

# KSE INSTITUTE RUSSIA CHARTBOOK

## MACROECONOMIC SITUATION SHOWS SIGNS OF IMPROVEMENT, SANCTIONS NEED TO BE TIGHTENED

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## Executive Summary

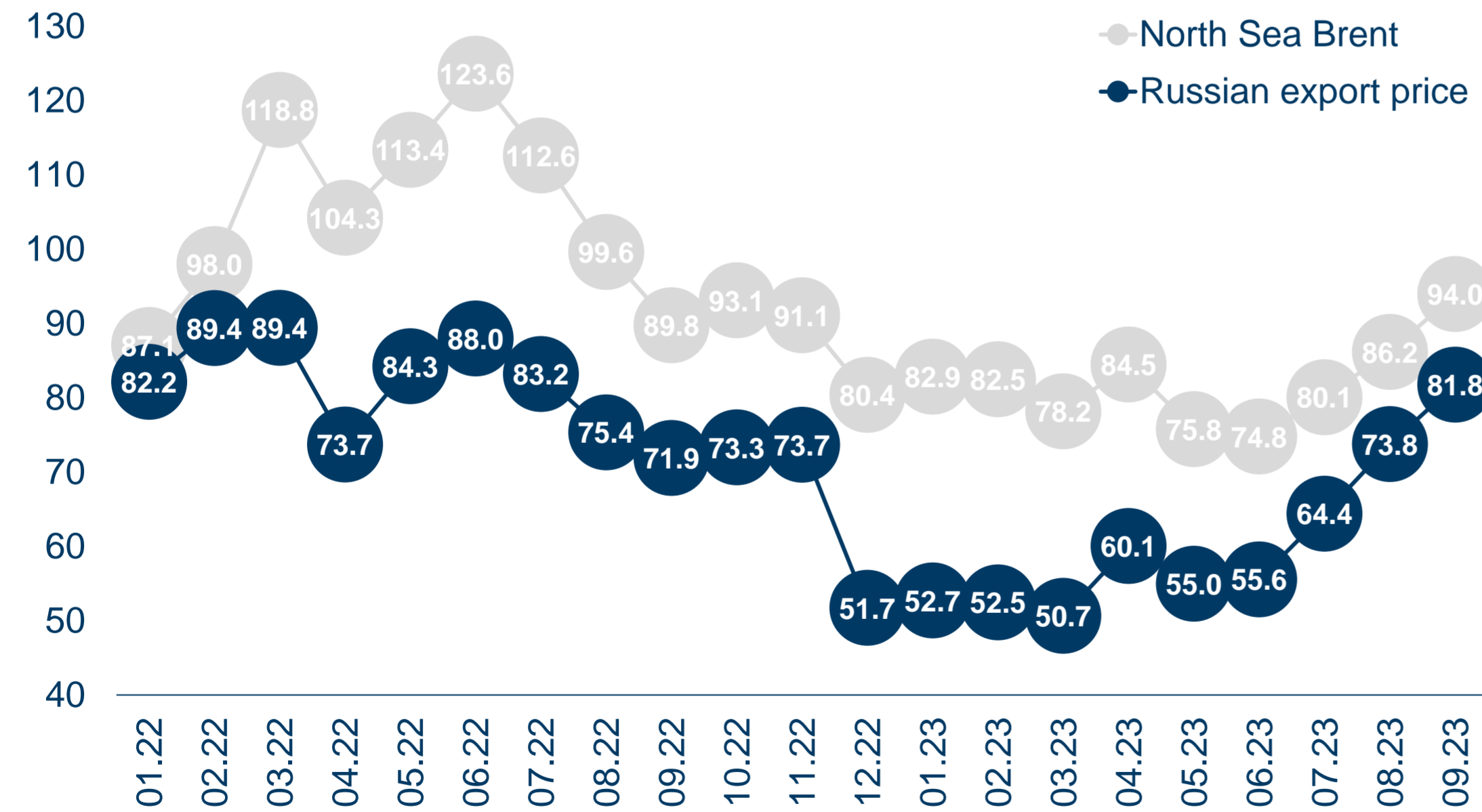
- 1. Effectiveness and credibility of energy sanctions on the line.** The key mechanism through which embargoes on Russian oil and the G7/EU price cap regime have weighed on export earnings and budget revenues—the discount on Russian supplies vs. global prices—is showing signs of trouble. For Urals grade crude oil, for instance, it declined from \$40/barrel in January to below \$14/barrel in September. Reduced volumes play a role but so does Russia’s growing ability to rely on a sanctions-proof fleet of vessels. These issues need to be addressed urgently to maintain pressure on Russia and ensure that the sanctions regime remains credible.
- 2. Rebounding export earnings will provide more policy space.** Russia’s exports reached \$18.8 billion in September, the highest level since July 2022. A persistent improvement of foreign currency inflows—as indicated by a higher current account surplus in Q3 (\$16.6 billion vs. \$9.6 billion in Q2)—will reduce pressure on the ruble and provide authorities with additional monetary and fiscal policy space to manage the economy in the fact of the war and sanctions. The currency’s significant depreciation since last fall—by close to 50% vs. both U.S. dollar and euro—has been one of the clearest signs of the deteriorating external environment.
- 3. Budget will improve further and allow for higher war spending.** In recent months, revenues from energy extraction taxes and export duties bounced back strongly, reaching the highest level since May 2022, as export earnings increased, and the weaker ruble drove up their local currency value. As a result, the federal deficit fell to 1.7 trillion rubles in January-September, broadly in line with the 2023 budget’s original target. This is a marked improvement vs. earlier in the year, driven also by rising non-oil and gas revenues and expenditure restraint, and will allow Russia to sharply increase military spending (+68% vs. 2023 according to MinFin).
- 4. Russia’s economy set to grow at a robust pace in 2023-24.** A variety of indicators shows a consistent picture of the economy recovering from the initial shock of war and sanctions. Most forecasters (e.g., CBR, IMF, market consensus, World Bank) project real GDP to grow by 1.6-2.2% this year and 1.0-1.5% next. One key factor is the future path of monetary policy: Should persistent ruble depreciation force the central bank to further hike interest rates and/or tighten capital controls, economic activity would certainly be impacted. It is critical to strengthen energy sanctions and prevent Russia from generating additional foreign currency inflows.

**External environment: signs of reduced effectiveness of energy sanctions are emerging as price discounts narrow, exports and budget revenues rebound.**

## Shrinking discounts threaten key mechanism of energy sanctions.

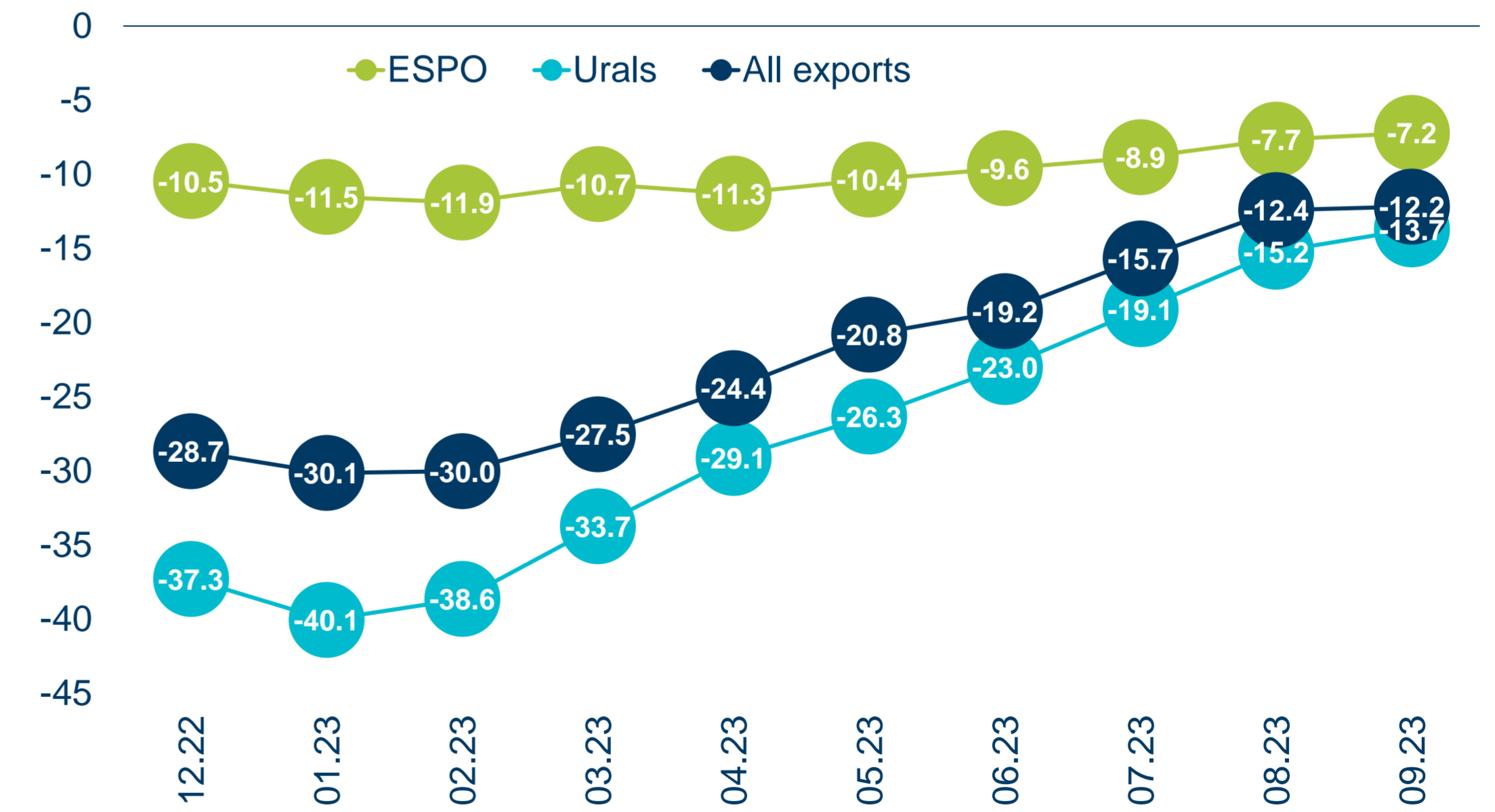
- Energy sanctions, in particular the EU embargo, weighed on Russian exports via sharply wider discounts.
- However, the Urals-Brent spread has narrowed from \$40/barrel in January to below \$14/barrel in September.
- At current export volumes, a \$10/barrel change in the crude oil price means ~\$18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



