

KSE INSTITUTE RUSSIA CHARTBOOK

GLOBAL PRICES WEIGH ON OIL EXPORTS; CBR CONTINUES TO STRUGGLE WITH INFLATION

SEPTEMBER 2024









Executive Summary

- 1. Global oil prices weigh on exports. At 15.3 billion Russian oil export earnings were the lowest since the H1 2023 in Aug. on the back of lower global prices while the discount for Russian oil remained stable. Thus, this is indicative of less supportive external conditions and not a reflection of improved sanctions enforcement. The UK recently designated additional tankers but the campaign is still too limited to effectively rein in the shadow fleet, which accounted for 90% of seaborne Russian crude exports in Aug.
- 2. Current account surplus to increase. Following a deficit in Jul., Russia's current account returned to a surplus in Aug. This was the result of a much smaller income & transfers deficit, while goods and services remained broadly unchanged from the previous month. Over Jan.-Aug., the surplus reached \$40.5 billion—a ~40% increase vs. Jan.-Aug. 2023 (\$29.0 billion). For the full year, the surplus is likely to be bigger than in 2023 (at ~\$60 billion vs. \$51 billion) before declining in 2025-26 partially due to falling global oil prices.
- 3. No major fiscal constraints currently. Over Jan.-Aug., Russia's federal budget deficit reached 0.3 trillion rubles—a sharp decline vs. the previous month due to a large surplus in Jul. While there are some risks to the outlook, including a slowdown in economic activity, Russia is likely to stay within its budget target for the full year; over 8 months, the deficit stood at just 16% of the 2024 plan. Sharply higher O&G revenues (+56%) and other revenues (+27%) vs. Jan.-Aug. 2023 more than offset higher spending (+23%).
- **4. Inflation remains a major concern.** Since mid-2023, Russia's central bank has hiked interest rates by 11.5pp, including 1pp in September. Nonetheless, inflation is still significantly above the CBR's 4% target, reaching 9.1% year-over-year for headline and 8.4% year-over-year for core in Aug. Several factors complicate the fight against rising prices: an extremely tight job market (2.4% unemployment in Jul.) pushing up wages, high government spending on the war, and large increases in credit to the private sector.
- 5. Reduced buffers limit policy options. Russia has lost access to roughly \$300 billion in CBR reserves due to sanctions. In addition, liquid assets of the sovereign wealth fund (NWF) have been reduced significantly to finance the budget. What remains are largely gold and yuan, which are much harder to convert at scale. Should Russia's economy slow down due to much tighter monetary conditions in the coming months and budget revenues weaken in turn, this could become a major problem for authorities.
- 6. Call to action. Ukraine's allies should take advantage of Russia's economic vulnerabilities and step up sanctions pressure now.



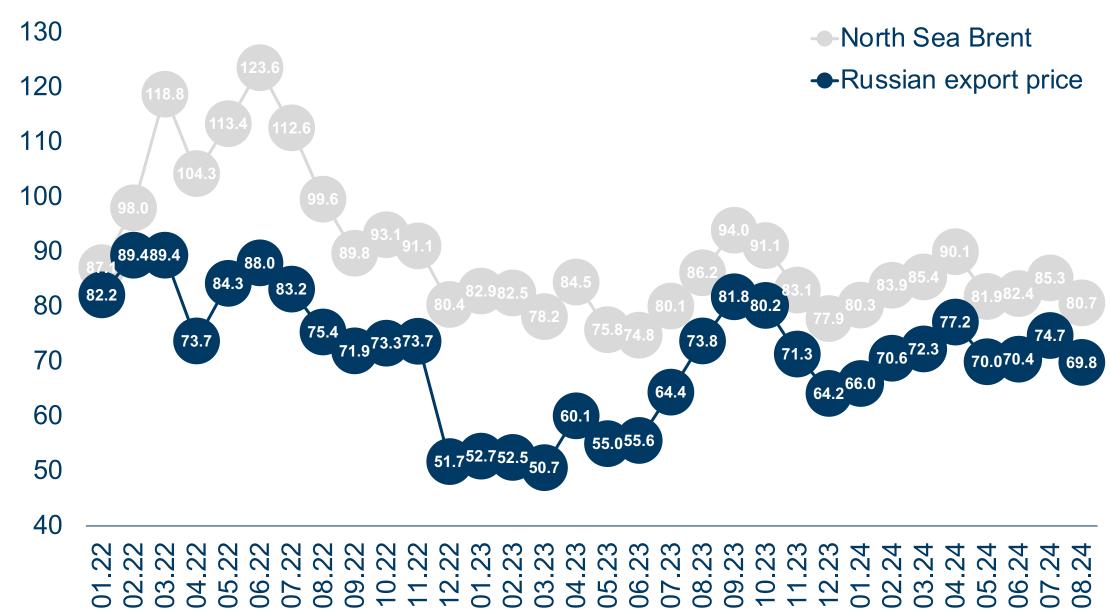
Prices for Russian oil remain above the price cap; further action is needed to maintain the policy's effectiveness and credibility.



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

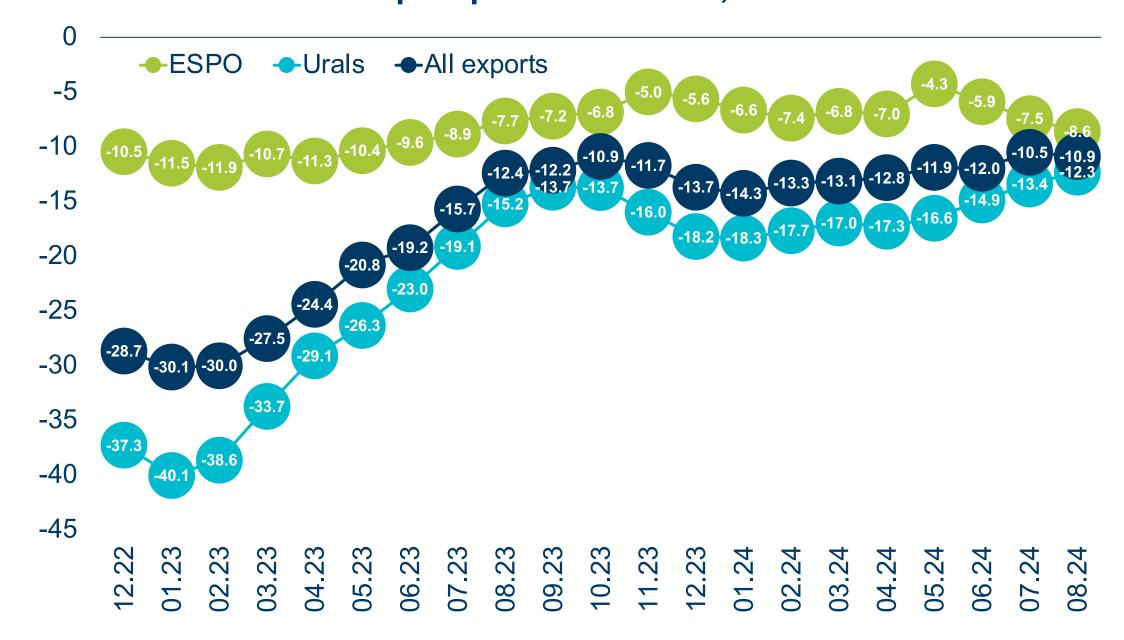
- The widening of the oil price discount that occurred in the last quarter of 2023 has now been fully reversed.
- The vessel designation campaign's limited nature has allowed Russia to replace lost transport capacities.
- While the discount remained stable, declining global prices lead to a \$5/barrel lower export price in August.

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



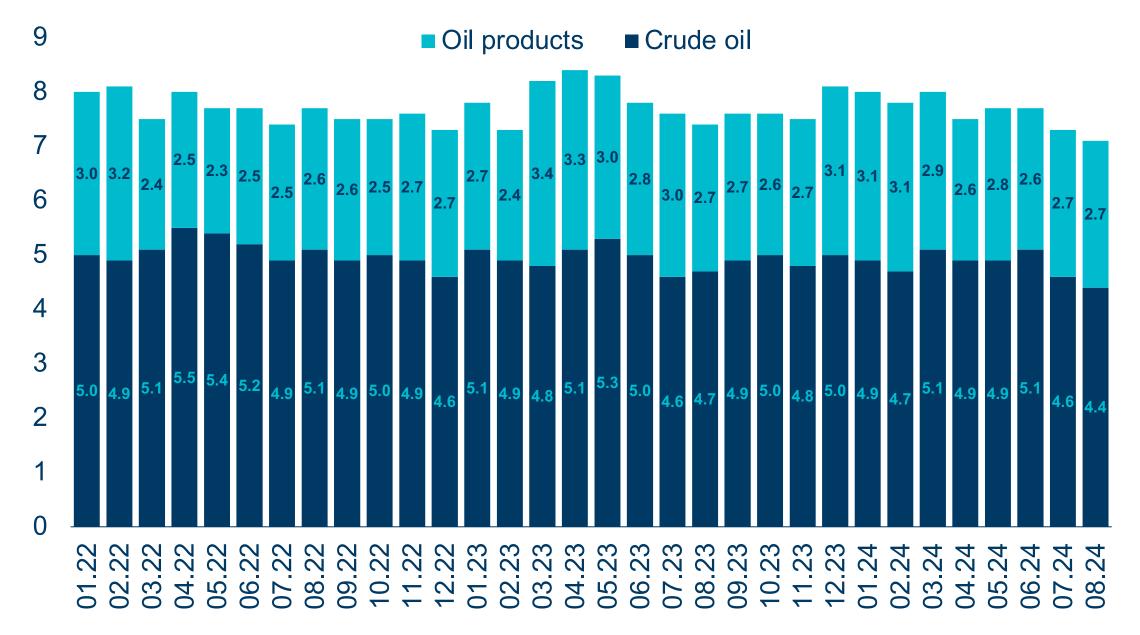
Source: International Energy Agency, KSE Institute



Supply of Russian oil to the global market remains stable.

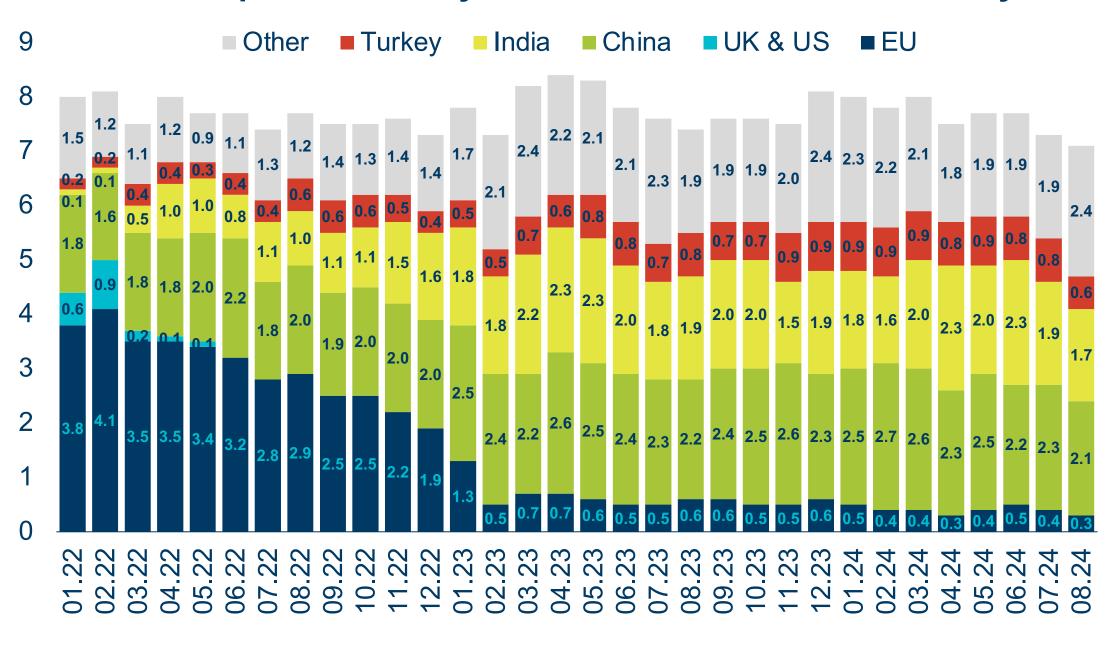
- Russian oil export volumes have been remarkably steady over the last 2.5 years despite sanctions.
- Thus, the price cap has succeeded at keeping Russian oil on the market and prevent supply issues.
- China, India, and Turkey are the most important buyers, together accounting for 60-70% of exports.

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*



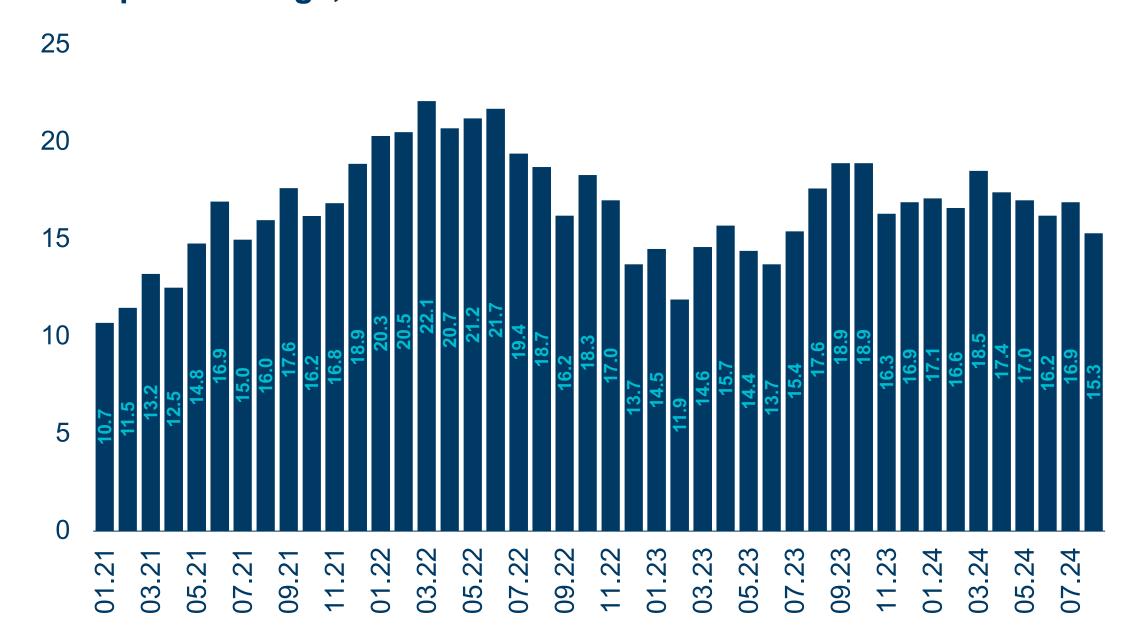
Source: International Energy Agency, KSE Institute *no March data from IEA



Ineffective price cap helps Russia with exports and budget revenues.

