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KSE Institute Russia Chartbook

Widespread Price Cap Violations Do Not Leave Room For Error—Action to Improve Enforcement Is Needed

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Executive Summary

1. **Effectiveness and credibility of energy sanctions on the line.** Recent data suggest that Russia's crude oil exports are increasingly slipping beyond the G7's reach. *First*, compliance with the price cap appears to have been virtually zero in October, likely due to so-called "attestation fraud", e.g., the provision of falsified pricing information to G7/EU service providers. *Second*, Russia's reliance on its "shadow fleet" of vessels not owned and/or insured by G7/EU entities is rising, meaning that the cap's leverage is fading quickly.
2. **Higher oil export earnings contribute to improved external environment.** Following a period during which export earnings came under significant pressure as wide discounts on Russian oil weighed on prices, we observe a gradual improvement in recent months. The overall current account surplus is up, partially driven by higher goods exports, resulting in higher foreign currency inflows into the Russian economy. Together with the CBR's interest rate hikes and re-introduction of capital controls, this has also stabilized the ruble.
3. **Macroeconomic pressure is subsiding, will provide more policy space.** On the fiscal side, revenues from oil and gas rebounded strongly due to higher export prices, robust volumes, and the weaker ruble. At the same time, non-O&G receipts are up as Russia's economy has proven to be resilient and bounced back from the initial shock from the war and sanctions. A much smaller budget deficit means that macro buffers will remain intact and allows the government to sharply increase spending on the war next year.
4. **Bold action is urgently needed to maintain pressure on Russia.** Sanctions have put a heavy burden on Russian macroeconomic stability in the first half of the year, but their effect appears to be increasingly in question. In particular, the October data suggest that problems with price cap implementation and enforcement are much bigger than previously expected. We propose three concrete steps that can quickly and effectively address these challenges—and make sure that Russia's policy space remains constricted.

    (1) G7/EU authorities should ensure that authorities have sufficient information to determine if the price cap is complied with.

    (2) EU coastal states should leverage geographical "choke points" to limit Russia's ability to use a shadow fleet of tankers.

    (3) Price cap coalition countries should step up penalties on entities that violate the price cap or facilitate such violations.

Price cap: Russia’s oil is slipping increasingly beyond G7 reach as violations appear widespread and the shadow fleet grows.

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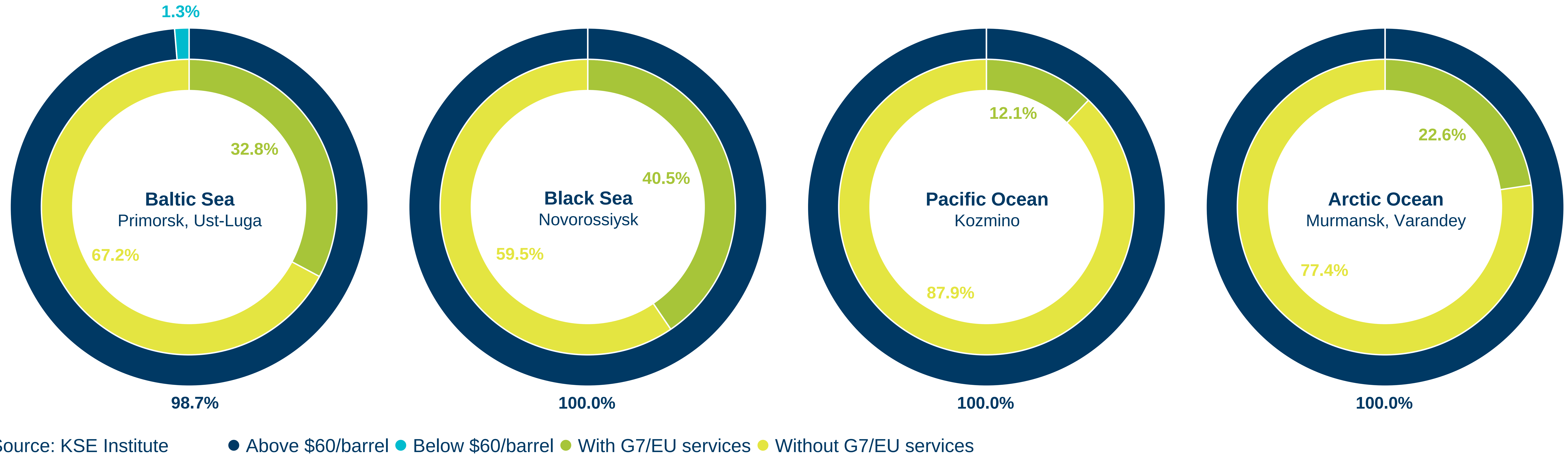
Data points to evidence for widespread violations of the price cap.

- In October, more than 99% of seaborne exports of Russian crude oil appear to have been sold above $60/barrel.
- At the same time, close to 30% of the total volume was shipped with involvement from 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 2023 by price and service provider



Source: KSE Institute

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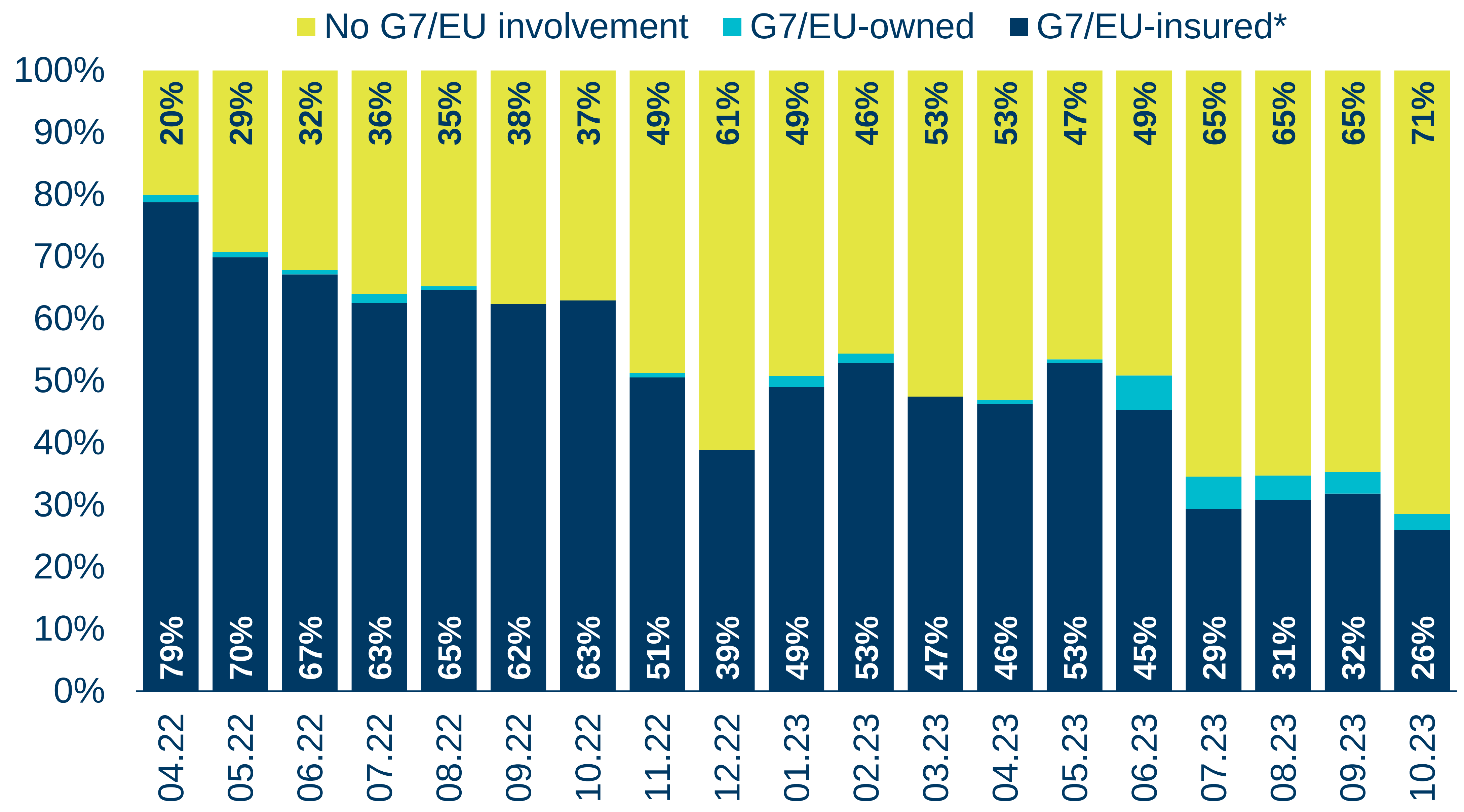
Fundamentally, the price cap's leverage is increasingly under threat.

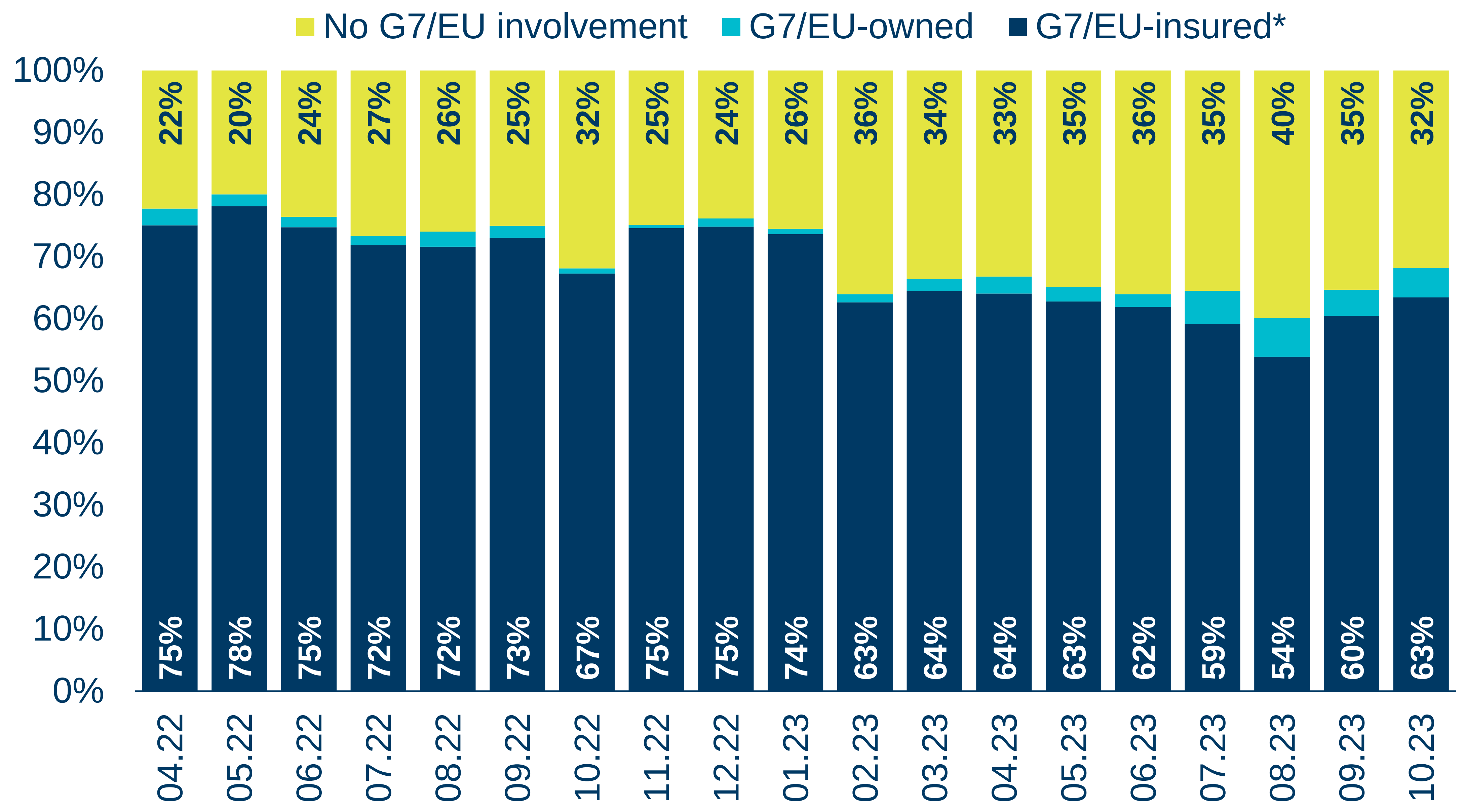
- Russia's reliance on G7/EU-owned and/or -insured vessels has fallen significantly in the case of crude oil.
- In July-October 2023, their share stood at 33%—a sharp drop from 51% in H1 2023 and 58% in H2 2022.
- Importantly, we do not observe the same dynamics for oil products where participation is stable at ~60%.

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

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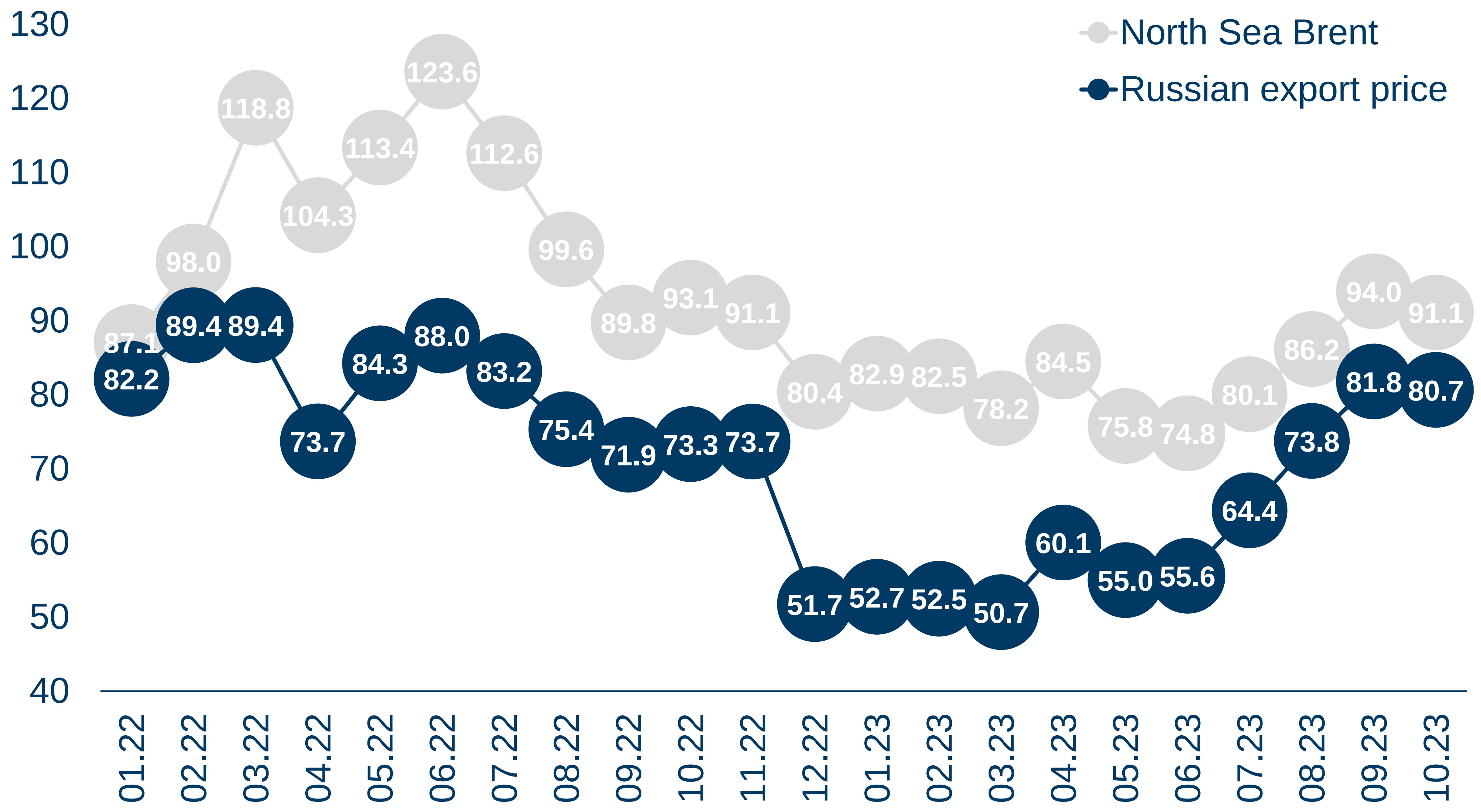
Shrinking discounts threaten key mechanism of energy sanctions.

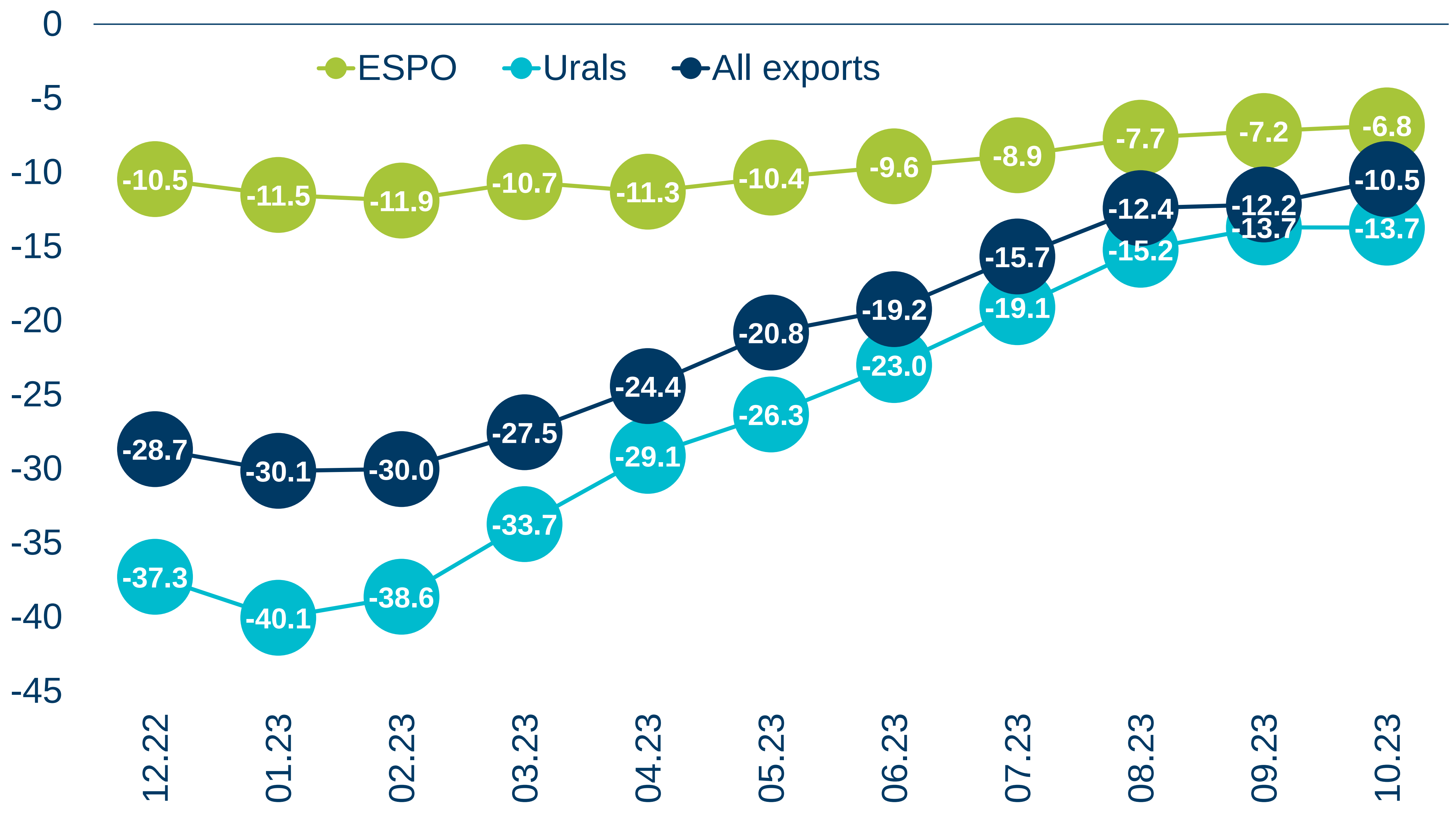
- Energy sanctions, in particular the EU embargo, weighed on Russian exports via sharply wider price discounts.
- However, the Urals-Brent spread has narrowed from $40/barrel in January to below $14/barrel in September-October.
- At current export volumes, a $10/barrel change in the crude oil price means ~$18 billion in earnings per year.

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

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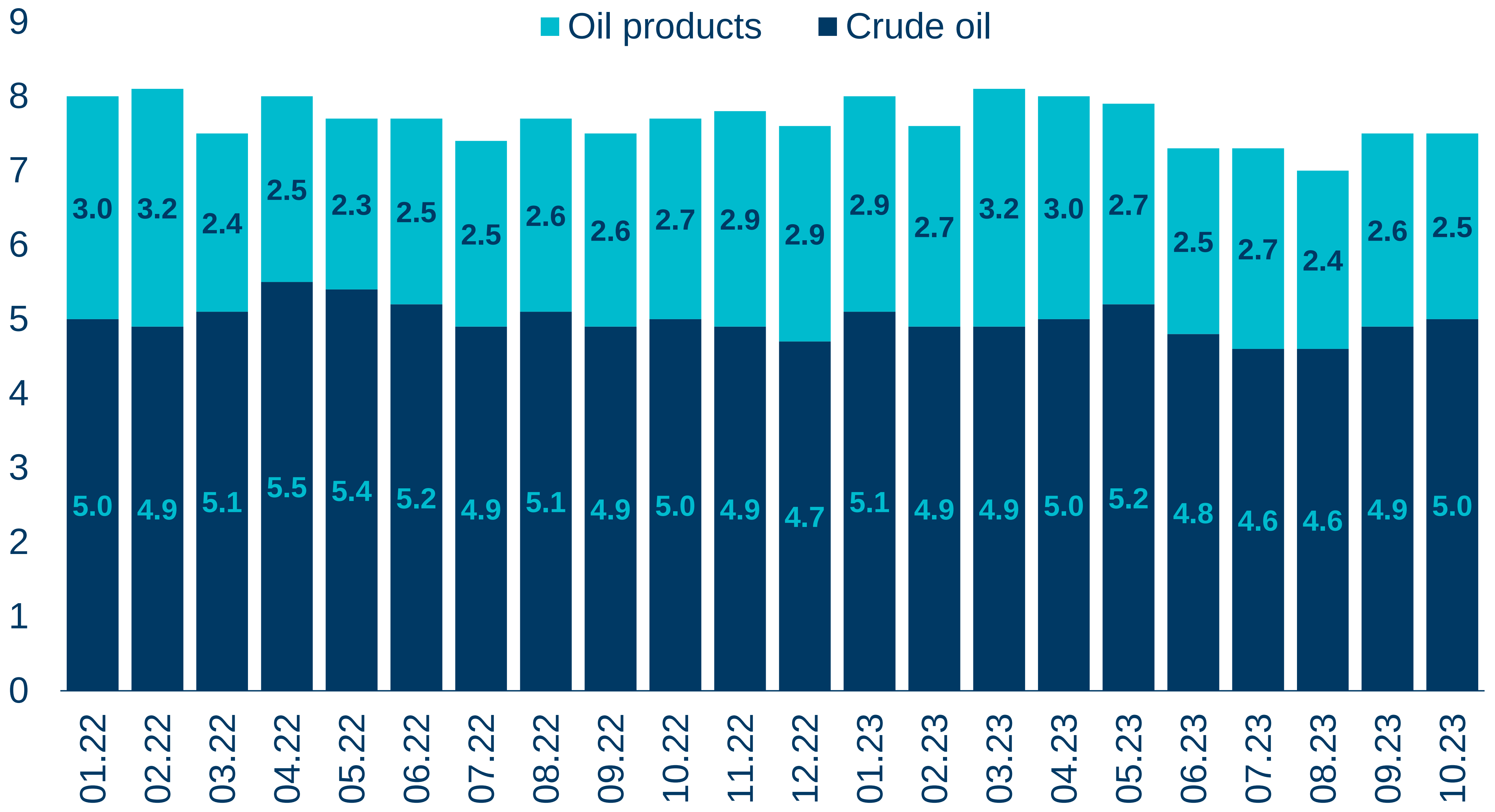
Russian oil export volumes rebounded in September-October.

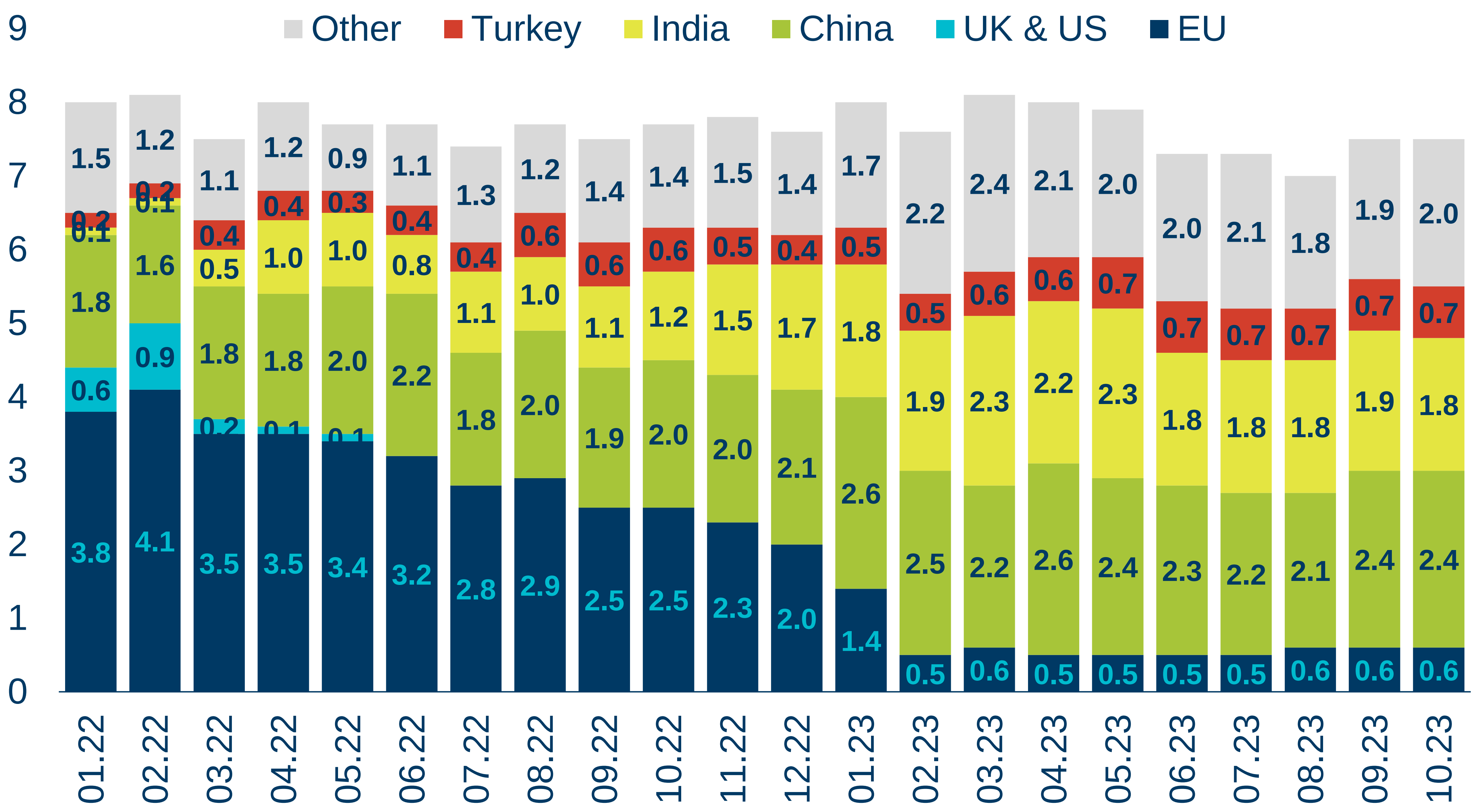
- Russian oil exports held steady at 7.5 million barrels/day—an increase of 200kb/day from August.
- Shipments to China remain 300kp/day higher vs. August and those to India and Turkey are broadly stable.
- China, India, and Turkey together accounted for ~65% of Russia's total exports in January-October.