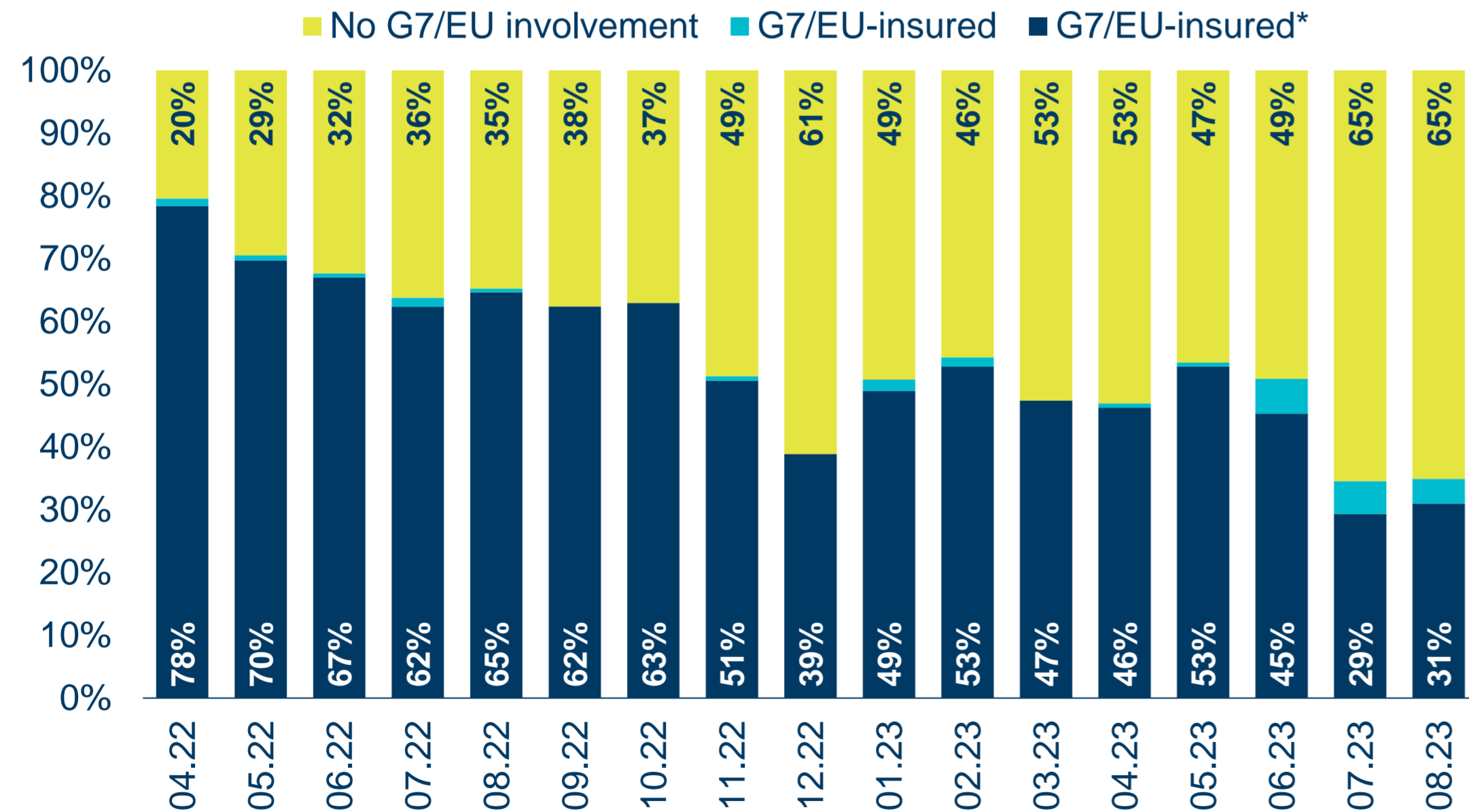
Source: International Energy Agency, KSE Institute

## Declining leverage of the price cap regime is a factor.

- A key challenge for the price cap coalition going forward is that the regime’s leverage appears to be declining quickly.
- Russia’s reliance on G7/EU services, especially P&I insurance, for seaborne crude oil exports fell to 35% in August.
- Important regional differences are emerging, with Baltic and Black sea exports more reliant than Pacific Ocean ones.

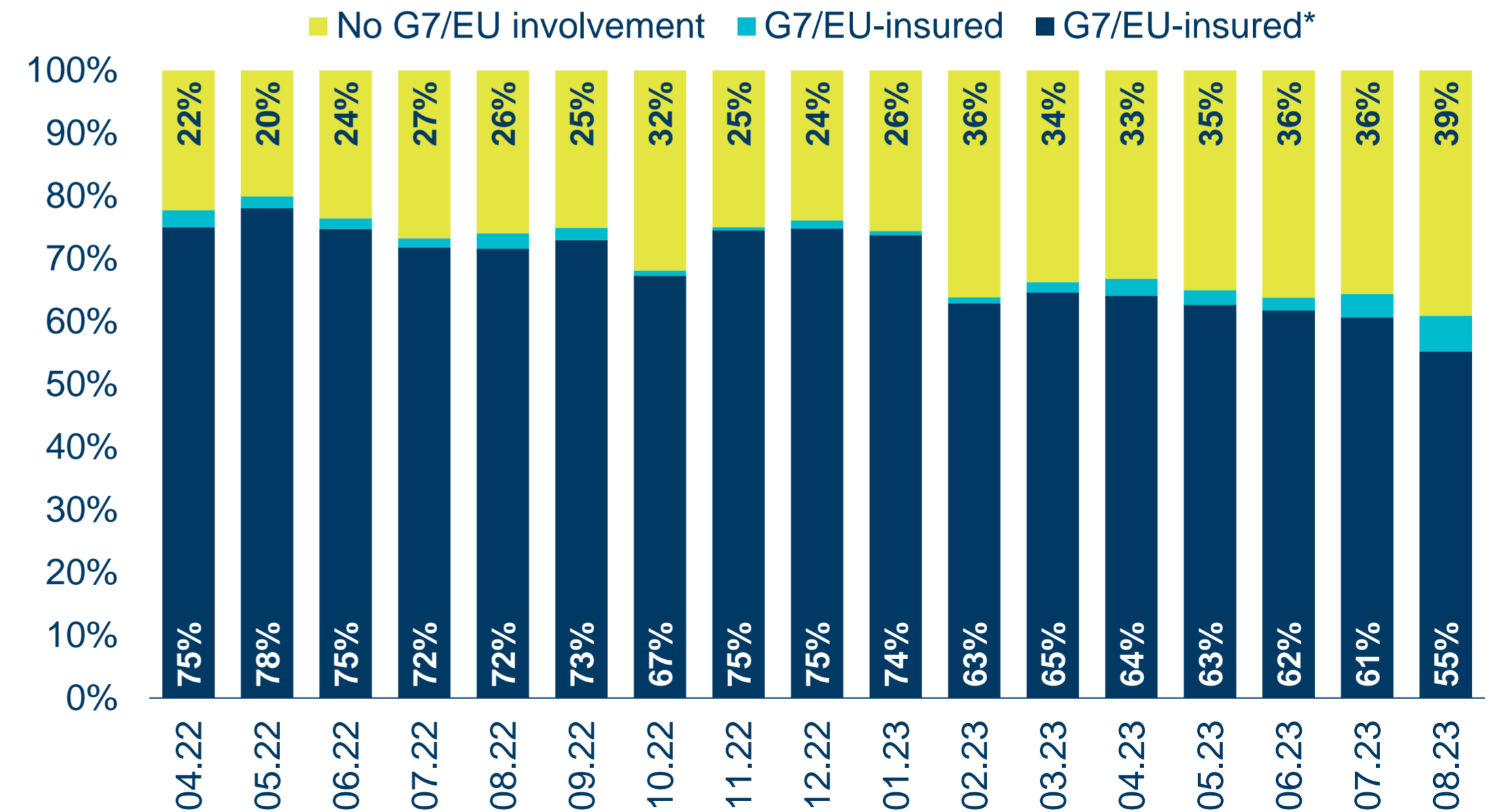
[Download KSE Institute’s latest “Russian Oil Tracker”](#)

