

# KSE INSTITUTE RUSSIA CHARTBOOK

## WHAT TO WATCH FOR IN 2024: EXTERNAL CONDITIONS UNDERMINE MACRO STABILITY, CRITICAL BUFFERS UNDER PRESSURE

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## Executive Summary

- 1. External environment has become dramatically less supportive.** The most important change to Russia' macroeconomic situation over the past 12 months has been the sharp deterioration of its external balance. In 2023, total goods exports reached \$423 billion, a decline of 29% vs. the previous year. This has contributed to much smaller trade (\$118 billion, -63%) and current account (\$50 billion, -79%) surpluses and is fundamentally eroding macroeconomic stability. As a result of sharply lower inflows of foreign currency, the ruble has lost ~40% of its value against euro and U.S. dollar since the fall of 2022. In turn, this has increased inflationary pressures and forced the CBR to hike interest rates by cumulative 850 bps as well as reintroduce capital controls.
- 2. Signs of stepped-up energy sanctions enforcement having impact.** Following a period during which the price cap's shortcomings had become apparent and threatened the overall effectiveness of the energy sanctions regime, coalition authorities have stepped up enforcement measures, including by modifying the ineffective attestations system and by imposing sanctions on entities as well as vessels involved in price cap violations. These measures appear to have an effect already. The discount on Russian oil vs. Brent, which is the key mechanism through which export earnings are driven down, has started to widen again in recent months. Should similar steps be taken in the coming months, Russia's external balance could approach a critically low level.
- 3. Macro buffers under stress due to the war and sanctions.** While the 2023 budget deficit reached only 1.9% of GDP and rising non-oil and gas revenues allowed authorities to spend 3 trillion rubles more than originally expected, financing is set to become more challenging. With external sources cut off due to sanctions, Russia has had to rely primarily on the National Welfare Fund. In fact, almost half of the fund's liquid assets, including all hard currency, have been used up since the start of the full-scale invasion. Going forward, the Russian banking system will likely have to carry more of the burden by buying up domestic debt issuance. Sanctions have also significantly constrained access to foreign reserves and limited policy space for the central bank.
- 4. Robust economic recovery conceals underlying vulnerabilities.** The Russian economy is benefitting from a large war-related fiscal stimulus, which will become even stronger this year. A dramatic increase in military spending could add around 2.5pp to GDP growth in 2024. Thus, it is not surprising that economic activity has essentially fully rebounded from the initial shock due to the war and sanctions. However, the underlying fundamentals of the economy are weak, and problems will eventually resurface.

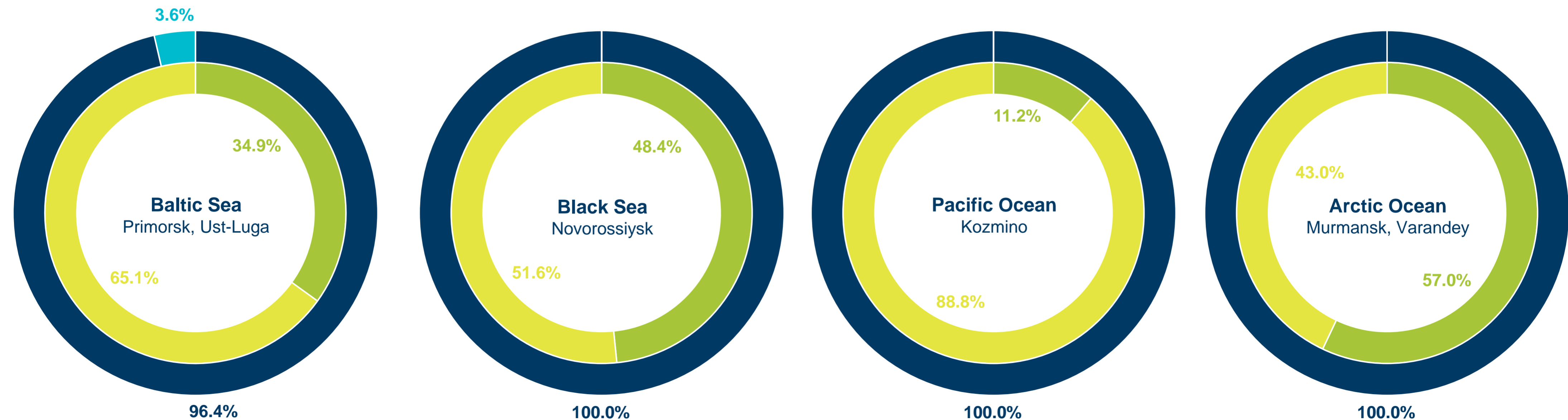
**Energy: stepped-up sanctions enforcement is showing early signs of success, but further action is needed to stop price cap violations and inhibit shadow fleet growth.**

## Data indicates that widespread violations of the price cap continue.

- In October-December 2023, more than 98% of Russian seaborne crude oil exports were likely sold above \$60/barrel.
- At the same time, close to one third of the total volume was shipped with the involvement of G7/EU service providers.
- This points to very low compliance with the price cap, likely via falsified pricing information (i.e., attestation fraud).

Read KSE's recent study [Bold Measures Are Needed as Russia's Oil is Slipping Beyond G7 Reach](#).

Seaborne exports of Russian crude oil in October-December 2023 by price and service provider



Source: KSE Institute

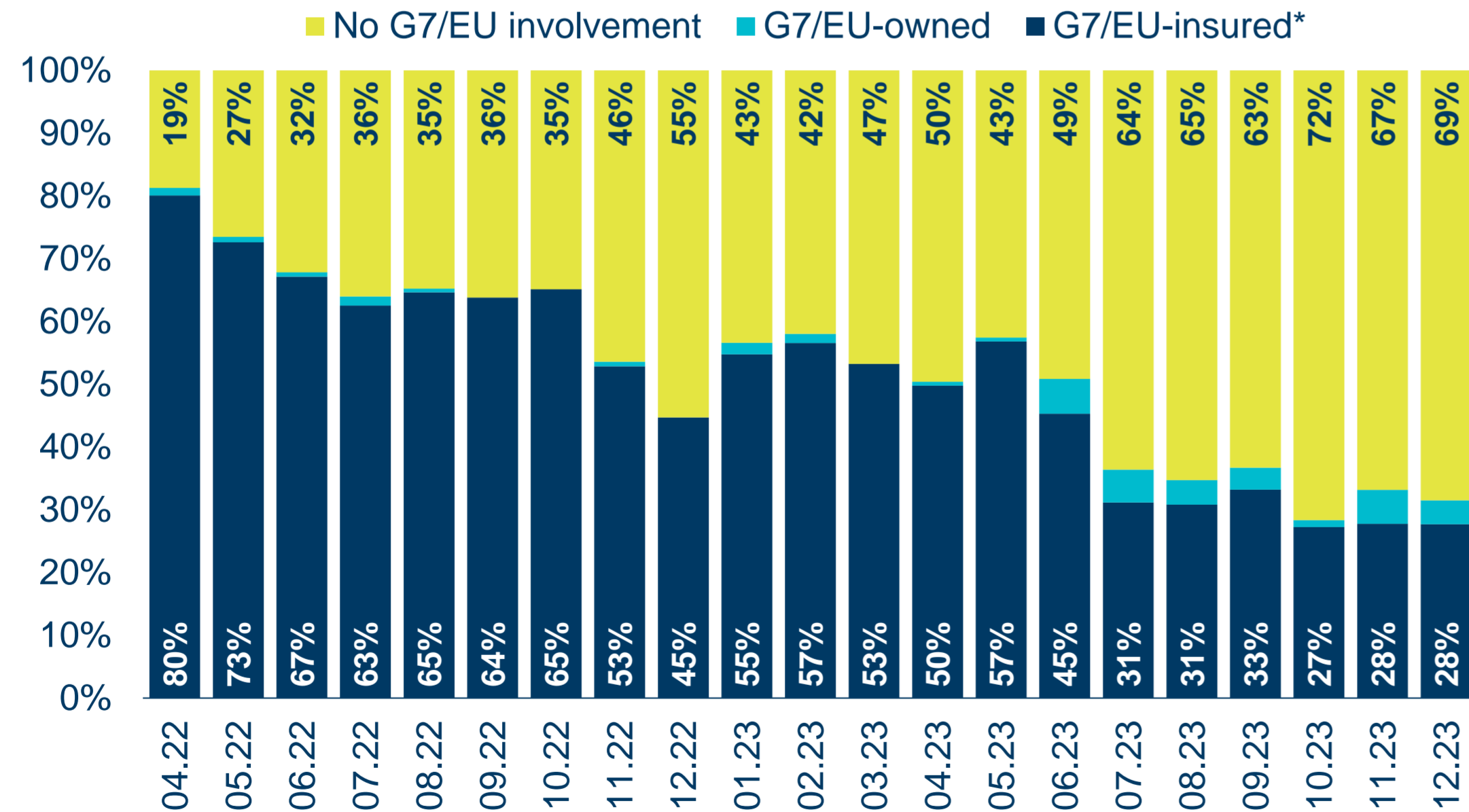
● Above \$60/barrel ● Below \$60/barrel ● With G7/EU services ● Without G7/EU services



## Fundamentally, the price cap's leverage remains under threat.

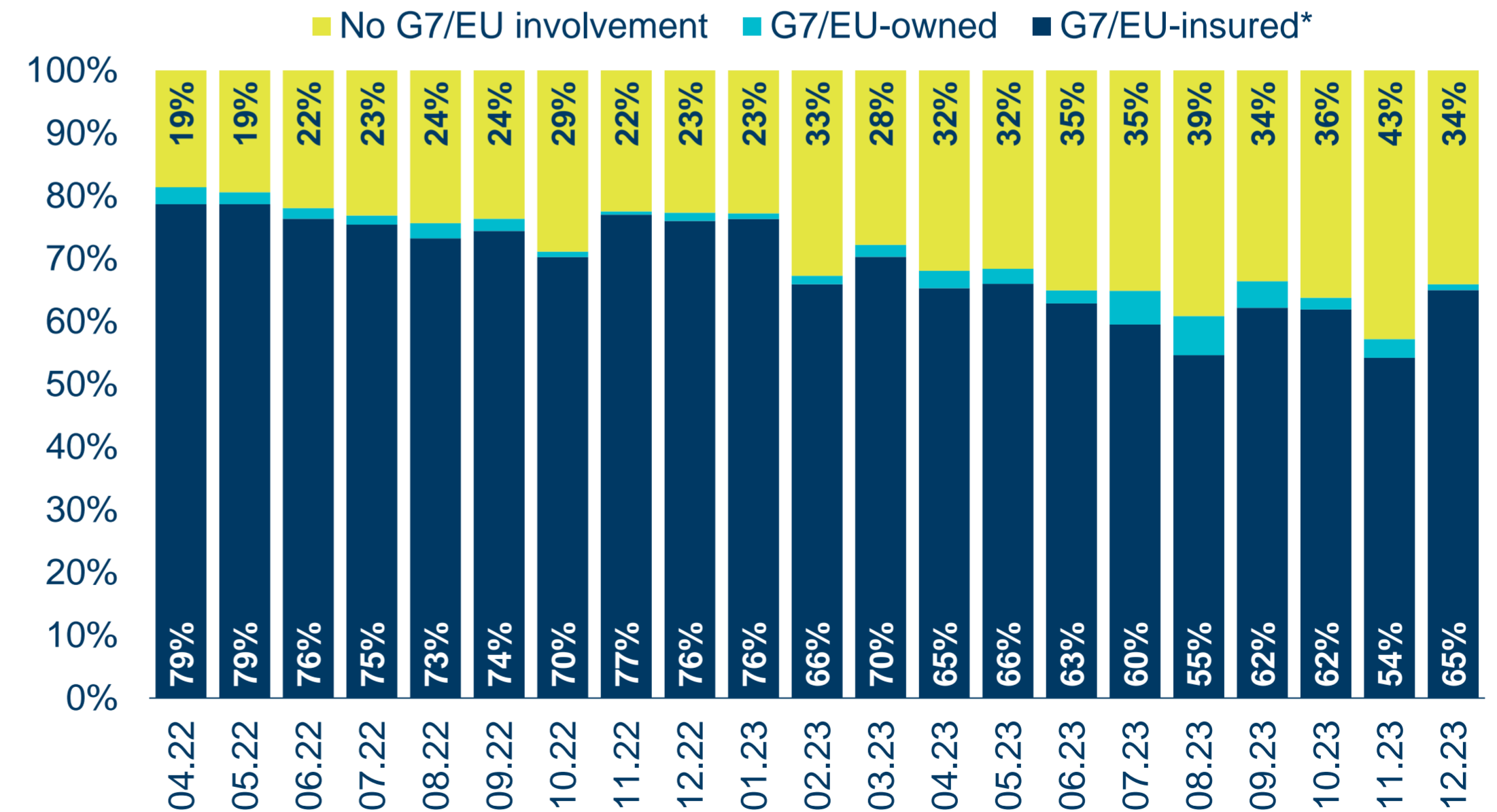
- Russia's reliance on G7/EU-owned and/or -insured vessels has fallen significantly in the case of crude oil.
- In H2 2023, their share stood at only 30%—a sharp drop from 51% in H1 2023 and 58% in H2 2022.
- Importantly, however, the shadow fleet's expansion has slowed down/stalled—at least for the time being.

Composition of Russian crude oil exports, in %



Source: Kpler, P&I Clubs, KSE Institute

Composition of Russian oil products exports, in %

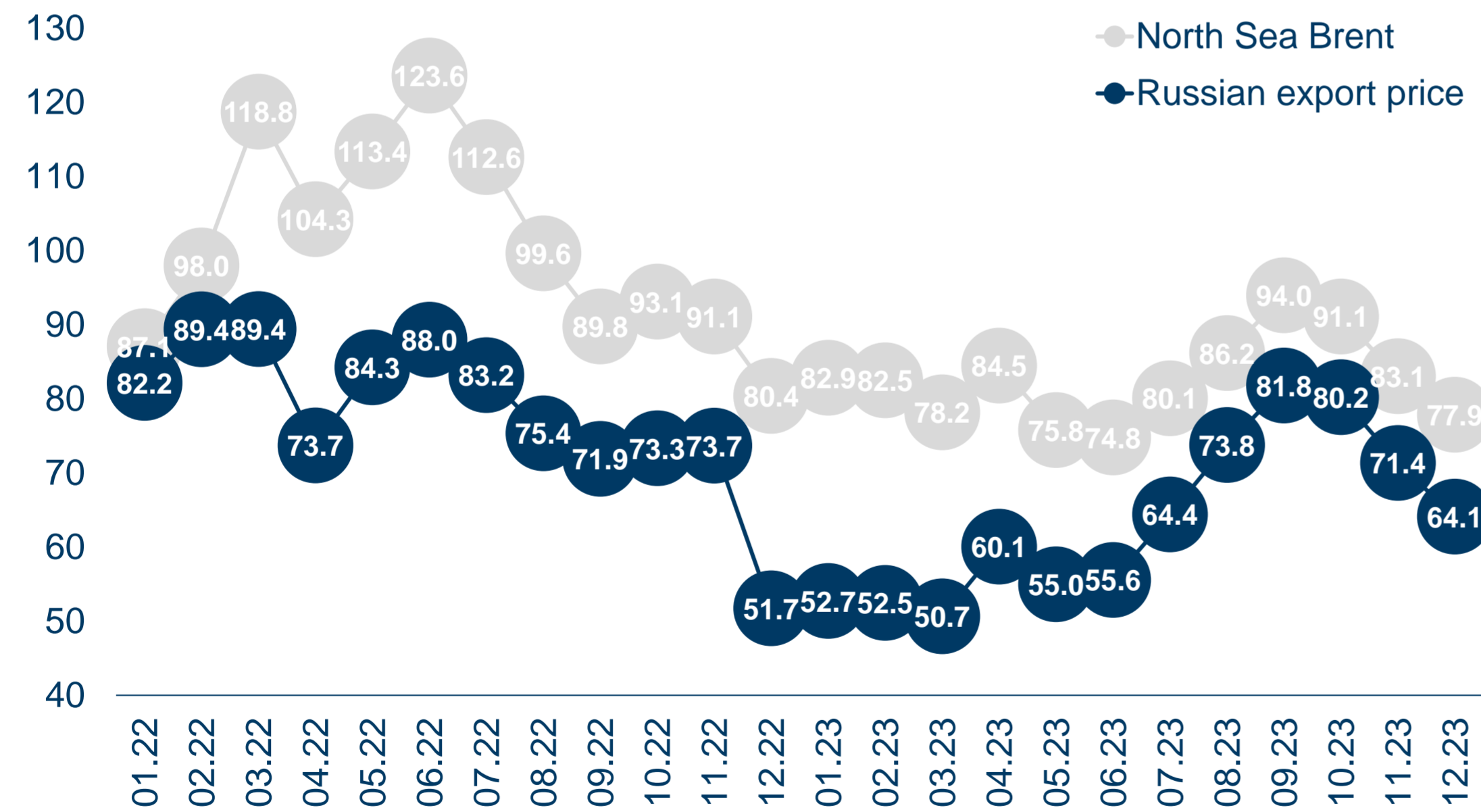


Source: Kpler, P&I Clubs, KSE Institute

## Discounts widen again as coalition countries step up enforcement.

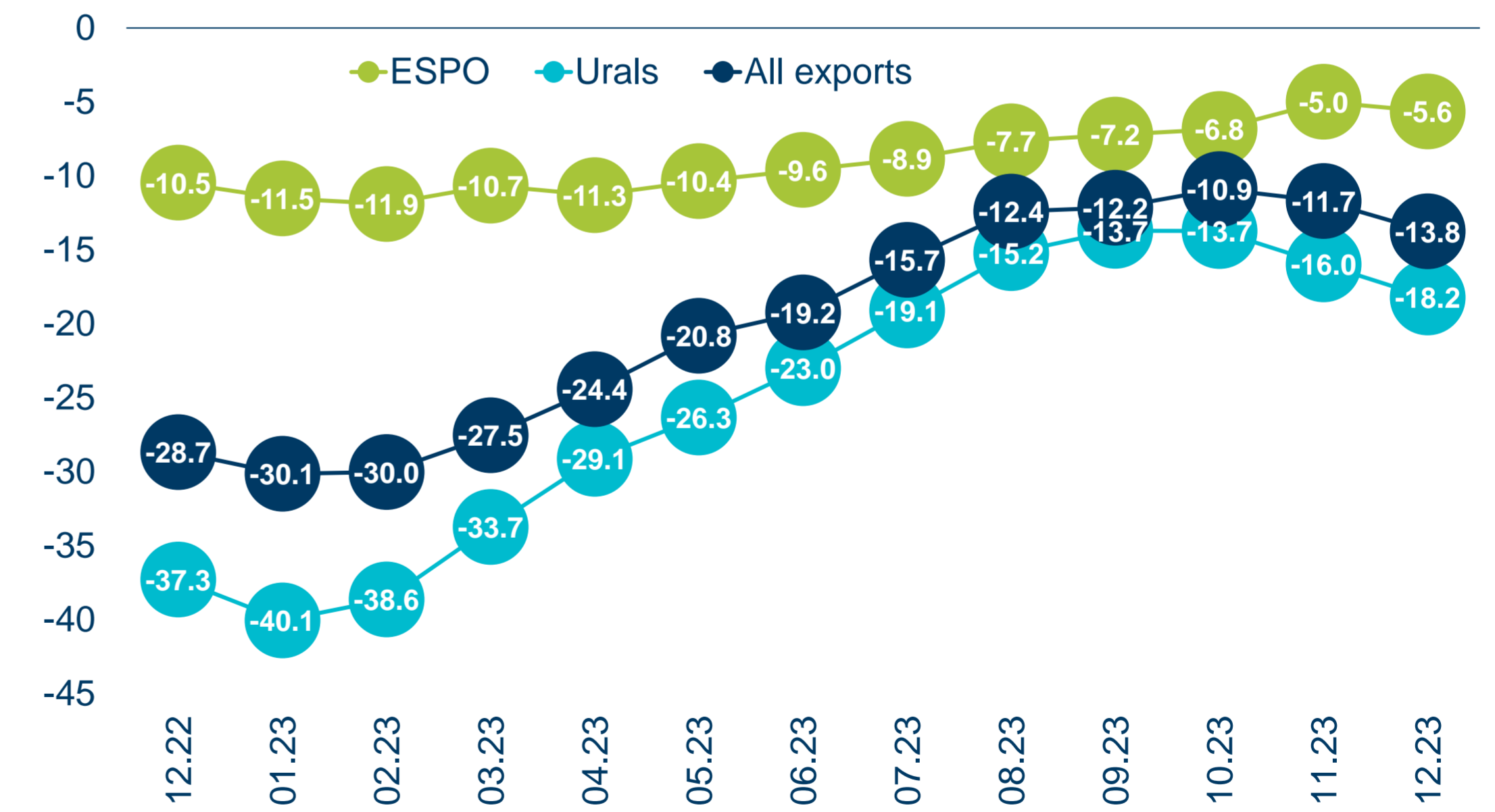
- Energy sanctions, in particular the EU embargo, weighed on Russian export earnings via wider price discounts.
- Since early 2023, we have observed a sharp narrowing—from \$40/barrel in January to \$13.7/barrel in October for Urals.
- However, recent G7/EU enforcement efforts are having an impact, with the Urals discount widening to \$18.2/barrel.

