

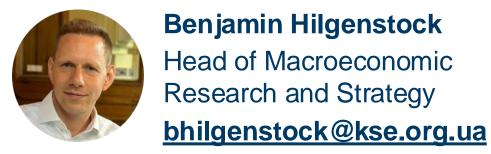
KSE INSTITUTE RUSSIA CHARTBOOK

THE RUSSIAN ECONOMY AT THE START OF 2025:

Underlying Vulnerabilities, Depleted Macro

BUFFERS, BUT NO SIGNS OF AN IMMEDIATE CRISIS

JANUARY 2025







Executive Summary

- 1. External environment remains supportive. Russia's current account surplus reached \$53.9 billion in 2024—a minor increase vs. 2023 (\$50.1 billion) and somewhat weaker than previously expected as H2 saw a much smaller surplus than H1 (\$12.6 billion vs. \$41.3 billion). While goods imports remained broadly stable throughout the year, goods imports rose by ~\$19 billion in H2 vs. H1 and the service as well as the income \$ transfer deficits also grew (by ~\$5 billion each). Oil and gas exports are estimated to have risen marginally—by 2% or \$6 billion—on the back of higher prices, while exports of other goods declined by 7% or \$13 billion.
- 2. Budget deficit in line with previous years. The federal budget deficit for 2024 was 3.5 trillion rubles—1.7% of GDP or roughly \$39 billion. In ruble terms, this is almost exactly the deficit of the previous two years. Strong oil and gas as well as non-O&G revenues (+26% vs. 2023 each) offset higher spending (+24%), but the full-year deficit was still significantly large than initially planned (1.6 trillion rubles). The December deficit of 3.1 trillion was financed with a transfer from the National Welfare Fund (1.3 trillion) as well as issuance of debt in the domestic market (2.0 trillion). The latter was supported by the central bank with a repo operation.
- 3. Macro buffers remain under pressure. Liquid assets of the NWF have now fallen to 3.8 trillion rubles—a 60% drop compared to February 2022. With all hard currency gone since end-2023, Russia sold yuan-denominated assets and gold in December to finance the deficit. At current prices and exchange rates, the liquid portion of the fund now only accounts for \$37.5 billion, which means that its availability for budgetary purposes will soon come to an end. An estimated \$340 billion of CBR reserves remain immobilized due to sanctions, which limits the central bank's policy space considerably. For ~85% of the frozen assets, their location is known.
- **4. Serious vulnerabilities but no imminent crisis.** The Russian economy likely grew by ~3.5% in 2024—very similar than the 2023 real GDP growth rate. Government spending on the war, a large expansion of bank loans to the private sector, and an extremely tight labor market are behind the economy's performance. However, the same factors—together with persistent ruble depreciation—are also driving up inflation, which reached 9.5% year-over-year in December. Despite significant monetary policy tightening by the CBR (+1,350 bps since mid-2023), a compromised transmission mechanism has prevented the lowering of inflationary pressures.



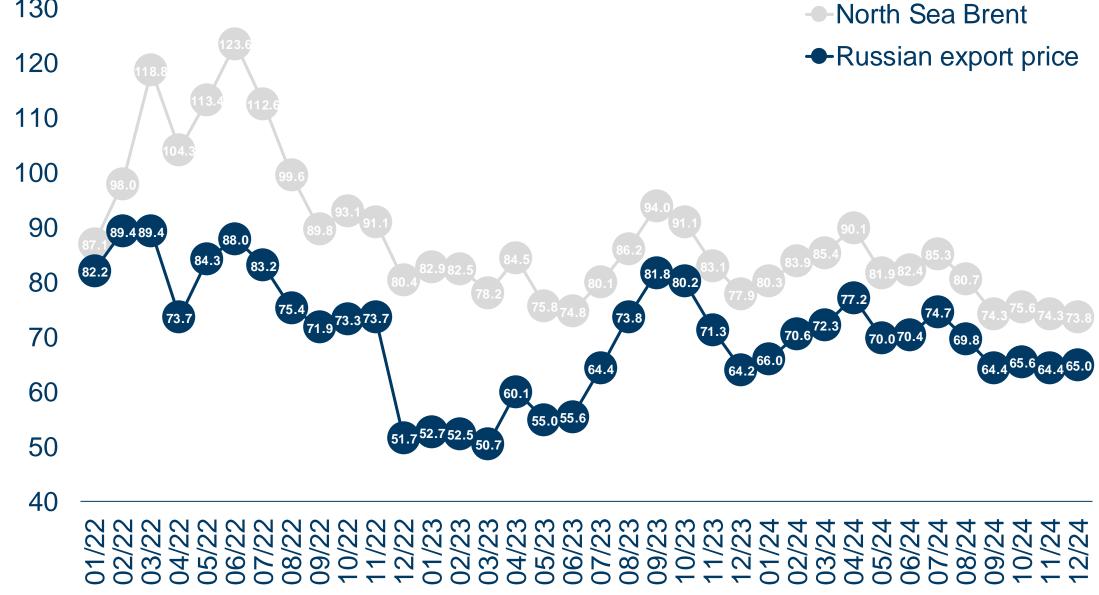
Oil exports stable in 2024 vs. 2023; smaller discount on Russian oil provides support; campaign against the shadow fleet stepped up in recent months.



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

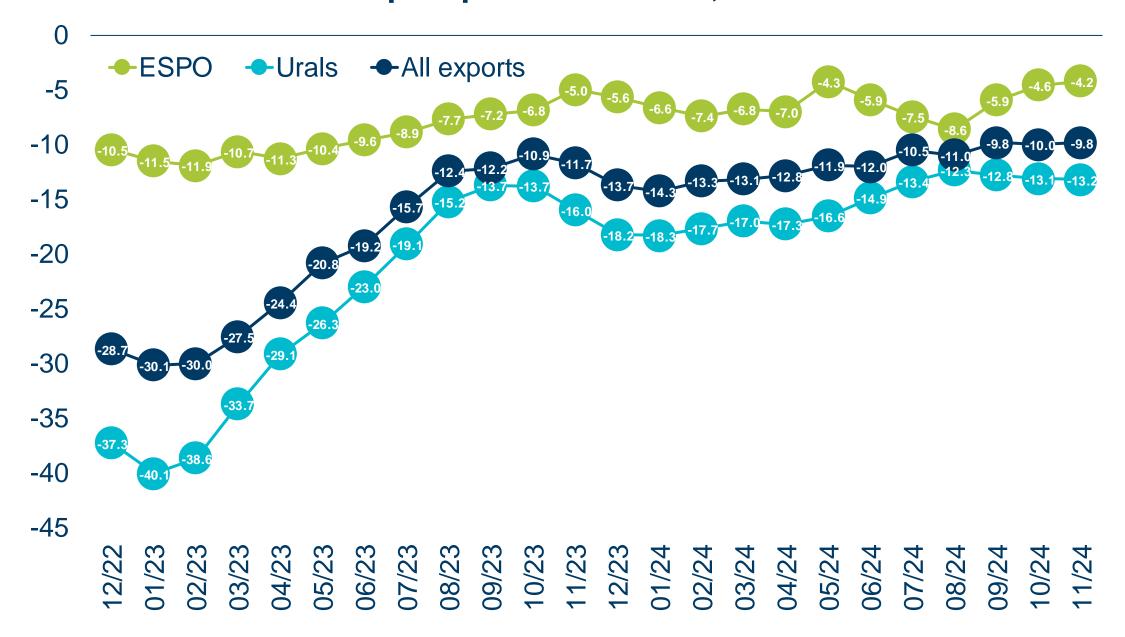
- Prices for Russian oil exports remained relatively close to the price cap's \$60/barrel threshold in December.
- However, the discount on Russian oil vs Brent is close to its lowest level since the start of the full-scale war.
- We expect that the latest US sanctions package will lead to a widening of the discount in the coming months.

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



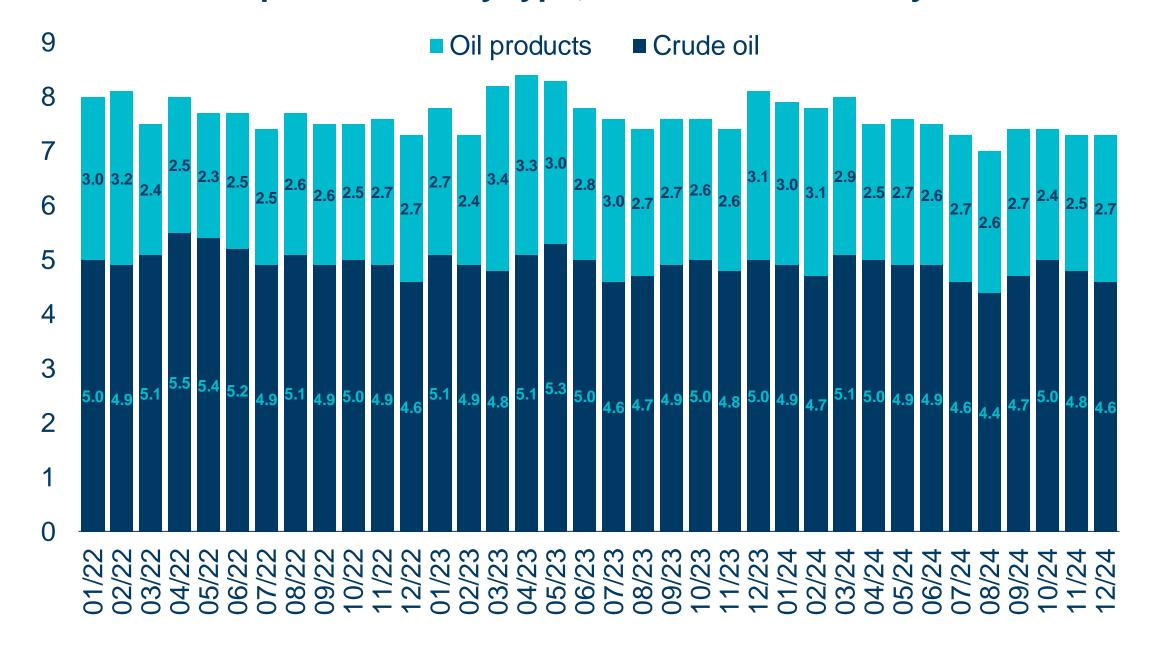
Source: International Energy Agency, KSE Institute



Supply of Russian oil to the global market remains stable.

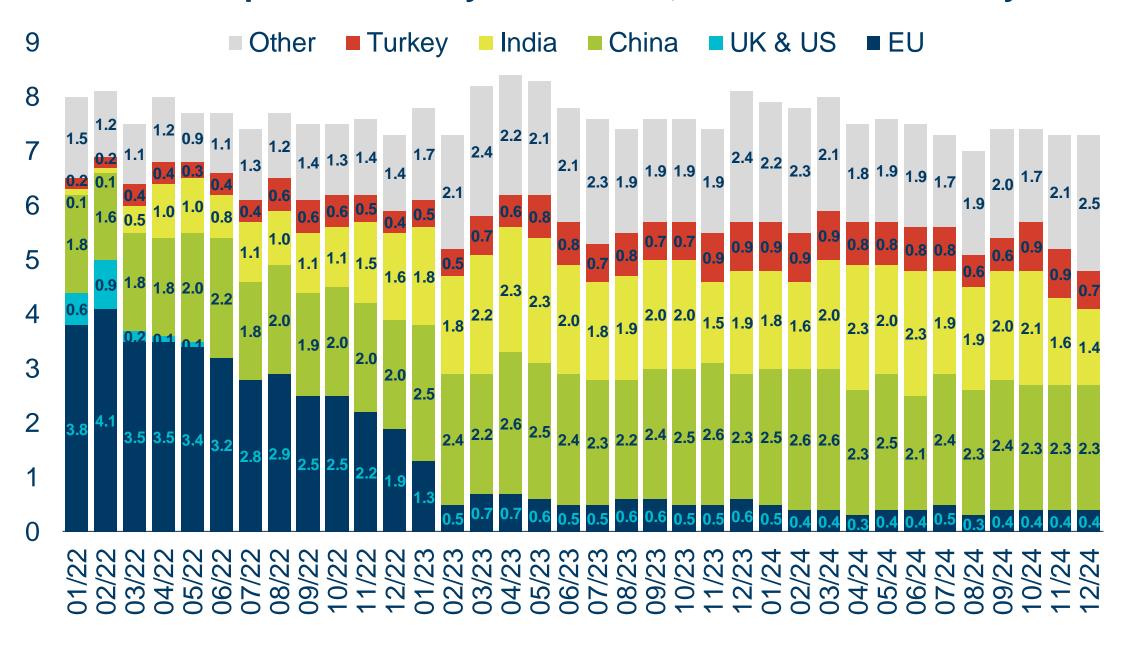
- Russian oil export volumes have been remarkably steady over the last 2.5 years despite sanctions.
- Thus, the price cap has succeeded at keeping Russian oil on the market and prevent supply issues.
- China, India, and Turkey are the most important buyers, together accounting for 60-70% of exports.

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



Source: International Energy Agency, KSE Institute

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



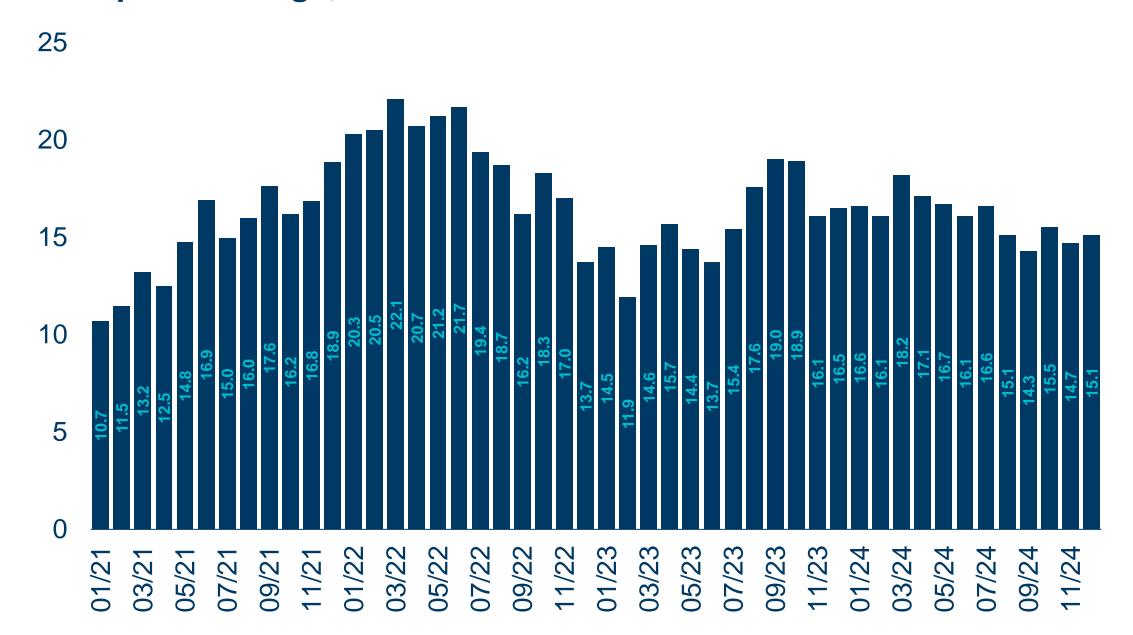
Source: International Energy Agency, KSE Institute



Oil export earnings broadly unchanged, budget revenues up significantly.

