over 10 billion RUB to agriculture.
- Over 42 billion RUB to agro-industrial complex (2025).
- 5 billion RUB for leasing sea and river vessels.
- 5 billion RUB for import programs.
- Additional 10.5 billion RUB for airports in central/southern Russia due to flight restrictions.
- 3.2 billion RUB for high-tech industrial enterprises.
- Support to Russian firms abroad building industrial infrastructure.
- Financial aid to DPR, LPR, and Zaporozhye region agro-enterprises as well as job preservation in occupied territories' agro sectors.

#### 5. Fiscal and Budgetary Policy

• Government authorized to allocate up to 1.5 trillion RUB from reserve funds in 2024 without formal budget amendments.

#### 7. Tax and Financial Regulation

- Radio-electronic industry income tax set at 8% for 2025–2027.
- Insurance premiums for IT and radio-electronic companies reduced from 15% to 7.6% in 2025.
- Regulatory exemptions for MFIs and consumer cooperatives until end 2025.
- Moratoriums:
  - On state inspections.
  - On fines for construction companies.

# Appendix – developments in non-military sectors

## Oil and gas<sup>20</sup>

The oil and gas sector remained a cornerstone of Russia's economy in late 2024, navigating sanctions and OPEC+ output curbs with a pivot to Asian markets. Crude oil production was slightly scaled back by about 2% to an estimated 521 million tons in 2024 (from 530.6 million in 2023) in line with OPEC+ agreements. While sanctions limited European exports, Russia boosted oil deliveries to China and India – becoming China's top supplier in 2023 (107 million tons, +25% year-on-year) and expanding 2024 shipments a further 1.6% (Jan–Nov). Exports to India surged 2.6 times in 2023 (to 81.8 million tons, ~35% of India's imports) and rose another 8.1% in 2024 (Jan–Oct).

Natural gas output actually grew in 2024, rising 7.6% as pipeline exports to Asia (via *Power of Siberia*) jumped 16%. Importantly, Russian LNG exports to the EU rose 20% relative to 2023. However, by early 2025 there were signs of decline: January gas production fell 3.1% year-on-year – the first such drop in over a year – as a warm winter curbed domestic demand and Ukraine transit was halted. Even so, January's gas output remained above the 2024 monthly average. Both Gazprom and independent producers (Novatek, Gazprom Neft, Lukoil) saw slight declines in January extraction, but consensus for 2025 is mixed: some experts foresee a ~1% gas output dip due to the lost transit, while others (and the IEA) project modest growth (~1.6%) buoyed by domestic needs and new LNG capacity.

Financially, high energy prices and a weak ruble bolstered oil and gas revenues, cushioning the budget. In January–September 2024, oil and gas taxes contributed 31.7% of federal revenues, up from 28.3% a year prior (and exceeding the planned 31.3%). By January 2025, monthly oil/gas revenues reached RUB789 billion – 16.9% higher than a year earlier – thanks to robust gas prices and the ruble's depreciation, coming in above ministry forecasts. This helped offset a surge in spending; overall January 2025 budget income rose 11% YoY while expenditures jumped 74%, resulting in a RUB1.7 trillion deficit. The outlook depends in part on commodity prices: the Finance Ministry of Russia warned that a drop in oil prices could reverse these revenue gains.

Meanwhile, corporate results reflected both windfall profits and new strains. Gazprom shocked markets with a RUB1.08 trillion net loss for 2024 after a RUB696 billion profit in 2023. This swing was driven by a write-down on its oil subsidiary's value (an RUB852 billion hit from Gazprom Neft's share price decline) and hefty deferred tax expenses (+RUB444 billion) due to a profit tax hike from 20% to 25% effective 2025. Notably, Gazprom's revenue actually grew 11.3% to RUB6.26 trillion in 2024. Its oil arm Gazprom Neft saw 2024 net profit drop 25% to

• European natural gas imports, Brugel, retrieved 01.04.2025

<sup>&</sup>lt;sup>20</sup> Data in this subsection originates from the following sources:

IEA Gas Market Report Q1, 2025

<sup>•</sup> Russia's Rosneft reports 14.4% drop in 2024 net profit. Reuters, 20 Mar 2025.

<sup>•</sup> Каким был 2024 год для российской нефтегазовой отрасли. Vedomosti, 23 Dec 2024.