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

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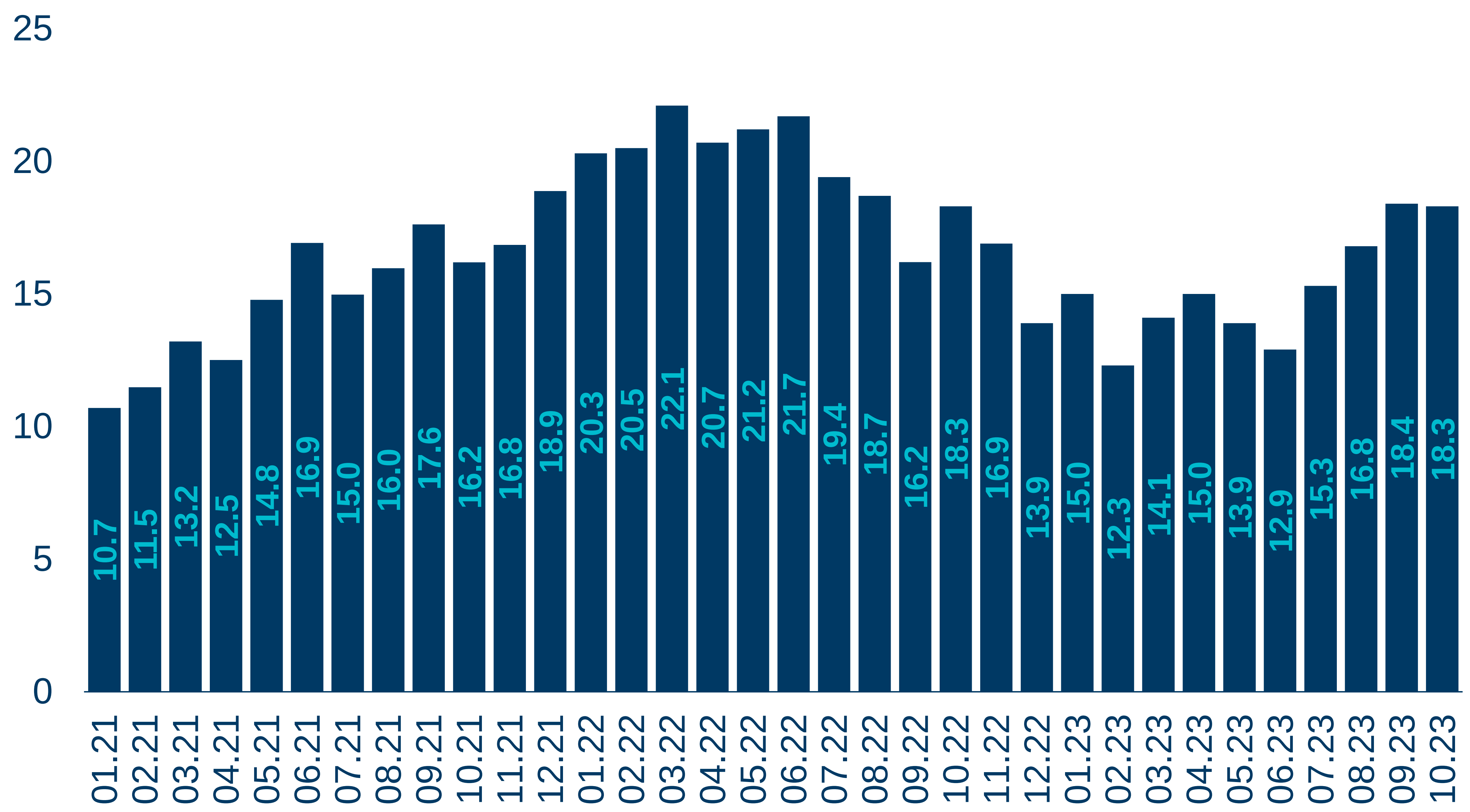
As a result, export earnings and budget revenues are recovering.

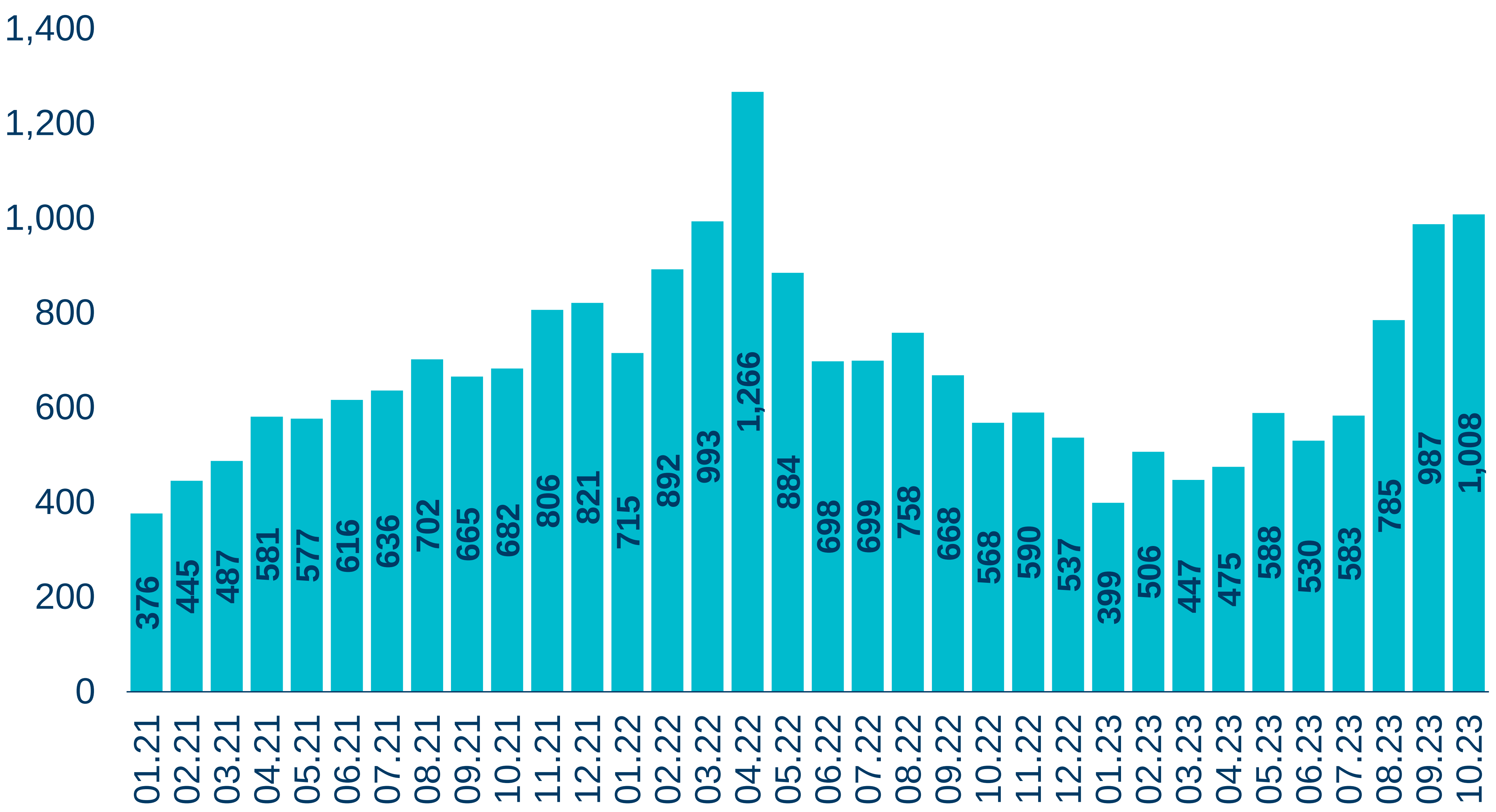
- In October, Russian oil export earnings reached $18.3 billion, following $18.4 billion in the previous month.
- At the same time, the weaker ruble is supporting budget revenues from oil extraction taxes and export duties.
- Ukraine’s allies urgently need to take action to improve enforcement and preserve the price cap’s leverage.

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

Bold measures are needed as Russia's oil is slipping beyond G7 reach.

The October data suggest that problems with price cap implementation and enforcement are much bigger than previously expected. To ensure that sanctions continue to constrain Russia's ability to wage its war of aggression on Ukraine—and that their credibility is maintained—additional steps urgently need to be taken. Below, we outline three critical measures that can quickly and effectively address Russian effort to evade sanctions on its oil exports.

1. **G7/EU countries should ensure that their authorities have sufficient proof of compliance with the price cap,** including by: a) leveraging the involvement of G7/EU financial institutions in the Russian oil trade and their knowledge of key transaction details such as prices; b) requiring attestations to be provided by reputable entities defined via transparent criteria and subject to sanctions in the case of violations or their facilitation; and/or c) stepping-up of documentary evidence requirements for G7/EU service providers under the current system (including original sales contracts, etc.).
2. **EU coastal states should leverage geographical "choke points" to limit Russia's use of a "shadow fleet" of tankers** by requiring proper spill insurance for vessels' passage through their territorial waters, including in the Baltic Sea and Mediterranean. This would force Russia to rely once again on G7/EU services for a substantial share of its exports and also help address environmental risks that have emerged due to the increasing use of old and under-insured tankers. For this purpose, a system to allow for timely and efficient verification of insurance information should be established.
3. **Price cap coalition countries should step up penalties on entities that violate the price cap.** For G7/EU companies, this should include tougher monetary penalties and expanded lockout periods. For third-country actors, price cap coalition countries should impose "direct" sanctions (e.g., SDN listing in the United States or use of the European Union's anti-circumvention tool established in the 11th package) and consider the application of extraterritorial ("secondary") sanctions, leveraging the continued critical importance of its financial system for internationally operating businesses.

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Trade: reduced effectiveness of energy sanctions spills over into better external environment.

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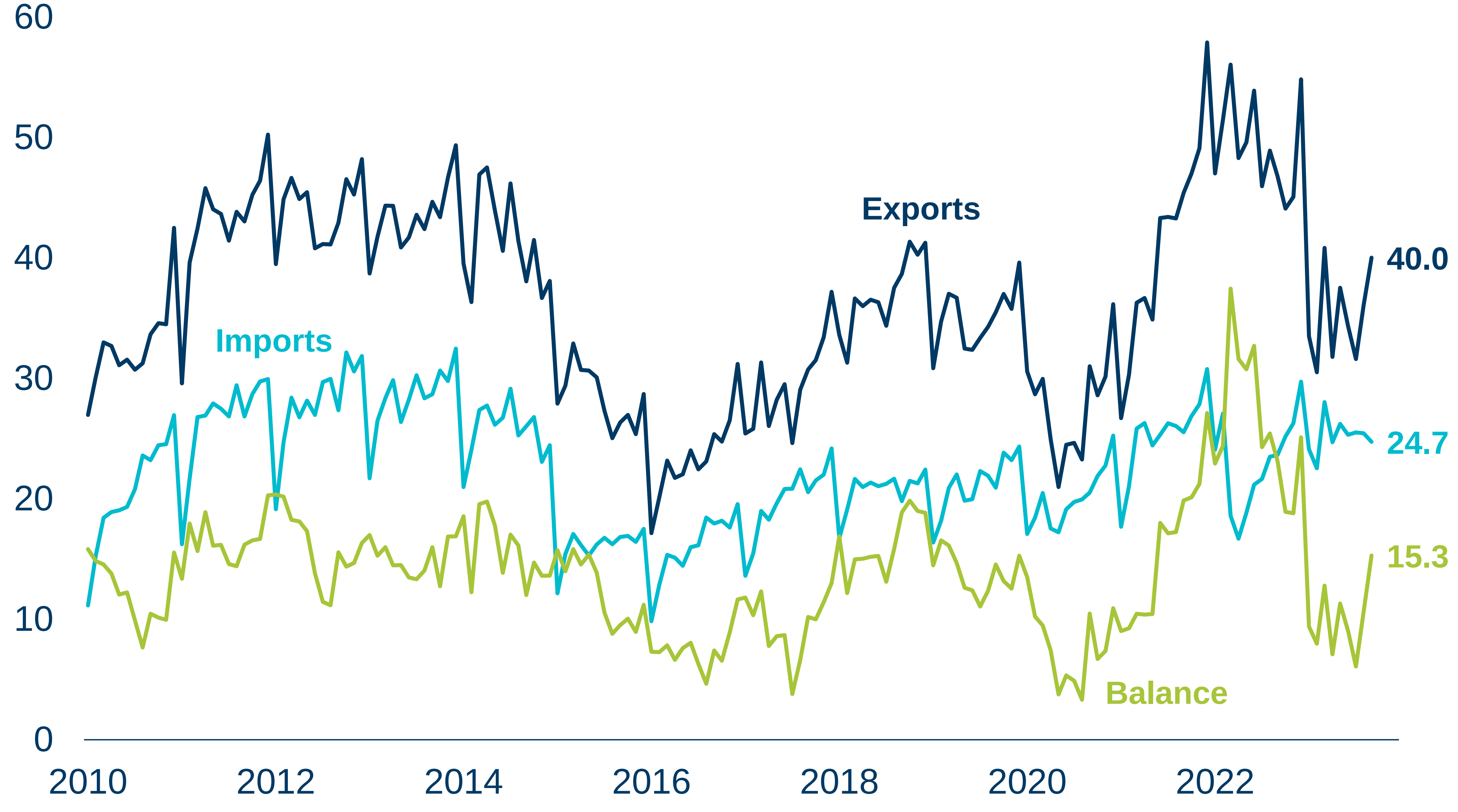
External environment appears to be improving somewhat.

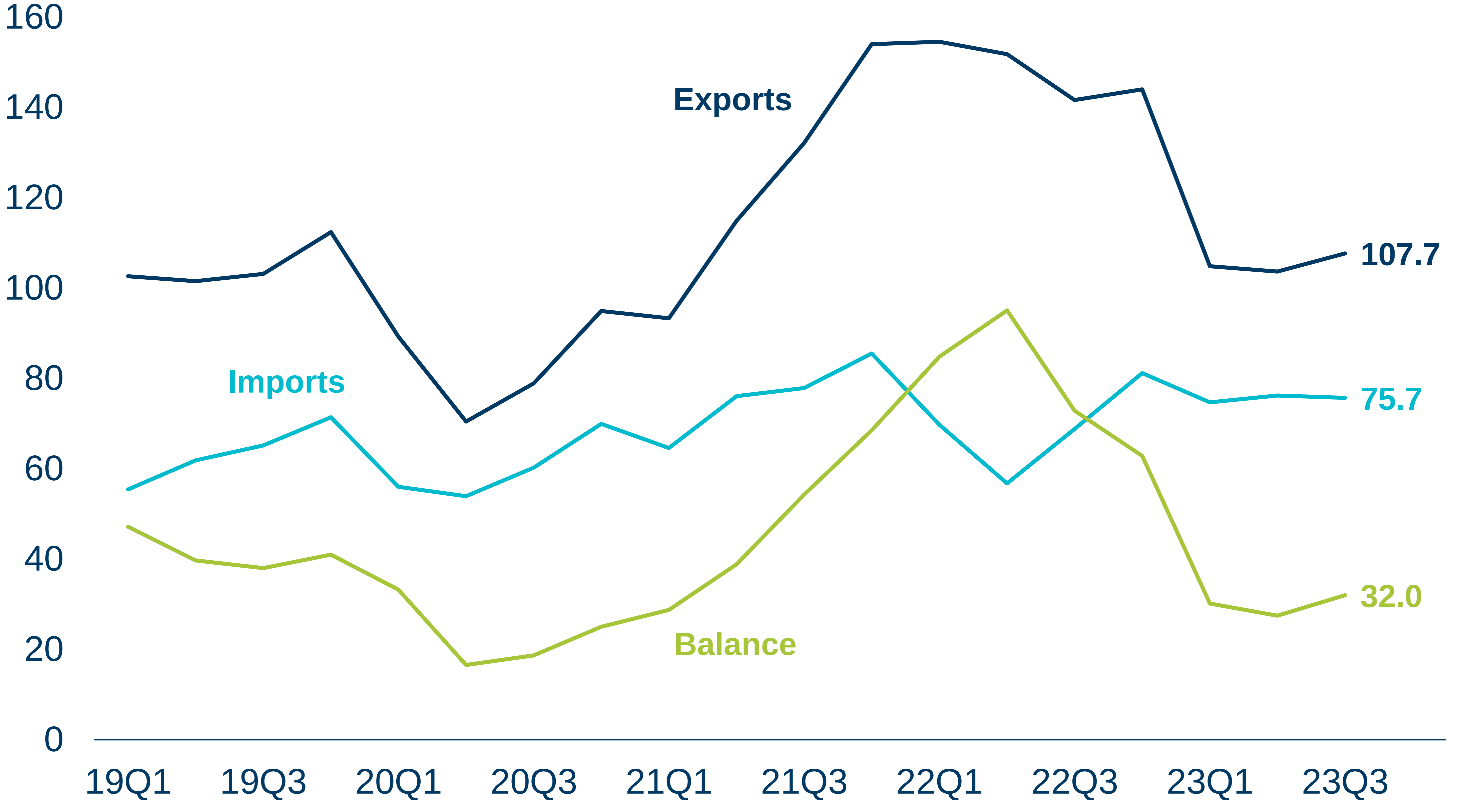
- Goods exports have begun to recover on the back of higher inflows from oil.
- With imports broadly stable, this has resulted in a bigger trade surplus.
- The surplus averaged ~$10.0 billion per month in January-September 2023.

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

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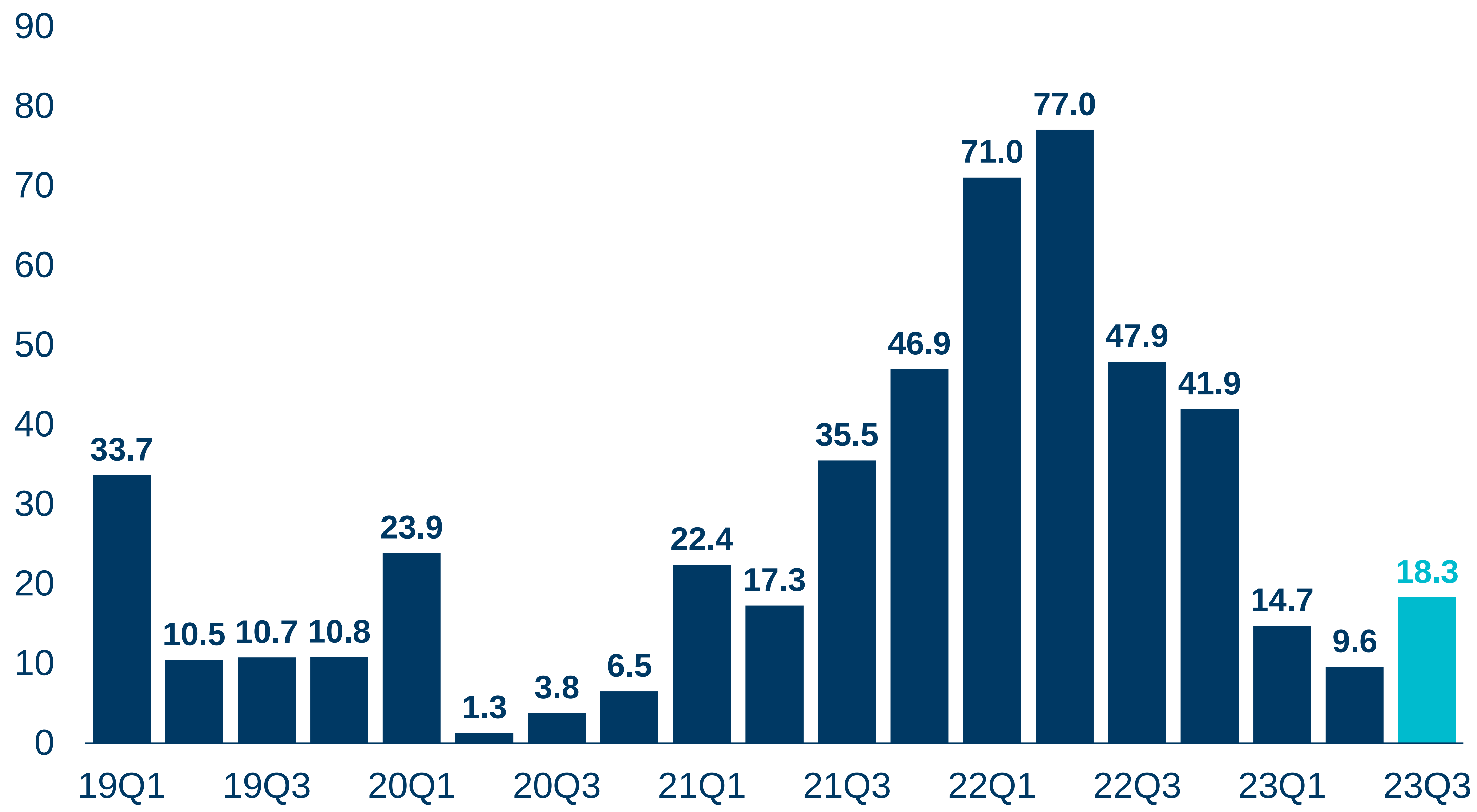
Inflows of foreign currency have dropped vs.

- The overall current account surplus has fallen in line with goods trade dynamics, significantly limiting FX inflows.
- While the surplus bounced back moderately to $16.6 billion in Q3 2023, it remains 78% below its peak in Q2 2022.
- This improvement was driven by a larger goods trade surplus but also a much smaller income and transfers deficit.

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.
Jul. 2023	1.3	6.1	31.6	25.5	-3.3	3.3	6.6	-1.4	3.1	4.5
Aug. 2023	5.6	10.6	36.1	25.5	-3.7	3.3	6.9	-1.4	2.9	4.4
Sep. 2023	11.4	15.3	40.0	24.7	-2.2	3.4	5.5	-1.7	3.2	4.9
Oct. 2023	11.2	14.3	37.2	22.9	-2.2	3.1	5.3	-0.9	3.4	4.3
Q1 2023	14.7	30.2	104.9	74.7	-7.3	9.8	17.1	-8.2	10.6	18.8
Q2 2023	9.6	27.4	103.7	76.2	-8.5	10.4	18.9	-9.3	12.8	22.2
Q3 2023	18.3	32.0	107.7	75.7	-9.1	10.0	19.1	-4.6	9.3	13.8
Jan.-Oct. 2023	53.8	104.0	353.5	249.5	-27.1	33.3	60.4	-23.0	36.1	59.1
Memorandum: Q1 2022	71.0	84.8	154.6	69.8	-3.5	13.9	17.4	-10.2	12.6	22.8
Memorandum: Q2 2022	77.0	95.1	151.8	56.7	-3.6	11.1	14.7	-14.4	12.0	26.4
Memorandum: Q3 2022	47.9	72.8	141.7	68.8	-7.0	11.4	18.3	-18.0	12.7	30.7
Memorandum: Jan-Oct. ‘22	208.8	271.6	492.2	220.5	-17.4	39.7	57.1	-45.4	41.6	87.0

Source: Bank of Russia, KSE Institute

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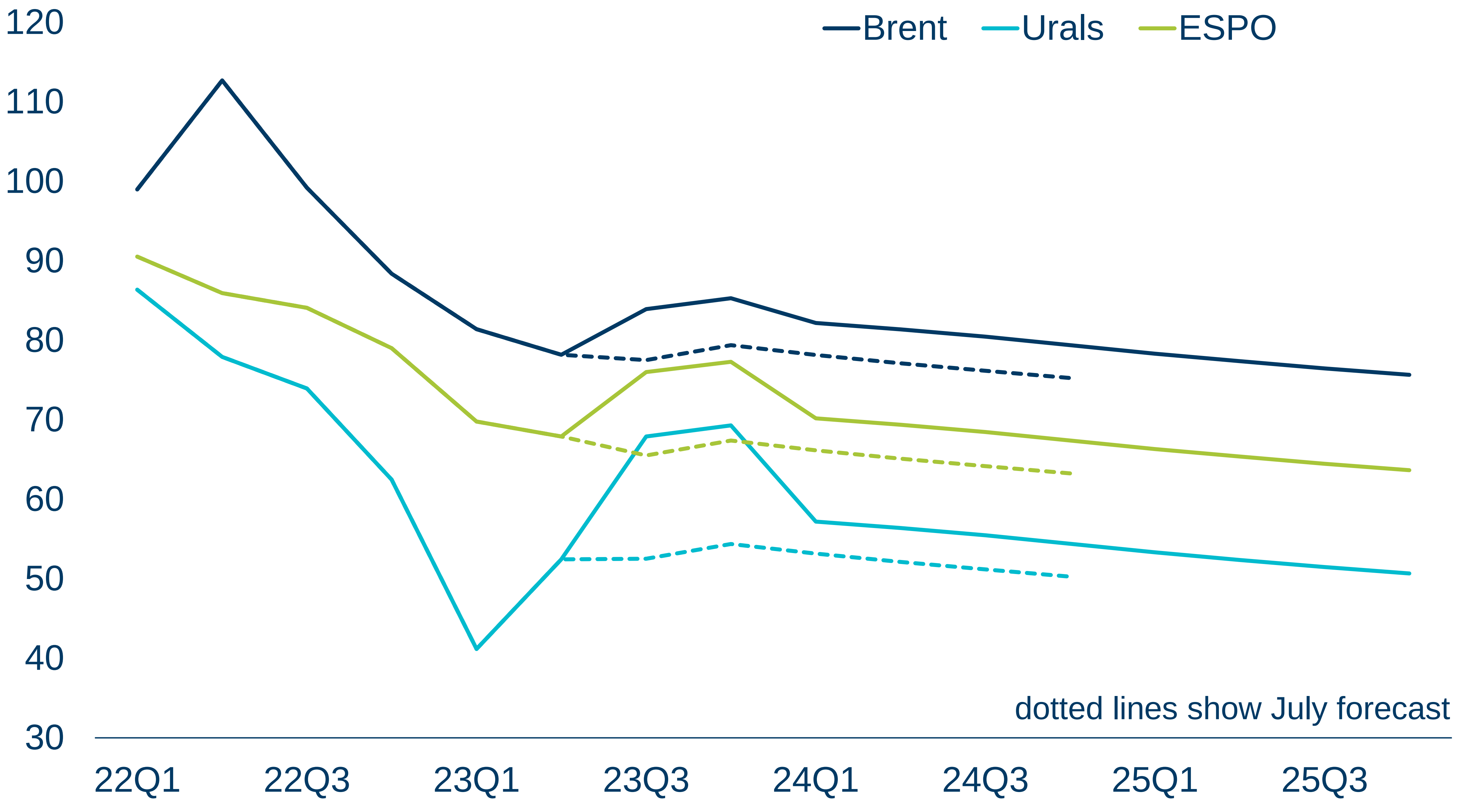
Estimate of Russian export prices and earnings revised upward.

