

KSE Institute Russia Chartbook

CENTRAL BANK STRUGGLES TO CONTAIN INFLATION;

RUBLE DEPRECIATION SHOWS VULNERABILITY

NOVEMBER 2024









Executive Summary

- 1. Ruble under considerable depreciation pressure once more. Following an extended period of exchange rate stability, Russia's currency started depreciating again in the fall and the pace of this development has accelerated in recent weeks. The ruble has now risen above 100 per U.S. dollar again—the highest reading since the shock episode following the imposition of sanctions in February-March 2022 and a psychologically important threshold. Altogether, the ruble has lost almost 52% of its value vs the U.S. dollar and close to 47% vs the Euro. The change is broad-based and occurred vs most developed and emerging market currencies.
- 2. Central bank struggles to contain inflation despite tightening. The CBR has not yet been able to meaningfully push down inflation even though it has increased the key policy rate by 1,350 bps to 21%. In October, headline inflation stood at 8.5% year-over-year and core inflation at 8.2%. Several factors create inflationary pressures that are difficult to contain: a very tight labor market leading to close to double-digit real wage growth, the large war-related stimulus, a significant expansion of credit to the private sector, and ruble depreciation. As a result, the central bank will likely be forced to tighten monetary policy further in December.
- 3. Lower oil prices but broadly supportive external environment. Russian oil export prices have increased somewhat in October (to \$65.7/barrel) on the back of higher global prices, while the discount has dropped to its lowest level since the start of the full-scale invasion (below \$10/barrel). The Russian shadow fleet, which accounted for 85% of all seaborne crude oil exports in October, has allowed Russia to generate significant extra export earnings—close to \$9 billion from crude oil alone in the first ten months of the year. The overall external environment remains broadly supportive, with the current account surplus in January-October 2024 reaching \$58.1 billion—31% higher than during 10M 2023. Net foreign currency inflows from trade are still quite low, however.
- 4. No significant constraints on the budget and war spending. Russia's federal budget balance reached a small deficit of 221 billion rubles over the first ten months of the year (vs a deficit of more than 1 trillion in January-October 2023). Sharply higher O&G revenues (+32%) and other revenues (+27%) more than offset higher spending (+24%). Russia is likely to stay within or close to its budget deficit target (of 2.1 trillion) for the full year. Limited fiscal financing needs also help in a situation where macro buffers (e.g., NWF) are increasingly depleted and interest rates rising considerably. Due to favorable fiscal dynamics, Russia will be able to achieve its objective to increase military spending further in 2025—by 25% vs the planned 2024 level to 13.5 trillion rubles (or ~\$140 billion).



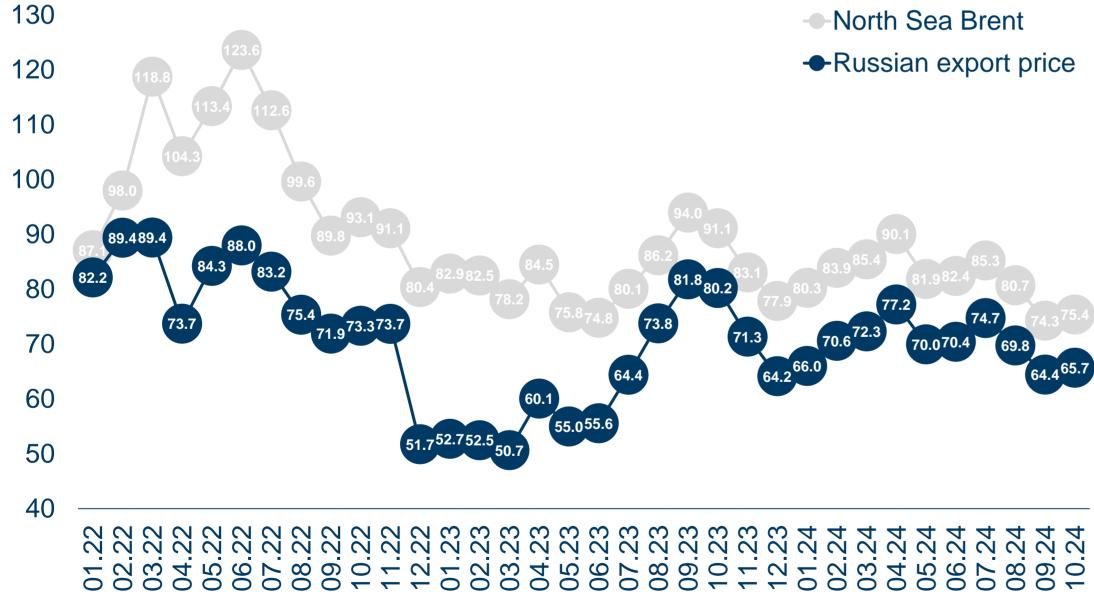
Bounce-back of global oil prices leads to slight improvement in Russian oil exports; shadow fleet allows for extra earnings.



Discount on Russian oil close to lowest level since full-scale invasion.

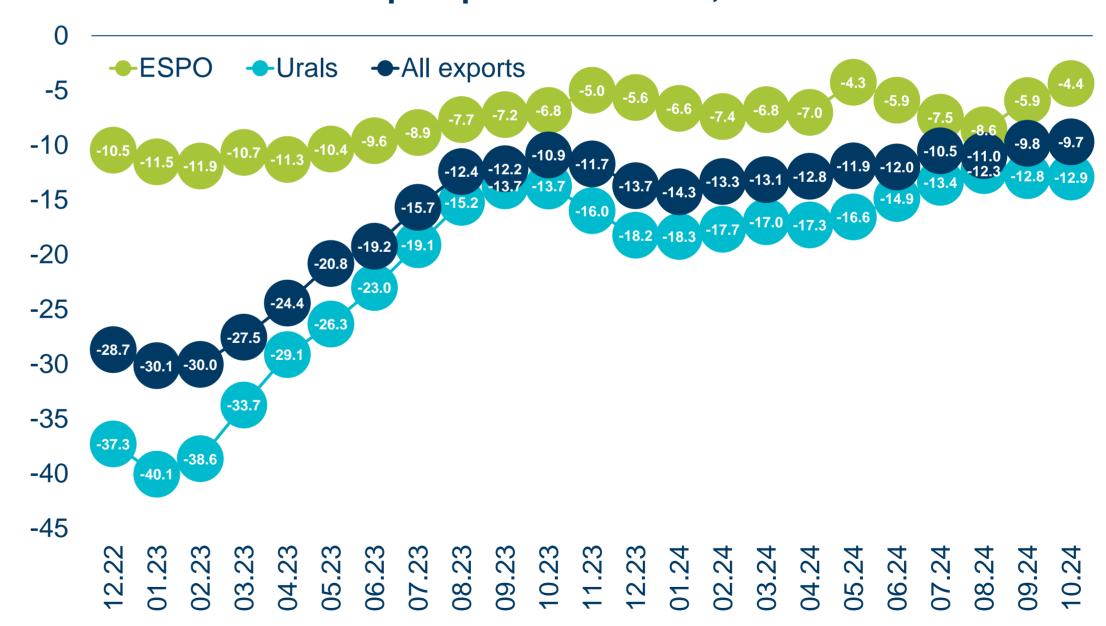
- Prices for Russian oil exports remained relatively close to the price cap's \$60/barrel threshold in October.
- However, the discount on Russian oil vs Brent is also at its lowest level since the start of the full-scale invasion.
- Thus, this has nothing to do with stricter sanctions enforcement and is entirely driven by weaker global prices.

Crude oil prices, in U.S. dollar/barrel*



Source: Federal Customs Service, International Energy Agency, KSE Institute *export price until November 2022 from Russian customs, all other numbers from IEA

Discount of Russian export prices vs. Brent, in U.S. dollar/barrel



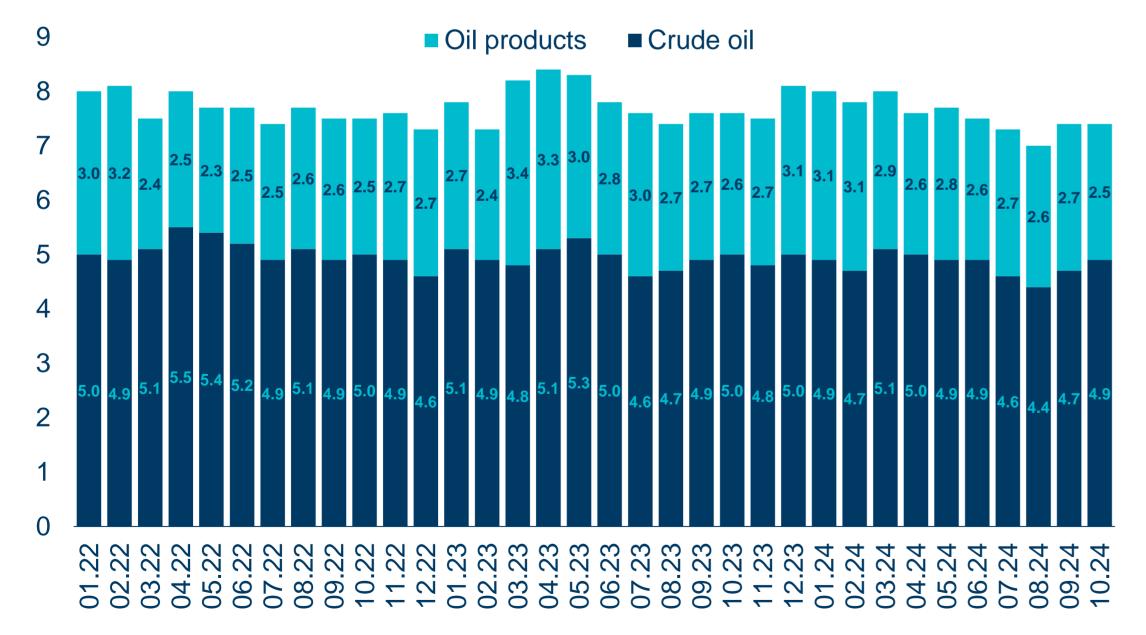
Source: International Energy Agency, KSE Institute



Supply of Russian oil to the global market remains stable.

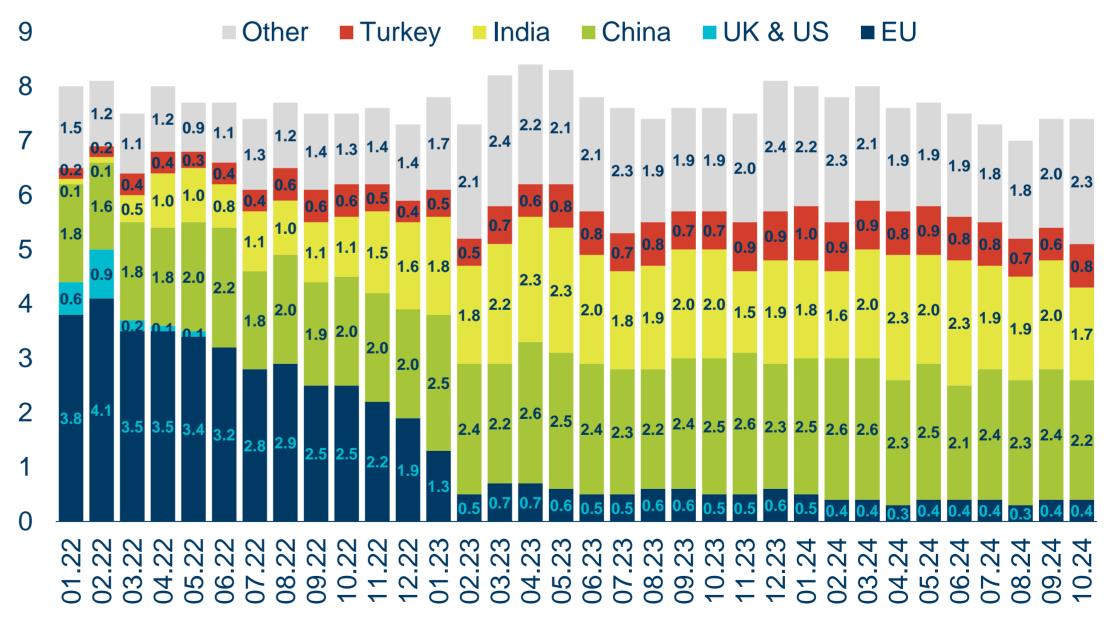
- Russian oil export volumes have been remarkably steady over the last 2.5 years despite sanctions.
- Thus, the price cap has succeeded at keeping Russian oil on the market and prevent supply issues.
- China, India, and Turkey are the most important buyers, together accounting for 60-70% of exports.

Russian oil export volume by type, in million barrels/day*



Source: International Energy Agency, KSE Institute *March 2024 = KSE Institute estimate

Russian oil export volume by destination, in million barrels/day*



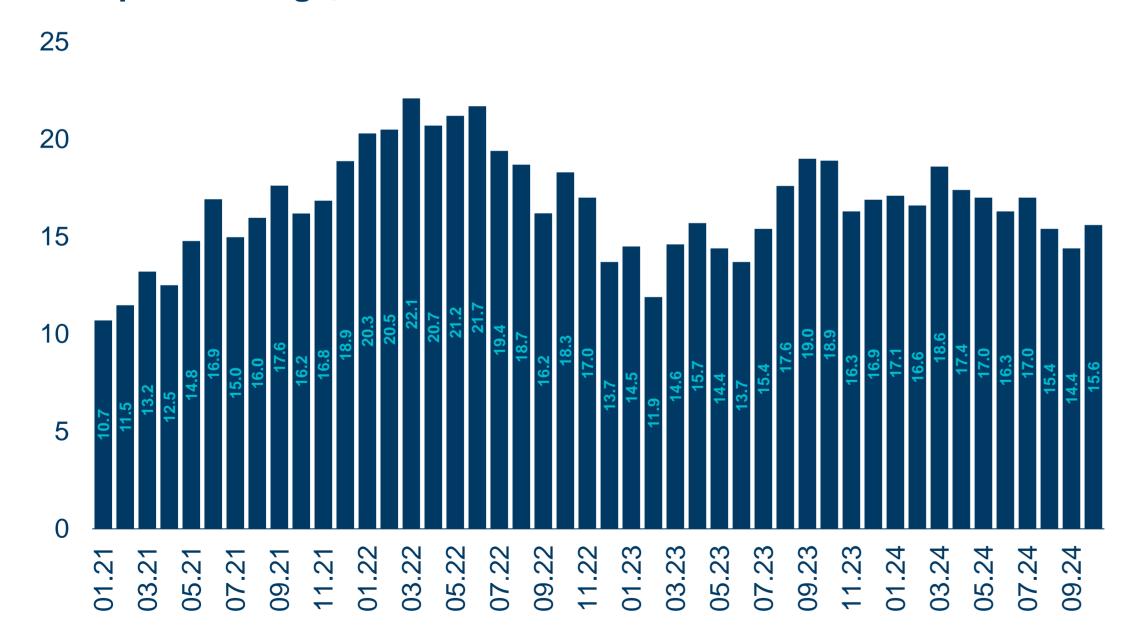
Source: International Energy Agency, KSE Institute *no March data from IEA



Ineffective price cap helps Russia with exports and budget revenues.