Composition of seaborne crude oil exports, in %



Source: Equasis, Kpler, P&I clubs, KSE Institute \*also includes Norway

Composition of seaborne oil products exports, in %

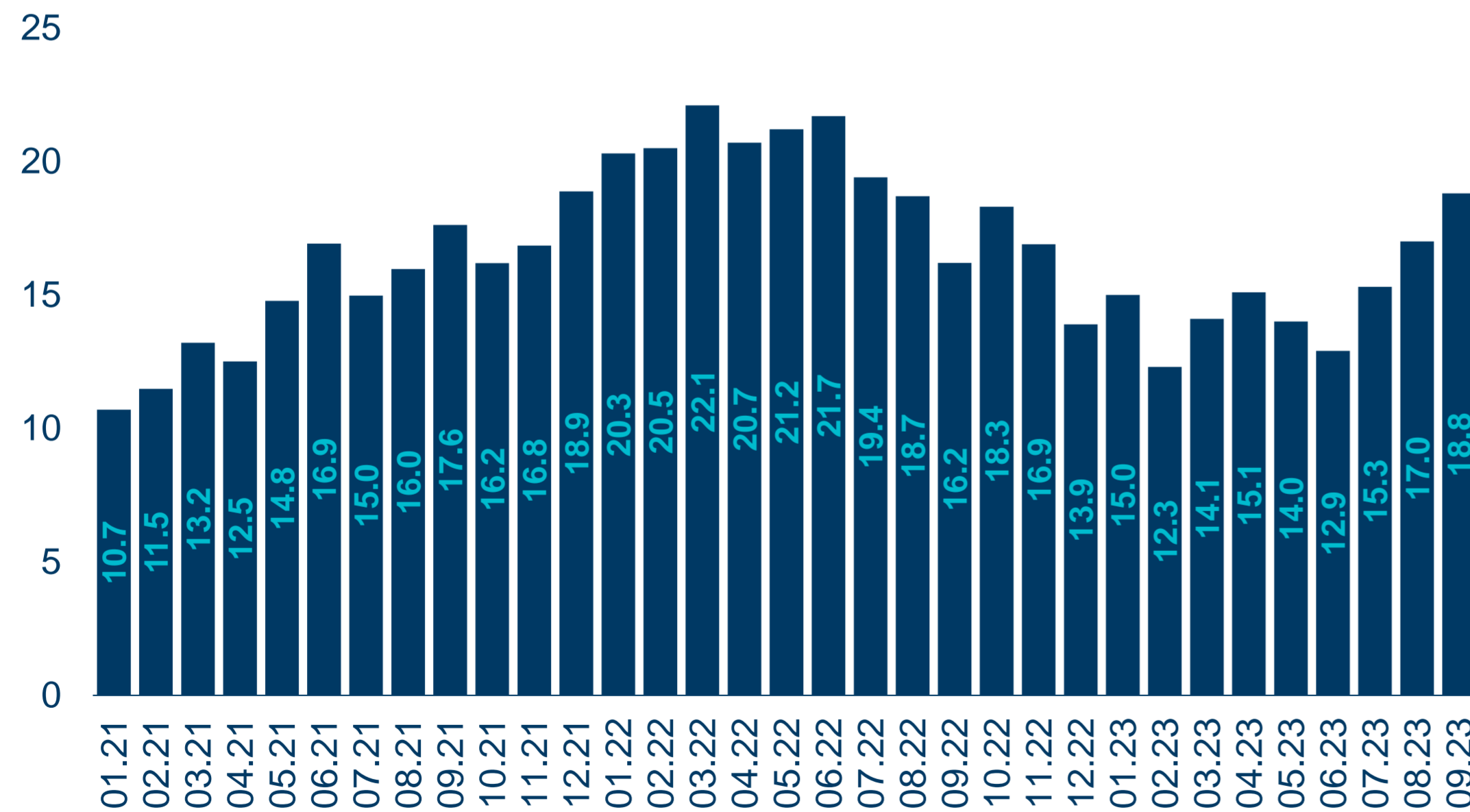


Source: Equasis, Kpler, P&I clubs, KSE Institute \*also includes Norway

## Higher prices support exports, weaker ruble drives up budget revenues.

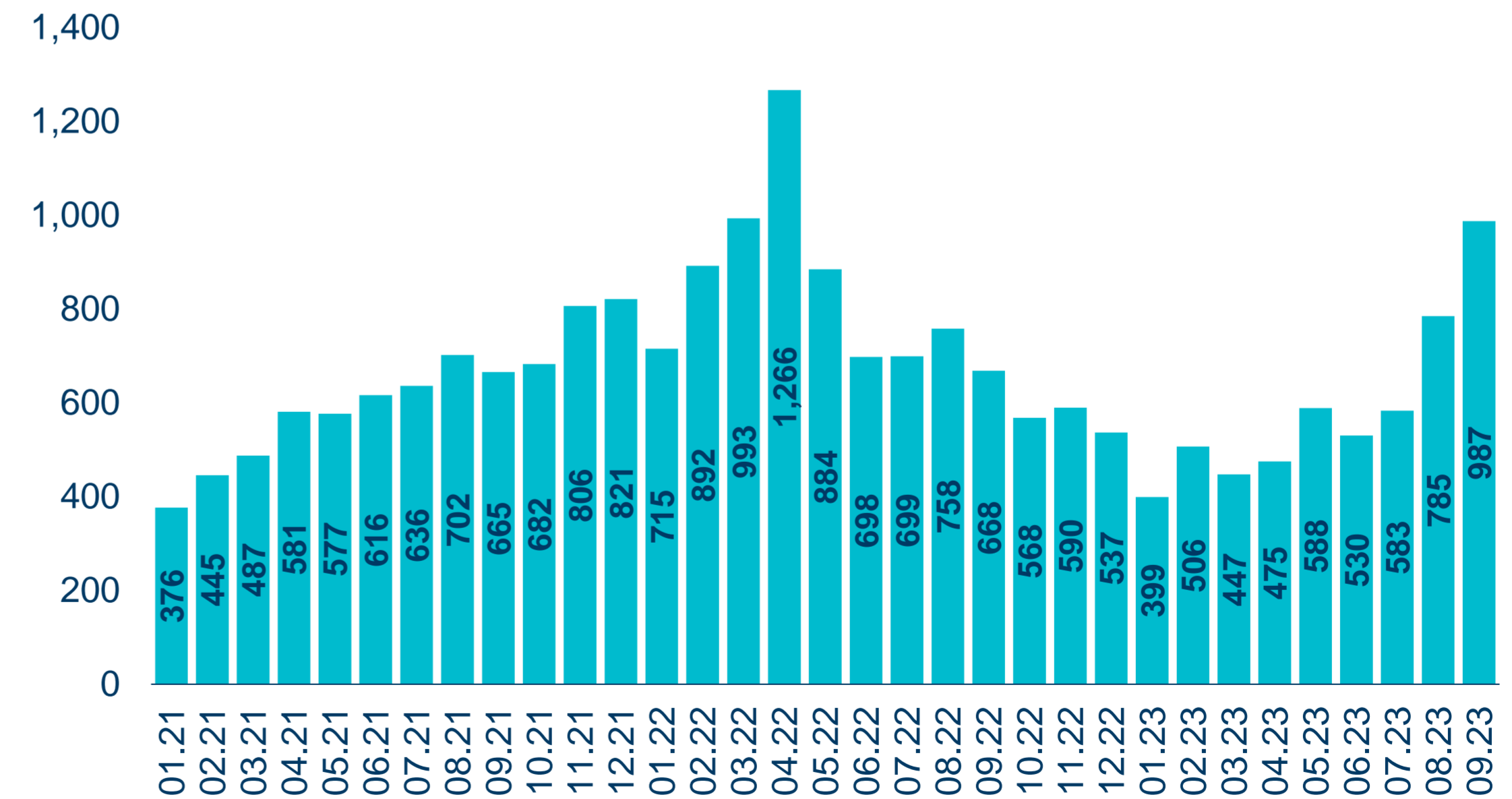
- In September, Russian oil export earnings reached \$18.8 billion, the highest reading since July of last year.
- At the same time, the weaker ruble is supporting budget revenues from oil extraction taxes and export duties.
- Ukraine’s allies urgently need to consider lower price caps, better enforcement to step-up pressure on Russia.