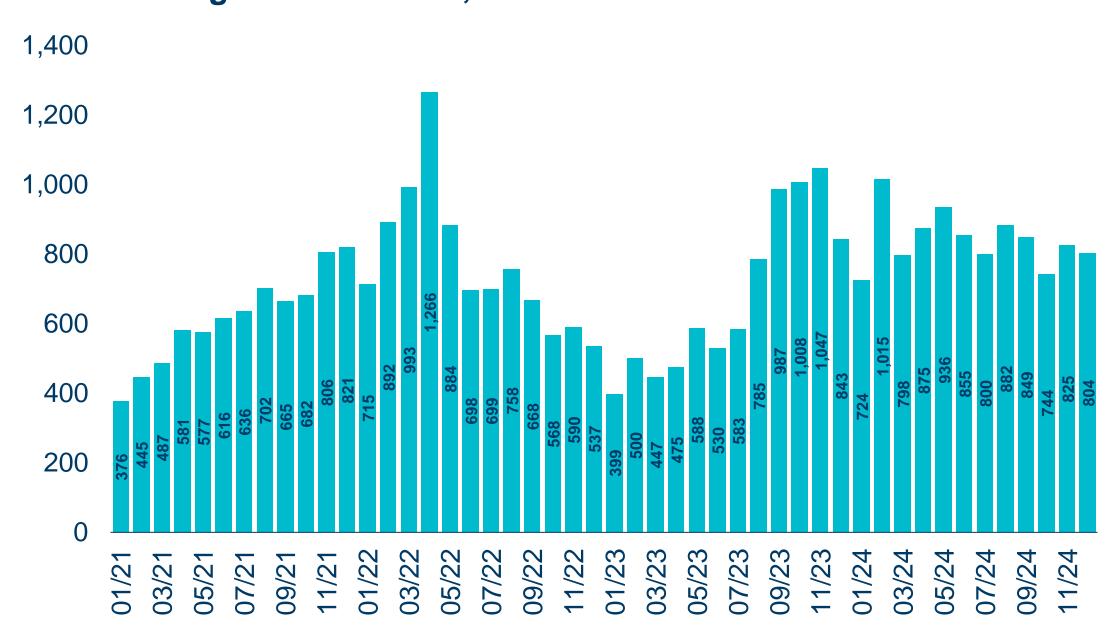
- Russian oil export earnings increased to \$15.1 billion in Dec. and the total for 2024 was \$192.1 billion.
- This means export earnings in 2024 were 2% higher than in 2023 and only 16% weaker than in 2022.
- Budget revenues (of 10.1 trillion rubles) were 23% higher than in 2023 (and 9% higher than in 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

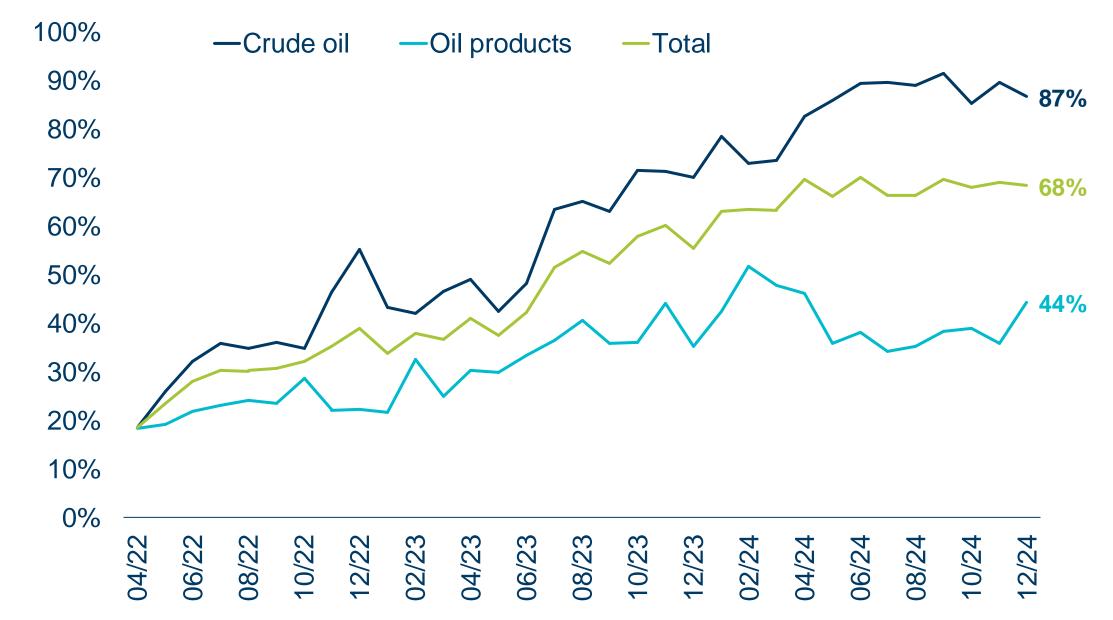


Shadow fleet has fundamentally eroded the price cap's leverage.

- The shadow fleet allows Russia to evade the G7+ oil price cap for a large share of its exports.
- In Dec. 2024, 87% of seaborne crude oil was transported without involvement of G7+ services.
- This has allowed Russia to generate ~\$10 billion in extra export earnings (from crude) in 2024.

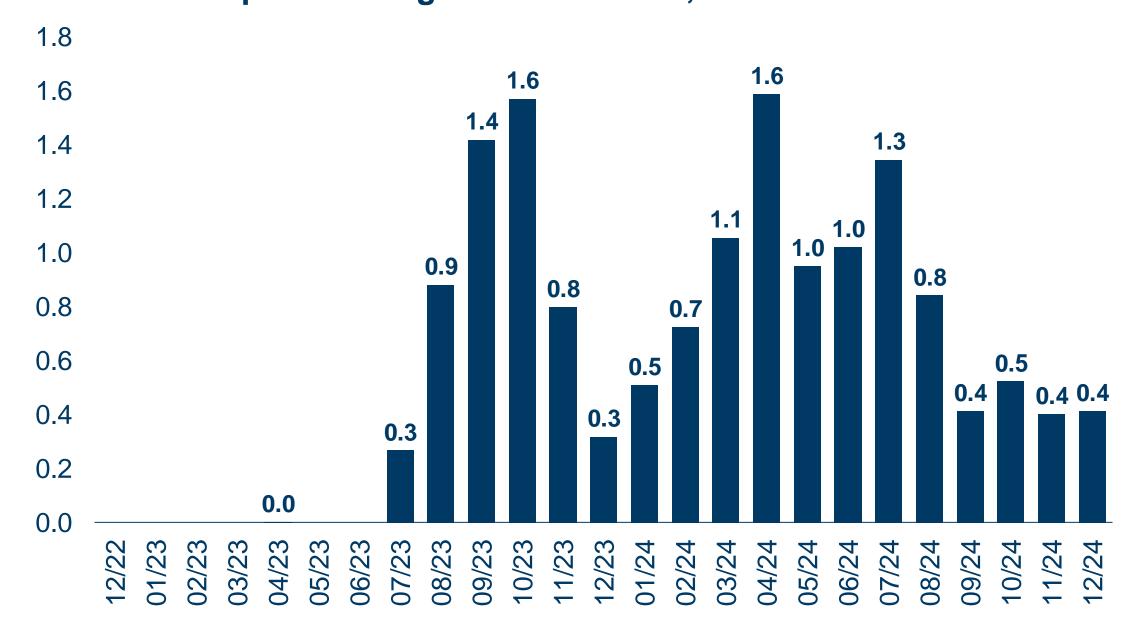
Read KSE Institute's in-depth assessments of the shadow fleet here, here, and here.

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



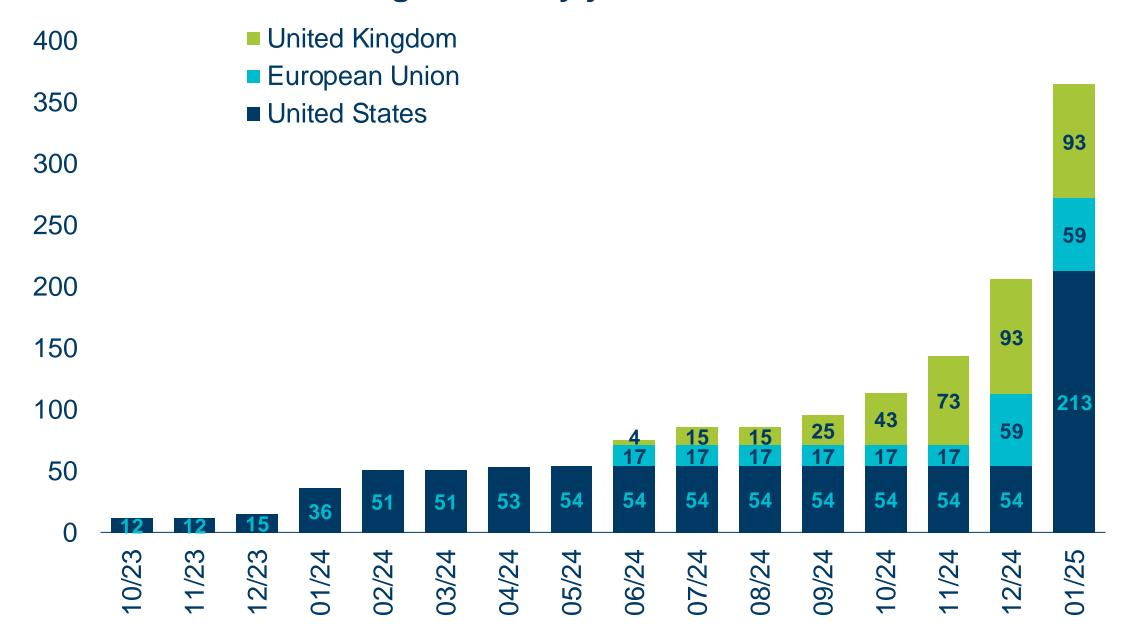
Source: Equasis, International Energy Agency, Kpler, P&I Clubs, KSE Institute



Countries have dramatically stepped-up sanctions on shadow tankers.

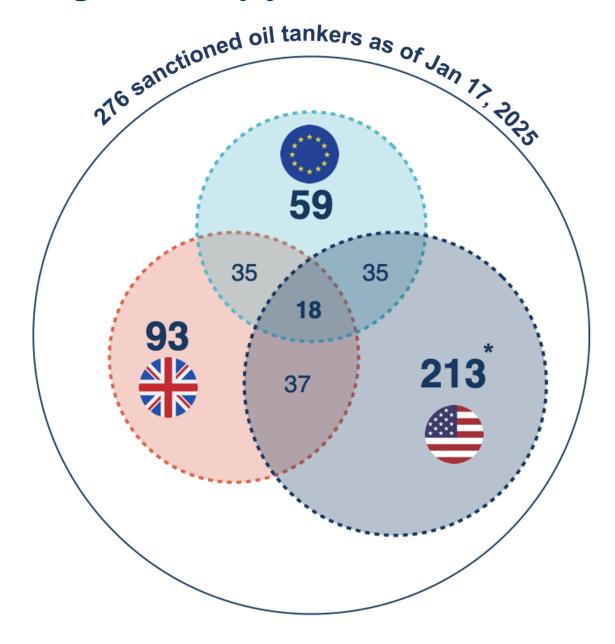
- After an almost 12-months hiatus, the US government adopted a major designations package in January.
- The EU also sanctioned a significant number of shadow tankers in December and is expected to continue.
- With the UK's continuous designations efforts, 276 vessels are now sanctioned in at least one jurisdiction.

Cumulative vessel designations by jurisdiction and month



Source: European Commission, OFAC, OFSI, KSE Institute

Current vessel designations by jurisdiction



Source: European Commission, OFAC, OFSI, KSE Institute
* Includes 2 tankers that were sanctioned by the U.S. under the SDGT program rather than RUSSIA-EO14024, as they had already been sanctioned by one of two other governments.



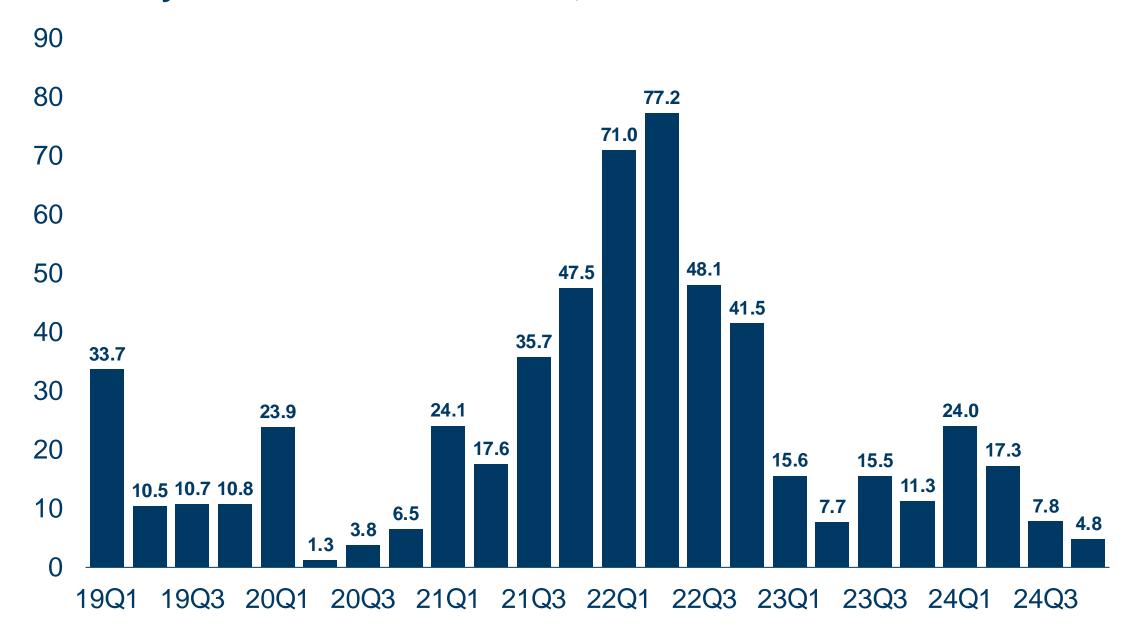
External conditions remain supportive; weak sanctions enforcement helps Russia; hard currency inflows have fallen sharply.



External environment was only marginally more supportive in 2024.

- The current account surplus reached \$53.8 billion in 2024, with H2 (\$12.6 billion) much smaller than H1 (\$31.3 billion).
- This is considerably weaker than previously expected due to significant revisions and a deficit in December (\$1.3 billion).
- As a result, the overall surplus in 2024 was only marginally bigger than in 2023, partially driven by weaker goods exports.