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

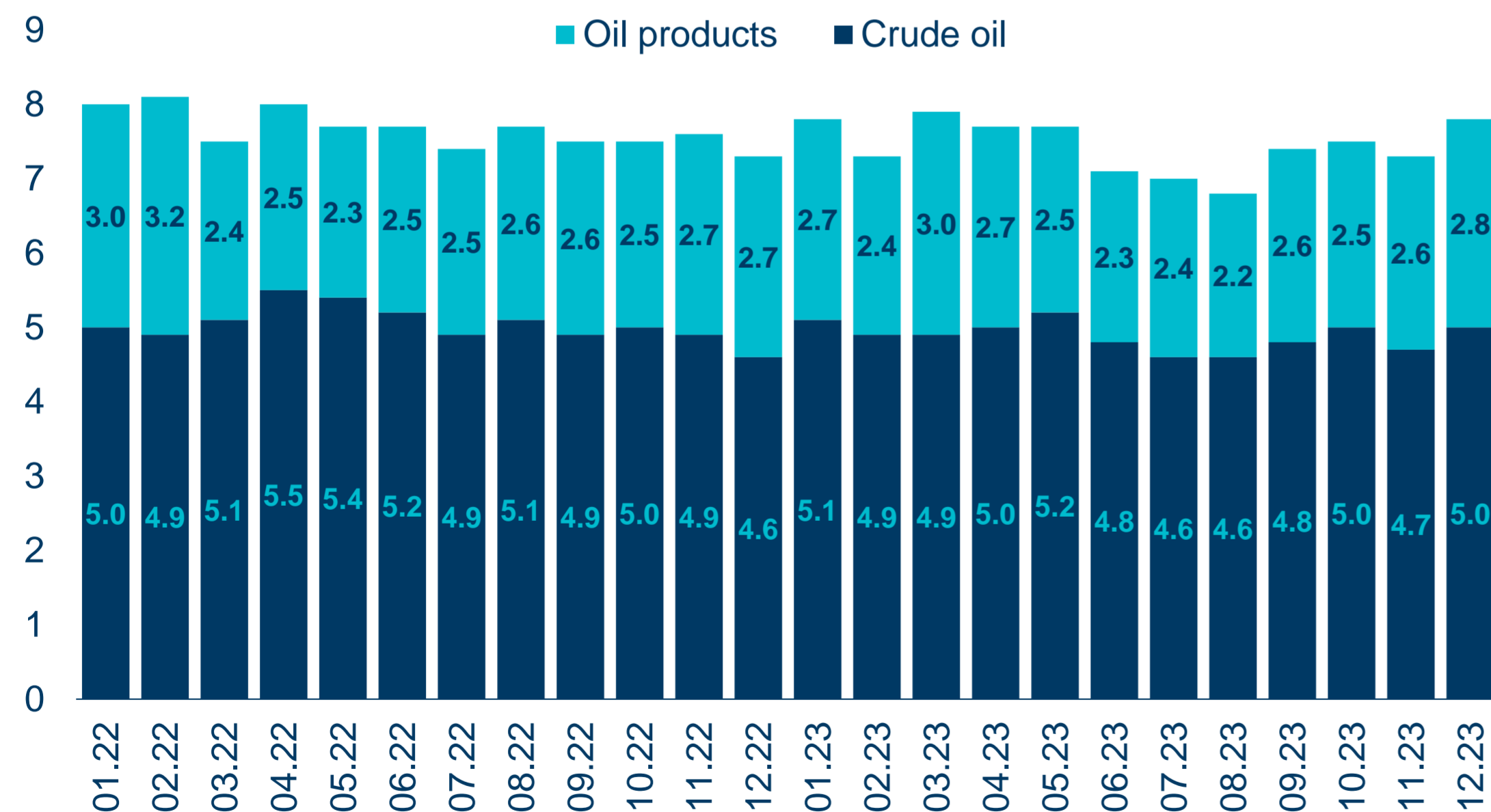


Source: International Energy Agency, KSE Institute

## Russian oil export volumes grew by 6.8% in December.

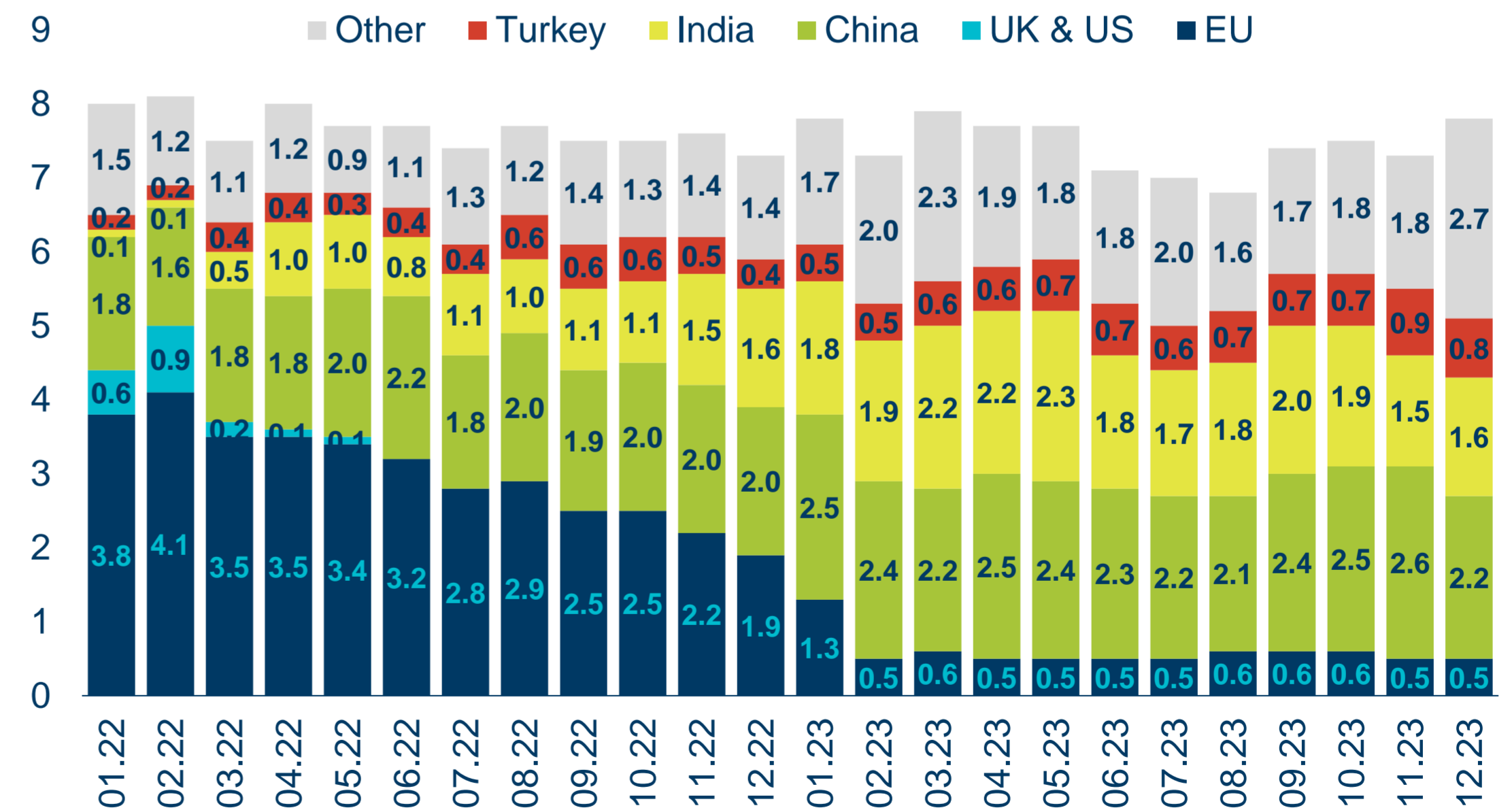
- Russian oil exports grew moderately in December—by 6.4% for crude oil and 7.7% for oil products vs. November.
- While shipments to China fell 15.4% and those to India remained stable, unknown destinations accounted for 1.0 mbd.
- Overall stable export volumes throughout 2023 show that the price cap has achieved its goal of oil market stability.

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



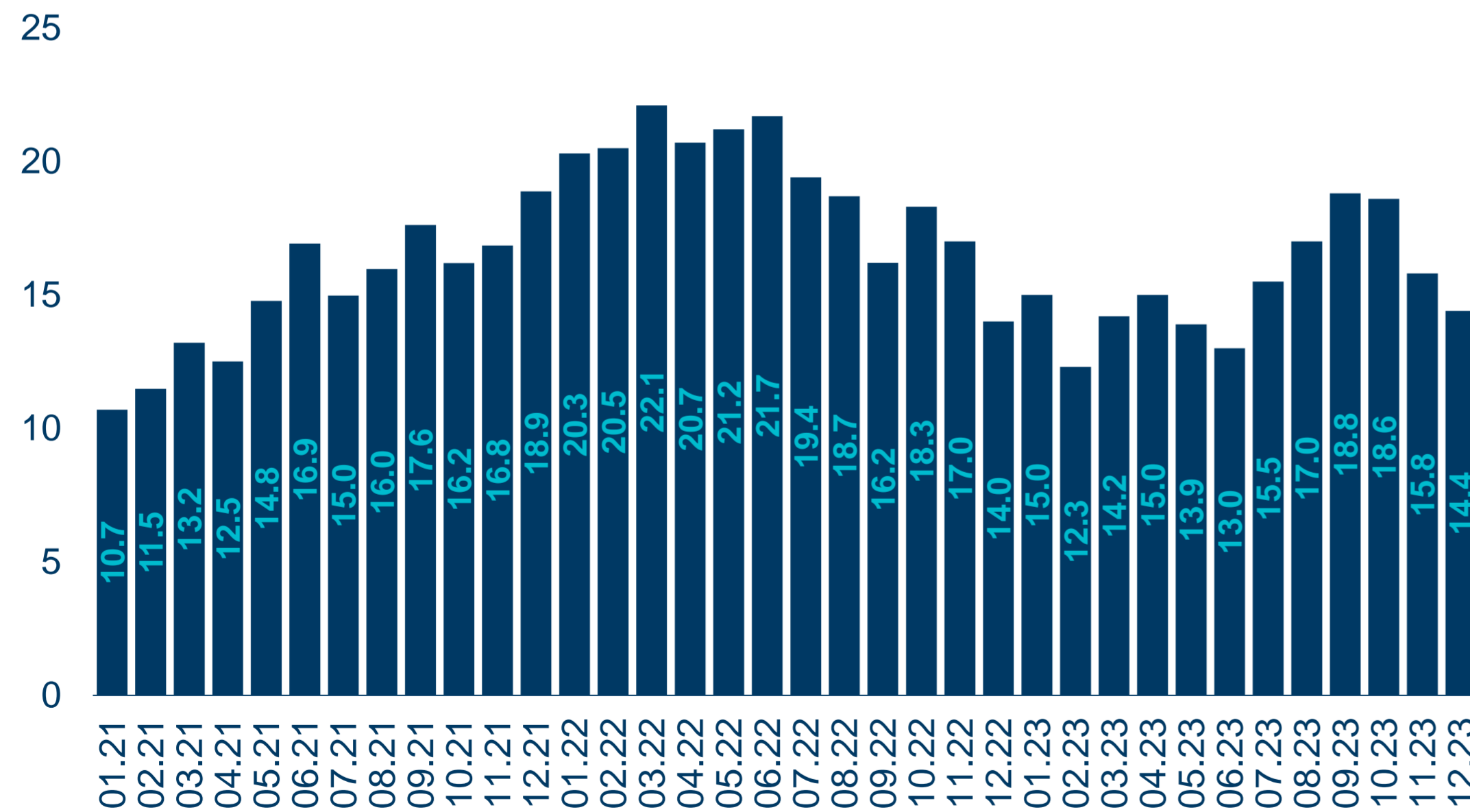
Source: International Energy Agency, KSE Institute

## By the end of 2023, strain on export earnings and budget revenues returned.

- After exceeding \$18 billion in September-October, Russian oil export earnings fell to \$14.4 billion in December.
- At the same time, the weaker ruble is still supporting budget revenues from oil extraction taxes and export duties.
- Ukraine’s allies need to continue their efforts to improve enforcement and preserve the price cap’s leverage.

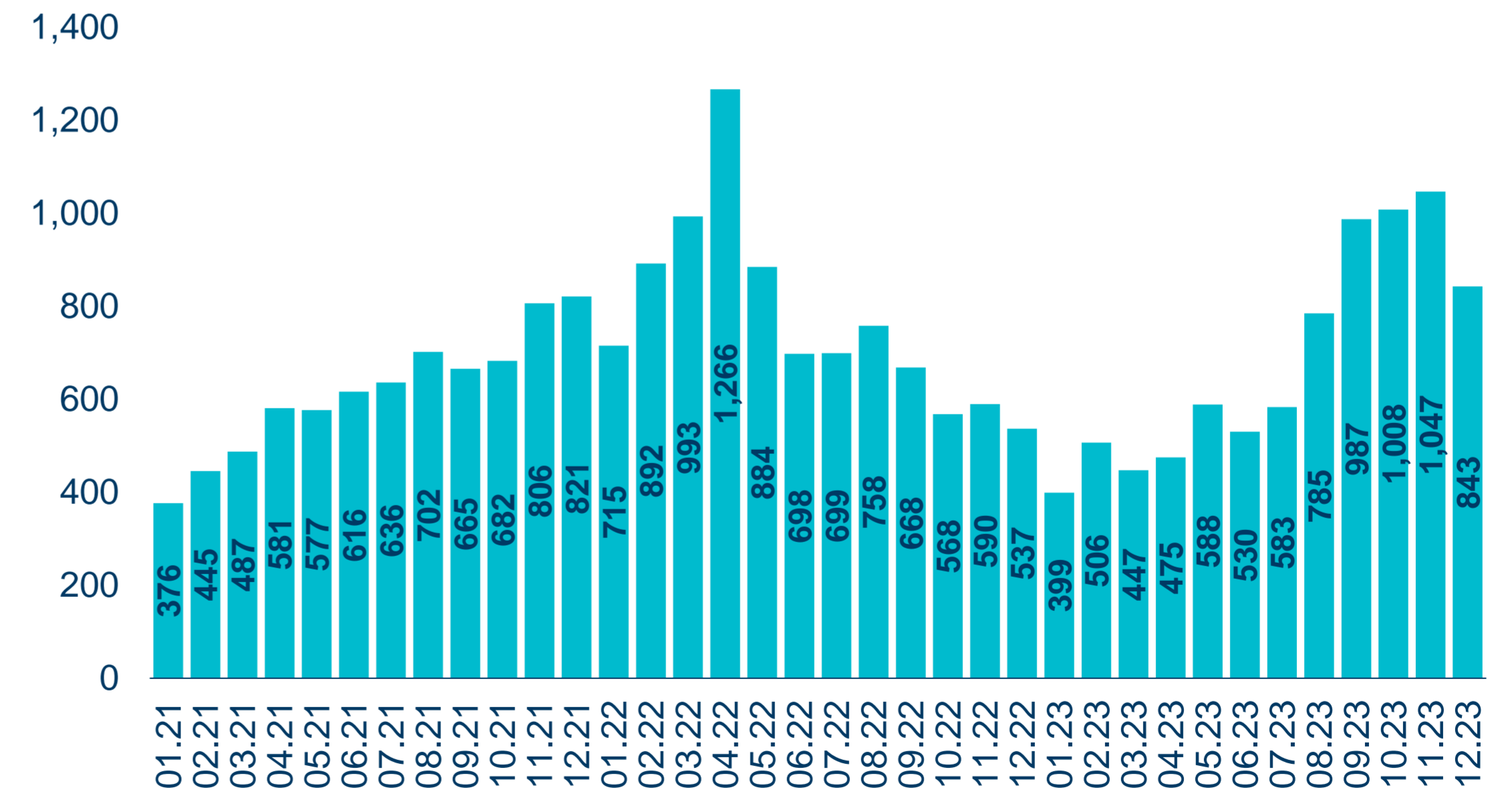
Read KSE’s recent study [Bold Measures Are Needed as Russia’s Oil is Slipping Beyond G7 Reach](#).

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

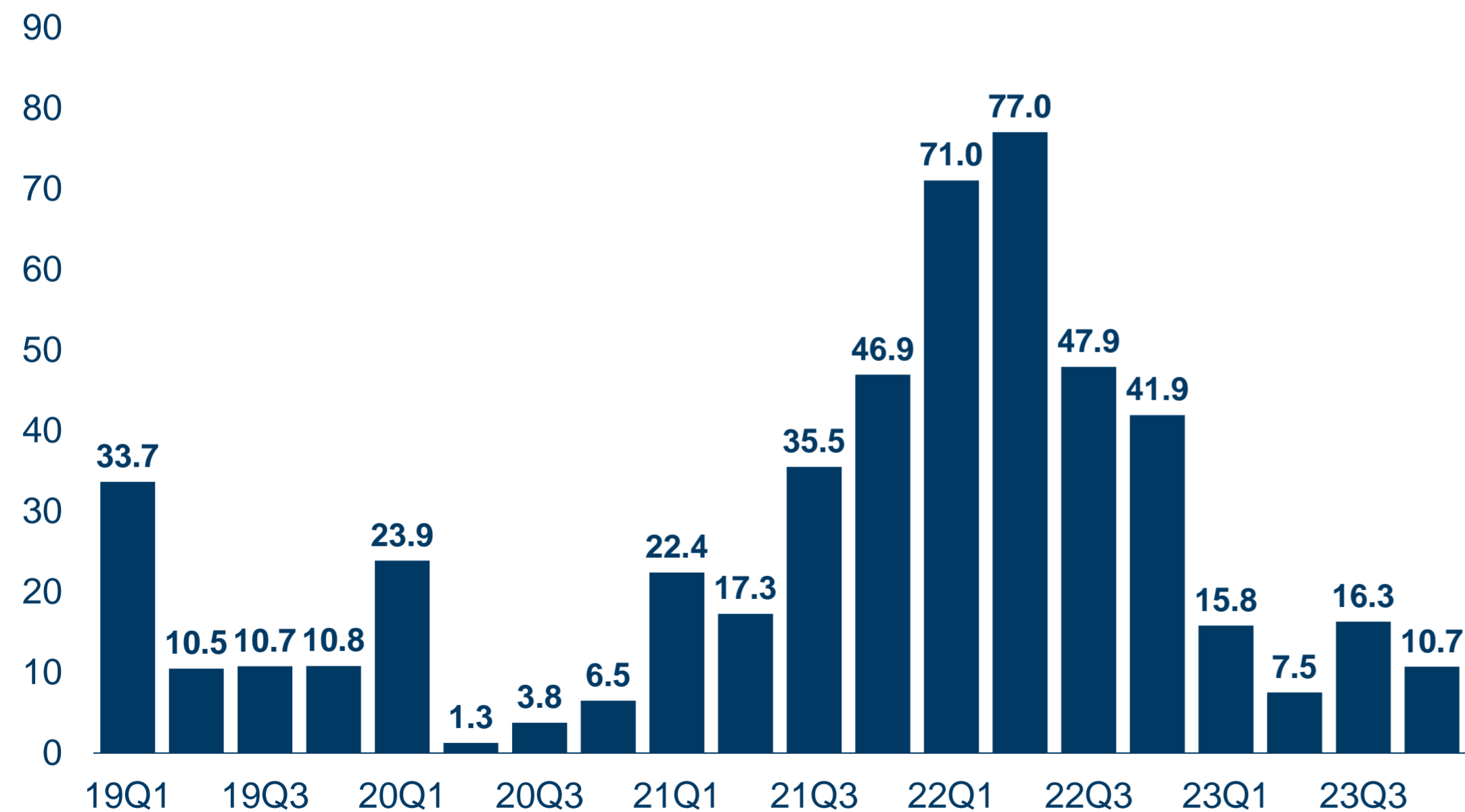


**Trade: sharp reduction in exports in 2023;  
much smaller trade and current account  
surpluses undermine macro stability.**

## External environment dramatically less supportive than in 2022.

- The 2023 current account surplus reached \$50.2 billion—79% lower than the record-high 2022 reading of \$238.0 billion.
- This is largely driven by a much smaller trade surplus (\$118.3 billion, -63% vs. 2022) as goods export dropped by 29%.
- Russia’s external environment has become dramatically less supportive in 2023, which is undermining macro stability.

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

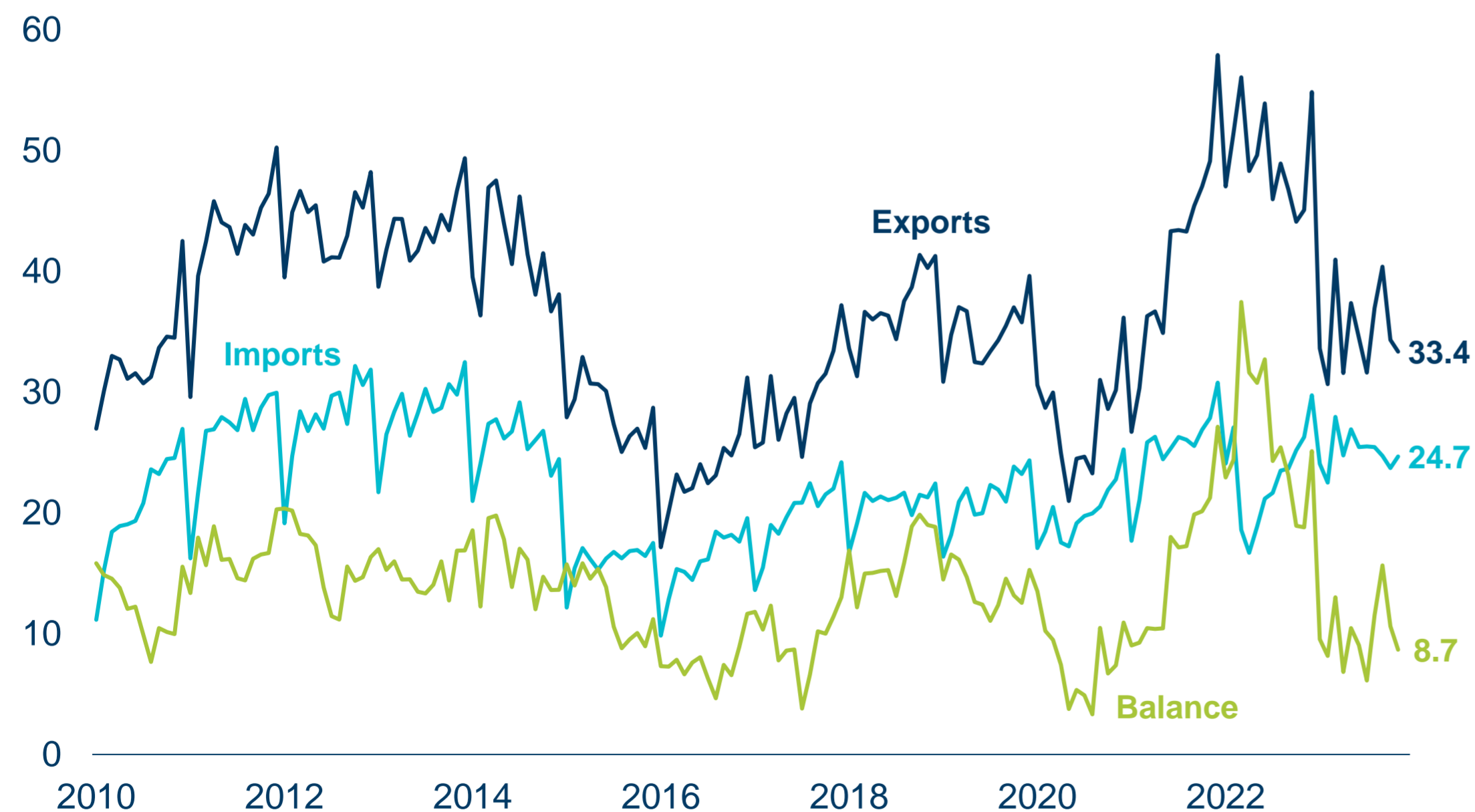
Time period	C/A		Goods		Services			Income & transfers		
	Bal.	Bal.	Exp.	Imp	Bal.	Cred.	Deb.	Bal.	Cred.	Deb.
Oct. 2023	5.4	10.6	34.3	23.7	-2.3	3.3	5.6	-2.9	3.3	6.3
Nov. 2023	4.7	8.7	33.4	24.7	-1.9	3.2	5.1	-2.1	3.0	5.1
Dec. 2023	0.6	8.7	37.4	28.7	-3.2	4.2	7.3	-4.9	3.6	8.5
Q1 2023	15.8	30.7	105.2	74.5	-7.6	9.8	17.4	-7.3	11.3	18.6
Q2 2023	7.5	26.3	103.4	77.1	-8.9	10.4	19.3	-9.9	12.6	22.5
Q3 2023	16.3	33.3	108.9	75.7	-9.7	9.7	19.4	-7.3	10.2	17.5
Q4 2023	10.7	28.0	105.1	77.1	-7.4	10.7	18.0	-10.0	9.9	19.8
2023	50.2	118.3	422.7	304.4	-33.6	40.5	74.1	-34.5	44.1	78.5
Memorandum										
Q1 2022	71.0	84.8	154.6	69.8	-3.5	13.9	17.4	-10.2	12.6	22.8
Q2 2022	77.1	95.1	151.8	56.7	-3.6	11.1	14.7	-14.4	12.0	26.4
Q3 2022	48.2	72.8	141.7	68.8	-6.7	11.4	18.1	-17.9	12.8	30.7
Q4 2022	41.7	62.8	144.0	81.2	-8.4	12.3	20.7	-12.7	14.2	26.9
2022	238.0	315.6	592.1	276.5	-22.2	48.6	70.9	-55.3	51.5	106.8
2021	122.1	190.3	494.4	304.0	-20.4	55.6	18.1	-47.8	96.3	144.1

Source: Bank of Russia, KSE Institute

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

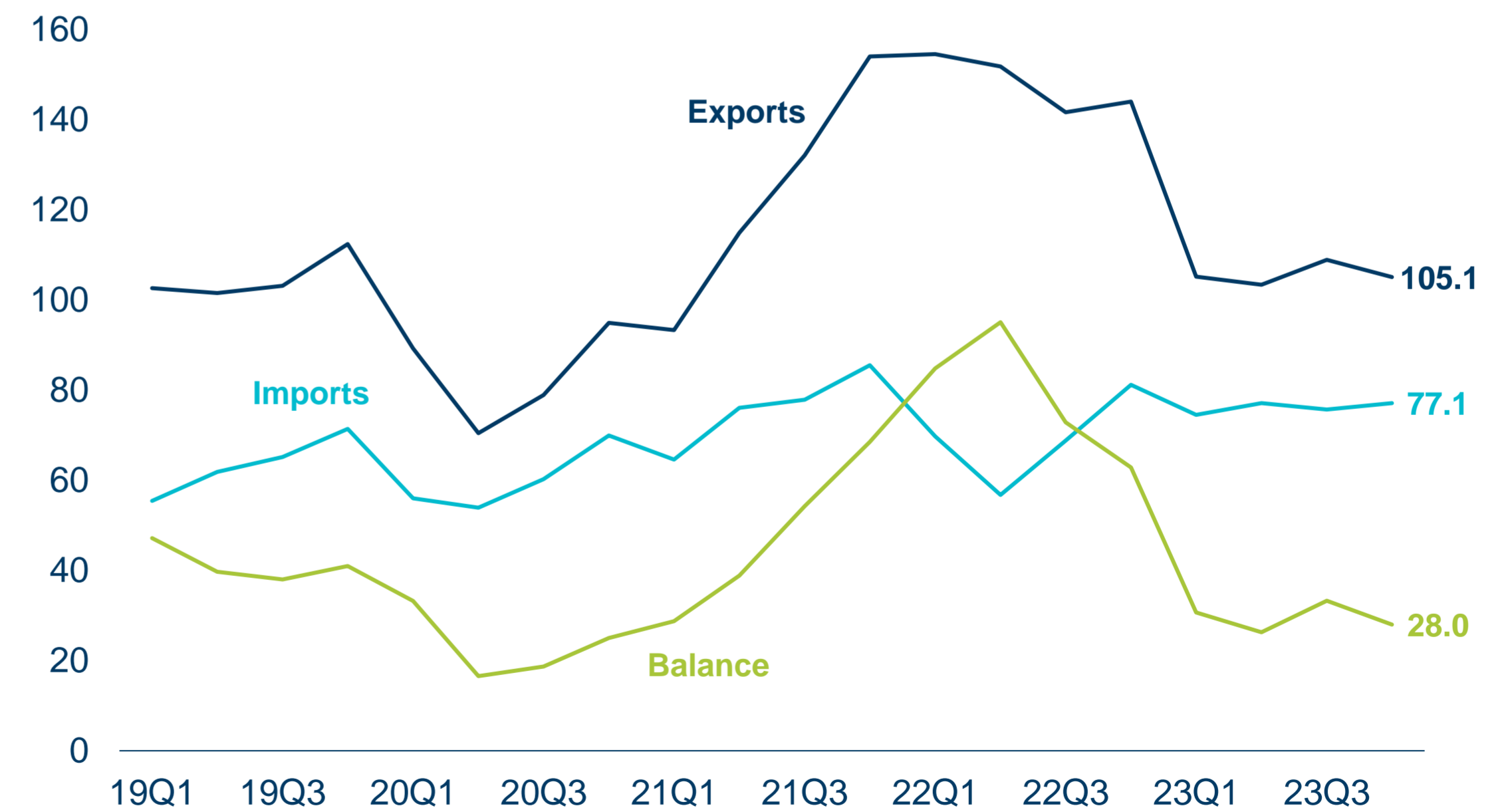
- Russia's foreign trade has essentially stabilized at a new baseline of \$35 billion/month in exports and \$25/billion in imports.
- Weaker exports due to sanctions and moderating energy prices cost Russia around \$14 billion per month compared to 2022.
- If enforcement of the price cap is stepped up, Russia's foreign currency inflows could reach a critically-low level in 2024.