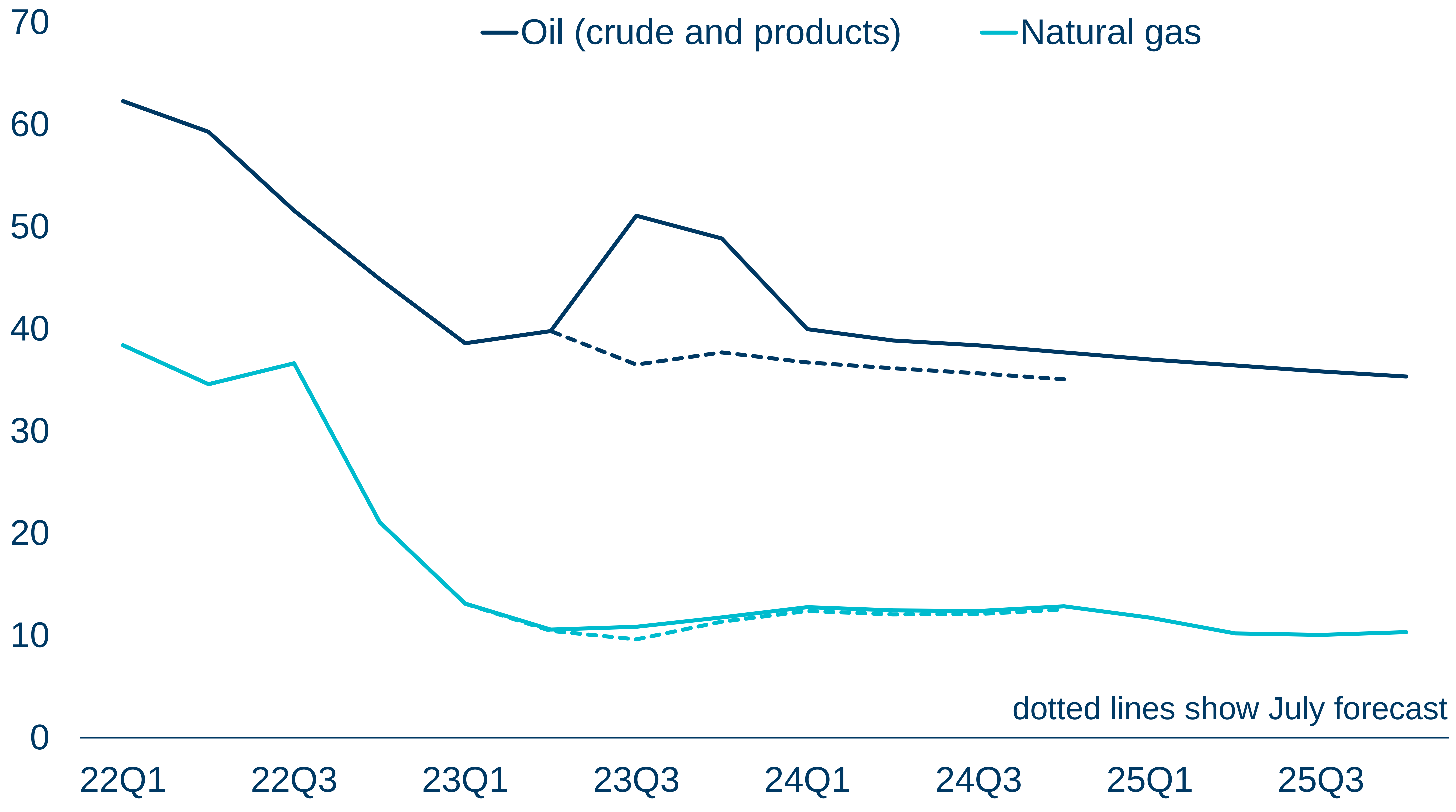
- Higher global prices and smaller discounts on Russian exports have led to significant upward revisions of oil prices.
- Importantly, our projection still assumes a moderate widening of discounts due to improved price cap enforcement.
- Nonetheless, export earnings from oil are forecast to come in $26 billion higher this year than previously expected.

Oil prices, in U.S. dollar/barrel



Source: KSE Institute

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



Source: KSE Institute

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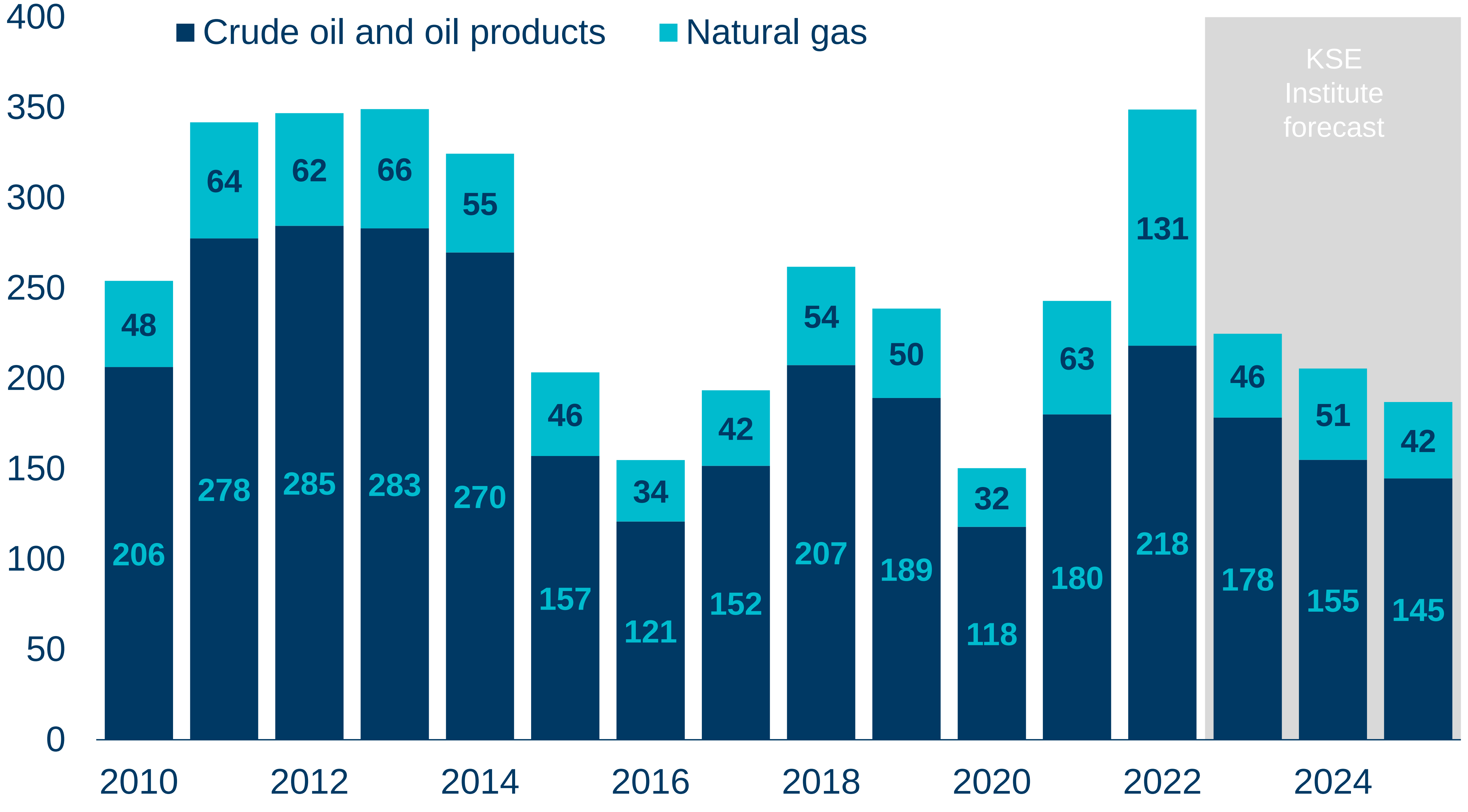
Significantly drop in the current account surplus from 2022 to 2023.

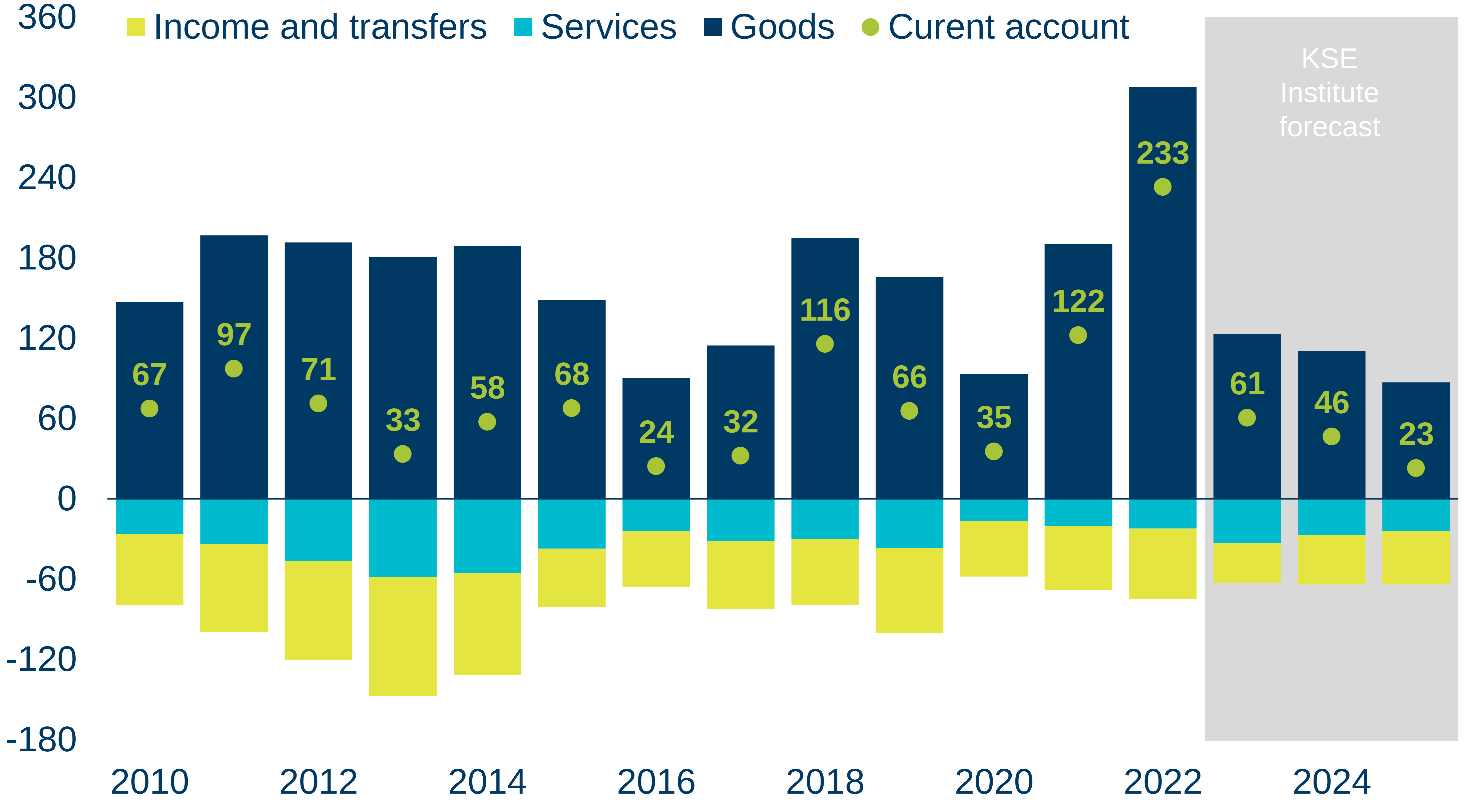
- In our updated forecast, oil and gas exports will reach $225 billion in 2023, $205 billion in 2024, and $187 billion in 2025.
- Considering the Q3 2023 outturn of current account components, we project an overall surplus of $61 billion for this year.
- Due to the high sensitivity of Russia's external balance to oil price changes, it is critical to maintain pressure from sanctions.

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

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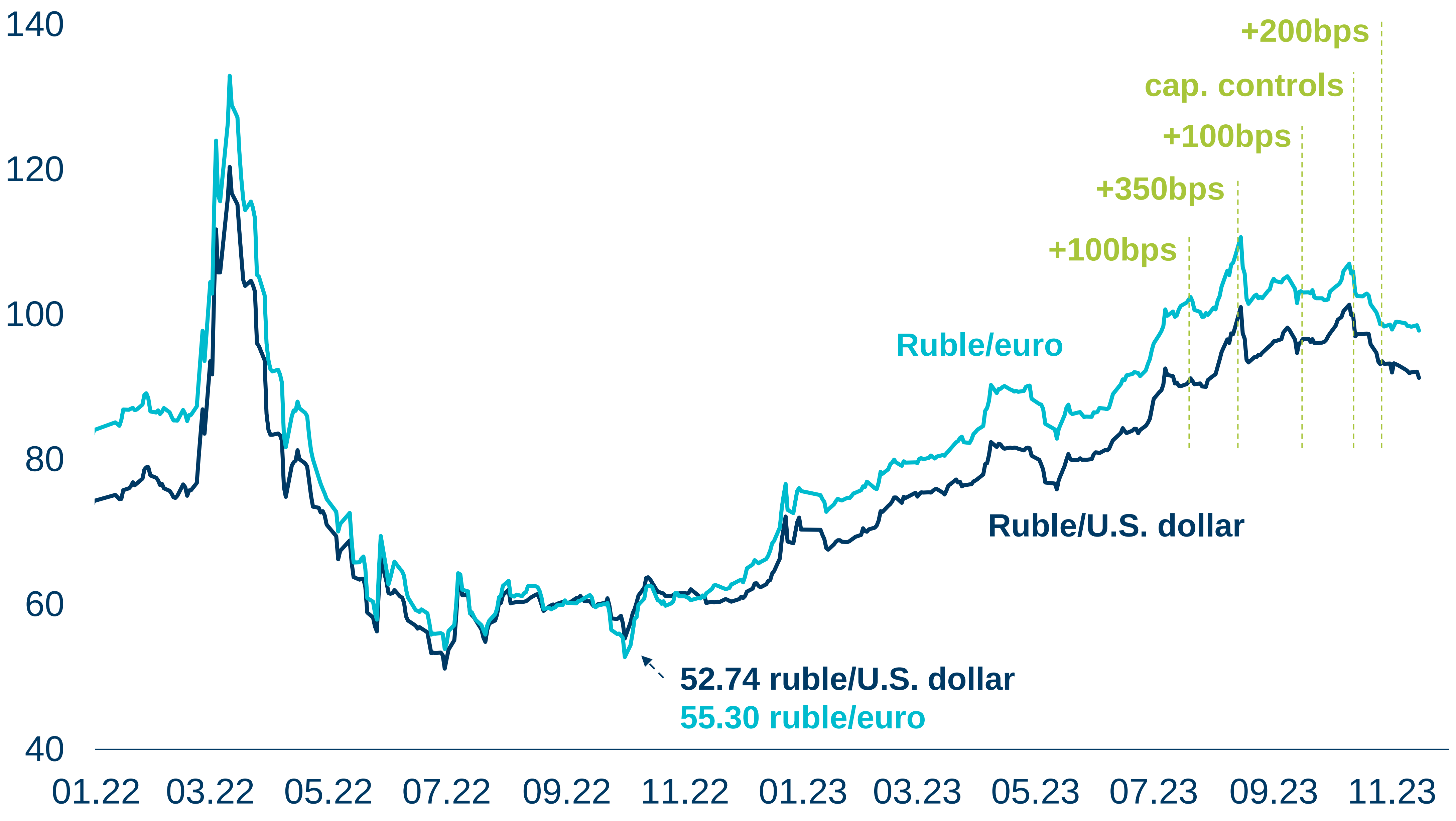
Pressure on the ruble has subsided somewhat in recent weeks.

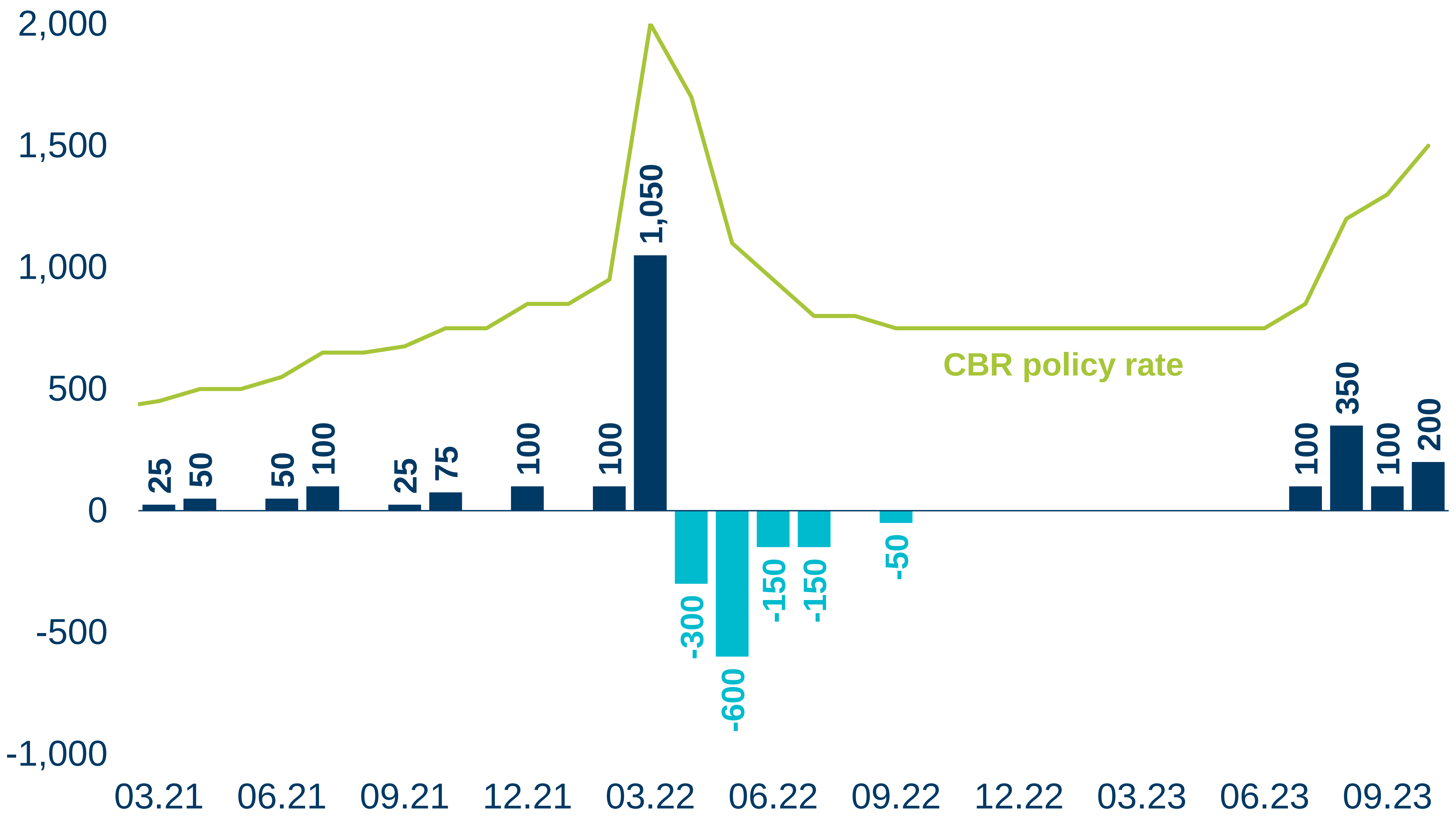
- Since October 2022, the ruble has lost ~40% of its value against the U.S. dollar and ~45% against the euro.
- The re-introduction of capital controls and additional CBR interest rate hikes have led to some stabilization.
- More fundamentally, however, pressure on the ruble is declining with a more supportive external environment.

Ruble-U.S. dollar exchange rate



Source: Bank of Russia, KSE Institute

CBR policy rate and MPC decisions, in bps



Source: Bank of Russia, KSE Institute

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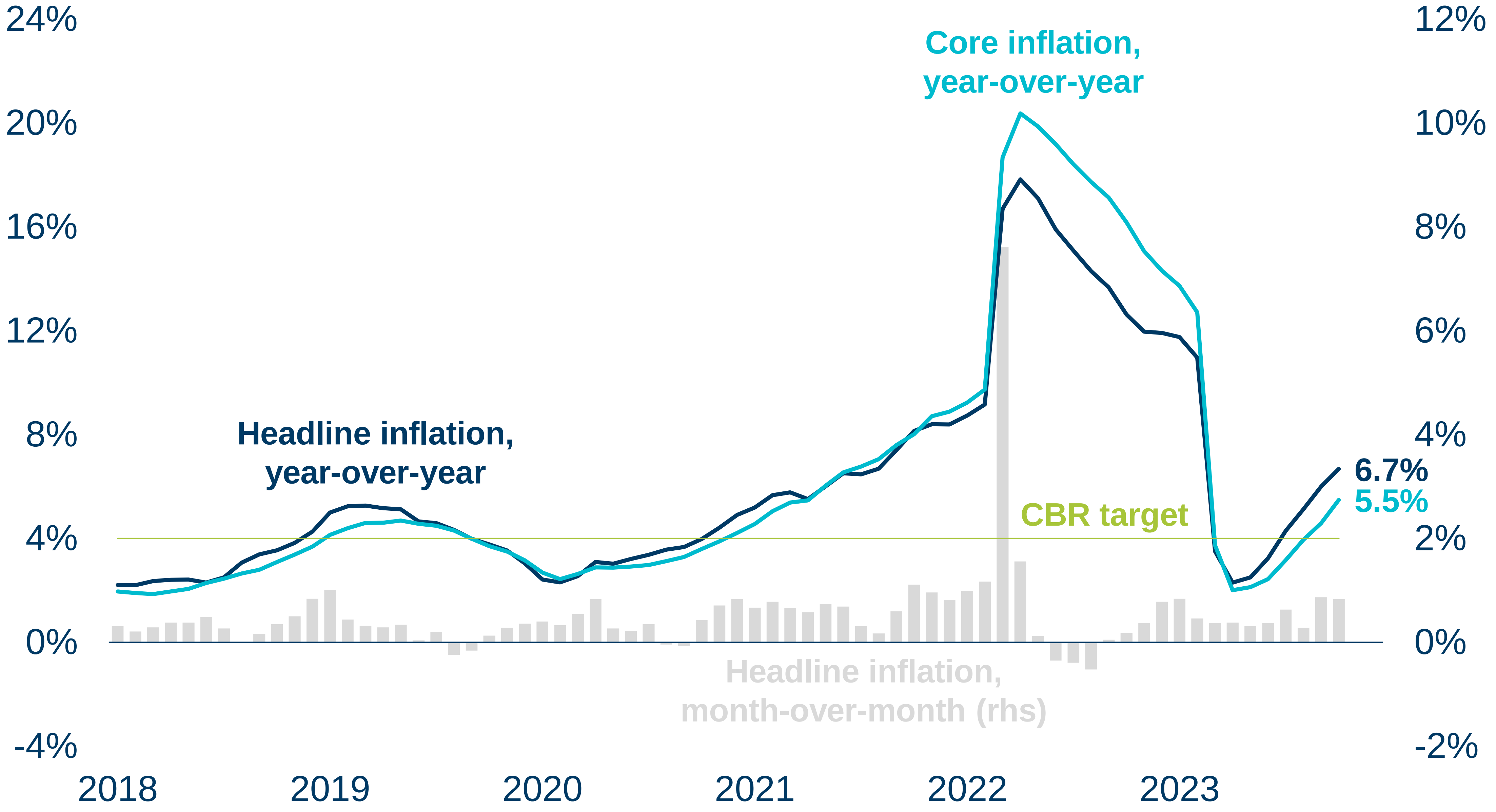
Inflation begins to pick back up as base effects fade.

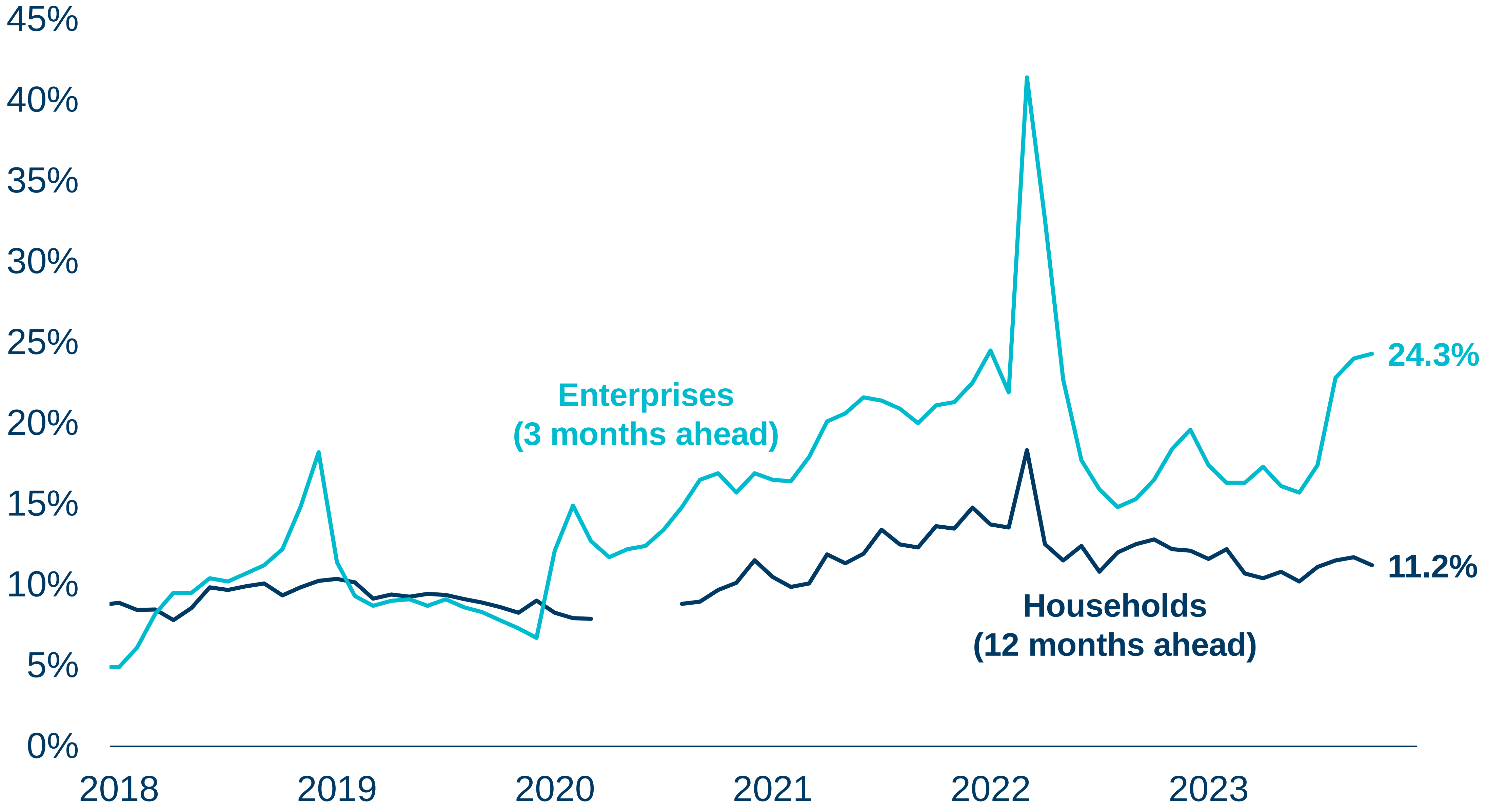
- Following a base effects-driven drop in spring/summer, both headline and core inflation are rising again.
- Based on current price dynamics, headline inflation will likely rise to around 7% by the end of the year.
- Inflation expectations by enterprises point to increasing concerns, with households likely to follow suit.