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 Goods			Services			Income & transfers			
Time period		Bal.	Bal.	Exp.	Imp	Bal.	Cred.	Deb.	Bal.	Cred.	Deb.
Q1 2024		24.0	34.7	101.7	66.9	-7.2	10.2	17.4	-3.5	9.3	12.8
Q2 2024		17.3	35.6	106.3	70.7	-9.3	9.9	19.2	-9.0	8.5	17.6
Q3 2024		7.8	31.9	109.5	77.7	-12.6	10.7	23.3	-11.5	8.9	20.4
Q4 2024		4.8	20.4	99.6	79.2	-9.2	11.5	20.6	-6.5	9.1	15.6
October 2024		4.0	8.8	36.4	27.6	-2.6	3.8	6.4	-2.3	3.1	5.3
November 2024		2.1	6.0	32.0	25.9	-2.5	3.2	5.7	-1.4	2.7	4.1
December 2024		-1.3	5.6	31.3	25.7	-4.0	4.5	8.5	-2.9	3.3	6.2
2024		53.8	122.6	417.2	294.5	-38.3	42.3	80.6	-30.6	35.8	66.4
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 202 Q2 202 Q3 202 Q4 202	23	15.6	30.5	105.1	74.6	-7.6	9.9	17.5	-7.3	11.4	18.7
ੁੱਛ Q2 202	23	7.7	26.3	103.4	77.1	-8.9	10.4	19.3	-9.6	12.7	22.3
Q3 202	23	15.5	33.4	109.1	75.7	-10.3	9.7	20.0	-7.6	10.0	17.6
ခ် Q4 202	23	11.3	31.4	106.9	75.5	-8.4	11.3	19.7	-11.7	10.7	22.4
≥ Oct. 20	23	5.4	10.9	34.3	23.4	-2.4	3.4	5.7	-3.2	3.3	6.5
Nov. 20	023	5.3	9.5	33.8	24.3	-1.9	3.3	5.2	-2.3	3.0	5.3
Dec. 20	023	0.6	10.9	38.7	27.8	-4.2	4.6	8.8	-6.2	4.4	10.6

Source: Bank of Russia, KSE Institute



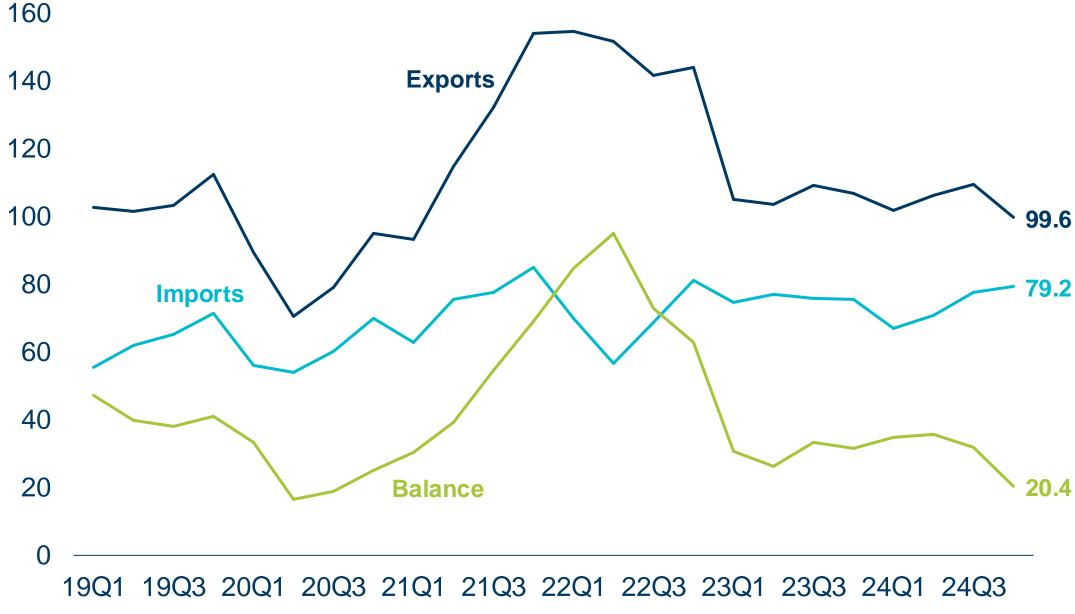
Source: Bank of Russia, KSE Institute

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 60 50 40 30 10 Balance 5.6

Source: Bank of Russia, KSE Institute

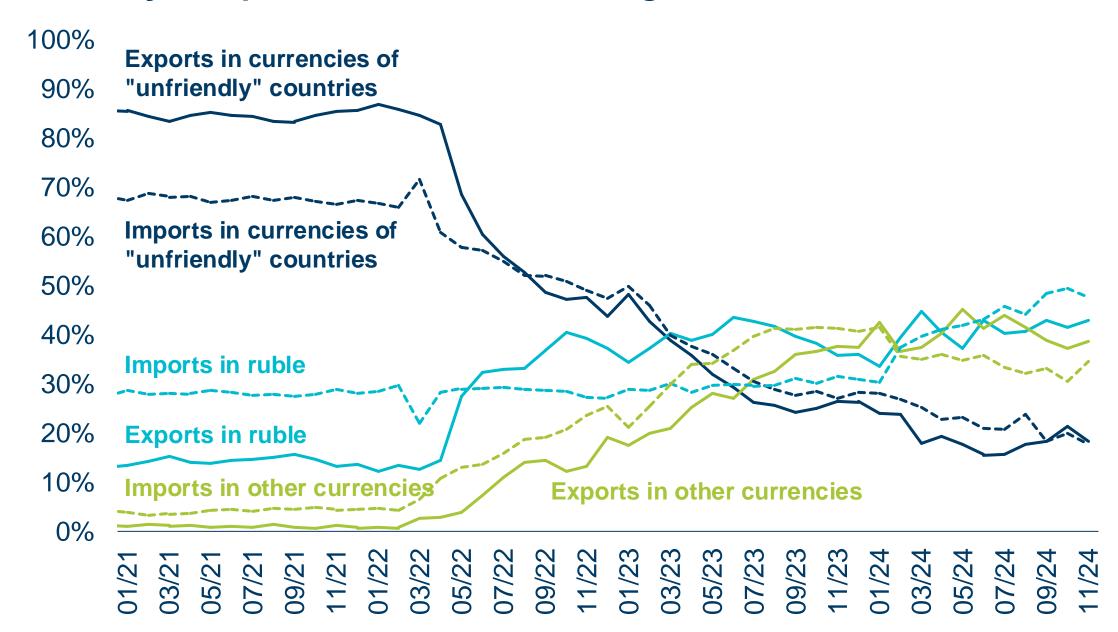




Change to currency composition of trade creates hard currency shortage.

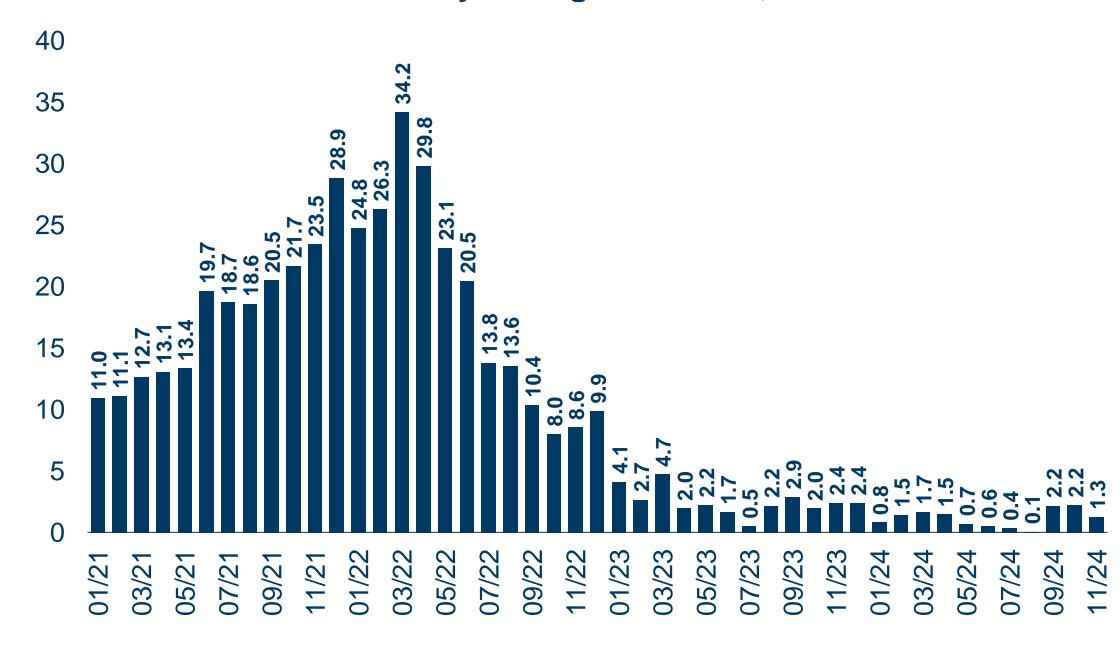
- The share of "unfriendly" countries' currencies (e.g., USD, EUR, GBP, JPY, CHF) in Russian trade has fallen sharply.
- Other currencies have risen for both exports and imports, while the ruble has gained importance mostly for exports.
- These shifts have created a shortage of hard currency as net inflows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



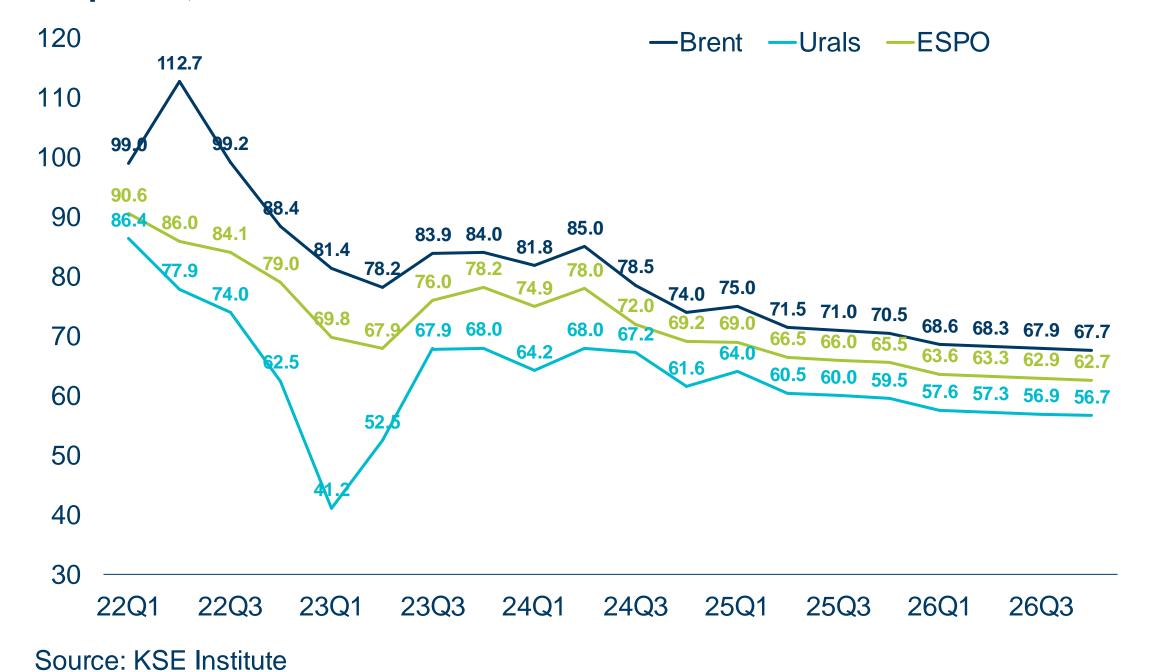
Source: Bank of Russia, KSE Institute *includes currencies of "unfriendly" countries



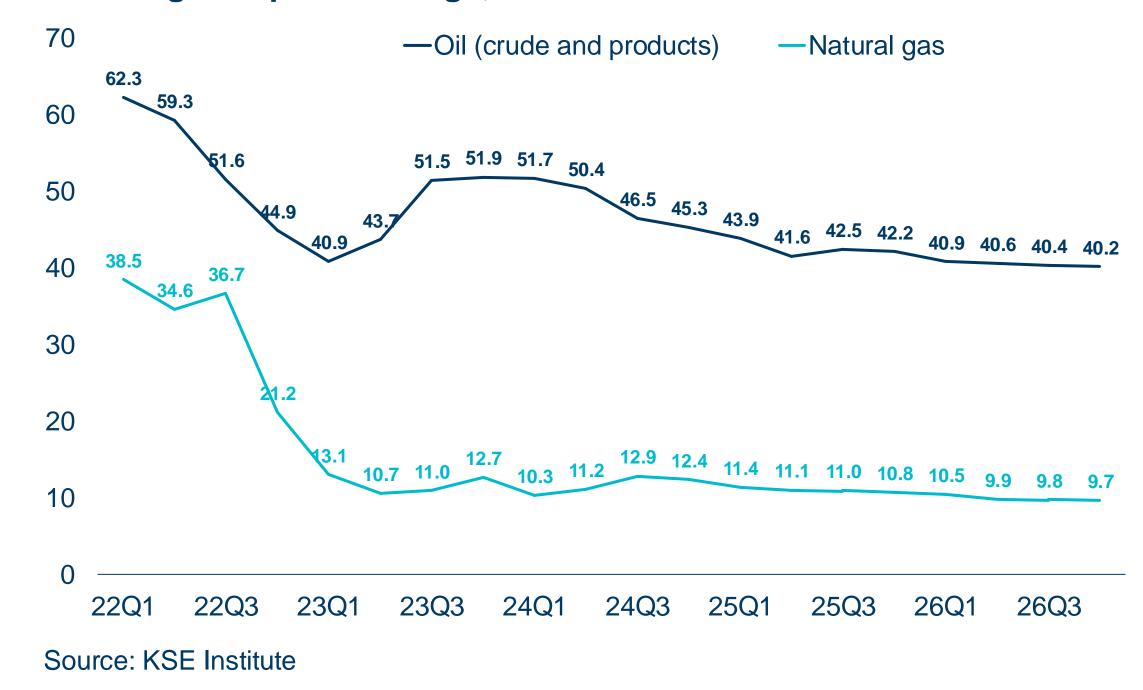
Weak sanctions enforcement scenario is increasingly likely.

- 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.
- In 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

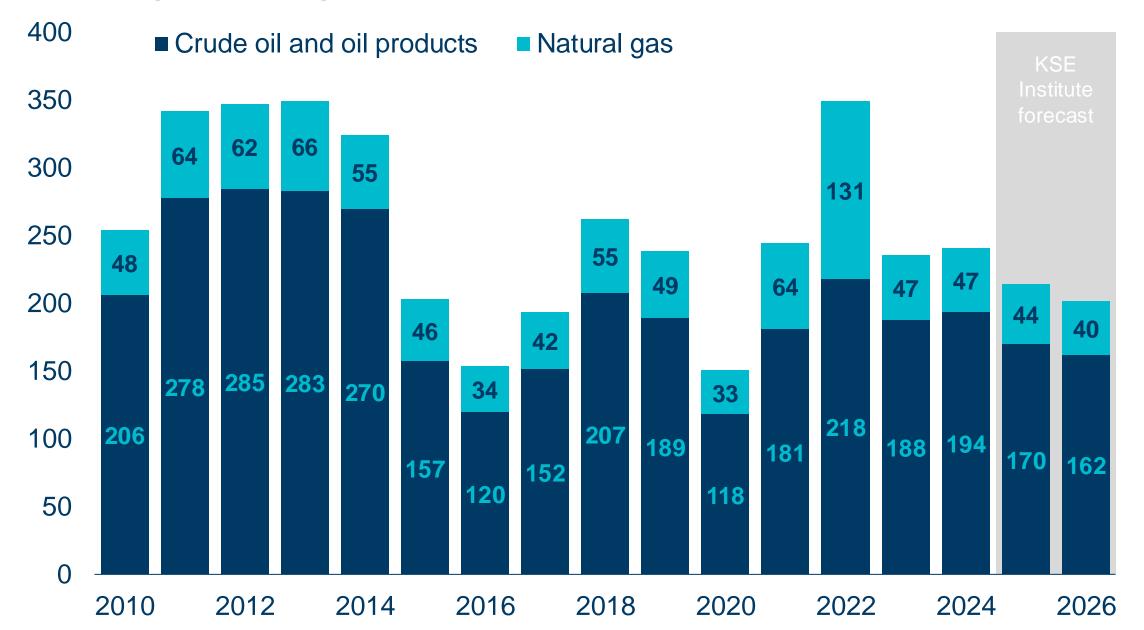




Current account surplus to decline moderately in 2025-26.