<sup>•</sup> Россия снизила добычу газа. Vedomosti, 26 Feb 2025.

<sup>•</sup> Минфин: доля нефтегазовых доходов превысила план. Vedomosti, 30 Oct 2024.

<sup>• &</sup>lt;u>Бюджет: дефицит и доходы января 2025. Vedomosti, 11 Feb 2025.</u>

<sup>• &</sup>lt;u>Газпром сообщил об убытке в 1,08 трлн рублей по РСБУ. Vedomosti, 17 Mar 2025.</u>

<sup>• &</sup>lt;u>Газпром нефть снизила прибыль на 25%</u>. Vedomosti, 14 Feb 2025.

<sup>• &</sup>lt;u>Чистая прибыль ЛУКОЙЛа упала</u>. Vedomosti, 25 Mar 2025.

RUB479.5 billion, even as revenue climbed 16.5% to RUB4.09 trillion. Several other majors reported similar trends: Lukoil's EBITDA and pre-tax income fell by 11% and 15% respectively in 2024 amid higher costs and weaker refining margins, and analysts predict further profit declines (5-12%) in 2025 if oil prices ease. Rosneft reported 14% decrease in net profits. In the upstream sector, companies cut back investment in new wells (down ~12% in 2024) under OPEC+ output limits and tight credit conditions.

Late 2024 also brought tougher sanctions – the U.S. blacklisted major producers (e.g. Surgutneftegaz, Gazprom Neft) and 183 oil tankers carrying 1.5 million barrels/day of Russian crude. This forced Russian crude to steepen its price discounts (Urals at around 15-20 dollars below Brent, versus around 10 dollars before) and pushed seaborne exports to a multi-month low of 2.75 Mbpd. Analysts warn these logistics curbs could trim Russia's oil output by a few hundred thousand barrels per day, although new buyers and a shift to domestic refining may partially compensate. In response, sanctioned firms are redirecting more supply to the home market (sacrificing some margins).

In turn, gas initiatives continue: Gazprom aims to reduce debt and resume dividends within 1–2 years, banking on new gas deals with China, Iran, and Central Asia. Private gas player Novatek is pressing ahead with LNG projects - including launching Russia's first ice-class LNG tankers - to expand export capacity.

Overall, the oil & gas sector has experienced slight decline in volumes of sold oil in 2024 (mostly due to sanctions and OPEC+ agreement), and a slight increase in the volumes of sold gas (due to reorientation to the Asian markets and a lower base of 2023 with a drop in EU gas imports). However, the largest market players – such as Gazprom, GaspromNeft, Rosneft and Lukoil, reported a significant drop in net profit. The nominal budget revenues from oil and gas in 2024 actually increased relative to 2023, driven by high oil and gas prices and weak rouble (at the same time, the real effect on the budget is difficult to assess due to likely underestimated inflation figures). The sector faces headwinds from sanctions and potential price volatility heading into 2025.

## Banking<sup>21</sup>

In the second half of 2024 and early 2025, Russia's banking sector navigated a complex macroeconomic environment characterized by high inflation and elevated interest rates. As discussed above, the CBR maintained its key interest rate at 21% in March 2025 amid inflation exceeding 10% year-end. This tight monetary stance contributed to a noticeable cooling in credit activity. According to the CBR's Q4 2024 report, mortgage lending growth decelerated to 1.5%, while consumer loans contracted by 2% year-over-year. Corporate loan growth also slowed to

<sup>&</sup>lt;sup>21</sup> References in this subsection include: "Аналитический обзор банковского сектора, IV квартал 2024 года", Bank of Russia, 29.01.2025

<sup>&</sup>quot;Развитие банковского сектора в январе 2025 года", Bank of Russia, 29.02.2025

<sup>&</sup>quot;Пресс-конференция по итогам заседания Совета директоров Банка России, 14 февраля 2025 года", Bank of Russia, 14.02.2025

<sup>&</sup>quot;Результаты деятельности за январь—февраль 2025 года", Sberbank, 6.03.2025

<sup>&</sup>quot;Чистая прибыль Сбербанка по РСБУ за февраль 2025 года выросла на 11,6%", Vedomosti, 11.03.2025