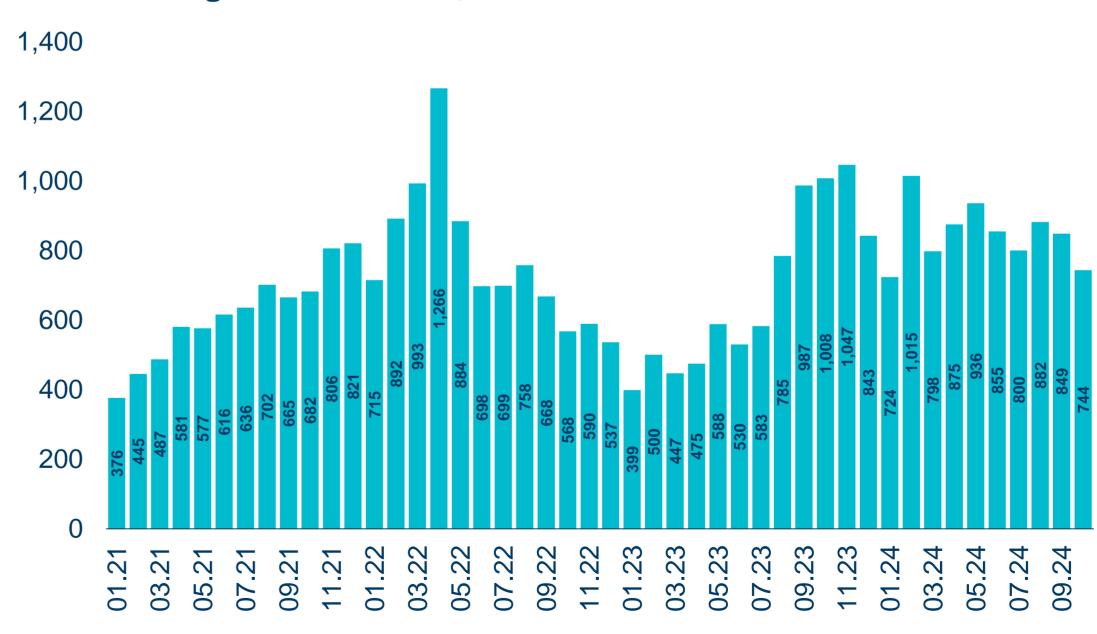
- Russian oil export earnings increased to \$15.6 billion in Oct. on the back of somewhat higher prices.
- For 10M 2024, earnings were 6% higher than in 10M 2023 and only 17% weaker than in 10M 2022.
- Budget revenues for 10M 2024 were 46% higher than in 10M 2023 (and 2% higher than in 10M 2022).

Oil export earnings, in U.S. dollar billion



Source: Federal Customs Service, International Energy Agency, KSE Institute *2021 data from Russian customs service, 2022-23 data from IEA

Federal budget oil revenues, in ruble billion*



Source: Ministry of Finance, KSE Institute *includes extraction tax and export duty

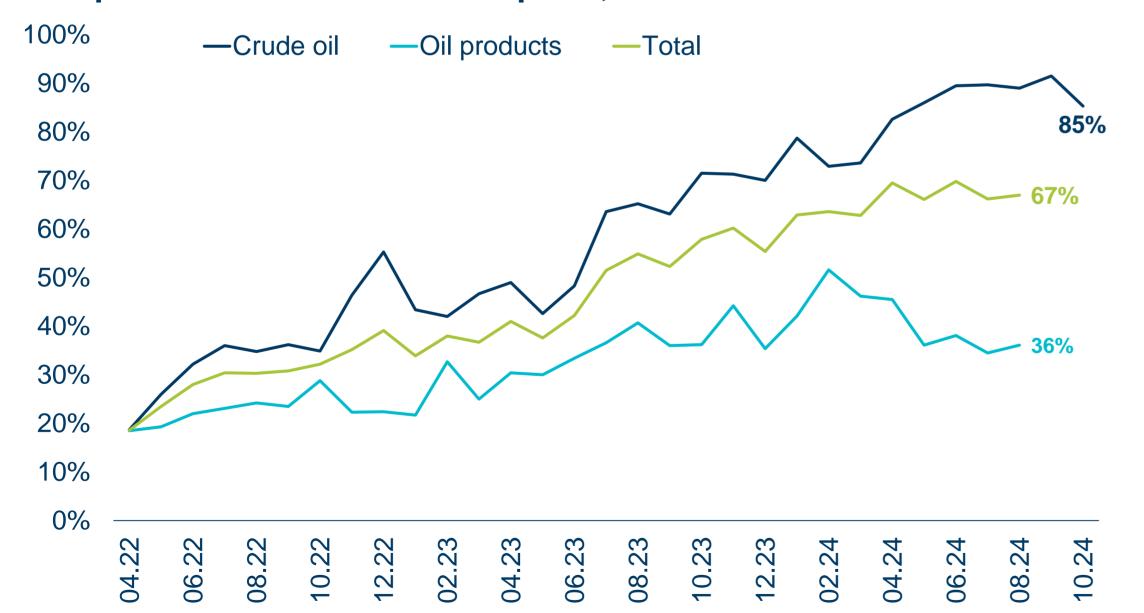


Shadow fleet has fundamentally eroded the price cap's leverage.

- The shadow fleet allows Russia to evade the G7+ oil price cap for a large share of its exports.
- In Oct. 2024, 85% of seaborne crude oil was transported without involvement of G7+ services.
- This has allowed Russia to generate ~\$9 billion in extra export earnings over Jan.-Oct. 2024.

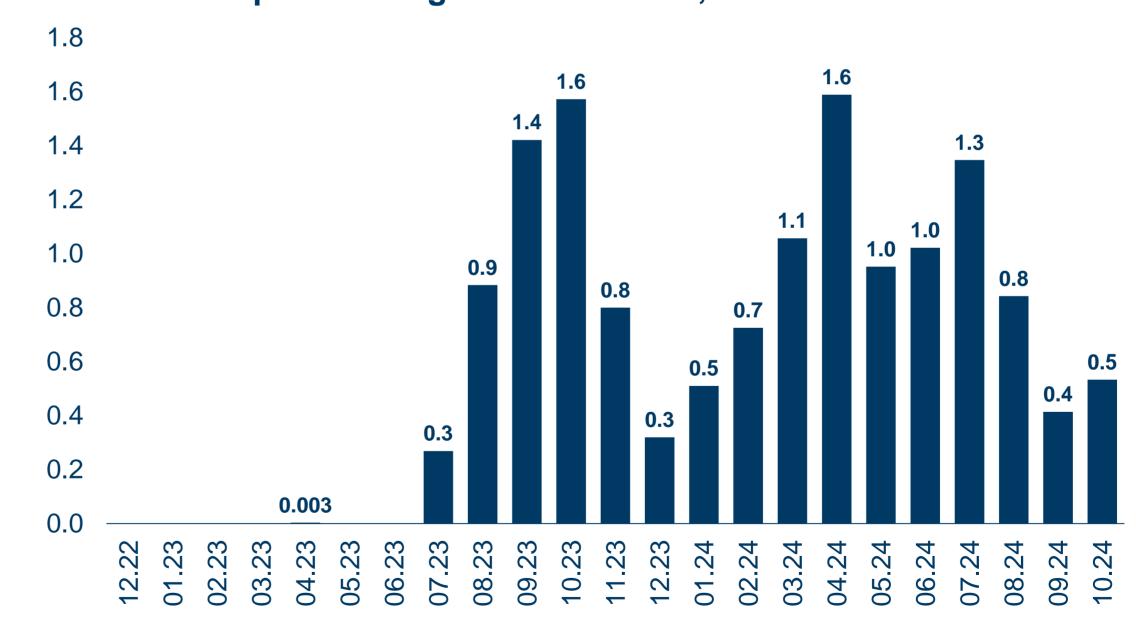
Read KSE Institute's in-depth assessments of the shadow fleet here, here, and h

Composition of seaborne oil exports, in %



Source: Equasis, Kpler, P&I Clubs, KSE Institute

Additional export earnings from crude oil, in U.S. dollar billion



Source: Equasis, International Energy Agency, Kpler, P&I Clubs, KSE Institute



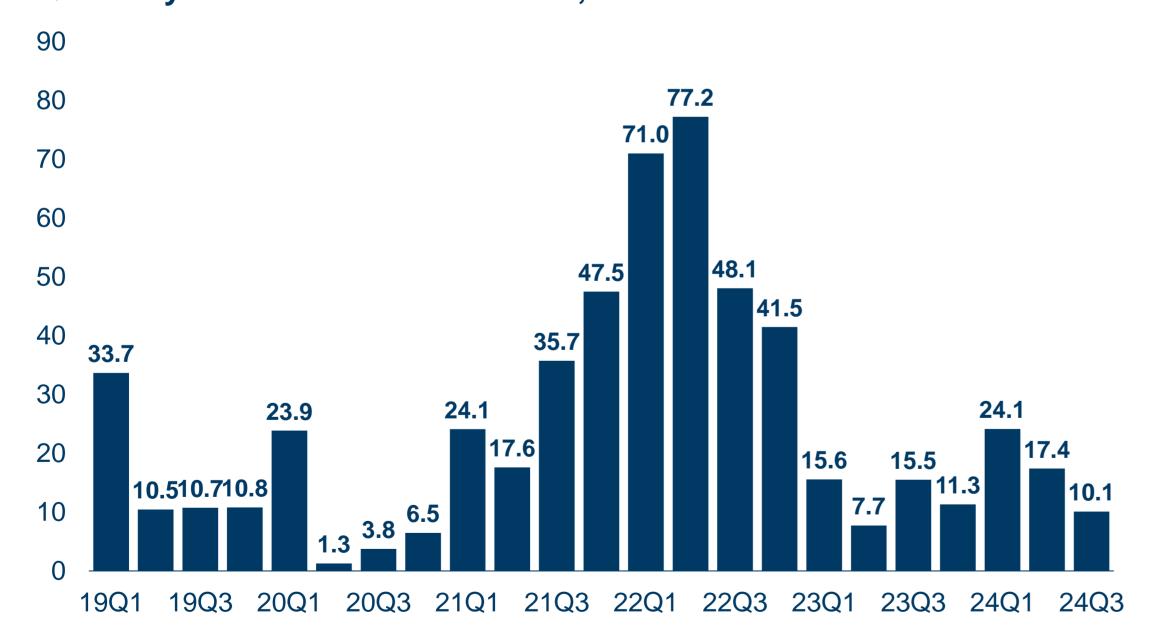
External conditions remain supportive; weak sanctions enforcement helps Russia; hard currency inflows have fallen sharply.



External environment has become more supportive in 2024.

- Russia's current account surplus reached \$6.5 billion in Oct. (vs \$6.8 billion in Sep. and \$3.3 billion in Aug.).
- Somewhat higher goods exports, smaller goods imports, and a less negative services balance contribute.
- The 10M 2024 surplus of \$58.1 billion is 31% bigger than in 10M 2023 and 16% larger than the 2023 total.

Quarterly current account balance, in U.S. dollar billion



Source: Bank of Russia, KSE Institute

Composition of the current account, in U.S. dollar billion

	C/A	C/A Goods			Services			Income & transfers		
Time period	Bal.	Bal.	Exp.	Imp	Bal.	Cred.	Deb.	Bal.	Cred.	Deb.
Q1 2024	24.1	34.9	101.4	66.5	-7.3	10.2	17.5	-3.5	9.3	12.8
Q2 2024	17.4	35.8	105.7	69.9	-9.4	9.9	19.3	-9.1	8.5	17.5
Q3 2024	10.1	32.9	109.8	76.9	-13.4	10.3	23.7	-9.4	10.2	19.6
July 2024	0.0	10.6	35.7	25.1	-4.6	3.6	8.2	-6.1	3.4	9.5
August 2024	3.3	9.7	35.0	25.3	-5.0	3.4	8.3	-1.4	3.3	4.7
September 2024	6.8	12.6	39.1	26.5	-3.9	3.3	7.2	-1.9	3.5	5.4
October 2024	6.5	11.8	36.0	24.2	-3.3	3.3	6.6	-2.0	3.3	5.3
JanOct. 2024	58.1	115.4	352.9	237.5	-33.4	33.7	67.0	-24.0	31.3	55.2
2021	125.0	193.1	494.2	301.0	-20.3	55.6	75.9	-47.8	96.3	144.1
2022	237.7	315.6	592.1	276.5	-22.1	48.8	70.9	-55.8	51.0	106.8
_ 2023	50.1	121.6	424.5	302.9	-35.3	41.2	76.4	-36.2	44.8	81.0
Q1 2023 Q2 2023 Q3 2023 Jul. 2023 Aug. 2023	15.6	30.5	105.1	74.6	-7.6	9.9	17.5	-7.3	11.4	18.7
Q2 2023	7.7	26.3	103.4	77.1	-8.9	10.4	19.3	-9.6	12.7	22.3
g Q3 2023	15.5	33.4	109.1	75.7	-10.3	9.7	20.0	-7.6	10.0	17.6
Ĕ Jul. 2023	0.2	6.2	31.7	25.5	-3.7	3.2	6.9	-2.2	3.4	5.6
∑ Aug. 2023	5.4	11.7	37.1	25.4	-4.1	3.3	7.4	-2.2	3.1	5.3
Sep. 2023	9.9	15.5	40.3	24.8	-2.5	3.2	5.7	-3.1	3.5	6.6
Oct. 2023	5.4	10.9	34.3	23.4	-2.4	3.4	5.7	-3.2	3.3	6.5
JanOct. 2023	44.2	101.1	351.9	250.8	-29.2	33.2	62.4	-27.7	37.4	65.2

Source: Bank of Russia, KSE Institute



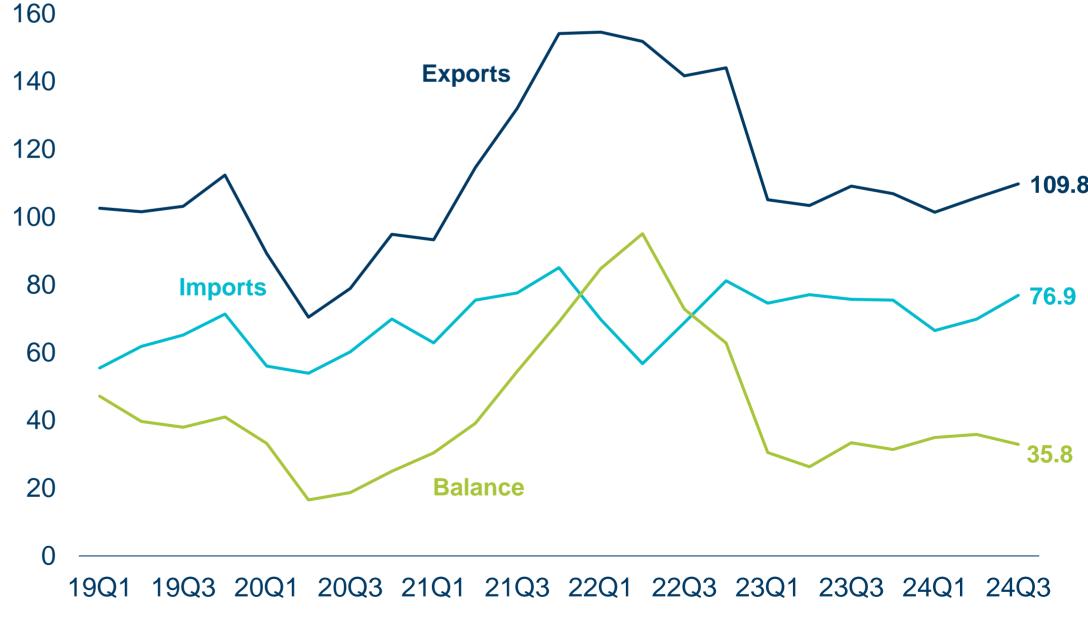
Source: Bank of Russia, KSE Institute

Foreign trade has settled in at a new post-full scale invasion baseline.