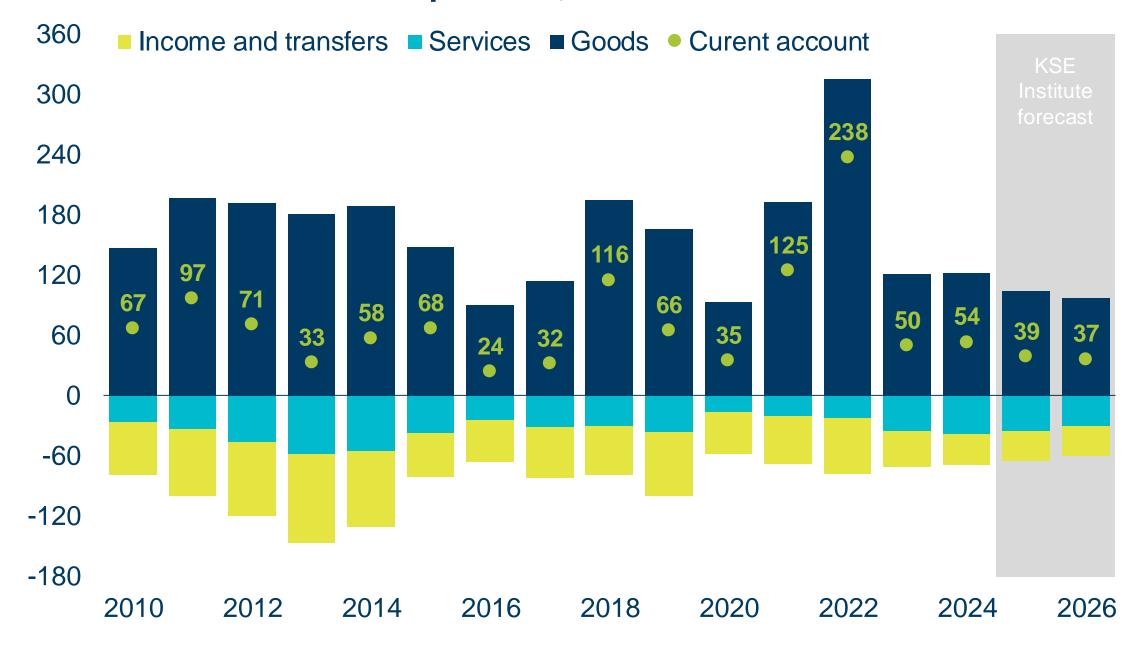
- We estimate oil and gas exports to have reached \$241 billion in 2024, while the current account came in at +\$54 billion.
- The current account surplus is projected to decrease to \$39 billion in 2025 and \$37 billion in 2026 as O&G exports weaken.
- In terms of its external accounts, this leaves 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



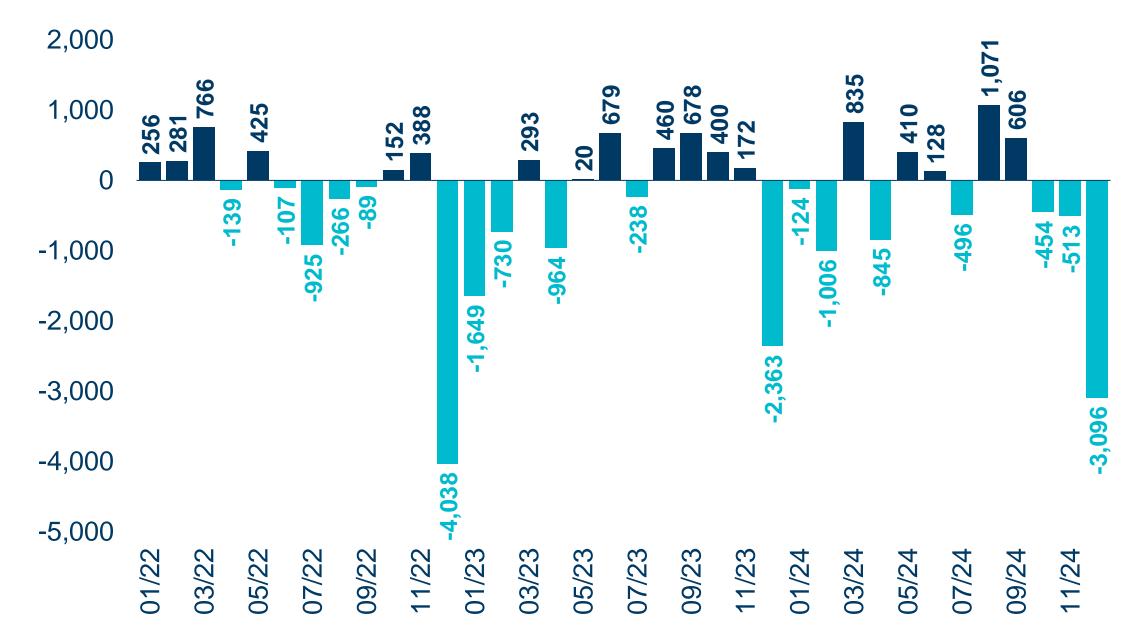
Budget deficit at 2022/23 level last year; Robust revenues more than offset higher spending; financing not a major challenge.



Russia finished year with higher-than-expected federal budget deficit.

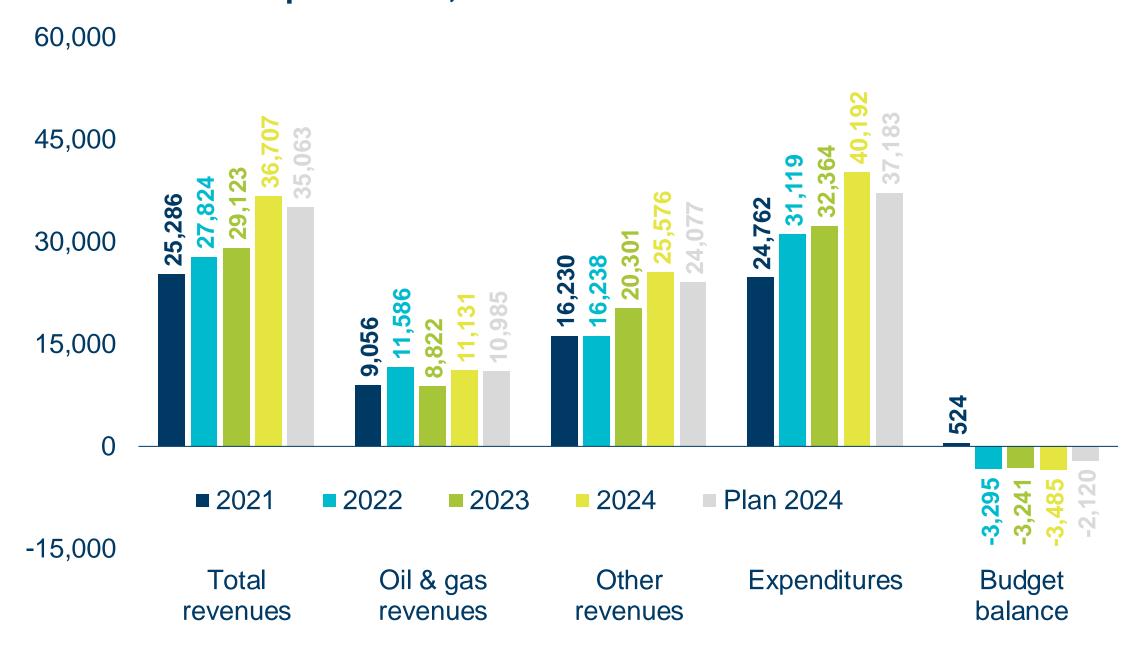
- Russia's federal budget deficit reached 3.5 trillion rubles in 2024—1.7% of GDP or roughly \$39 billion.
- This is sharply higher than the original budget plan, which had assumed a deficit of 1.6 trillion rubles.
- Strong O&G and non-O&G revenues (both +26%) helped to offset large spending (+24%), however.

Federal government balance, in ruble billion



Source: Ministry of Finance, KSE Institute

Revenues and expenditures, in ruble billion



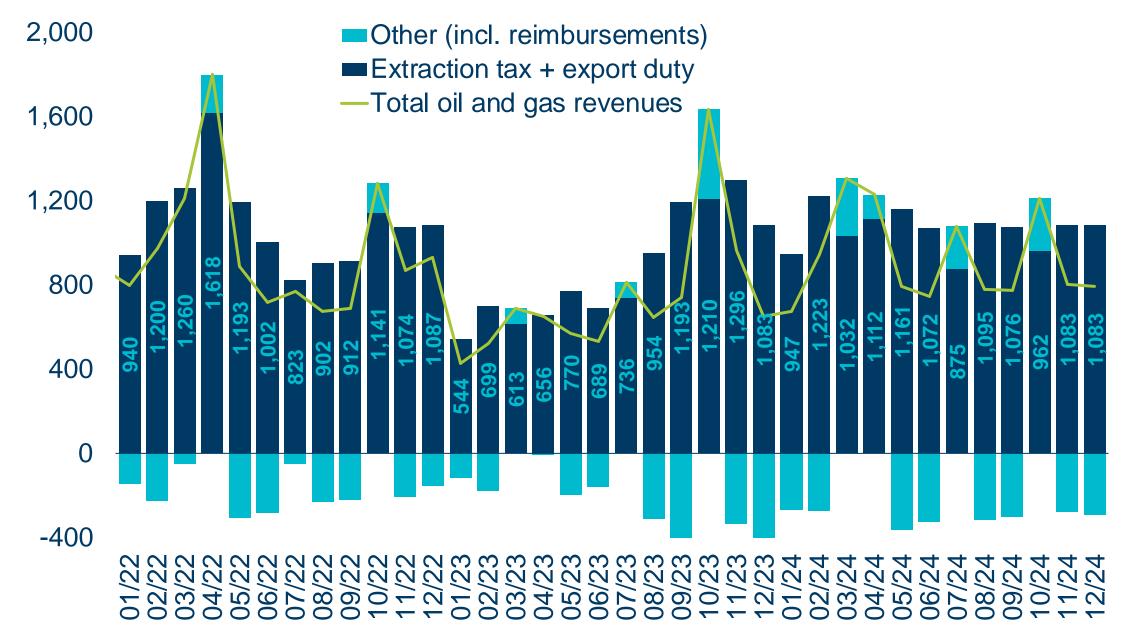
Source: Ministry of Finance, KSE Institute



Strong oil and gas revenues provide support to the budget.

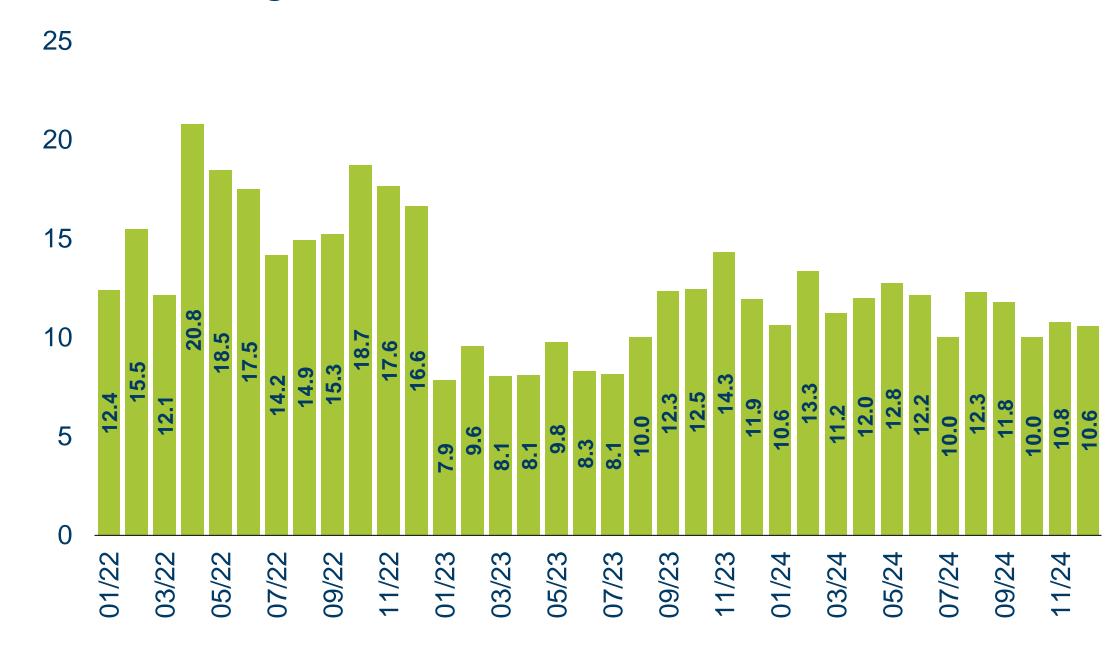
- Oil and gas revenues from extraction taxes and export duties have averaged more than 1 trillion rubles this year.
- This is significantly higher (+60%) than during H1 2023 (~660 billion) when energy sanctions were most effective.
- In \$ terms, these revenues grew by 33% (2024 avg vs. H1 2023 avg.), which shows the effect of a weaker ruble.

Federal oil and gas revenues, in ruble billion



Source: Ministry of Finance, KSE Institute

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



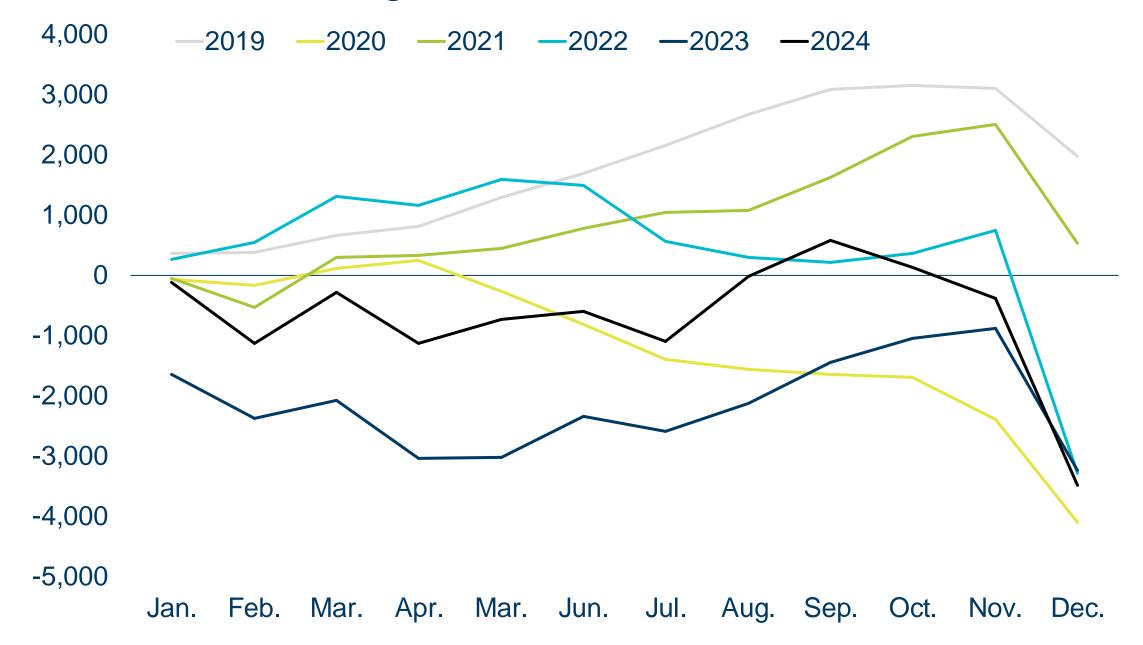
Source: International Monetary Fund, Ministry of Finance, KSE Institute
*includes extraction tax and export duty; calculated with monthly average exchange rate



Russia's MinFin relied heavily on OFZ issuance and the NWF in December.