<sup>&</sup>quot;Консолидированная финансовая отчетность по МСФО за 2024 год", VTB Group, 27.02.2025

<sup>&</sup>quot;ВТБ не будет выплачивать дивиденды за 2024 год", Vedomosti, 25.02.2025

<sup>&</sup>quot;Греф допустил ужесточение санкций и пообещал дивиденды за 2024 год", RBC, 27.02. 2025 "Газпромбанк увеличил розничную клиентскую базу в 2024 году", Gazprombank, 15.01.2025

<sup>&</sup>quot;Альфа-Банк получил 158 млрд рублей прибыли по итогам восьми месяцев 2024 года", Alfa-Bank, 30.09.2024

2.9%, with foreign currency loans shrinking by 12.8% due to risk aversion and sanctions-related pressures.

Despite these challenges, major banks posted relatively strong financial results, underpinned by non-interest income and operational adjustments. Sberbank, Russia's largest bank, reported a 13.5% year-over-year rise in net profit for the first two months of 2025, reaching 267.3 billion rubles. This performance was supported by a 21.1% increase in net interest income, even as its loan portfolio continued to decline in early 2025 (corporate loans down 0.1%, retail down 0.4% in February). Similarly, VTB achieved a record profit of 551.4 billion rubles in 2024, up 27.6% year-over-year, with a robust 22.9% ROE. Its deposit base grew substantially—household deposits alone surged 35.5%—even as net interest income declined by 36% due to margin compression.

A broader view of the sector reveals growing household deposits and strong capital positions, but a cautious outlook. In Q4 2024, household deposits jumped 9.9% (5.2 trillion rubles), bolstered by early government payments and bonuses. Banks also expanded investments in securities by 4 trillion rubles, largely in OFZ and corporate bonds. The capital adequacy ratio (N1.0) increased to 12.5%, aided by retained earnings and asset revaluation. However, the CBR forecasts a decline in sector-wide profits to 3.0-3.5 trillion rubles in 2025, down from 3.8 trillion in 2024, as lending slows and credit risks rise. Tightened regulations and continued high rates are expected to suppress lending further, particularly in consumer and mortgage segments. Outlook statements from banking executives reflect cautious optimism amid the structural shift. Sberbank's leadership signaled readiness to operate under prolonged sanctions and reiterated dividend commitments for 2024, showing institutional resilience. Meanwhile, VTB's CEO projected a key rate reduction in H2 2025 to around 19% as inflation peaks, but warned of a potential 15-20% drop in sector-wide profits this year. Mid-tier banks like Gazprombank and Alfa-Bank reported solid asset and client base growth through 2024, though some (like Gazprombank) began 2025 with declining profits and capital. Overall, the sector remained profitable and well-capitalized but is facing mounting pressures from macroeconomic tightening and geopolitical uncertainty.

## Ferrous metallurgy<sup>22</sup>

Russia's ferrous metallurgy (steel and iron ore industry) experienced a downturn in H2 2024 under the weight of higher taxes, weakening demand, and export constraints. The government raised extraction taxes on miners and metal producers – for example, the mineral extraction tax (MET) on iron ore increased from 4.8% to 6.7% in 2024. However, analysts noted these tax

Северсталь и ММК сильнее всех снизили выпуск стали. Vedomosti, 29 Nov 2024.

Выпуск стали снизился в феврале. Vedomosti, 11 Mar 2025.

<u>Как долго российской экономике жить при высоких ставках</u>. Vedomosti, 12 Feb 2025.

<u>Рост налогов не окажет существенного влияния на финпоказатели металлургических компаний</u>. Vedomosti, 29 Oct 2024.

2025 год может быть для Северстали сложным. Finam, 13 Mar 2025.

Северсталь оценила снижение спроса на сталь в РФ в 2025 году в 5,7%. Interfax, 5 Mar 2025.

<u>Гендиректор Северстали о перспективах рынка</u>. Interfax, 23 Nov 2024.

Северсталь может пересмотреть инвестпроекты из-за высоких ставок. TASS, 20 Dec 2024.

<sup>&</sup>lt;sup>22</sup>References in this subsection include:

changes would have only a minor impact on steelmakers' finances, especially compared to oil and gas firms, and that metals companies would "remain highly profitable".