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\*

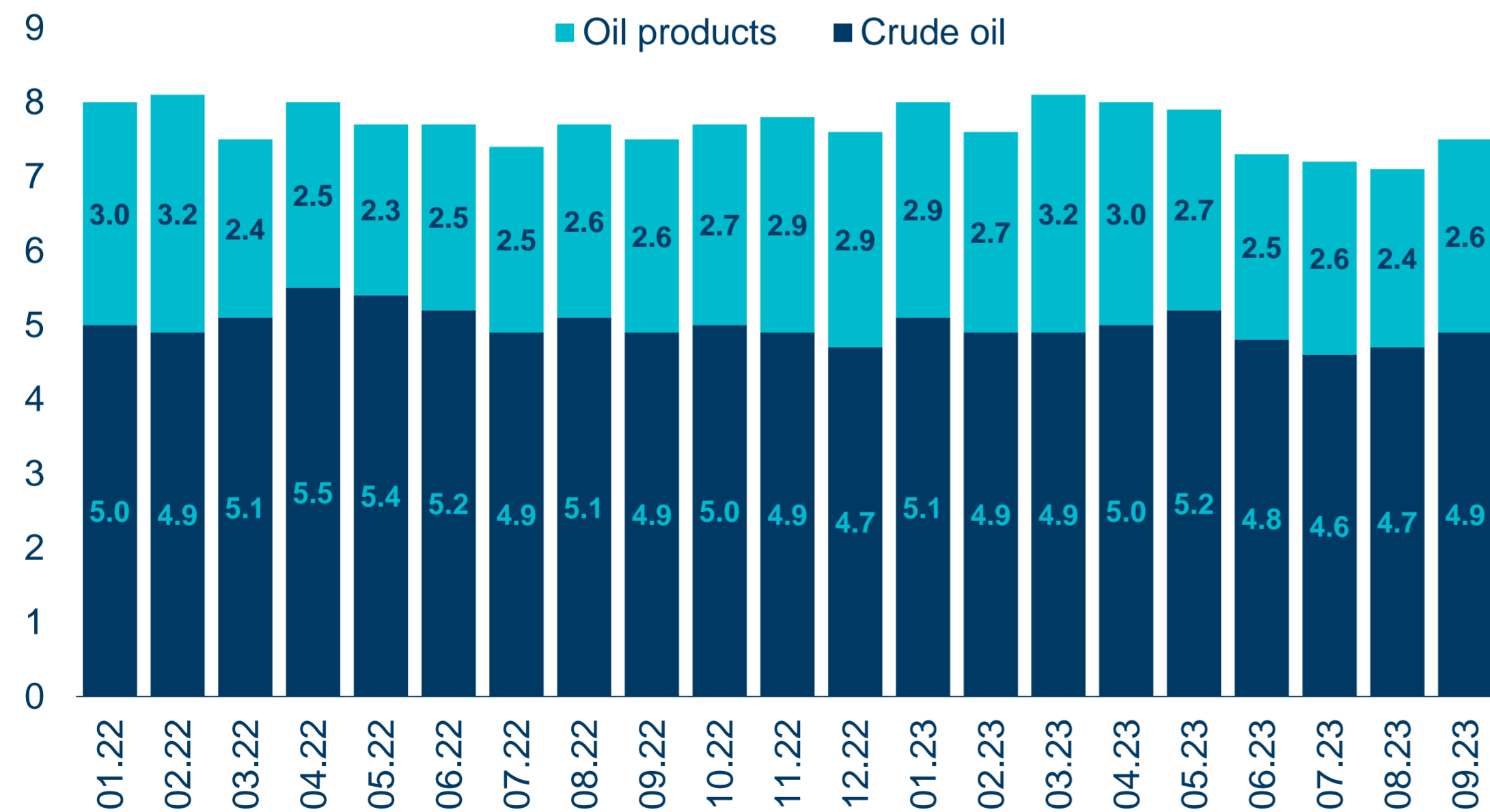


Source: Ministry of Finance, KSE Institute \*includes extraction tax and export duty

## Russian oil export volumes rebound in September.

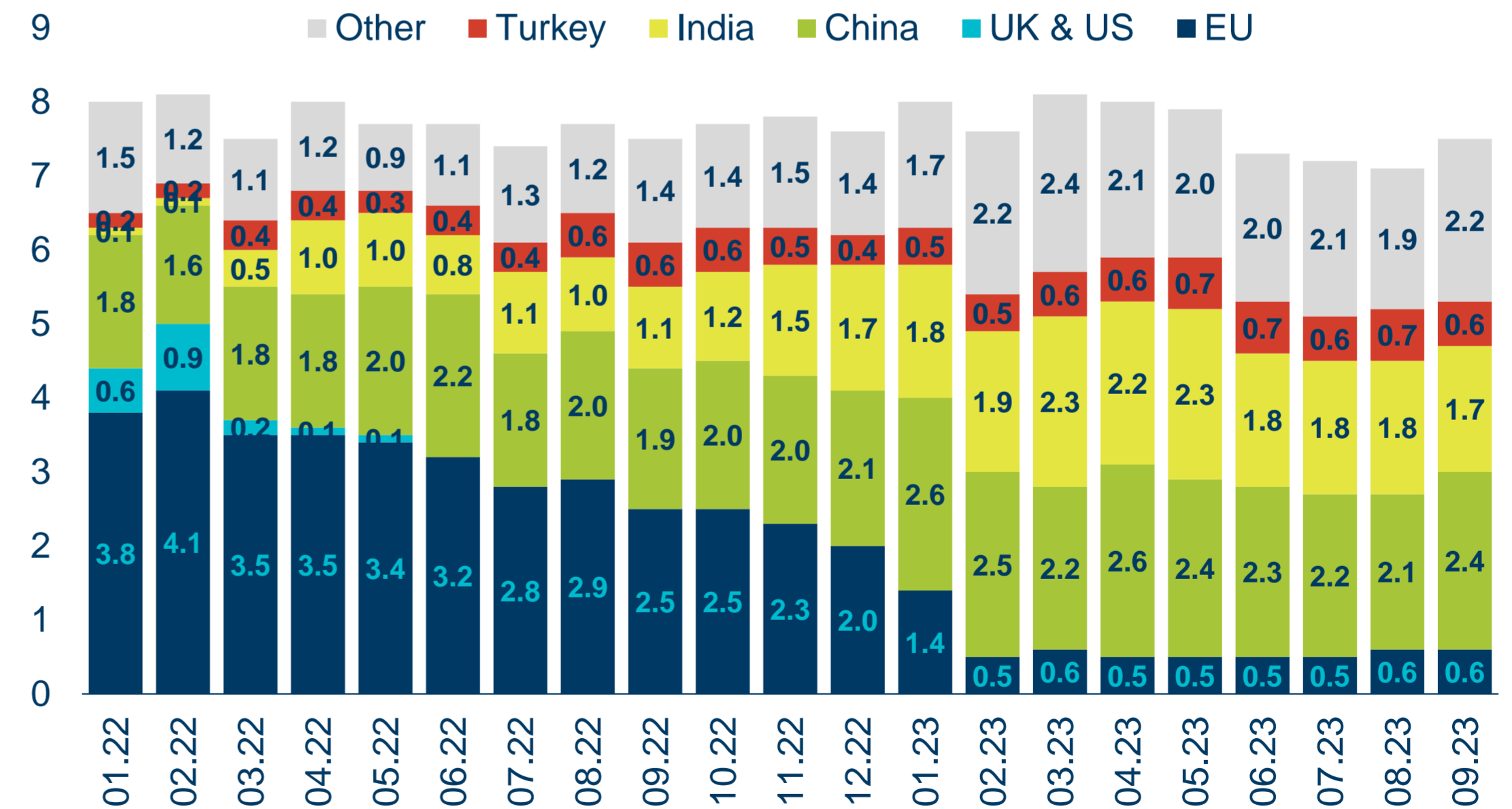
- Russian oil exports bounced back in September—by 200kb/day for crude oil and 200 kb/day for oil products.
- Shipments to China increased by 300kp/day, while those to India and Turkey declined by 100kb/day each.
- The three countries together accounted for roughly two-thirds of Russia’s total exports in January-September.