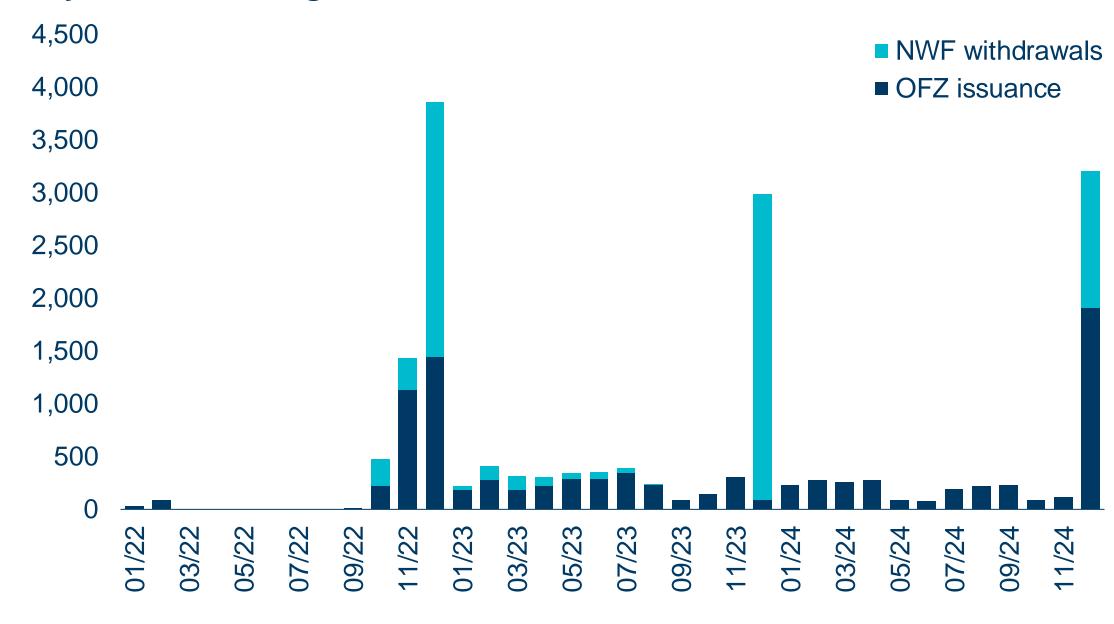
- Like in previous years, the Dec. budget gap was sizable at 3.1 trillion rubles, bringing the full-year deficit to its 2022/23 level.
- The Ministry of Finance relied on 1.3 billion from the NWF and 2.0 billion in OFZ issuance to finance the Dec budget deficit.
- NWF withdrawals were smaller than in previous years but OFZ issuance higher then in 2022 but close to Nov.-Dec. 2022.

Cumulative federal budget balance, in ruble billion



Source: Ministry of Finance, KSE Institute

Key fiscal financing channels, in ruble billion

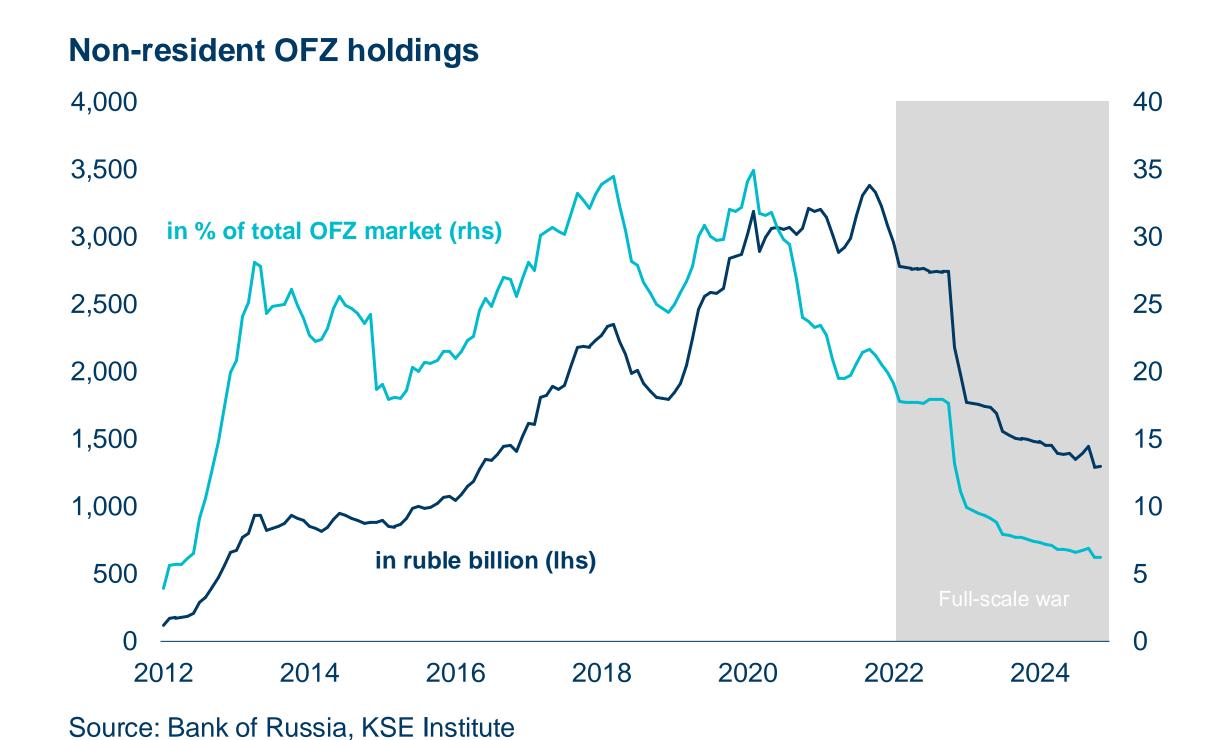


Source: Ministry of Finance, KSE Institute



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 1.4 trillion rubles (or 53%) since October 2022 as bonds matured.
- Credit institutions' holdings of OFZs, on the other hand, have risen significantly over the same period.



10,000 8,000 in % of total assets (rhs) 4,000 in ruble billion (lhs) 2,000 Full-scale war

2015 2016 2017 2018 2019 2020 2021 2022 2023 2024

Depository corporations' OFZ holdings*

14,000

12,000

12

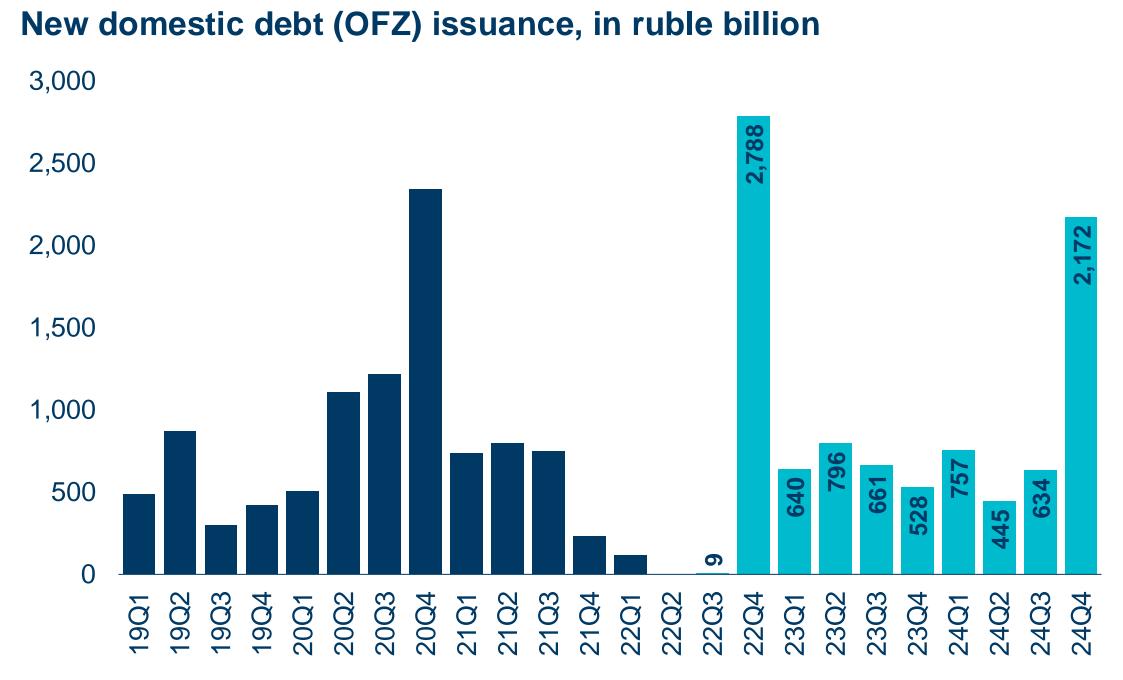
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Source: Ministry of Finance, KSE Institute

Financing via domestic borrowing is becoming significantly more costly.

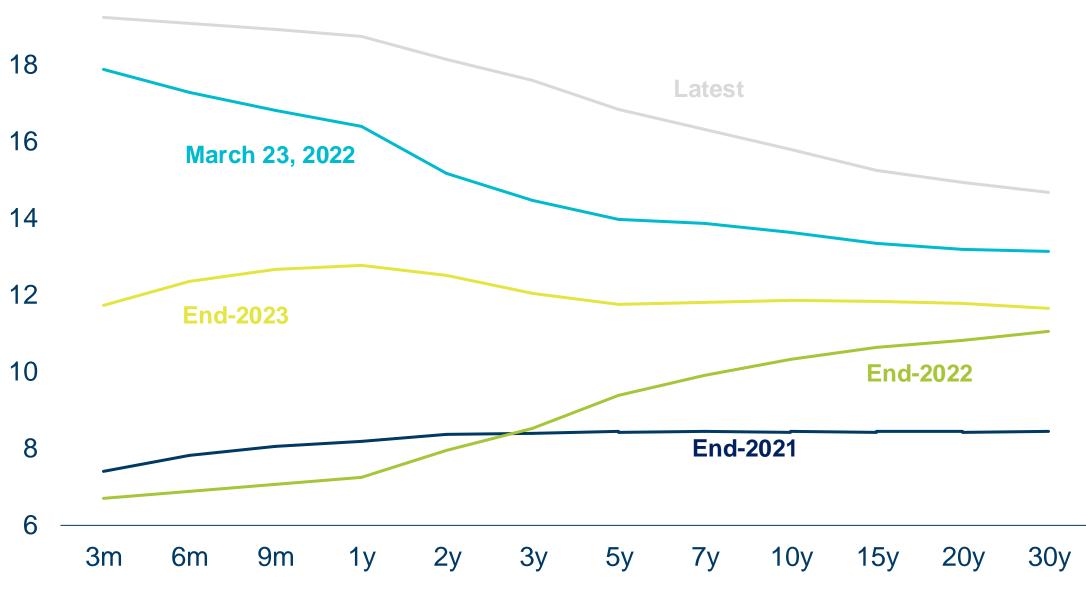
- Borrowing in the domestic market had been broadly stable in the last seven quarters before soaring in Q4 2024.
- The OFZ yield curve reflects recent CBR interest rate hikes, which means that funding costs are rising markedly.
- Despite high yields, the CBR had to institute a repo operation to provide banks with liquidity for OFZ purchases.





OFZ yield curves, in %

20





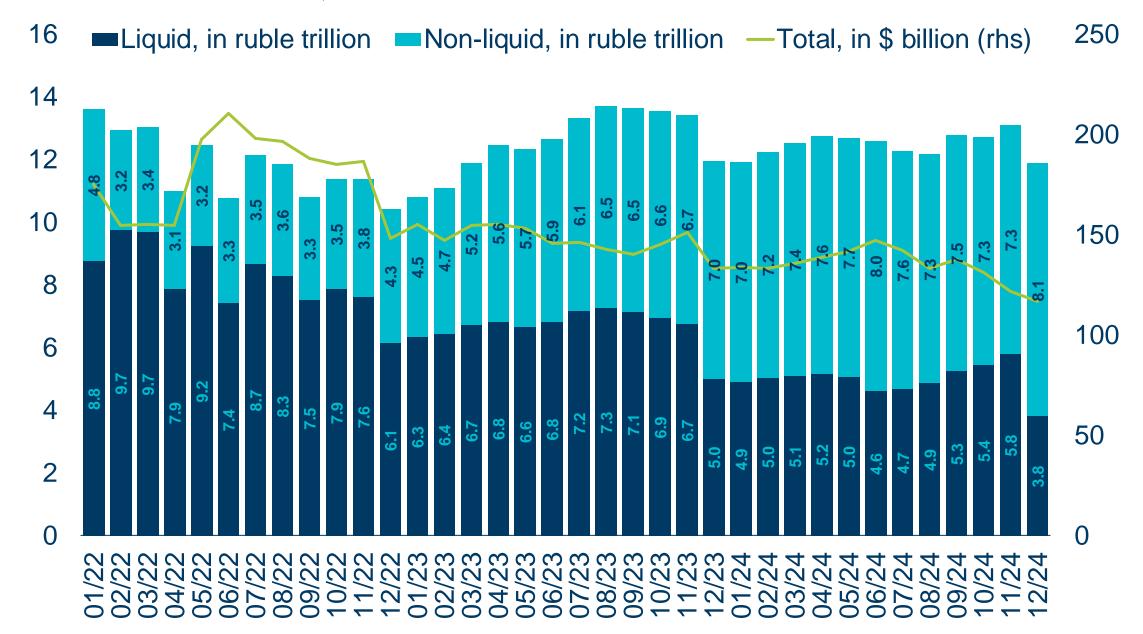
Macro buffers seriously depleted by war and sanctions; limited policy options in the case of further ruble depreciation and inflation.



Depletion of the NWF's liquid assets continued in 2024.

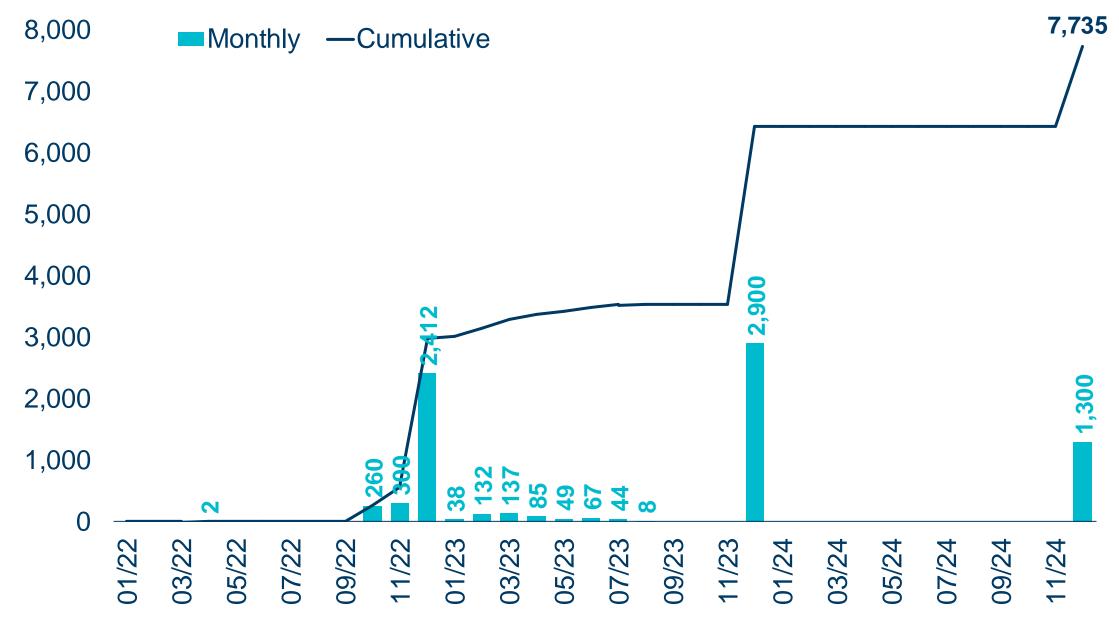
- Total assets of the National Welfare Fund stood at 11.9 trillion rubles (\$117 billion, 6.6% of GDP) in December 2024.
- The liquid portion declined to 3.8 trillion rubles as 1.3 trillion were used for the budget (and the ruble strengthened).
- Since the start of the full-scale war, Russia has used 7.7 trillion for budgetary purposes and liquid assets fell by 60%.