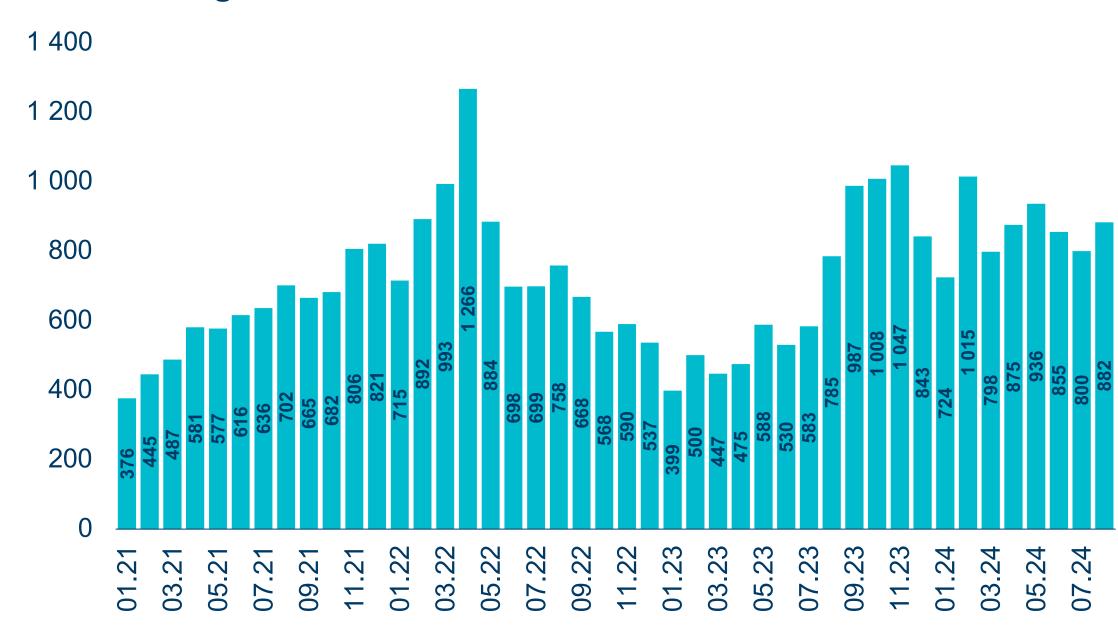
- In Jan.-Aug., oil export earnings averaged \$16.9 billion vs. \$17.3 billion in H2 2023 and \$14.1 billion in H1 2023.
- Budget revenues from oil were also roughly unchanged compared to H2 2023 but ~75% higher than in H1 2023.
- Russia's ability to fund its government and, thus, its war in Ukraine appears largely unconstrained by oil sanctions.

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

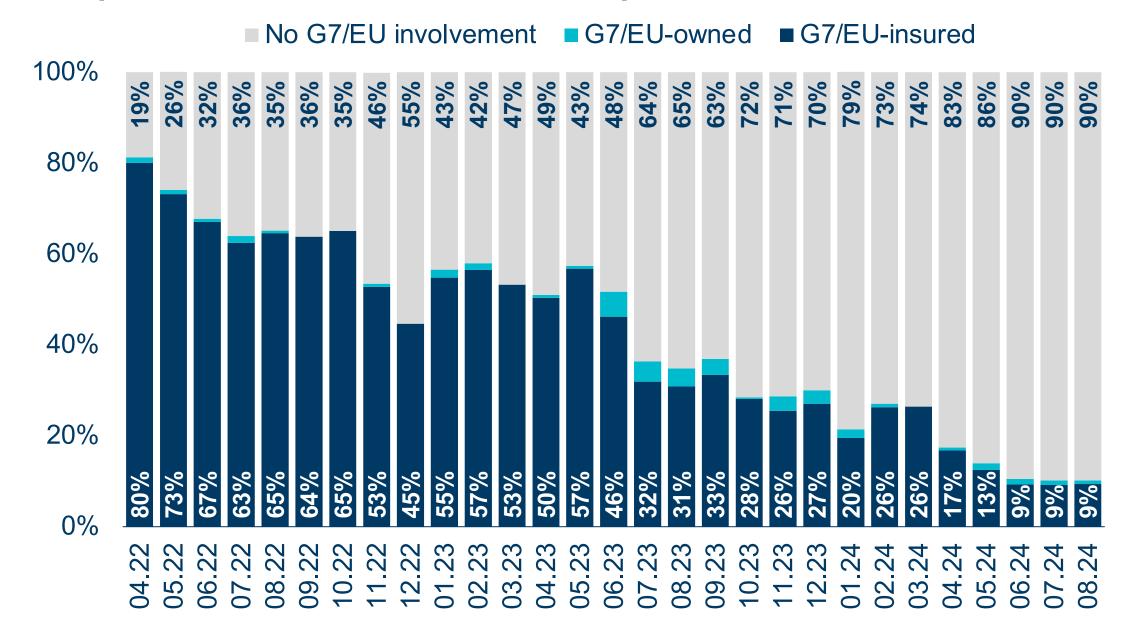


Shadow fleet has fundamentally eroded the price cap's leverage.

- Russia's shadow fleet of 430+ tankers allows it to evade the price cap for a large share of its oil exports.
- In Aug. 2024, close to 90% of seaborne crude oil was transported without involvement of G7/EU services.
- For this portion, Russia is currently able to realize an average price that lies \$10/barrel above the cap.

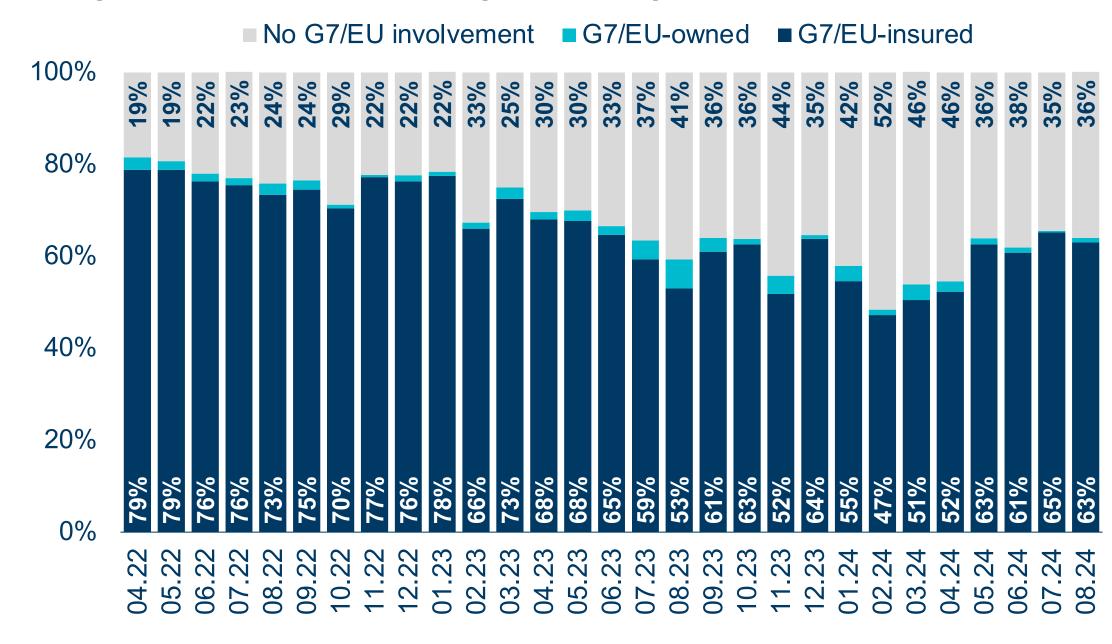
Read KSE Institute's in-depth assessments of the shadow fleet here and here.

Composition of seaborne crude oil exports, in %



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

Composition of seaborne oil product exports, in %



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



Designations have largely removed shadow tankers from operations.

- A total 74 shadow fleet tankers have been sanctioned by the United States, European Union, and United Kingdom.
- Around 70% of vessels have been removed from commercial operations as entities in third countries fear involvement.
- Designations remain a powerful tool to rein in the shadow fleet, which should be scaled up gradually going forward.

Status of designated vessels

US

Ballast/drifting

Kruger

Name	Designated by	Status	Name	Designated by	Status	Name	Designated by	Status		
Crude oil tankers						Scf Primorye	US	Completed Currently ballast/drifting		
Anatoly Kolodkin	US	Ballast/drifting	Krymsk	US EU	Ballast/drifting	Scf Vankor	UK	Ballast/drifting		
Andromeda	UK	Underway	La Pride	US	Ballast/drifting	Vela Rain	EU	Ballast/drifting		
Andromeda Star	EU	Ballast/drifting	Ladoga	US	Ballast/drifting	Viktor Bakaev	US	Planned voyage		
Antarktika	US	Ballast/drifting	Legacy	EU UK	Underway	Vladmir Tikhonov	UK	Planned voyage		
Avril	US	Ballast/drifting	Leonid Loza	UK	Underway	Zaliv Amursiy	UK	Ballast/drifting		
Belgorod	US	Completed voyages	Liberty	UK	Completed voyage	Zaliv Aniva	UK	Ballast/drifting		
Bratsk	US	Completed Currently underway	Ligovsky Prospect	US	Ballast/drifting	Oil product tankers				
Daksha	EU	Underway	Liteyny Prospect	US	Ballast/drifting	Apus	US	Ballast/drifting		
Fighter Two	UK	Completed voyage	Lokosao	UK	Ballast/drifting	Aristo	US	Ballast/drifting		
Galaxy	UK	Underway	Nevsky Prospect	US	Ballast/drifting	Beks Aqua	EU	Ballast/drifting		
Galian 2	EU	Ballast/drifting	Nikolay Zuyev	UK	Underway	Bettle	US	Ballast/drifting		
Georgy Maslov	US	Ballast/drifting	Ns Asia	UK	Underway	Canis Power	EU UK	Ballast/drifting		
Hai li	US	Ballast/drifting	Ns Clipper	UK	Underway*	Kavya	EU	Underway		
Hs Buraq	US	Ballast/drifting	Ns Commander	UK	Ballast/drifting	Mona	US	Ballast/drifting		
Hs Esberg	US	Ballast/drifting	Ns Consul	US	Ballast/drifting	Ns Stream	EU	Ballast/drifting		
Hs Everett	US	Ballast/drifting	Ns Corona	UK	Planned voyage	Saga	EU	Underway		
Hs Glory	US	Ballast/drifting	Ns Leader	US	Ballast/drifting	Sanar 15	US	Underway		
Hs Legend	US	Ballast/drifting	Ocean AMZ	EU UK	Ballast/drifting	Sara li	US	Ballast/drifting		
Hs Star	US	Ballast/drifting	Olympiysky Prospect	UK	Ballast/drifting	Scf Pechora	UK	Ballast/drifting		
Kaliningrad	US	Ballast/drifting	Pictor	US	Ballast/drifting	Sensus	US	Completed Currently ballast/drifting		
Kareliya	US	Ballast/drifting	Rigel	UK	Underway	Success	EU UK	Underway		
Kazan	US	Ballast/drifting	Robon	EU UK	Ballast/drifting	Vasily Lanovoy	US	Underway		
Kemerovo	US	Ballast/drifting	Rocky Runner	UK	Ballast/drifting	Green – out of commercial operations; Yellow – in operation, monitoring required; Red –				
Kotlas	US	Ballast/drifting	Sahara	US	Ballast/drifting	completed voyage, investigation needed; *loaded before designation				
Krasnoyarsk	US	Ballast/drifting	Sakhalin	US	Ballast/drifting					

Planned voyage

UK

Scf Baltica



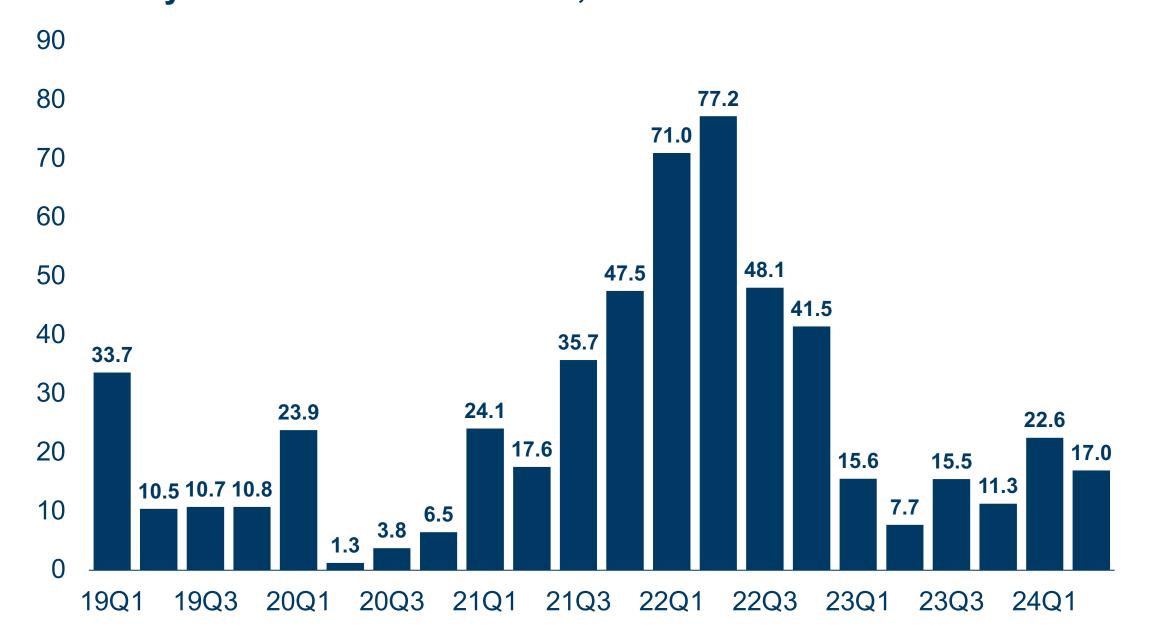
External conditions remain supportive; weak sanctions enforcement helps Russia; hard currency inflows have fallen sharply.