Inflation, in %



Source: Bank of Russia, KSE Institute

Inflation expectations, in %



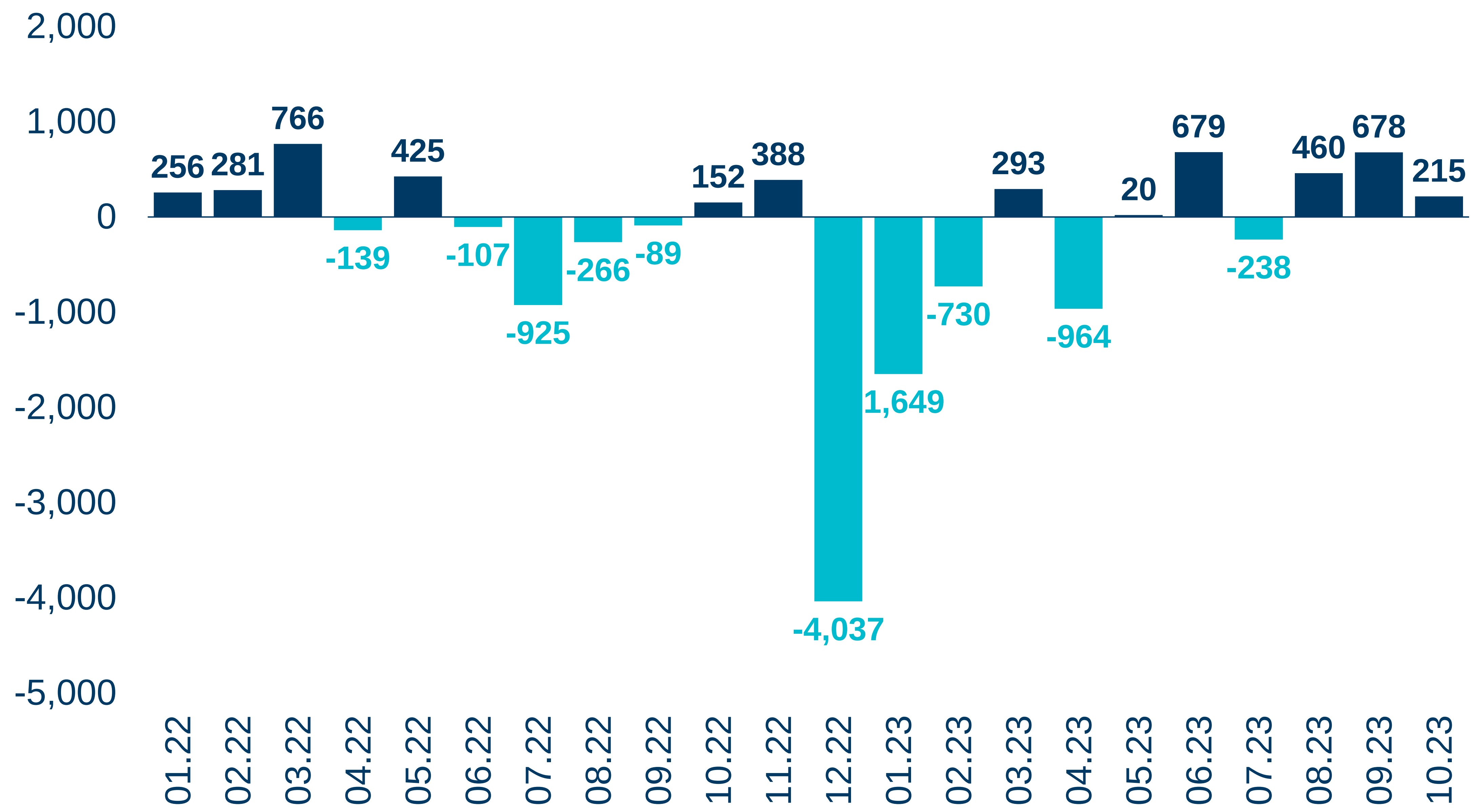
Source: Bank of Russia, KSE Institute

Budget: due to rising export earnings from energy and ruble weakness, fiscal situation is improving significantly.

Russia's federal budget has improved markedly in recent months.

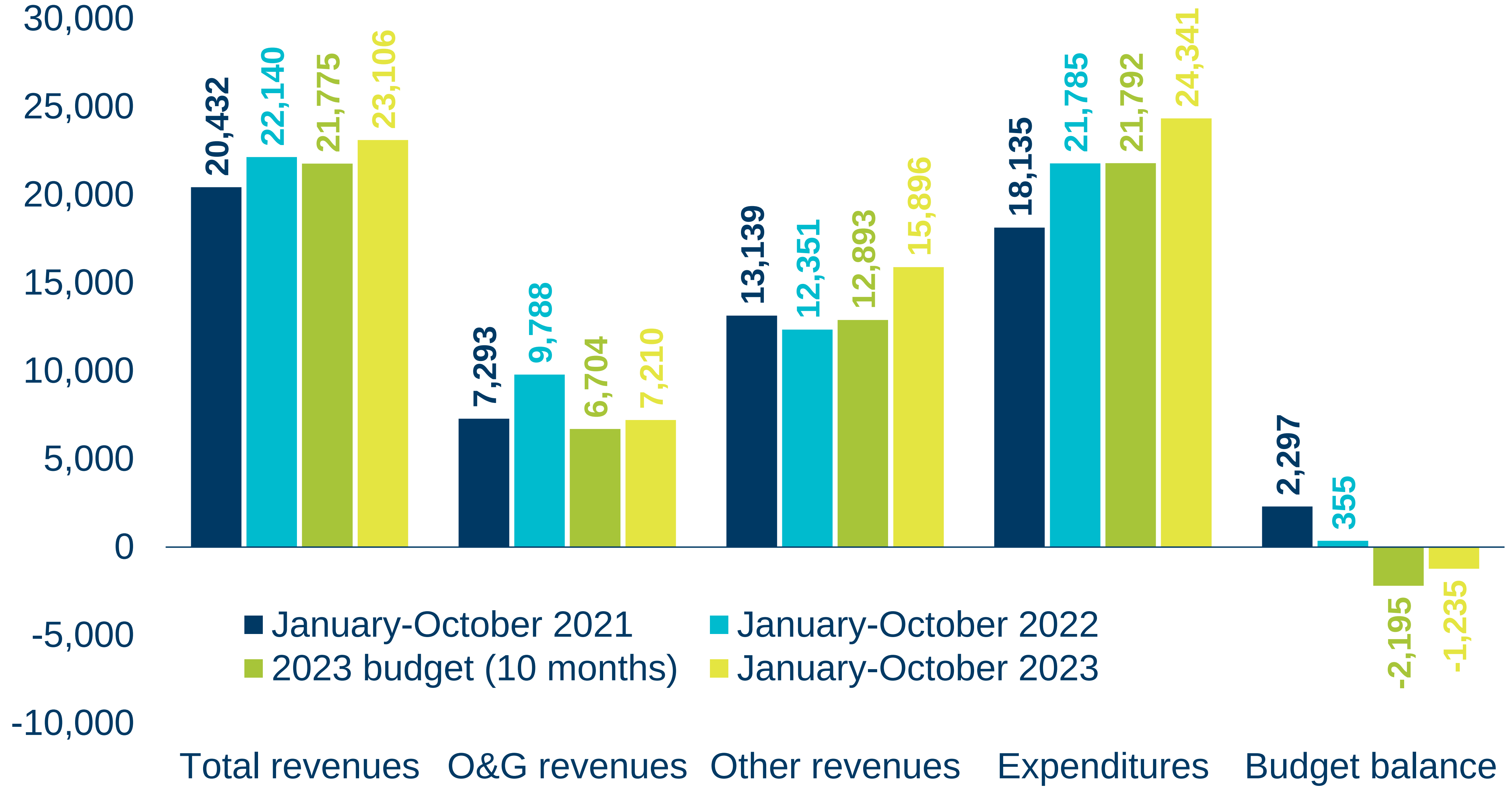
- Russia's budget reached a surplus of 1.8 trillion rubles in June-October, a marked improvement vs. January-May.
- A cumulative deficit of 1.2 trillion in January-October represents only 42% of the what was budgeted for the full year.
- Even considering the pattern of large December gaps, the deficit for 2023 will likely be contained at ~1% of GDP.

Federal government balance, in ruble billion



Source: Ministry of Finance, KSE Institute

Revenues and expenditures, in ruble billion



Source: Ministry of Finance, KSE Institute

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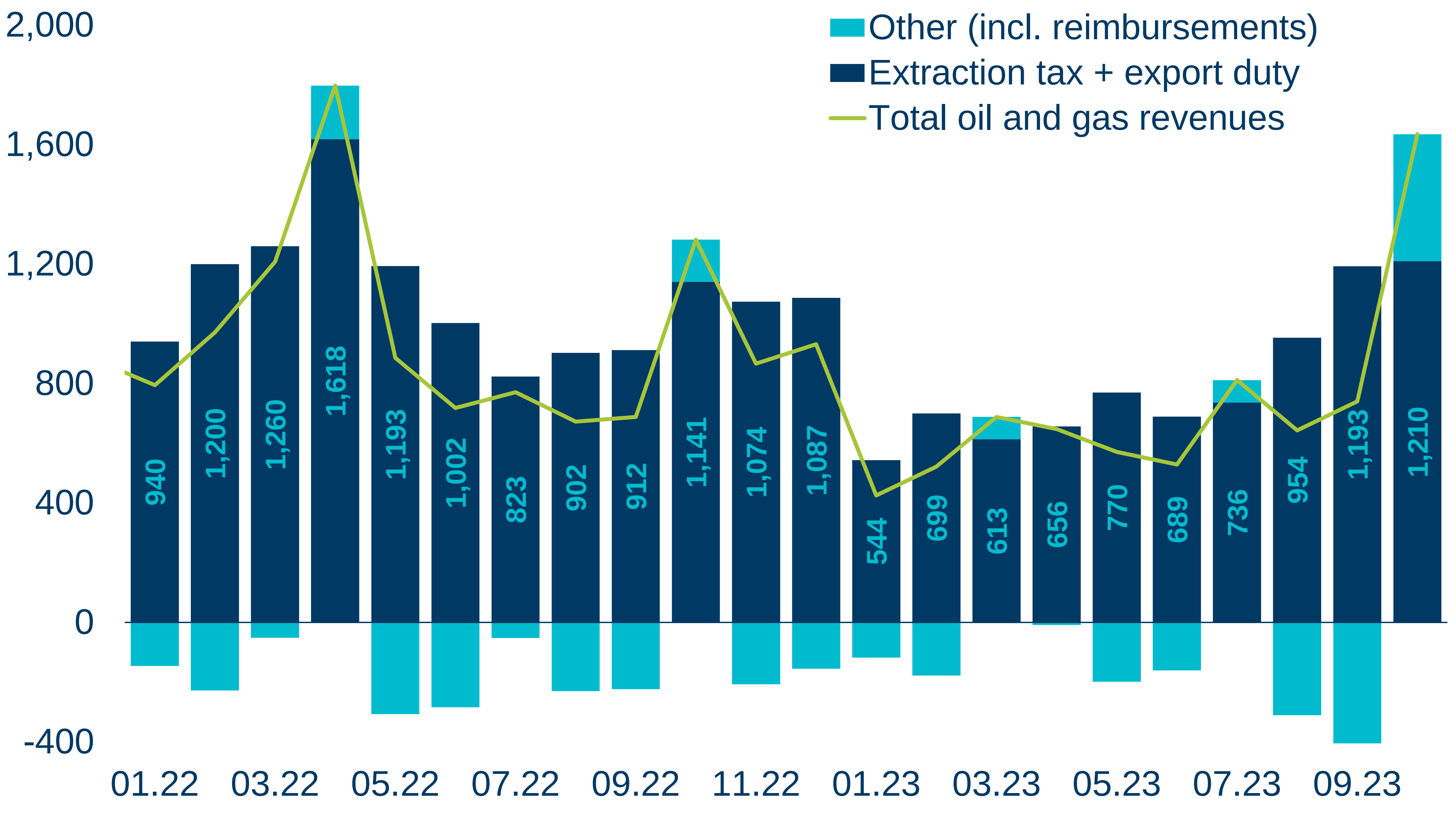
Oil and gas revenues are benefitting from higher prices, weaker ruble.

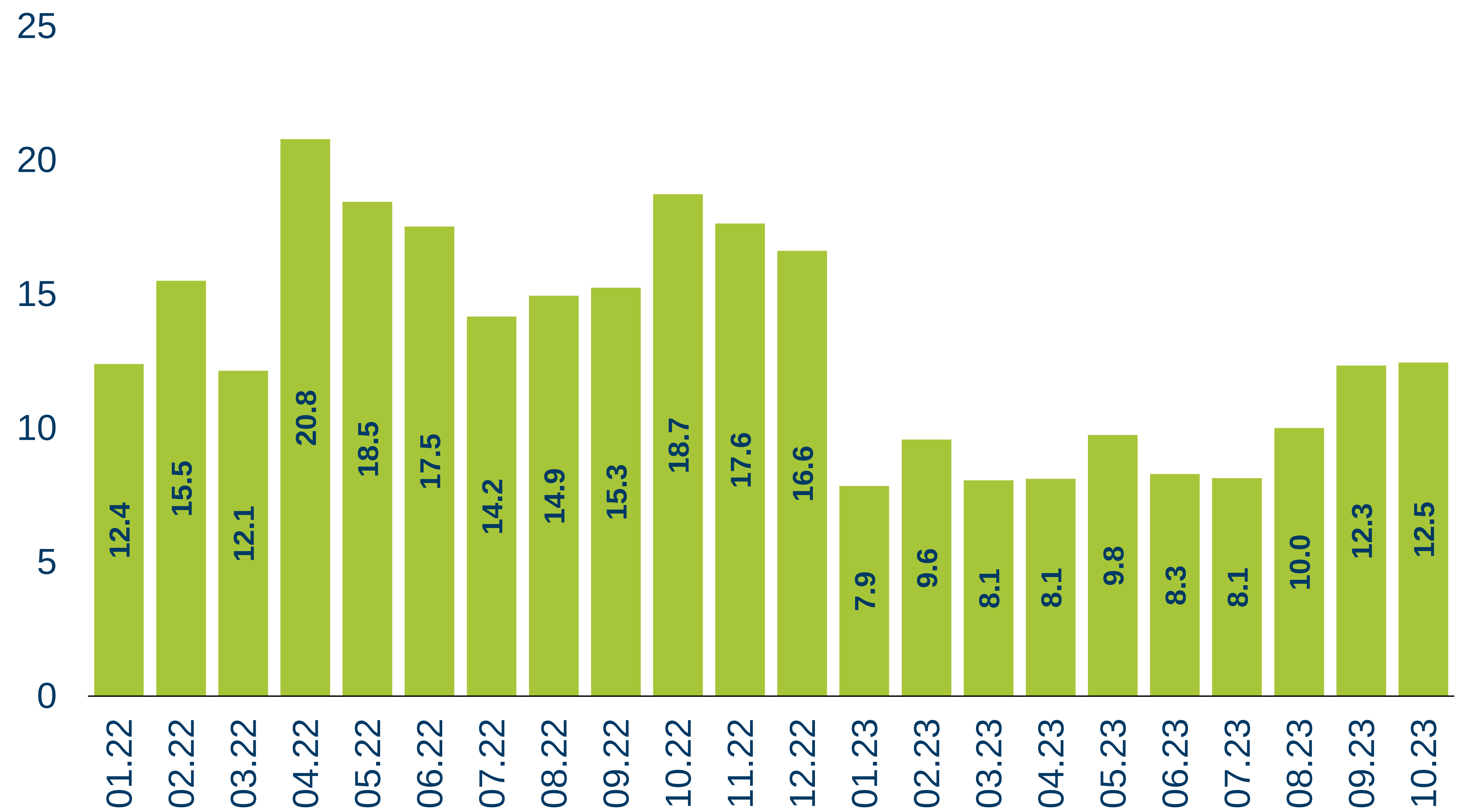
- Extraction taxes and export duties reached around 1.2 trillion rubles in September, the highest since April 2022.
- While the budget benefits from the weaker ruble, oil and gas revenues in U.S. dollar terms are also rising.
- The narrowing of Urals-Brent spreads means that changes to the tax oil price have not had a big effect yet.

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

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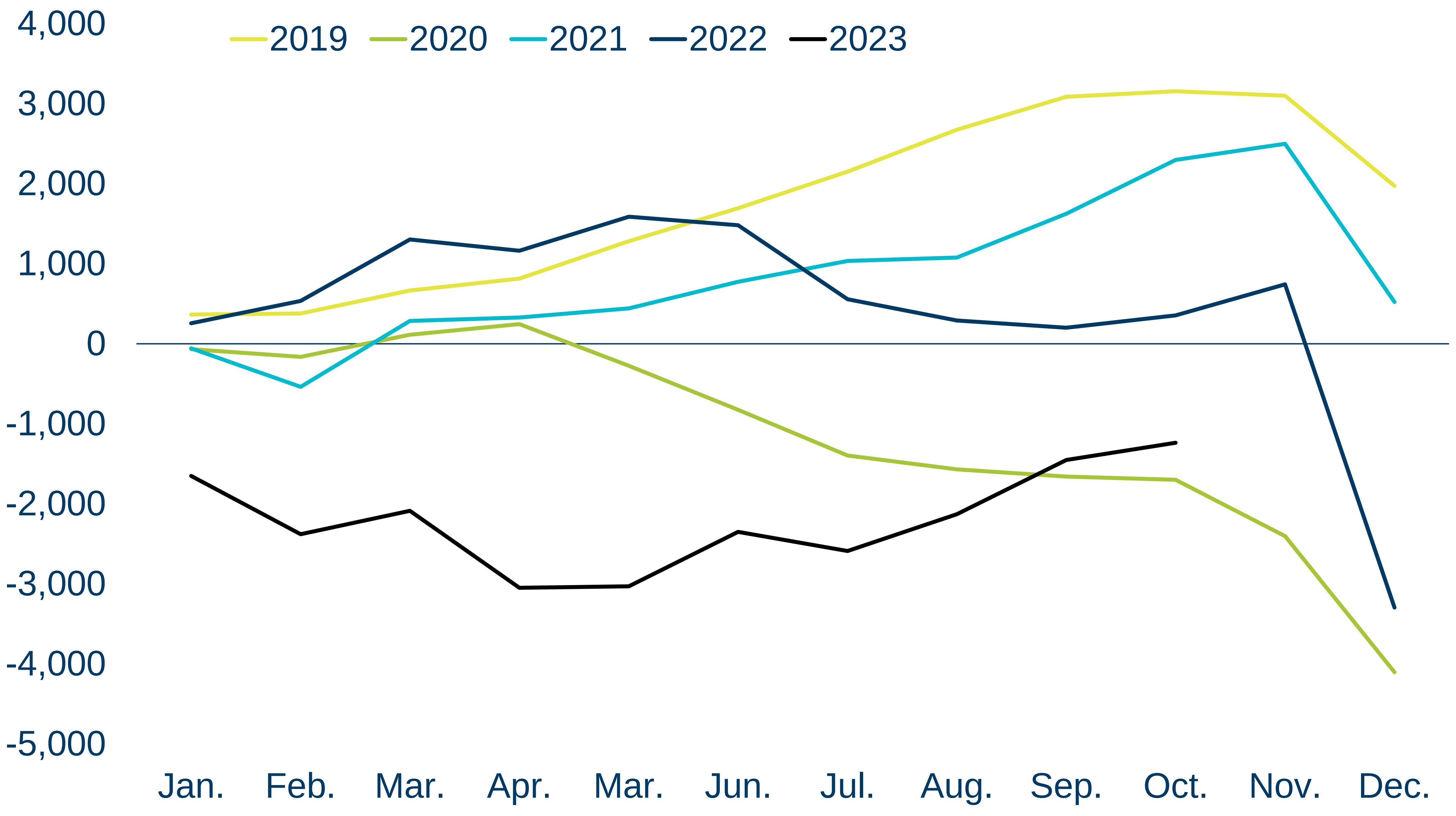
Reliance on NWF and OFZ issuance remains low.

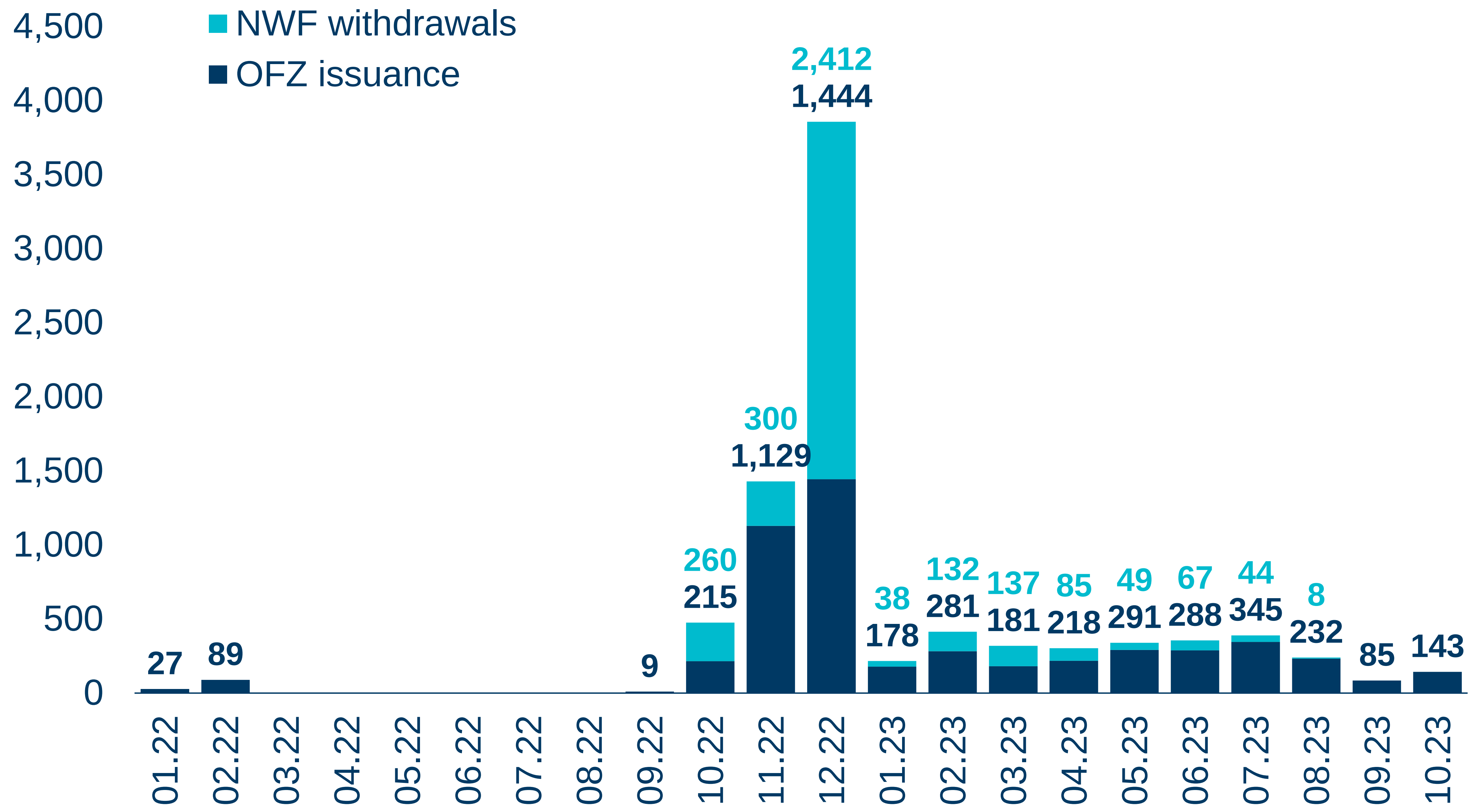
- Due to smaller deficits, Russia needs to rely less on key financing channels—NWF withdrawals and OFZ issuance.
- New issuance of domestic debt (OFZ) was 2.4 trillion rubles in January-October 2023, less than in Q4 2022 alone.
- At the same time, the NWF only sold assets worth 560 billion rubles to support the budget (vs. 3 trillion in Q4 2022).

Cumulative federal budget balance, in ruble billion



Source: Ministry of Finance, KSE Institute

Key fiscal financing channels, in ruble billion

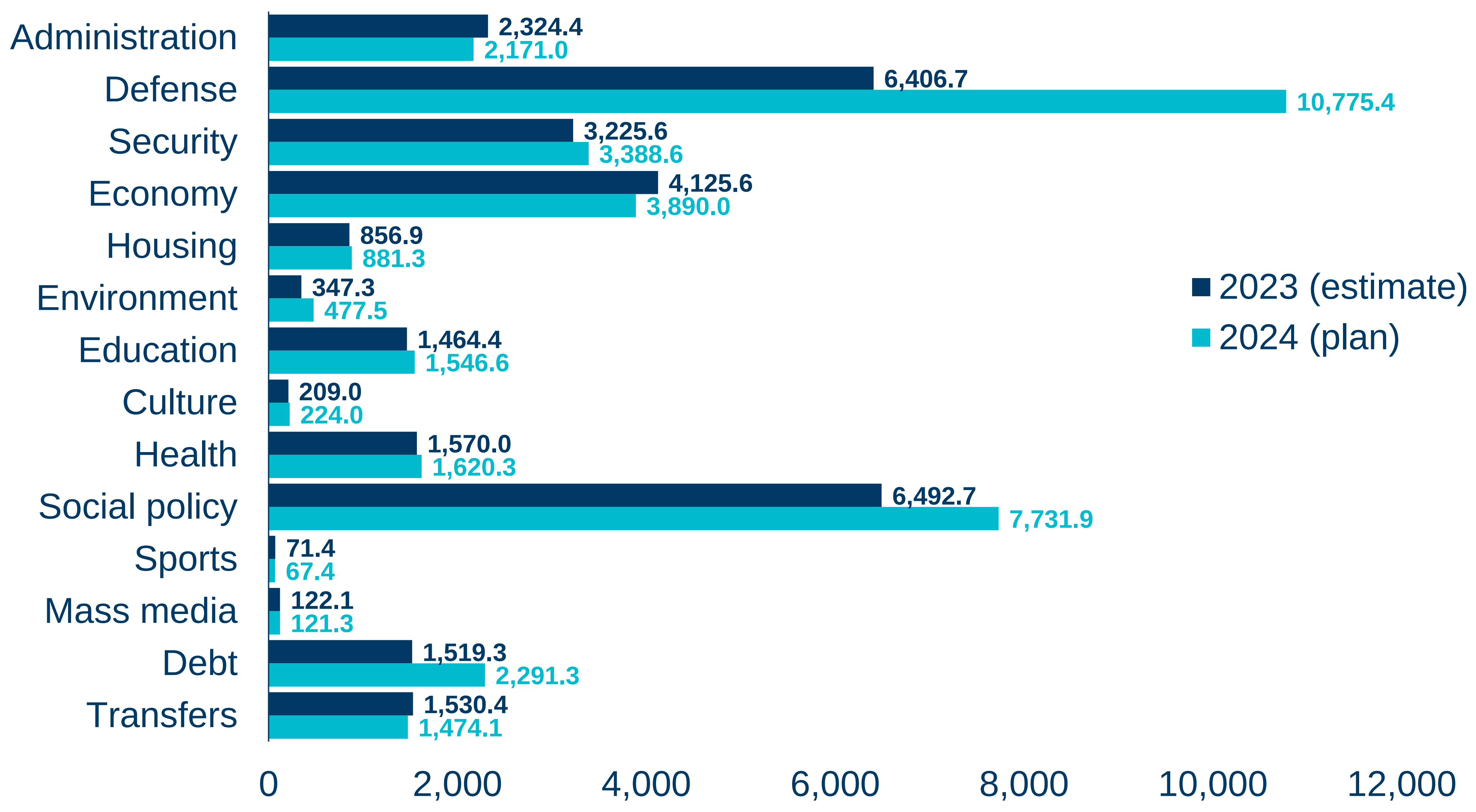


Source: Ministry of Finance, KSE Institute

Significant increase in defense budget planned for 2024.