- Russia's foreign trade has stabilized at a new baseline of ~\$100 billion in exports and ~\$75 billion in imports per quarter.
- This represents a significant change to 2022 when soaring commodity prices drove up exports while imports weakened.
- However, any further erosion of Russia's external accounts will require more decisive measures on the sanctions front.

Monthly trade statistics, in U.S. dollar billion 50 40 30 10 Balance 0 2010 2012 2014 2016 2018 2020 2022 2024

Quarterly balance of payments statistics, in U.S. dollar billion



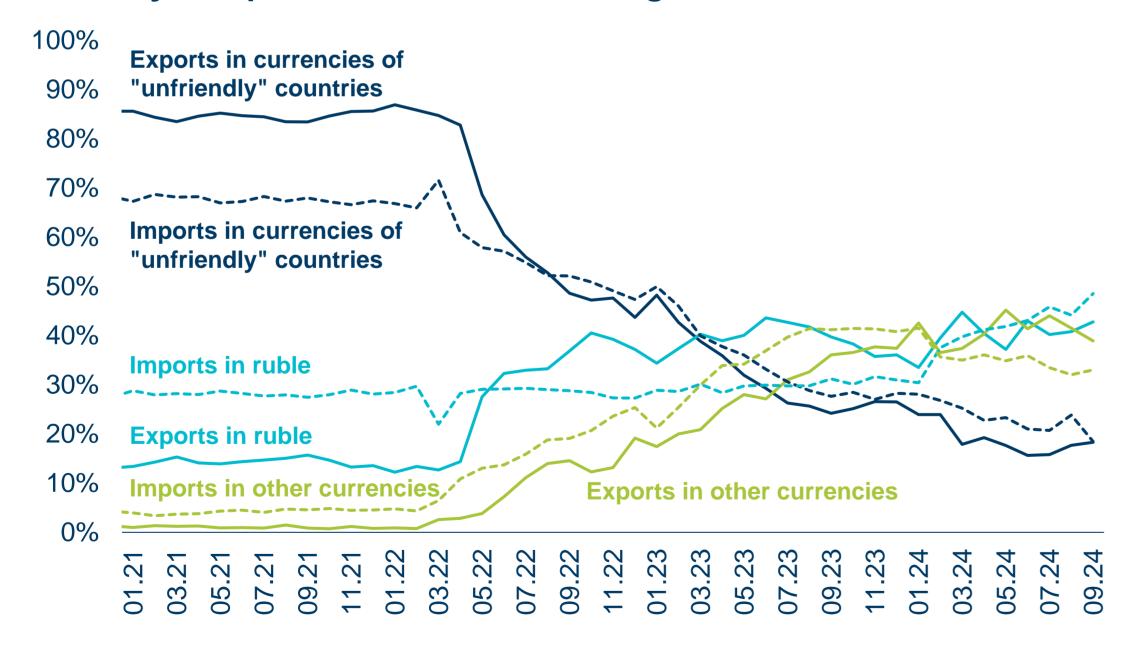
Source: Bank of Russia, KSE Institute



Change to currency composition of trade creates hard currency shortage.

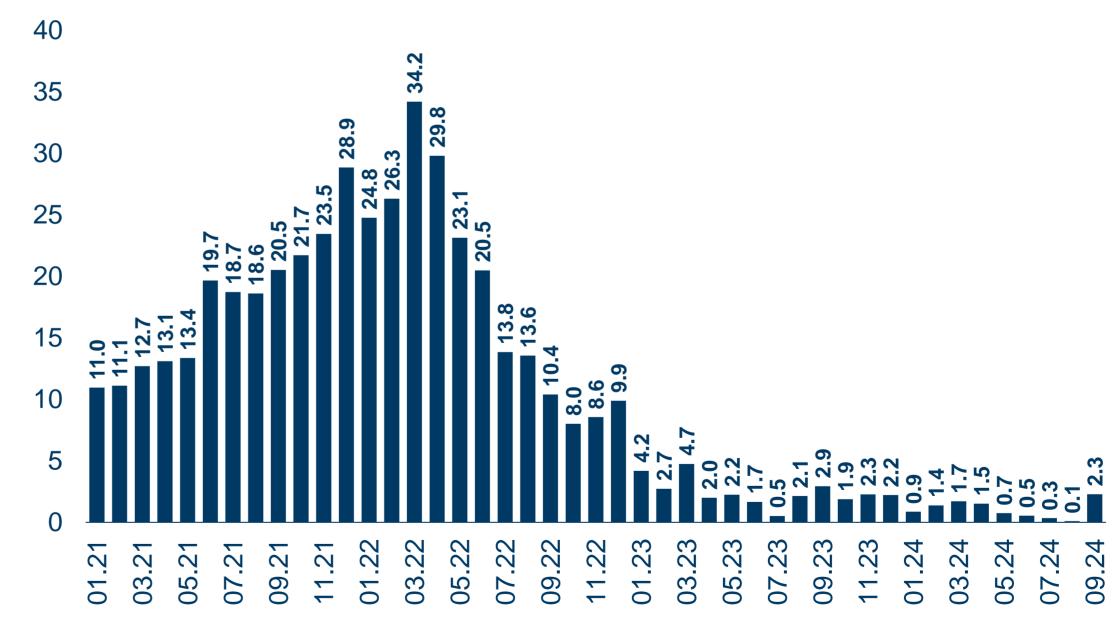
- The share of "unfriendly" countries' currencies (e.g., USD, EUR, GBP, JPY, CHF) in Russian trade has fallen sharply.
- Other currencies have risen for both exports and imports, while the ruble has gained importance mostly for exports.
- These shifts have created a shortage of hard currency as net inflows from goods trade have essentially disappeared.

Currency composition of Russia's foreign trade, in %



Source: Bank of Russia

Net inflows of hard currency from goods trade, in \$ billion*



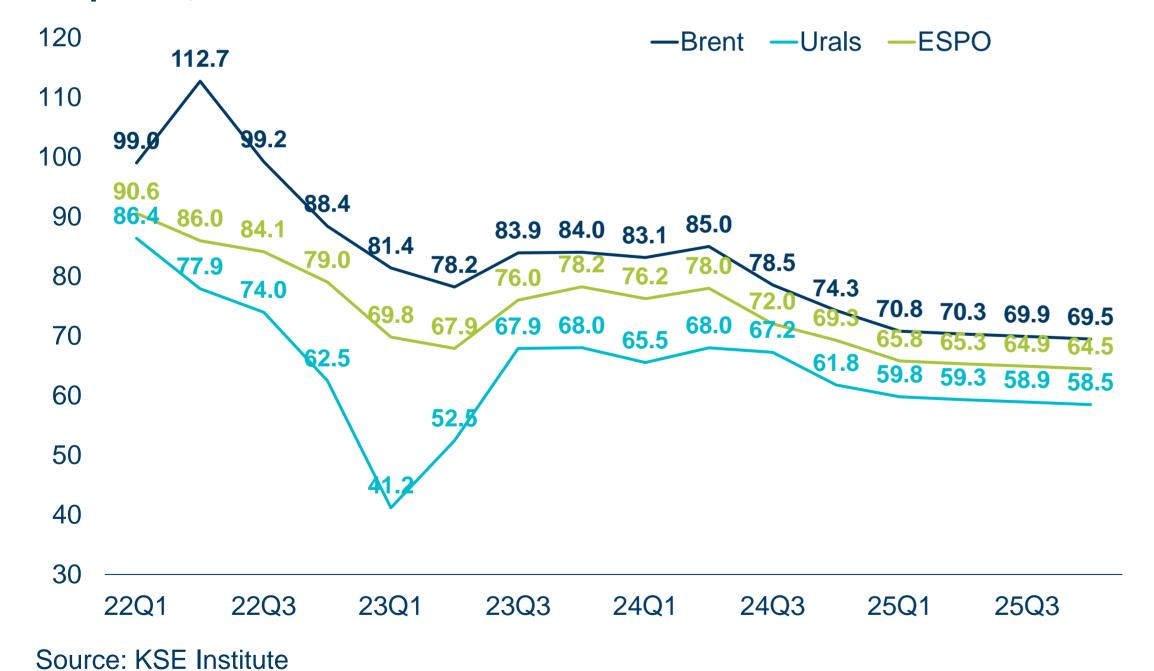
Source: Bank of Russia, KSE Institute *includes currencies of "unfriendly" countries



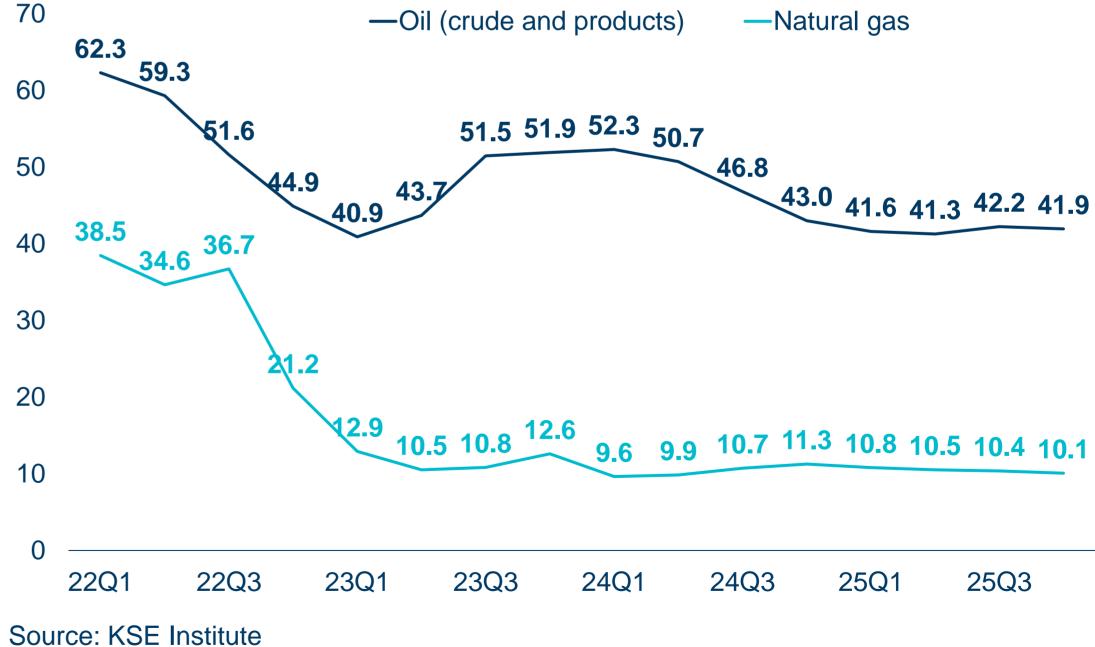
Weak sanctions enforcement scenario is increasingly likely.

- It looks increasingly likely that our bearish scenario of weak energy sanctions enforcement is materializing.
- This scenario assumes an Urals discount of \$11/barrel and an ESPO discount of \$5/barrel going forward.
- this situation, Russia would be able to generate significantly higher oil export earnings vs. the base case.

Oil prices, in U.S. dollar/barrel



Oil and gas export earnings, in U.S. dollar billion

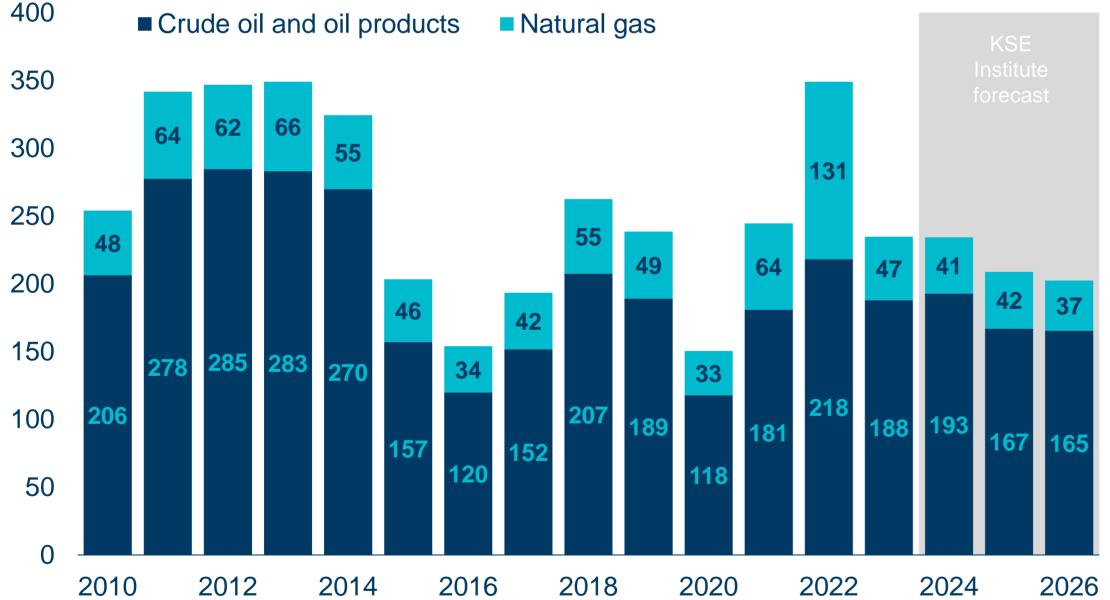




Current account surplus to improve markedly this year.