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

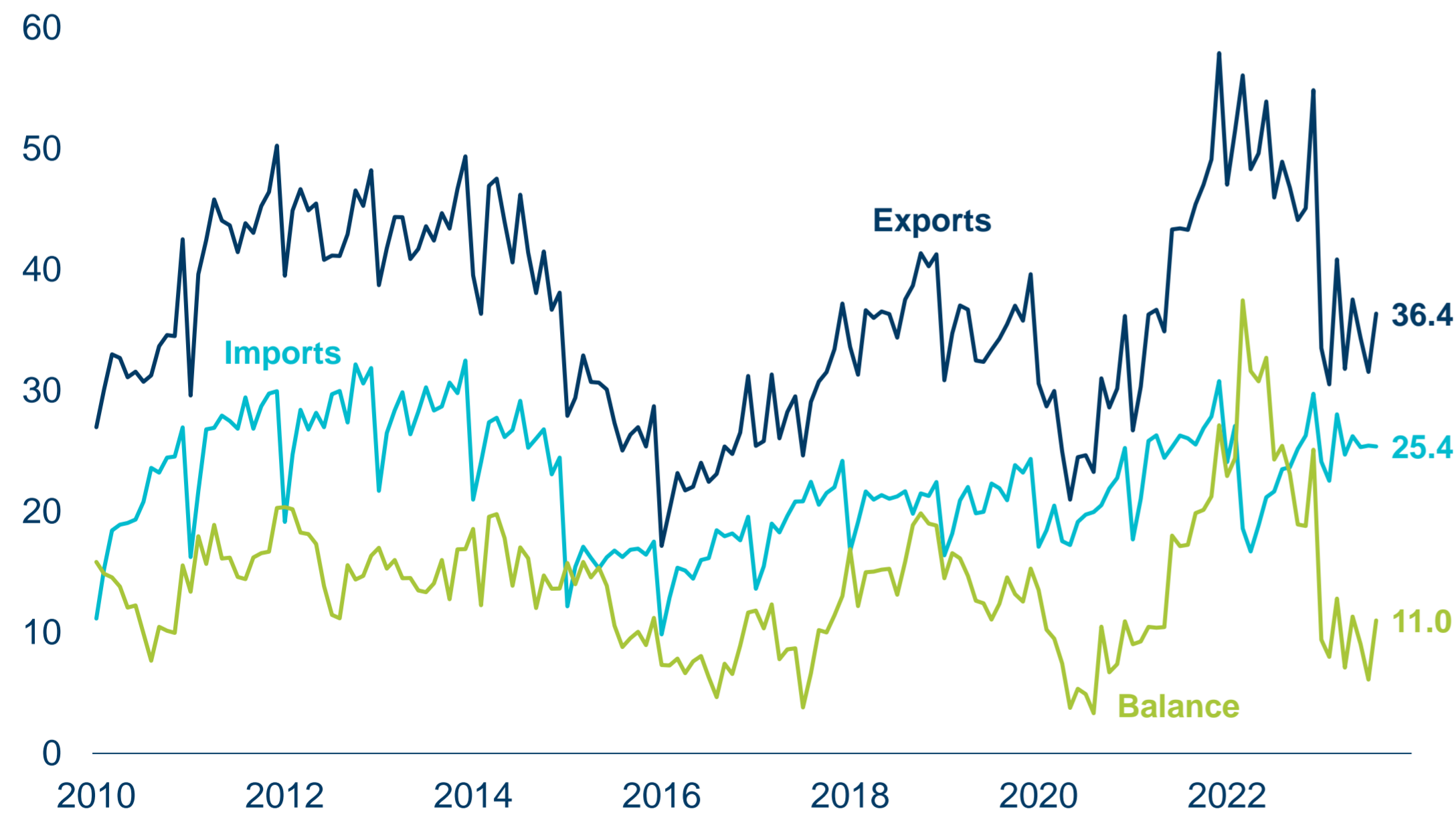


Source: International Energy Agency, KSE Institute

## Overall external environment remains extremely challenging.

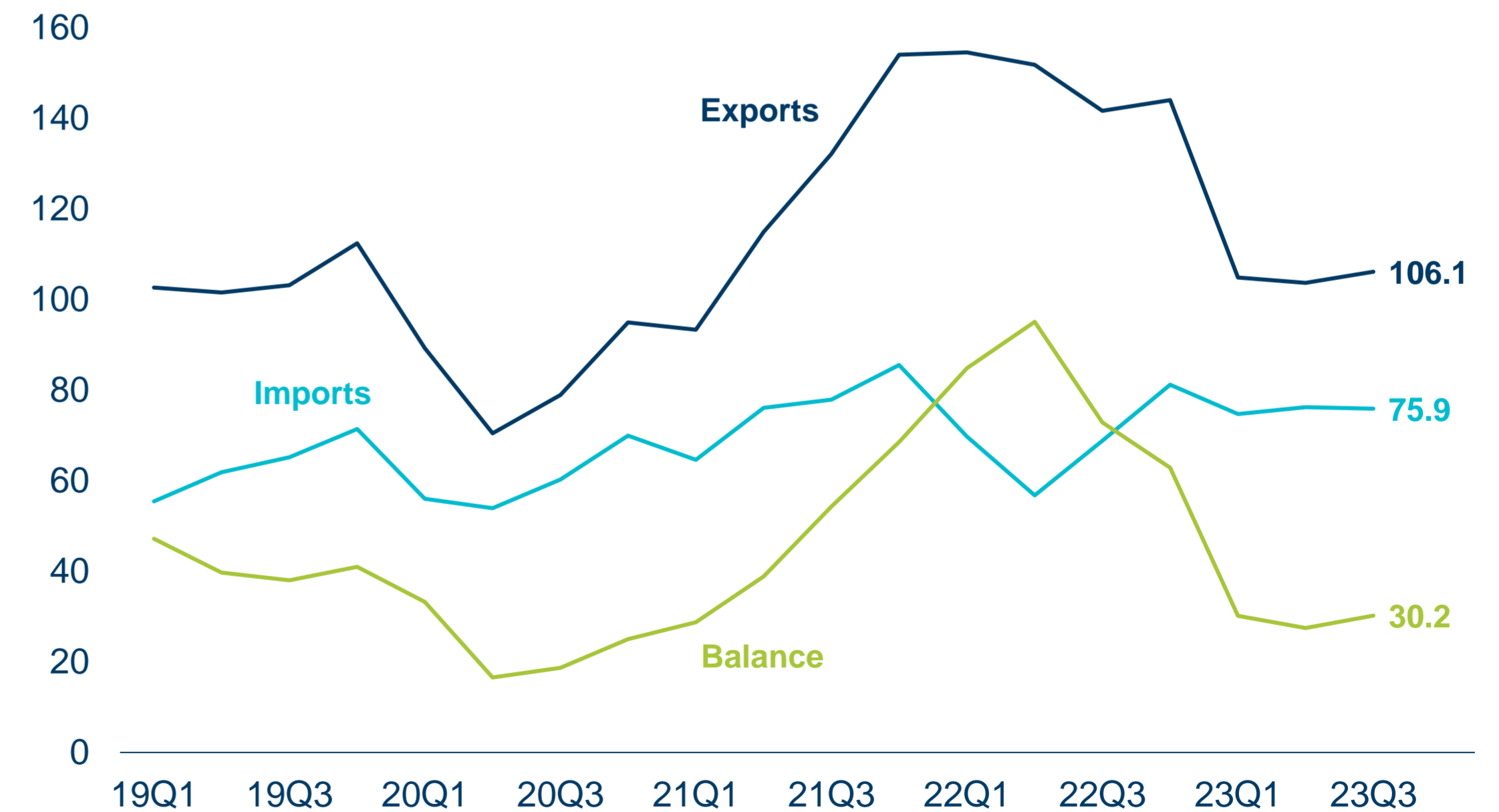
- Total goods exports remain weak despite higher earnings from oil; they are down one-third vs. early/mid-2022.
- With imports essentially back to pre-full scale-invasion levels, this has resulted in a sharply lower trade surplus.
- The surplus averaged around \$9.8 billion per month in Q1-Q3 2023—a drop of 70% compared to Q2 2022.