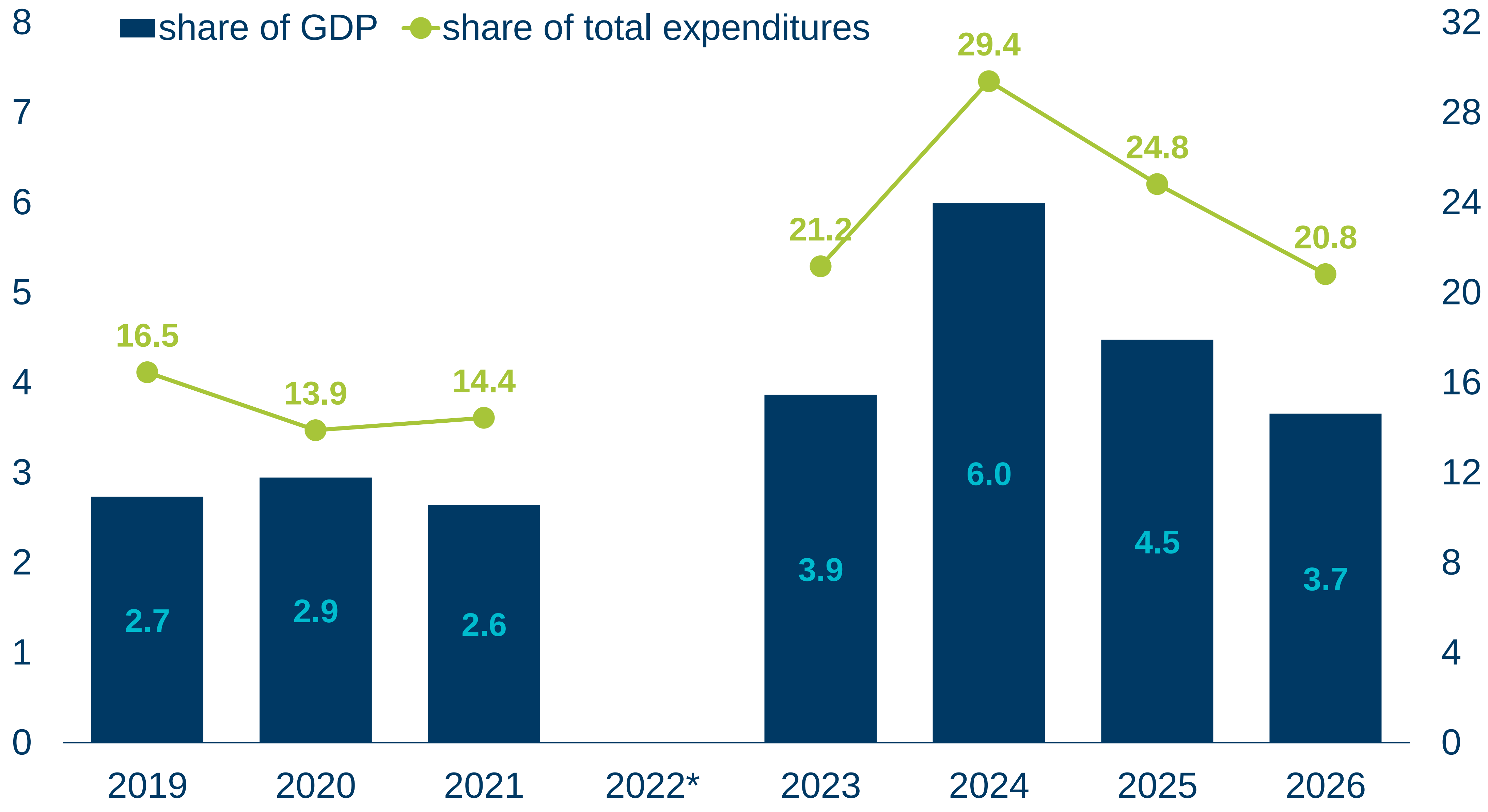
- The Russian government plans to spend 10.7 trillion rubles (~$100 billion) on defense in 2024 (+68% vs. this year).
- At 6% of GDP and close to 30% of the total federal budget, defense clearly dominates government expenditures.
- This demonstrates the regime's commitment to the war but also illustrates the extent of the military-driven stimulus.

Federal budget expenditure details, in ruble billion



Source: Ministry of Finance, KSE Institute

Federal defense expenditures, in %

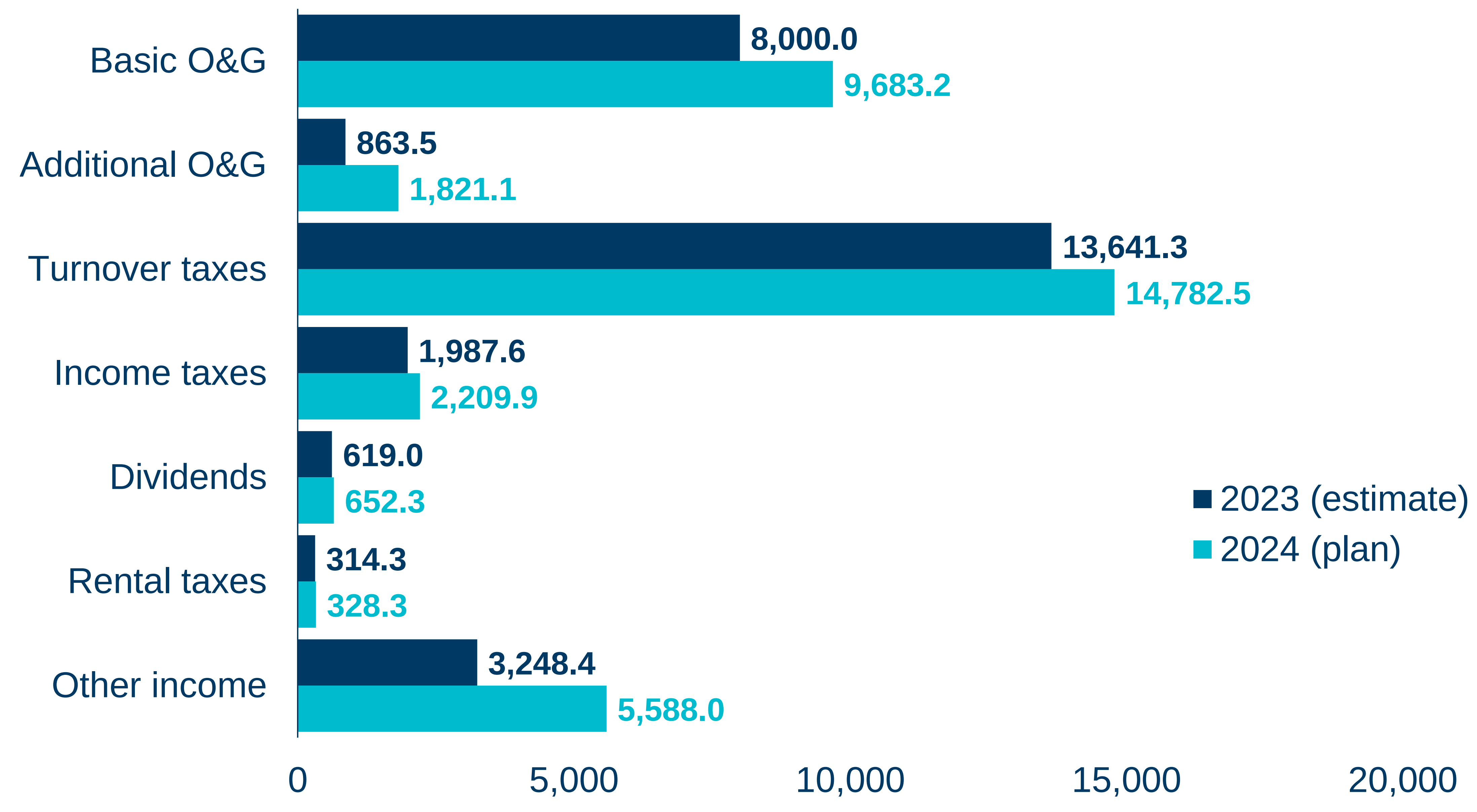


Source: Ministry of Finance, KSE Institute *no expenditure breakdown published

Expectation of moderate deficits in the coming years.

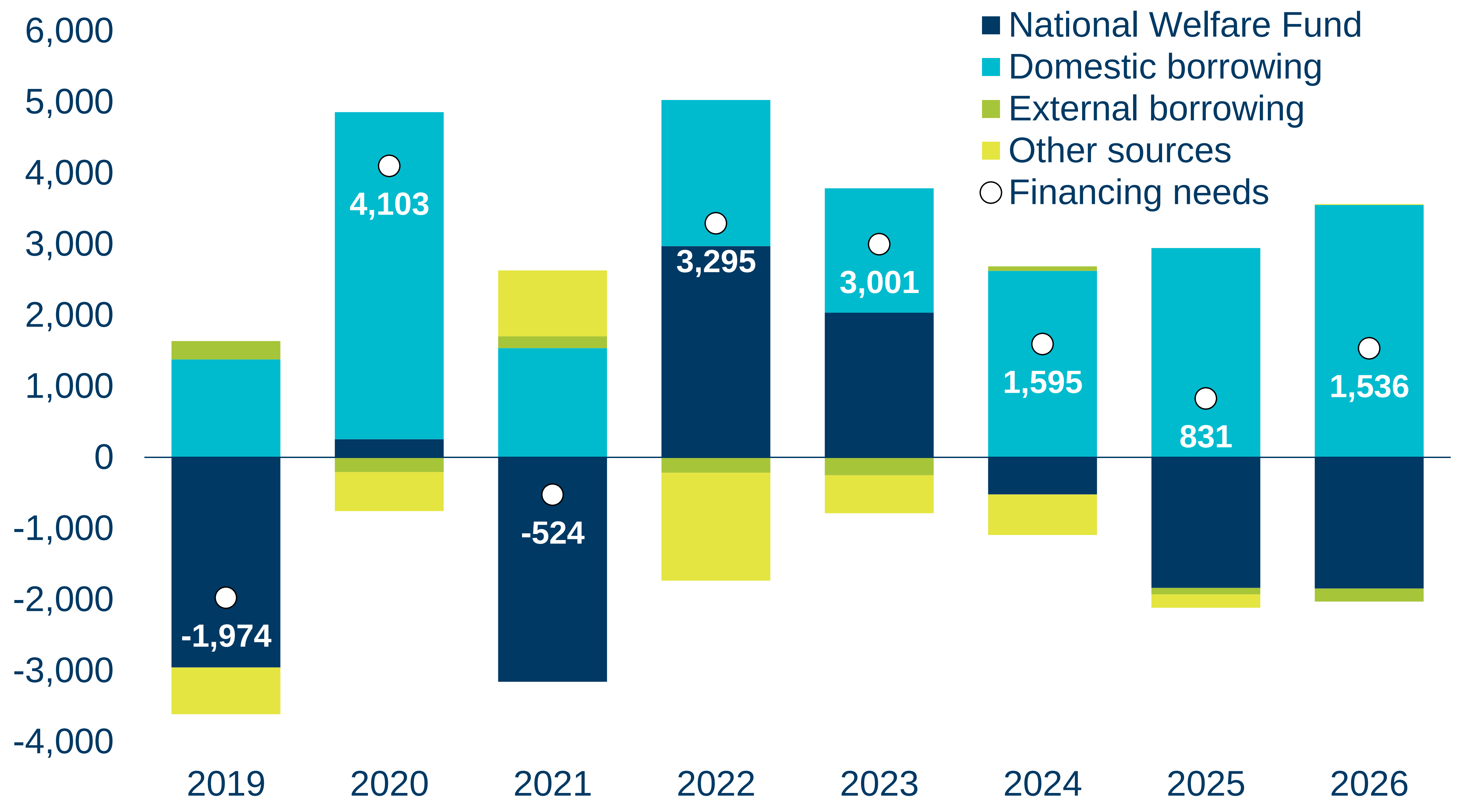
- Russia's Ministry of Finance expects revenue growth of 22% in 2024, driven by oil & gas revenues and turnover taxes.
- The federal budget deficit is projected to be at or below 1% of GDP in 2024-26 and to be financed by domestic borrowing.
- Planned net issuance is 3 trillion rubles this year, followed by 1.6 trillion, 0.8 trillion, and 1.5 trillion in 2024-26, respectively.

Federal budget revenue details, in ruble billion



Source: Ministry of Finance, KSE Institute

Federal budget financing, in ruble billion

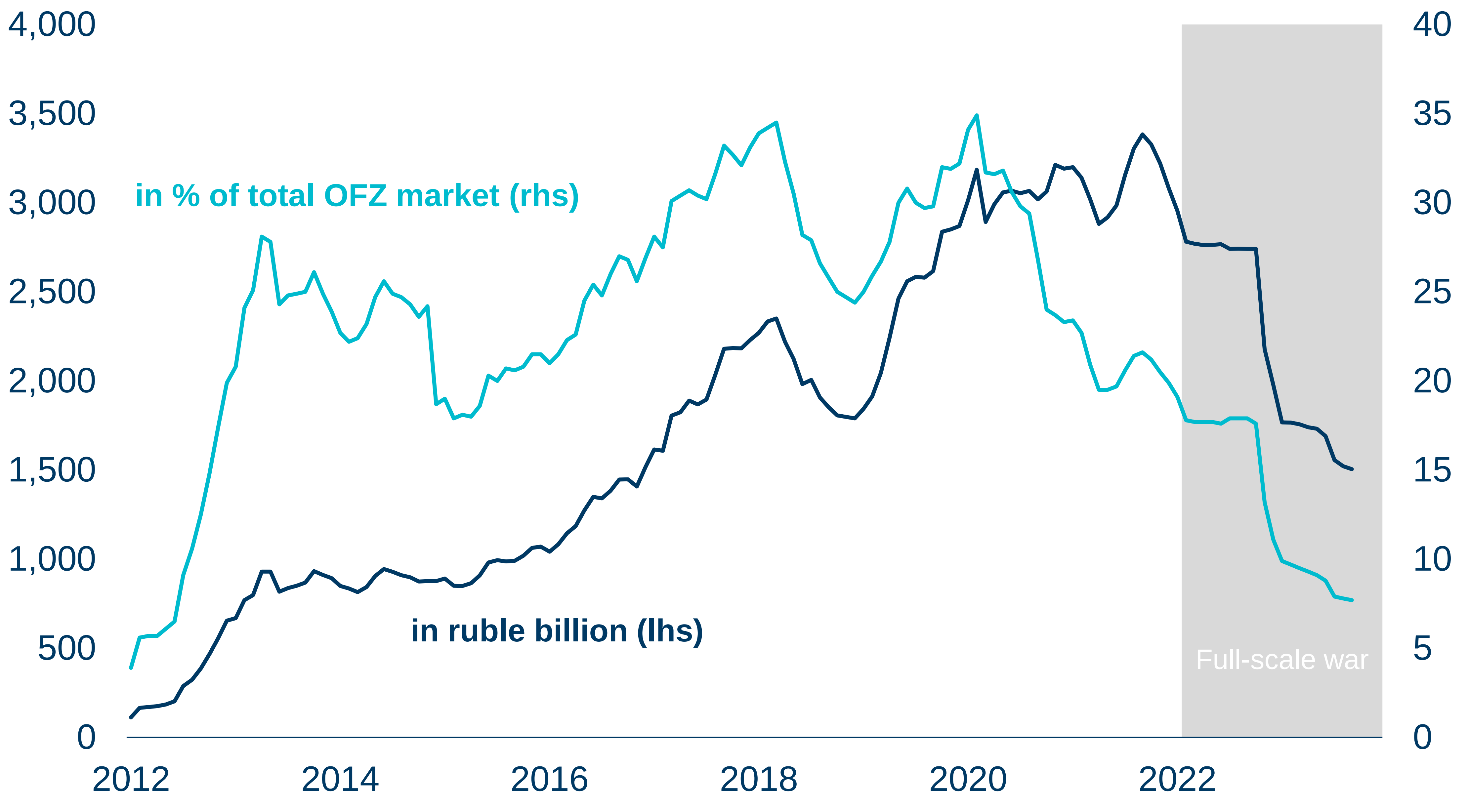


Source: Ministry of Finance, KSE Institute

Domestic banks are the only remaining buyer for OFZs.

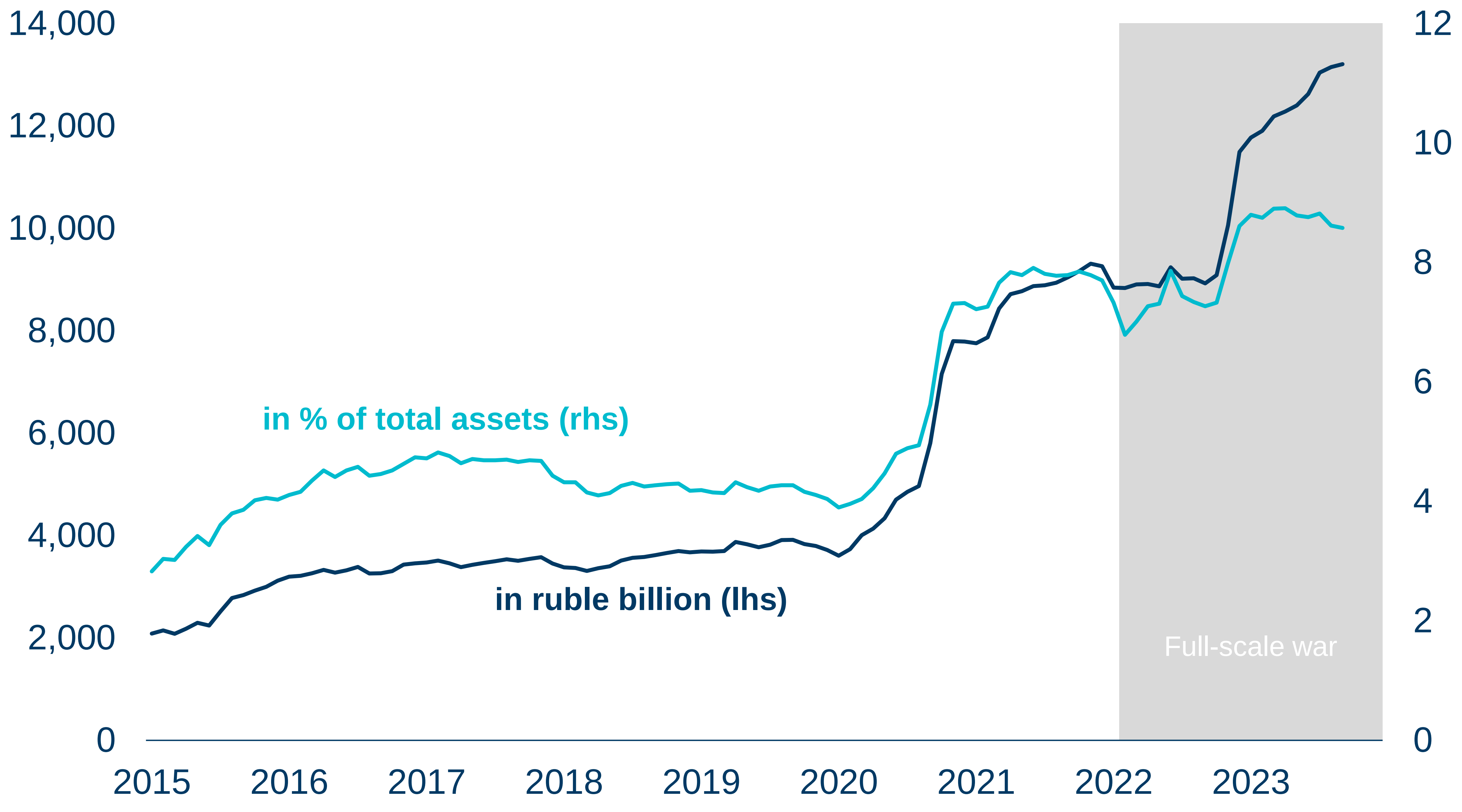
- Foreigners have largely disengaged from the Russian sovereign debt market since the start of the war.
- Non-resident holdings have dropped 1.2 trillion rubles (or 45%) since November 2022 as bonds matured.
- Over the same period, credit institutions’ holdings have risen by more than 4.1 trillion rubles (or 45%).

Non-resident OFZ holdings



Source: Bank of Russia, KSE Institute

Credit institutions OFZ holdings

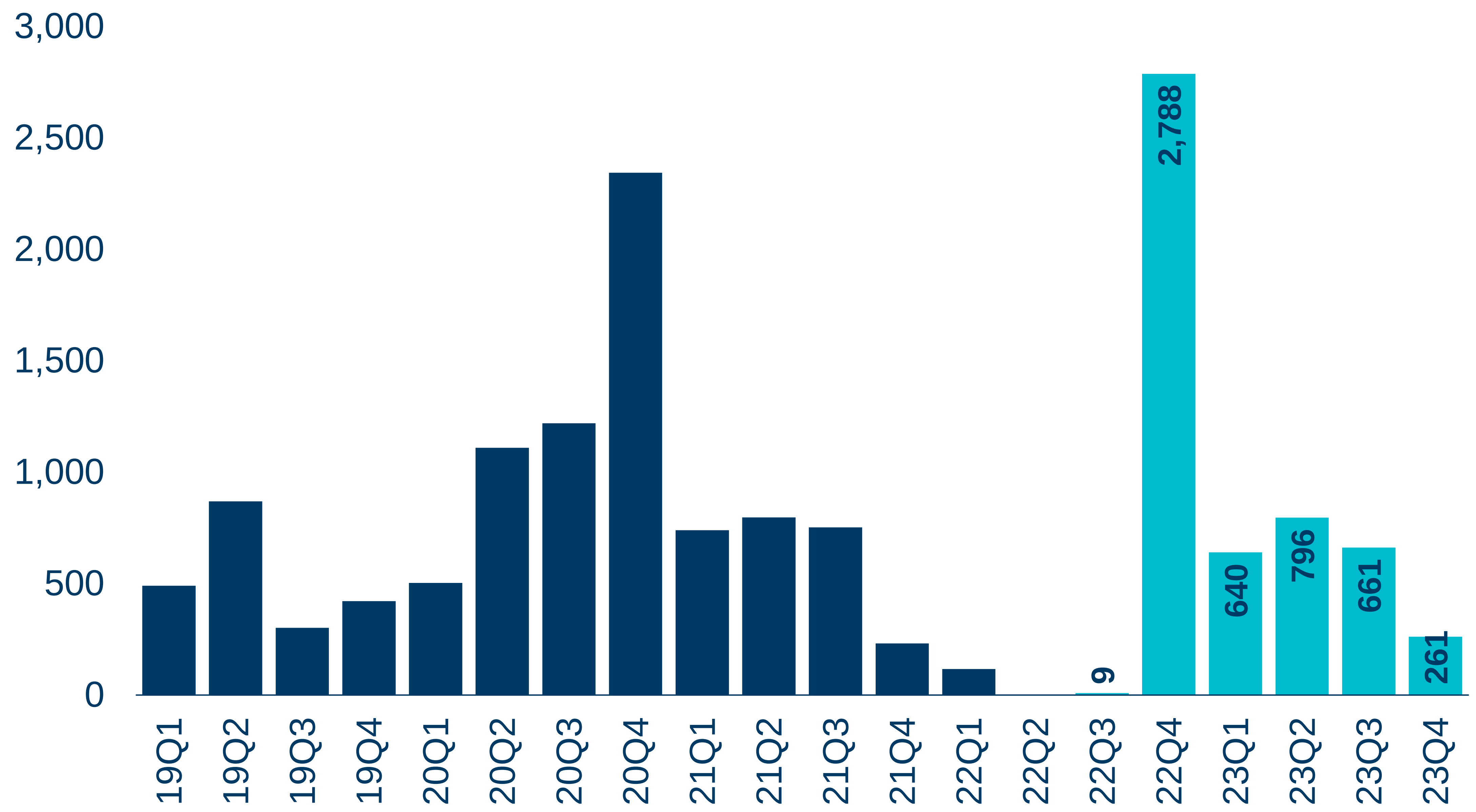


Source: Bank of Russia, KSE Institute

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

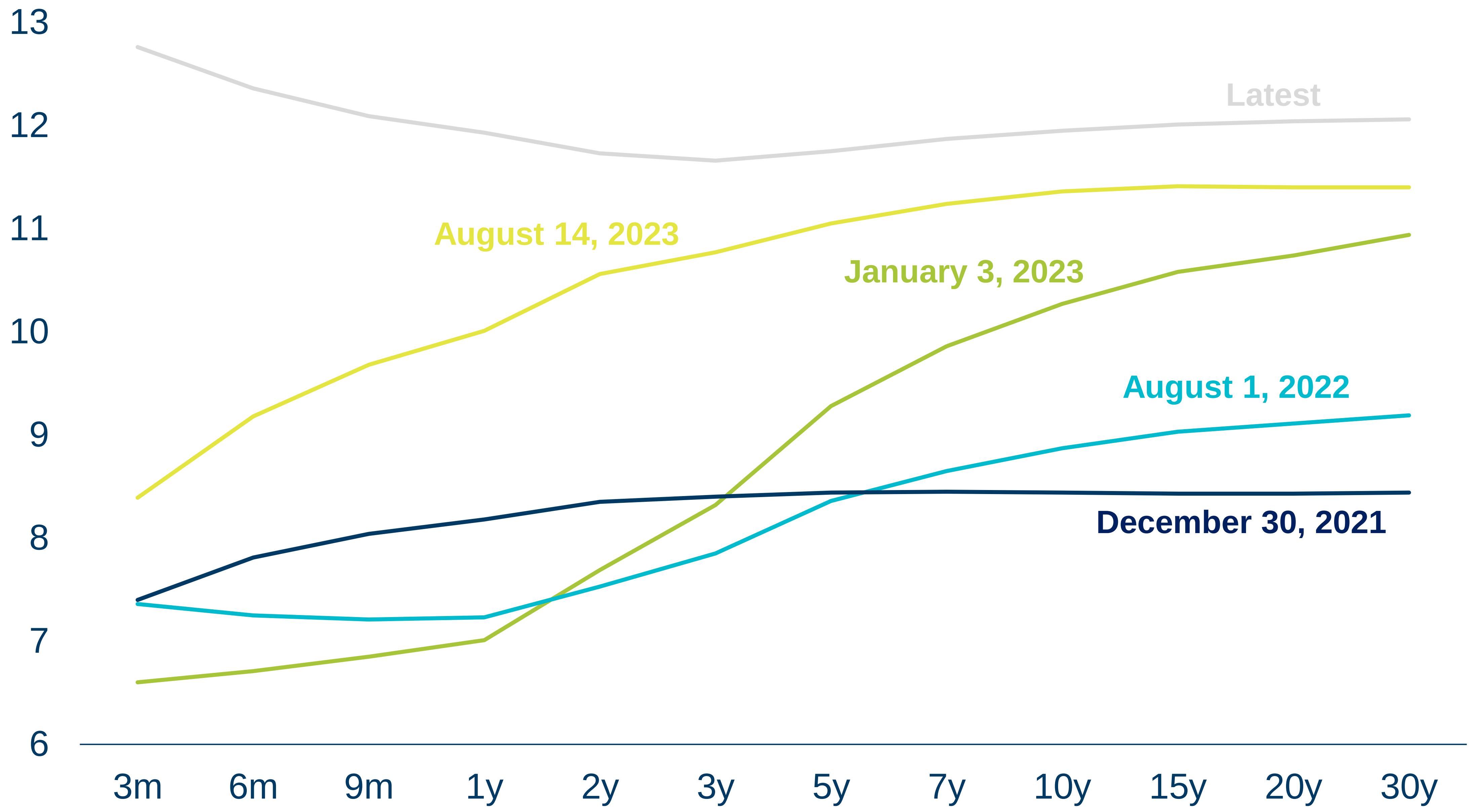
- Due to the improved fiscal picture, we do not expect a significant increase in auction volumes for the rest of 2023.
- The OFZ yield curve reflects the recent CBR rate hikes (of cumulative 550bps) with the short end shifting up sharply.
- Longer maturity interest rates will inevitably follow suit in the coming weeks/months, driving up overall borrowing costs.