Monthly trade statistics, in U.S. dollar billion



Source: Bank of Russia, KSE Institute

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

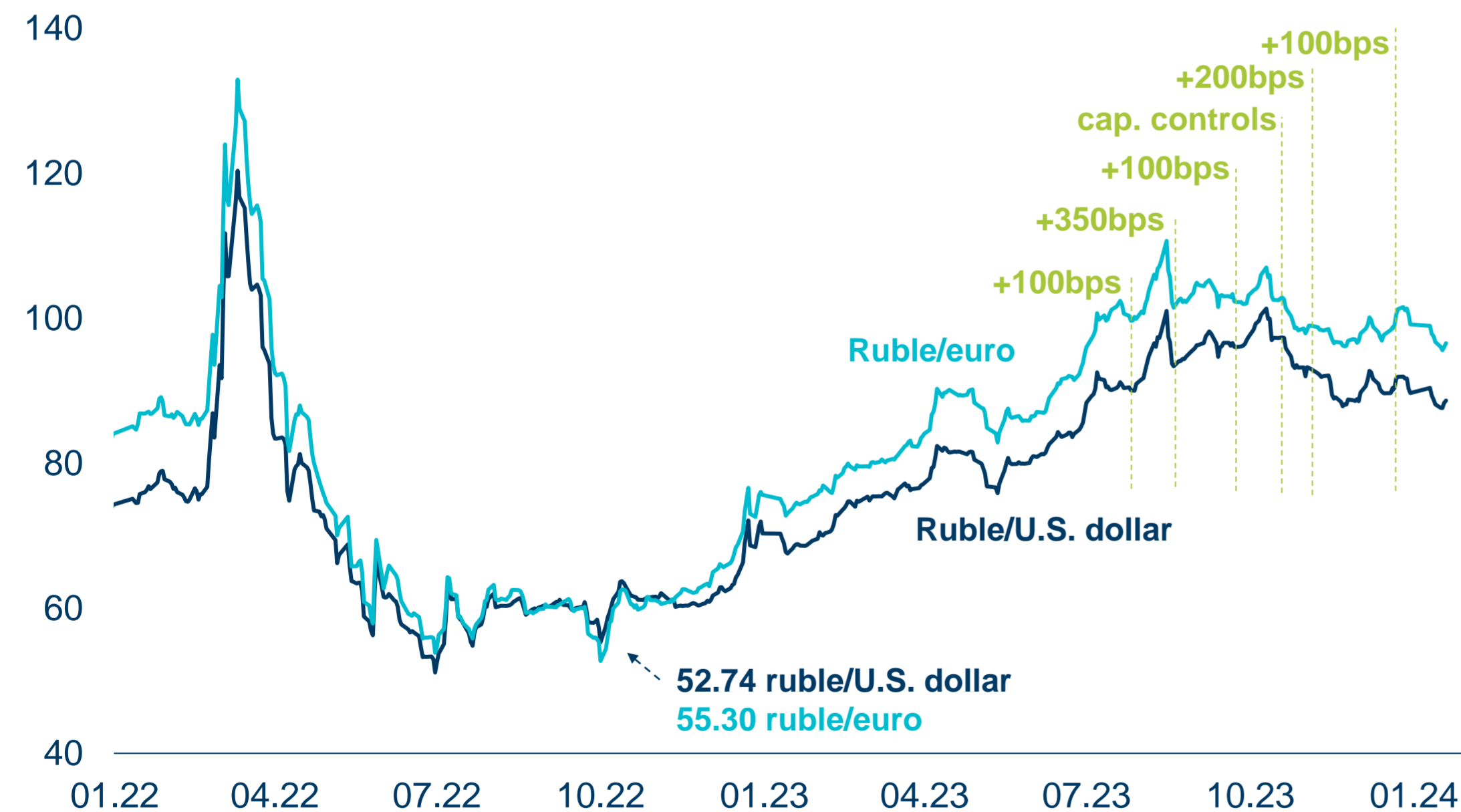


Source: Bank of Russia, KSE Institute

## Ruble has stabilized, but only due to tough policy response.

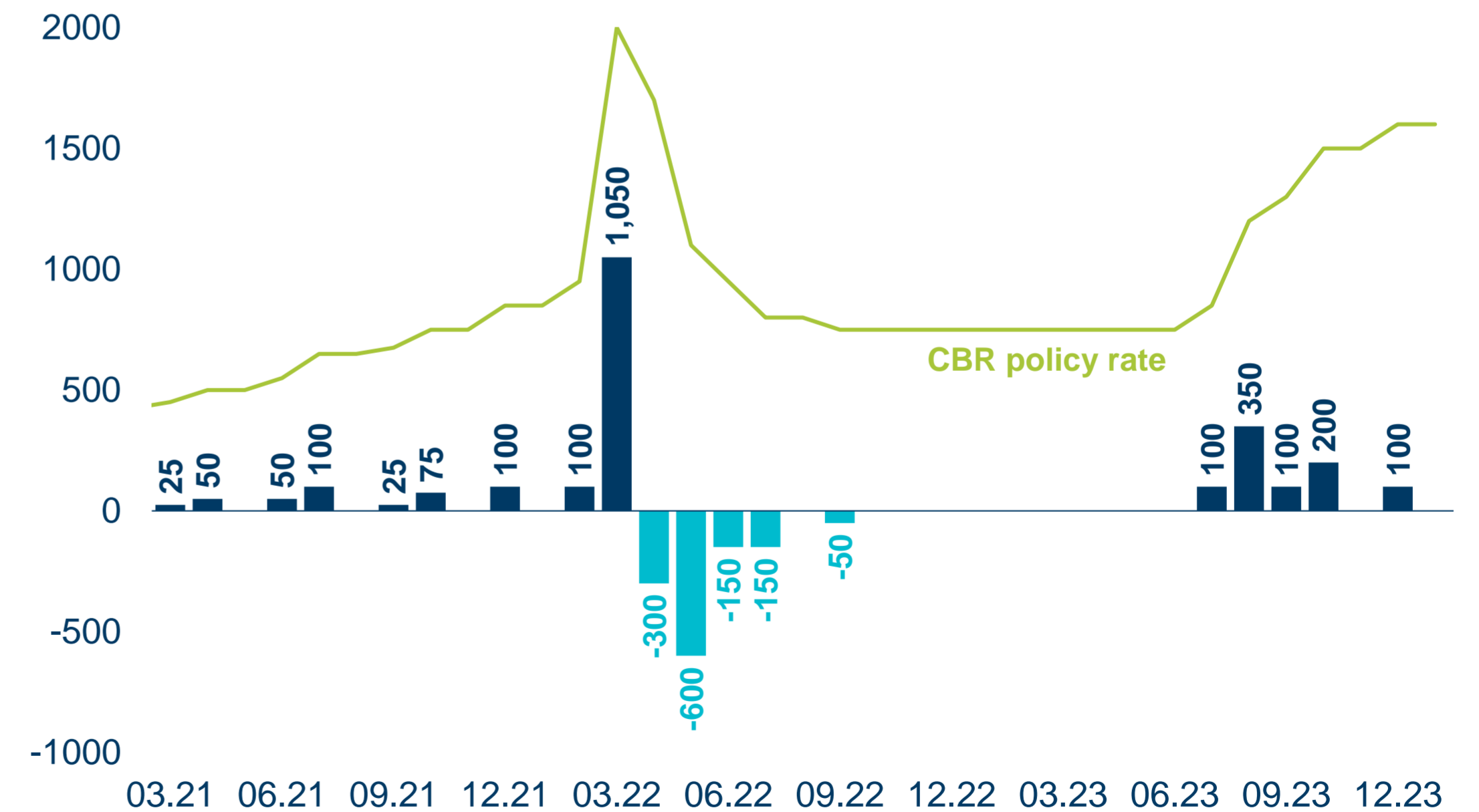
- Since October 2022, the ruble has lost ~41% of its value against the U.S. dollar and ~43% against the euro.
- The re-introduction of capital controls and additional CBR interest rate hikes have led to some stabilization.
- Clearly, the regime sees ruble stabilization and contained inflation as a key priority ahead of the 2024 elections.

Ruble exchange rate vs. U.S. dollar and euro



Source: Bank of Russia, KSE Institute

CBR policy rate and MPC decisions, in bps



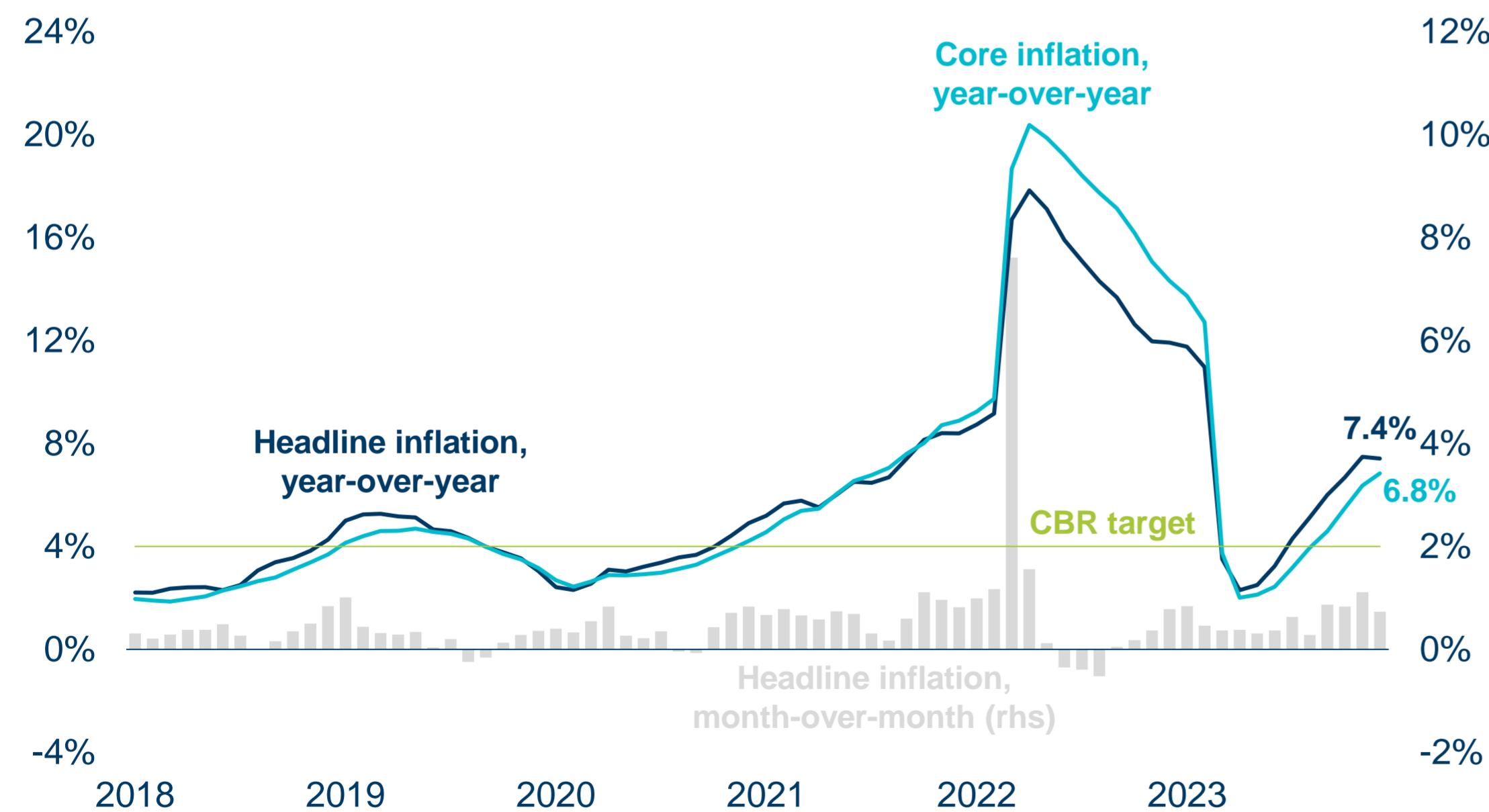
Source: Bank of Russia, KSE Institute



## Headline and core inflation, expectations continue to rise.

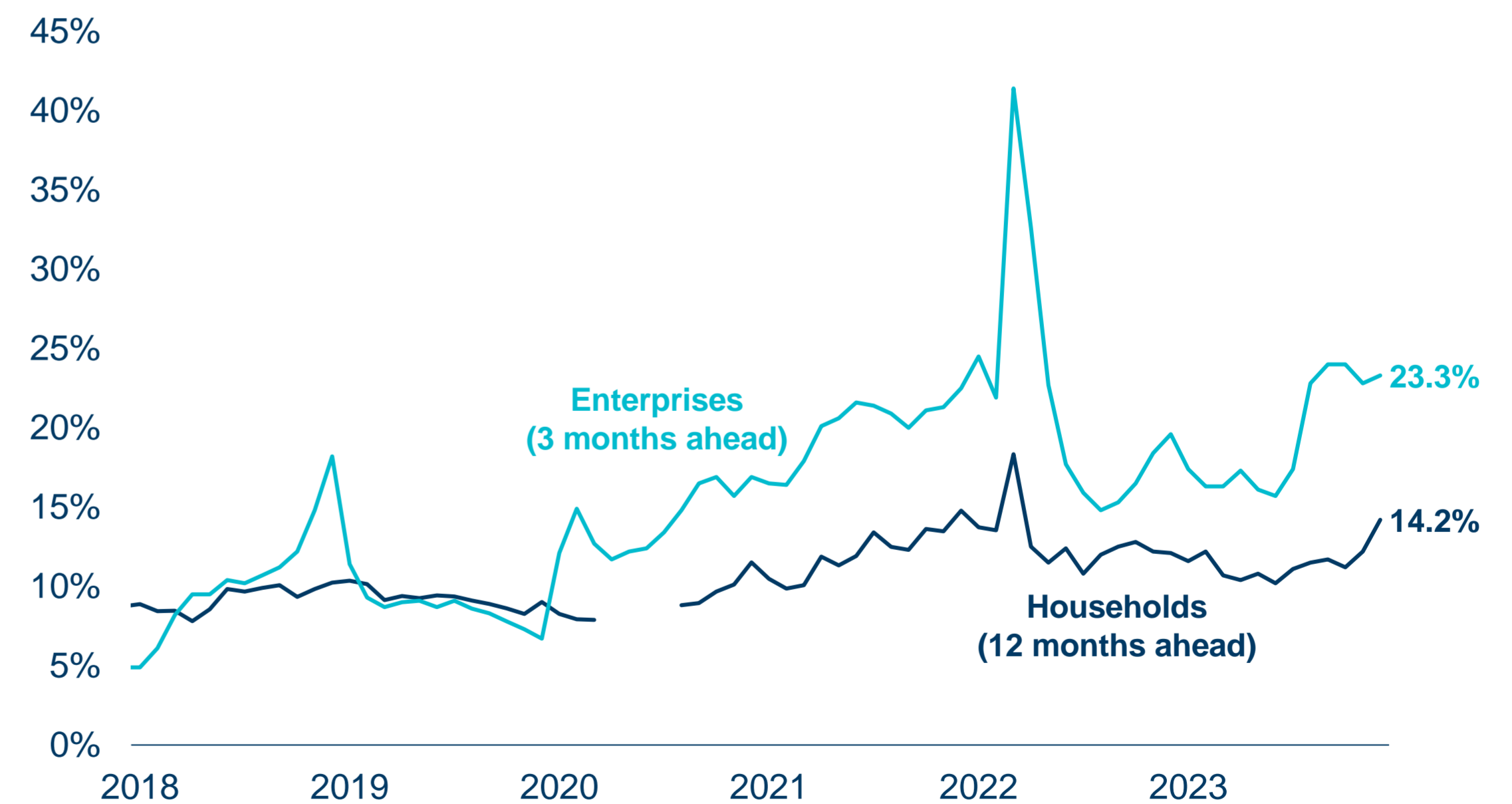
- Following a base effects-driven drop in spring/summer 2023, both headline and core inflation are rising again.
- Based on current month-to-month dynamics, headline inflation will likely reach double-digits again in H2 2024.
- Rising household inflation expectations also indicate that more CBR action may be needed going forward.

Inflation, in %



Source: Bank of Russia, KSE Institute

Inflation expectations, in %

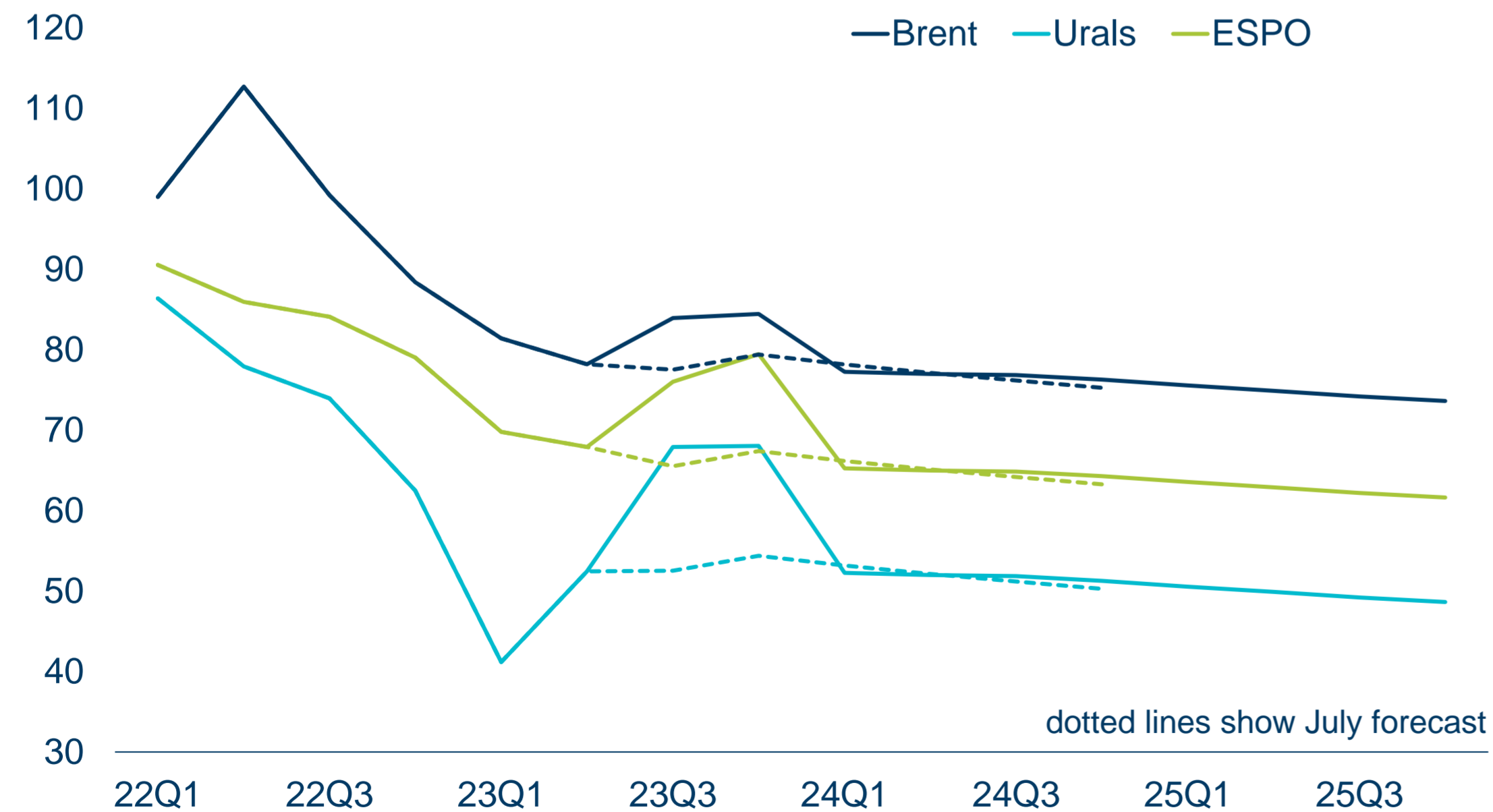


Source: Bank of Russia, KSE Institute

## Additional export earnings in 2023, return to baseline forecast in 2024.

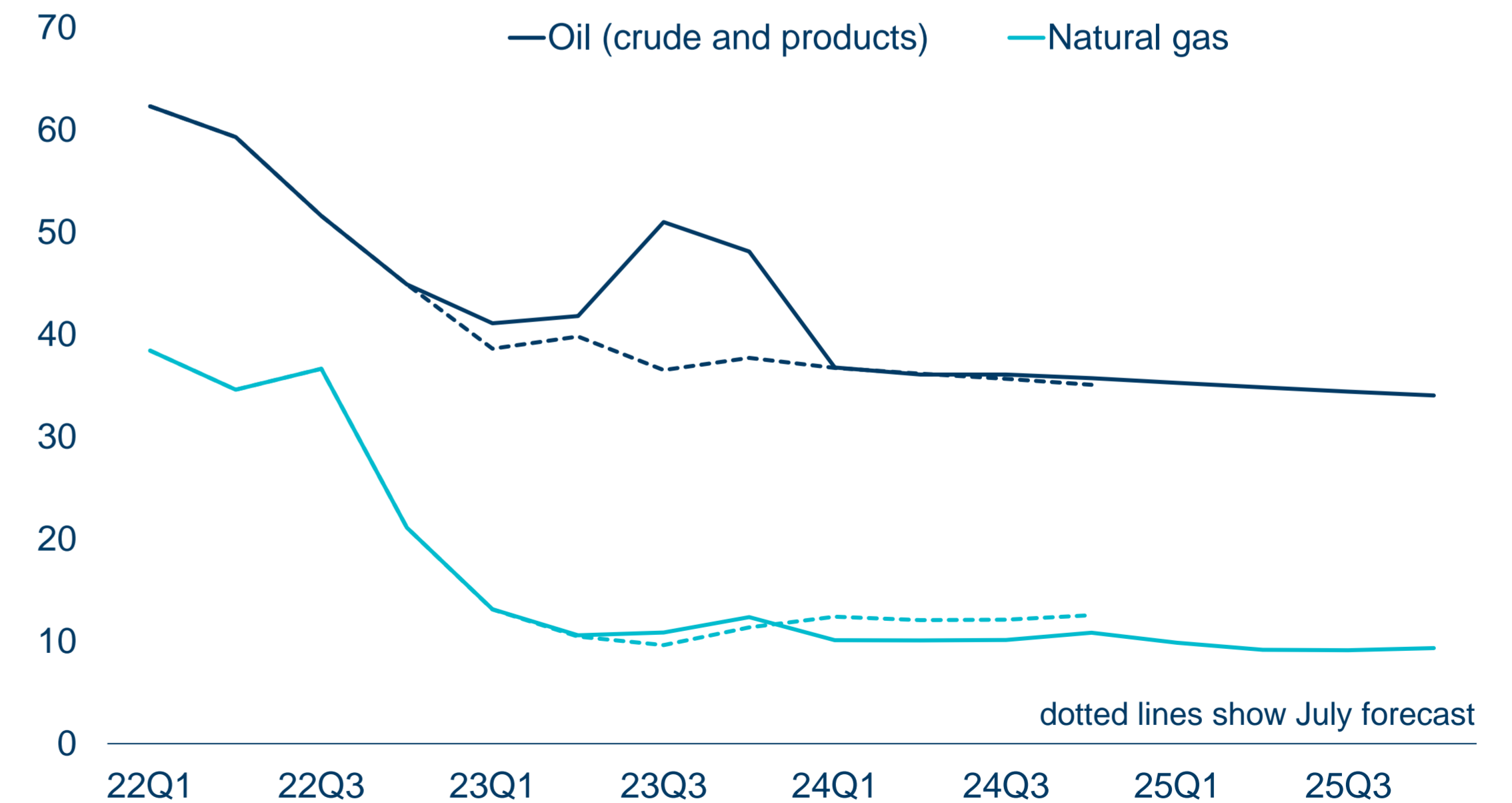
- Higher global prices and smaller discounts on Russian exports have led to significant upward revisions of oil prices.
- This has allowed Russia to collect an additional \$30 billion from oil exports in 2023 compared to the original scenario.
- However, we assess that prices as well as export earnings will return to their previously expected paths in Q1 2024.