External environment has become more supportive in 2024.

- The current account returned to a surplus in Aug. (\$2.5 billion) after recording a deficit of \$1.6 billion in Jul.
- This was driven by a smaller income & transfers balance, while goods and services remained unchanged.
- The Jan.-Aug. 2024 surplus of \$40.5 billion is almost 40% bigger than the one recorded in Jan.-Aug. 2023.

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.	lmp	Bal.	Cred.	Deb.	Bal.	Cred.	Deb.
Q1 2024	22.6	33.8	100.9	67.1	-7.3	10.2	17.4	-3.9	8.6	12.5
Q2 2024	17.0	35.6	106.2	70.6	-9.6	9.6	19.1	-9.0	8.2	17.2
Apr. 2024	7.3	11.9	34.2	22.3	-2.6	3.1	5.7	-2.0	3.1	5.1
May 2024	5.0	12.0	36.6	24.5	-3.3	3.2	6.5	-3.7	2.7	6.4
June 2024	4.7	11.6	35.4	23.8	-3.7	3.2	6.9	-3.3	2.4	5.6
July 2024	-1.6	8.7	33.7	25.0	-4.2	3.6	7.8	-6.1	3.4	9.5
August 2024	2.5	8.4	33.0	24.6	-4.3	3.6	7.9	-1.6	3.2	4.7
JanAug. 2024	40.5	86.4	273.7	187.3	-25.3	27.0	52.3	-20.6	23.3	43.9
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 Apr 2023 May 2023 June 2023	15.6	30.5	105.1	74.6	-7.6	9.9	17.5	-7.3	11.4	18.7
은 Q2 2023	7.7	26.3	103.4	77.1	-8.9	10.4	19.3	-9.6	12.7	22.3
<u>®</u> Apr 2023	0.3	6.8	31.6	24.8	-2.4	3.3	5.8	-4.0	4.1	8.1
K May 2023	5.5	10.4	37.4	26.9	-3.1	3.4	6.4	-1.9	3.7	5.6
∑ June 2023	2.0	9.0	34.5	25.4	-3.4	3.6	7.0	-3.7	4.9	8.5
July 2023	0.2	6.2	31.7	25.5	-3.7	3.2	6.9	-2.2	3.4	5.6
August 2023	5.4	11.7	37.1	25.4	-4.1	3.3	7.4	-2.2	3.1	5.3
JanAug. 2023	29.0	74.7	277.3	202.6	-24.3	26.6	51.0	-21.4	30.6	52.0

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.

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Monthly trade statistics, in U.S. dollar billion 60 2010 2024 2012 2014 2016 2018 2020 2022

140 **Exports**

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



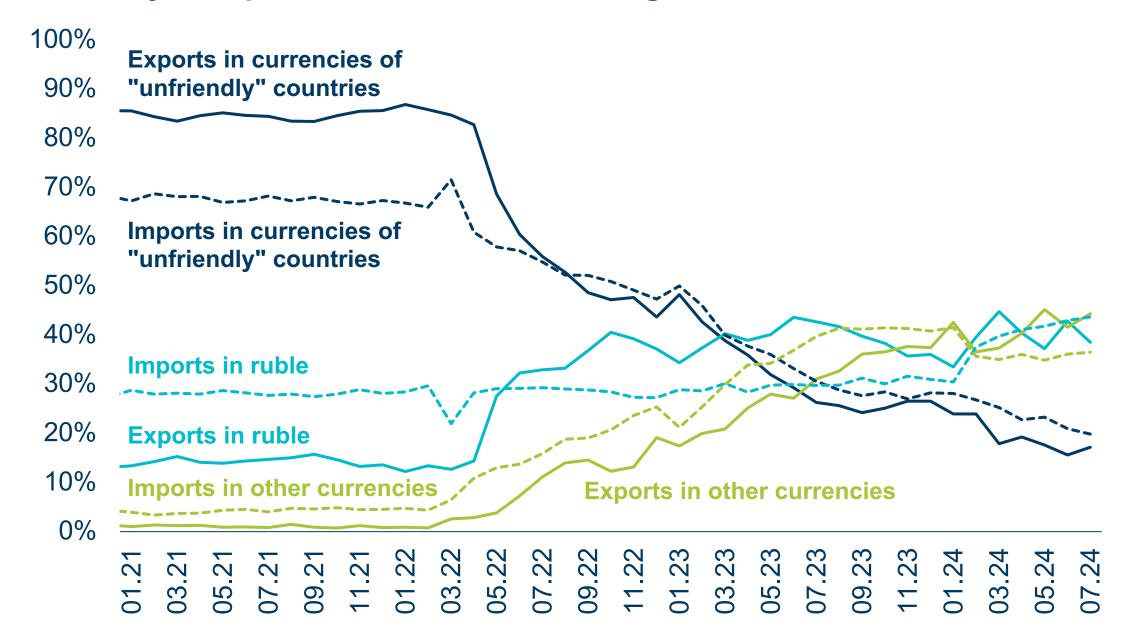
Source: Bank of Russia, KSE Institute



Change to currency composition of trade creates hard currency shortage.

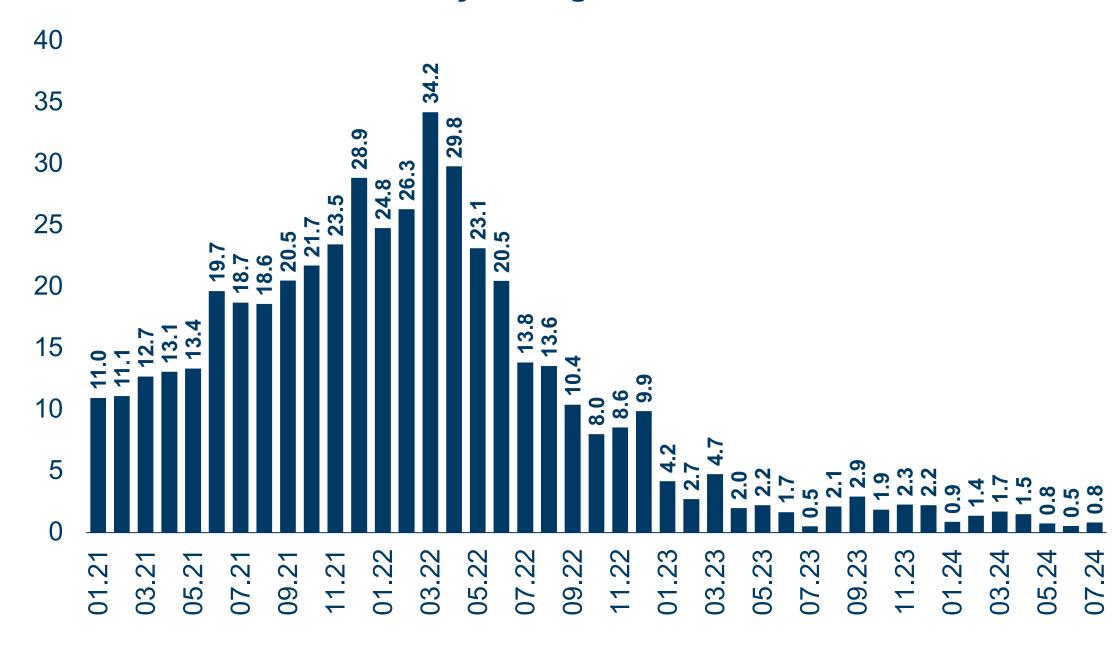
- The share of "unfriendly" countries' currencies (e.g., USD, EUR, GBP, JPY, CHF) in Russian trade has fallen sharply.
- Other currencies have risen for both exports and imports, while the ruble has gained importance mostly for exports.
- These shifts have created a shortage of hard currency as net inflows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



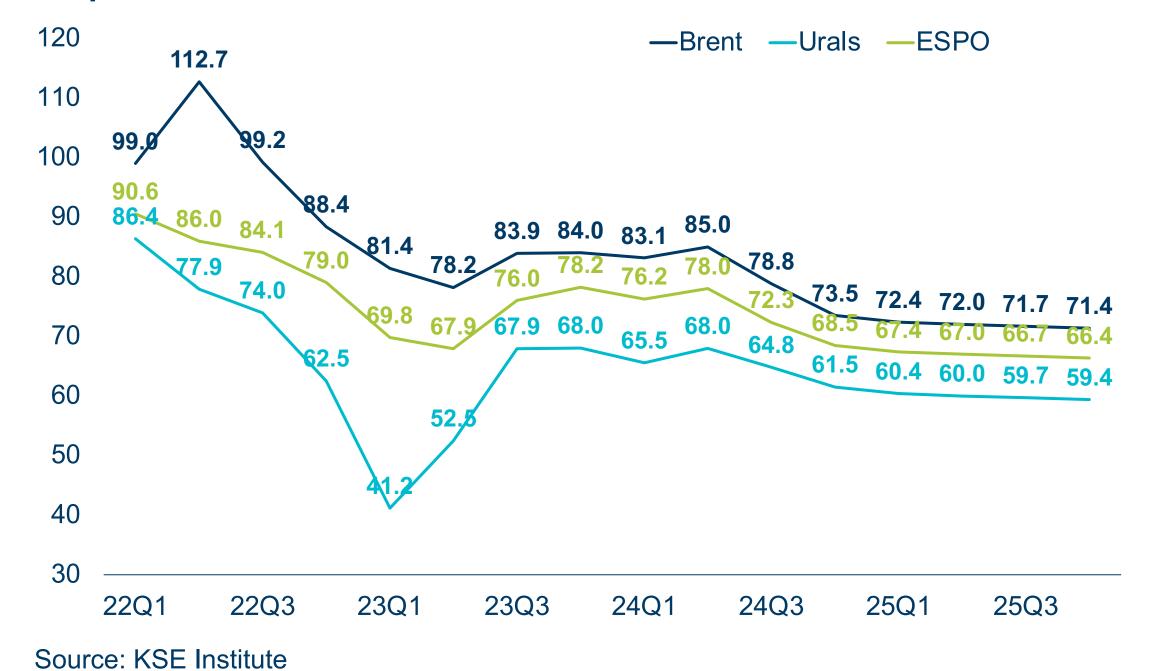
Source: Bank of Russia, KSE Institute *includes currencies of "unfriendly" countries



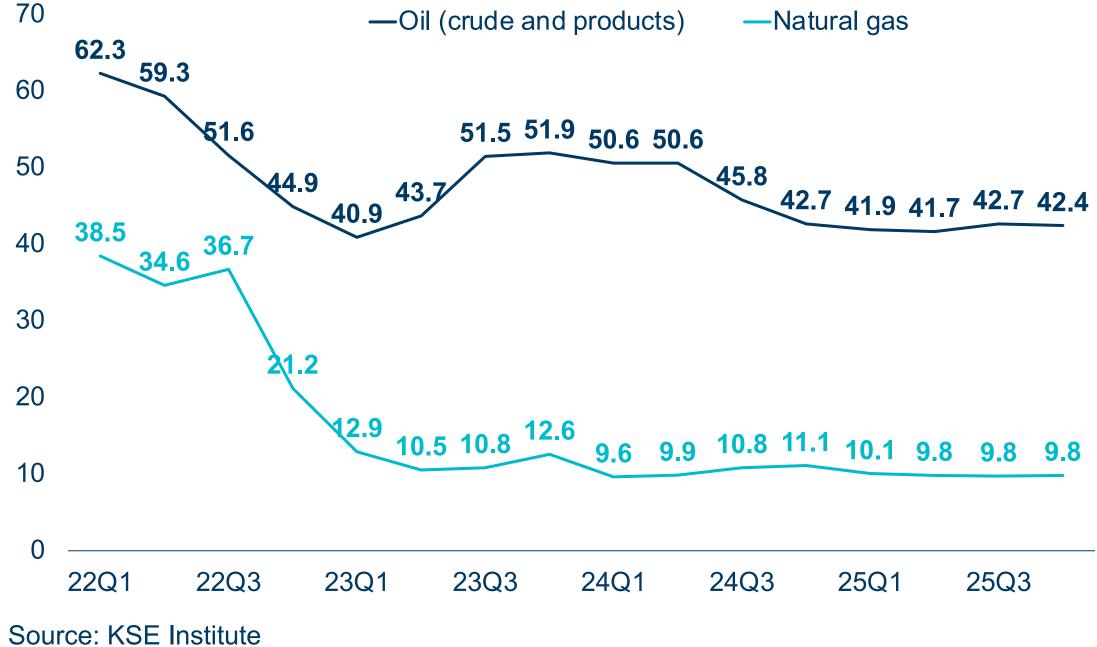
Weak sanctions enforcement scenario is increasingly likely.