The bigger challenge has been softer demand. Domestic steel consumption fell ~6% in 2024 amid a construction cooldown, and exports of Russian steel dropped about 8% under sanctions and pricing pressures. By October 2024, Russia's total crude steel output was running 7% below the prior year. For the full year 2024, production is estimated at 70.7 million tons of steel (down from 76 Mt in the 2021 peak). The largest producers all registered declines in Jan–Oct 2024: e.g. output at MMK –12%, Severstal –8%, and Evraz –5.7% year-on-year. Only a few firms (e.g. Ural Steel) managed to increase output modestly. This declining trend continued into early 2025: in February, Russian mills produced 5.4 Mt of steel, down 3% YoY, with rolled steel output down 5% and pig iron down 10%. Over January–February 2025 combined, steel production (11.3 Mt) was essentially flat (–0.1%) compared to a year prior, suggesting the slump may be bottoming out. Industry figures expect a further drop in domestic steel demand on the order of 5% in 2025, given the construction slowdown after Russia's subsidized mortgage program ended in July 2024. However, analysts expect Russian steelmakers to stay resilient – buoyed by low production costs and a captive domestic market – even as 2025 brings challenges from higher taxes and sluggish construction demand.

The effects of these developments on the budget revenues are likely to be rather limited: In fact, non-energy mining (all metals, gold, diamonds, etc.) generated just RUB0.4 trillion of rent tax in 2023 – less than 4% of Russia's total rent taxes – versus RUB9.3 trillion from oil and RUB1.5 trillion from gas. Thus, while ferrous producers face a heavier tax burden, their importance to the federal budget is relatively small and the sector's tax load is manageable.

One of the key players, Severstal, illustrates the mixed picture. Severstal (Russia's largest steelmaker, under Western sanctions since 2023) grew its 2024 revenue by 14% to RUB830 billion, aided by higher steel prices and a richer product mix. Yet its profits were squeezed by rising costs and taxes: EBITDA fell 9% to RUB238 billion (a 29% margin, down 7 percentage points), and management reported net profit was down about 22% year-on-year. The final quarter showed signs of strain – Q4 2024 EBITDA plunged 35% YoY (margin down to 23%) despite a 3% uptick in revenue. Facing these pressures, Severstal's board omitted a Q4 dividend to preserve cash for 2025.

The company's leadership has struck a cautious tone. CEO Alexander Shevelev noted in November 2024 that market conditions were "tight" and hoped the demand decline in 2024 would not continue into 2025, even as mortgage subsidies expired. He acknowledged a heavier tax burden (higher mineral extraction and forthcoming profit taxes) and weaker orders for metal, but affirmed that Severstal would continue its key investment projects – albeit potentially revising some plans due to high borrowing costs (Ferrous metallurgy.docx). High interest rates are a sore point: Russia's tight monetary policy (key rate around 15% in late 2024) has made financing expensive. Alexey Mordashov, Severstal's owner, remarked that with such rates "it is more profitable for companies to halt development, even scale down business and just put funds on deposit" rather than invest and take risks. This stark statement underscores how credit conditions are dampening industrial investment across Russia. Still, Severstal and its peers remain profitable and comparatively less impacted by sanctions than other sectors.

In sum, the ferrous metallurgy sector ended 2024 on a modest decline in output and profit, and further decline in demand is expected in 2025. Still, its fundamentals are likely strong enough to weather a tougher domestic market in 2025.

#### Retail<sup>23</sup>

Russia's retail sector, particularly food retail, saw robust growth through 2024 but with signs of cooling in late 2024 as consumers became more price-conscious. The country's largest retailer, X5 Group (which operates Pyaterochka, Perekrestok, and the Chizhik discounter chain), reported banner results for 2024. Net profit jumped 21.9% to RUB110.1 billion, and revenue surged 24.2% year-on-year to RUB3.9 trillion. EBITDA also rose 16.9% (reaching RUB251.8 billion) although the EBITDA margin dipped slightly to 6.4% from 6.8%. These gains were driven by strong like-for-like sales growth (+14.4%) and aggressive expansion – X5 added 8.4% more retail space in 2024, bringing its store footprint to 11 million m<sup>2</sup>.