Monthly trade statistics, in U.S. dollar billion



Source: Bank of Russia, KSE Institute

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



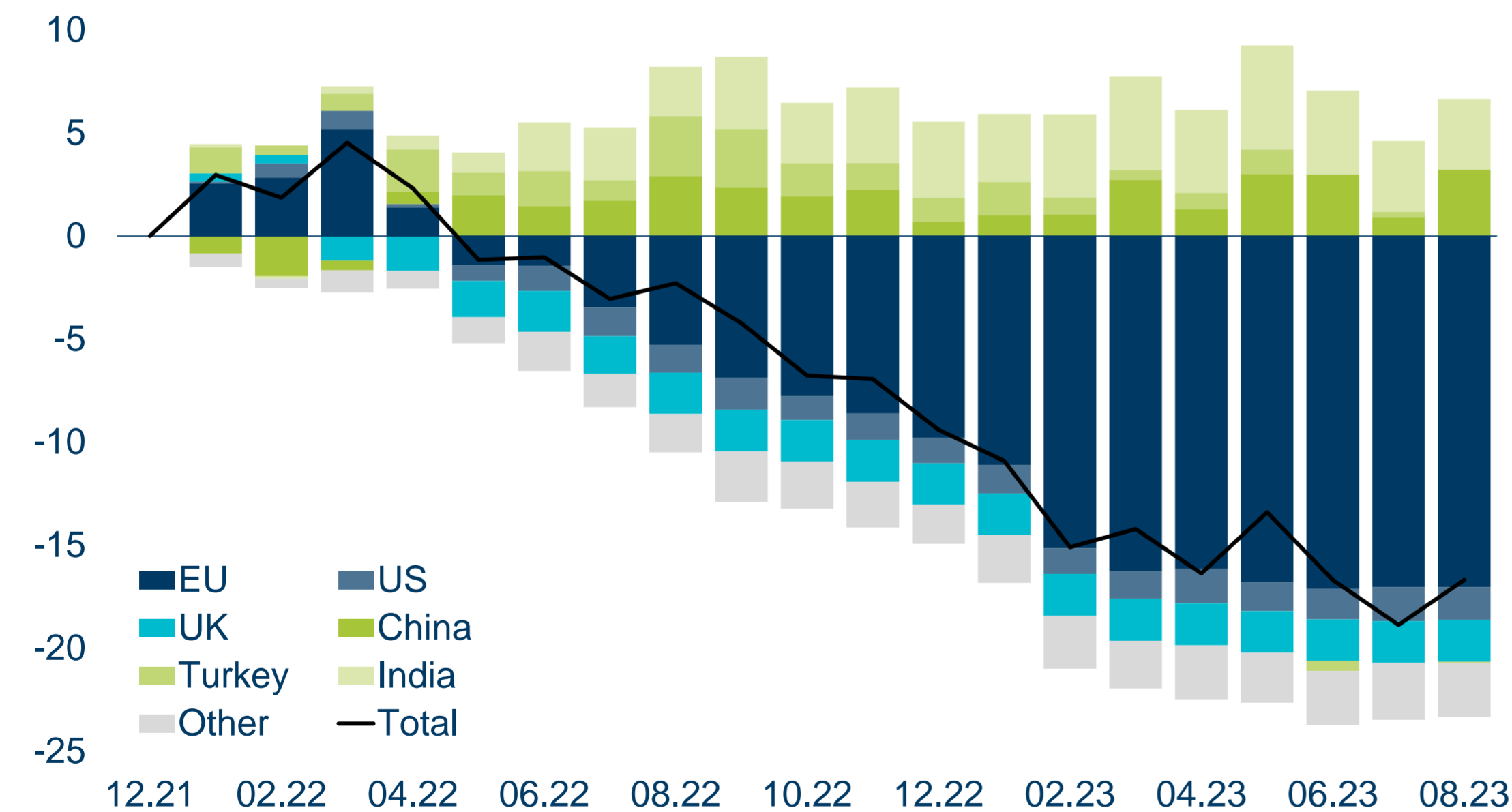
Source: Bank of Russia, KSE Institute



## Russia has not been able to replace traditional trading partners.

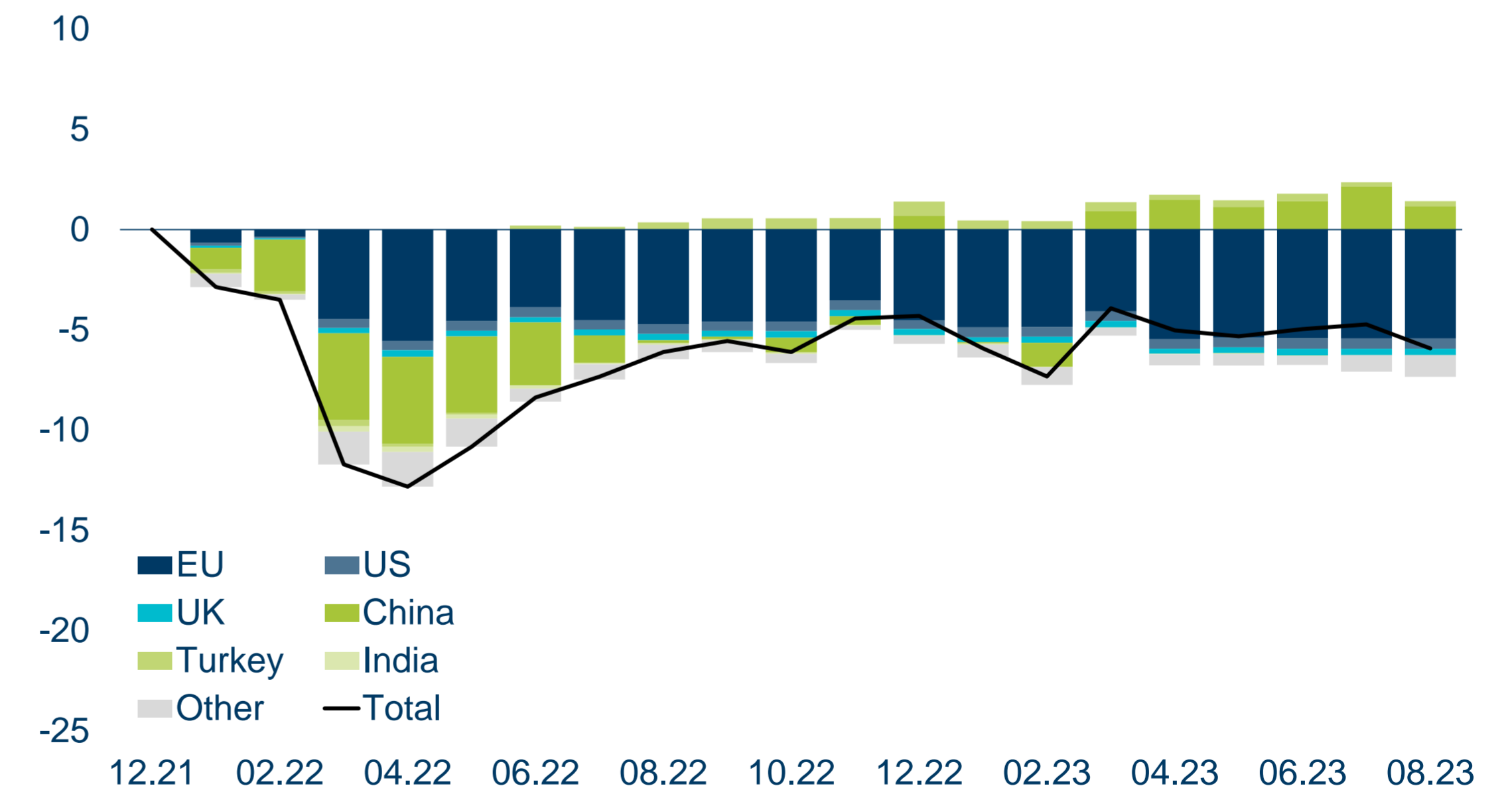
- Exports to the EU are down 68% in 2023 year-to-date vs. the 2021 average—and imports from the EU by 59%.
- Lower trade with the EU, UK, and US costs Russia more than \$8 billion (exports-imports) per month vs. 2021.
- Countries such as China, India, and Turkey cannot make up for the deterioration of previous trade relationships.