**Oil prices, in U.S. dollar/barrel**



Source: KSE Institute

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

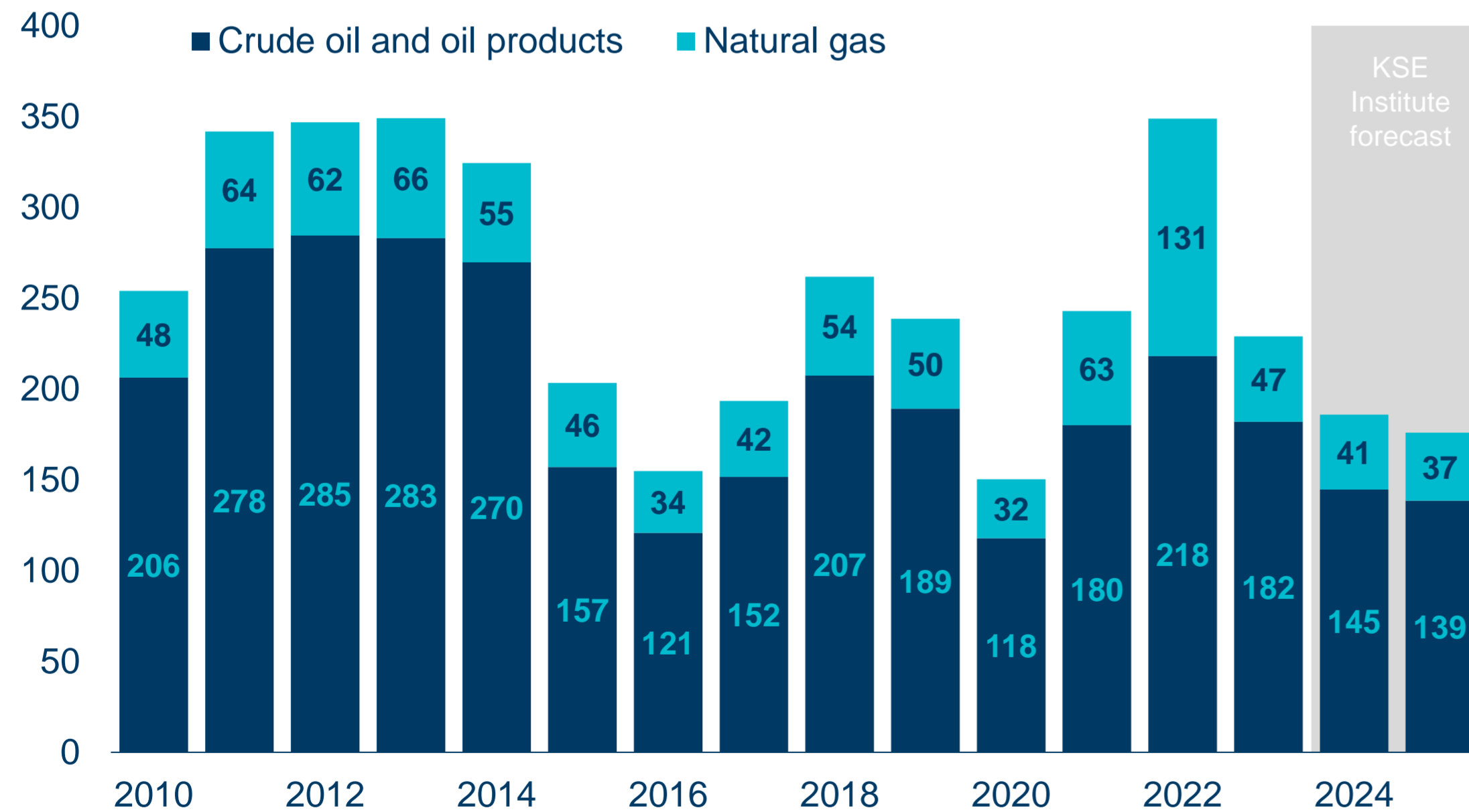


Source: KSE Institute

## Significant drop in the current account surplus beyond 2023.

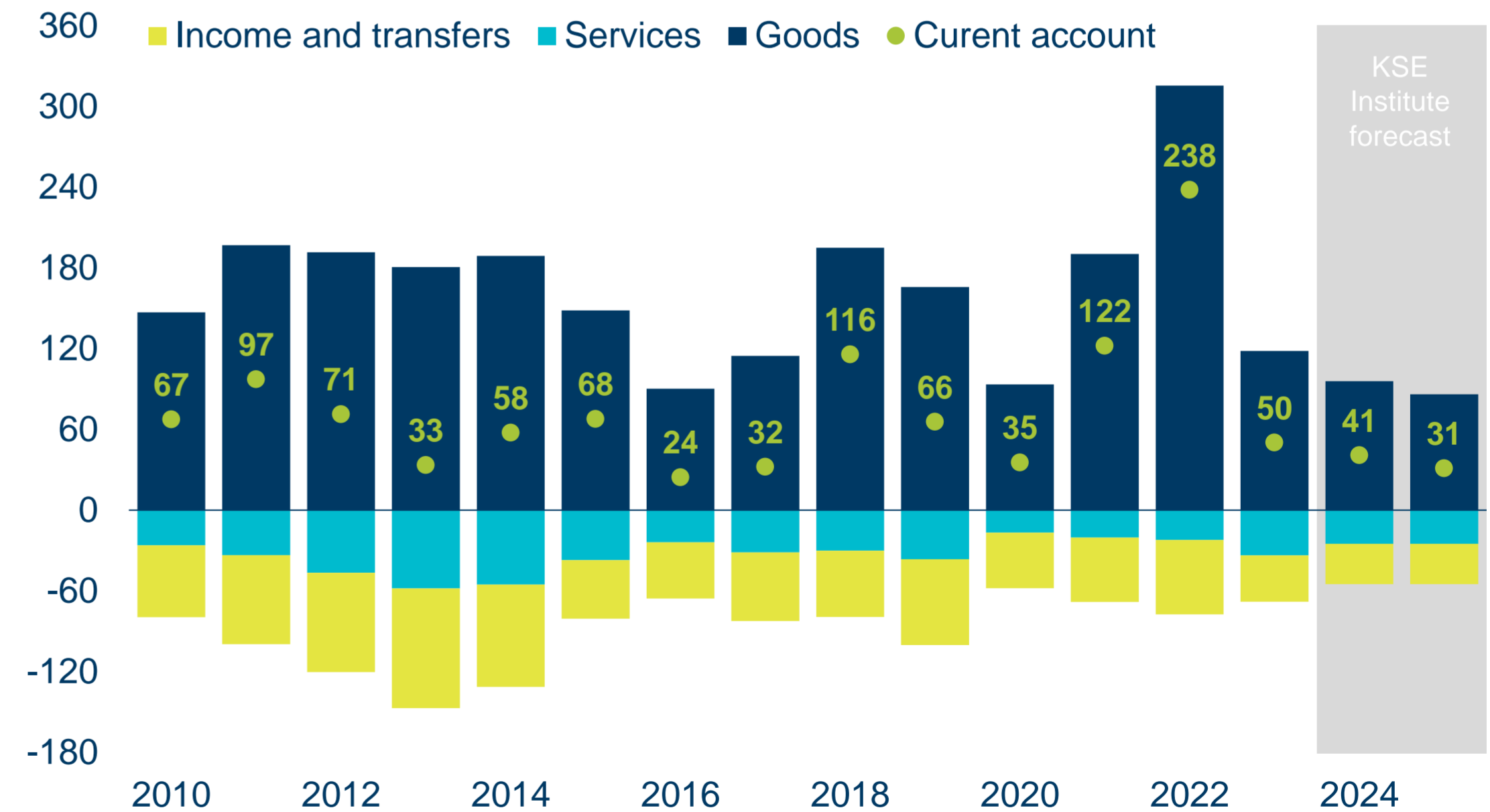
- We assess that oil and gas exports reached \$228 billion in 2023 and will drop to \$186 billion in 2024, \$176 billion in 2025.
- This will weigh on the overall current account, with surpluses of only \$41 billion and \$31 billion in 2024-25, respectively.
- It is critical to main pressure through sanctions as \$10/barrel in oil prices change export earnings by ~\$25-30 billion/year.

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

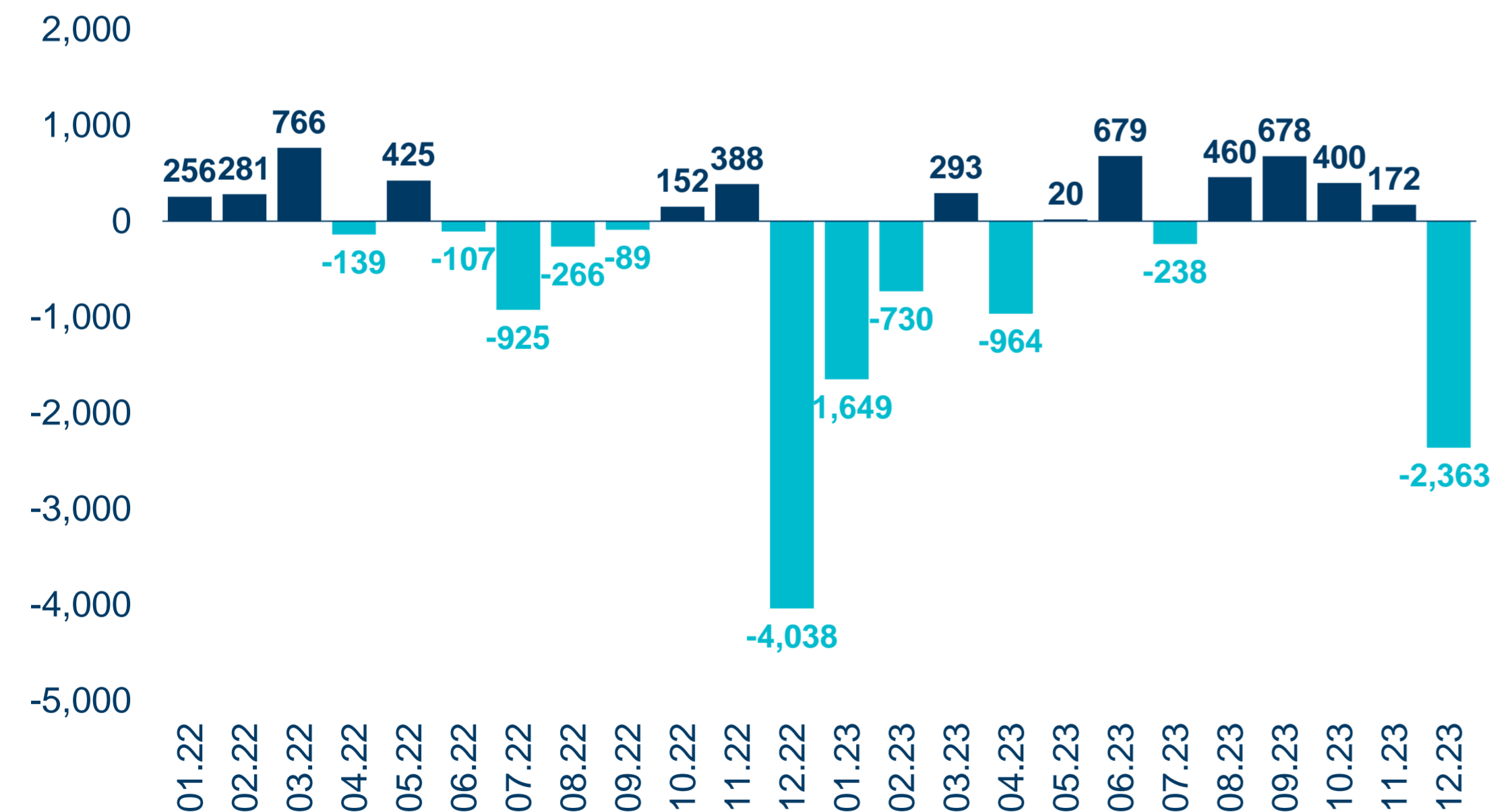
**Budget: deficit in line with plan, no  
fundamental financing constraints,  
war spending to rise sharply in 2024.**



## Budget deficit in line with original plan in 2023.

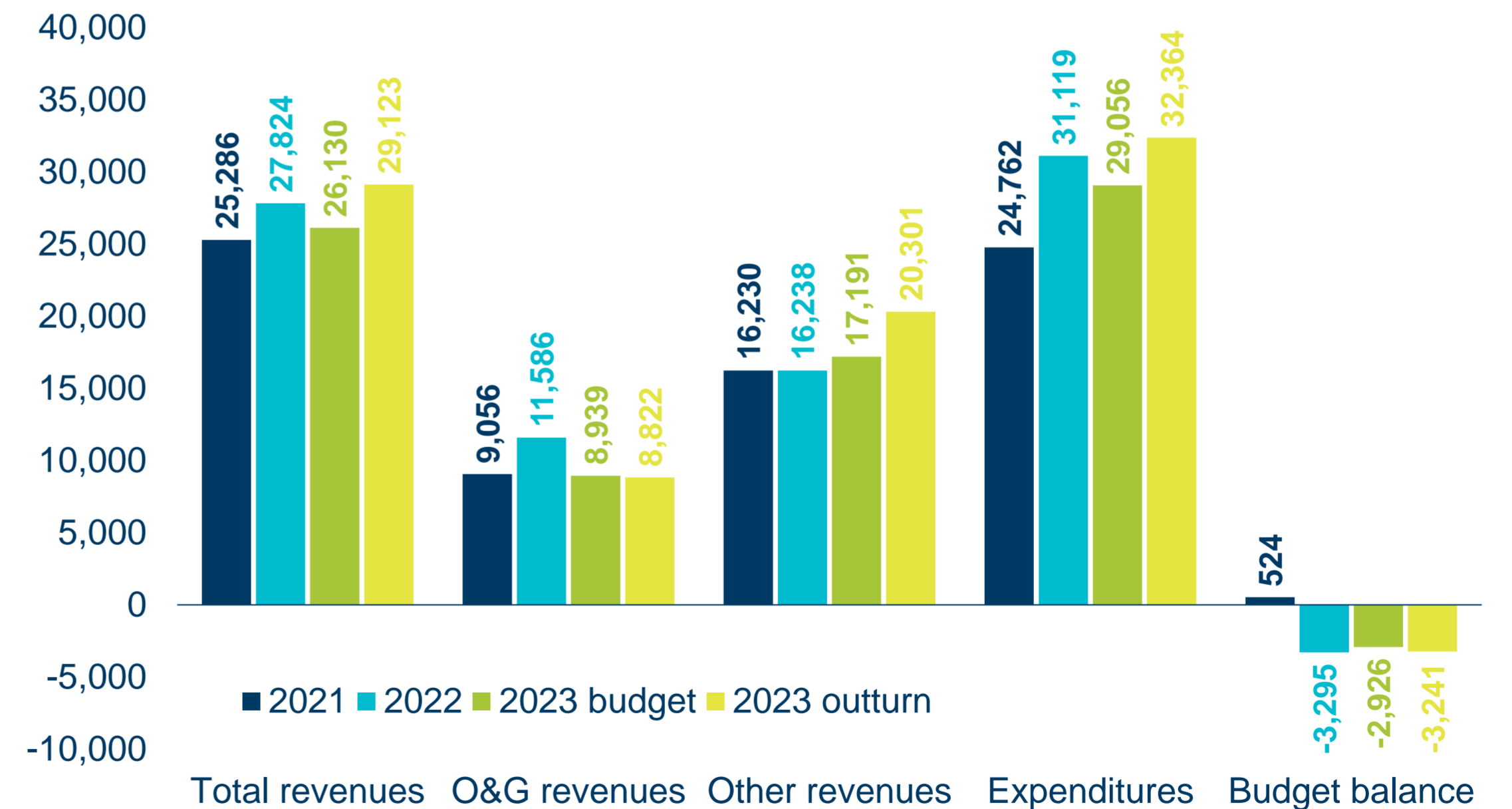
- Russia’s federal budget deficit reached 3.2 trillion rubles in 2023—1.9% of GDP or roughly \$45 billion.
- This is broadly in line with the original budget plan, which had assumed a full-year deficit of 2.9 trillion.
- Revenue overperformance, especially on the non-O&G side, allowed for 3 trillion in additional spending.

Federal government balance, in ruble billion



Source: Ministry of Finance, KSE Institute

Revenues and expenditures, in ruble billion

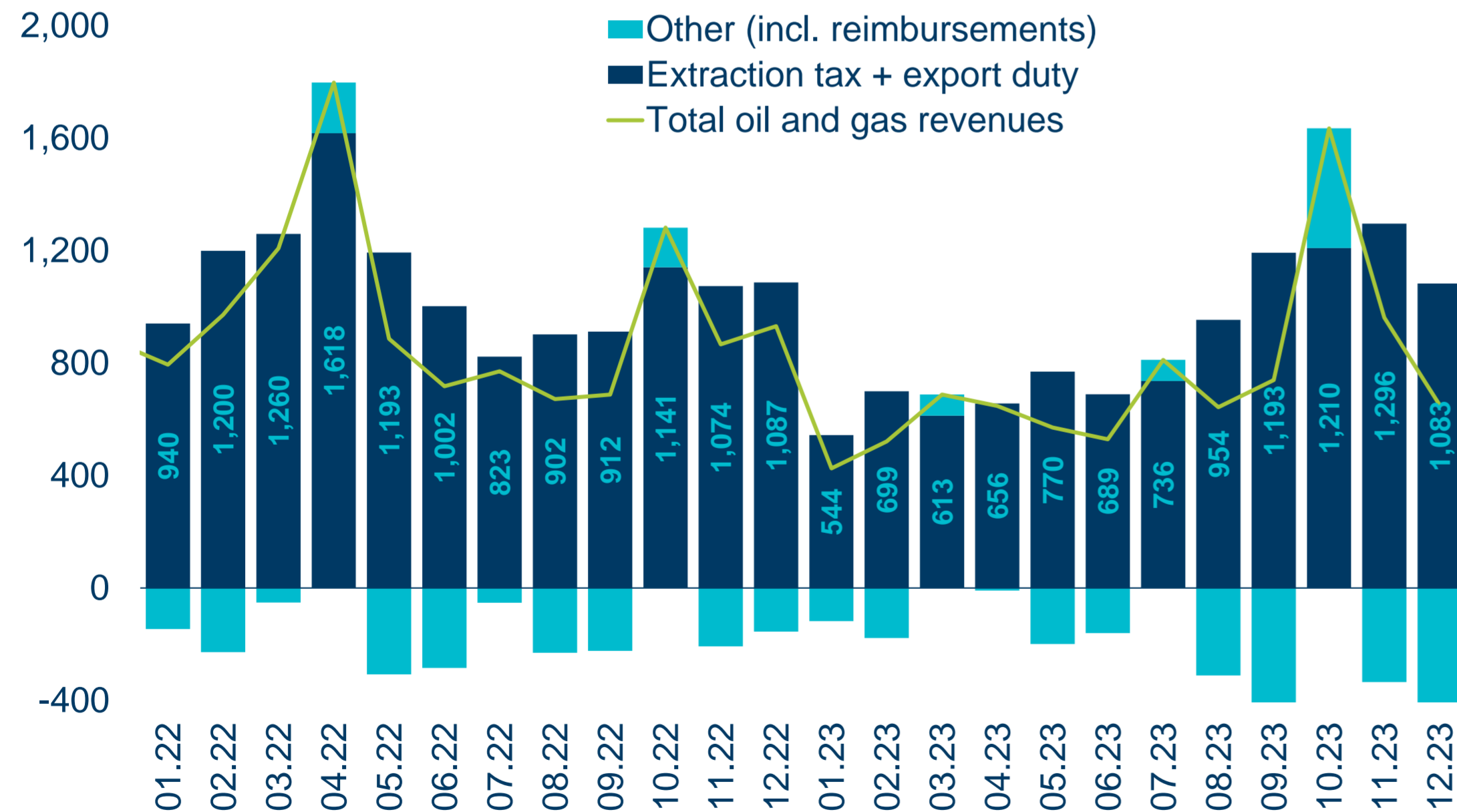


Source: Ministry of Finance, KSE Institute

## Oil and gas revenues benefit from price cap evasion and weaker ruble.

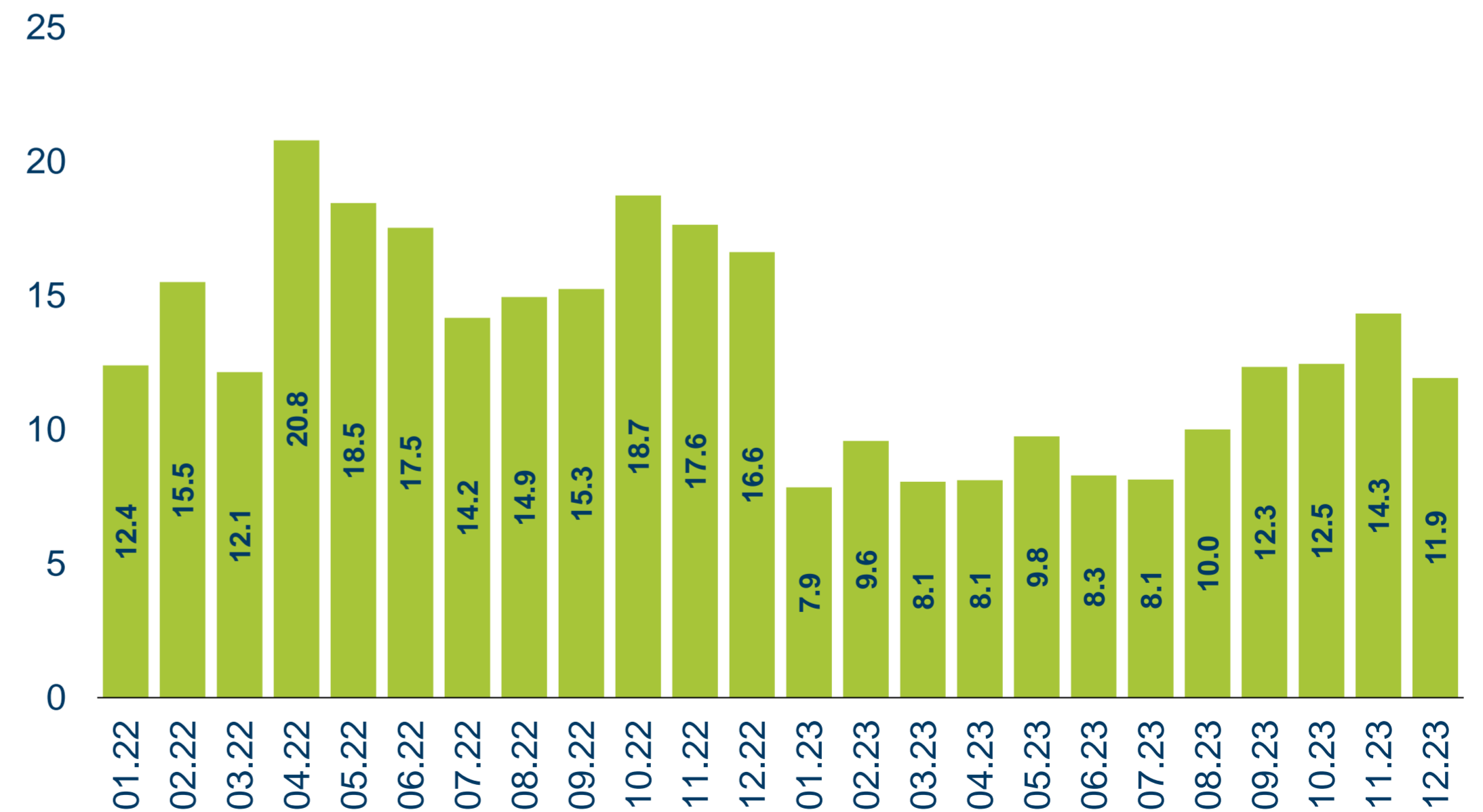
- Extraction taxes and export duties amounted to around 1.2 trillion rubles per month in Q4 2023.
- This is 8.7% more than in Q4 2022 and represents the highest quarterly number since Q2 2022.
- While revenues have also risen in U.S. dollar-terms, the weaker ruble plays an important role.