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



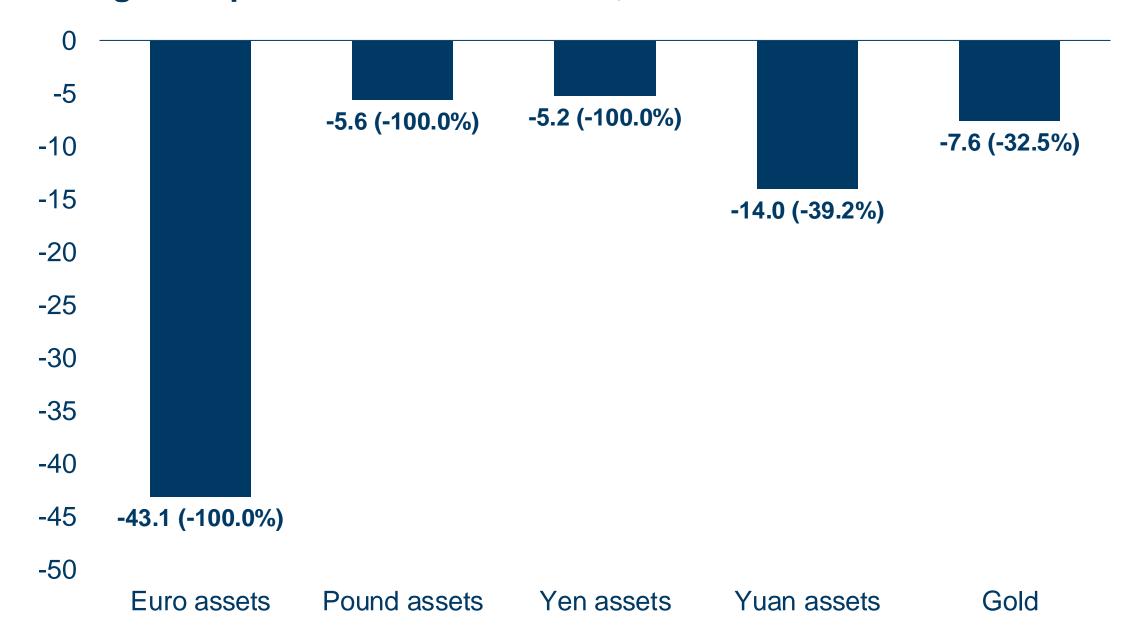
Source: Ministry of Finance, KSE Institute



Only around \$38 billion in liquid NWF funds remain.

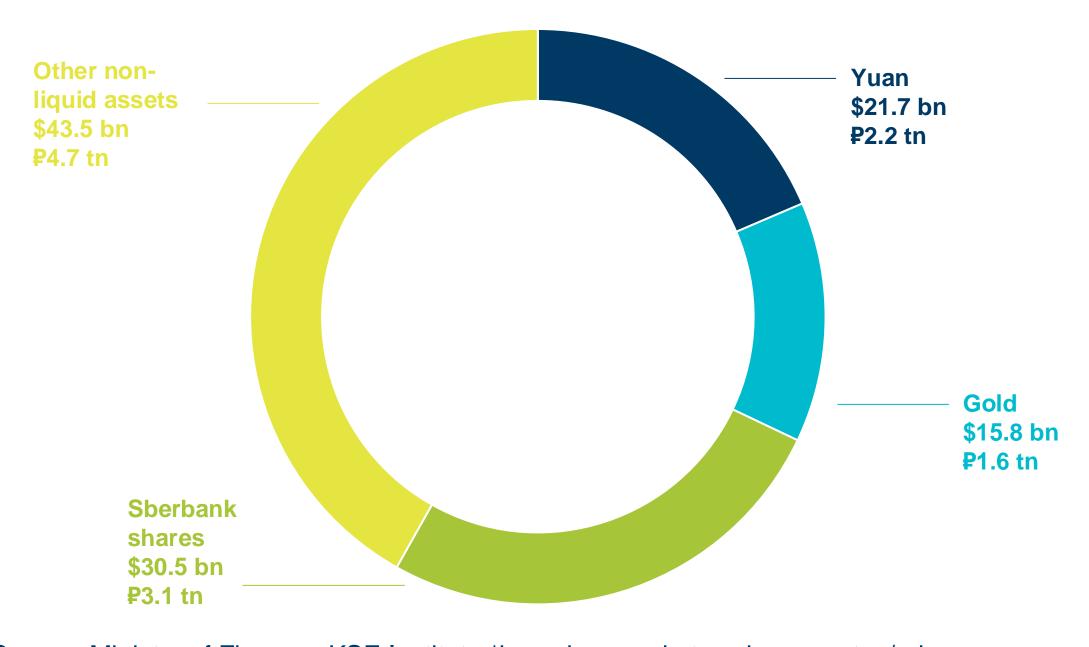
- In December, Russia's MinFin sold ~\$4 billion in yuan-denominated assets and close to \$8 billion in gold.
- All hard currency assets have been depleted since December 2023, when the remaining Euros were sold.
- Only yuan (2.2 trillion rubles) and gold (1.6 trillion) are left, and the NWF's liquid share has fallen to 32%.

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 January 1, 2025*



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



A substantial share of international reserves remain immobilized.

- Before the start of the full-scale invasion, Russia held \$643 billion in international reserves—an all-time high.
- We estimate, based on the CBR's Dec. 2021 data, that frozen reserves have a current value of ~\$340 billion.
- This leaves Russia with \$43 billion of foreign exchange, \$196 billion of gold, and \$28 billion of other assets.

Total reserves, in U.S. dollar billion 700 650 Feb. 18, 2022: \$643.2 billion 550 450 400 350

2018

2020

2022

2024

Source: Bank of Russia, KSE Institute

2014

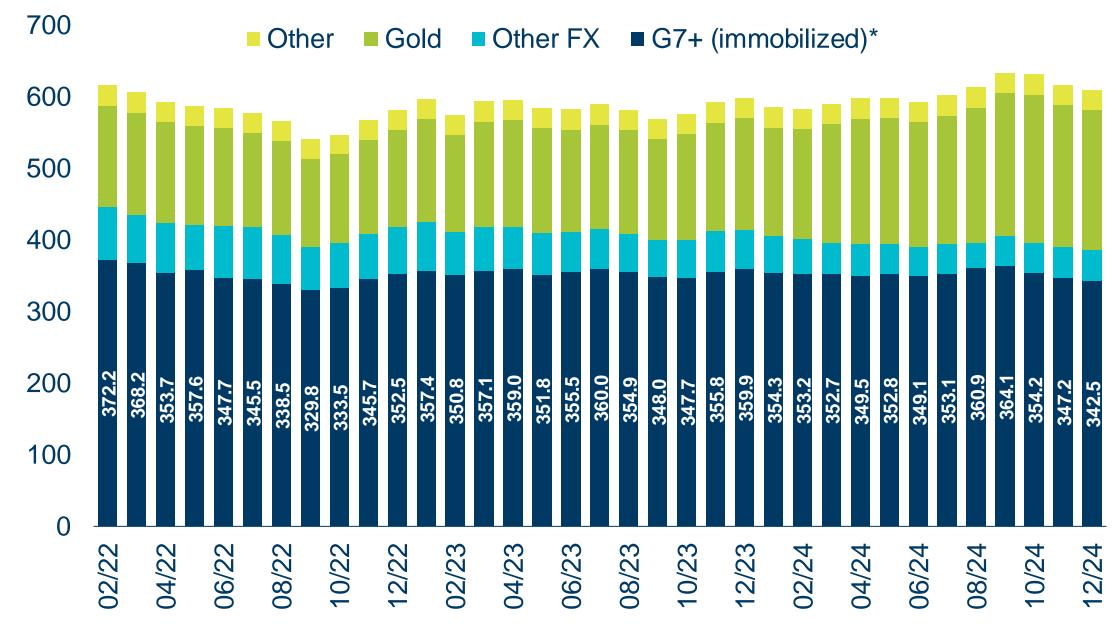
2016

2012

300

2010

Composition of reserves, in U.S. dollar billion*



Source: Bank of Russia, KSE Institute *Calculated using December 2021 reporting by the CBR and market exchange rates; includes AUD, CAD, EUR, GBP, JPY, SGD, and USD,

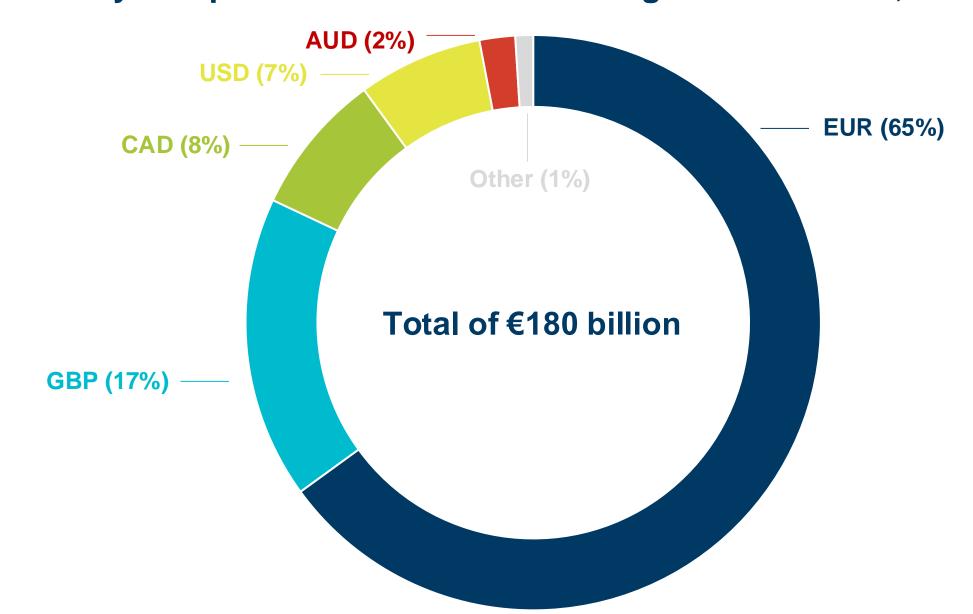


Euroclear accounts for a large share but other jurisdictions factor in.

- Close to \$300 billion in immobilized CBR assets are accounted for, with ~\$200 billion managed by Euroclear.
- A large share of these assets have turned from securities to cash (~90% of all Russian assets with Euroclear).
- In addition to Euroclear-managed assets, \$68-95 billion of CBR reserves could be in sanctioning jurisdictions.

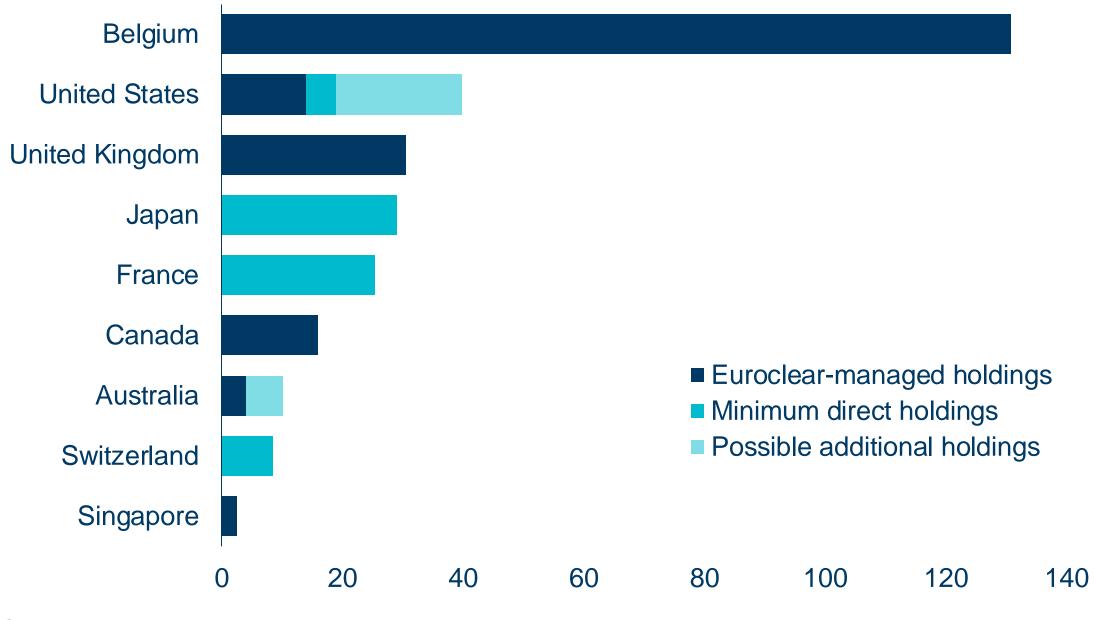
Read the paper "Resolving Accountability Over Russian State Assets" by the New Lines Institute here.

Currency composition of Euroclear-managed CBR assets, in %



Source: Euroclear, New Lines Institute, KSE Institute

Accounting of immobilized CBR reserves, in U.S. dollar billion



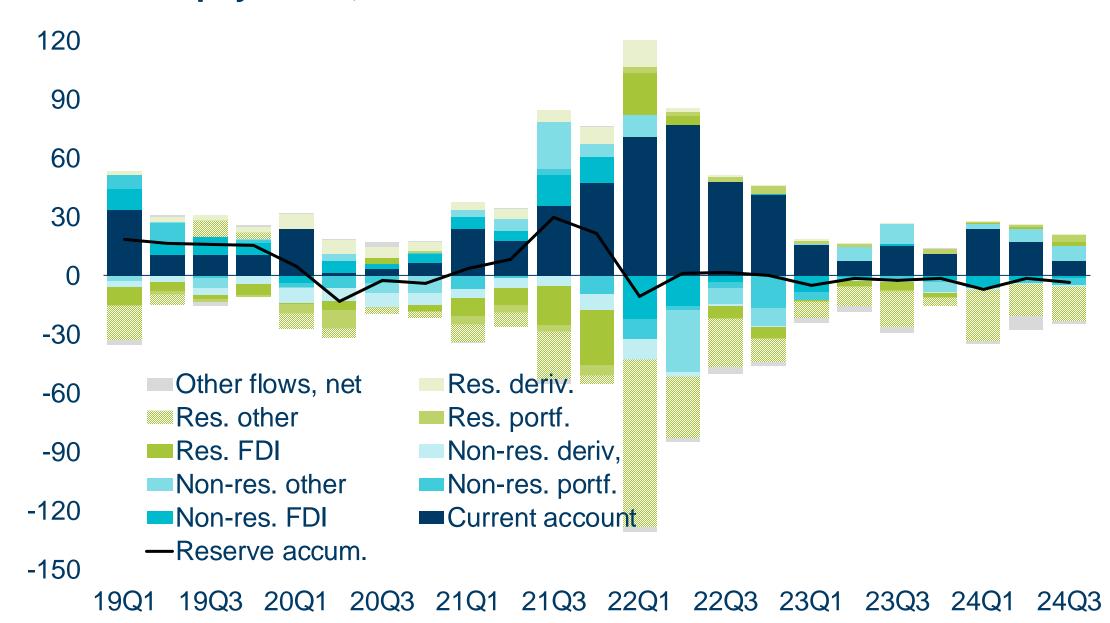
Source: New Lines Institute



Significant accumulation of new foreign assets since 2022.