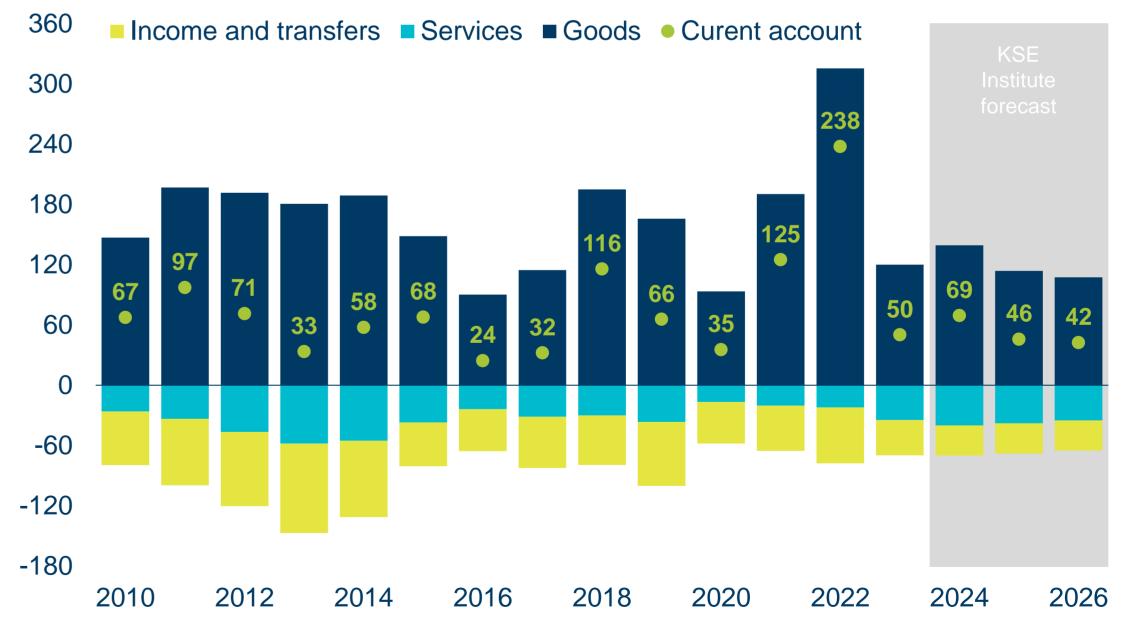
- O&G exports are projected to decrease to \$234 billion in 2024 and further to \$209 billion in 2025 (vs \$235 billion in 2023).
- As a result, the current account surplus is set to increase to \$69 billion this year before declining to \$46 billion in 2025.
- In terms of its external accounts, this leaves Russia in a relatively comfortable position and will limit ruble depreciation.

Oil and gas earnings, in U.S. dollar billion



Source: Bank of Russia, KSE Institute

Current account and components, in U.S. dollar billion



Source: Bank of Russia, KSE Institute



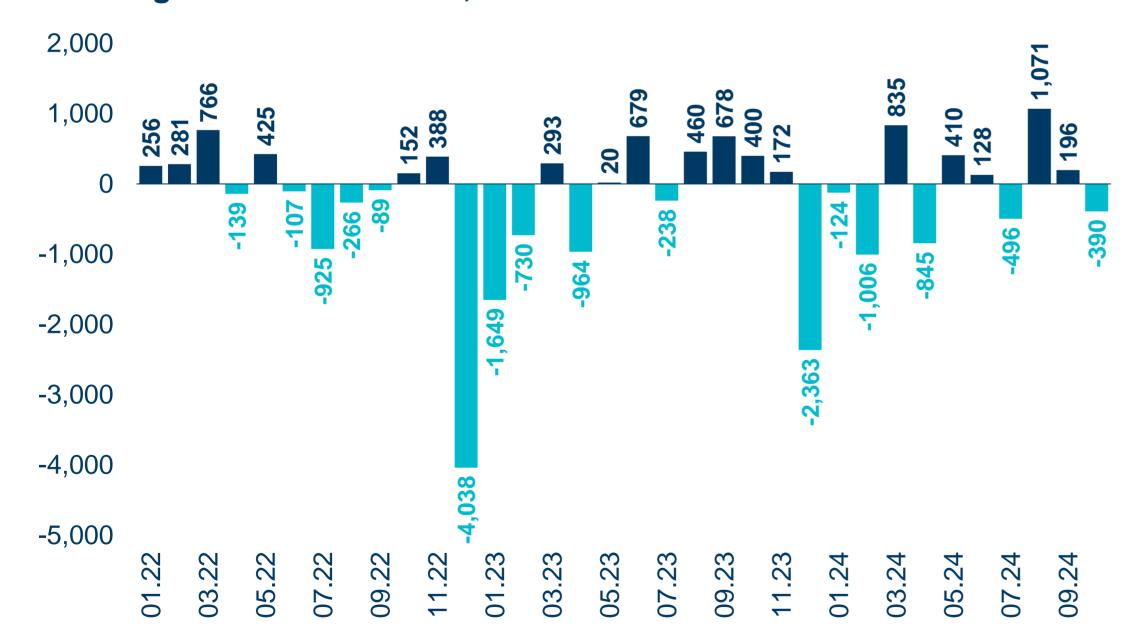
Robust revenues more than offset higher spending; budget financing not a challenge; Russia to step-up war budget further in 2025.



Sharp rise in revenues significantly improved fiscal situation.

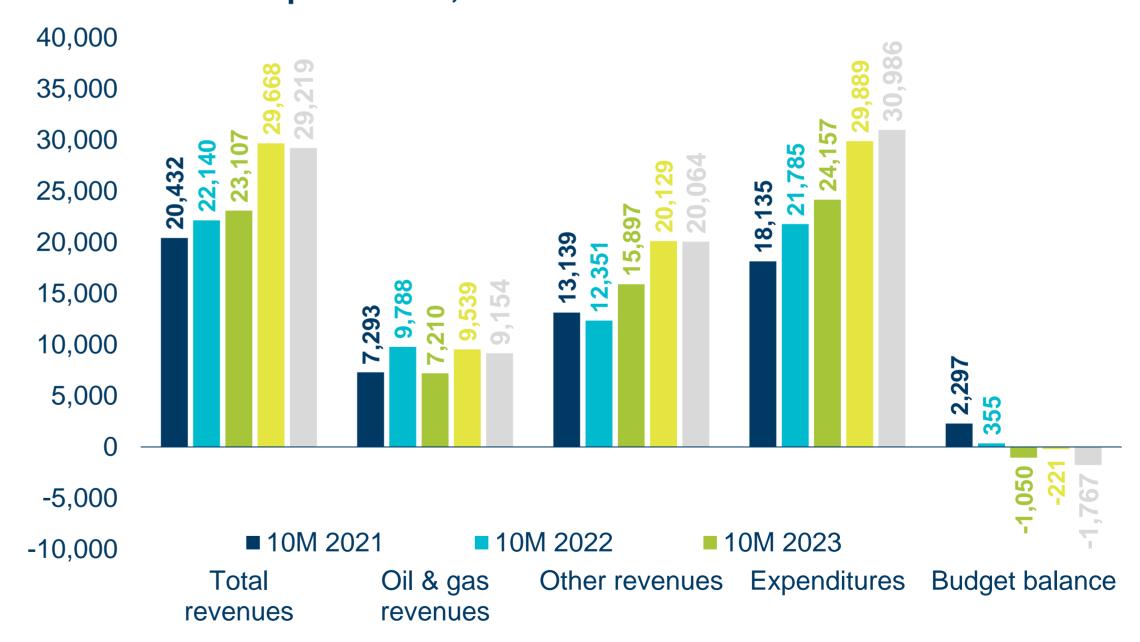
- In Jan.-Oct. 2024, Russia's federal budget reached a cumulative deficit of 221 billion rubles (389 billion in Oct.).
- Strong revenues (O&G and non-O&G) helped to more than offset large spending (of 3.8 trillion rubles in Oct.).
- Oil and gas revenues were 32%, non-O&G revenues 27%, and expenditures 24% higher vs Jan.-Oct. 2023.

Federal government balance, in ruble billion



Source: Ministry of Finance, KSE Institute

Revenues and expenditures, in ruble billion



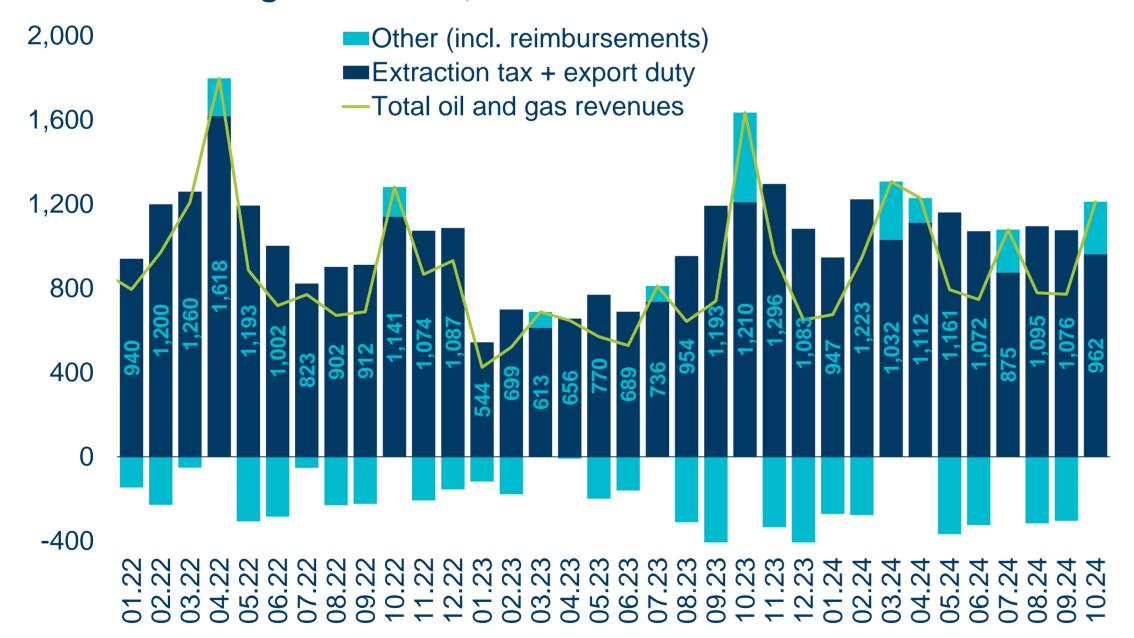
Source: Ministry of Finance, KSE Institute



Strong oil and gas revenues provide support to the budget.

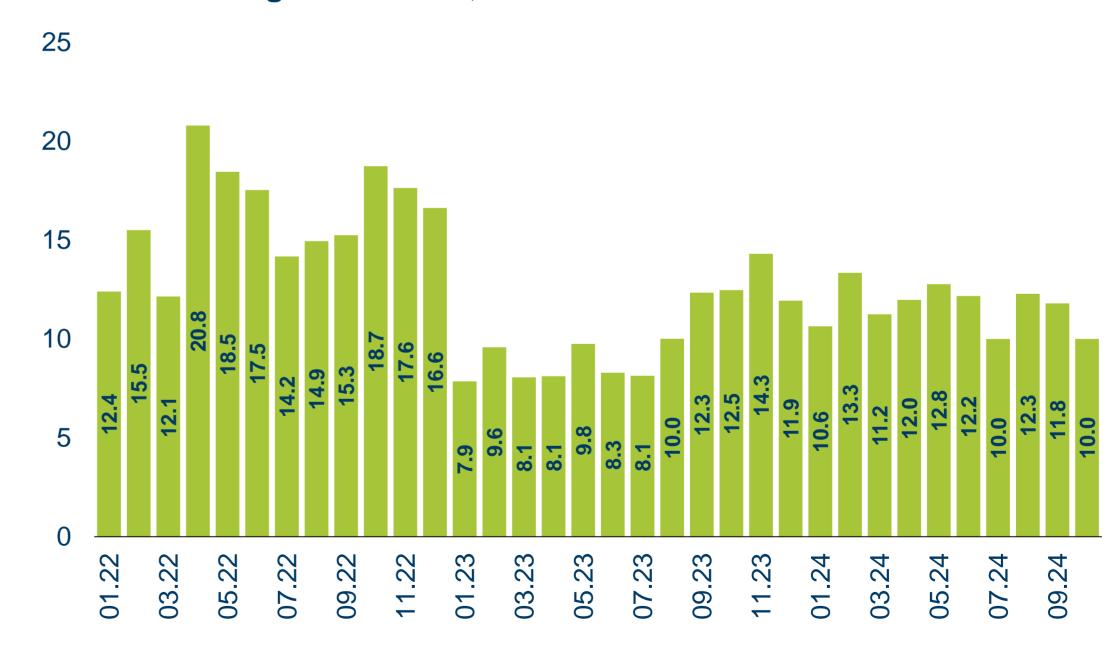
- O&G revenues from extraction taxes and export duties have averaged more than 1 trillion rubles this year.
- In Oct., revenues in \$ terms declined somewhat due to the lower reference price in the previous month.
- The weaker ruble will help offset negative effects from lower oil export prices and keep revenues robust.