Federal oil and gas revenues, in ruble billion



Source: Ministry of Finance, KSE Institute

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



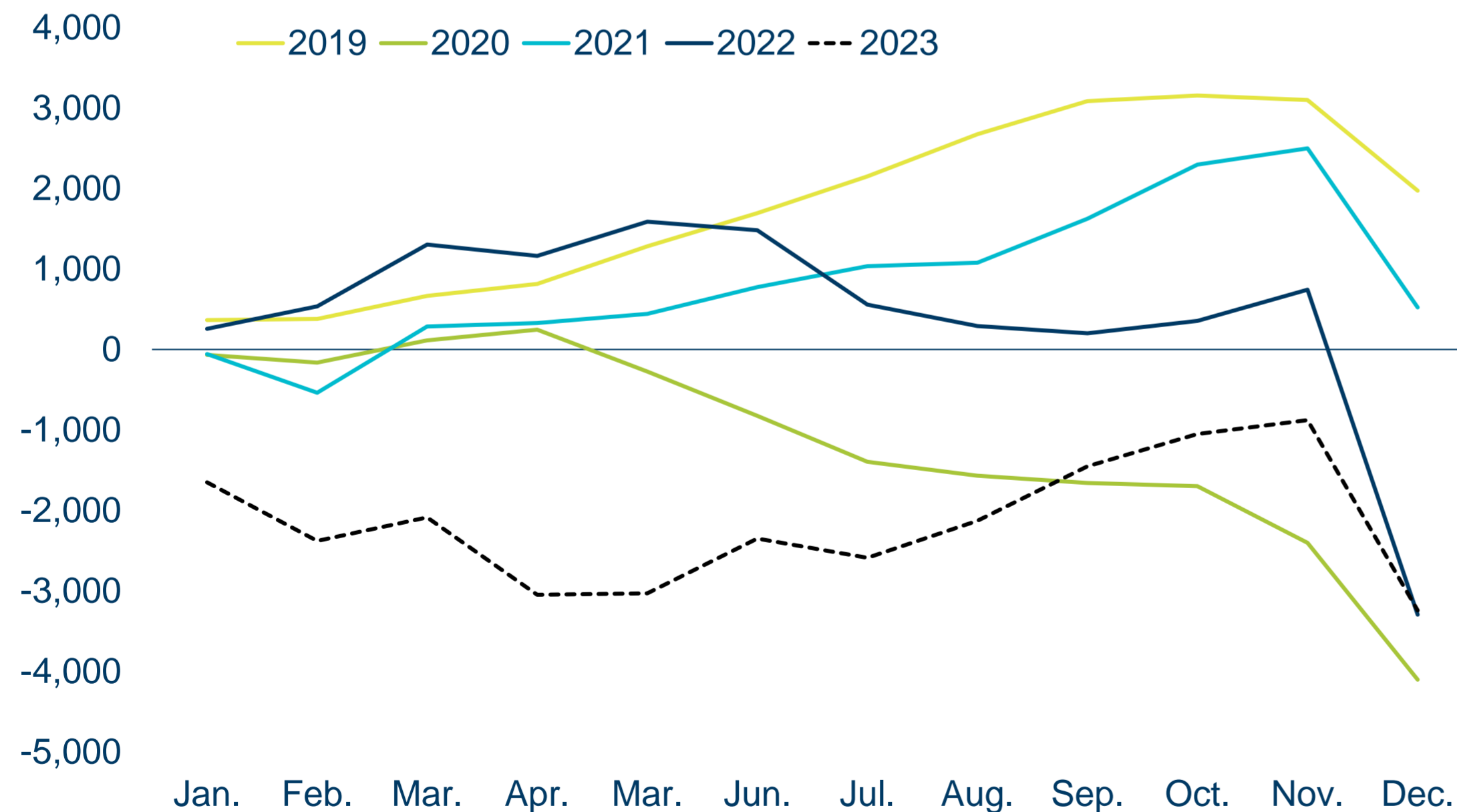
Source: International Monetary Fund, Ministry of Finance, KSE Institute

\*includes extraction tax and export duty; calculated with monthly average exchange rate

## Moderate reliance on NWF and OFZ issuance for financing.

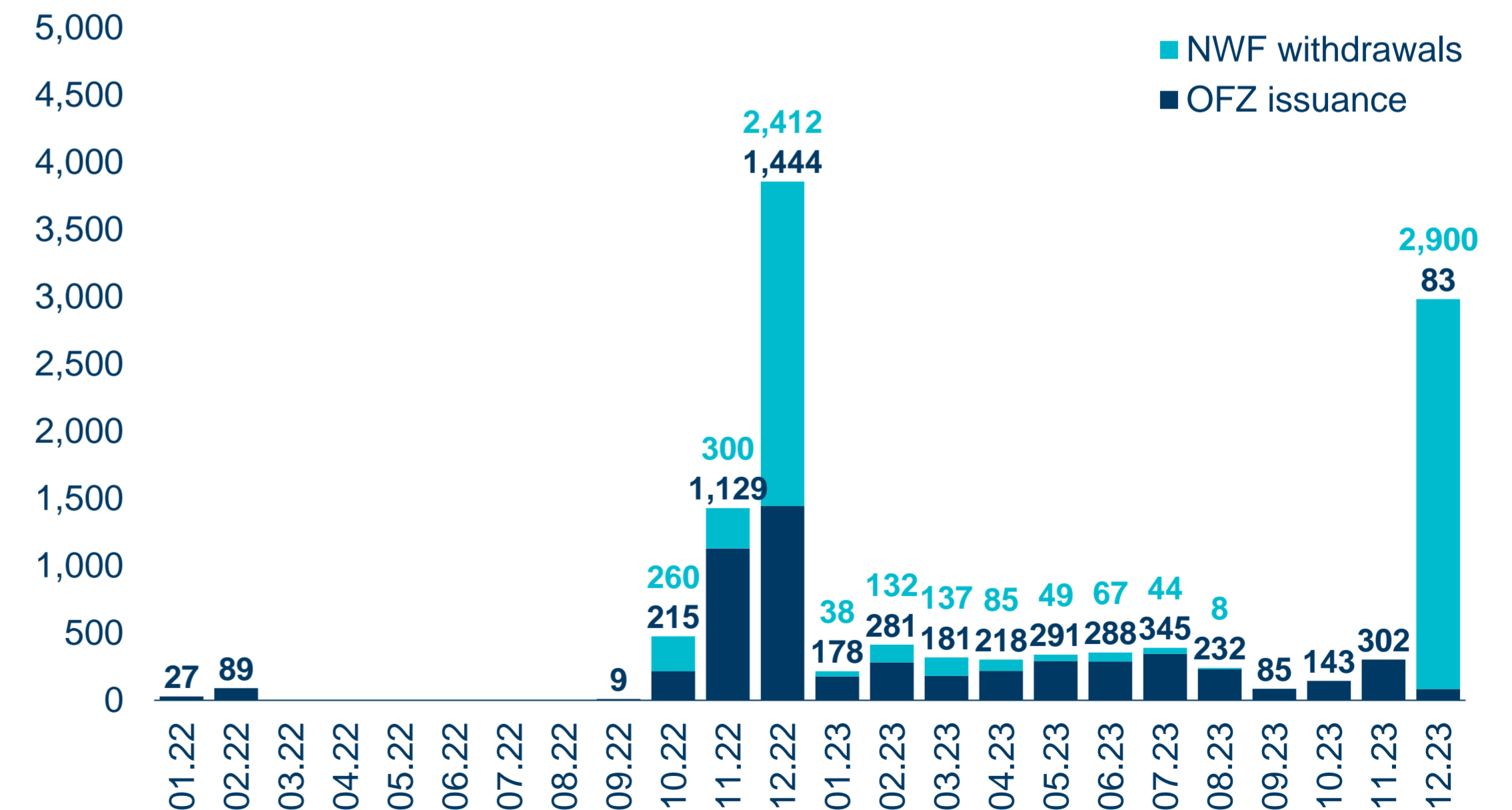
- The December deficit was typically elevated (at 2.4 trillion rubles), but not as pronounced as in 2022 (4 trillion).
- Authorities used 3.5 trillion from the NWF for financing, +16% vs. 2022 but less than expected earlier in the year.
- Due to the contained deficit, domestic borrowing declined by 10%—to 220 billion rubles per month on average.

Cumulative federal budget balance, in ruble billion



Source: Ministry of Finance, KSE Institute

Key fiscal financing channels, in ruble billion

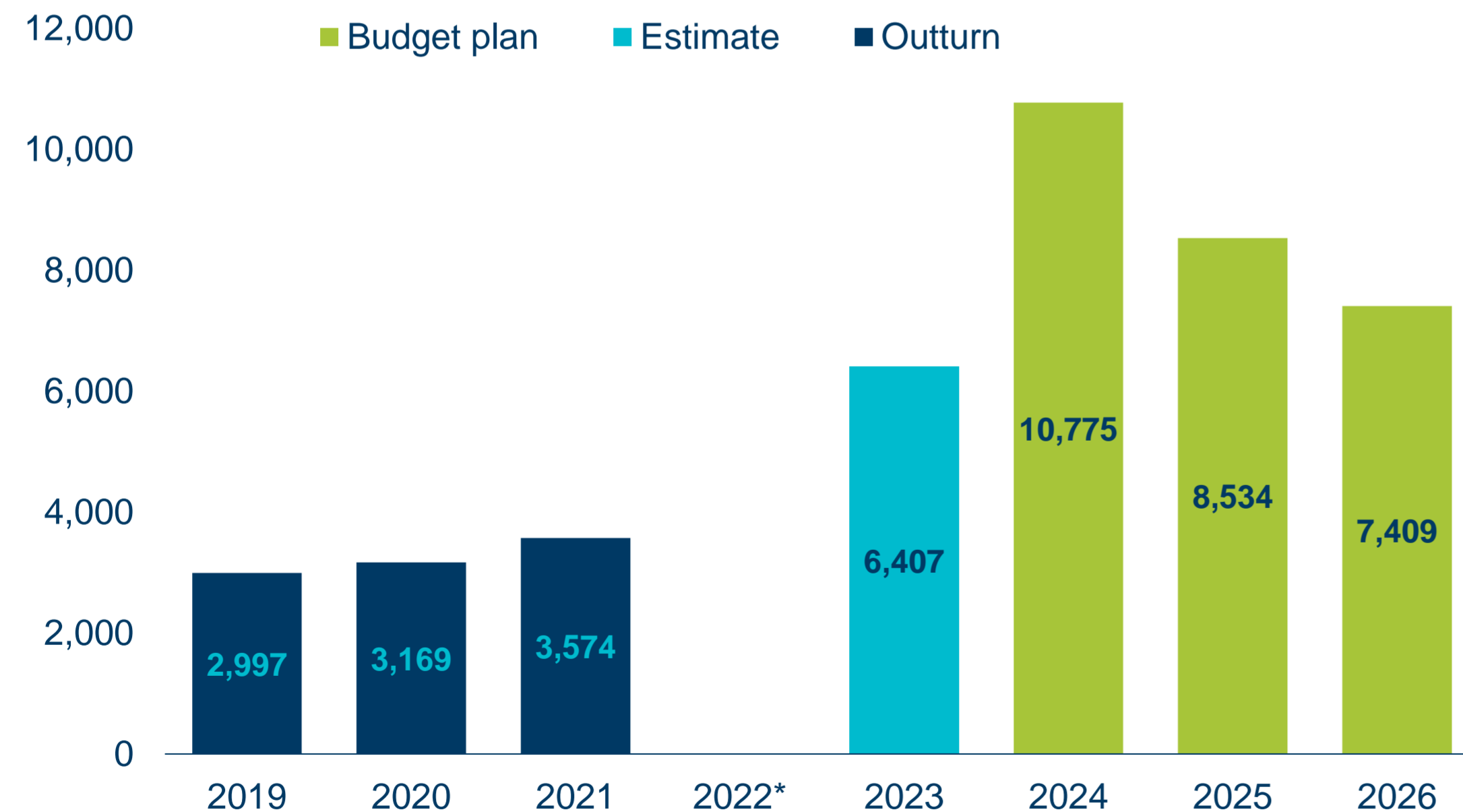


Source: Ministry of Finance, KSE Institute

## Significant increase in military spending planned for 2024.

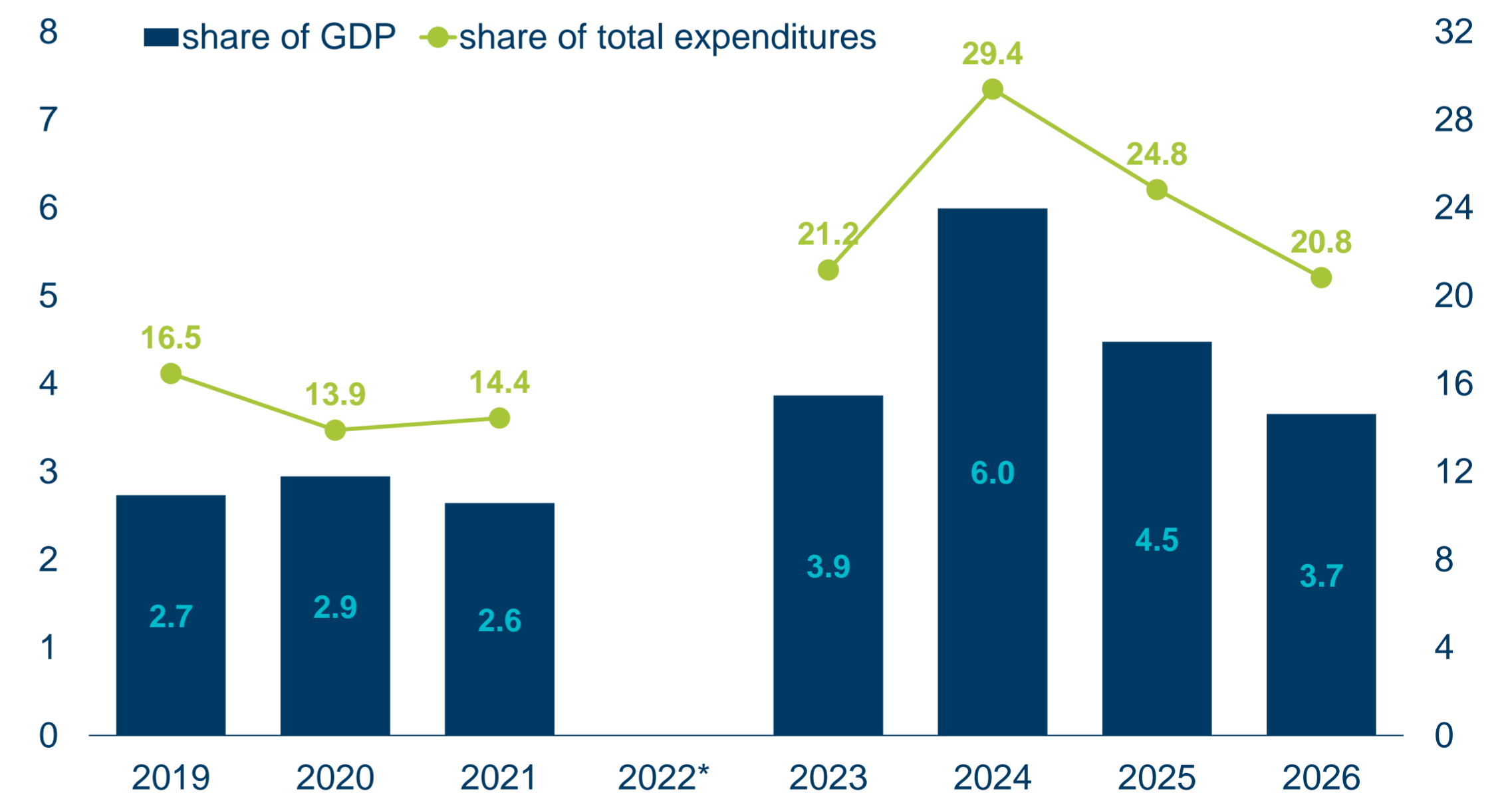
- Stable public finances will allow authorities to go through with their plan to dramatically expand military spending.
- The government aims to spend 10.7 trillion rubles (~\$100 billion) on the military in 2024 (+68% vs. last year).
- This demonstrates the regime’s commitment to the war but also illustrates the extent of the military-driven stimulus.

Federal defense expenditures, in ruble billion



Source: Ministry of Finance, KSE Institute \*no expenditure breakdown published

Federal defense expenditures, in %



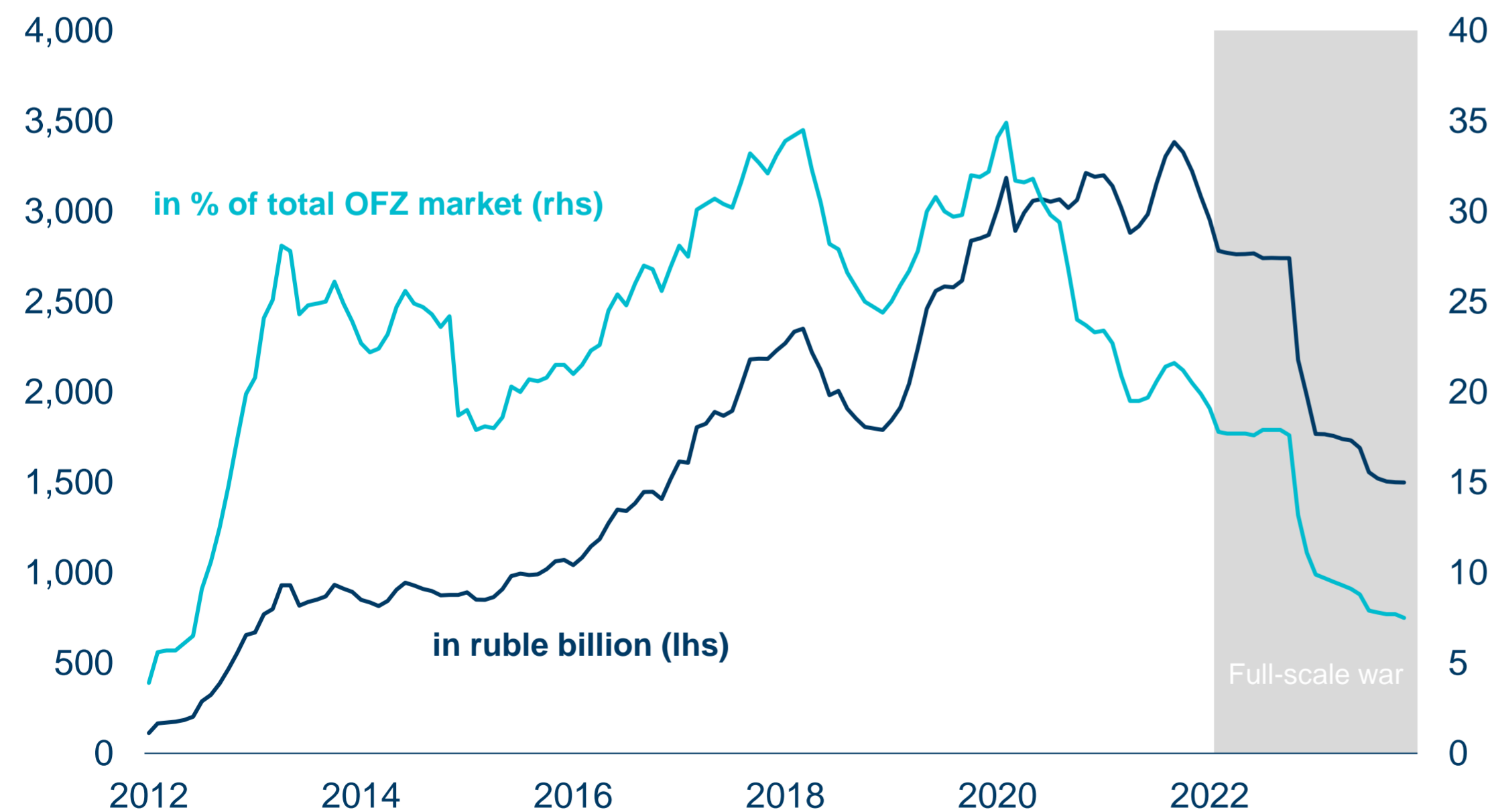
Source: Ministry of Finance, KSE Institute \*no expenditure breakdown published



## Domestic banks are the only remaining buyers for OFZs.

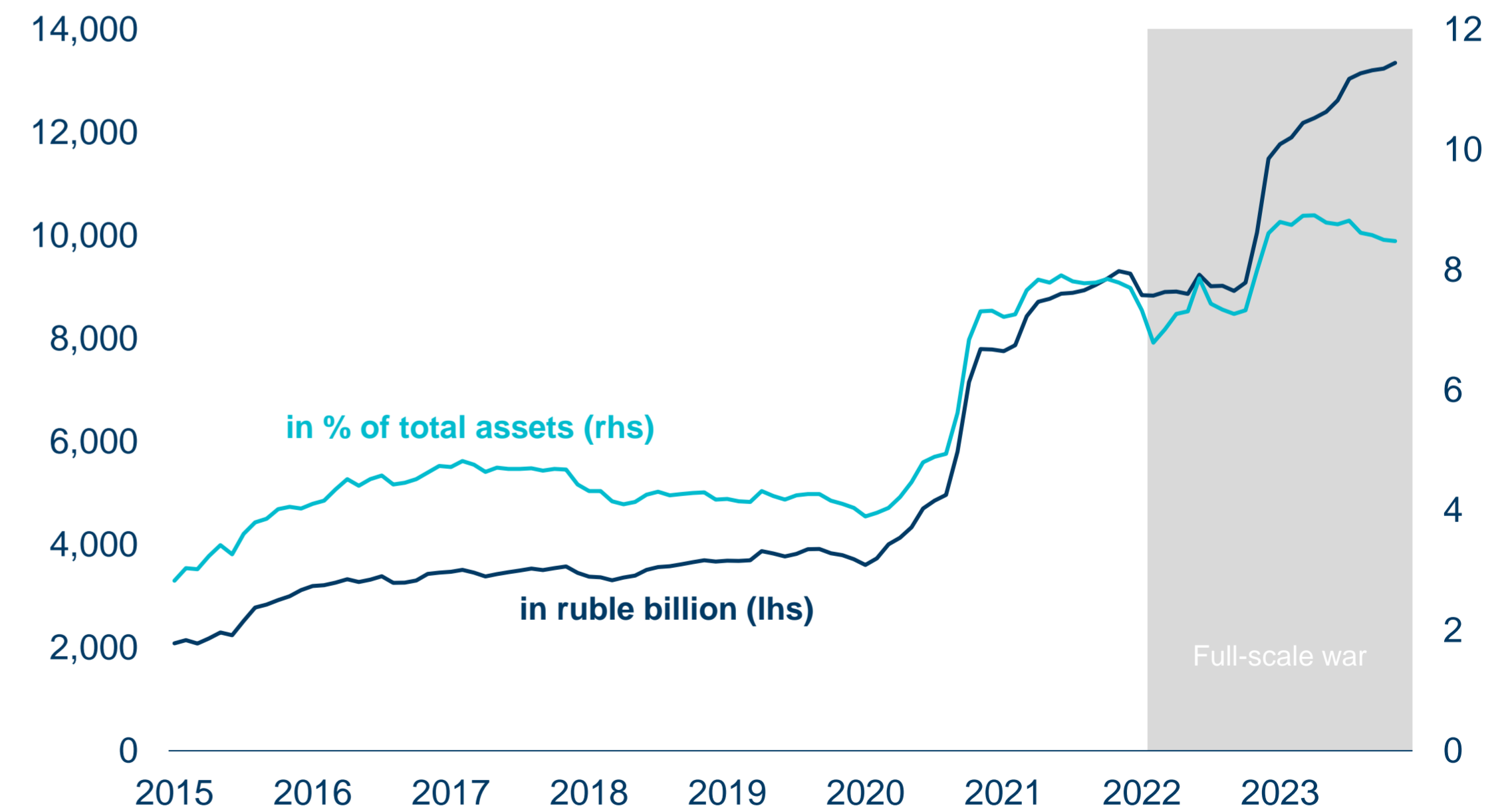
- Foreigners have largely disengaged from the Russian sovereign debt market since the start of the war.
- Non-resident holdings have dropped 1.2 trillion rubles (or 45%) since October 2022 as bonds matured.
- Over the same period, credit institutions' holdings have risen by close to 4.3 trillion rubles (or 47%).