New domestic debt (OFZ) issuance, in ruble billion



Source: Ministry of Finance, KSE Institute

OFZ yield curves, in %



Source: Bank of Russia, KSE Institute

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Macro buffers: NWF benefits from improved fiscal picture, access to reserves seriously constrained

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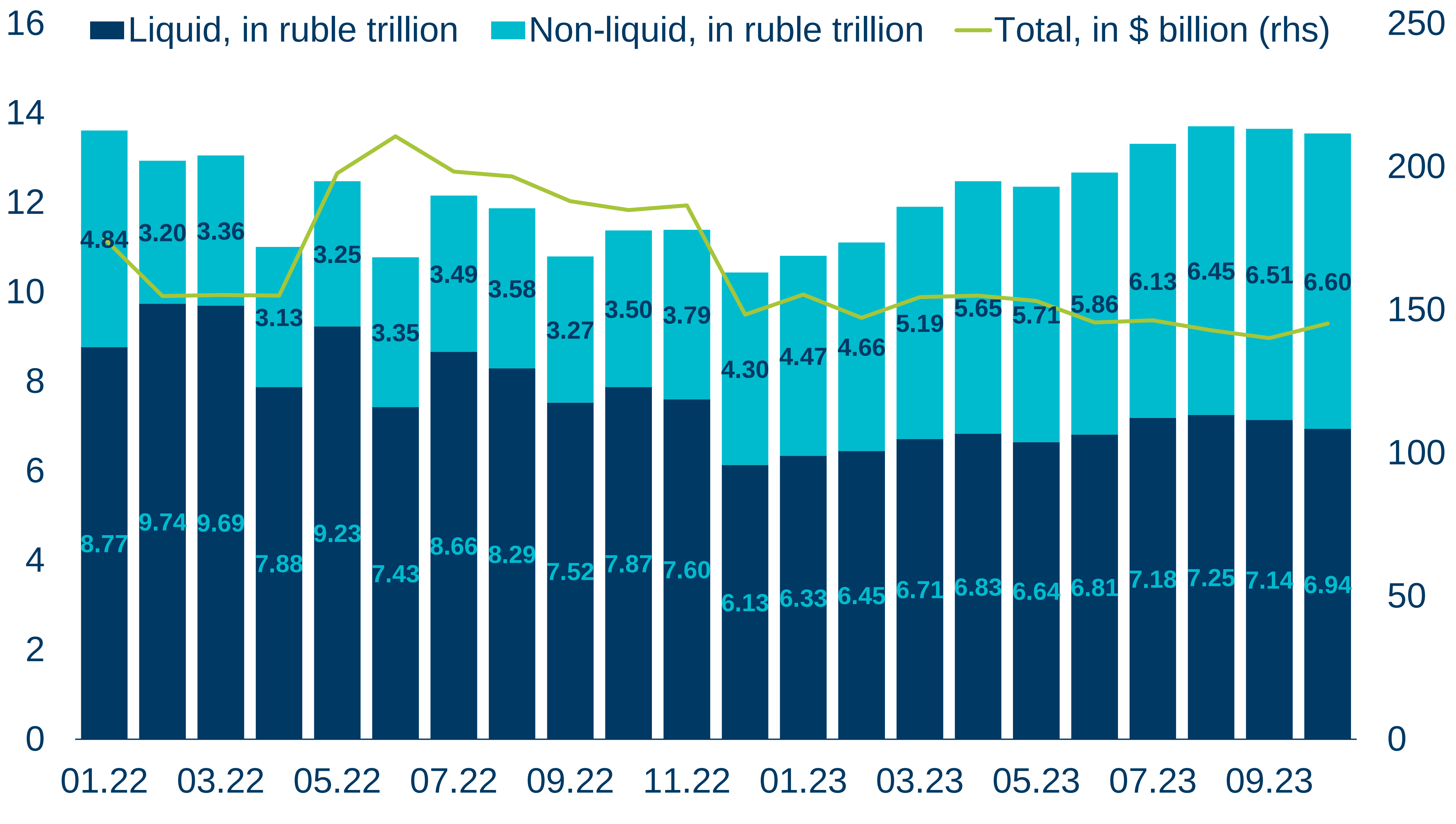
NWF assets have risen due to smaller withdrawals, valuation effects.

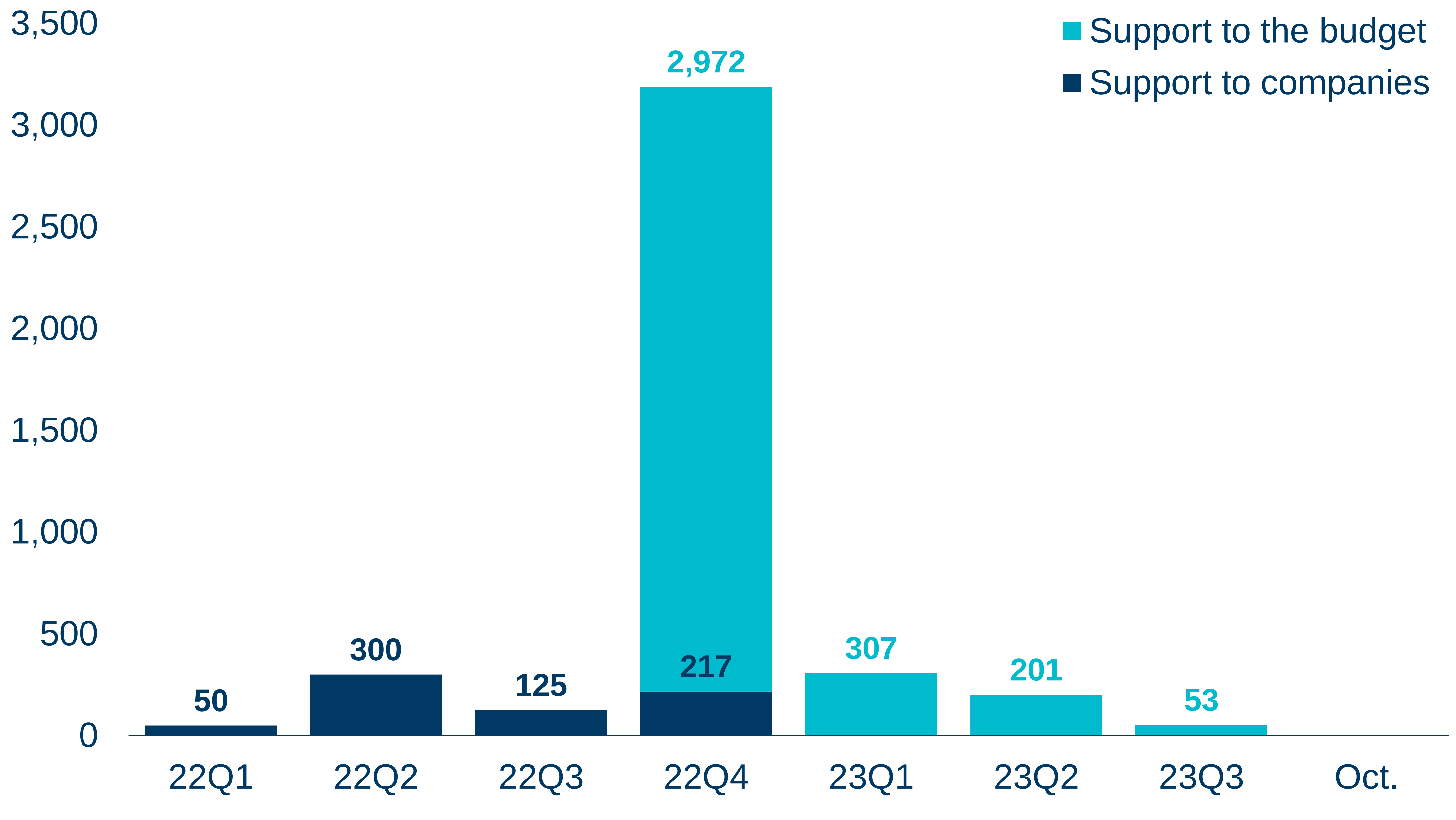
- Total assets of the National Welfare Fund stood at 13.5 trillion rubles ($145.2 billion, 9.0% of GDP) at the end of October.
- Liquid assets (e.g., foreign currency and gold) accounted for 51% of the total and non-liquid assets (e.g., stocks) for 49%.
- Withdrawals from the NWF support companies and the budget have dropped sharply after a record-high Q4 2022.

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

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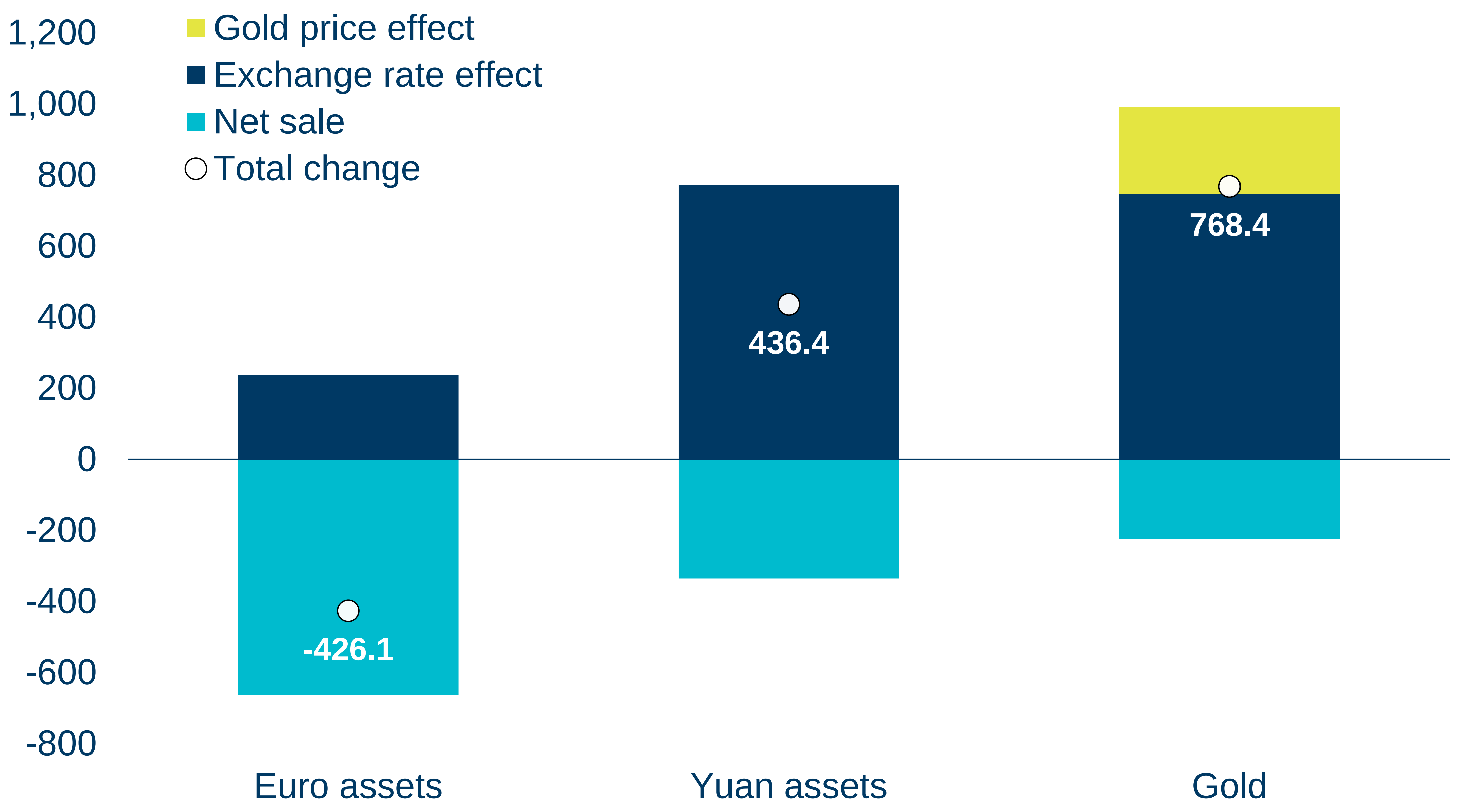
Russia will be able to rely on the NWF for financing for quite some time.

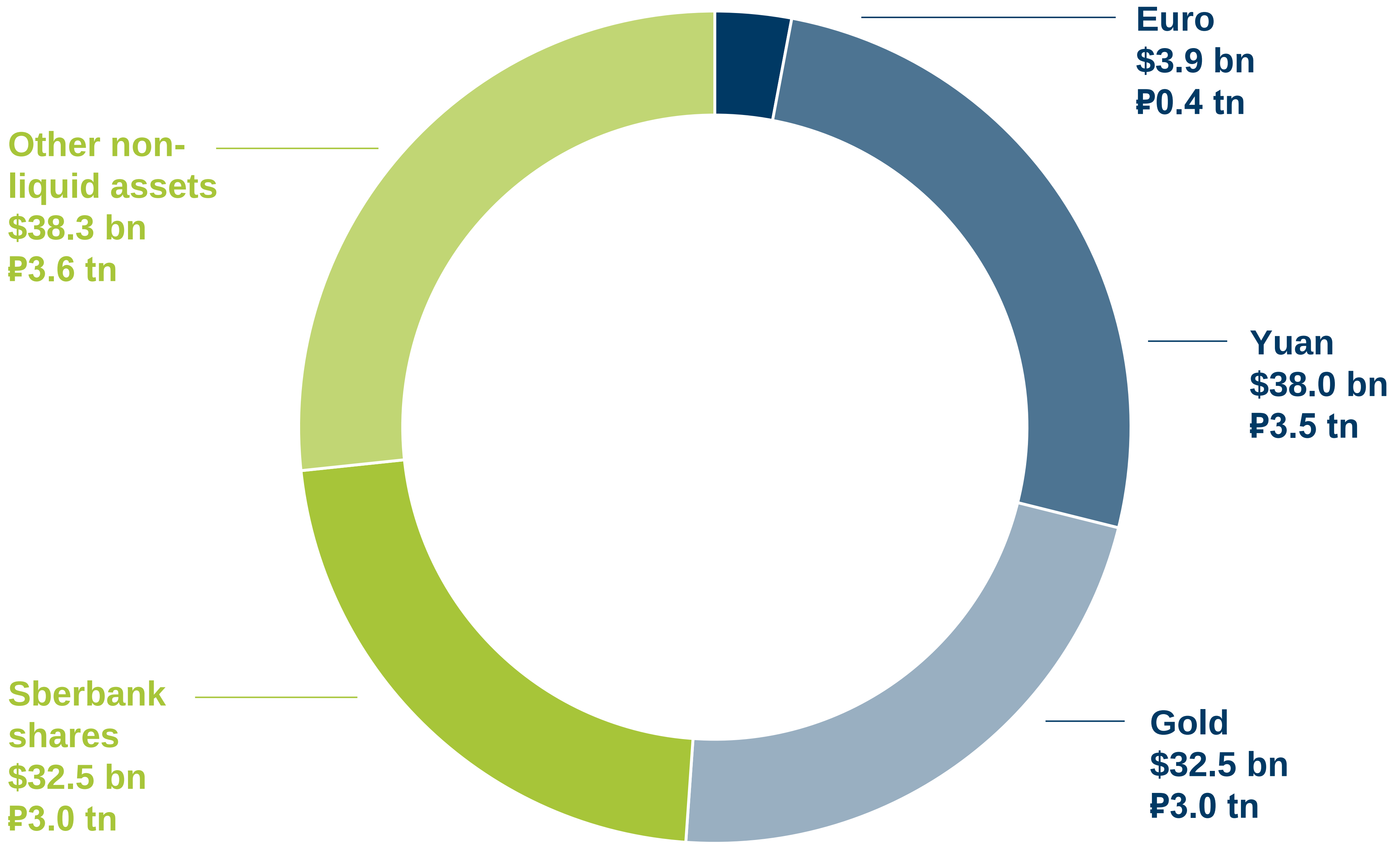
- Moderate net sales of euro/yuan assets and gold were offset by exchange rate, valuation effects.
- In the absence of a much wider deficit, withdrawals will likely remain moderate for the rest of the year.
- Therefore, Russia will be able to rely for longer than originally anticipated on the NWF for financing.

Change in assets (Oct. 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 November 1, 2023*



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

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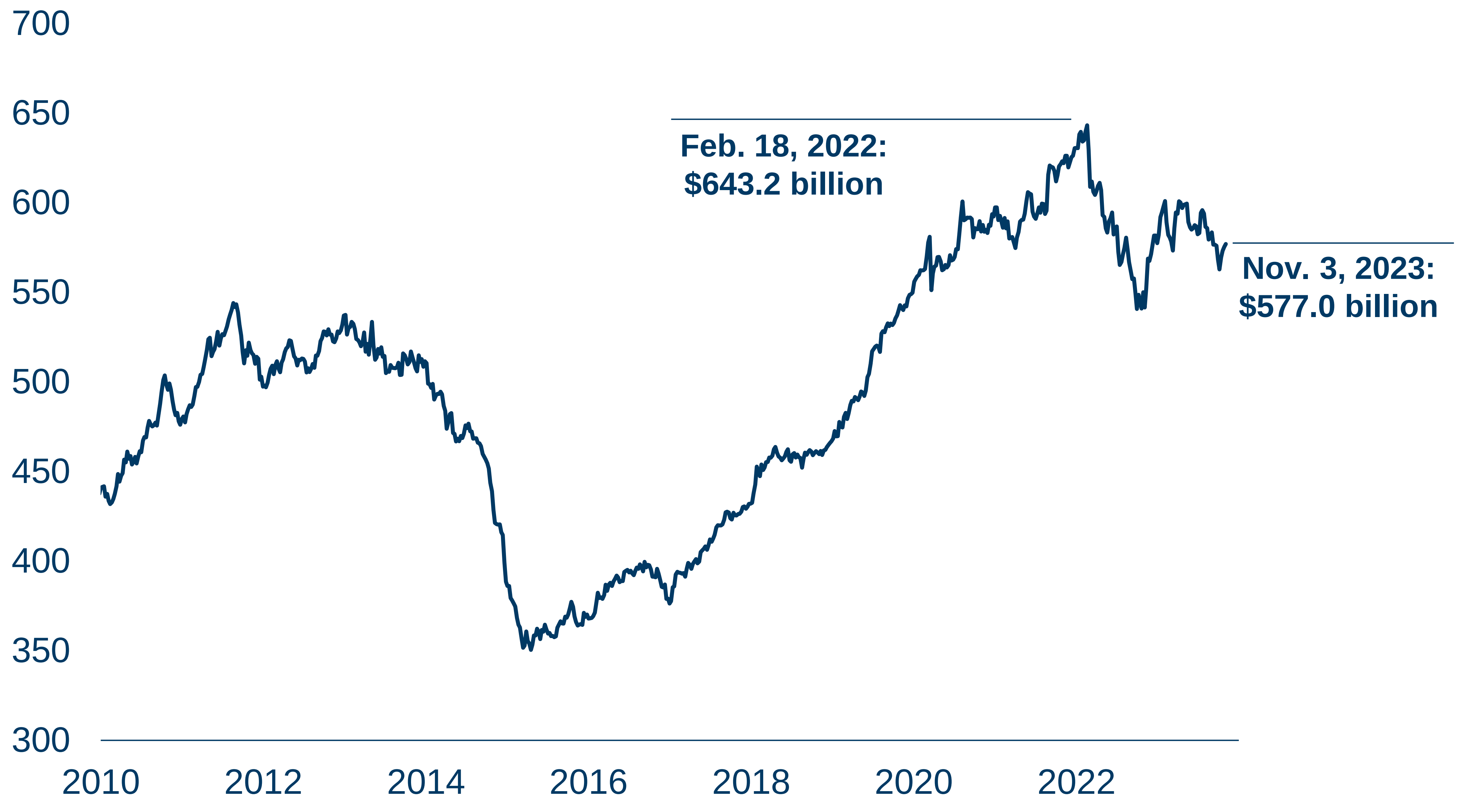
A substantial share of international reserves have been immobilized.

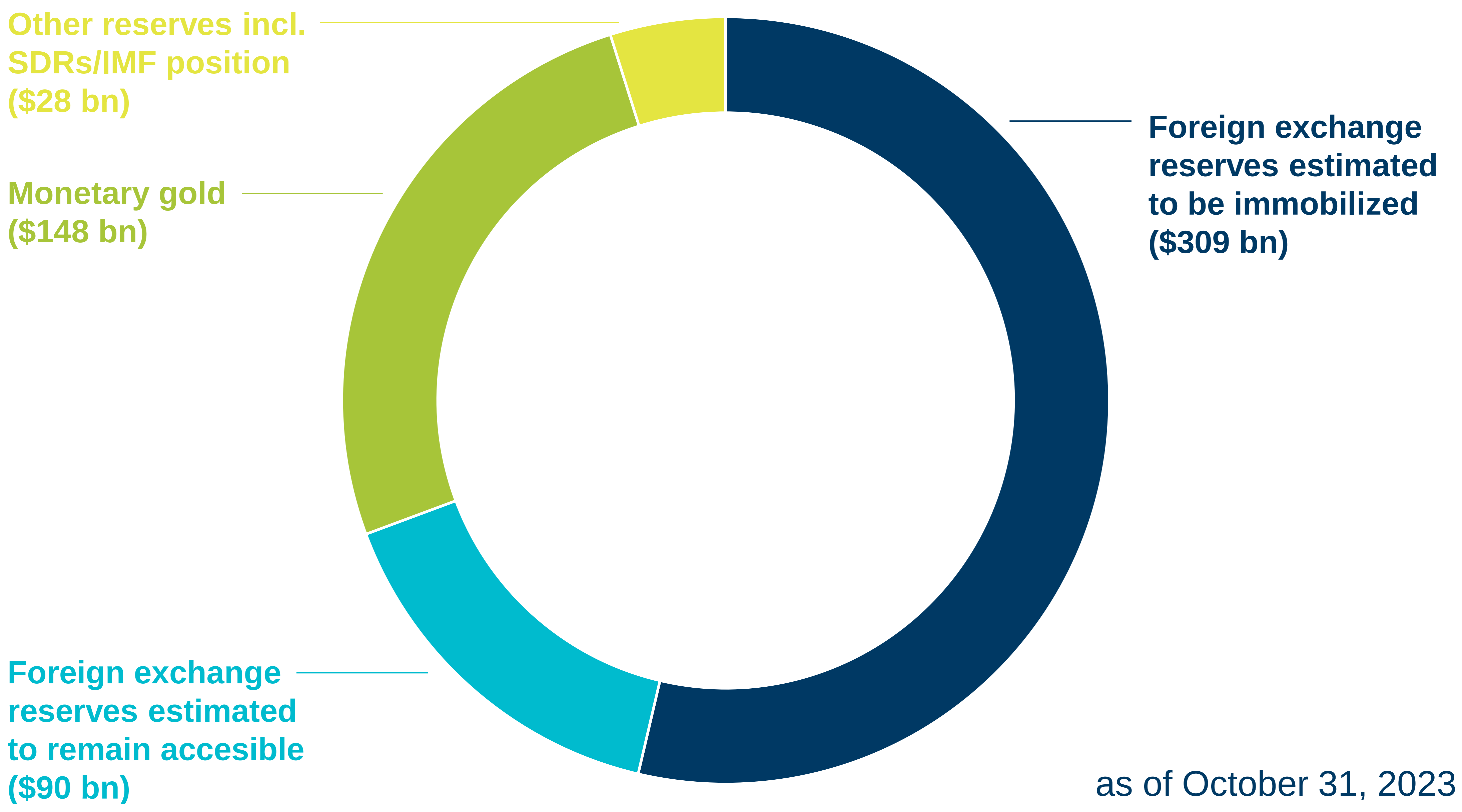
- Before the invasion, Russia held $634 billion in international reserves, part of what is described as *“Fortress Russia”.*
- We estimate that around $309 billion are currently immobilized due to international sanctions on CBR and NWF.
- This leaves Russia with access to $148 billion in monetary gold and roughly $90 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



as of October 31, 2023

Source: Bank of Russia, KSE Institute

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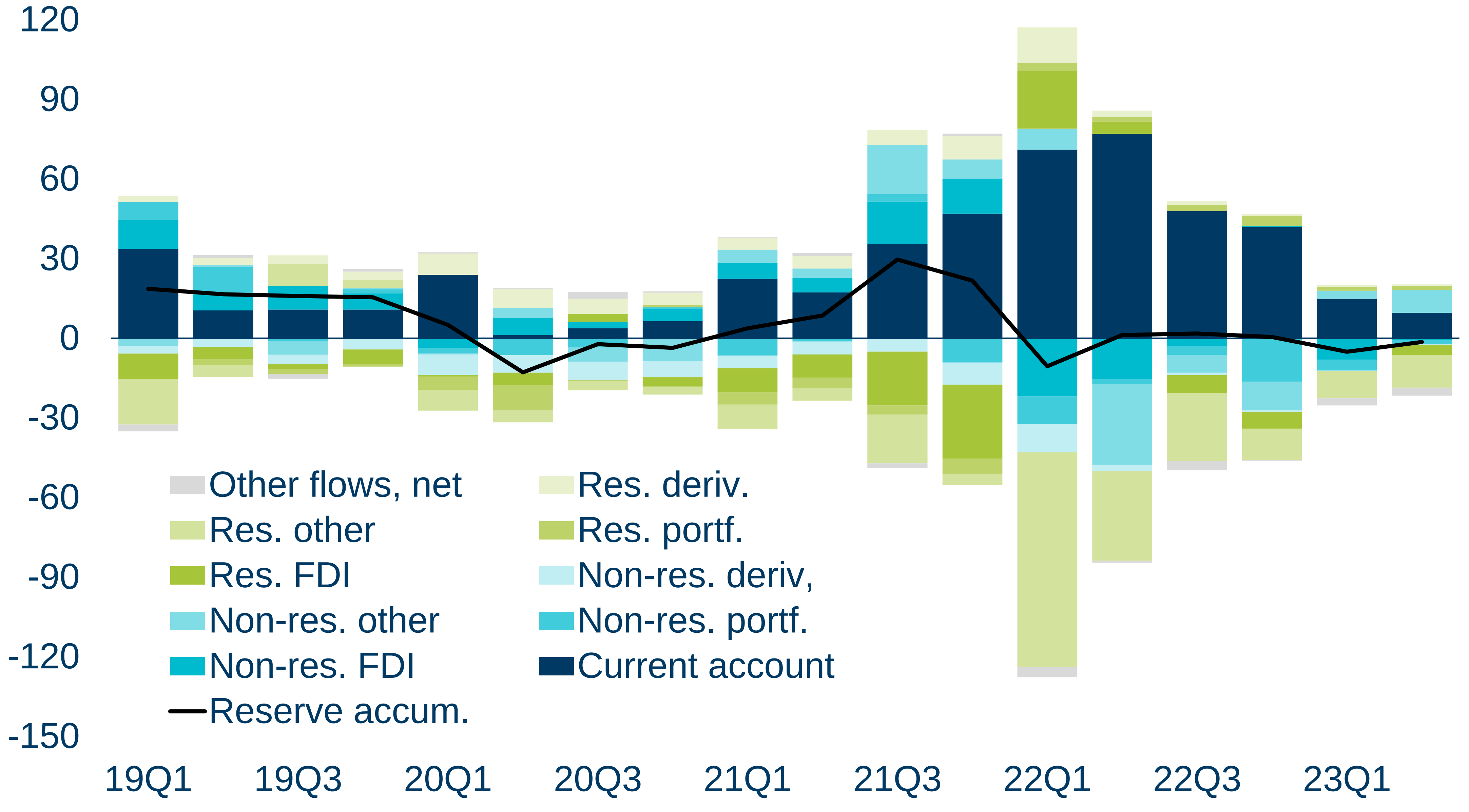
Significant accumulation of new foreign assets in 2022-23.