A major trend for the retail sector in general, and for its largest players, was the boom in hard discounters. X5's ultra-budget chain "Chizhik" more than doubled its revenue from 2023 (RUB118 billion) to 2024 (RUB249.5 billion), increasing its share of X5's sales from 4% to 7%. Consumers gravitated toward cheaper outlets as inflation increased – a shift confirmed by analysts who noted rising demand for discount formats and lower-priced goods. Outside of grocery, Russia's retail scene saw a similar tilt toward affordability and domestic substitutes, as Western brands' exit opened space for local and Asian players.

Overall retail turnover in late 2024 was stable, but higher interest rates and slowing real income growth started to temper consumer spending. By the fourth quarter of 2024, some cracks emerged in retail's momentum. X5's Q4 net profit fell 20% year-on-year (to RUB15.4 billion) and EBITDA edged down 0.8%, even though quarterly revenue was up a hefty 22% (RUB1.08 trillion). This profit dip is partly due to a high base in late 2023, but also reflects shrinking margins as the company held down prices to keep customers shopping. Management and analysts cite several factors: significantly higher operating costs, especially labor, and an uptick in borrowing costs. In 2024 X5 faced a staff shortage across the retail sector and responded by raising salaries – personnel expenses jumped 24.7% to RUB331.6 billion– outpacing revenue growth. Total debt also climbed 25% in the year (to RUB288.8 billion) amid expansion and higher interest rates. These pressures, combined with consumers growing cautious, squeezed Q4 profitability. Industry observers note that consumer demand began to slow in late 2024 as inflation ate into real incomes and the Central Bank's tight policy cooled credit growth. Nonetheless, inflation itself has boosted nominal sales, and X5's portfolio proved adaptive: "High inflation is favorable for X5's business," remarked one portfolio manager, pointing out that 14.4% same-store sales growth outpaced food inflation (+10%), enabling the retailer to pass on cost increases. Going into 2025, X5's outlook remains positive - the board even recommended a hefty dividend of RUB648 per share for 2024, reflecting confidence in cash flow.

In summary, the retail sector – exemplified by X5 -showed strong revenue and profit growth fueled by inflation and a shift to discounters. The start of 2025 finds retailers balancing expansion with margin management, as high financing costs and cautious consumers test the sustainability of 2024's gains.

<sup>&</sup>lt;sup>23</sup> Data in this subsection originates from the following sources:

<sup>• &</sup>lt;u>X5 увеличила прибыль и выручку в 2024 году</u>. Vedomosti, 21 Mar 2025.

<sup>• &</sup>lt;u>Квартальная выручка X5 впервые превысила 1 трлн рублей</u>. Vedomosti, 28 Jan

<sup>•</sup> X5 Group – Financial and Operational Results. X5 Group Investor Relations, 2025.

#### Construction<sup>24</sup>

Russia's construction sector downshifted sharply in late 2024, hit by the end of governmentsubsidized non-targeted mortgages and surging interest rates. The most telling sign was a collapse in homebuying: real estate transactions fell by 32.5% in Q3 2024 compared to a year earlier. This coincided with the phase-out of ultra-low mortgage deals that had buoyed housing demand. The volume of new mortgages in 2024 was about 37% lower than in 2023. As mortgages became more expensive (market rates climbed well into the teens by late 2024), developers saw new housing demand dry up. According to Dom.RF data, in the first two months of 2025 Russian developers brought 4.5 million m<sup>2</sup> of new housing to market – 23% less than in Jan-Feb 2024. Several key regions saw dramatic pullbacks in construction launches: the Moscow region's new housing volume plummeted 59% year-on-year, Moscow city was down 46%, and St. Petersburg down 35%. Developers are delaying or cancelling projects due to weaker demand and the difficulty of financing at high interest rates. An industry expert noted that many projects are now "economically unfeasible" with project loan rates so high. Essentially, the removal of cheap-credit stimulus revealed a more fragile underlying demand. Sensing trouble, authorities have partly extended support: some subsidized lending programs continued into early 2025, contributing to a small rebound in February 2025 mortgage activity. Nevertheless, experts predict further contraction: new housing construction in 2025 could shrink by 30-35% for the year if credit and demand conditions don't improve. For developers, the priority has become financial survival: many are cautiously managing inventory and land banks, awaiting either lower interest rates or new stimulus.