### Non-resident OFZ holdings



Source: Bank of Russia, KSE Institute

### Credit institutions OFZ holdings

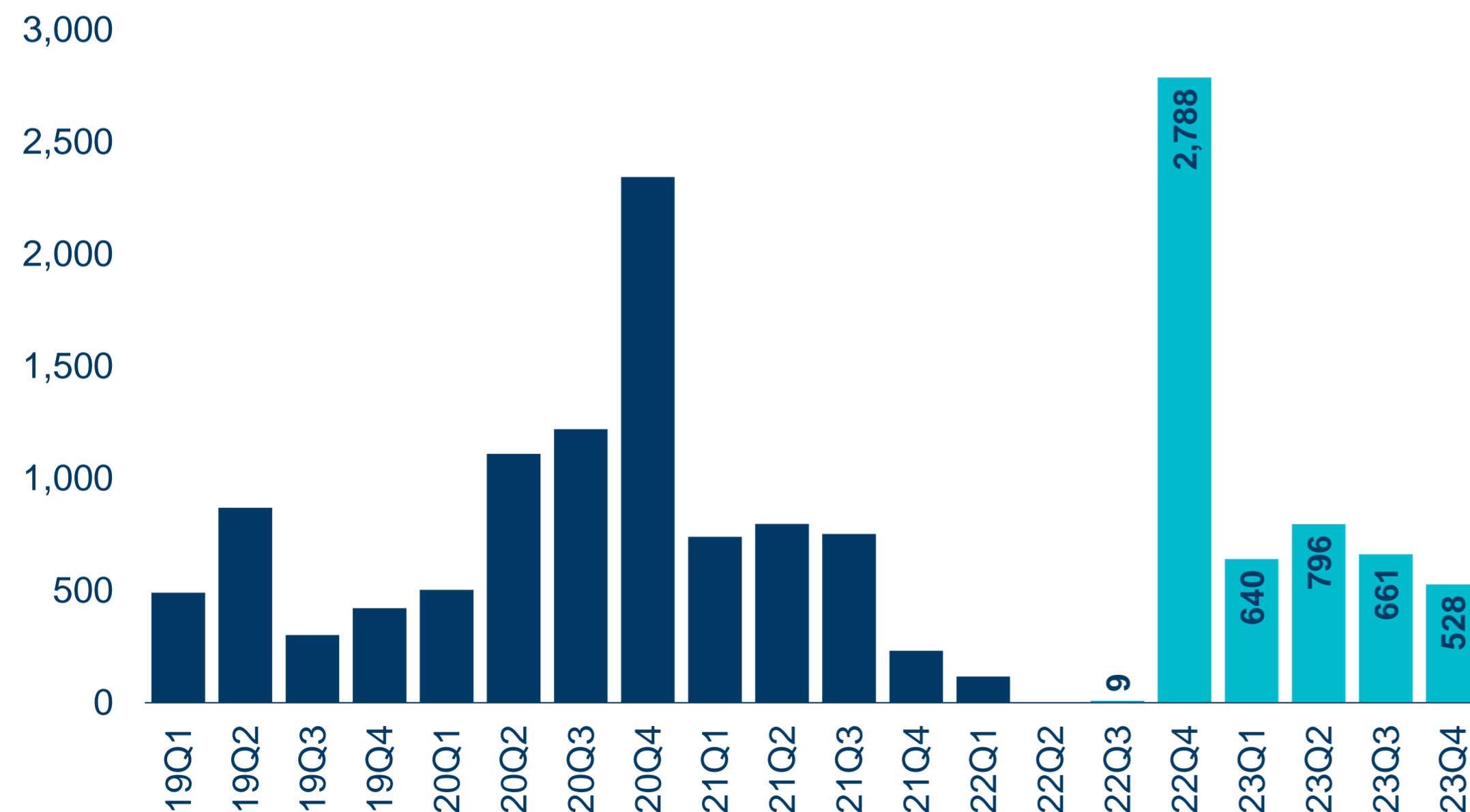


Source: Bank of Russia, KSE Institute

## The cost of borrowing has been rising since early-2022.

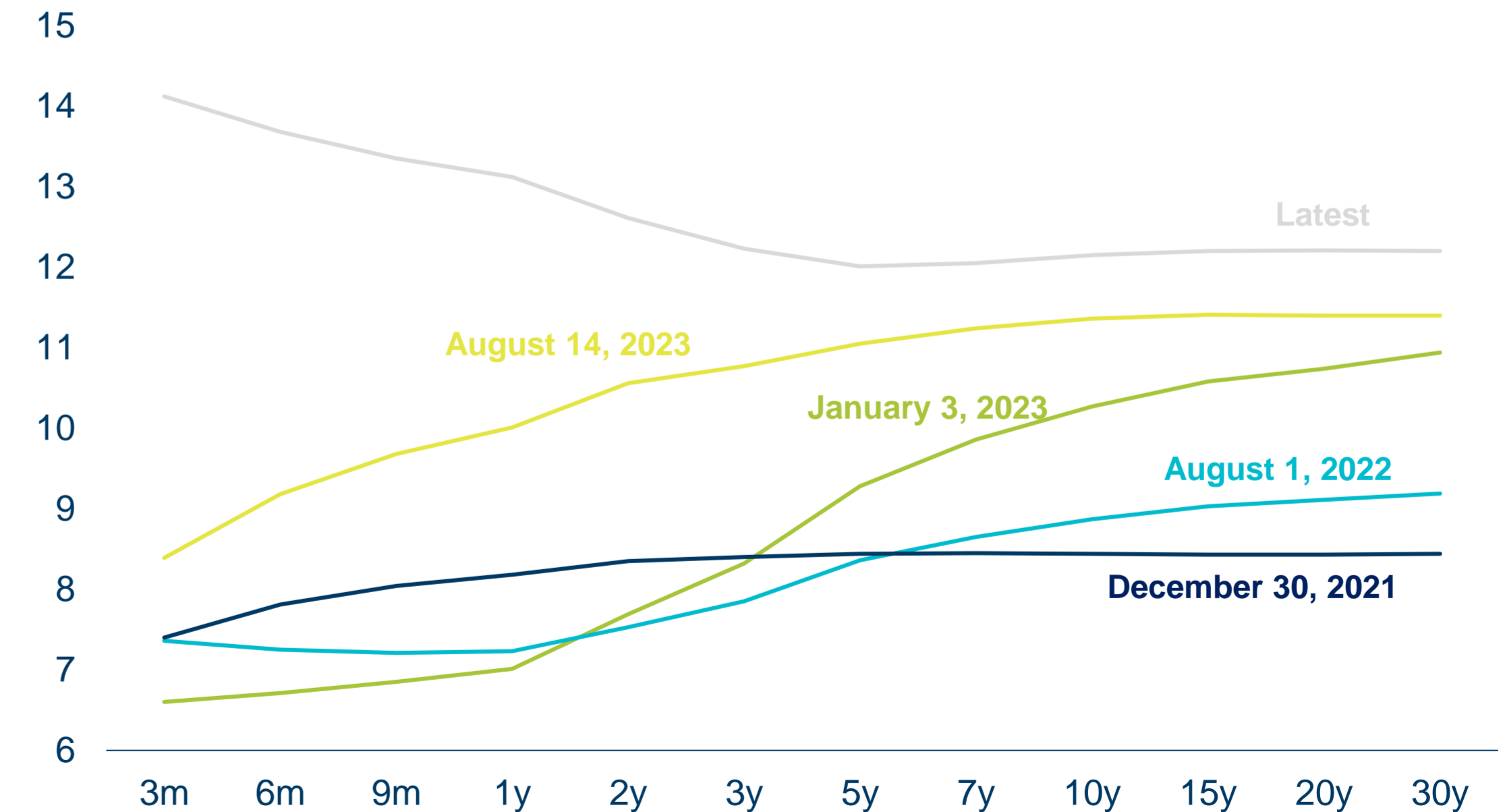
- The OFZ yield curve reflects the recent CBR rate hikes (of cumulative 850bps) with the short end shifting up sharply.
- Longer maturity interest rates will inevitably follow suit in the coming weeks/months, driving up overall borrowing costs.
- Domestic debt issuance may pick up in 2024 as the financing mix has to shift away from the National Welfare Fund.

New domestic debt (OFZ) issuance, in ruble billion



Source: Ministry of Finance, KSE Institute

OFZ yield curves, in %



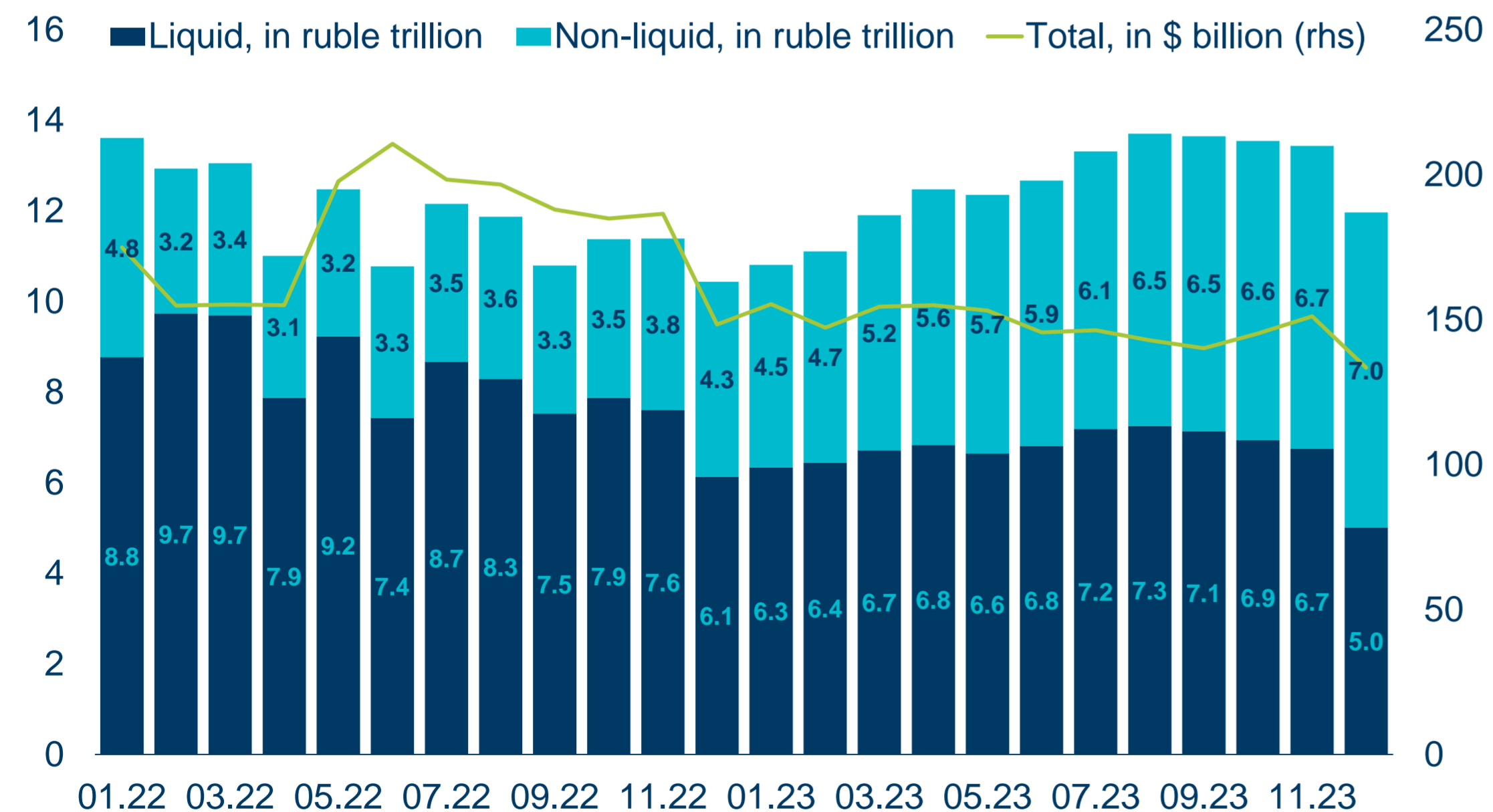
Source: Bank of Russia, KSE Institute

**Macro buffers: Russia has used up half of the NWF's liquid assets, including all hard currency; access to reserves seriously constrained.**

## Half of the NWF's liquid assets have been used up.

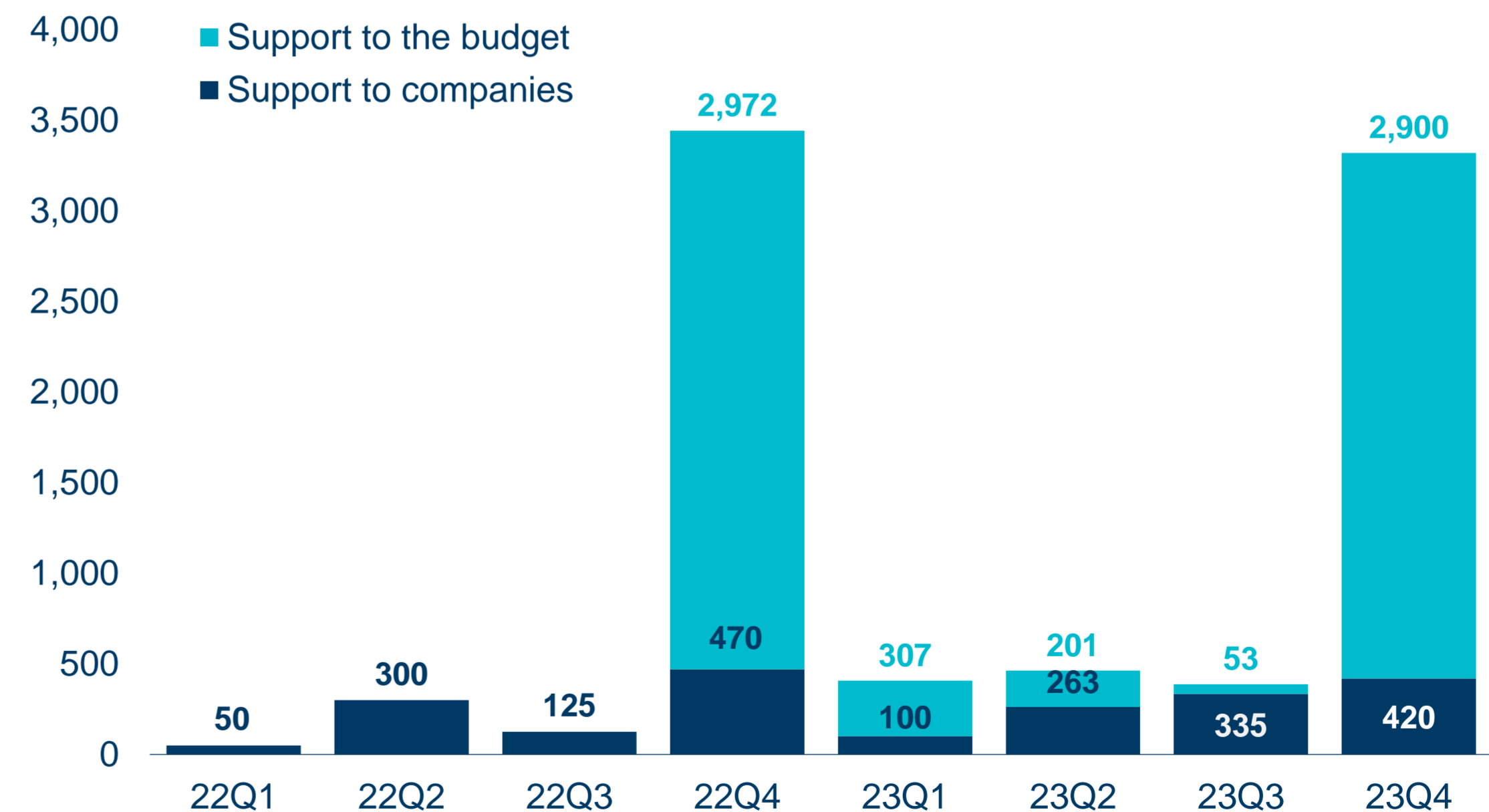
- Total assets of the National Welfare Fund stood at 12.0 trillion rubles (\$133.4 billion, 8.0% of GDP) at the end of 2023.
- The liquid portion now only accounts for 42% of the total as funds were withdrawn for budgetary support in December.
- Since the start of the full-scale invasion, Russia has, thus, used up almost half (~4.7 trillion) of the NWF's liquid assets.

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



Source: Ministry of Finance, KSE Institute

Utilization of the NWF, in ruble billion



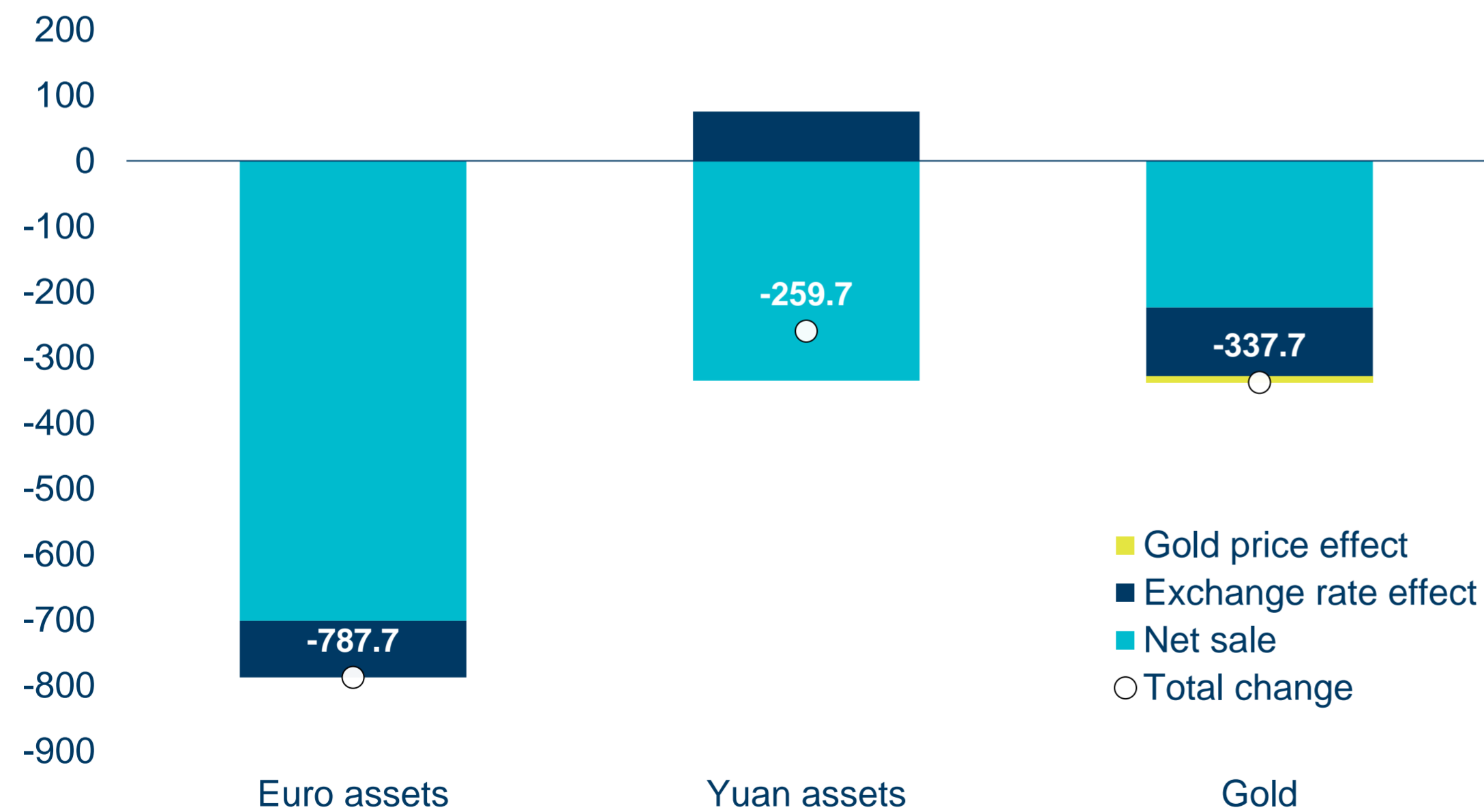
Source: Ministry of Finance, KSE Institute



## Headline NWF numbers conceal that hard currency assets are gone.

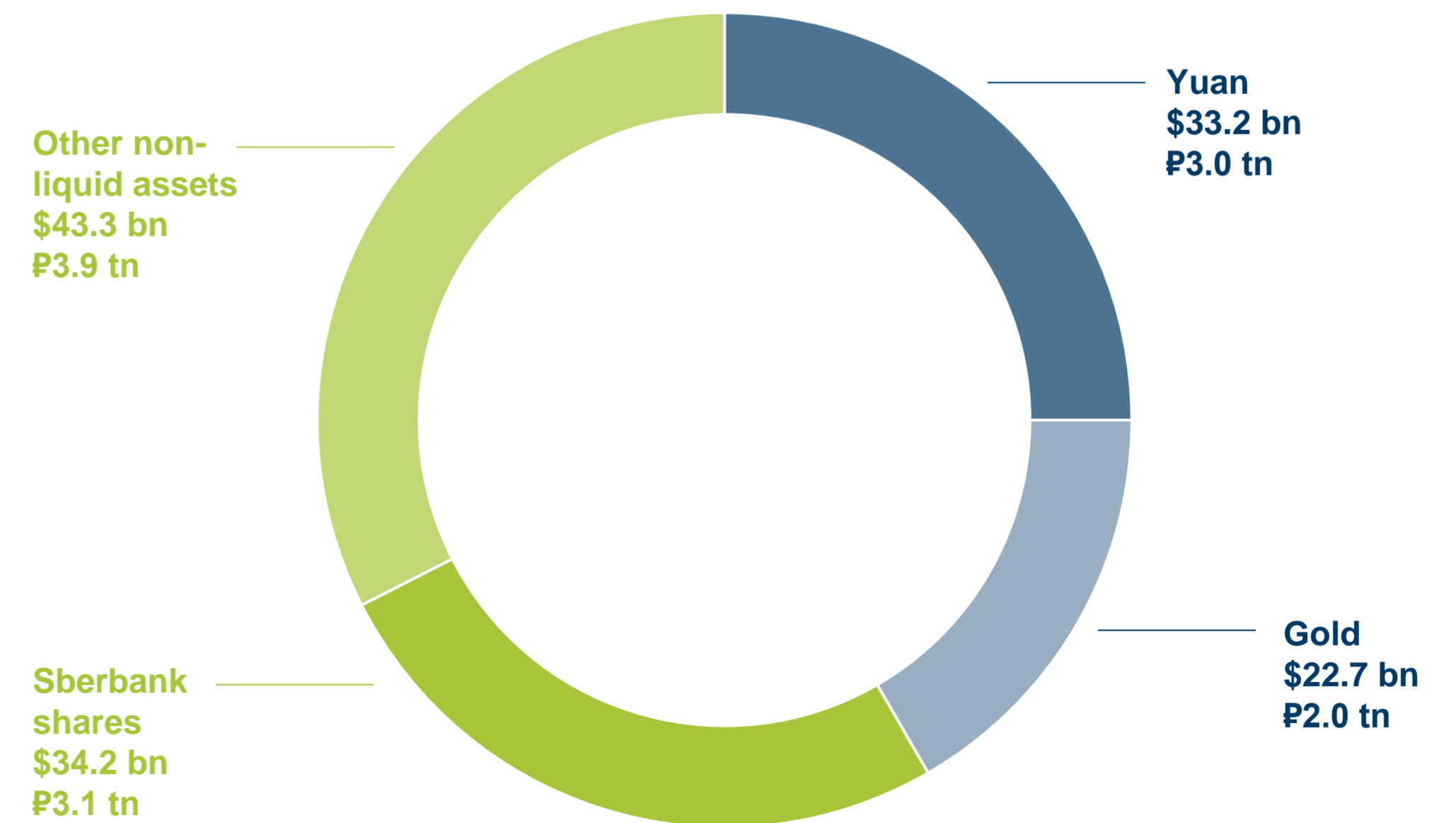
- Russia has depleted all hard-currency holdings of the NWF, with euro assets falling to zero in December 2023.
- Only yuan-denominated assets and gold remain in the liquid portion, totaling 5.0 trillion rubles (or \$56 billion).
- As these are more difficult to use, at least at scale, budgetary funding via the NWF will become more challenging.