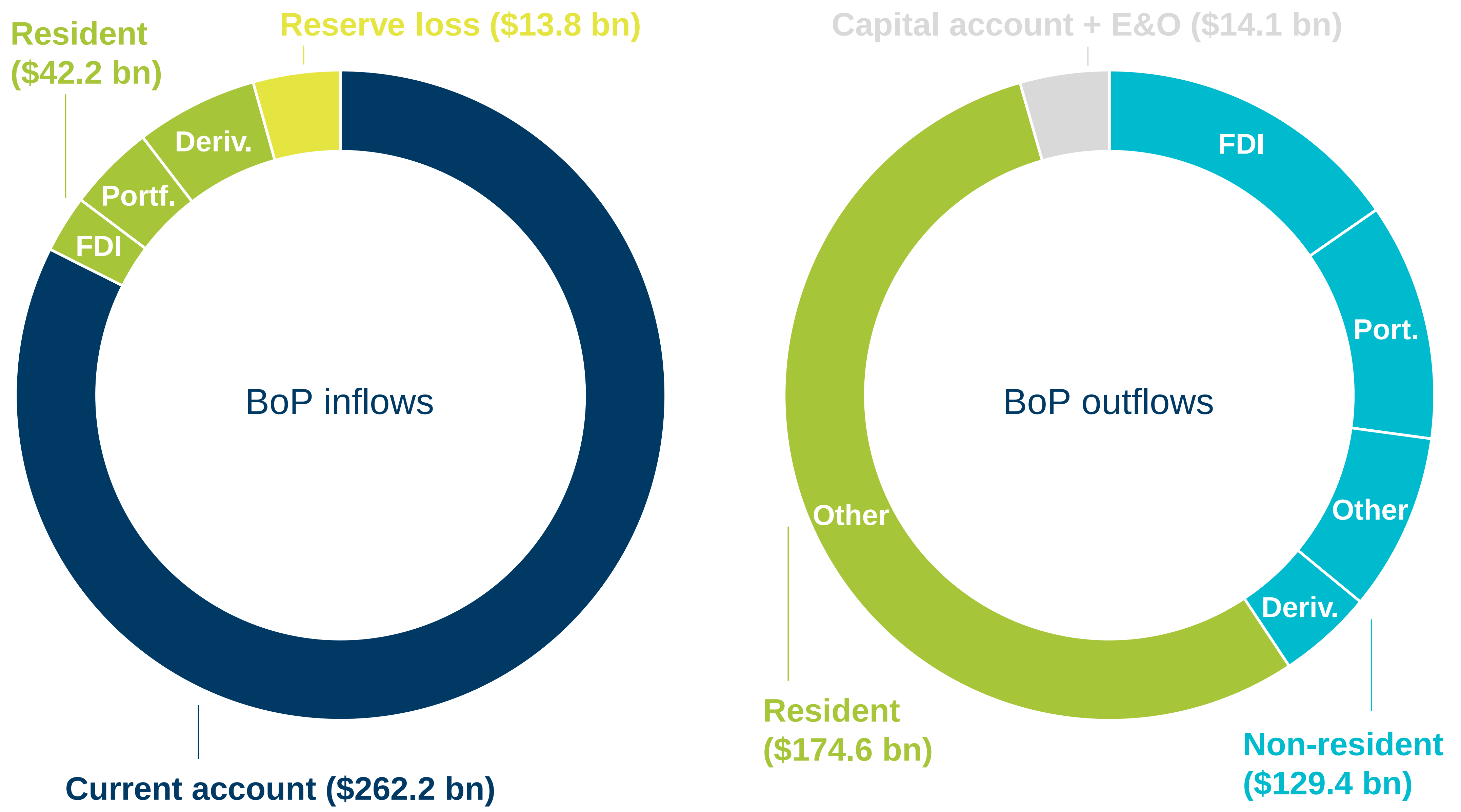
- It is time to focus attention on foreign assets that Russia has been able to accumulate due to favorable BoP dynamics.
- Non-resident capital outflows partially ate up the large current account surplus and resident inflows in 2022Q1-2023Q2.
- But Russian banks and corporates were able to acquire $175 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

2022Q1-2023Q2 balance of payments flows, in U.S. dollar billion



Source: Bank of Russia, KSE Institute

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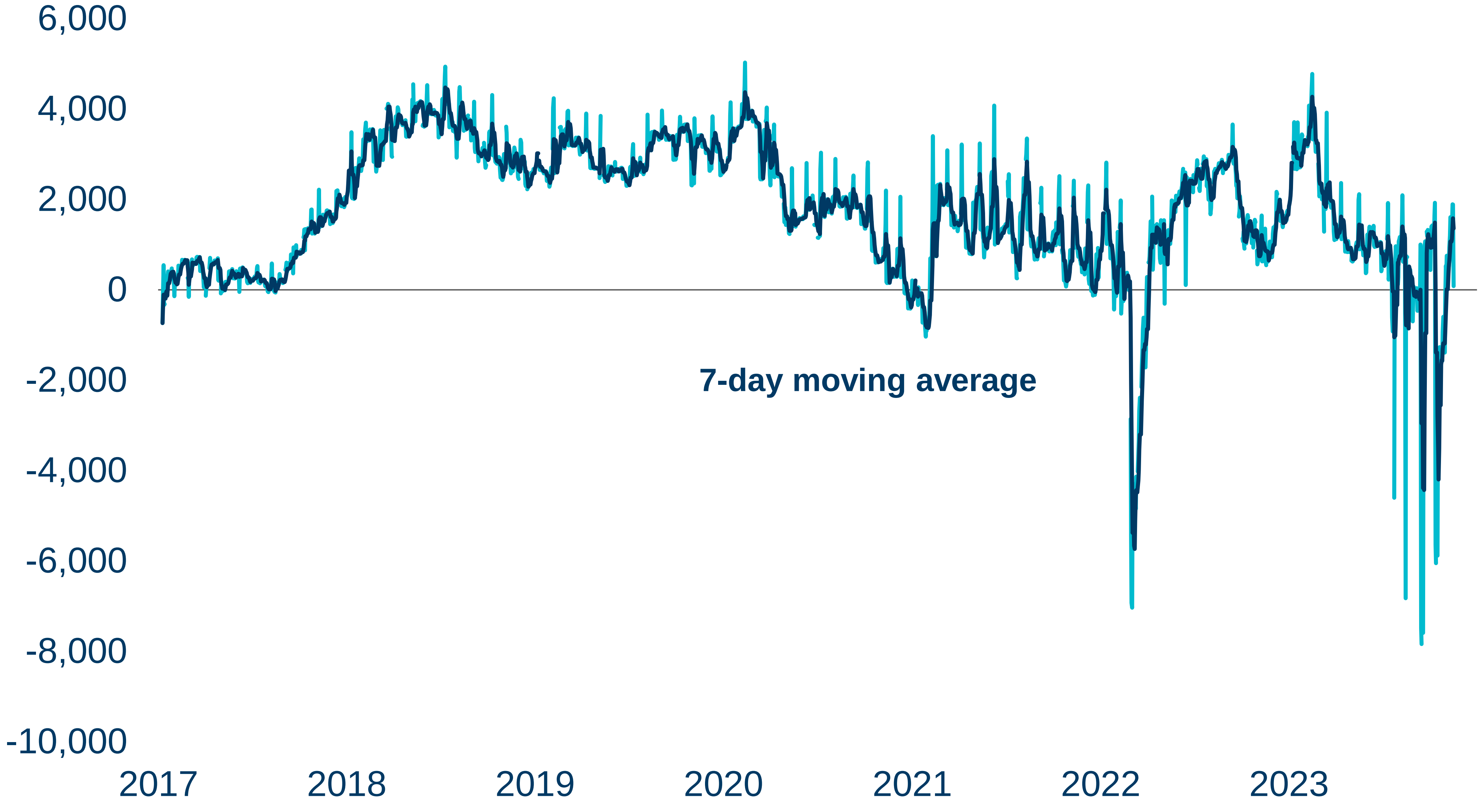
CBR rate hikes have impacted banking system liquidity in recent months.

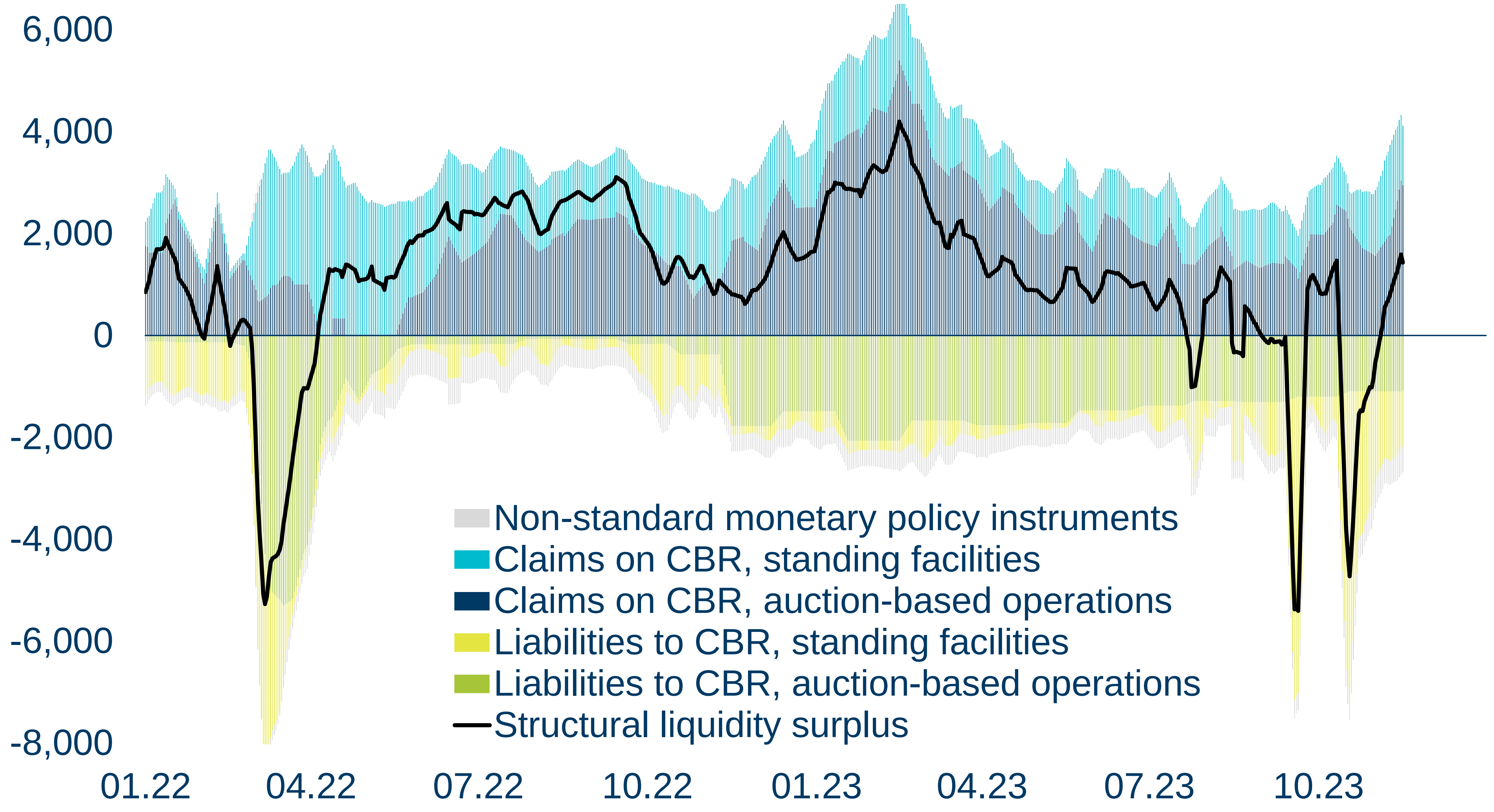
- Liquidity conditions recovered quickly after the initial shock from the full-scale war and imposition of sanctions.
- A closer look at the composition of the structural liquidity surplus points to some stress in the interbank market.
- The data clearly shows the (temporary) effects of the CBR's monetary tightening in July-October (750bps).

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

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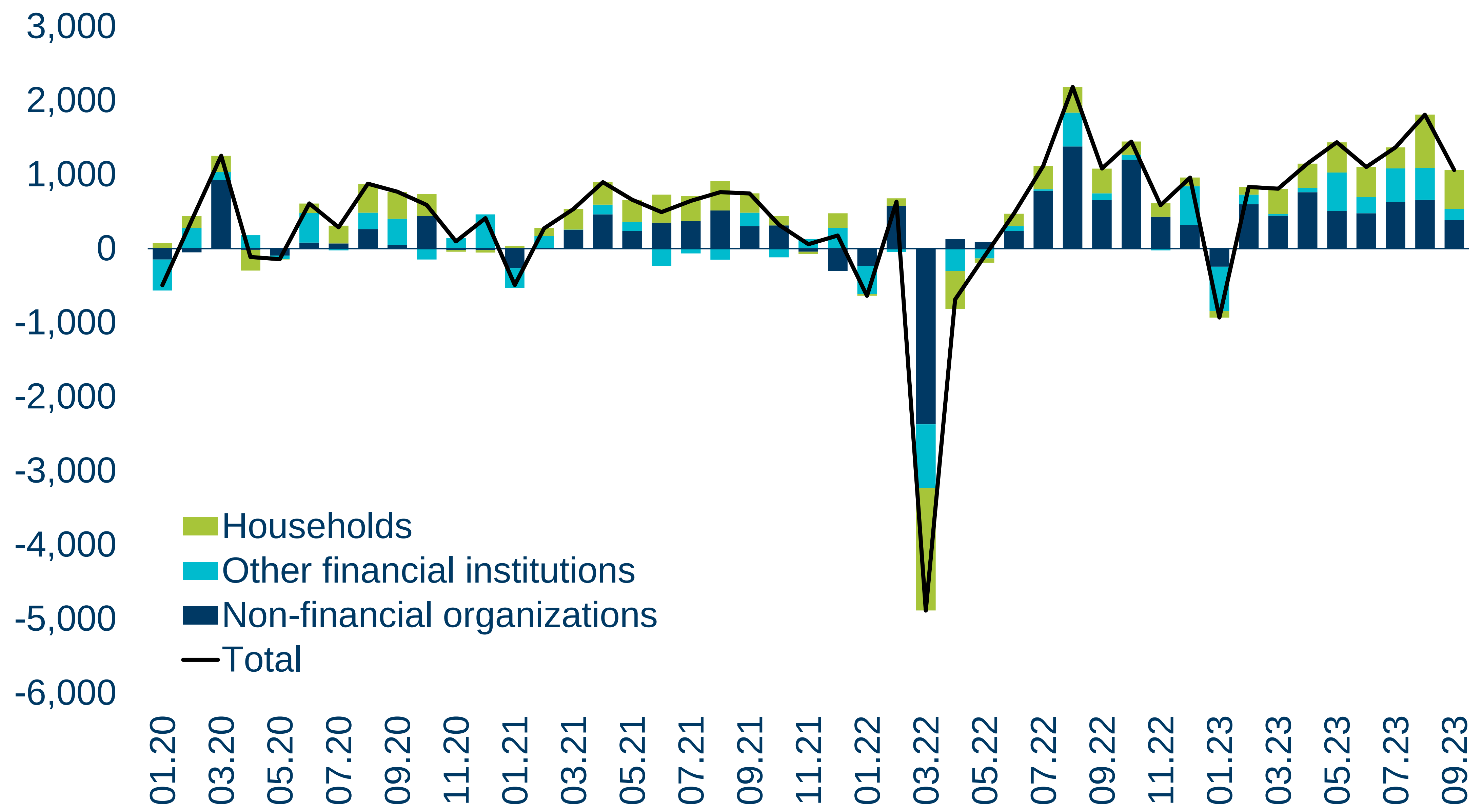
Private sector credit growth robust for the moment.

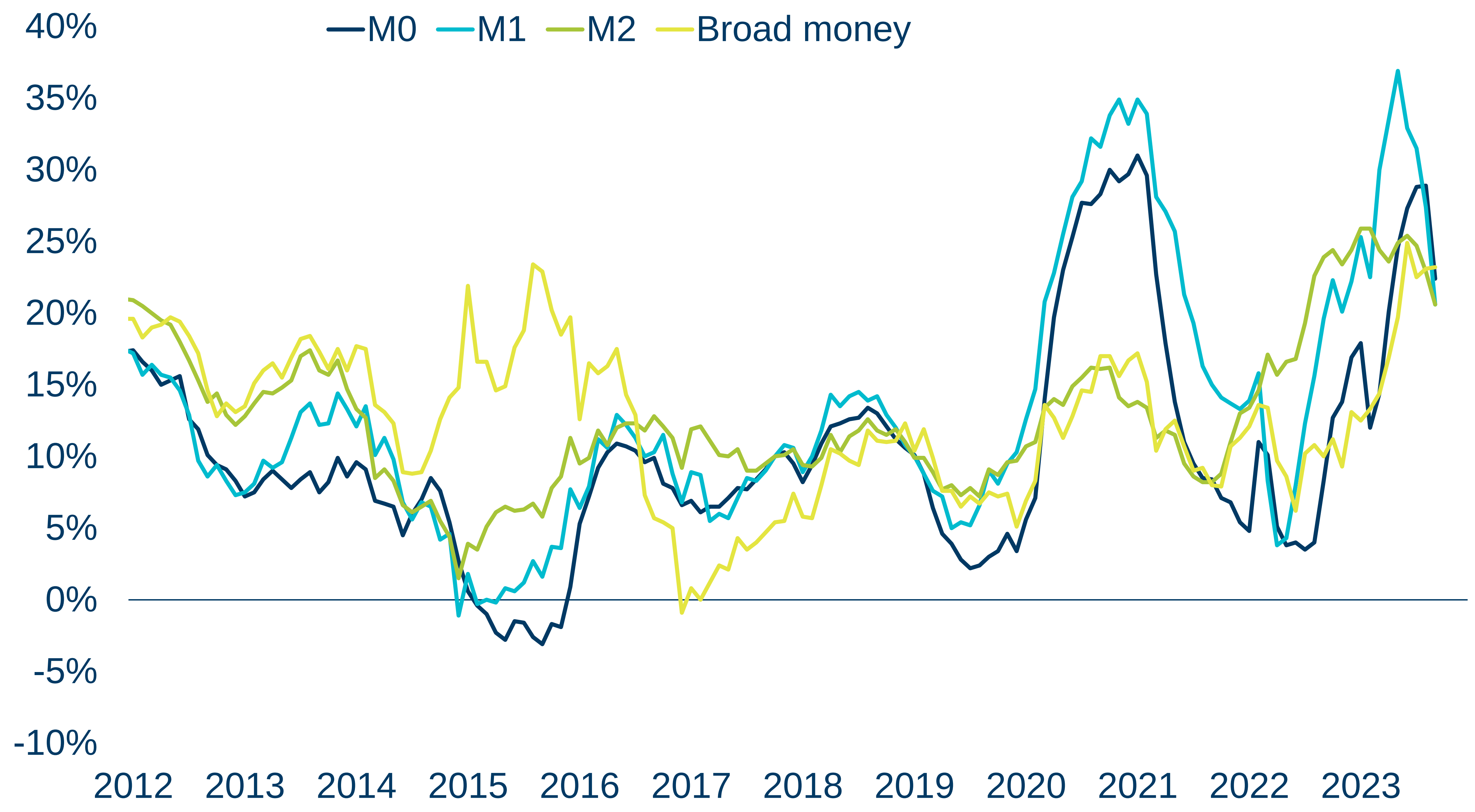
- Due to the provision of sufficient liquidity by the CBR, banks have been able to provide the private sector with credit.
- The CBR was able to simultaneously address monetary and financial stability in 2022 due to the supportive environment.
- With FX inflows down and the ruble under pressure, conflicts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

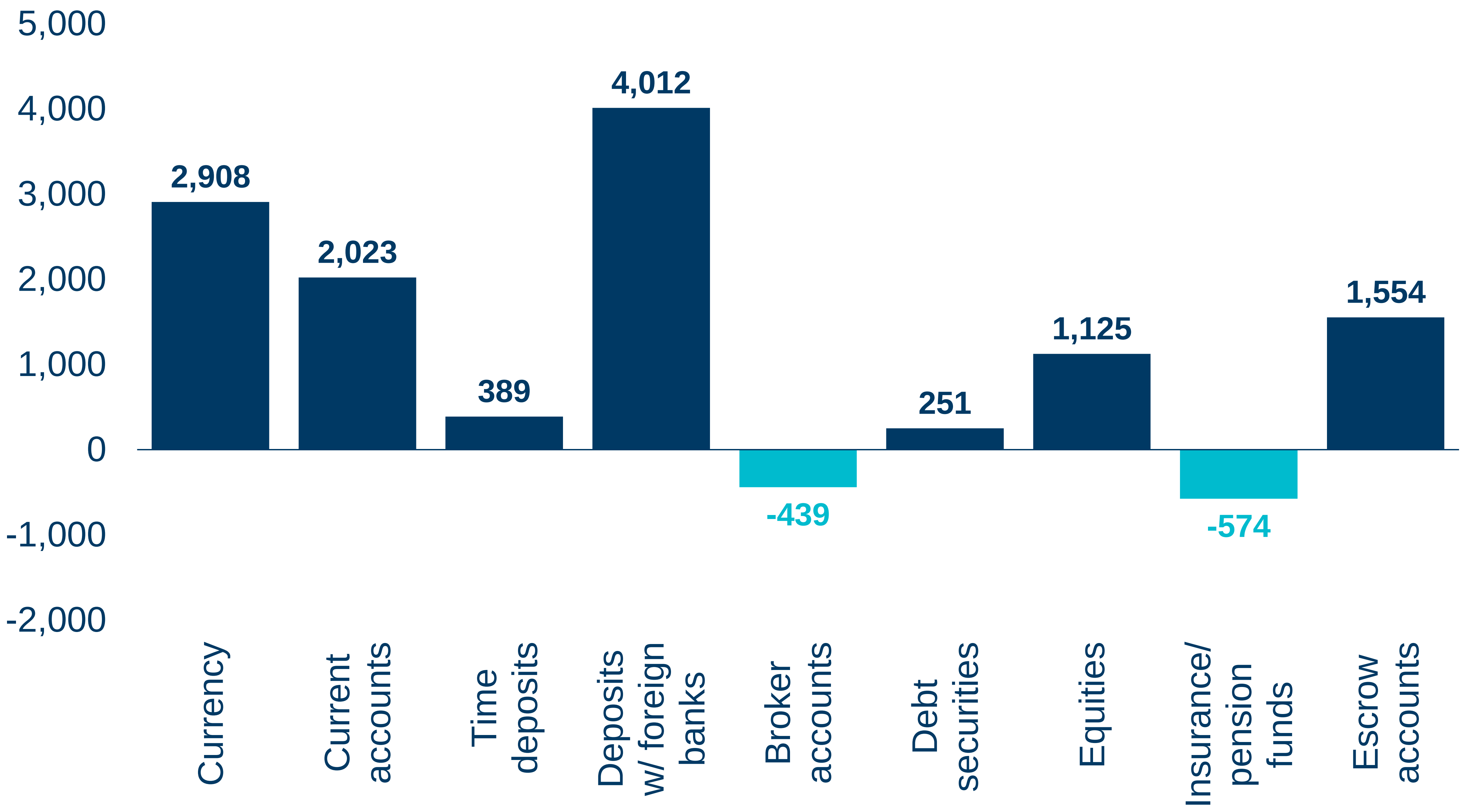


Source: Bank of Russia, KSE Institute

Underlying financial vulnerabilities remain and could resurface quickly.