- It looks increasingly likely that our bearish scenario of weak energy sanctions enforcement is materializing.
- This scenario assumes an Urals discount of \$12/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

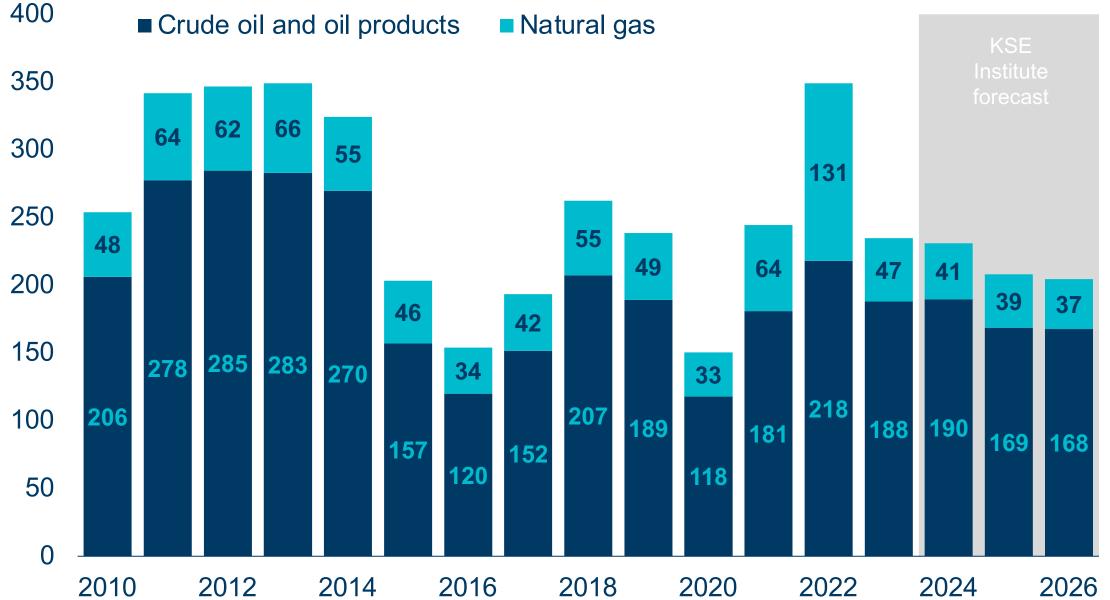




Current account surplus to improve markedly this year.

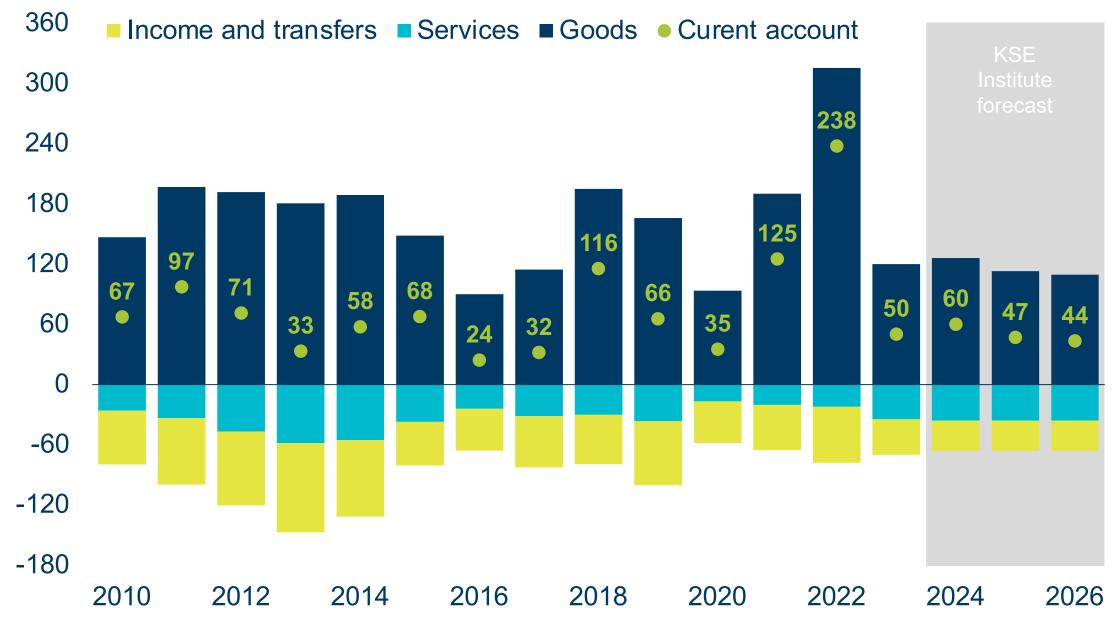
- O&G exports are projected to fall to \$231 billion in 2024 and further to \$208 billion in 2025 (vs. \$235 billion in 2023).
- As a result, the current account surplus is set to increase to \$60 billion this year before declining to \$47 billion in 2025.
- In terms of its external accounts, this leaves 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 keep deficit contained despite significantly higher spending; budget financing not a challenge for the time being.



Sharp rise in revenues significantly improved fiscal situation.

- In January-August 2024, Russia's budget deficit decreased to 0.3 billion rubles, 16% of the full-year plan.
- O&G revenues were 56%, non-O&G revenues 27%, and expenditures 22% higher vs. January-August 2023.

35 000

30 000

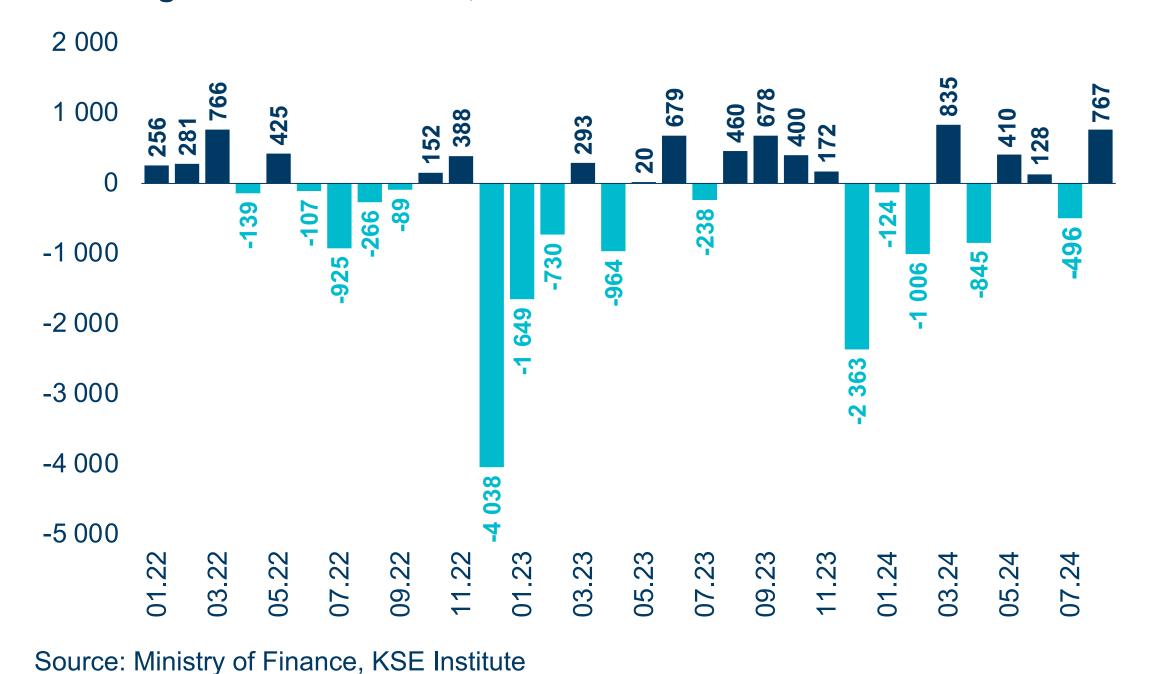
25 000

20 000

15 000

It is unlikely that Russia will face any serious fiscal constraints that would affect planned military spending.

Federal government balance, in ruble billion





Total revenues O&G revenues Other revenues Expenditures Budget balance

Source: Ministry of Finance, KSE Institute

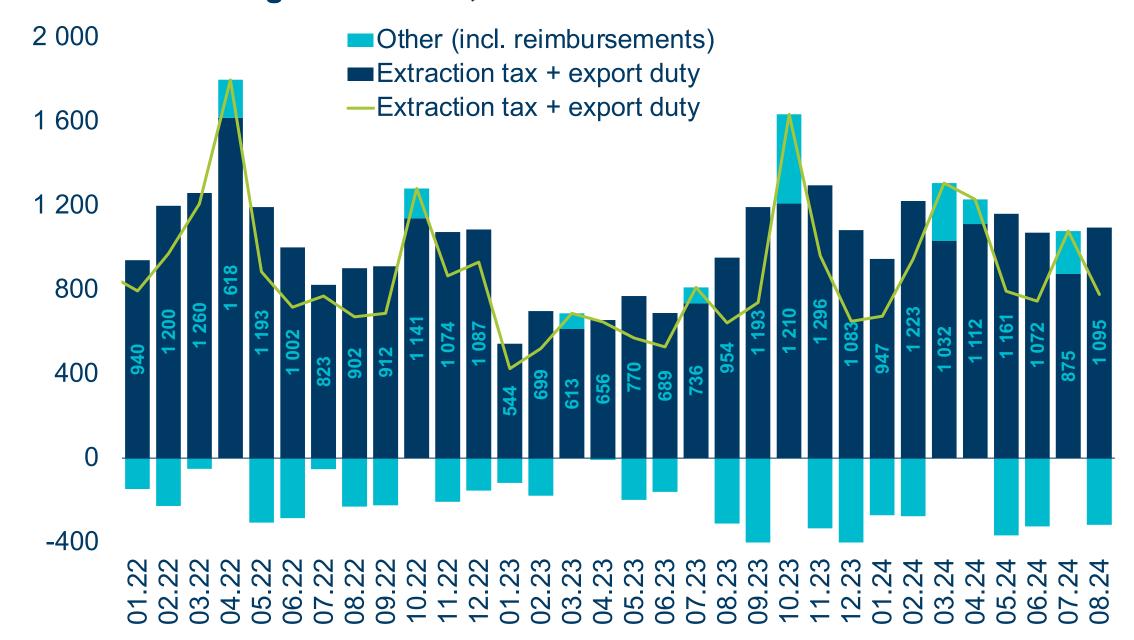
Revenues and expenditures, in ruble billion



Strong oil and gas revenues provide support to the budget.

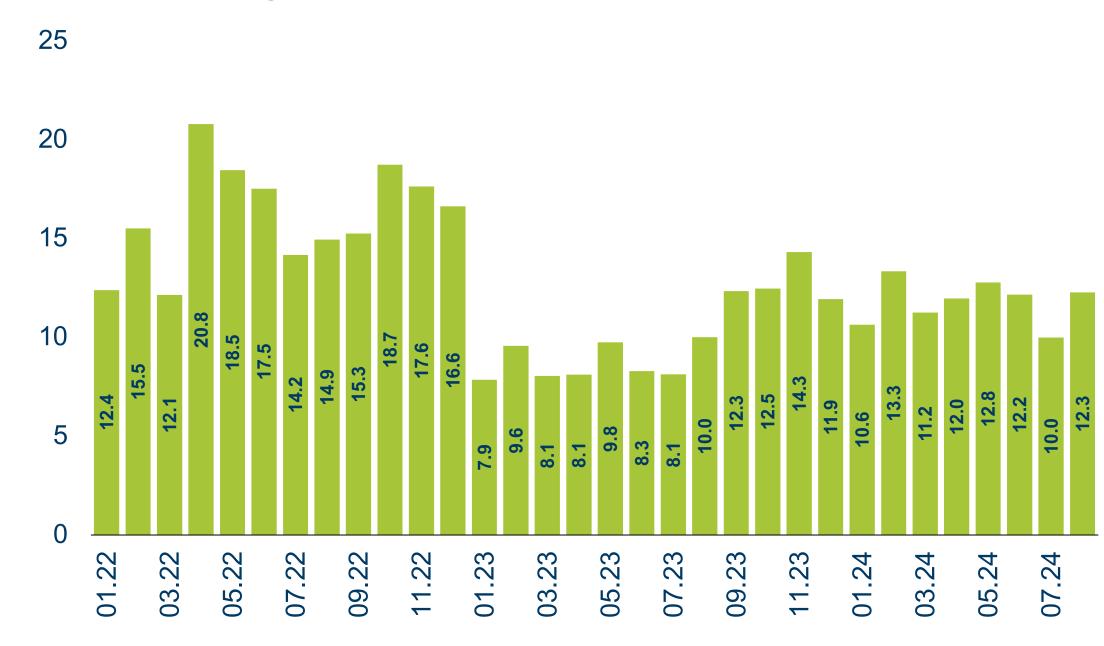
- O&G revenues from extraction taxes and export duties have averaged more than 1 trillion rubles this year.
- Total receipts over January-July 2024 (6.8 trillion) represent a 62% increase over the same period in 2023.
- With export prices at current levels, it is very unlikely that the Russian budget will come under pressure.