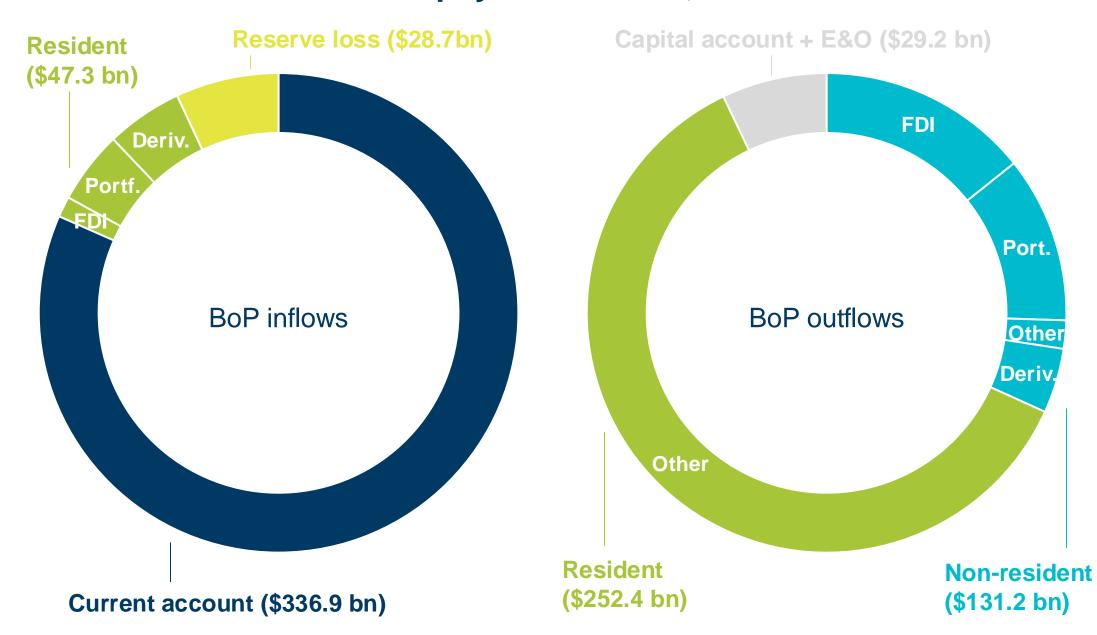
- With the ruble under pressure and regular reserves partly immobilized, it is time to focus on new Russian assets abroad.
- Non-resident capital outflows partially ate up the large current account surplus and resident inflows in Q1 2022-Q3 2024.
- But Russian banks and corporates were able to acquire \$252 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

2022Q1-2024Q3 balance of payments flows, in U.S. dollar billion



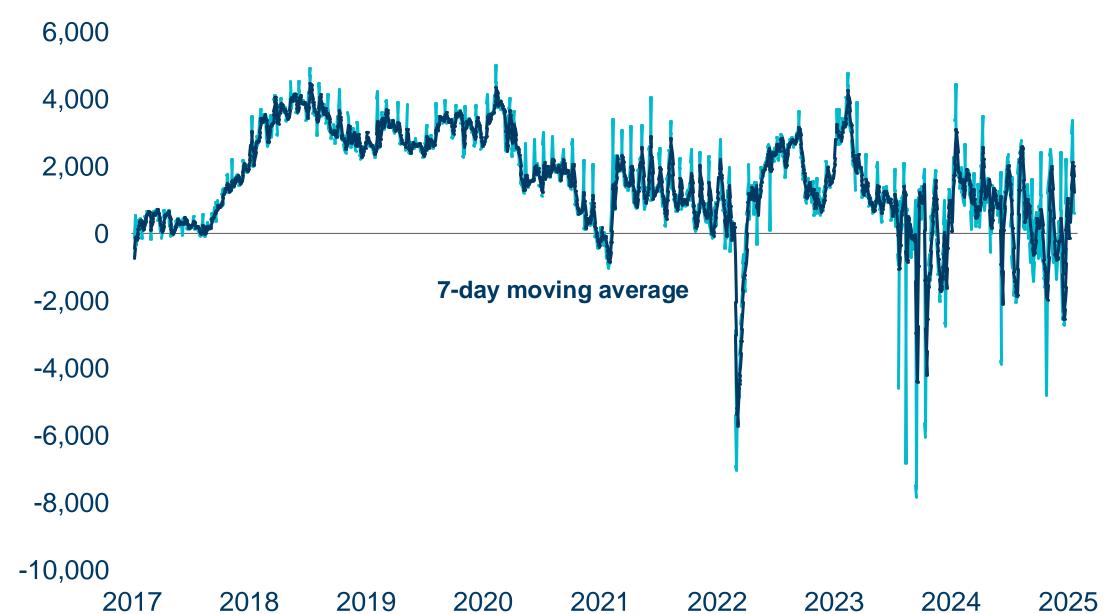
Source: Bank of Russia, KSE Institute



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

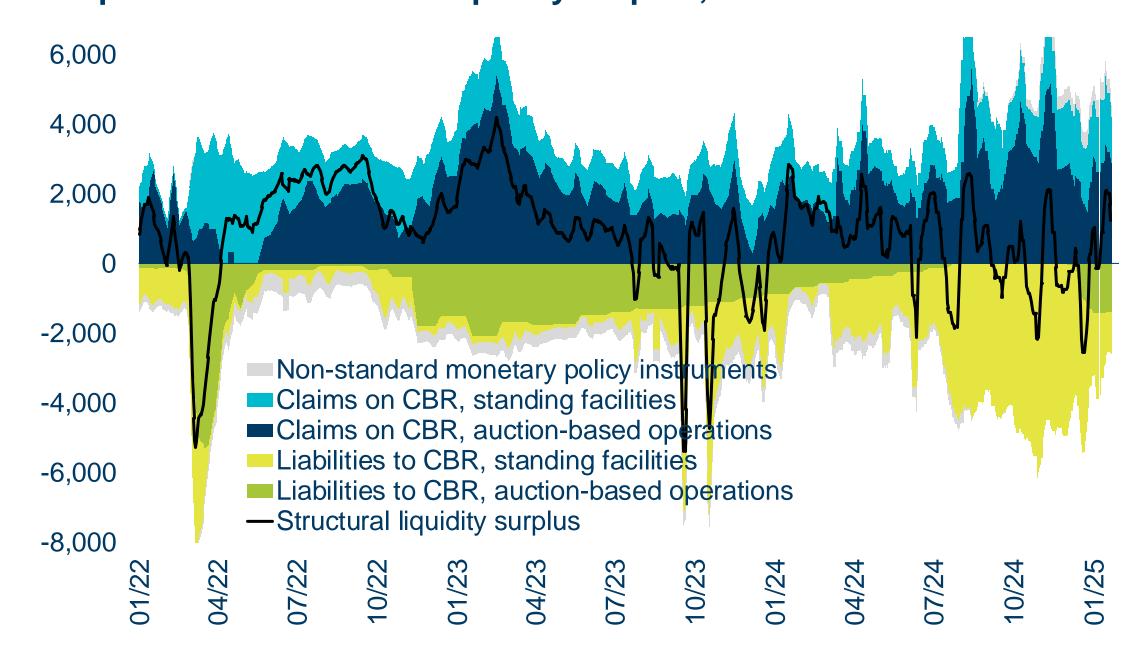
- Liquidity conditions recovered quickly after the initial shock from the full-scale war and imposition of sanctions.
- A closer look at the composition of the structural liquidity surplus points to some stress in the interbank market.
- The data clearly shows the effects of the CBR's monetary tightening 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

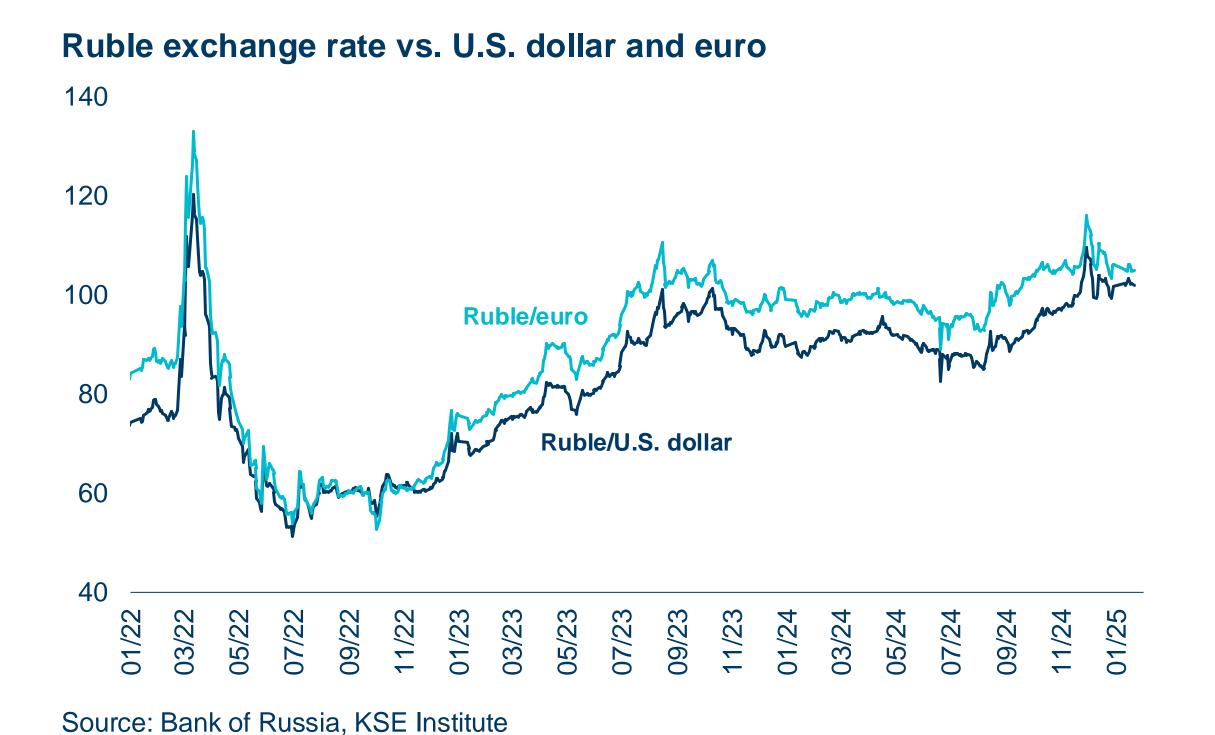


Inflation elevated despite CBR tightening; government spending, high wage growth and significant credit expansion create pressure; persistent Ruble depreciation.

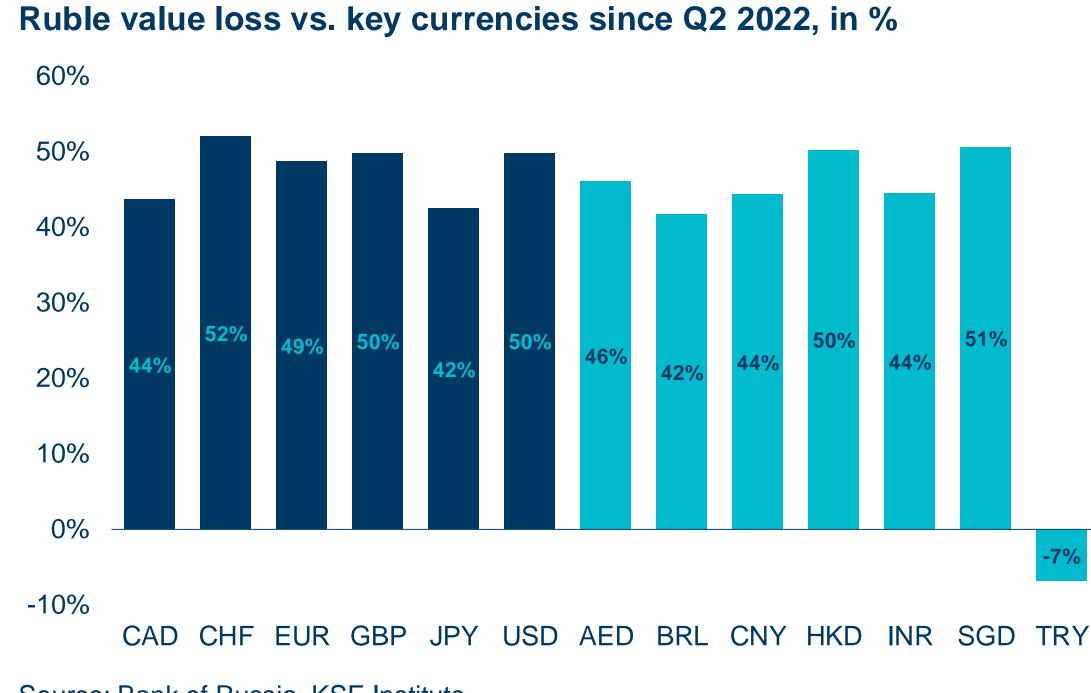


Ruble has weakened dramatically against major currencies.

- While the December depreciation episode has reversed, the ruble has persistently lost value for six months.
- Altogether, Russia's currency lost 49% of its value vs. the dollar and 48% vs. the euro since the mid-2022.
- The ruble's value loss is consistent across essentially all major developed and emerging market currencies.