Change in assets (Dec. 2023 vs. Dec. 2022), in ruble billion\*



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

Composition of NWF assets as of December 1, 2023\*

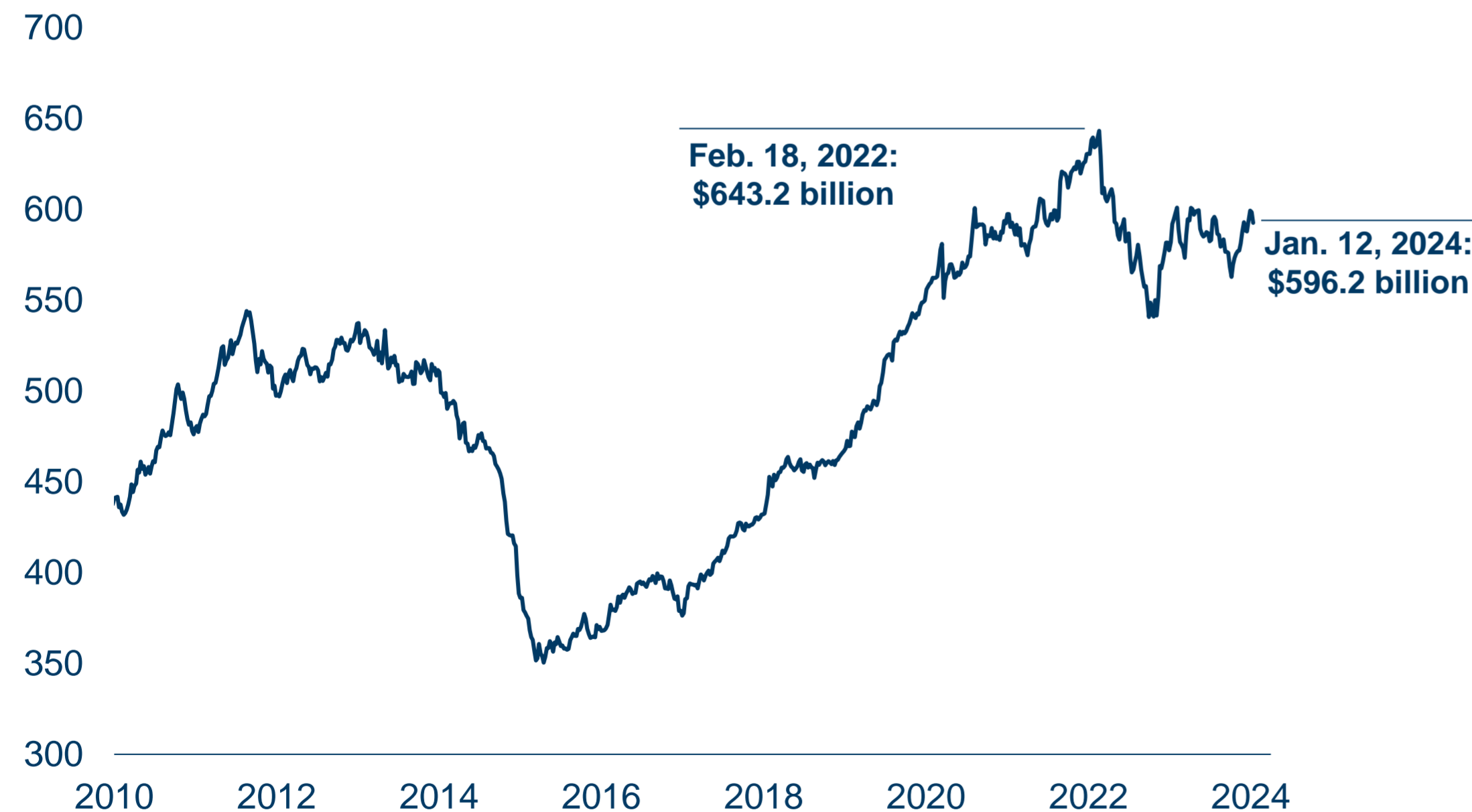


Source: Ministry of Finance, KSE Institute \*based on market exchange rates/prices

## A substantial share of international reserves remain immobilized.

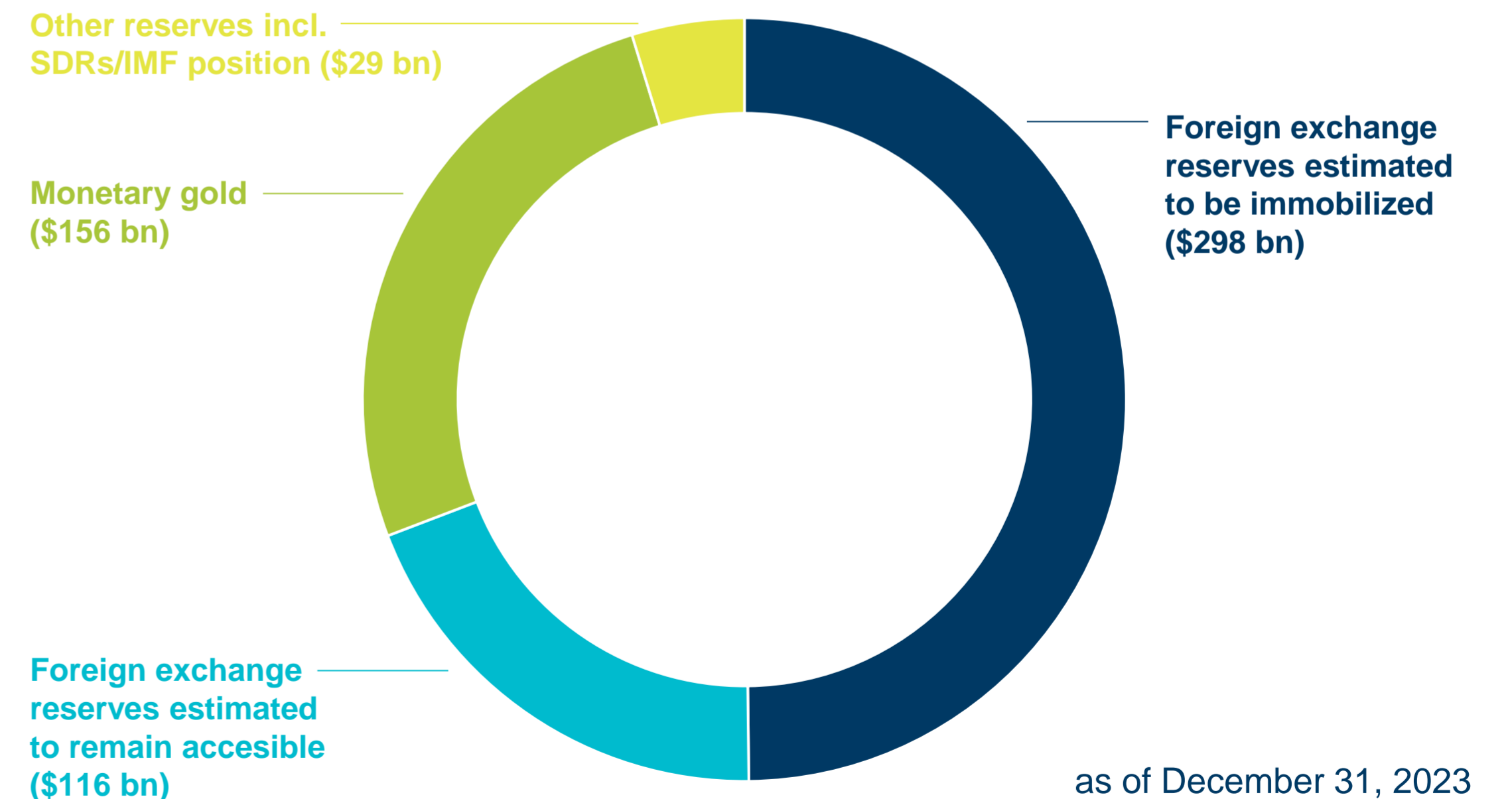
- Before the invasion, Russia held \$634 billion in international reserves, part of what is described as “Fortress Russia”.
- We estimate that around \$298 billion are currently immobilized due to international sanctions on CBR and NWF.
- This leaves Russia with access to \$156 billion in monetary gold and roughly \$116 billion in FX assets (largely yuan).

Total reserves, in U.S. dollar billion



Source: Bank of Russia, KSE Institute

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

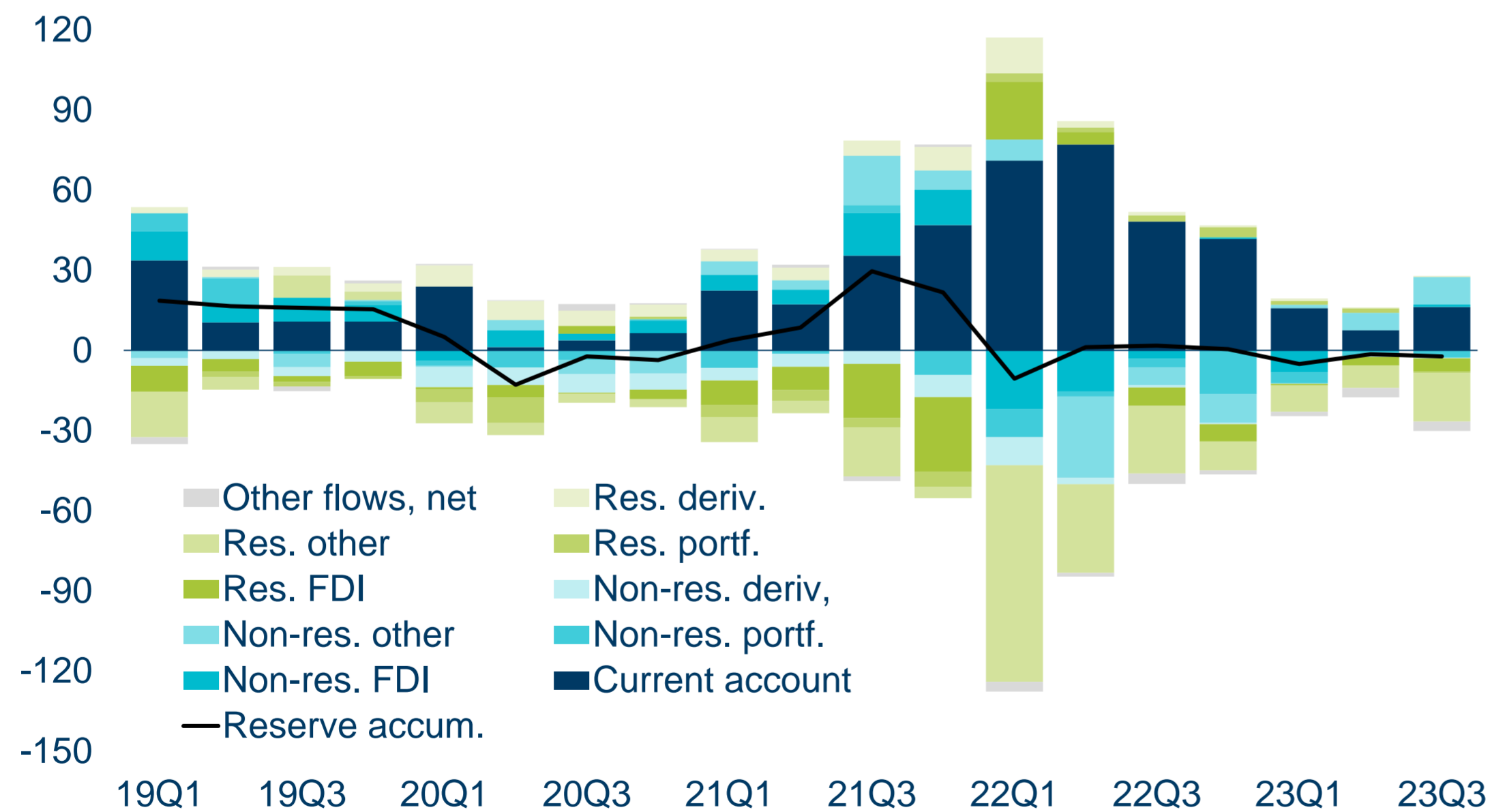


Source: Bank of Russia, KSE Institute

## Significant accumulation of new foreign assets in 2022-23.

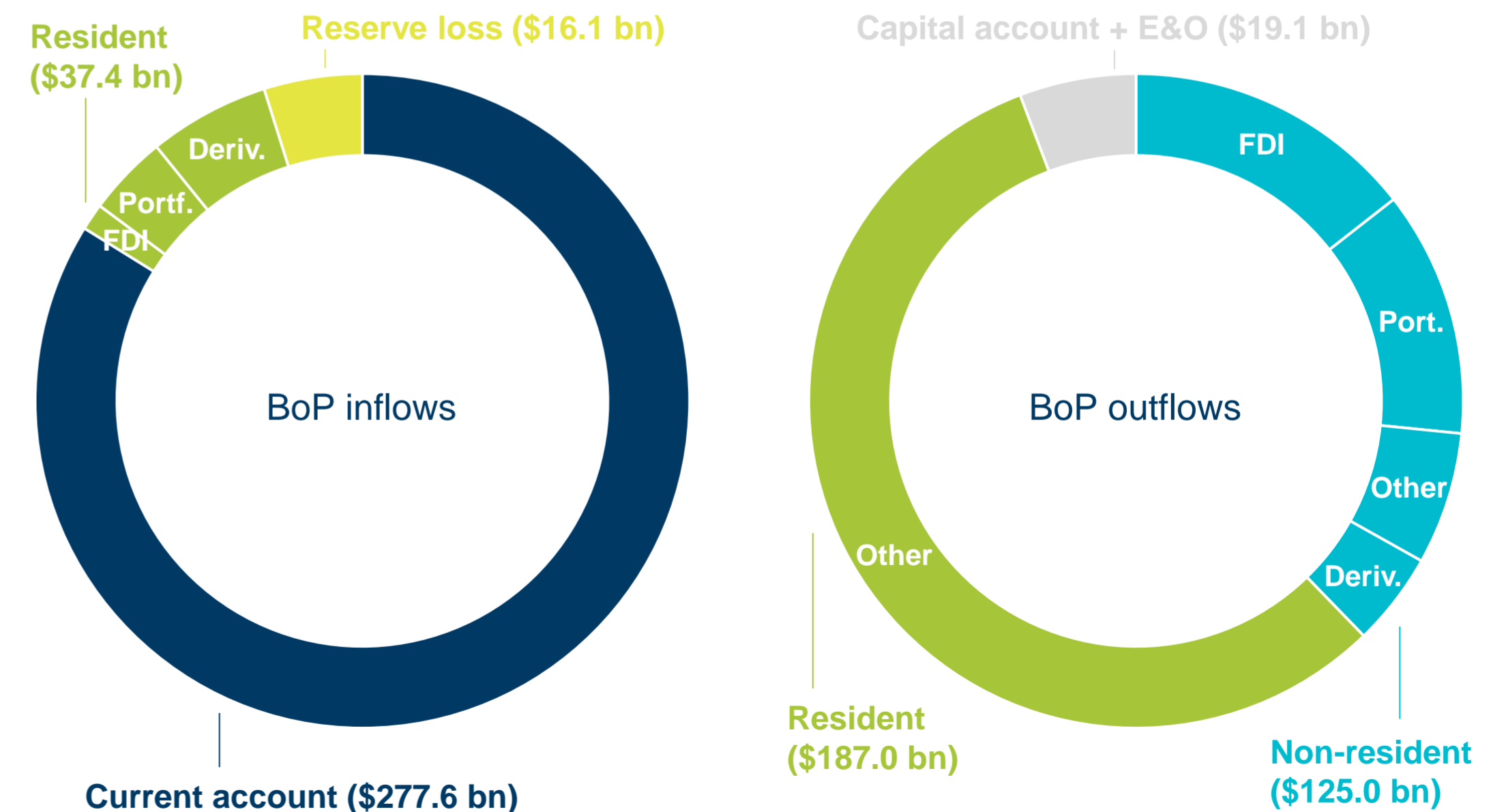
- It is time to focus attention on foreign assets that Russia has been able to accumulate due to favorable BoP dynamics.
- Non-resident capital outflows partially ate up the large current account surplus and resident inflows in Q1 2022-Q3 2023.
- But Russian banks and corporates were able to acquire \$187 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

2022Q1-2023Q3 balance of payments flows, in U.S. dollar billion

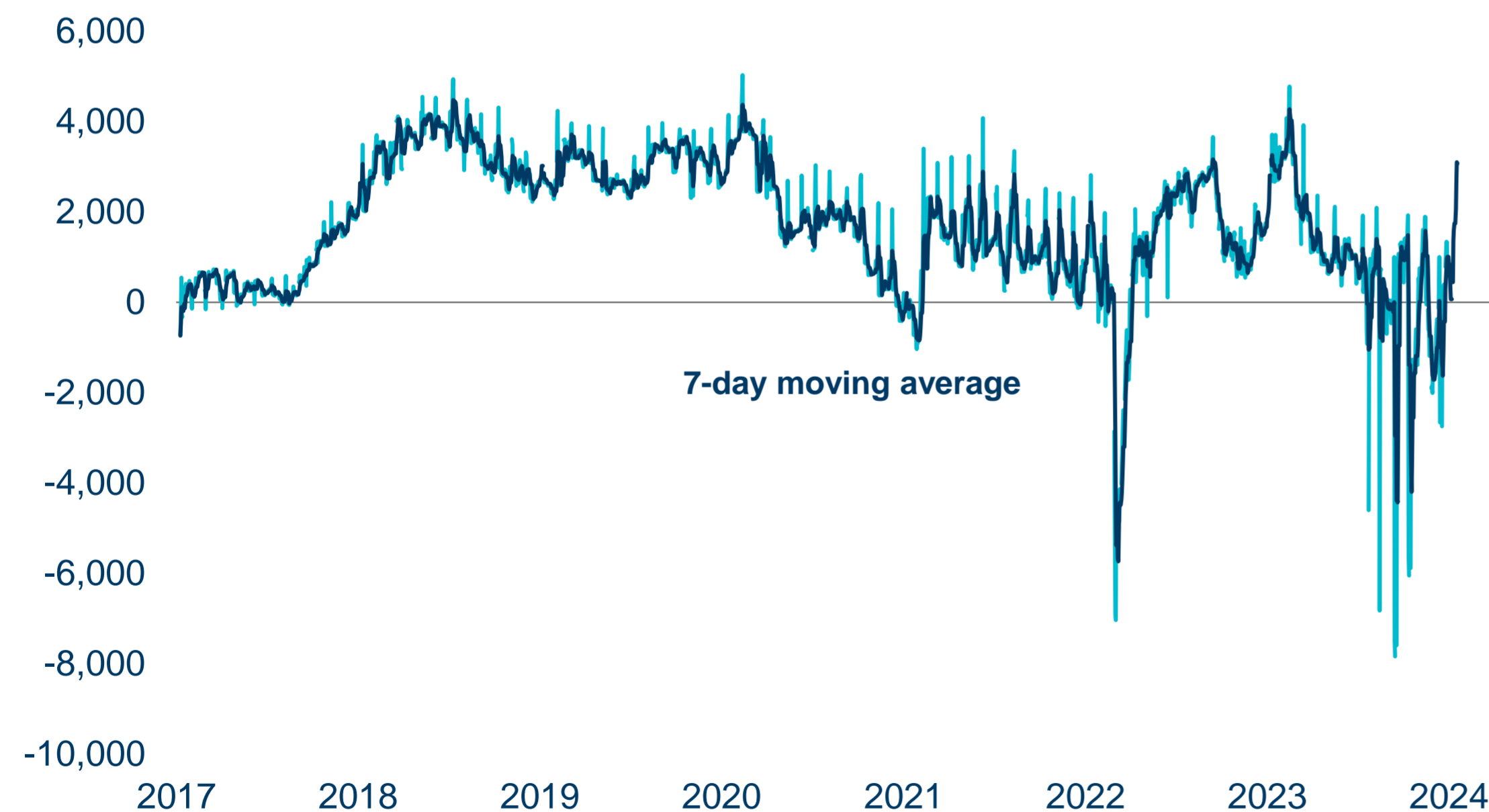


Source: Bank of Russia, KSE Institute

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

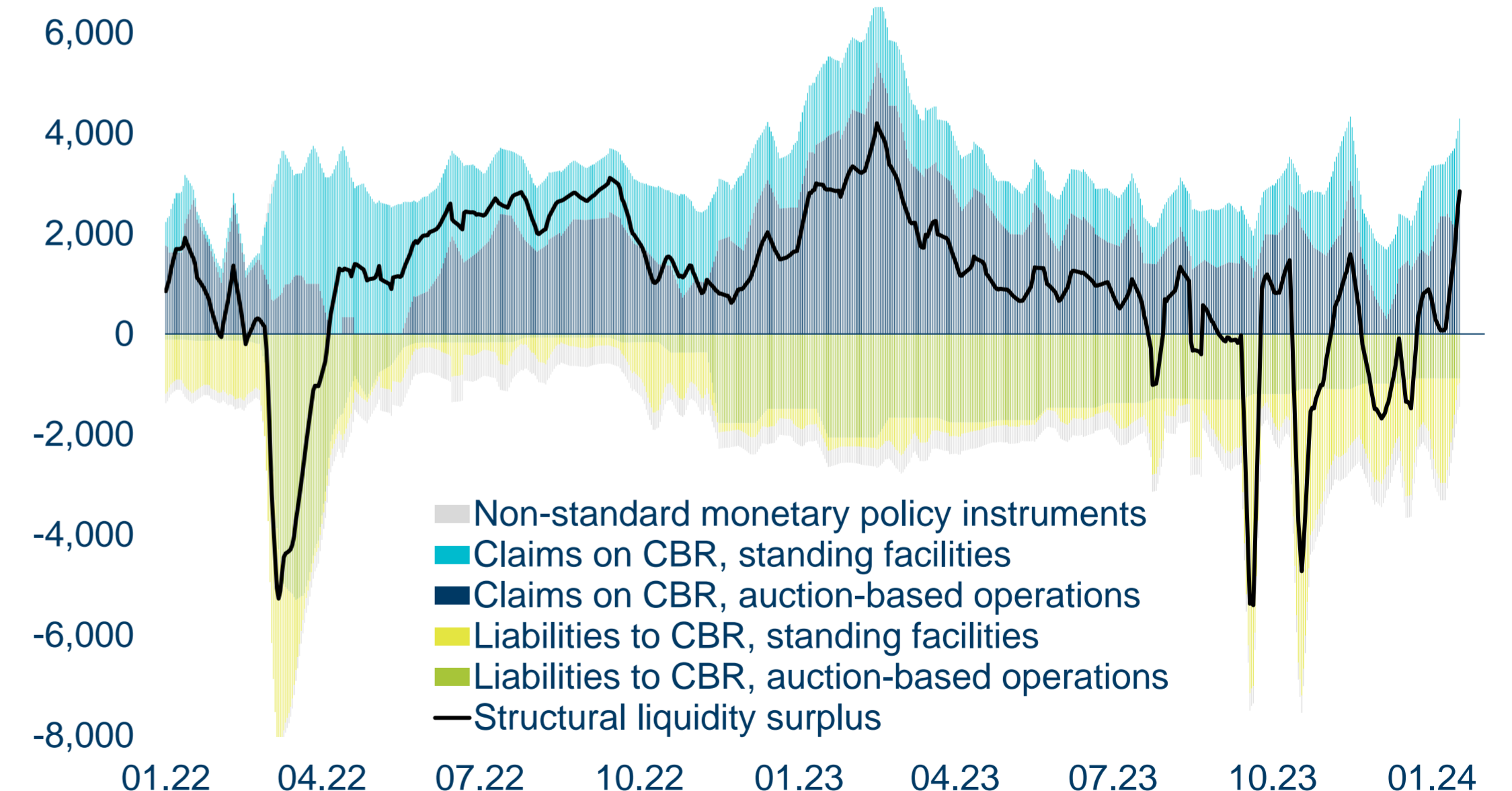
- Liquidity conditions recovered quickly after the initial shock from the full-scale war and imposition of sanctions.
- A closer look at the composition of the structural liquidity surplus points to some stress in the interbank market.
- The data clearly shows the effects of the CBR's monetary tightening in July-December 2023 (cumulative +850 bps).