Federal oil and gas revenues, in ruble billion



Source: Ministry of Finance, KSE Institute

Federal oil and gas revenues, in U.S. dollar billion*



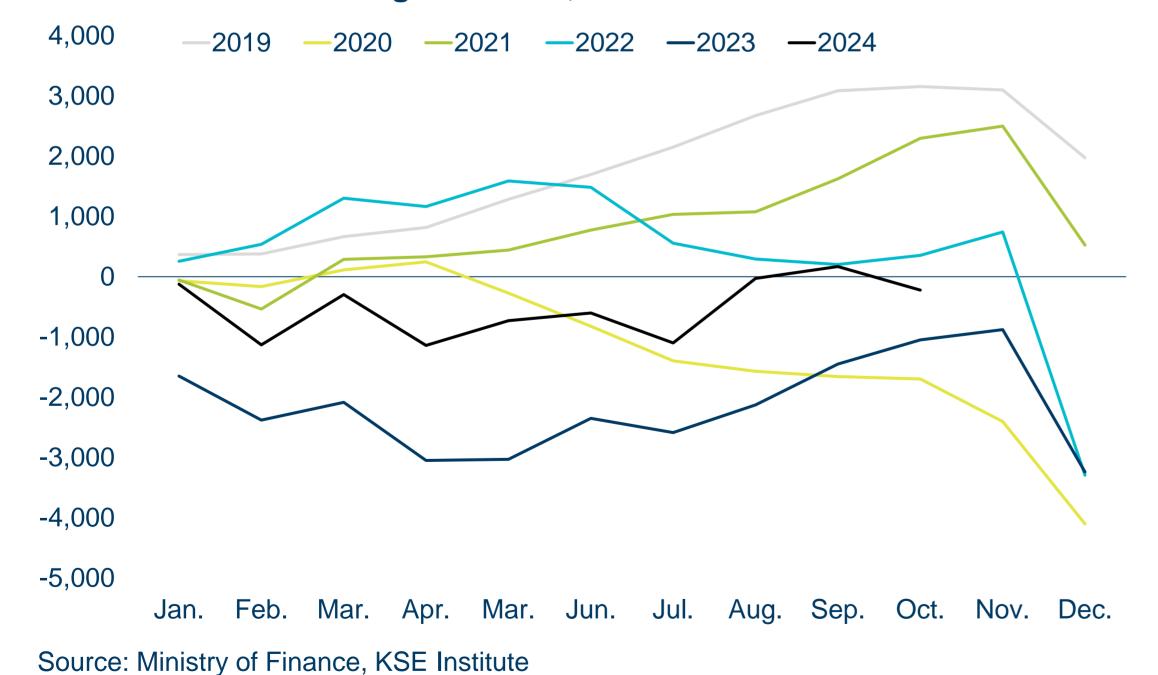
Source: International Monetary Fund, Ministry of Finance, KSE Institute
*includes extraction tax and export duty; calculated with monthly average exchange rate



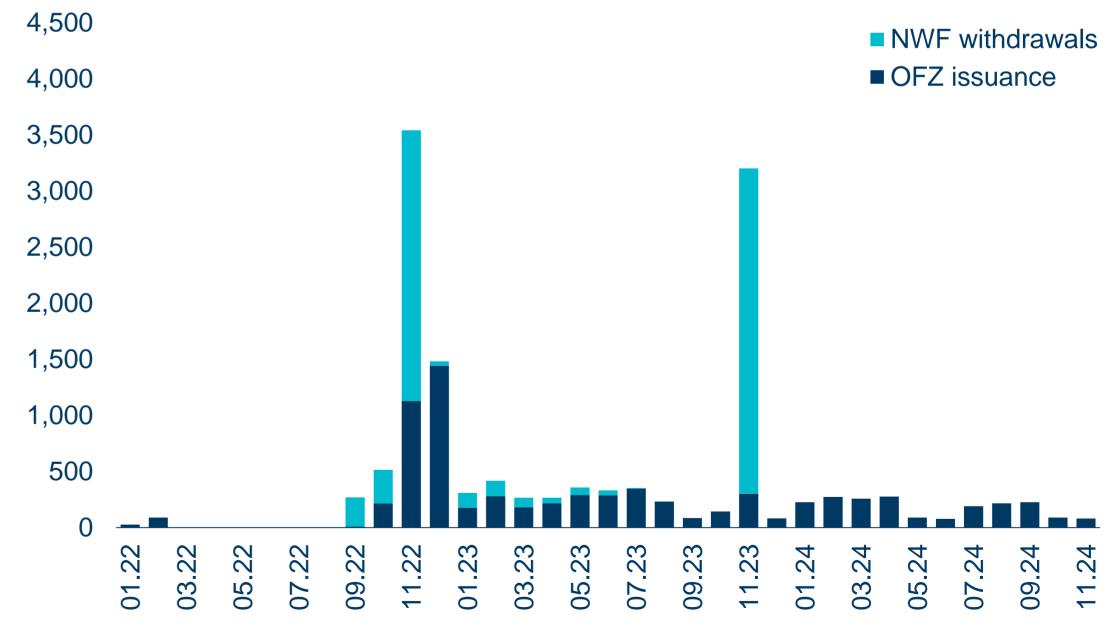
Positive budget dynamics mean financing is not a challenge.

- With a deficit of 390 billion rubles in October, the cumulative balance over M10 2024 slipped into a (small) deficit again.
- Due to the improved fiscal situation, Russia has been able to finance the budget via moderate domestic debt issuance.
- There are some risks to the outlook, including an economic slowdown, but Russia will likely stay within its budget target.

Cumulative federal budget balance, in ruble billion



Key fiscal financing channels, in ruble billion



Source: Ministry of Finance, KSE Institute

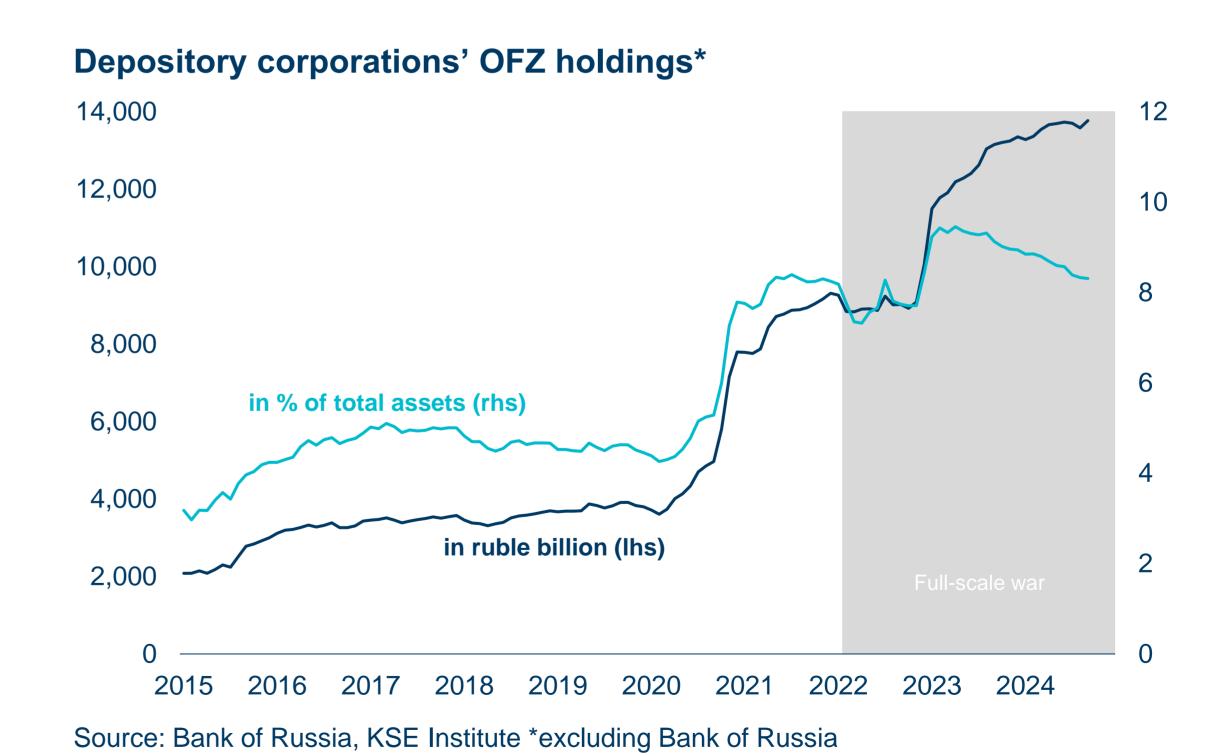


Source: Bank of Russia, KSE Institute

Domestic banks are the only remaining buyers of OFZs.

- Foreigners have largely disengaged from the Russian sovereign debt market since the start of the war.
- Non-resident holdings have dropped 1.29 trillion rubles (or 47%) since October 2022 as bonds matured.
- Credit institutions' holdings of OFZs, on the other hand, have risen significantly over the same period.

Non-resident OFZ holdings 4,000 40 3,500 35 in % of total OFZ market (rhs) 30 2,500 2,000 20 15 1,500 10 1,000 in ruble billion (lhs) 500 5 2022 2024 2012 2014 2016 2018 2020





Domestic borrowing stable due to limited fiscal pressure.

- Borrowing in the domestic market has been broadly stable in the last 1.5+ years.
- The OFZ yield curve reflects the recent CBR rate hikes (of cumulative 1,350bps).
- Funding costs are higher but limited in their impact due to the small budget deficit.

21Q3 21Q4 22Q1

21Q1 21Q2

20Q4

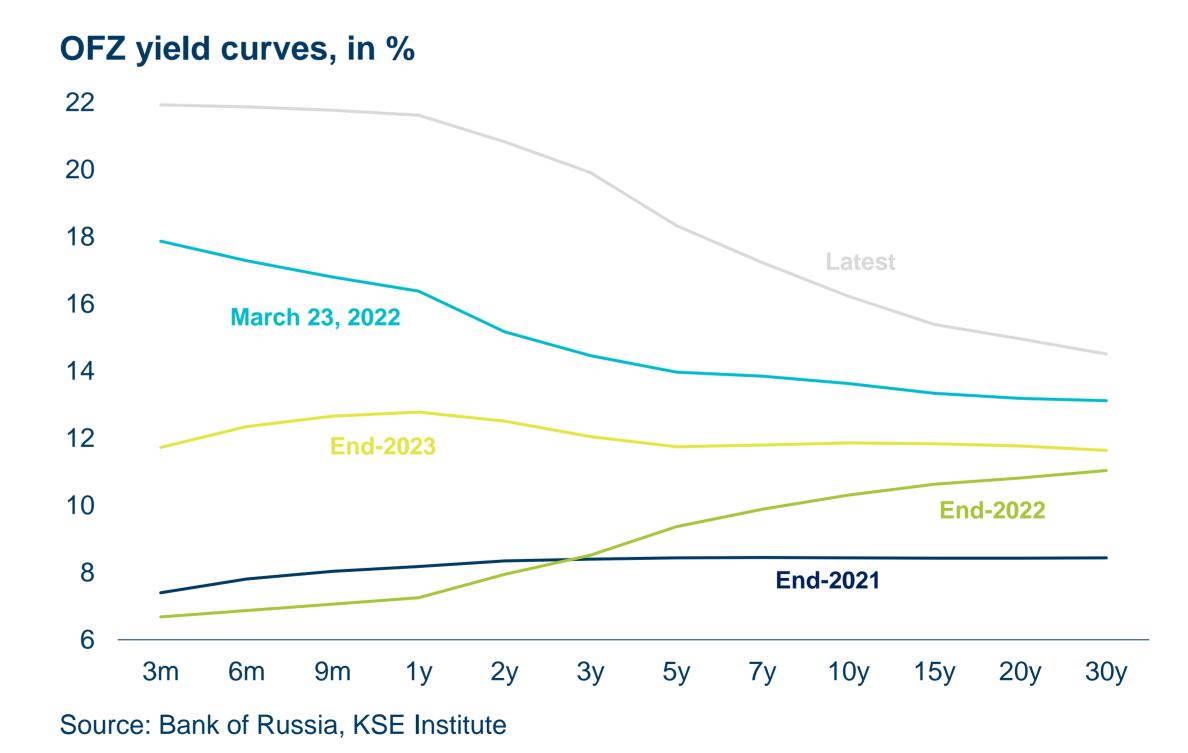
22Q2 22Q3 22Q4 23Q3

23Q2

23Q1



19Q4 20Q1 20Q2

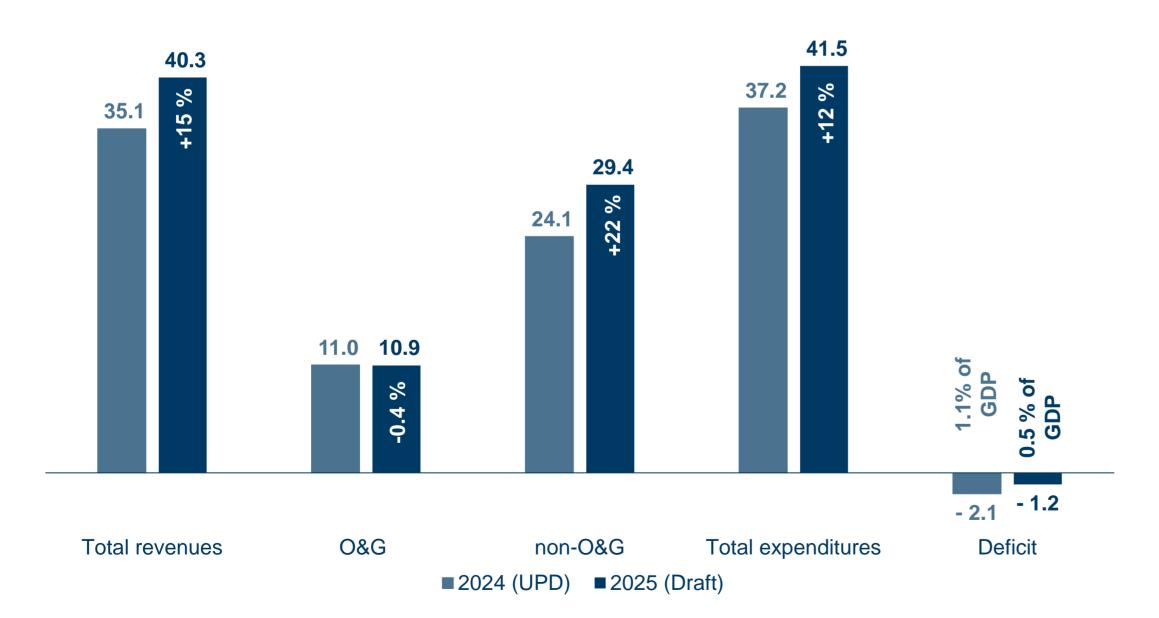




Budget for 2025 is clearly war-centered, without major financing challenges.

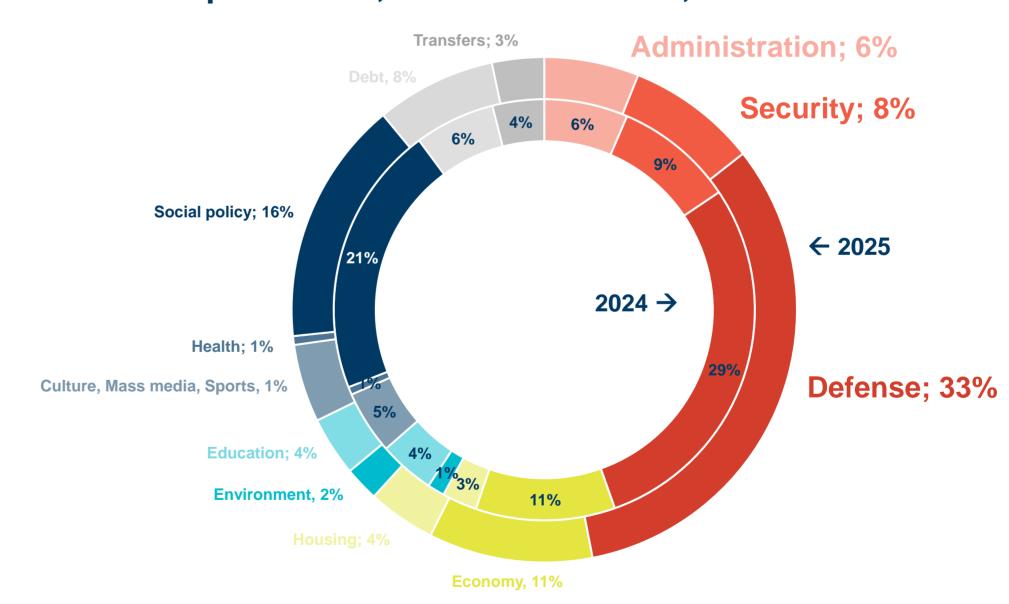
- A record 13.5 trillion rubles (\$140 billion), or 1/3 of the budget, is planned to be allocated to the war next year.
- This will be possible due to a 22% rise in non-O&G revenues from tax hikes, along with stable O&G revenues.
- The absence of major fiscal constraints allows Russia to plan for a lower budget deficit (of 0.5% of GDP) next year.