Federal oil and gas revenues, in ruble billion



Source: Ministry of Finance, KSE Institute

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



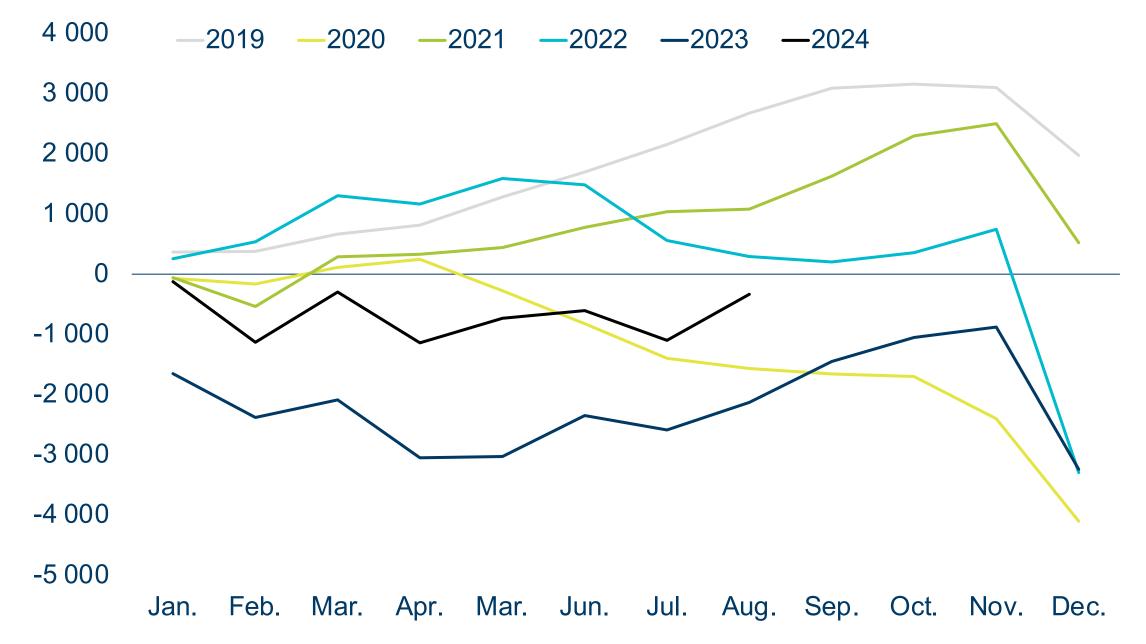
Source: International Monetary Fund, Ministry of Finance, KSE Institute
*includes extraction tax and export duty; calculated with monthly average exchange rate



Contained budget deficit means financing is not a challenge.

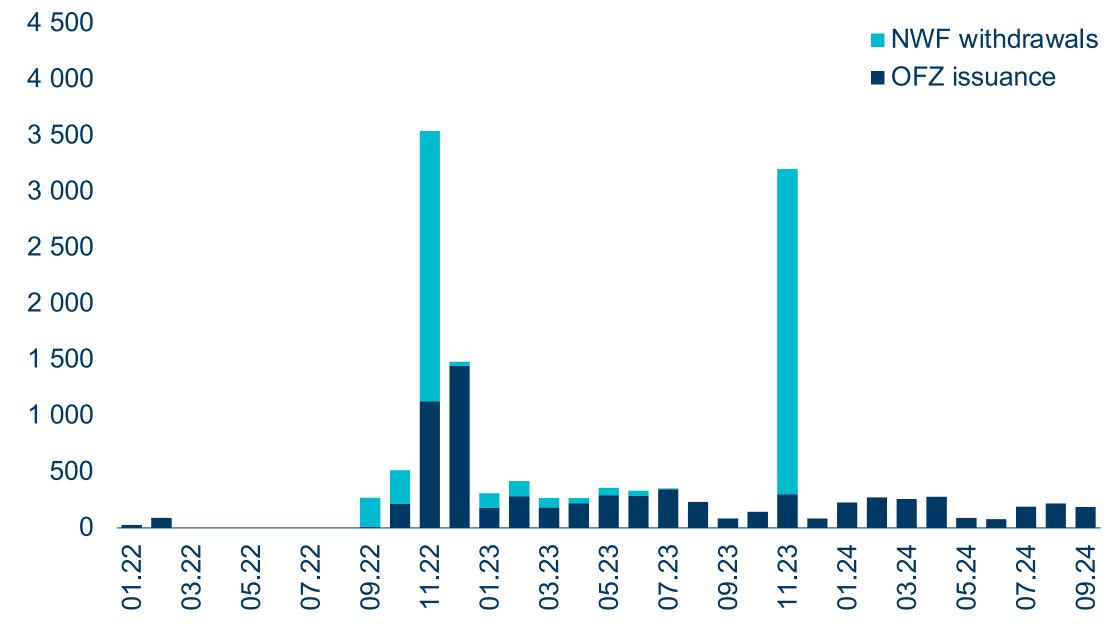
- The January-August 2024 deficit is 84% smaller compared to 2023, albeit expenditures are up sharply due to the war.
- Due to the improved fiscal situation, Russia has been able to finance the budget via moderate domestic debt issuance.
- There are some risks to the outlook, including an economic slowdown, but Russia will likely stay within its budget target.

Cumulative federal budget balance, in ruble billion



Source: Ministry of Finance, KSE Institute

Key fiscal financing channels, in ruble billion



Source: Ministry of Finance, KSE Institute

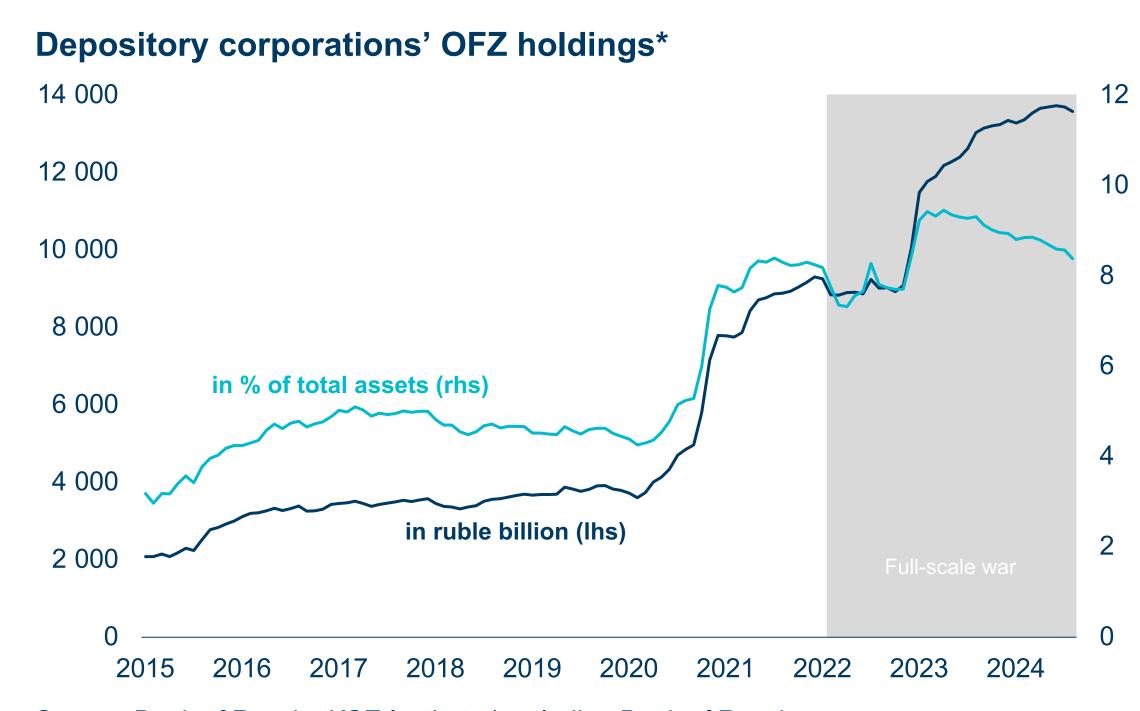


Source: Bank of Russia, KSE Institute

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 1.35 trillion rubles (or 49%) since October 2022 as bonds matured.
- Credit institutions' holdings of OFZs, on the other hand, have risen significantly over the same period.

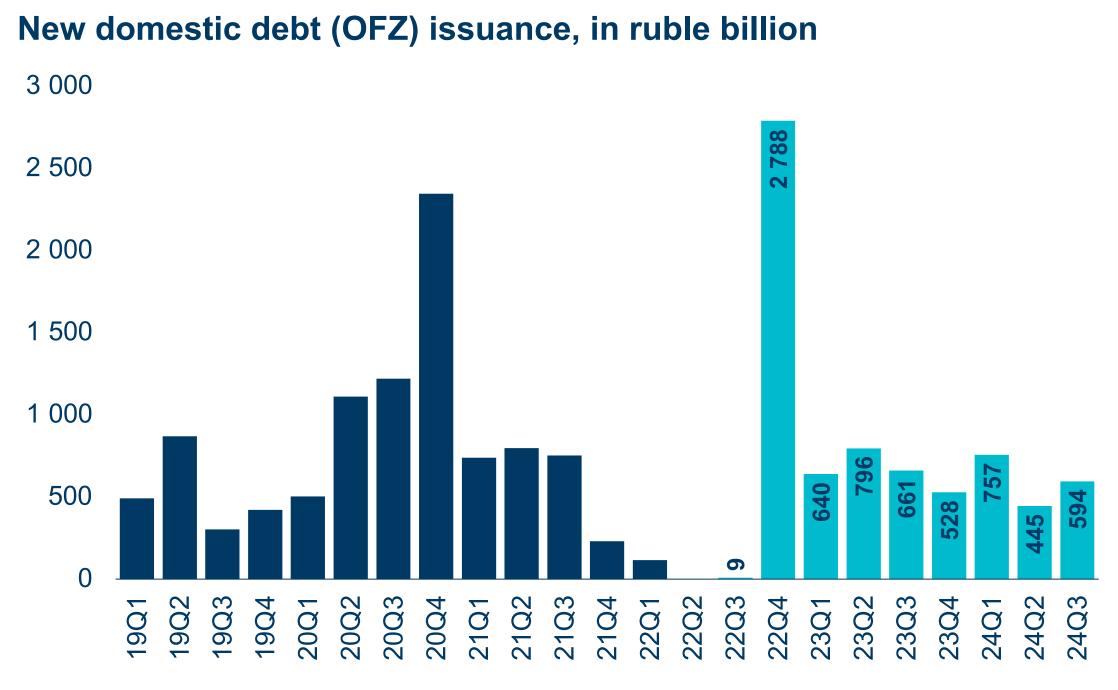
Non-resident OFZ holdings 4 000 40 3 500 35 in % of total OFZ market (rhs) 30 2 500 25 2 000 15 1 500 10 1 000 in ruble billion (lhs) 500 5 0 2012 2014 2018 2020 2022 2024 2016



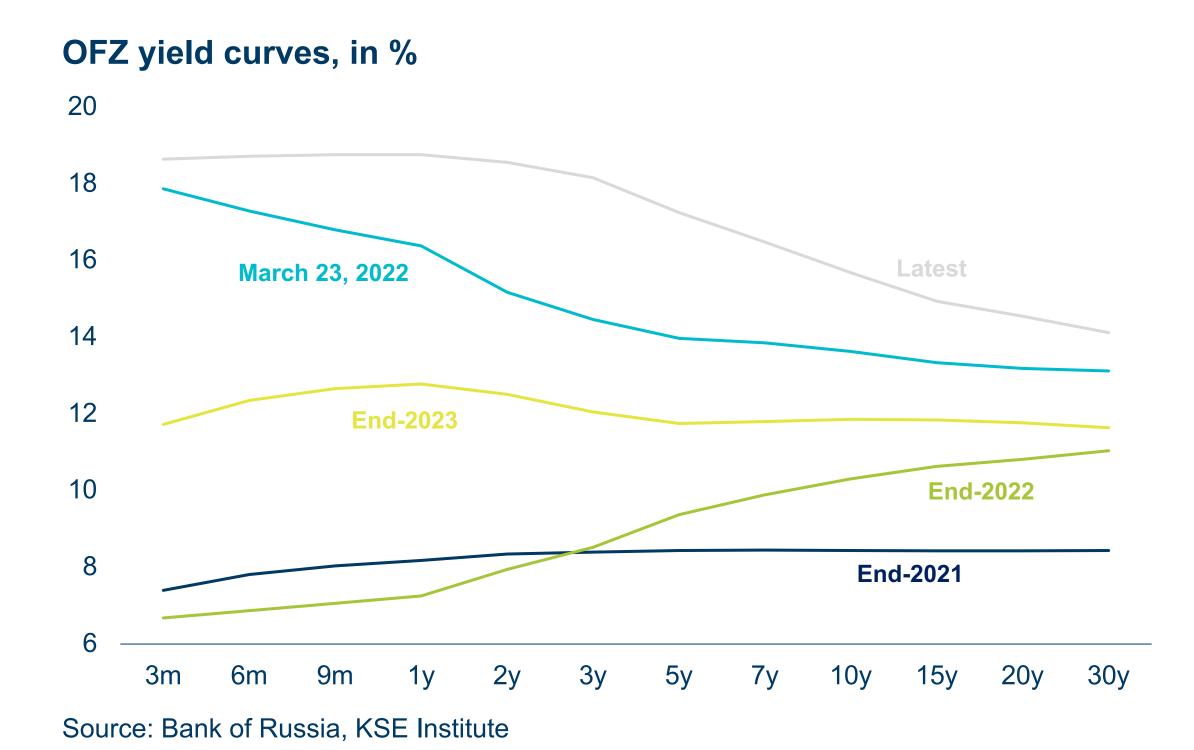


Domestic borrowing stable due to limited fiscal pressure.

- 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 1,050bps).
- Funding costs are higher but limited in their impact due to the small budget deficit.