The construction slump has ripple effects across related industries, such as building material producers and freight rail companies. In 2024, prices for key construction inputs soared even as volumes fell – cement prices rose 11%, gypsum 13.5%, and ready-mix concrete 16.4%. These increases were driven by higher energy and transportation costs (natural gas +11%, electricity +9%) and tariff hikes by infrastructure monopolies, which squeezed contractors' margins. By early 2025, the cement industry entered a "recession," according to the Cement Producers Association, as demand from developers waned. Reduced construction activity also left trains less loaded: Russia's rail freight volumes of cement, lumber, and steel for construction dropped, leading one columnist to dub it "unburdened railroads".

In summary, the construction sector that had been a growth engine is now contracting, dragging on industries from cement to transportation. High borrowing costs and the end of easy mortgages in late 2024 led to a steep fall in new builds and sales. Industry players are retrenching for what could be a tough 2025, depending on whether inflation and interest rates stabilize.

<sup>&</sup>lt;sup>24</sup> Data in this subsection originates from the following sources:

<sup>• &</sup>lt;u>Как изменится рынок стройматериалов в 2025 году: ответ эксперта ЦЕМРОСА.</u> Vedomosti, 29 Jan 2025.

<sup>•</sup> Эксперт ЦЕМРОСА сообщил о начале рецессии цементного рынка. Vedomosti, 24 Jan 2025.

<sup>•</sup> Объем нового строительства у российских застройщиков жилья упал. Vedomosti, 12 Mar 2025.

<sup>• &</sup>lt;u>Квартиры в готовых домах Москвы подорожали</u>. Vedomosti, 11 Mar 2025.

<sup>• &</sup>lt;u>Разгруженные железные дороги</u>. Vedomosti, 19 Jan 2025.

<sup>•</sup> Ипотека в феврале: первый рост после долгого падения. Vedomosti, 14 Mar 2025.

## Machinery and Equipment Manufacturing<sup>25</sup>

In contrast to real estate, Russia's machine-building sector surged in late 2024, emerging as a surprising driver of growth. Machinery production expanded at record rates for the second year in a row, thanks to import substitution and defense orders.

According to Rosstat, output of machinery and equipment rose about 15% in 2024, after an even stronger ~20% rebound in 2023. This brought the sector to its highest output in 35 years – the volume of equipment produced in 2024 reached RUB17 trillion, roughly 14% of Russia's total industrial output (RUB124 trillion). In fact, for the first time since the Soviet era, Russia's machine-building output in 2024 exceeded the level of 1990 by 9%. This remarkable growth is partly a catch-up effect – after a 13% drop in 2022, the sector roared back – but it also reflects structural changes. The two main sources of this boom are the sanction-driven need to substitute imported industrial goods with domestic ones, and military procurement. Russia sharply increased military production (e.g. tanks, missiles, aircraft) to supply its war needs. Experts point out that the growth in machine-building was strongly influenced by military orders which, in turn, has received massive budget infusions. Indeed, Russia's defense spending for 2025 is set at RUB13.4 trillion, almost 4times the level of 2021, which translates into huge demand for weapons, vehicles, and other machinery. This military-driven demand, combined with state import-substitution programs (e.g. incentives for domestic electronics and auto parts production), yielded the impressive output figures seen in late 2024.

Policymakers expect machine-building to remain a growth engine in the medium term. The Economy Ministry's optimistic baseline forecast sees machinery output rising another 27% cumulatively by 2027 (versus 2024). However, sustaining high growth will require overcoming some challenges. Business surveys indicate a possible cooldown in early 2025: the manufacturing PMI for Russia slid to 50.2 in February 2025, its lowest since September 2024, signalling a sharp slowdown in growth momentum. This dip suggests that capacity constraints or supply bottlenecks (e.g. shortages of certain high-tech components) may be emerging after two years of rapid expansion. Additionally, high interest rates make financing new factories costly – a concern voiced by industrialists in late 2024.

Thus, as of early 2025, Russia's machine-building sector stands out with double-digit growth in output, increased investment, and significant contributions to GDP, driven by the needs of import substitution as well as defense procurement.

<sup>&</sup>lt;sup>25</sup> Data in this subsection originates from the following sources:

<sup>• &</sup>lt;u>Машиностроение России прибавило</u>. Vedomosti, 18 Mar 2025.



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