Key budget numbers, 2024 vs 2025 draft, in ruble billion



Source: Ministry of Finance, KSE Institute

Structure of expenditures, 2024 vs 2025 draft, in %



Source: Ministry of Finance, KSE Institute



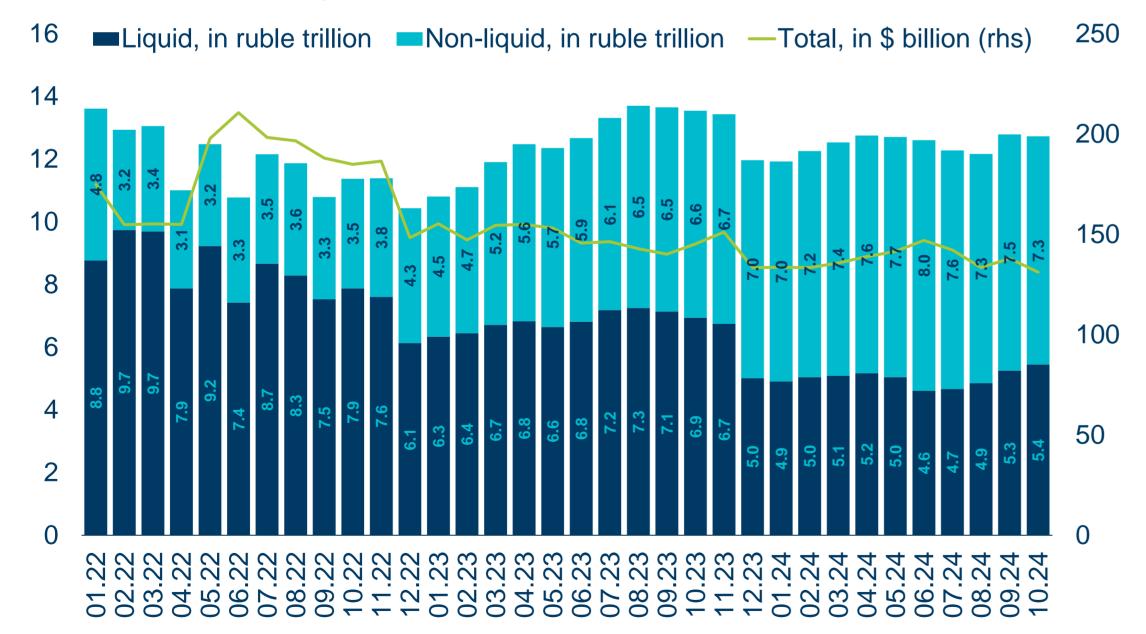
Macro buffers seriously depleted by war and sanctions; limited policy options in the case of further ruble depreciation and inflation.



Close to half of the NWF's liquid assets have been used up.

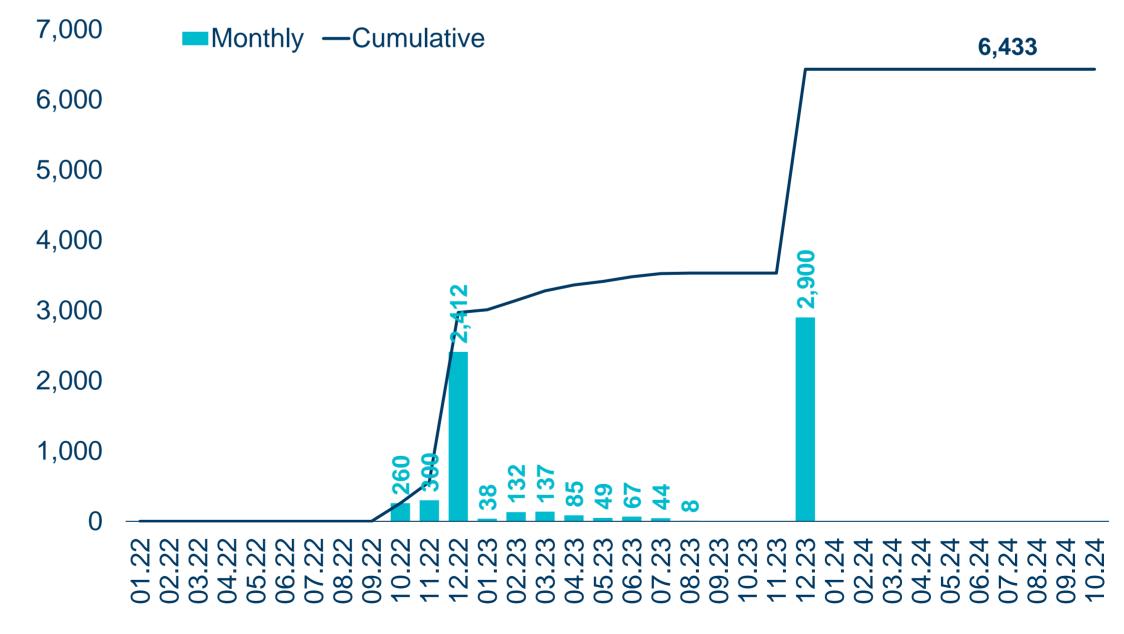
- Total assets of the National Welfare Fund stood at 12.8 trillion rubles (\$131 billion, 6.6% of GDP) in Oct. 2024.
- The liquid portion now accounts for 43% of the total as higher gold prices increase the value of liquid assets.
- Since the start of the war, Russia has used close to half (~4.3 trillion rubles) of liquid assets, largely for the budget.

Assets of the NWF, in ruble billion and U.S. dollar billion



Source: Ministry of Finance, KSE Institute

NWF contributions to the budget, in ruble billion



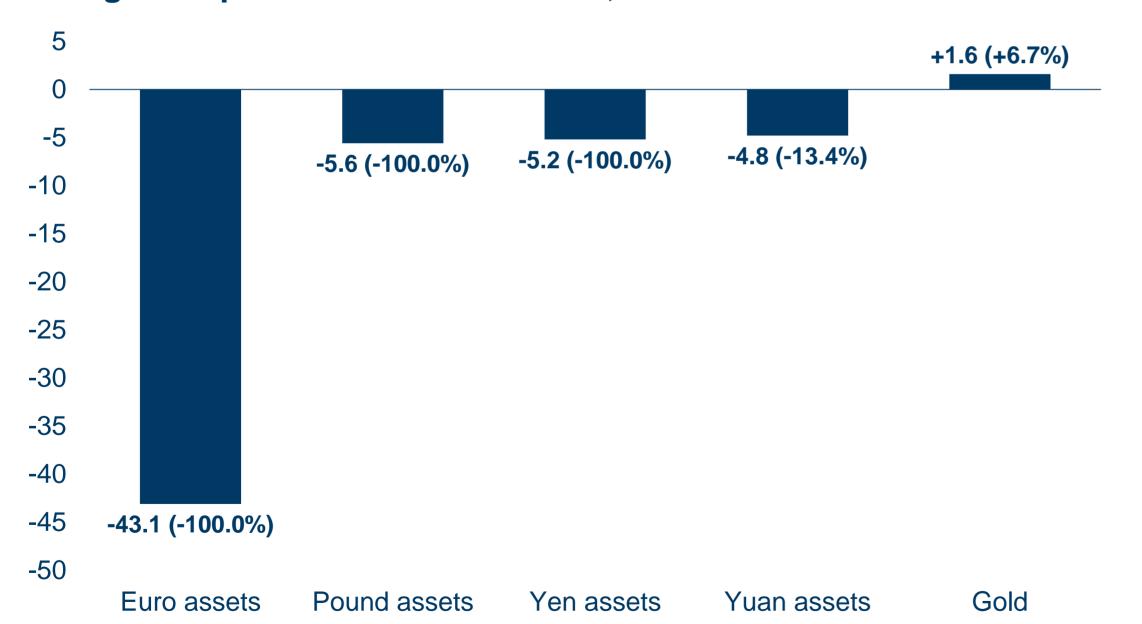
Source: Ministry of Finance, KSE Institute



Headline NWF numbers conceal that hard currency assets are gone.

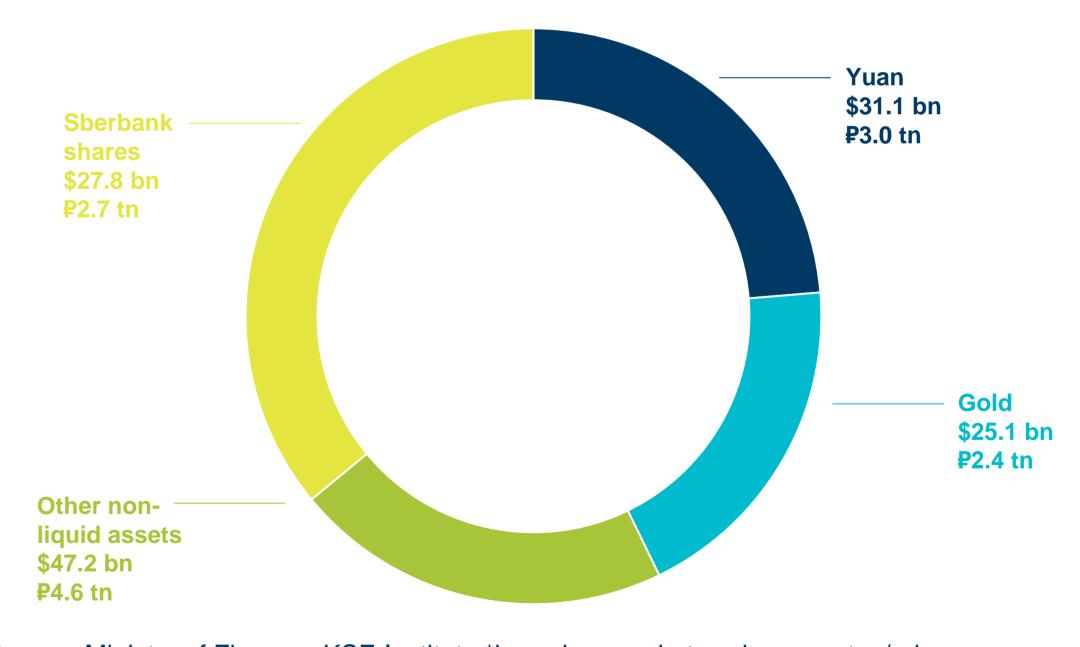
- Russia has depleted all hard-currency holdings of the NWF, with euro assets falling to zero in December 2023.
- Only yuan-denominated assets and gold remain in the liquid portion, totaling 5.4 trillion rubles (or \$56 billion).
- As these are more difficult to use, at least at scale, budgetary funding via the NWF will become more challenging.

Change in liquid assets vs. Jan. 2022, in U.S. dollar billion*



Source: Ministry of Finance, KSE Institute *based on market exchange rates/prices

Composition of NWF assets as of October 1, 2024*



Source: Ministry of Finance, KSE Institute *based on market exchange rates/prices



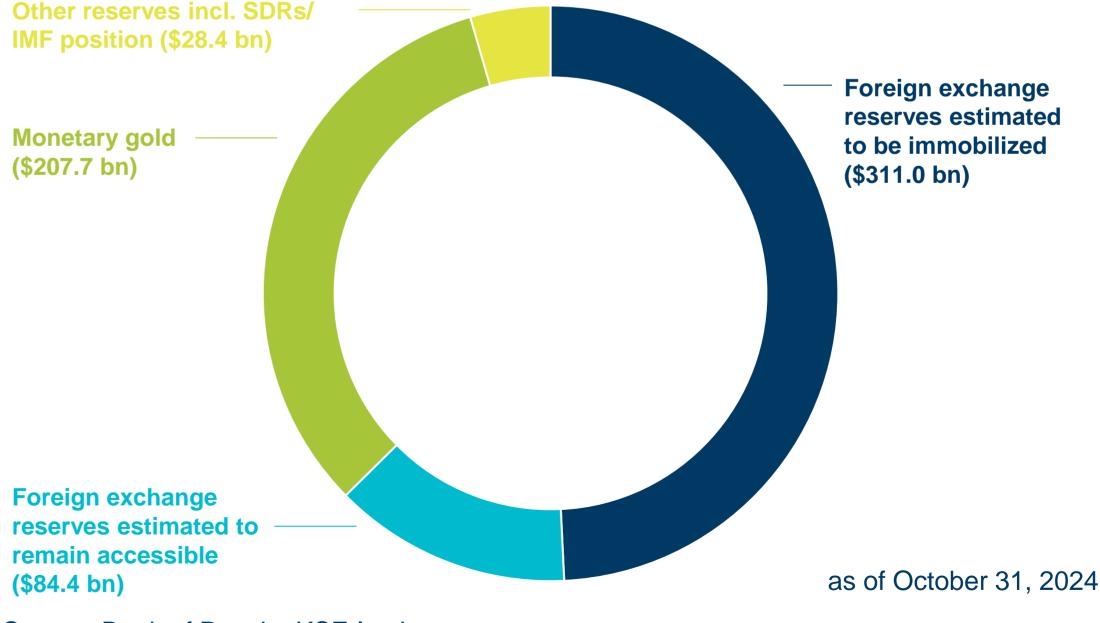
A substantial share of international reserves remain immobilized.

- Before the invasion, Russia held \$643 billion in international reserves, part of what is described as "Fortress Russia".
- We estimate that around \$311 billion are currently immobilized due to international sanctions on CBR and NWF.
- This leaves Russia with access to \$208 billion in monetary gold and roughly \$84 billion in FX assets (largely yuan).