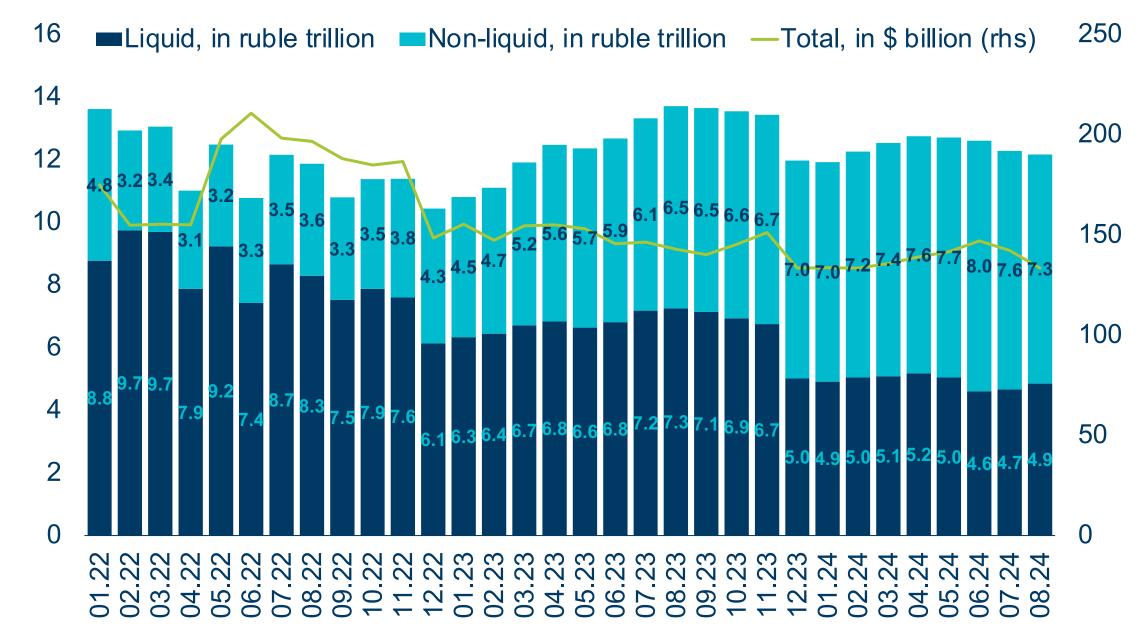
Macro buffers seriously depleted by war and sanctions; limited policy options in the case of further erosion of macroeconomic stability.



Half of the NWF's liquid assets have been used up since February 2022.

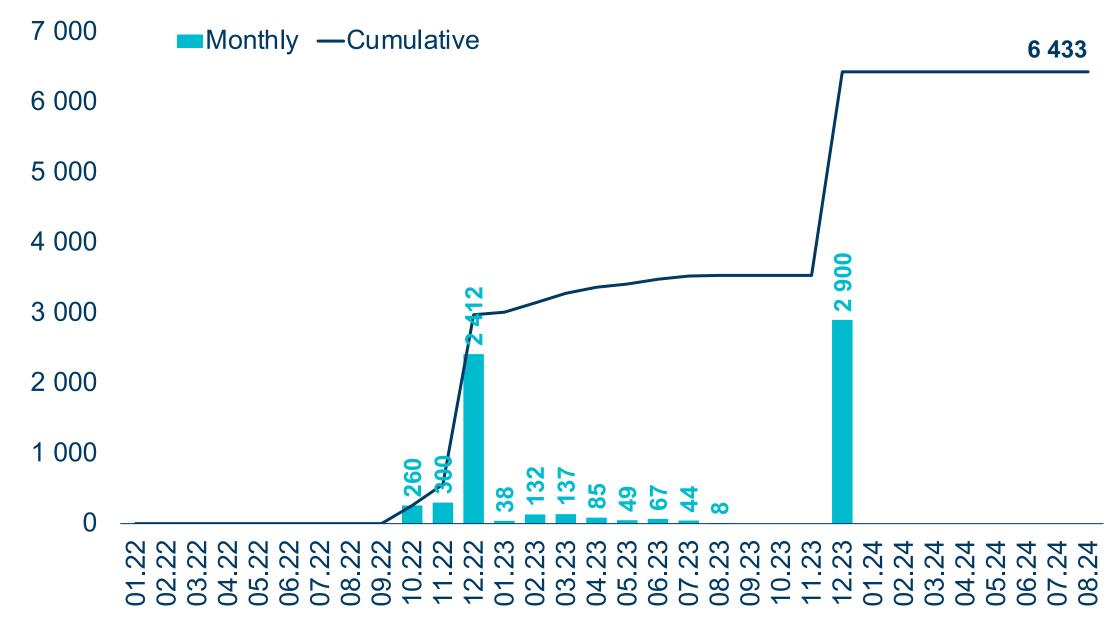
- Total assets of the National Welfare Fund stood at 12.3 trillion rubles (\$133 billion, 6.4% of GDP) in August 2024.
- The liquid portion now only accounts for 40% of the total as a stronger ruble weighs on the local currency value.
- Since the start of the full-scale war, Russia has used half (~4.9 trillion) of the 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.

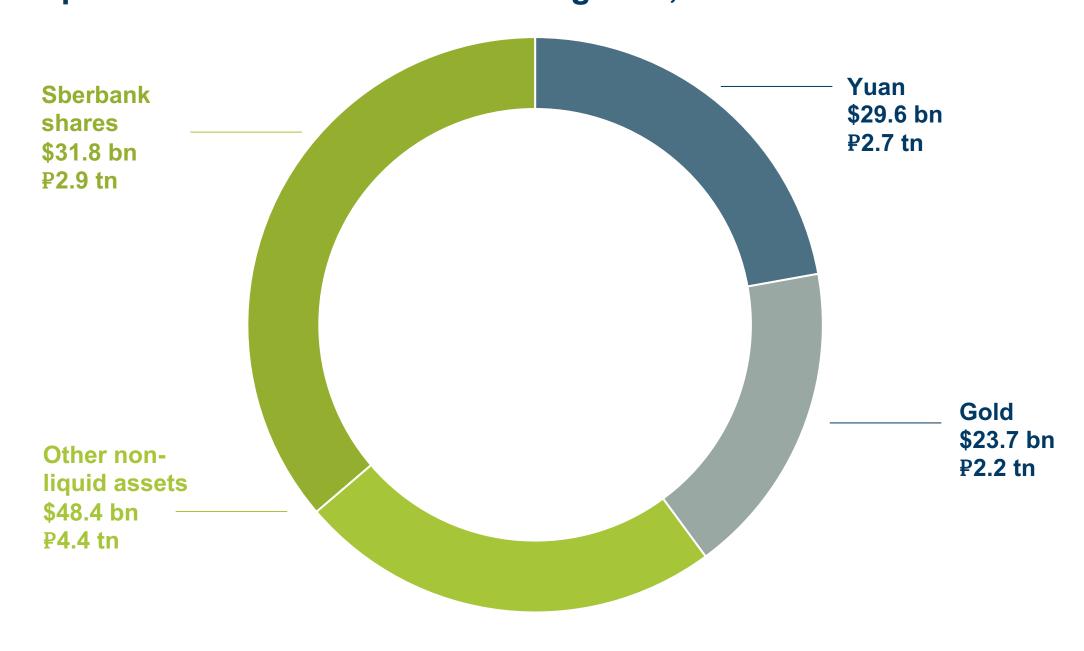
- Russia has depleted all hard-currency holdings of the NWF, with euro assets falling to zero in December 2023.
- Only yuan-denominated assets and gold remain in the liquid portion, totaling 4.9 trillion rubles (or \$53 billion).
- As these are more difficult to use, at least at scale, budgetary funding via the NWF will become more challenging.

Change in liquid assets (Sep. 2024 vs. Jan. 2022), in U.S. dollar billion



Source: Ministry of Finance, KSE Institute

Composition of NWF assets as of August 1, 2024*



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



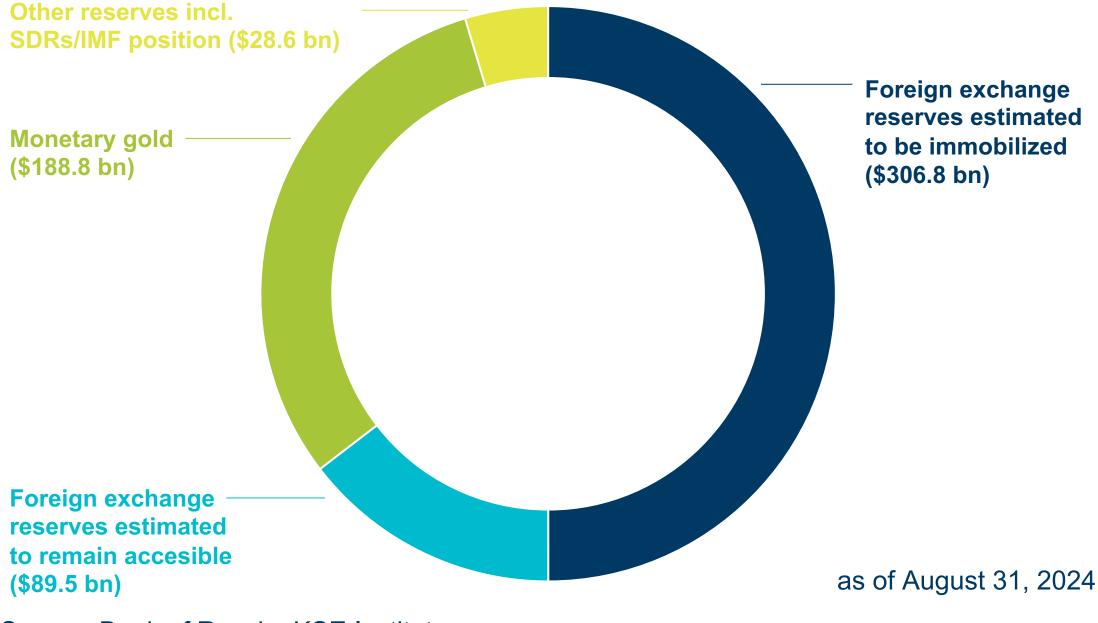
Source: Bank of Russia, KSE Institute

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 \$307 billion are currently immobilized due to international sanctions on CBR and NWF.
- This leaves Russia with access to \$189 billion in monetary gold and roughly \$90 billion in FX assets (largely yuan).

Total reserves, in U.S. dollar billion 700 650 Feb. 18, 2022: **\$643.2** billion 600 550 400 350 2022 2024 2010 2012 2014 2016 2018 2020

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



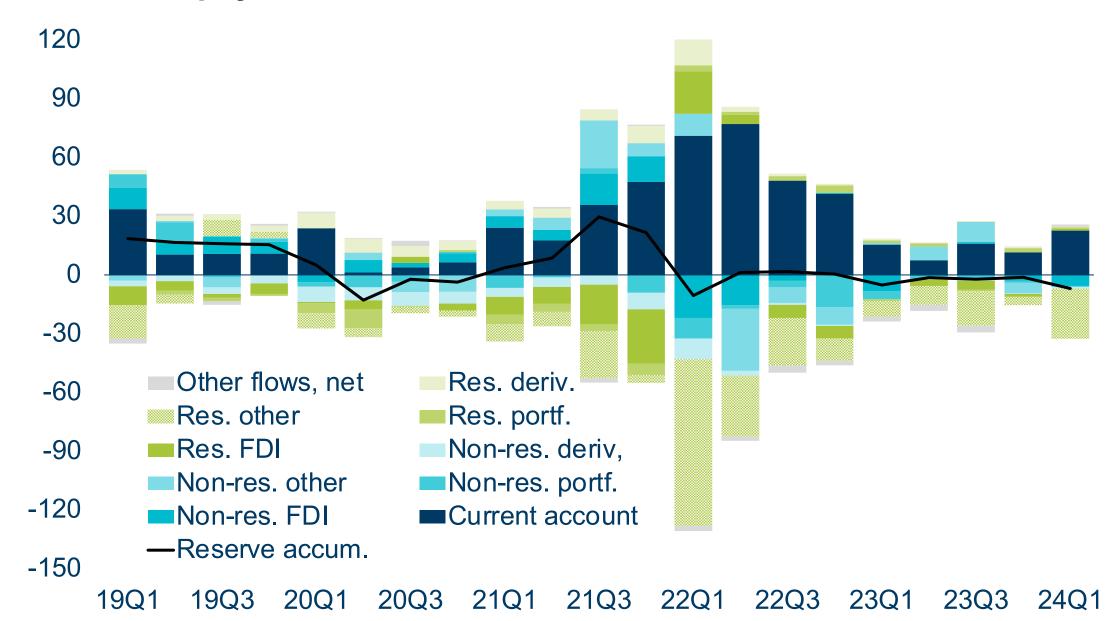
Source: Bank of Russia, KSE Institute



Significant accumulation of new foreign assets since 2022.