Banking system structural liquidity surplus, in ruble billion



Source: Bank of Russia, KSE Institute

Composition of structural liquidity surplus, in ruble billion\*



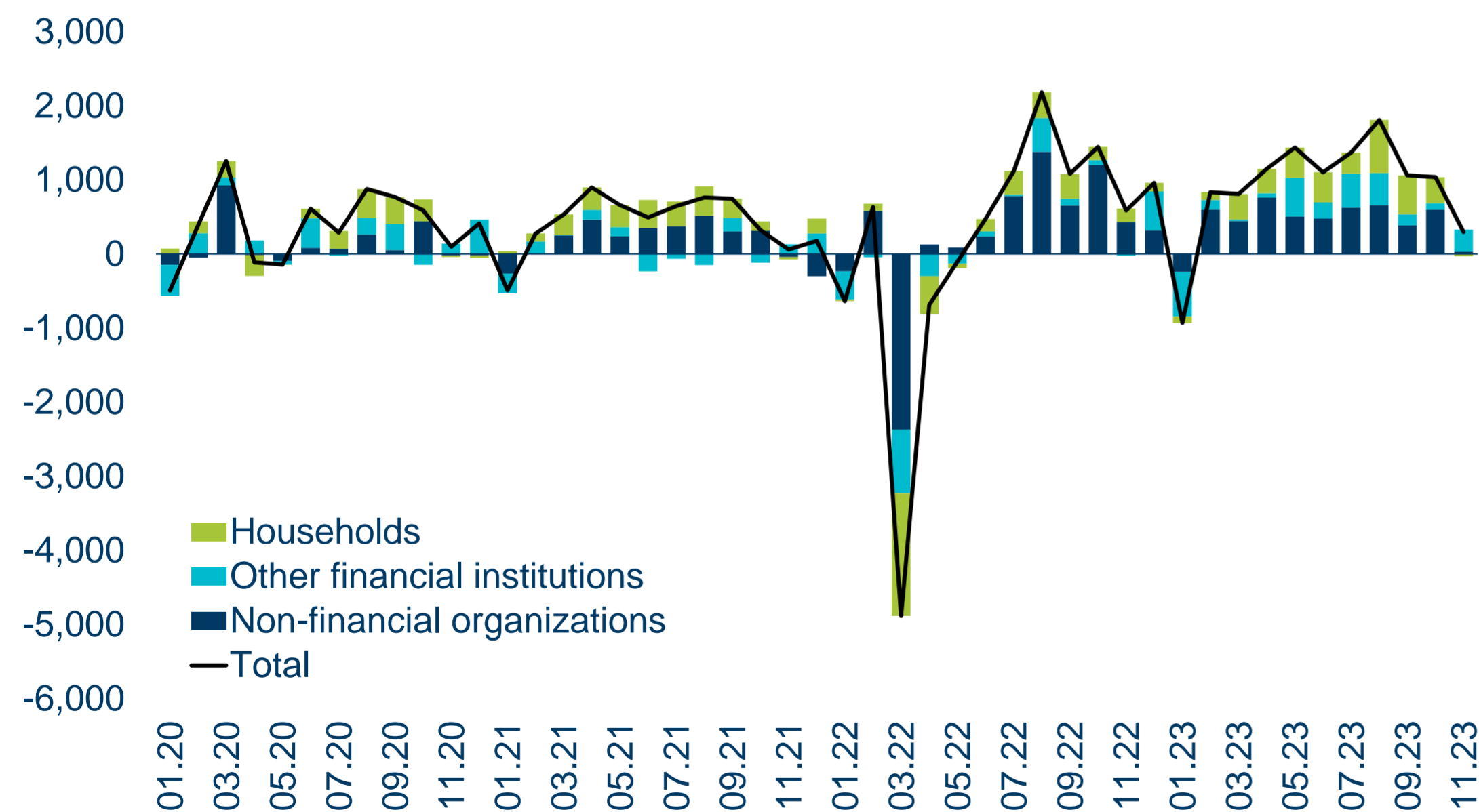
Source: Bank of Russia, KSE Institute \*7-day moving average



## Private sector credit growth robust for the moment.

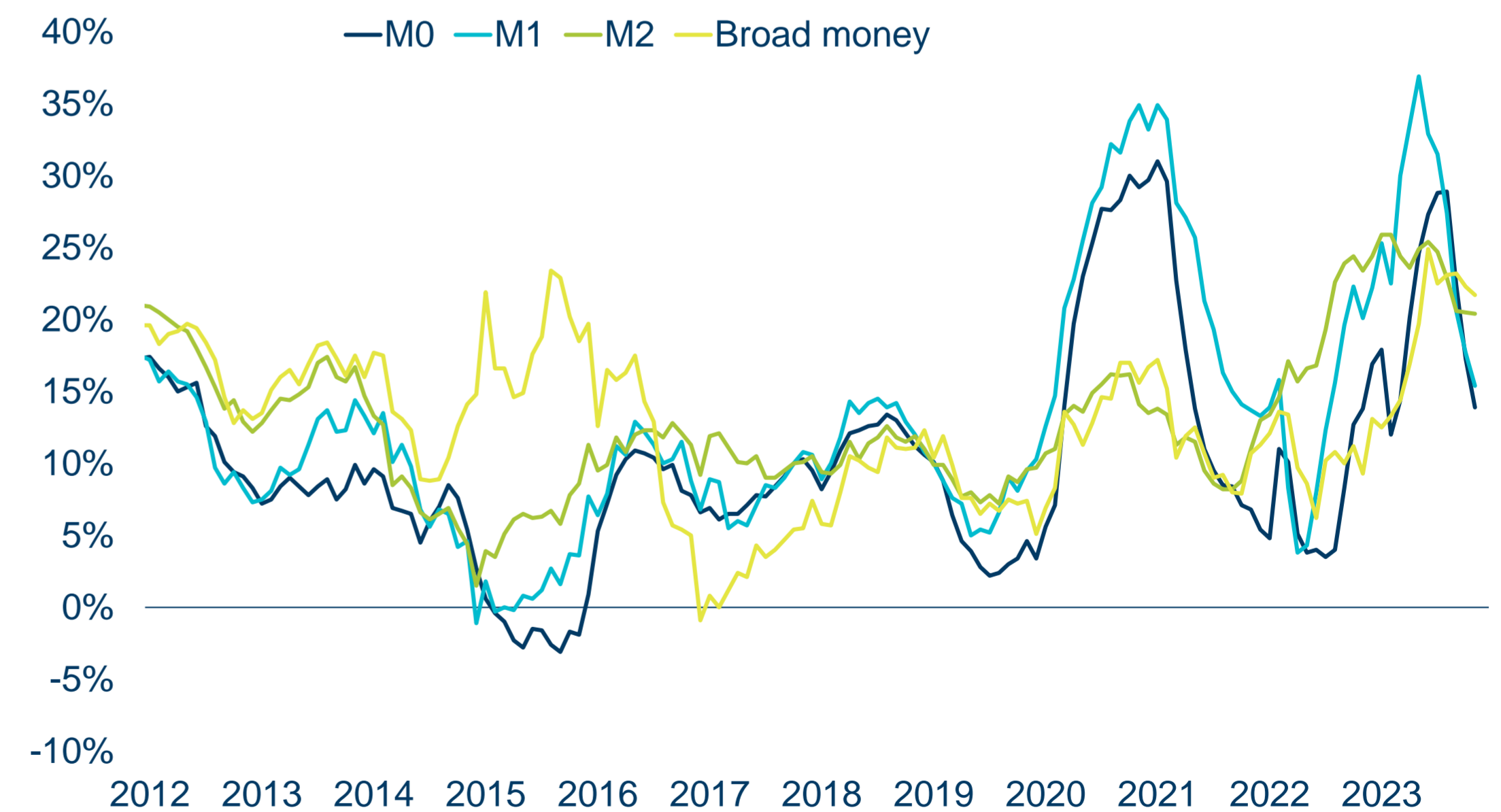
- Due to the provision of sufficient liquidity by the CBR, banks have been able to provide the private sector with credit.
- The CBR was able to simultaneously address monetary and financial stability in 2022 due to the supportive environment.
- With FX inflows down and the ruble under pressure, conflicts between the two objectives will increasingly emerge again.

New ruble-denominated credit, in 2020 ruble billion\*



Source: Bank of Russia, KSE Institute \*deflated using CPI

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



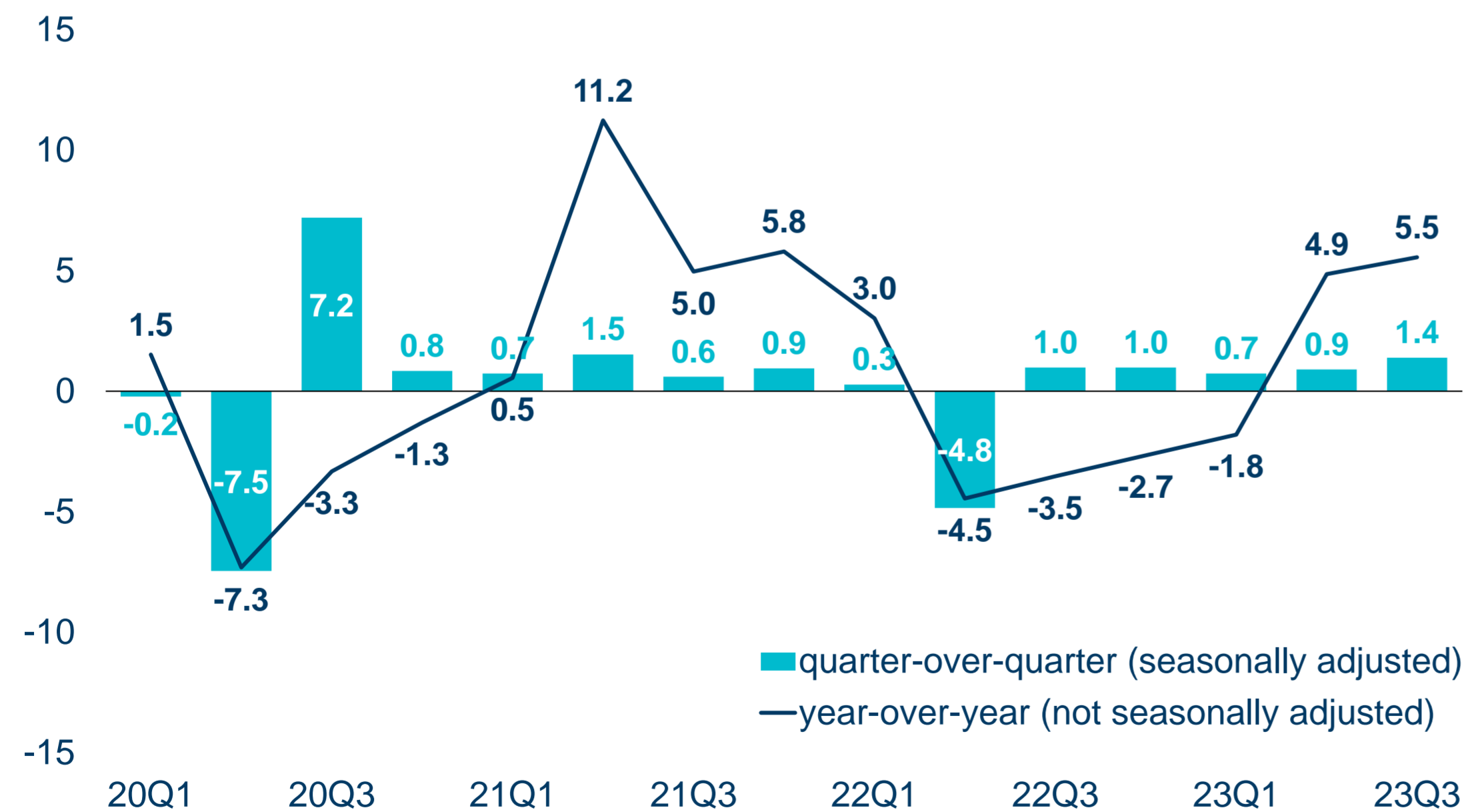
Source: Bank of Russia, KSE Institute

**Economic activity: return to growth in 2023-24 due to large fiscal stimulus from military spending, but prospects in the medium-/long-term are challenging**

## Russia's economy is on track for robust growth in 2023-24.

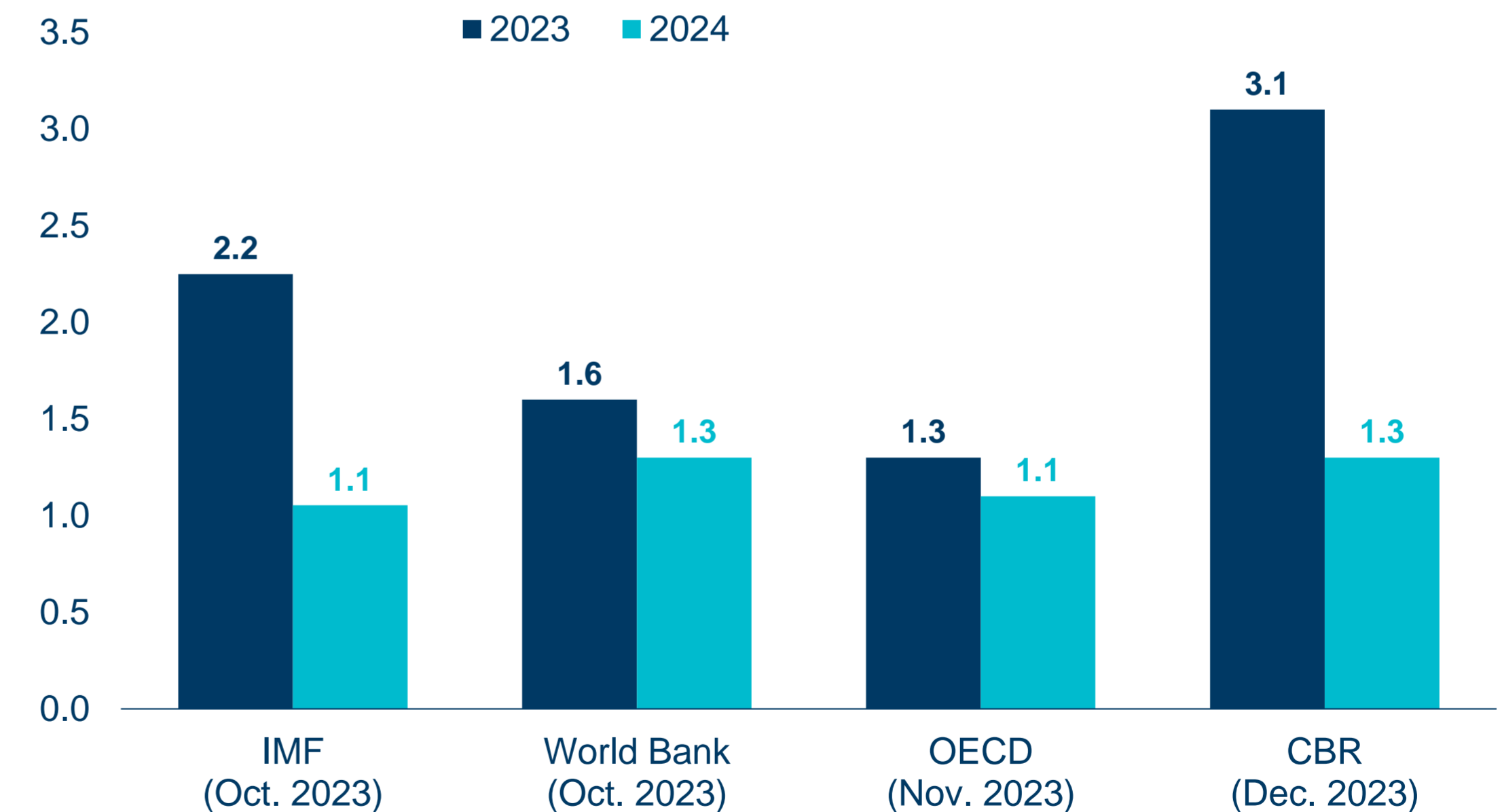
- Rosstat reports a pickup in growth—partially due to base effects—with 4.9% and 5.5% y/y in Q2 and Q3, respectively.
- For the full year, the economy is expected to growth at a robust rate, with most forecasts revised upward in recent months.
- Key factors for the recovery: strong fiscal stimulus from high defense spending and robust private sector credit growth.

Quarterly real GDP dynamics, in %



Source: Rosstat, KSE Institute

2023-24 forecasts for Russian real GDP, in % year-over-year

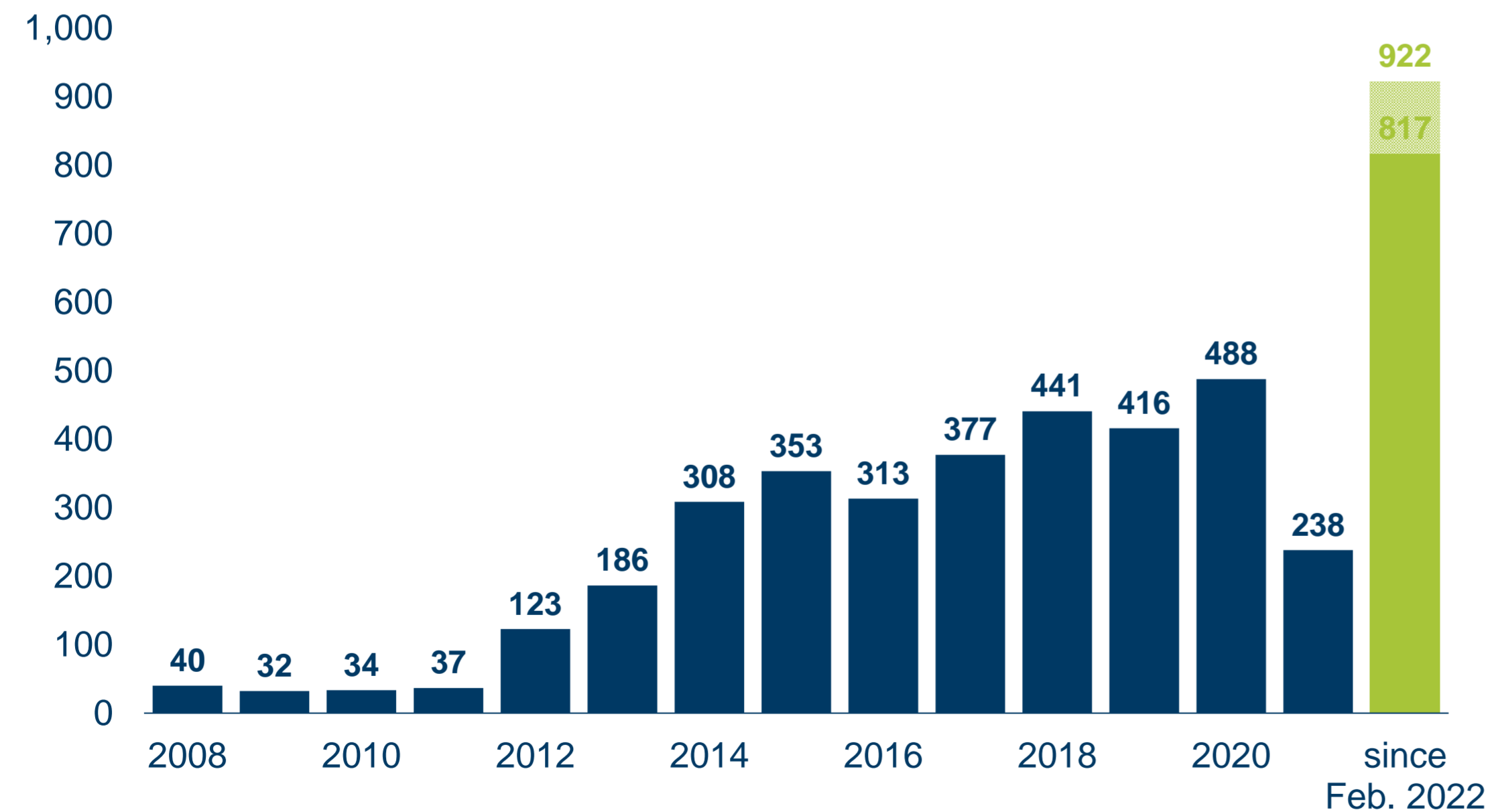


Source: Bank of Russia, Bloomberg, IMF, OECD, World Bank

## Medium- to long-term prospects of the economy are dire.

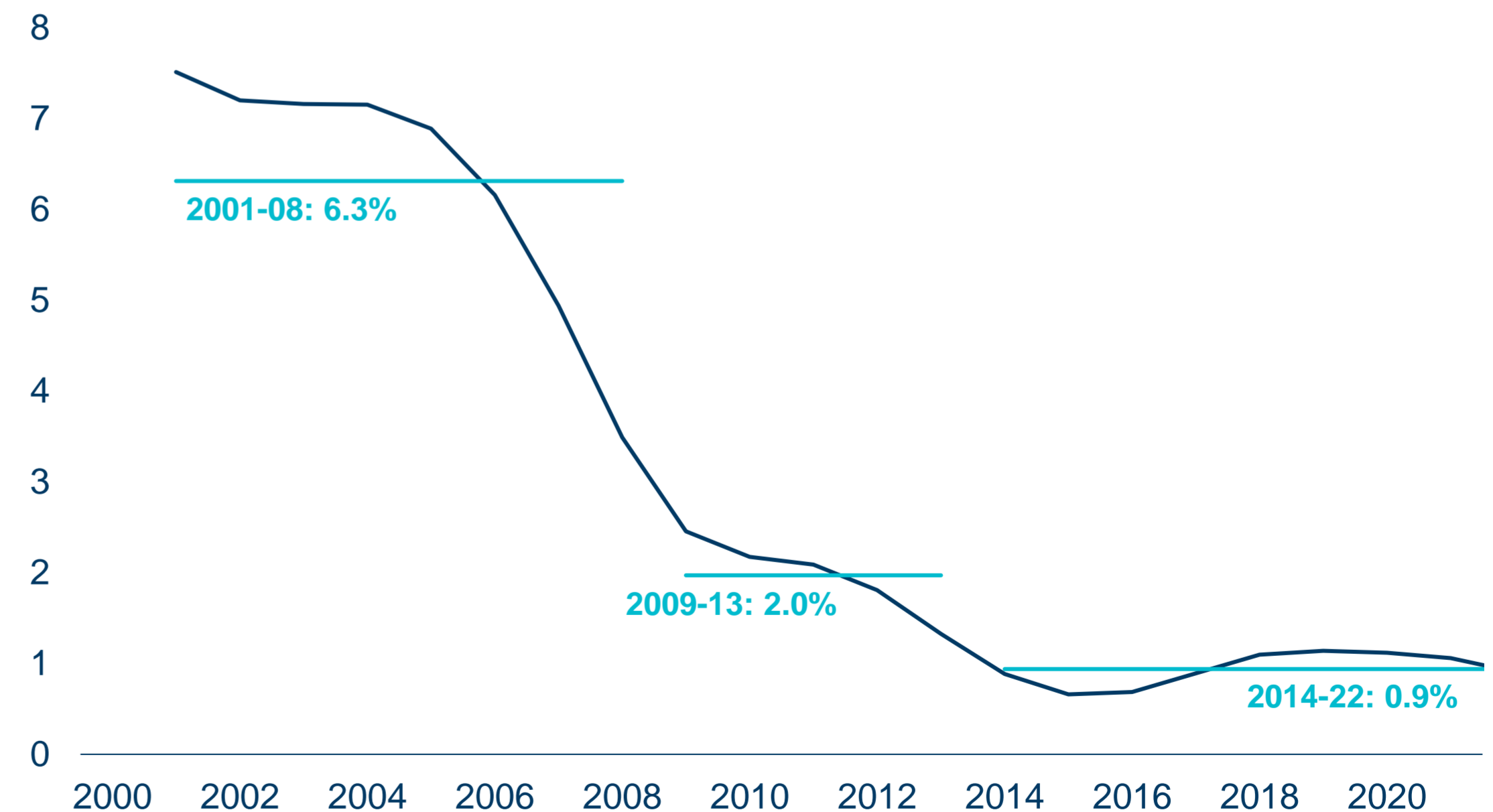
- Emigration is estimated to have picked up considerably since February 2022—to 817,000-922,000.
- Thus, an economy with previously abysmal potential growth is facing a significant shortage of (skilled) labor.
- Furthermore, once fiscal stimulus is withdrawn, the economy’s fundamental weaknesses will surface.

Emigration from Russia, in thousand persons



Source: Re:Russia, Rosstat, KSE Institute

Potential GDP growth, in % year-over-year\*



Source: Rosstat, KSE Institute \*calculated using H-P filter



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