Change in goods exports vs. December 2021, in U.S. dollar billion



Source: national authorities, KSE Institute

Change in goods imports vs. December 2021, in U.S. dollar billion

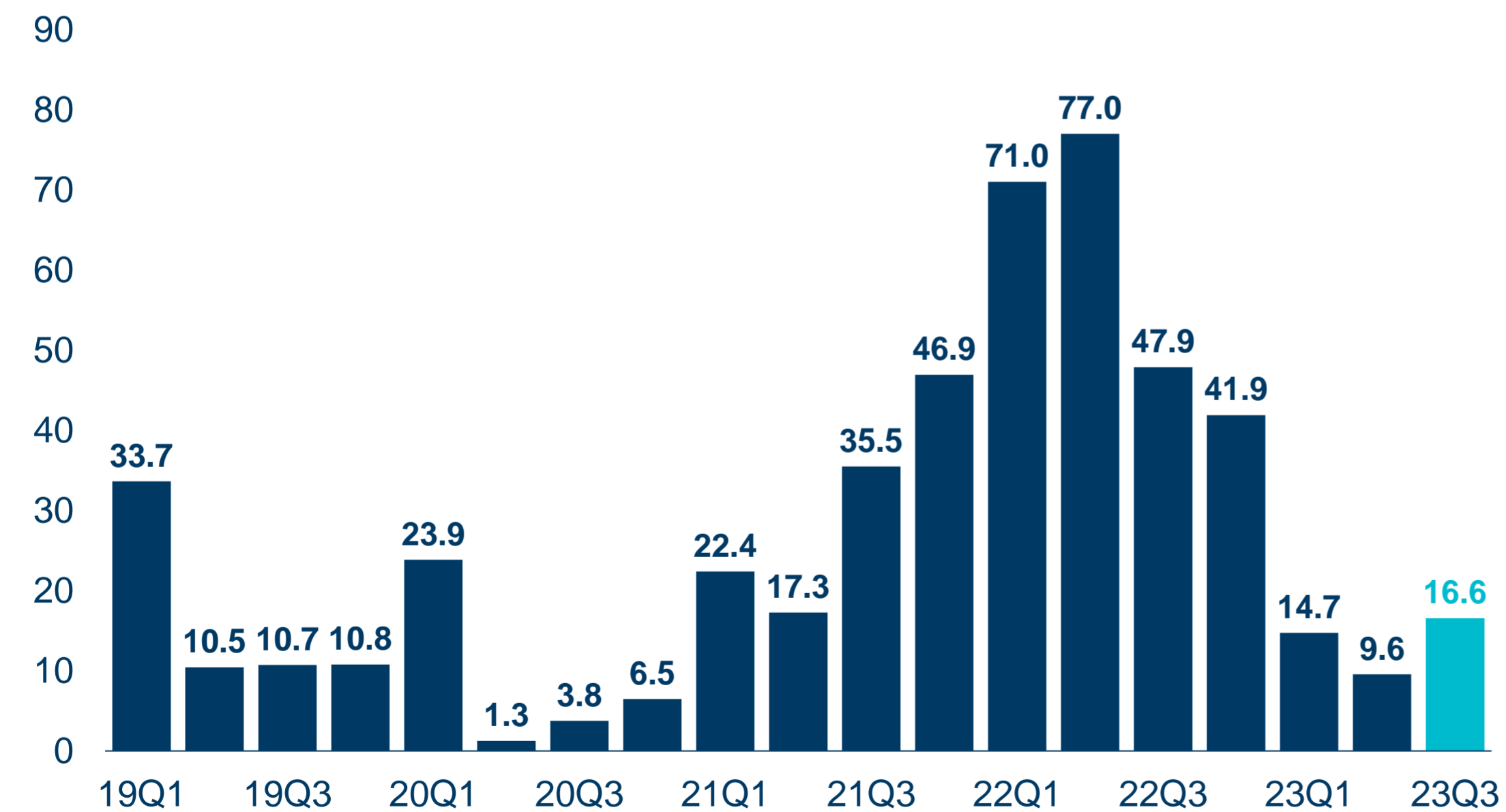


Source: national authorities, KSE Institute

## Inflows of foreign currency have dropped sharply.

- 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

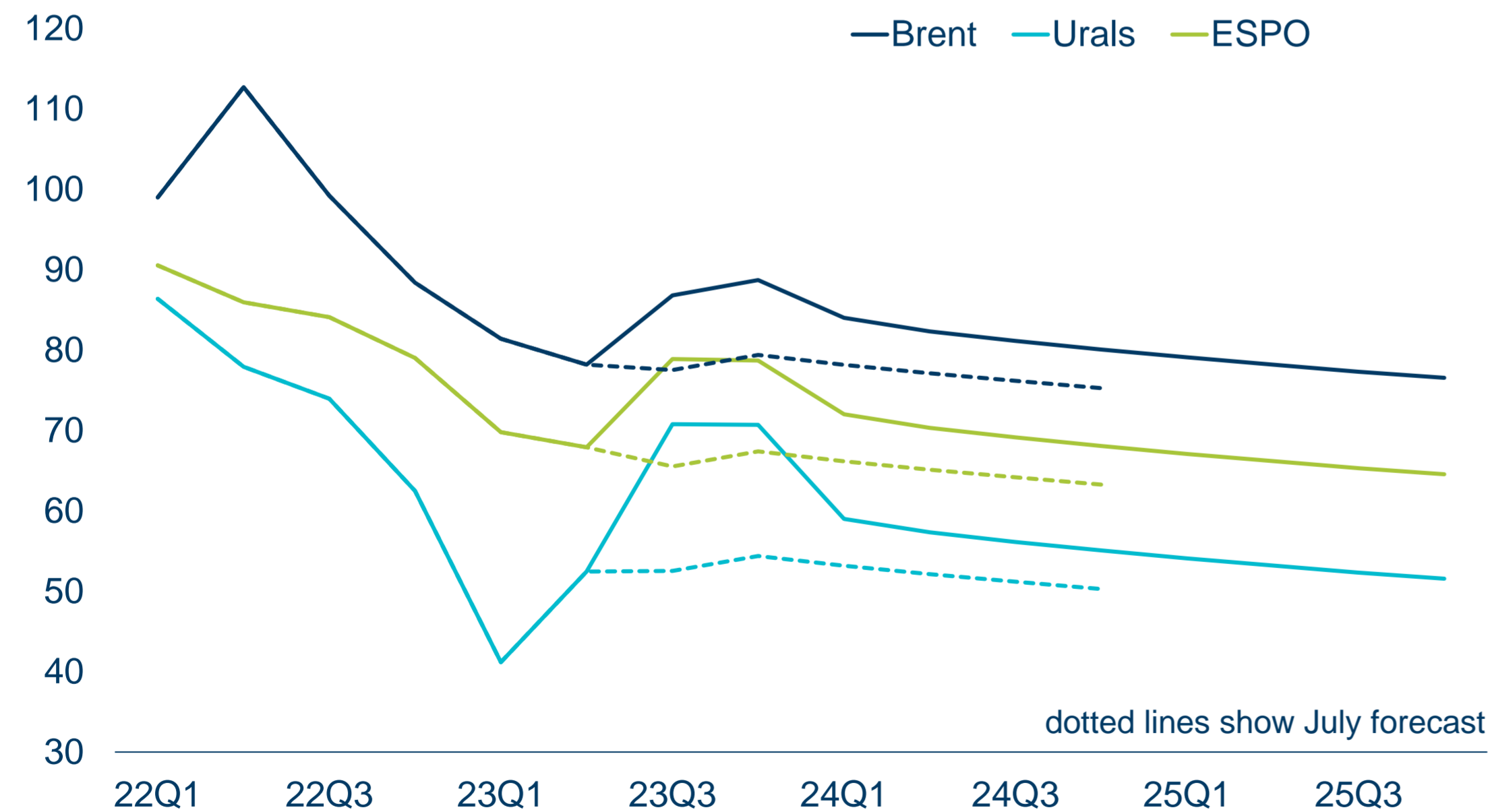
Time period	C/A		Goods		Services			Income & transfers			
	Bal.	Bal.	Exp.	Imp	Bal.	Cred.	Deb.	Bal.	Cred.	Deb.	
Jul. 2023	1.3	6.1	31.5	25.5	-3.3	3.3	6.6	-1.5	3.1	4.6	
Aug. 2023	5.7	11.0	36.4	25.4	-3.7	3.3	6.9	-1.6	2.9	4.5	
Sep. 2023	9.6	13.1	38.2	25.1	-2.1	3.5	5.6	-1.4	3.4	4.8	
Q1 2023	14.7	30.2	104.9	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	16.6	30.2	106.1	75.9	-9.0	10.1	19.1	-4.5	9.4	13.9	
Jan.-Sep. 2023	40.9	87.8	314.7	226.8	-24.8	30.3	55.1	-22.1	32.8	54.8	
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	77.0	95.7	151.8	56.7	-3.6	11.1	14.7	-14.4	12.0	26.4
	Q3 2022	47.9	72.8	141.7	68.8	-7.0	11.4	18.3	-18.0	12.7	30.7
	Jan-Sep. '22	196.0	252.7	448.0	195.3	-14.1	36.6	50.4	-42.7	37.3	79.9

Source: Bank of Russia, KSE Institute

## Estimate of Russian export prices and earnings revised upward.

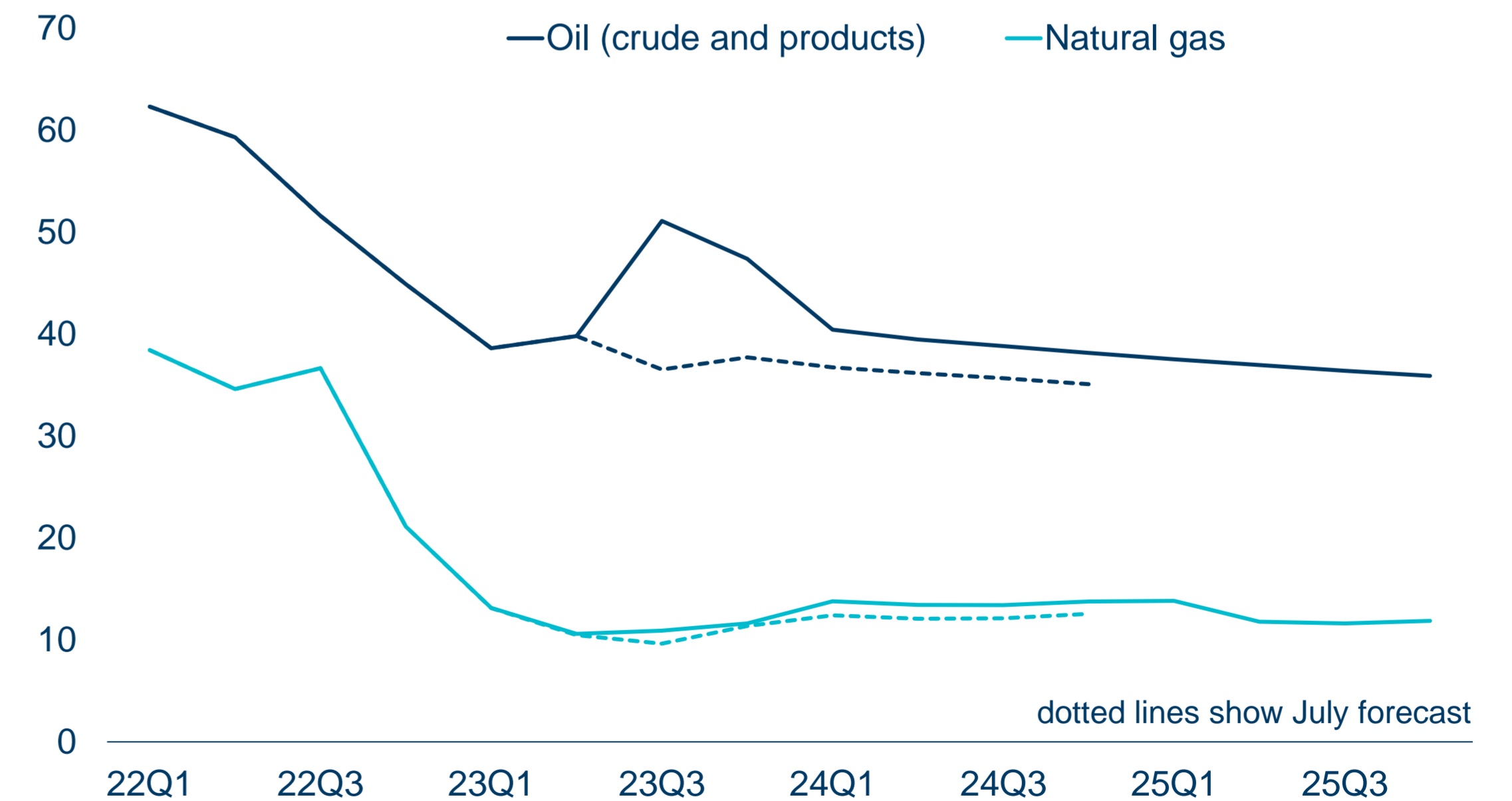
- Higher global prices and smaller discounts on Russian exports have led to significant upward revisions of oil prices.
- Importantly, our projection still assumes a moderate widening of discounts due to improved price cap enforcement.
- Nonetheless, export earnings from oil are forecast to come in \$24 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