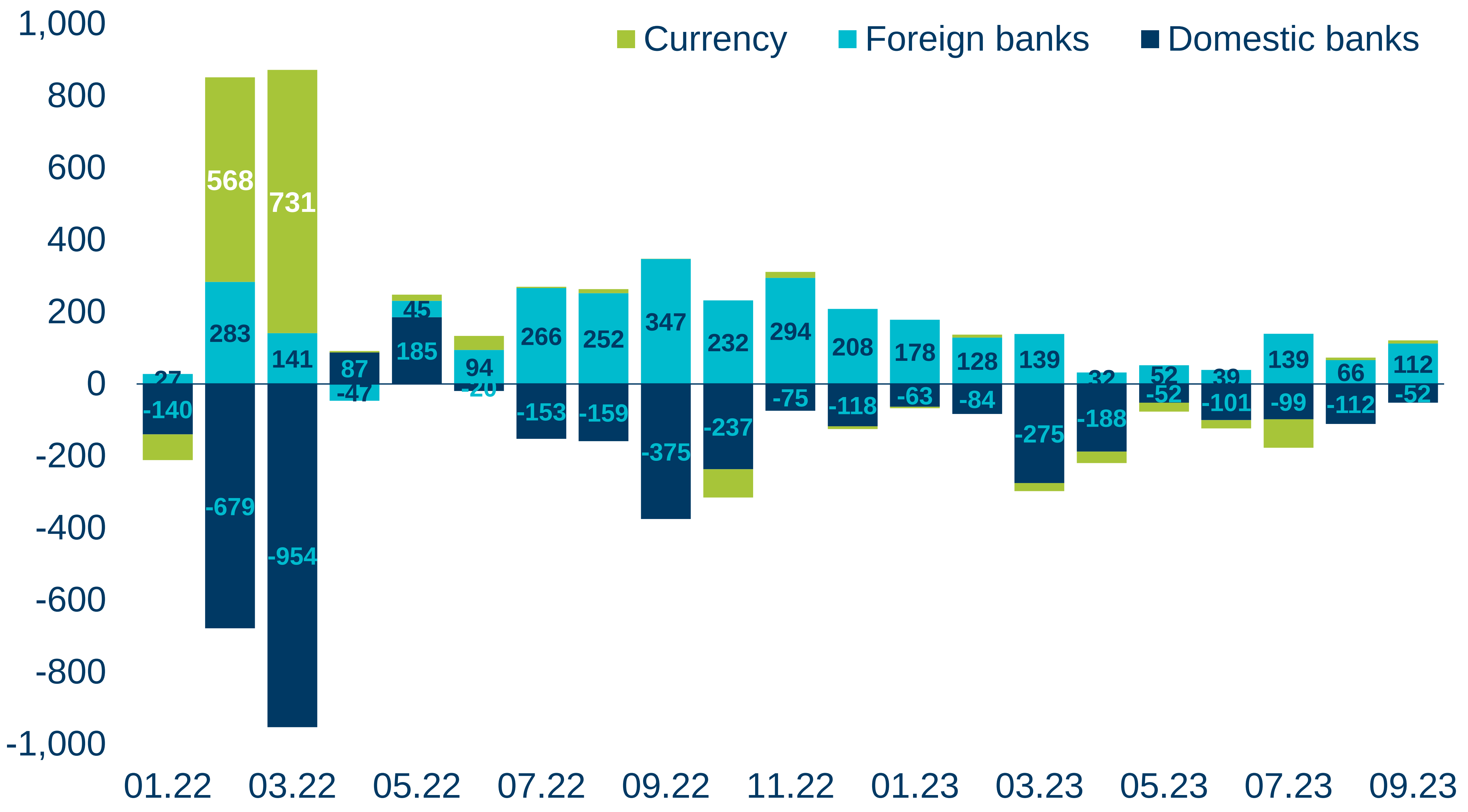
- While a systemic financial crisis was avoided, clear signs of vulnerabilities exist, including household asset movements.
- For instance, households moved funds from longer-term investments to cash holdings, current accounts, and foreign banks.
- As in previous crises, foreign currency was pulled from domestic banks—at the start of the war and surrounding mobilization.

Real change in household assets vs. February 2022, in ruble billion



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

Change in foreign currency cash and deposits, in ruble billion



Source: Bank of Russia, KSE Institute

Economic activity: return to growth in 2023-24, but prospects in the medium-/long-term are challenging

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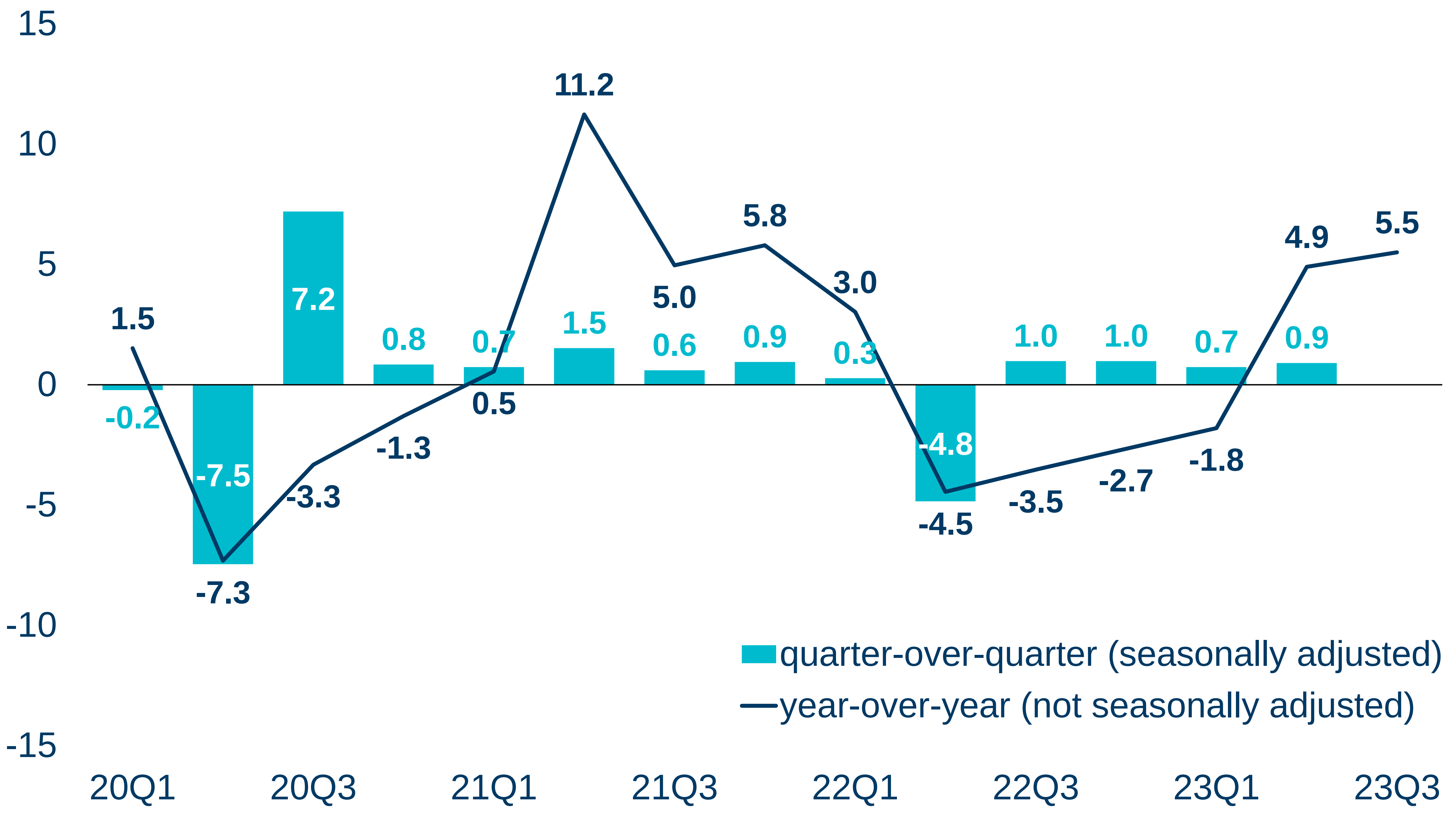
Russia's economy is on track for robust growth in 2023-24.

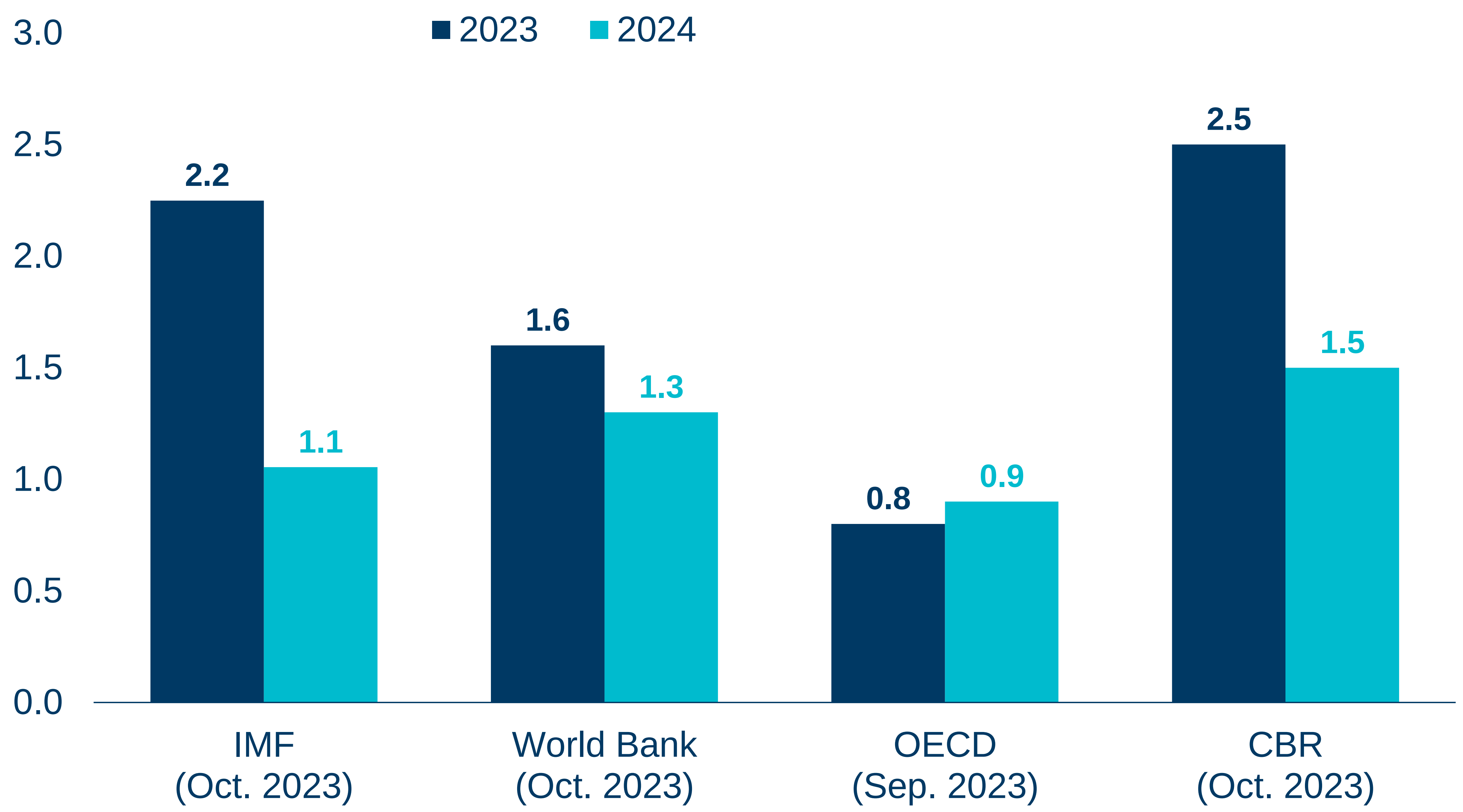
- Rosstat reports a pickup in growth—partially due to base effects—with 4.9% and 5.5% y/y in Q2 and Q3, respectively.
- For the full year, the economy is expected to growth at 1.6-2.2% with most forecasts revised upward in recent months.
- Key factors for the recovery: robust private sector credit growth and strong fiscal stimulus from high defense spending.

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

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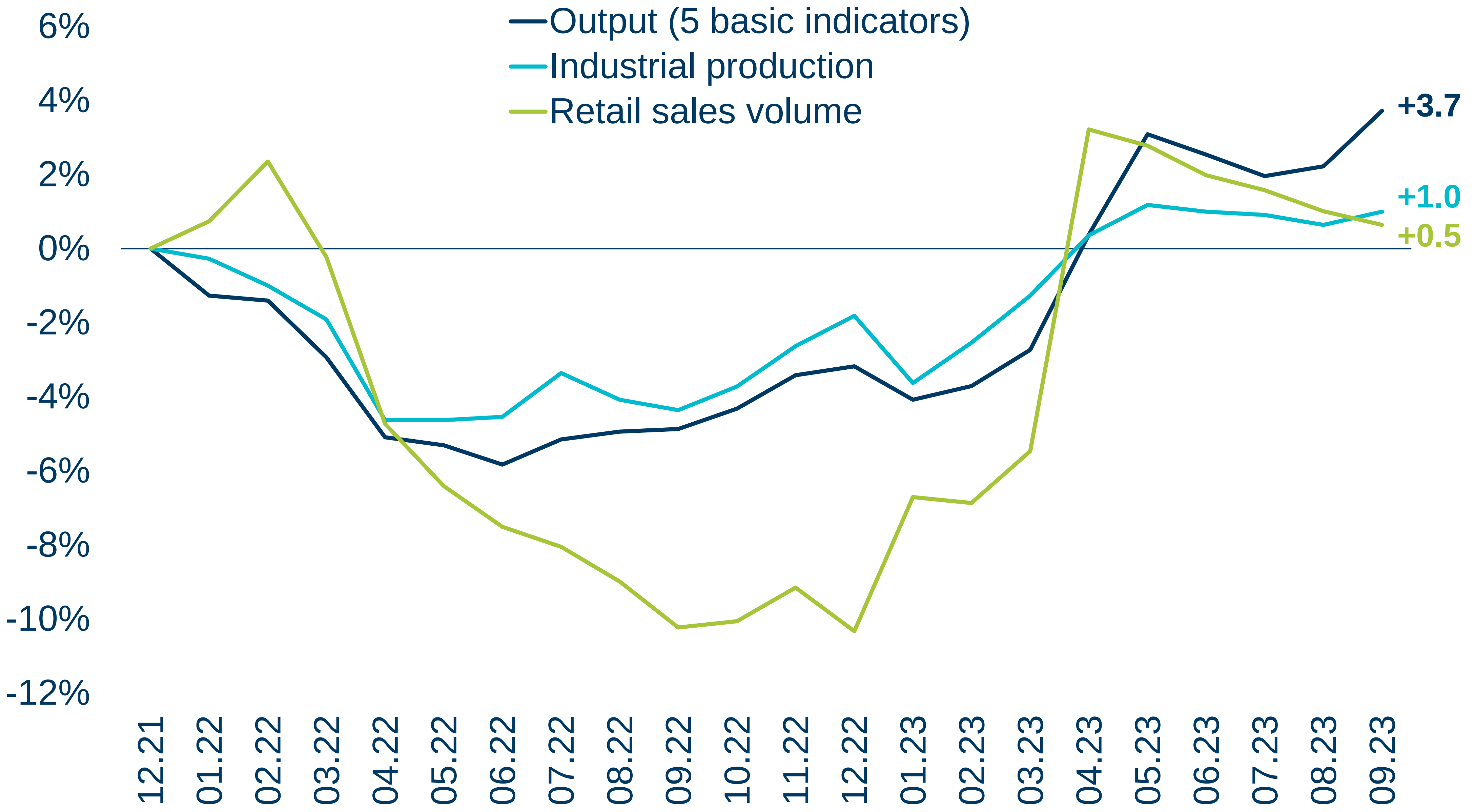
Broad range of indicators provides a consistent picture.

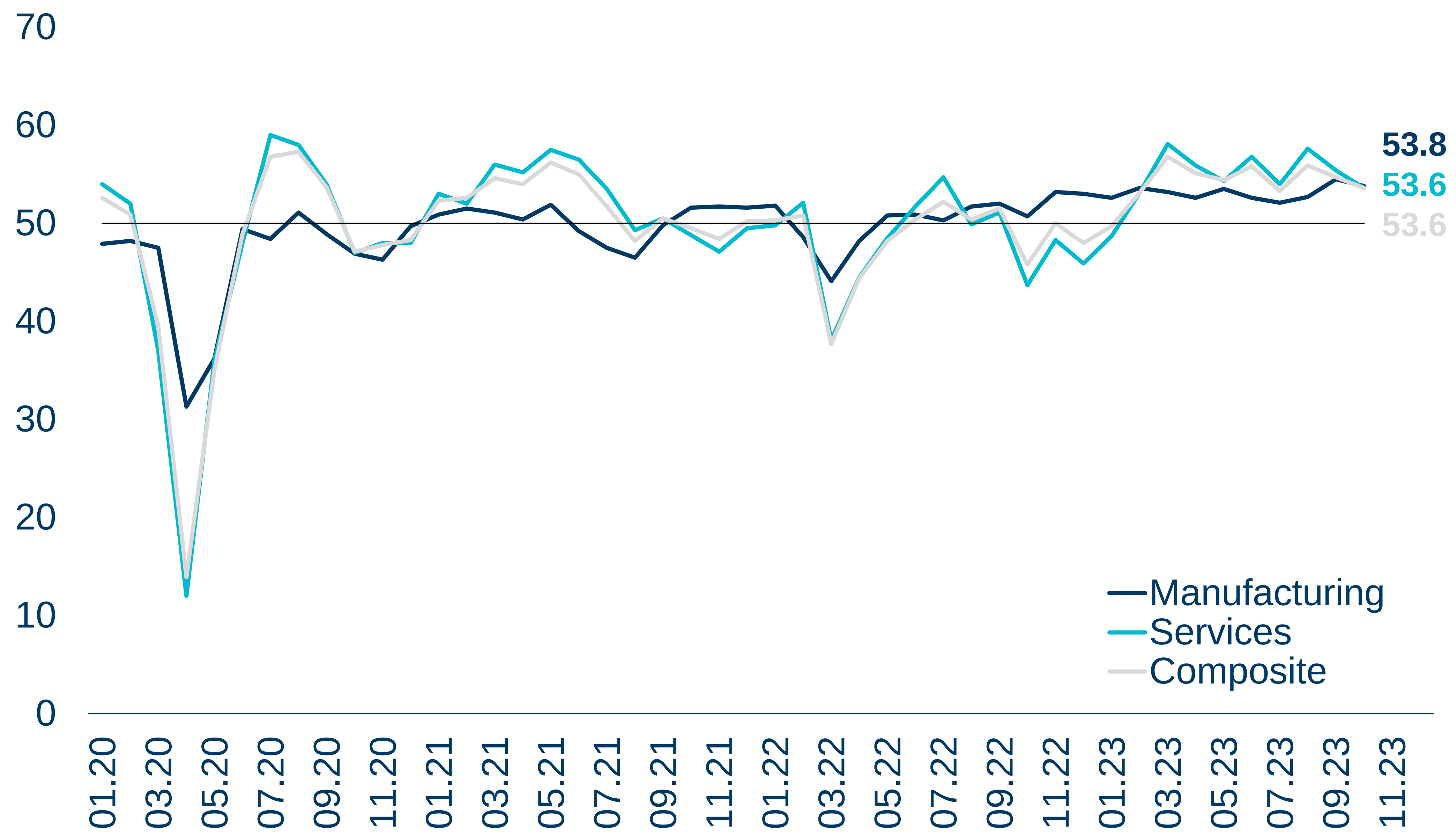
- Questions about the reliability of Russian GDP data are legitimate and pose challenges for any forecasting exercise.
- But a variety of indicators provide the consistent picture of an economic recovery that has essentially been completed.
- This is true for activity measures such as industrial production and retail sales, but also sentiment indicators like PMIs.

Activity indicators vs. December 2021, in %



Source: Rosstat, KSE Institute

PMIs, index (50+ = expansion)

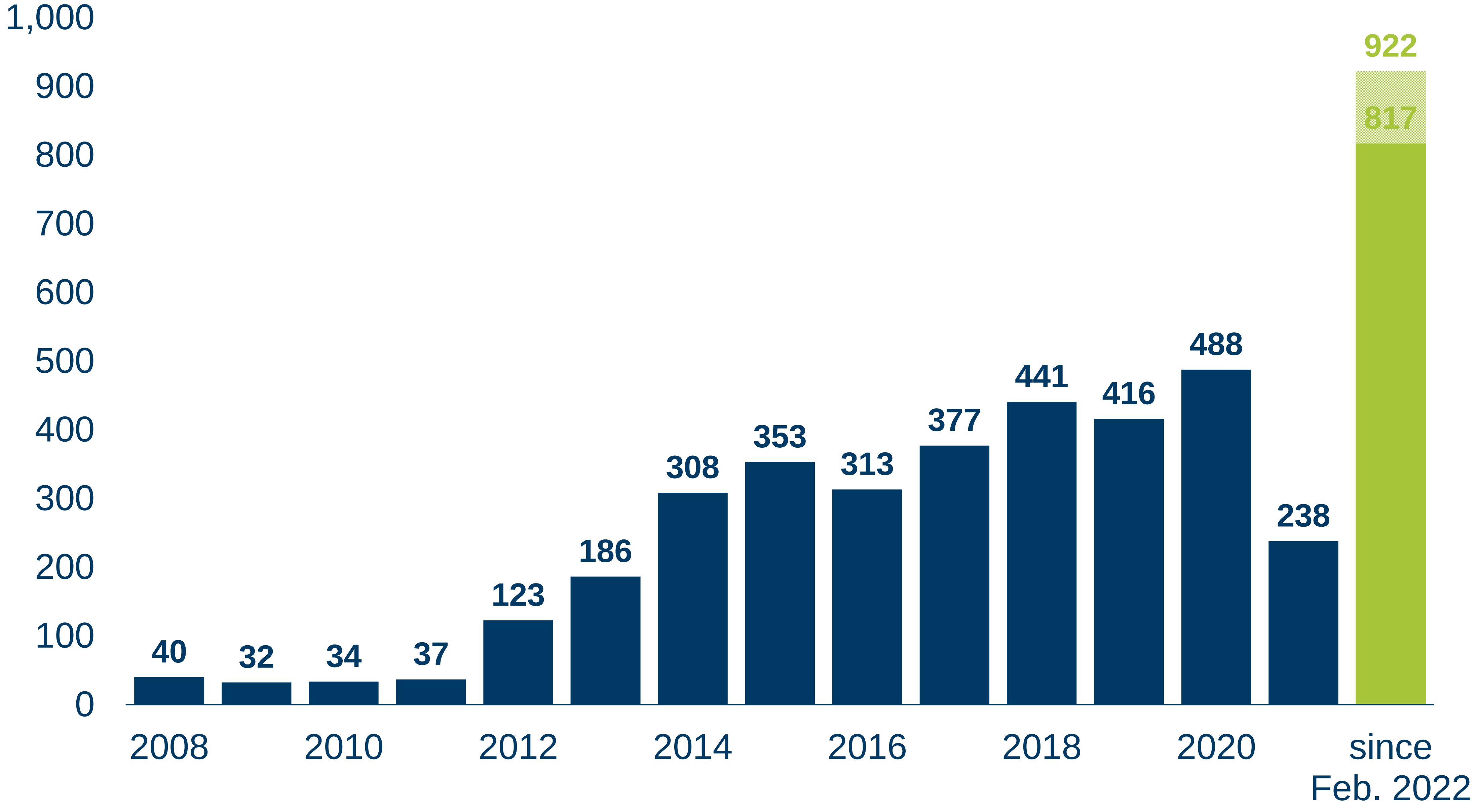


Source: S&P Global, KSE Institute

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

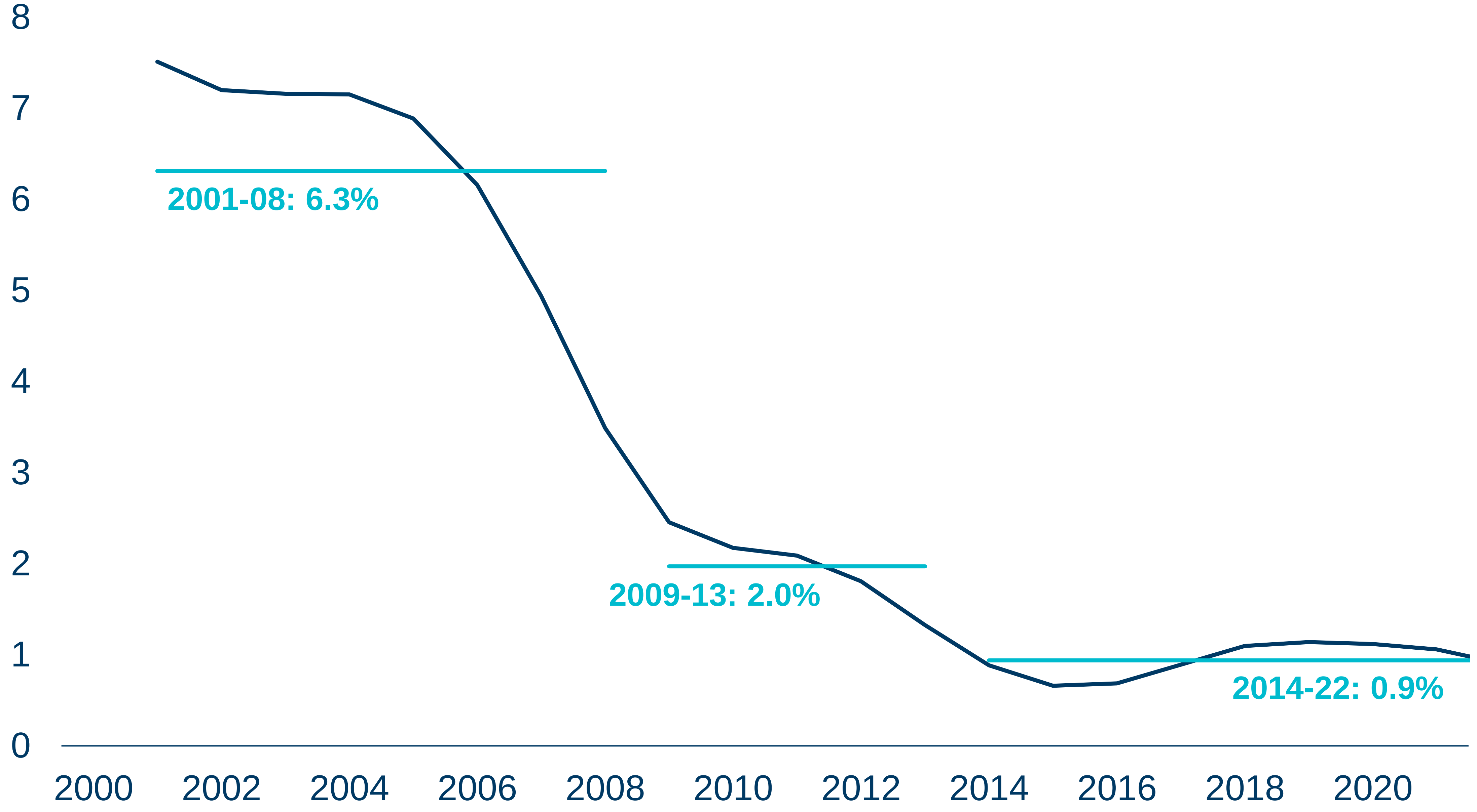
- Emigration is estimated to have picked up considerably since February 2022—to 817,000-922,000.
- Thus, an economy with previously abysmal potential growth is facing a significant shortage of (skilled) labor.
- Furthermore, once fiscal stimulus is withdrawn, the economy's fundamental weaknesses will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

- October 2023
- September 2023
- July 2023
- May 2023
- April 2023
- March 2023
- February 2023
- December 2022