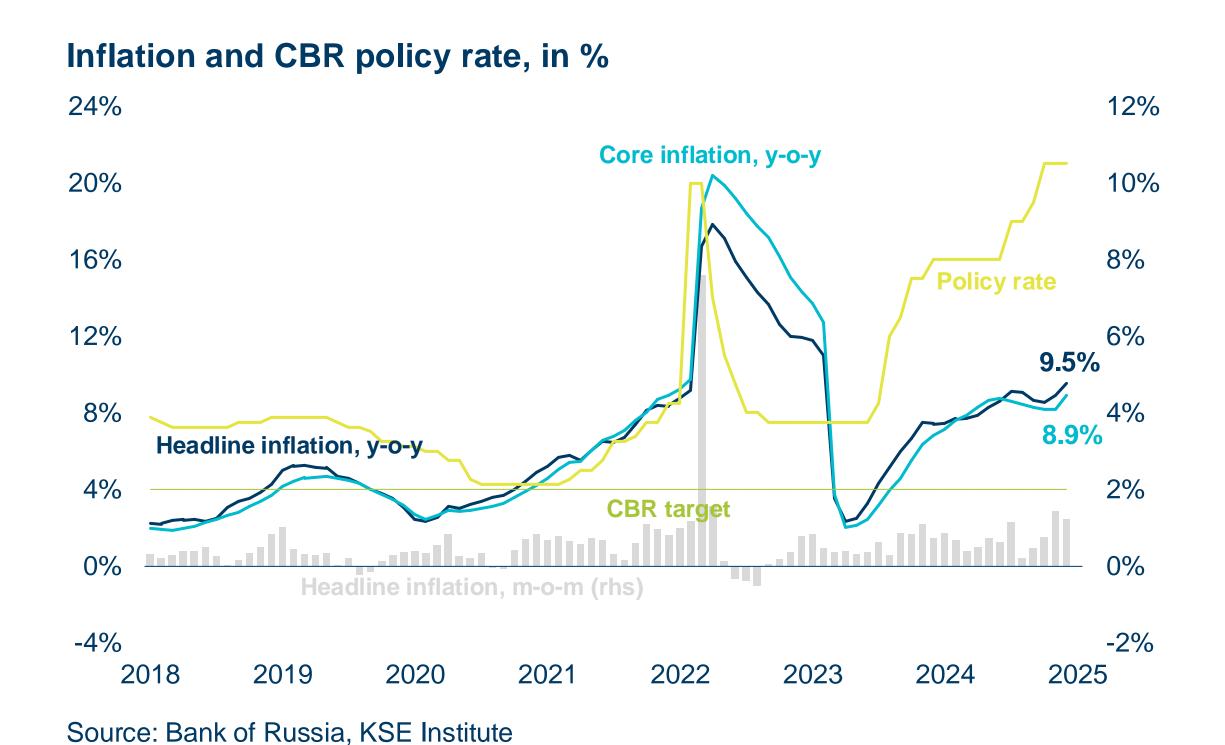


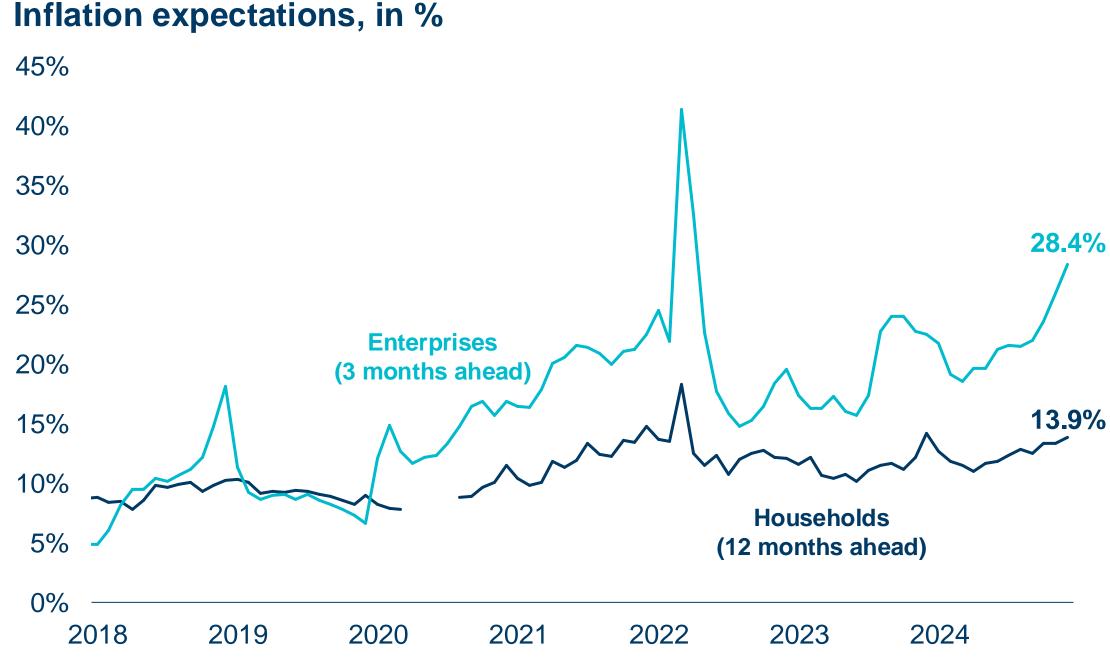




Inflation continues to rise despite CBR policy response.

- Headline inflation reached 9.5% y-o-y in Dec. and m-o-m changes indicate no dissipating of price pressures.
- Inflation expectations are rising again, especially those of enterprises, despite significant monetary tightening.
- After taking a break from rate hikes in December, the CBR may soon be forced to tighten conditions further.



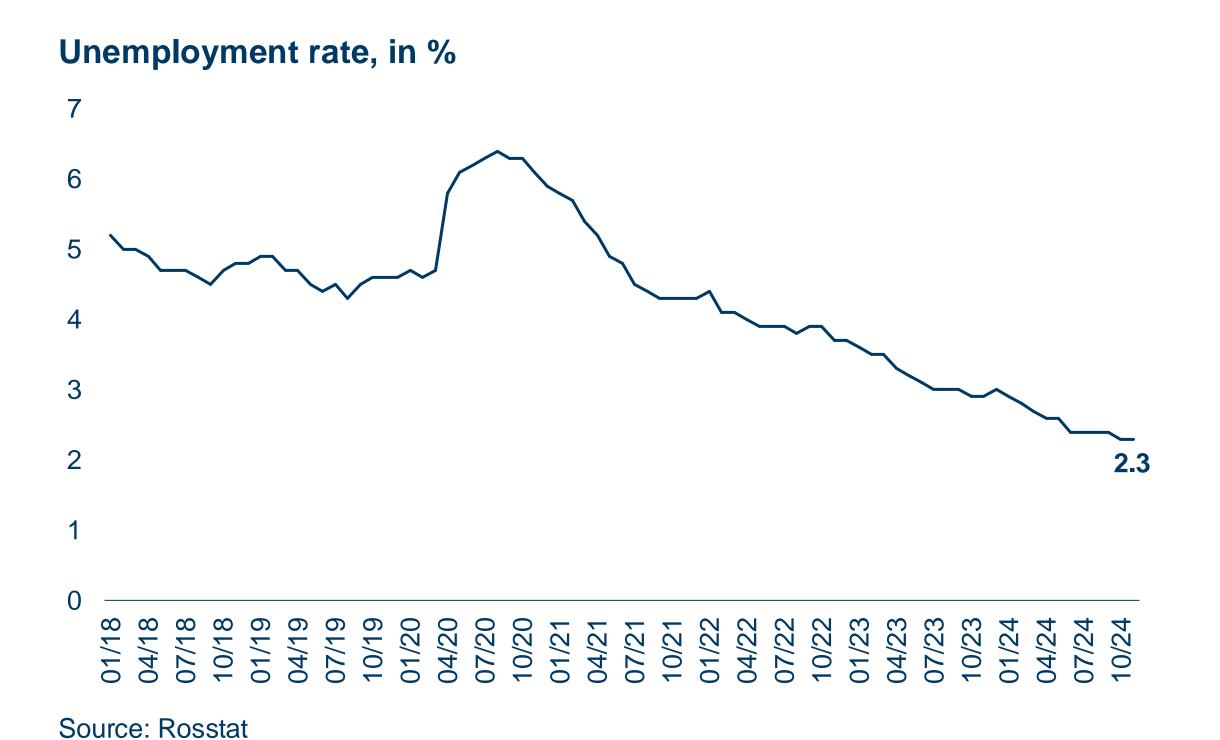


Source: Bank of Russia, KSE Institute



Tight labor market is driving up wages and inflation.

- The unemployment rate remains at record-low level of 2.3%—which technically means full employment.
- Nominal wage growth has trended up since the start of the full-scale invasion and stood at 16.4% in October.
- In addition to creating inflationary pressures, the economy has effectively no spare capacity left to draw from.





04/18 07/18 10/19 01/19 04/19 01/20 01/20 01/21 10/21 01/22 01/22 01/23 01/23 01/23

Nominal

Source: Rosstat

25

10

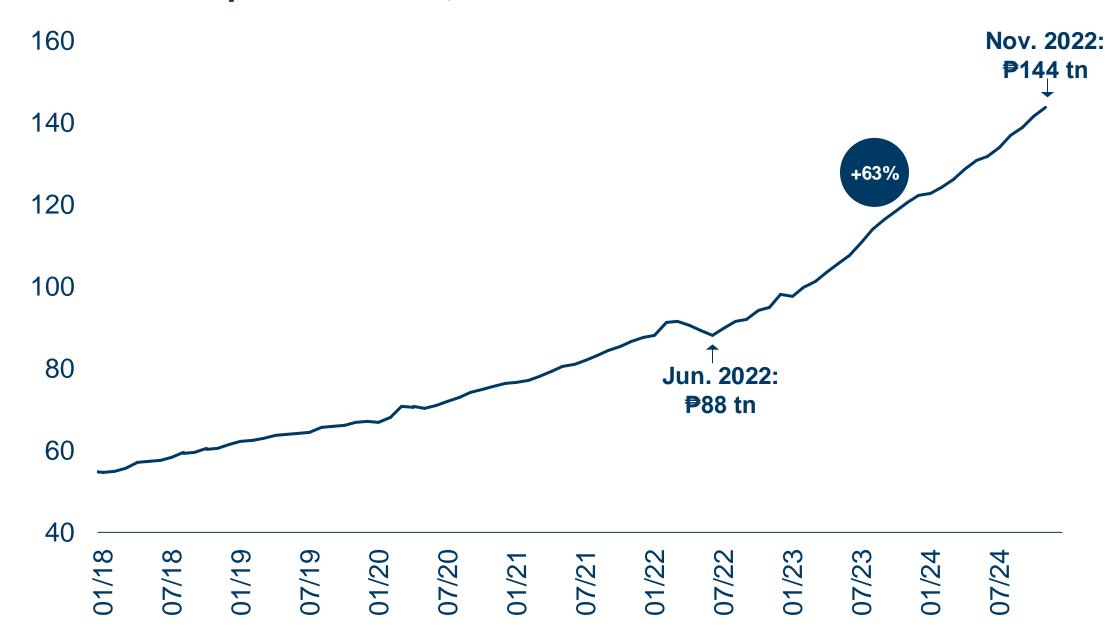
Wage growth, in % year-over-year



Significant credit growth creates inflationary pressures.

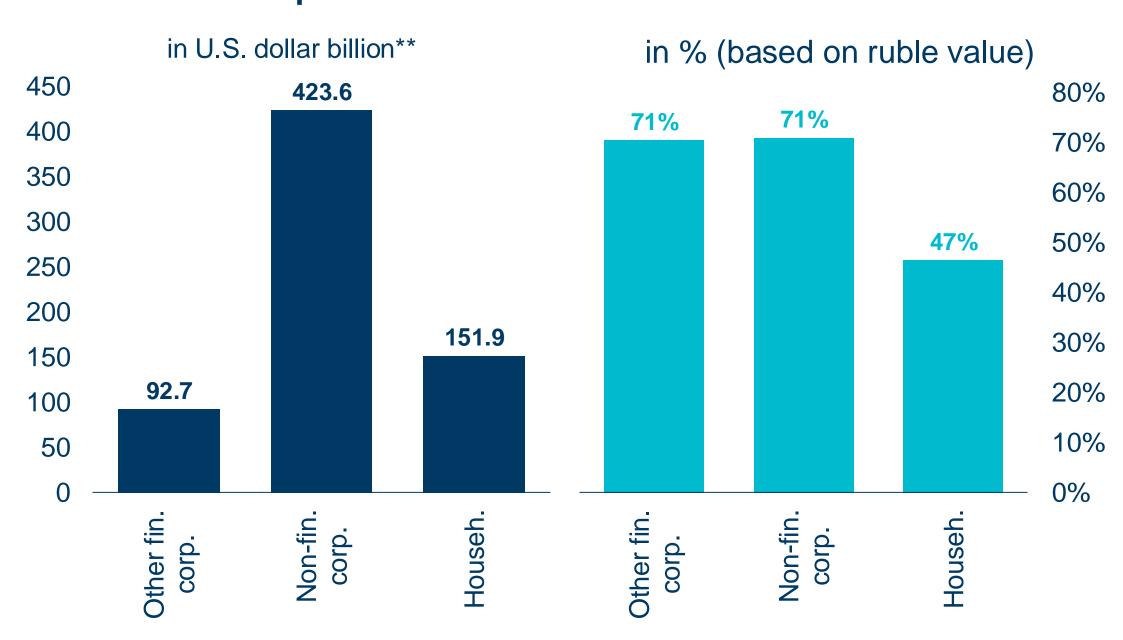
- Credit provided by the Russian banking system to the private sector has grown sharply since summer 2022 (+63%).
- Close to \$670 billion in loans have been provided to financial and non-financial corporations as well as households.
- More than \$400 billion went to non-financial corporations and a substantial amount likely went to the military industry.

Credit to the private sector, in ruble trillion*



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

New credit to the private sector vs. June 2022*



Source: Bank of Russia, KSE Institute *by depository corporation excluding the CBR **calculated by applying exchange rate on monthly basis



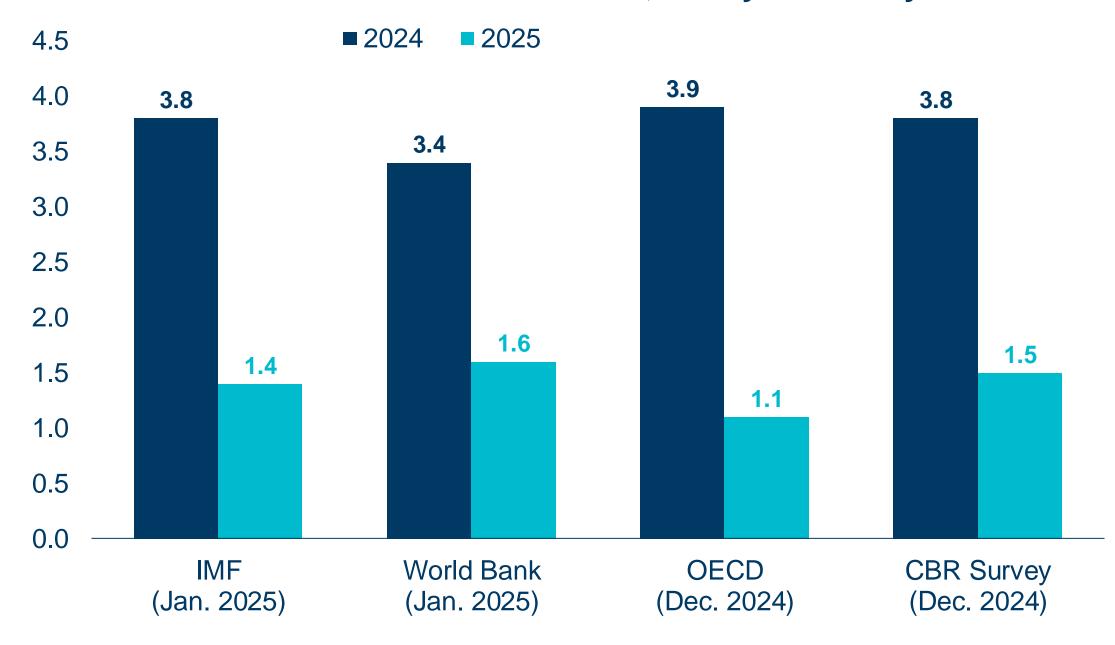
Source: Rosstat, KSE Institute

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

- Real GDP growth in Q3 2024 slowed down to 3.1% y-o-y, while quarterly growth accelerated marginally.
- 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 % 15 10 5 -2.8 -1.8 -1.6 **-7.3** -10 quarter-over-quarter (seasonally adjusted) —year-over-year (not seasonally adjusted) -15 23Q1 23Q3 24Q1 24Q3 20Q1 20Q3 21Q1 21Q3 22Q1 22Q3

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



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



Previous editions of KSE Institute's Russia Chartbook

- December 2024
- November 2024
- October 2024
- September 2024
- August 2024
- July 2024
- June 2024
- May 2024
- April 2024
- March 2024
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