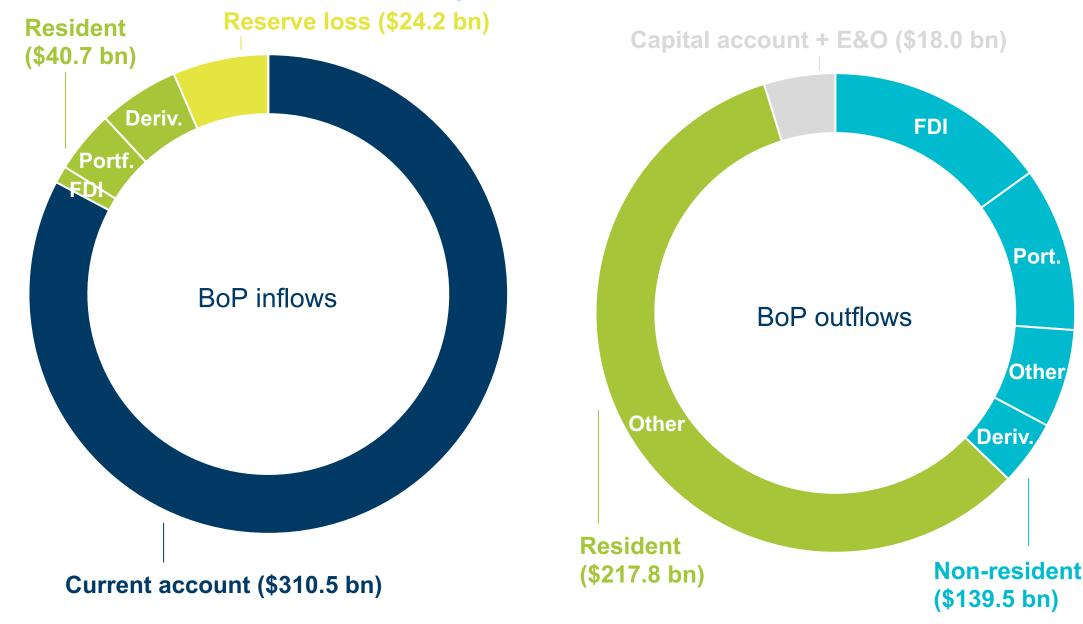
- With the ruble under pressure and regular reserves immobilized, it is time to focus on other Russian assets abroad.
- Non-resident capital outflows partially ate up the large current account surplus and resident inflows in Q1 2022-Q1 2024.
- But Russian banks and corporates were able to acquire \$218 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

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



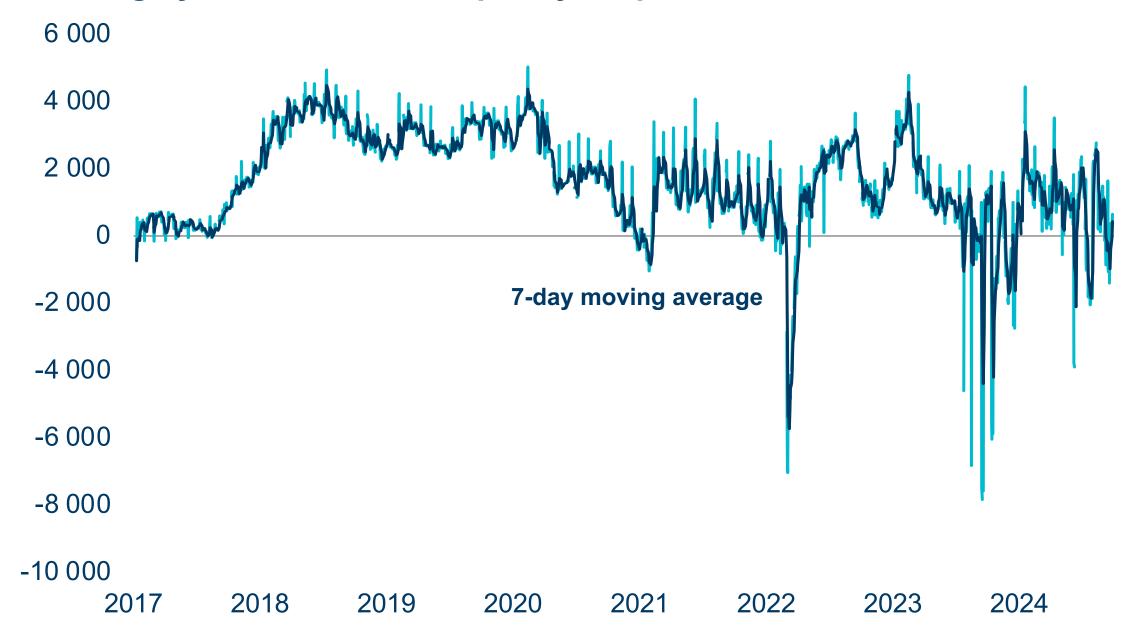
Source: Bank of Russia, KSE Institute



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

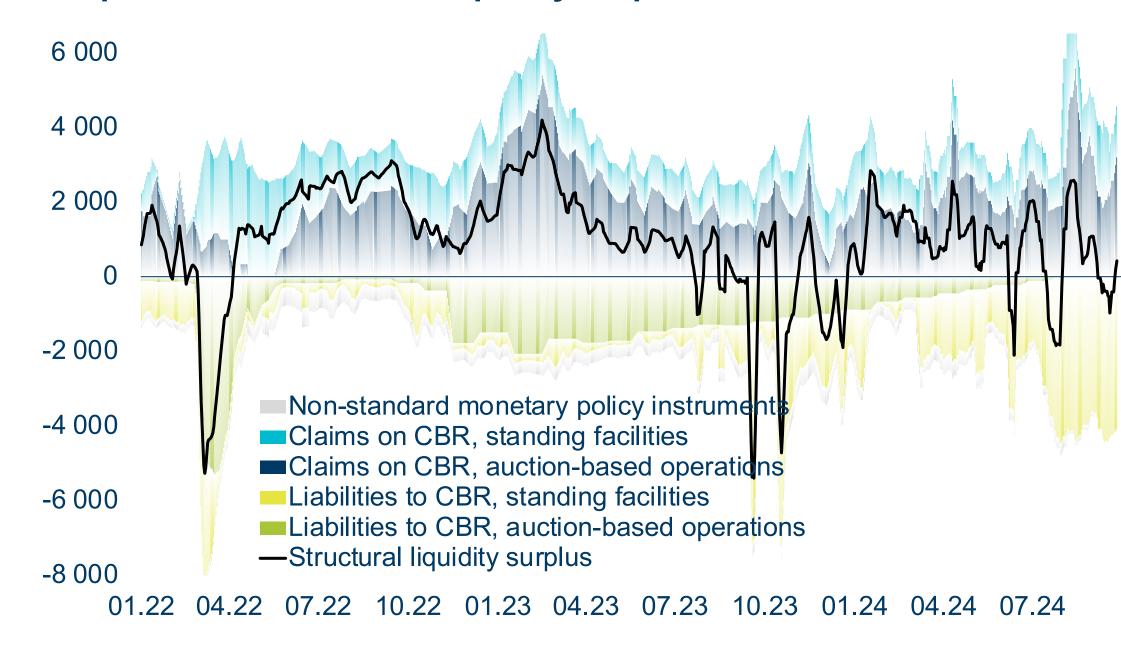
- Liquidity conditions recovered quickly after the initial shock from the full-scale war and imposition of sanctions.
- A closer look at the composition of the structural liquidity surplus points to some stress in the interbank market.
- The data clearly shows the effects of the CBR's monetary tightening since mid-2023 (cumulative +1,150 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

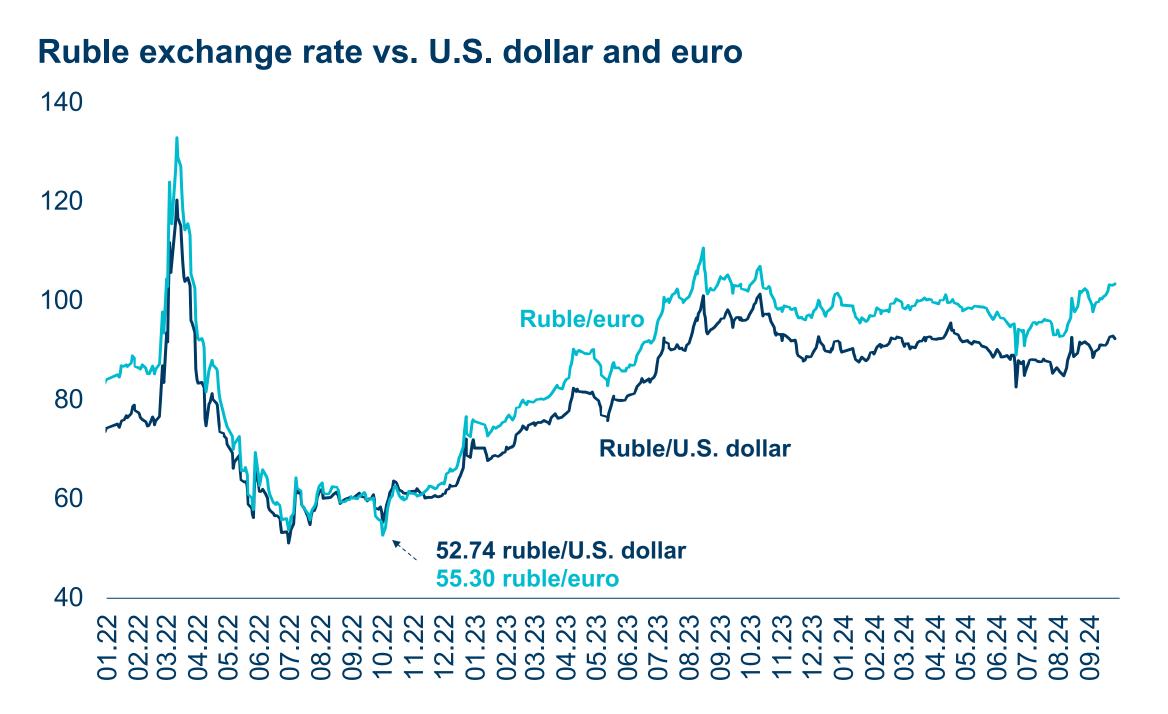


Inflation elevated despite CBR tightening; tight labor market, government spending, and significant credit growth create pressure.

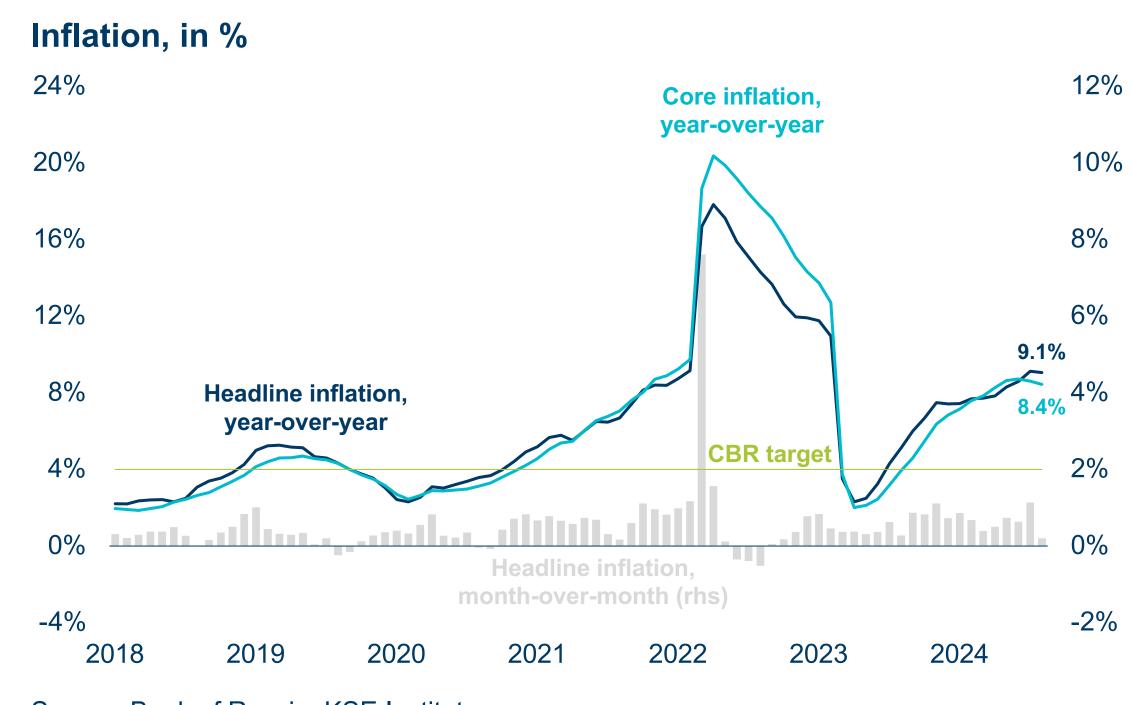


Ruble has been broadly stable, but inflation continues to rise.

- The ruble exchange rate was stable for around a year but has come under pressure again in recent weeks.
- Altogether, Russia's currency lost 40% of its value vs. the dollar and 49% vs. the euro since the fall of 2022.
- Despite a broadly stable exchange rate, inflation has persistently risen for 1.5 years, reaching 9.1% in Jul.