Total reserves, in U.S. dollar billion



Estimated composition of reserves, in U.S. dollar billion



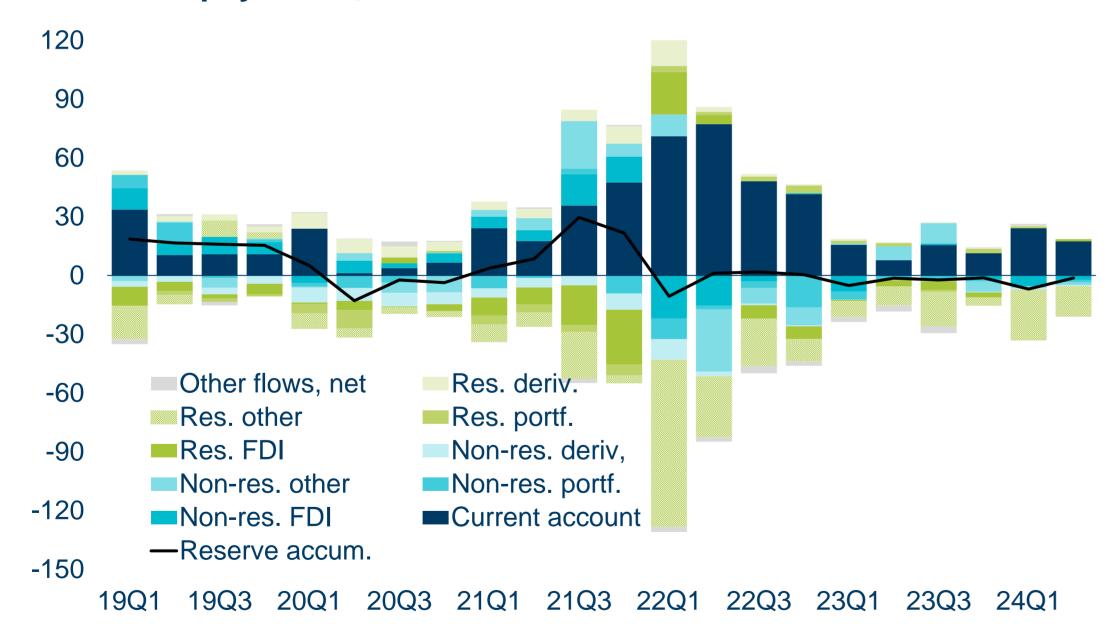
Source: Bank of Russia, KSE Institute



Significant accumulation of new foreign assets since 2022.

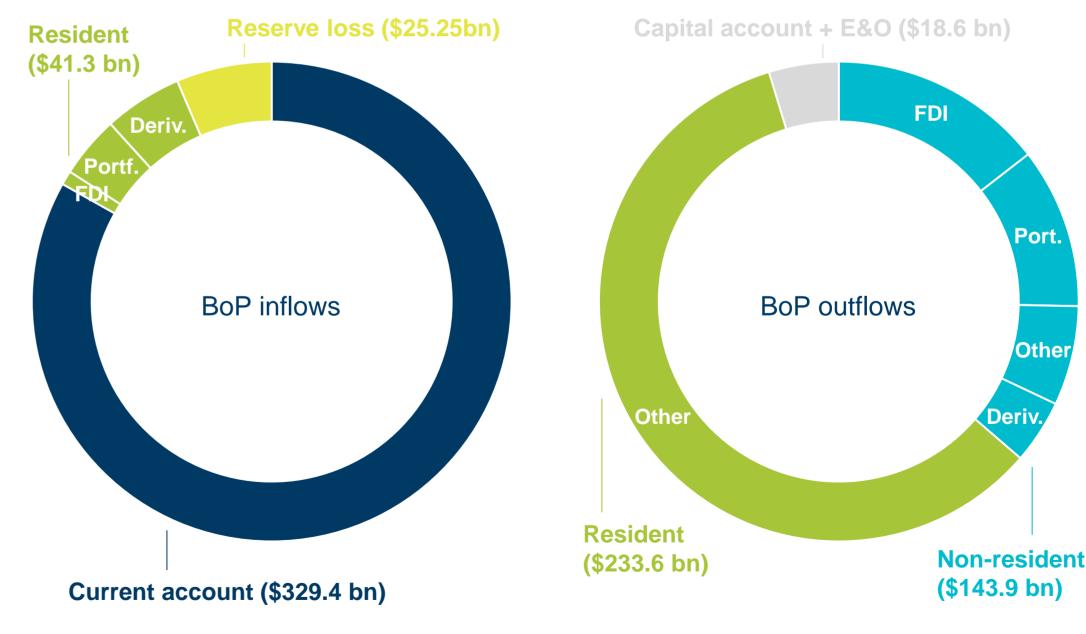
- With the ruble under pressure and regular reserves partly immobilized, it is time to focus on new Russian assets abroad.
- Non-resident capital outflows partially ate up the large current account surplus and resident inflows in Q1 2022-Q2 2024.
- But Russian banks and corporates were able to acquire \$234 billion in assets abroad, which need to be kept out of reach.

Balance of payments, in U.S. dollar billion



Source: Bank of Russia, KSE Institute

2022Q1-2024Q2 balance of payments flows, in U.S. dollar billion



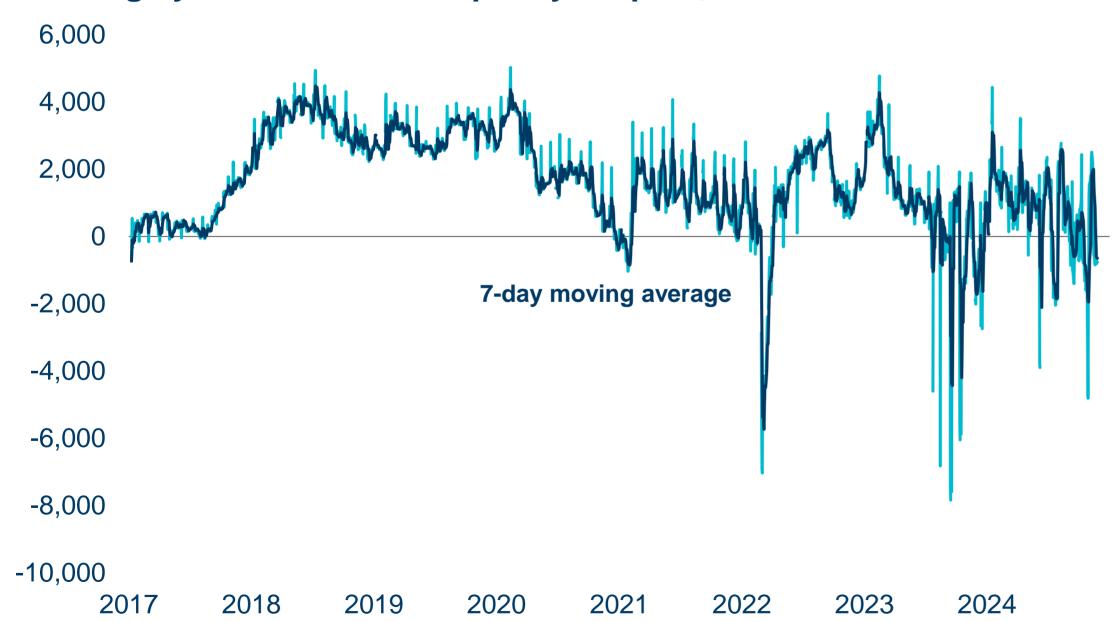
Source: Bank of Russia, KSE Institute



CBR rate hikes have impacted banking system liquidity in recent months.

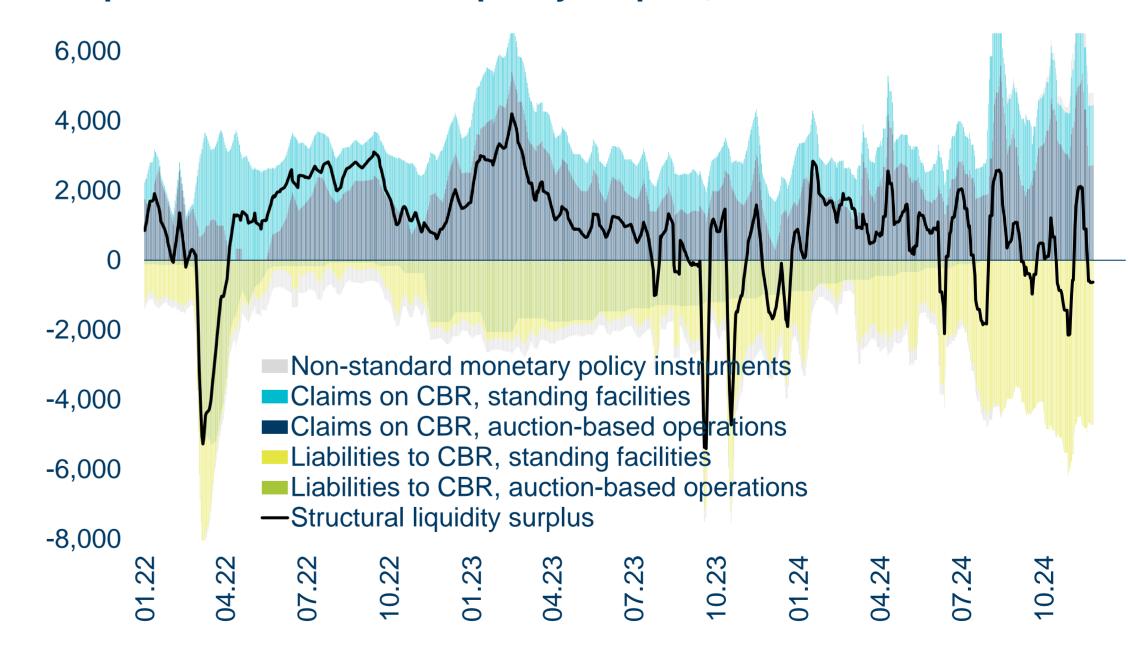
- Liquidity conditions recovered quickly after the initial shock from the full-scale war and imposition of sanctions.
- A closer look at the composition of the structural liquidity surplus points to some stress in the interbank market.
- The data clearly shows the effects of the CBR's monetary tightening since mid-2023 (cumulative +1,350 bps).

Banking system structural liquidity surplus, in ruble billion



Source: Bank of Russia, KSE Institute

Composition of structural liquidity surplus, in ruble billion*



Source: Bank of Russia, KSE Institute *7-day moving average

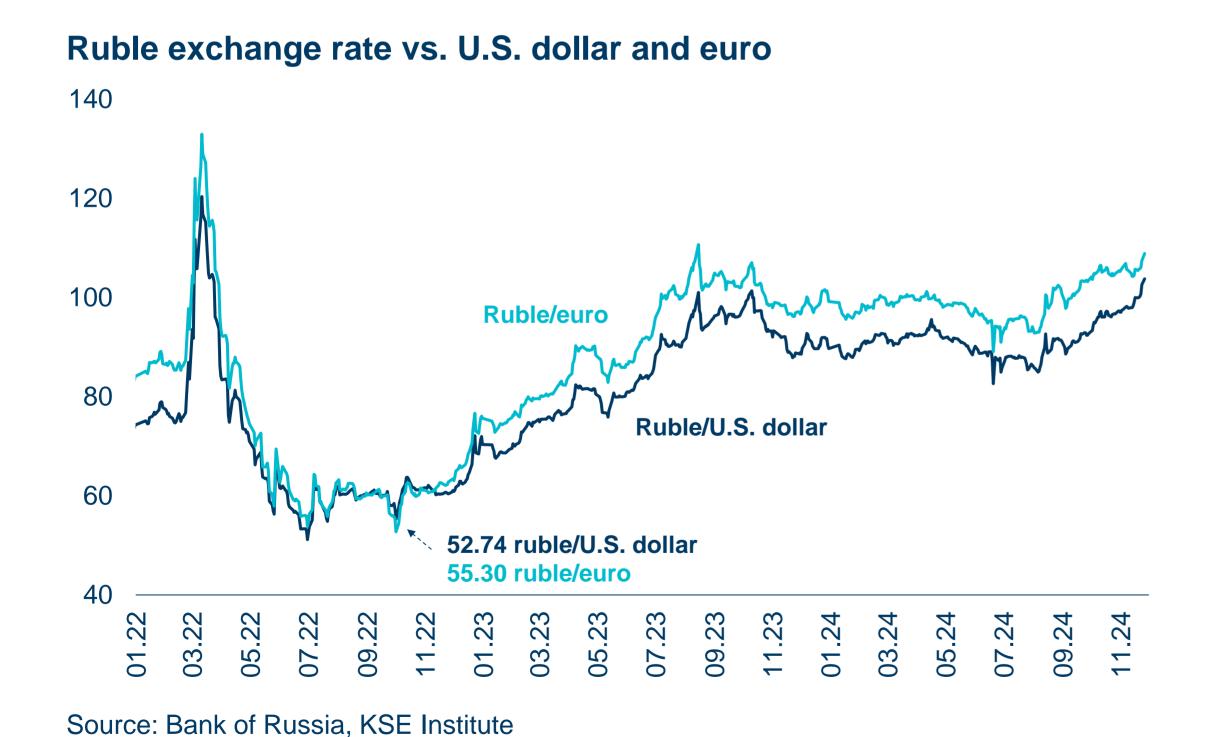


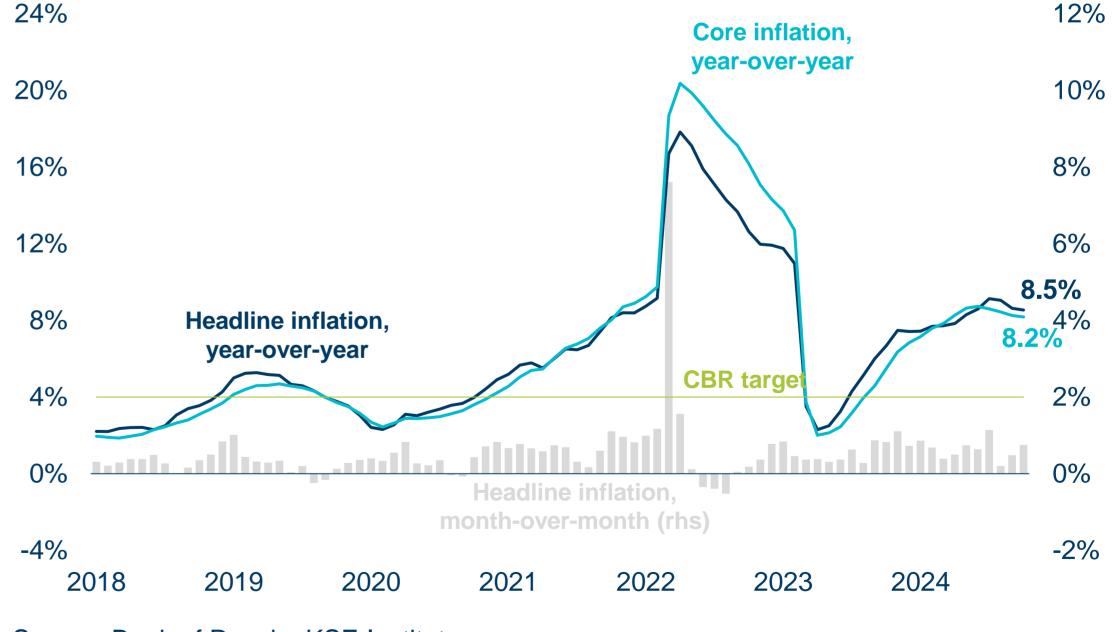
Inflation elevated despite CBR tightening; government spending, high wage growth and significant credit expansion create pressure; Ruble depreciation accelerates again.