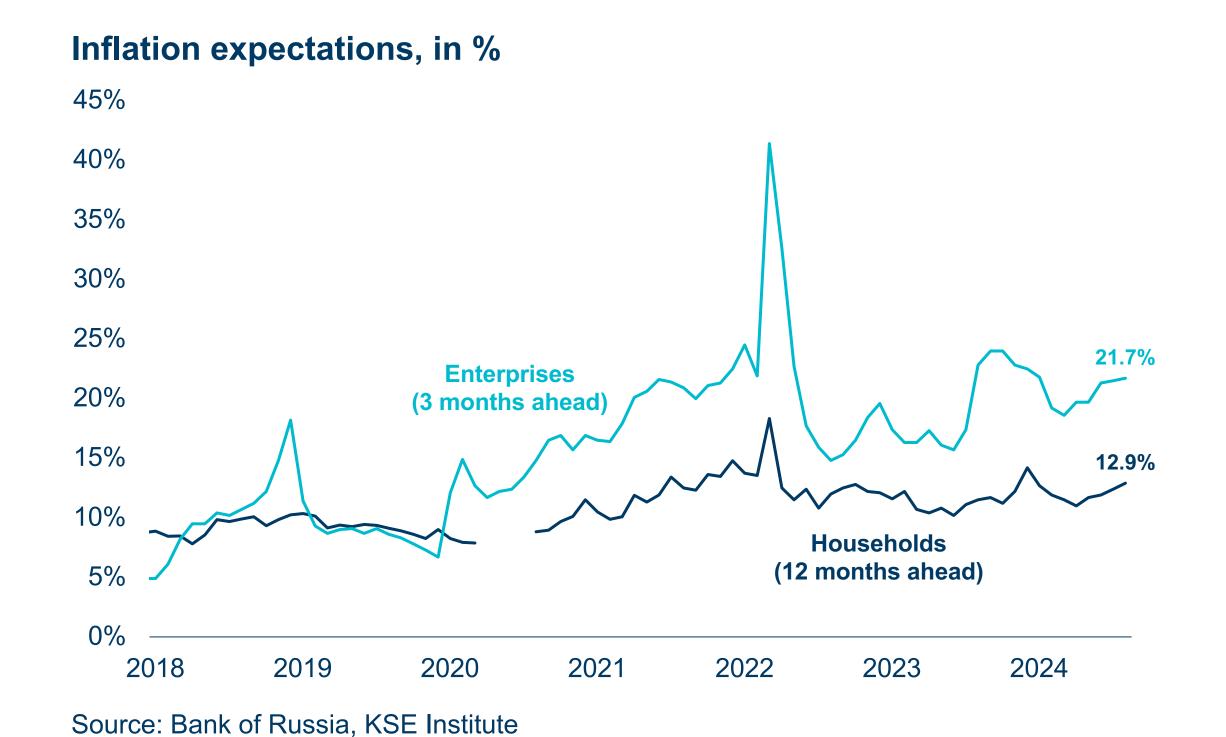


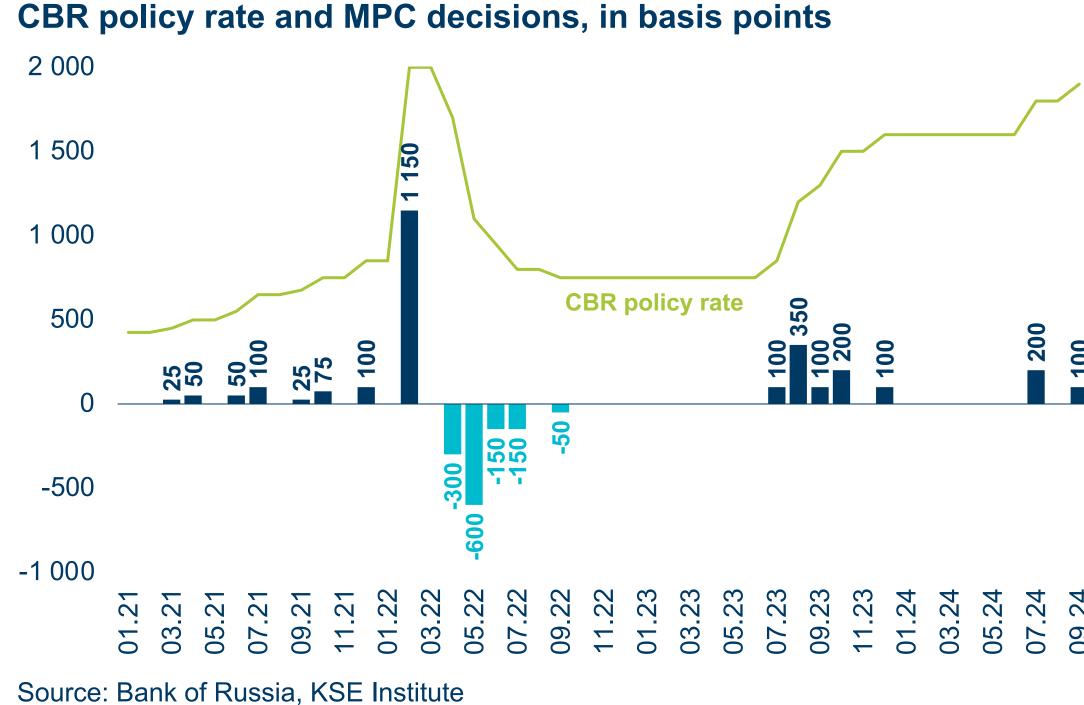




CBR has been forced to undertake dramatic monetary tightening.

- These inflation dynamics have forced the CBR to hike interest rates once again—by 100 bps.
- Cumulative hikes of 1,150 bps have brought the key rate within 100 bps of its March 2023 value.
- So far, significant tightening of monetary policy has failed to bring rising inflation under control.



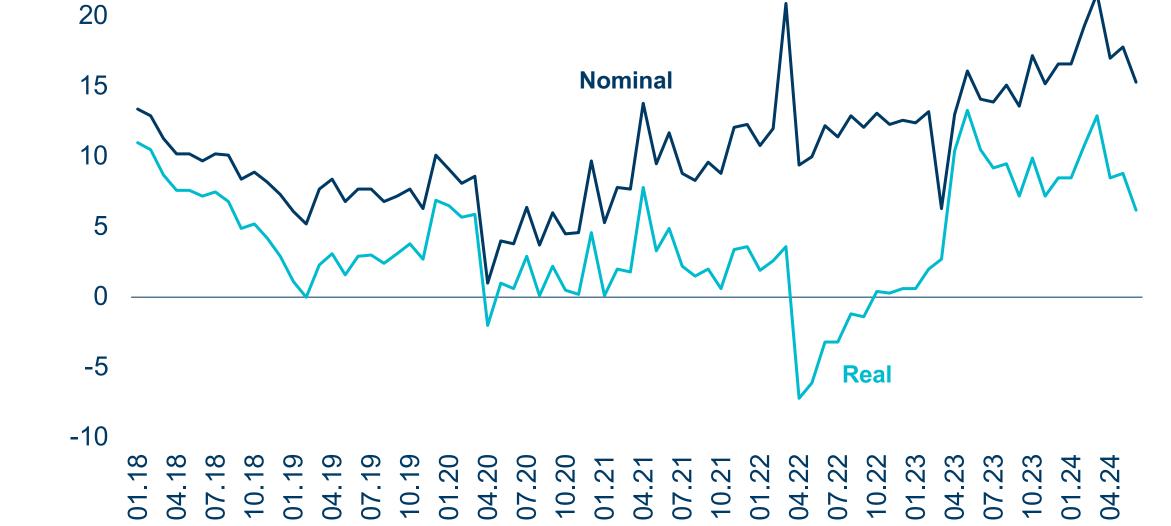




Source: Rosstat

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 15.3% in June.
- In addition to creating inflationary pressures, the economy has effectively no spare capacity left to draw from.



Wage growth, in % year-over-year

25

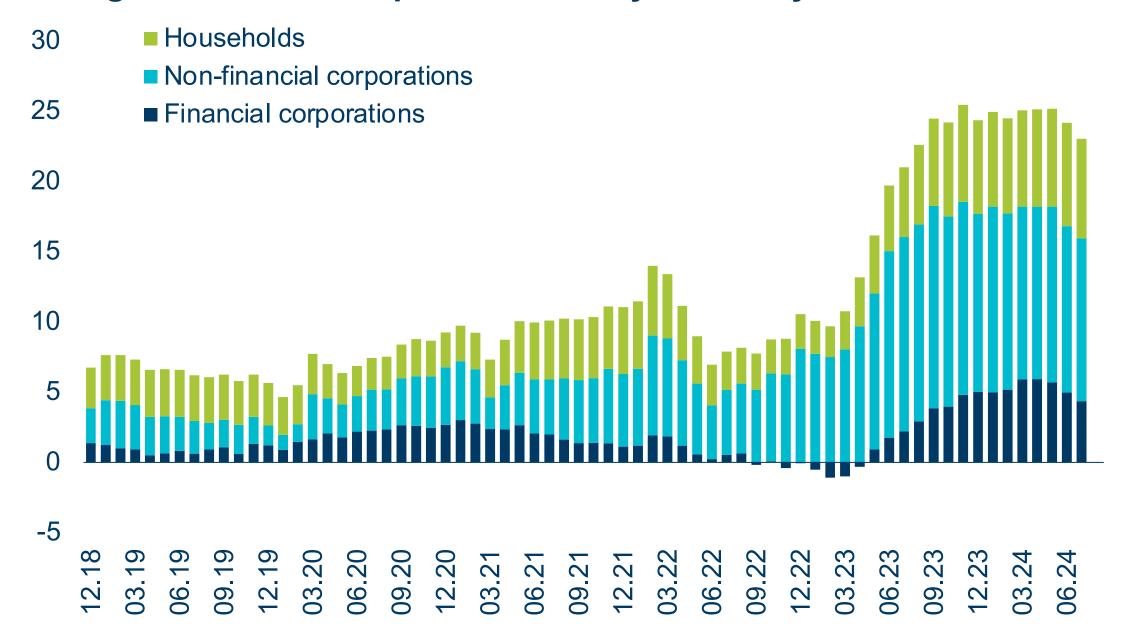
Source: Rosstat



Significant credit growth also makes CBR's job harder.

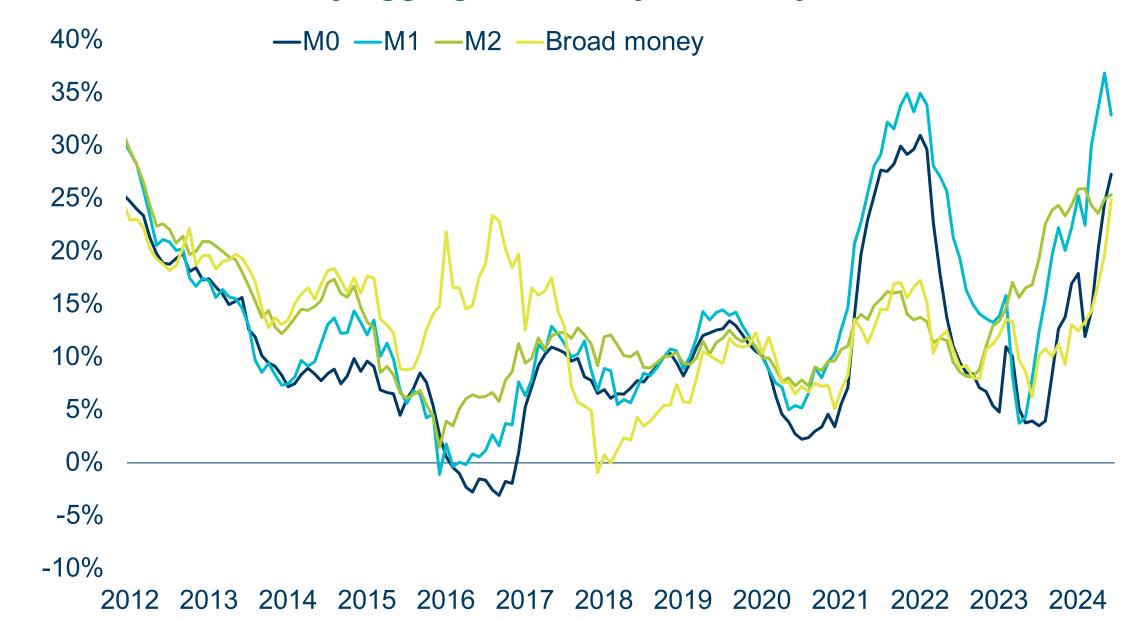
- Credit to the private sector, especially households and non-financial corporations, has grown sharply since early 2023.
- This is on top of the substantial amounts of money that the government has inserted into the economy via the budget.
- Monetary aggregates also reflect that the system is flush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

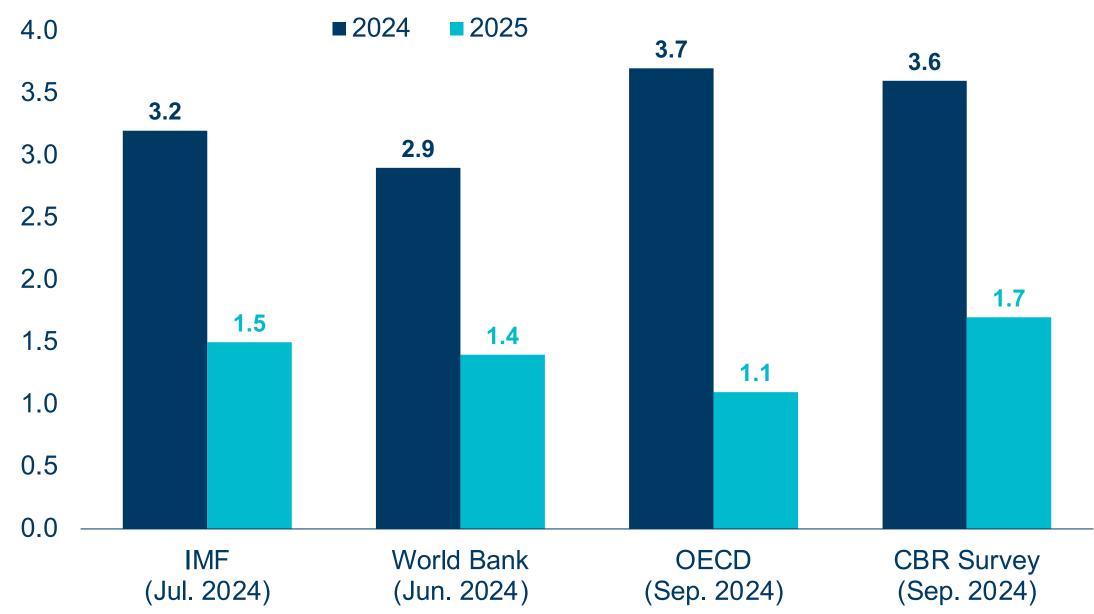


The Russian economy is projected to grow more slowly going forward.

- Real GDP growth in Q2 2024 was reported at 4.1% year-over-year by Russia's statistics agency Rosstat.
- This is slightly lower than in the previous four quarters but still points to a robust economic performance.
- Most institutions, including IMF, World Bank, and CBR, project that growth will decline significantly in 2025.

Quarterly real GDP dynamics, in % 15 11.4 10 5 3.5 - 2.8 - 1.8 - 1.6 -10 quarter-over-quarter (seasonally adjusted) —year-over-year (not seasonally adjusted) -15 24Q1 20Q3 21Q1 21Q3 22Q1 22Q3 23Q1 23Q3 20Q1 Source: Rosstat, KSE Institute

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

- August 2024
- July 2024
- June 2024
- May 2024
- April 2024
- March 2024
- February 2024
- January 2024

- December 2023
- November 2023
- October 2023
- September 2023
- July 2023
- May 2023
- April 2023
- March 2023
- February 2023

December 2022