Ruble is weakening again; inflation remains elevated.

- Ruble depreciation, which restarted in summer after a period of stability, accelerated sharply in recent weeks.
- Altogether, Russia's currency lost 47% of its value vs. the dollar and 52% vs. the euro since the fall of 2022.
- Inflation has persistently risen for 1.5 years, reaching 8.5% in Oct., due to fiscal stimulus, high wage growth, etc.



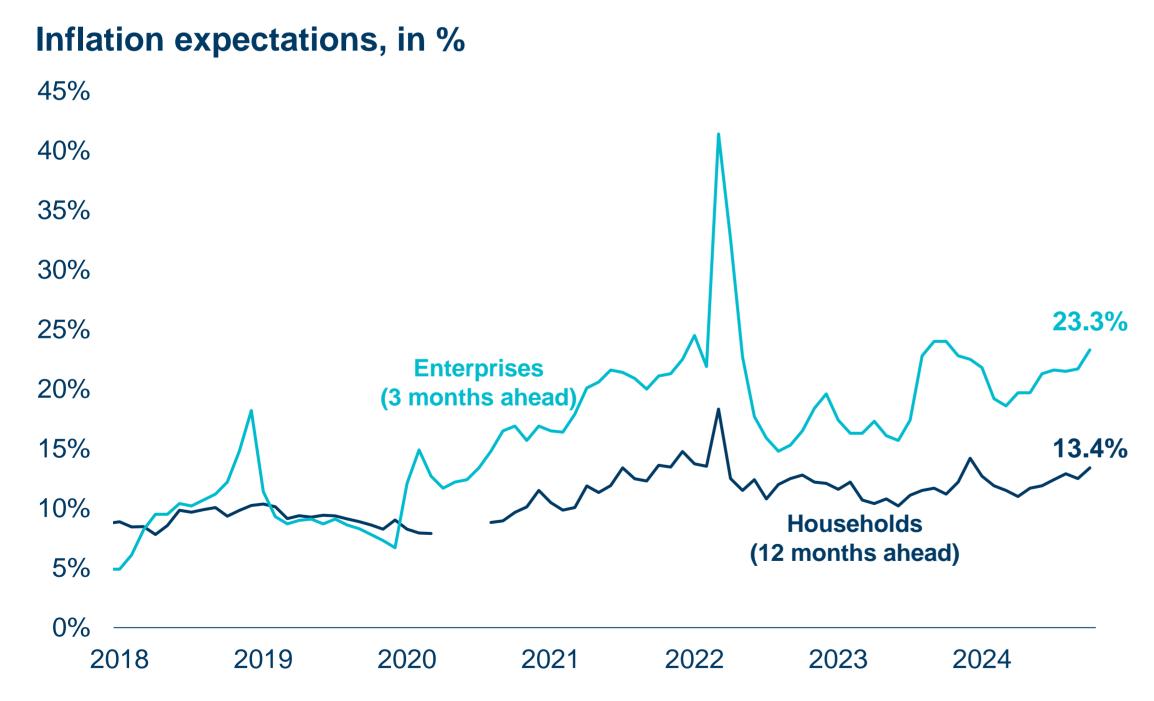


Inflation, in %

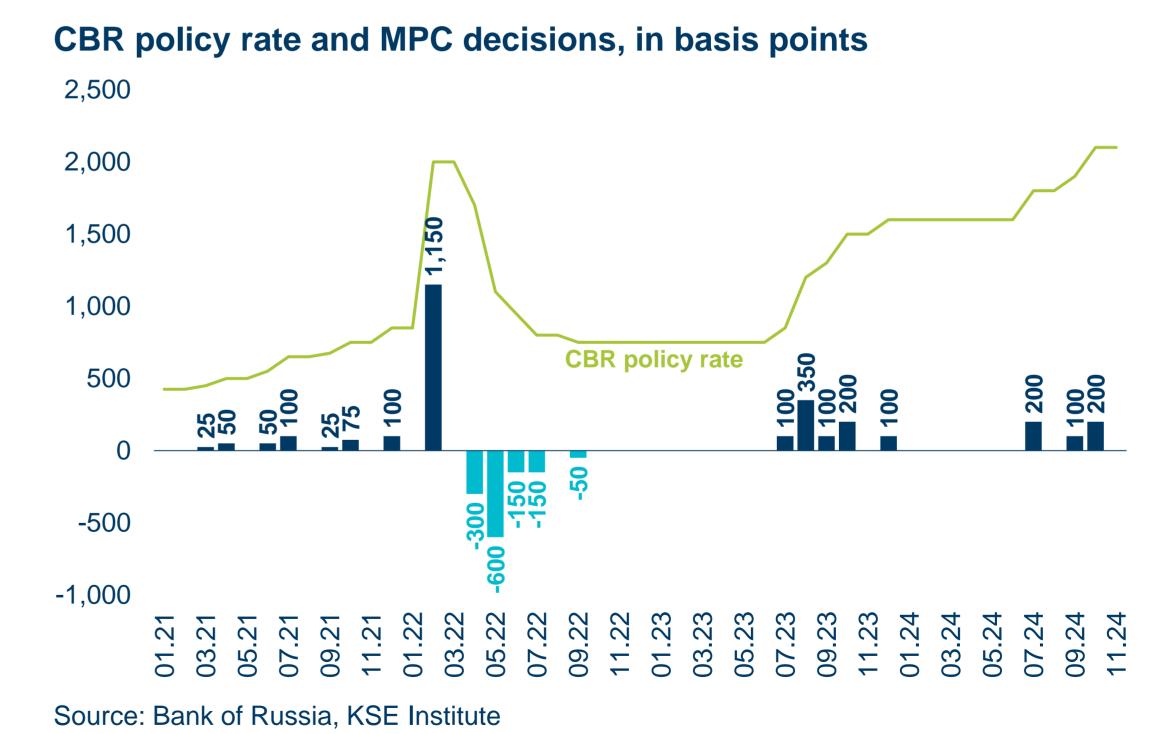


CBR has been forced to undertake dramatic monetary tightening.

- Cumulative rate hikes of 1,350 bps have brought the key rate above its Feb.-Mar. 2022 peak.
- So far, significant tightening of monetary policy has failed to bring rising inflation under control.
- Russia's central bank is expected to further increase the key rate at its December MPC meeting.









Source: Rosstat

Tight labor market is driving up wages and inflation.

- The unemployment rate remains at record-low level of 2.4%—which technically means full employment.
- Nominal wage growth has trended up since the start of the full-scale invasion and stood at 17.4% in August.
- In addition to creating inflationary pressures, the economy has effectively no spare capacity left to draw from.

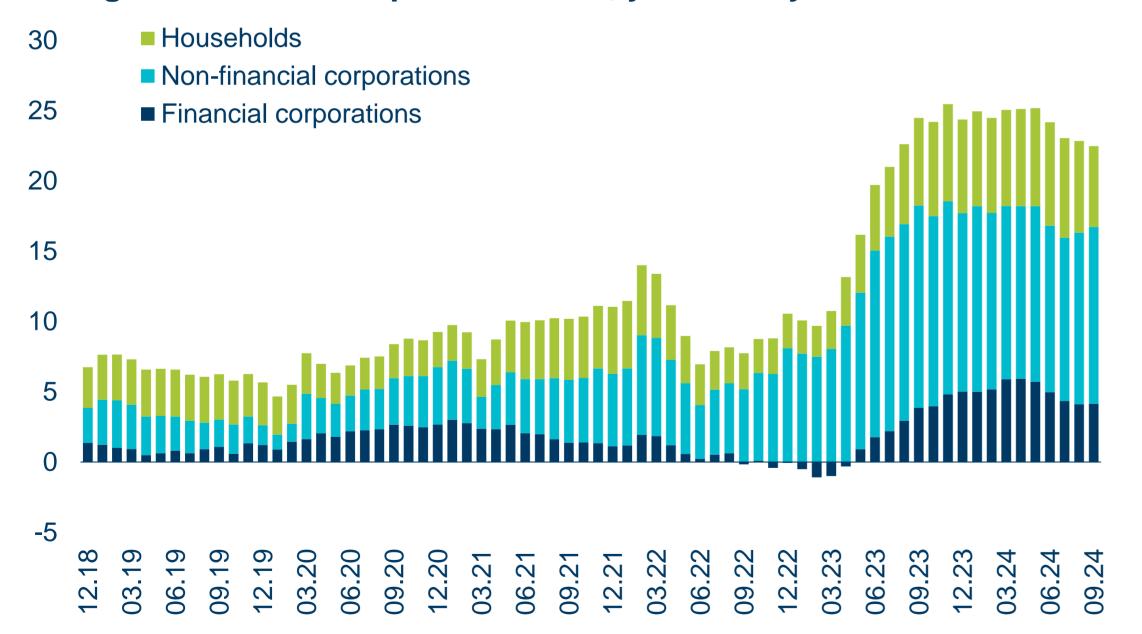
Source: Rosstat



Significant credit growth also makes CBR's job harder.

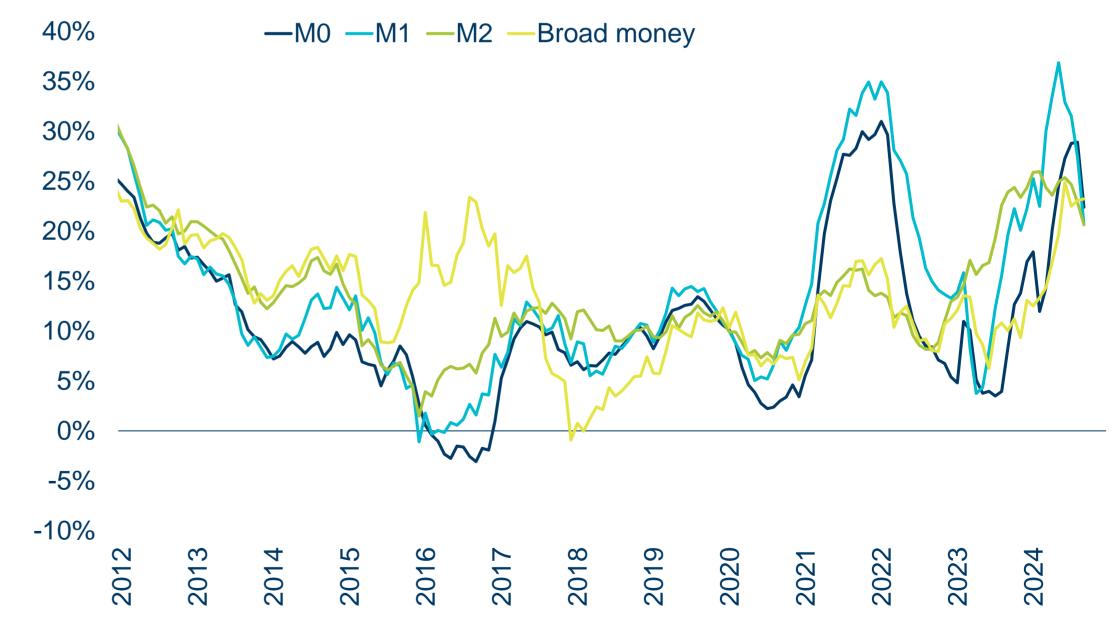
- Credit to the private sector, especially households and non-financial corporations, has grown sharply since early 2023.
- This is on top of the substantial amounts of money that the government has inserted into the economy via the budget.
- Monetary aggregates also reflect that the system is flush with money, which makes it more difficult to control inflation.

Change in credit to the private sector, year-over-year in rube trillion*



Source: Bank of Russia, KSE Institute *by depository corporation excluding the CBR

Growth of monetary aggregates, in % year-over-year



Source: Bank of Russia, KSE Institute



The Russian economy is projected to grow more slowly going forward.

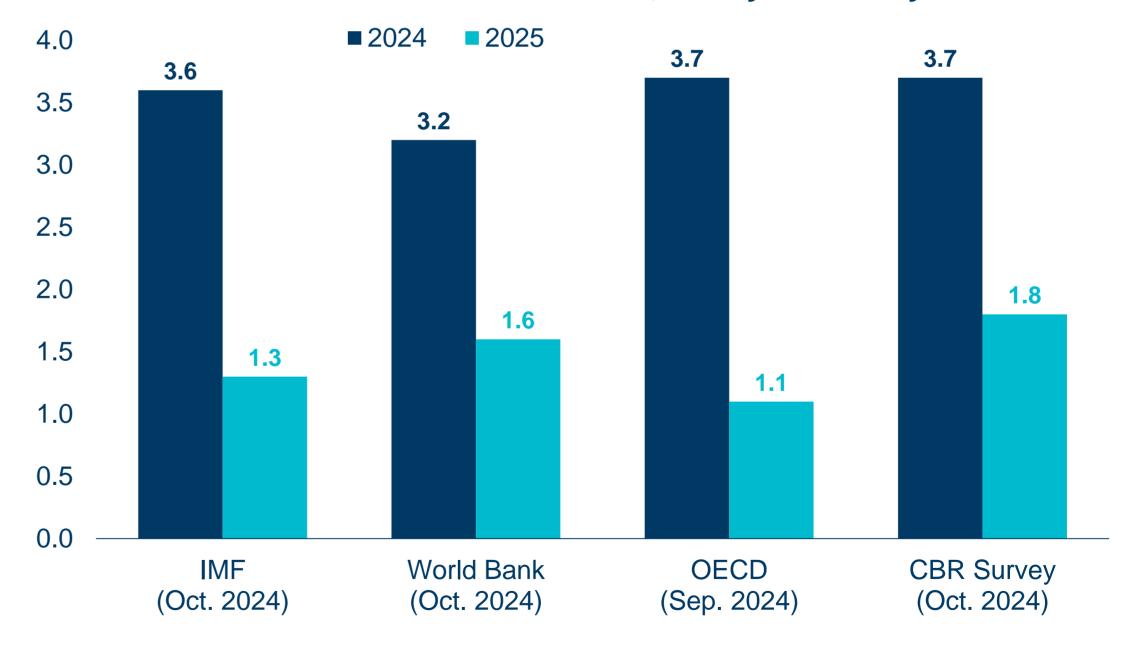
- Real GDP growth in Q3 2024 slowed down to 3.1% year-over-year according to Russia's statistics agency Rosstat.
- Most institutions, including IMF, World Bank, and CBR, project that growth will decline significantly in 2025.
- Key drivers: labor market constraints, missing (foreign) investment, significantly tighter monetary conditions.

Quarterly real GDP dynamics, in %



Source: Rosstat, KSE Institute

2024-25 forecasts for Russian real GDP, in % year-over-year



Source: Bank of Russia, IMF, OECD, World Bank



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