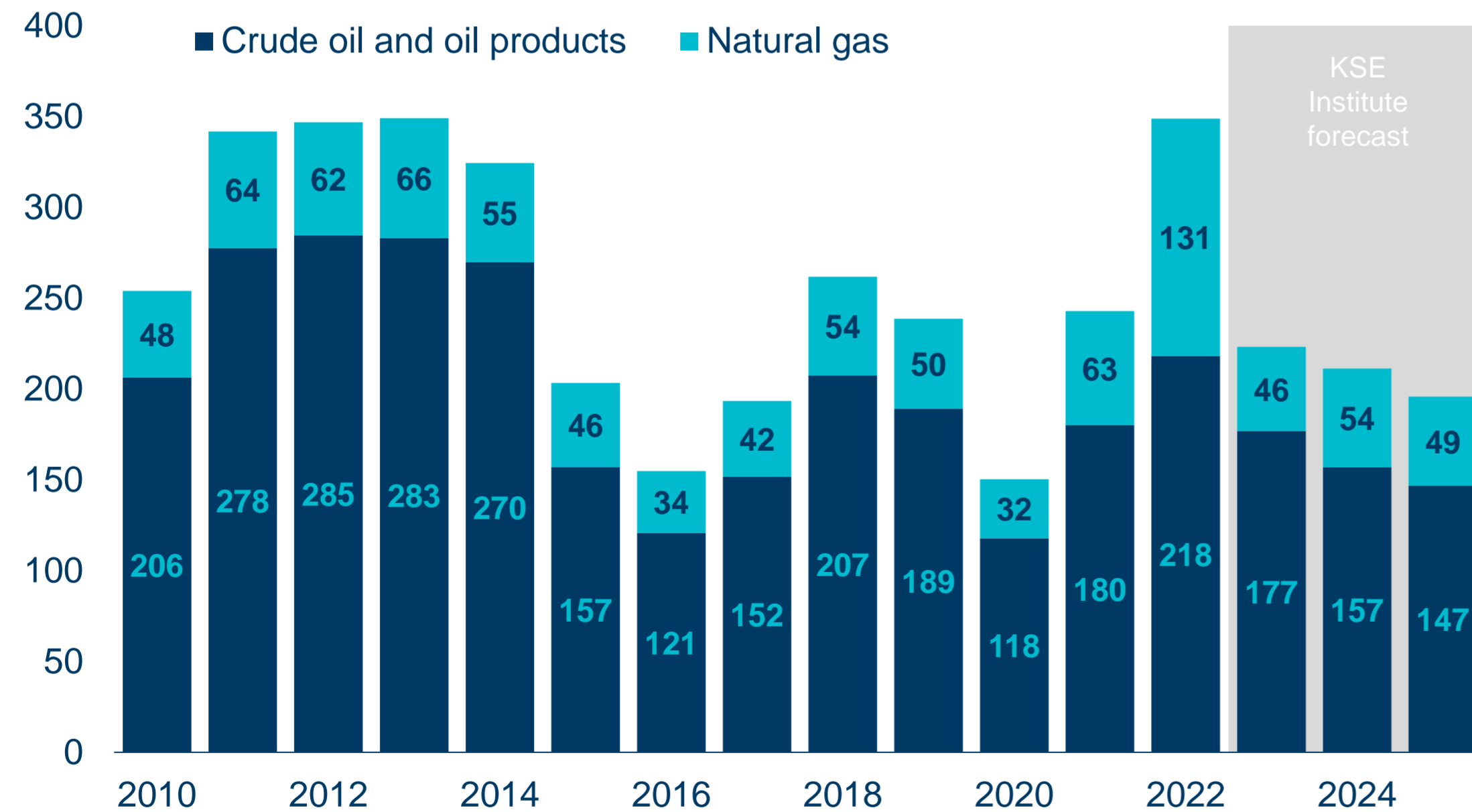


Source: KSE Institute

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

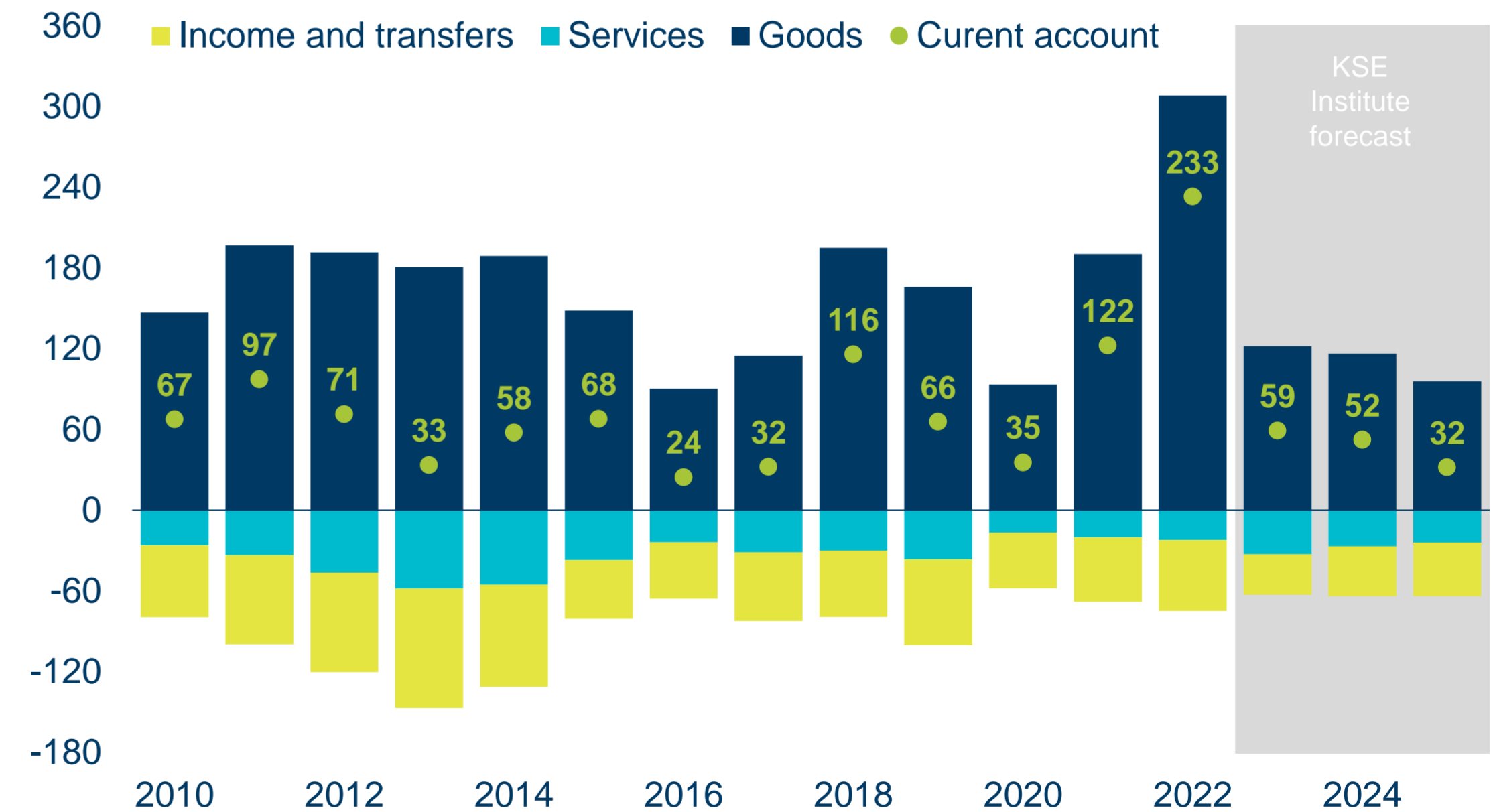
- In our updated forecast, oil and gas exports will reach \$223 billion in 2023, \$211 billion in 2024, and \$196 billion in 2025.
- Considering the Q3 2023 outturn of current account components, we project an overall surplus of \$59 billion for this year.
- Due to the high sensitivity of Russia’s external 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

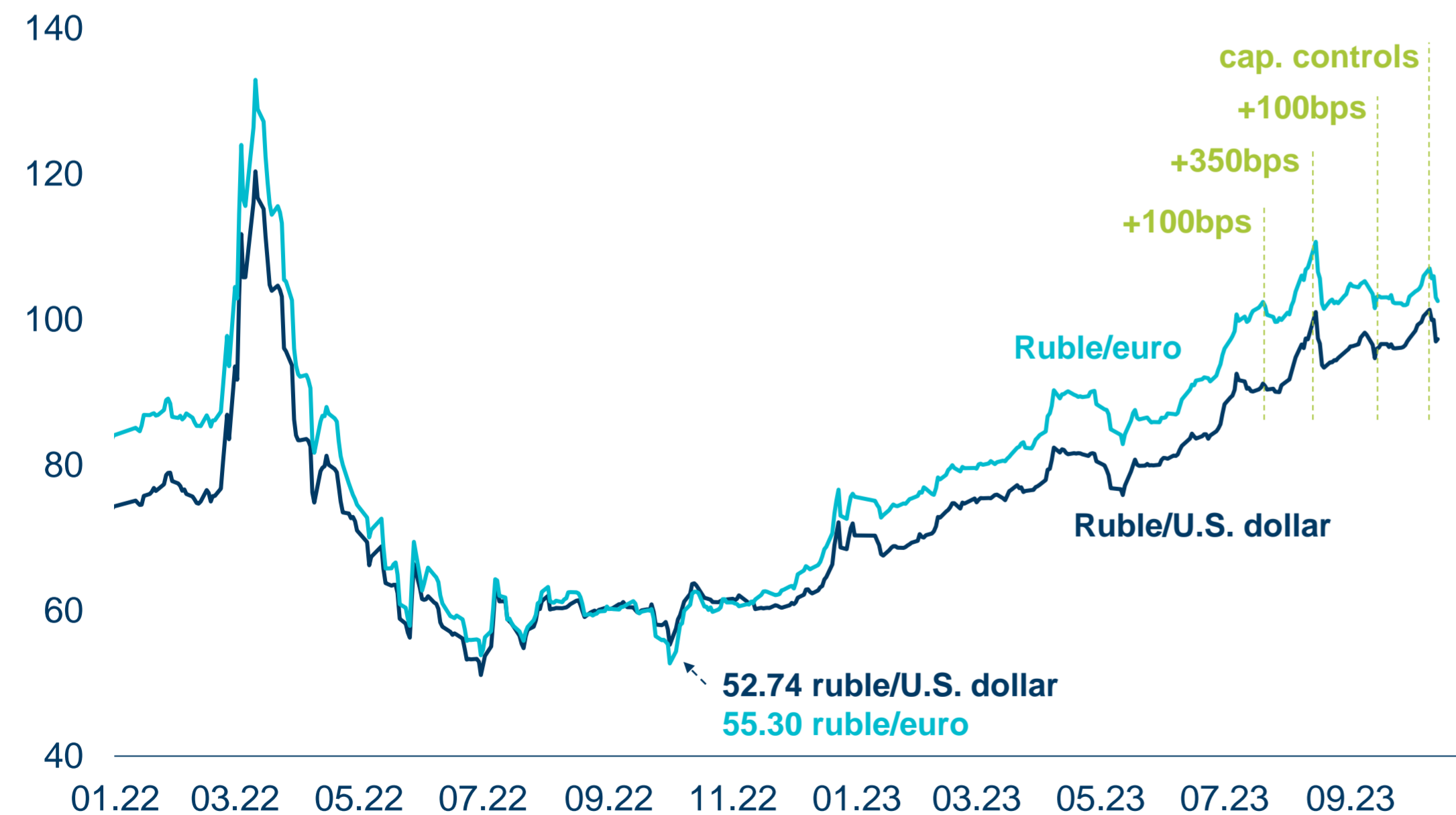


Source: Bank of Russia, KSE Institute

## Fundamental external dynamics continue to weigh on the ruble.

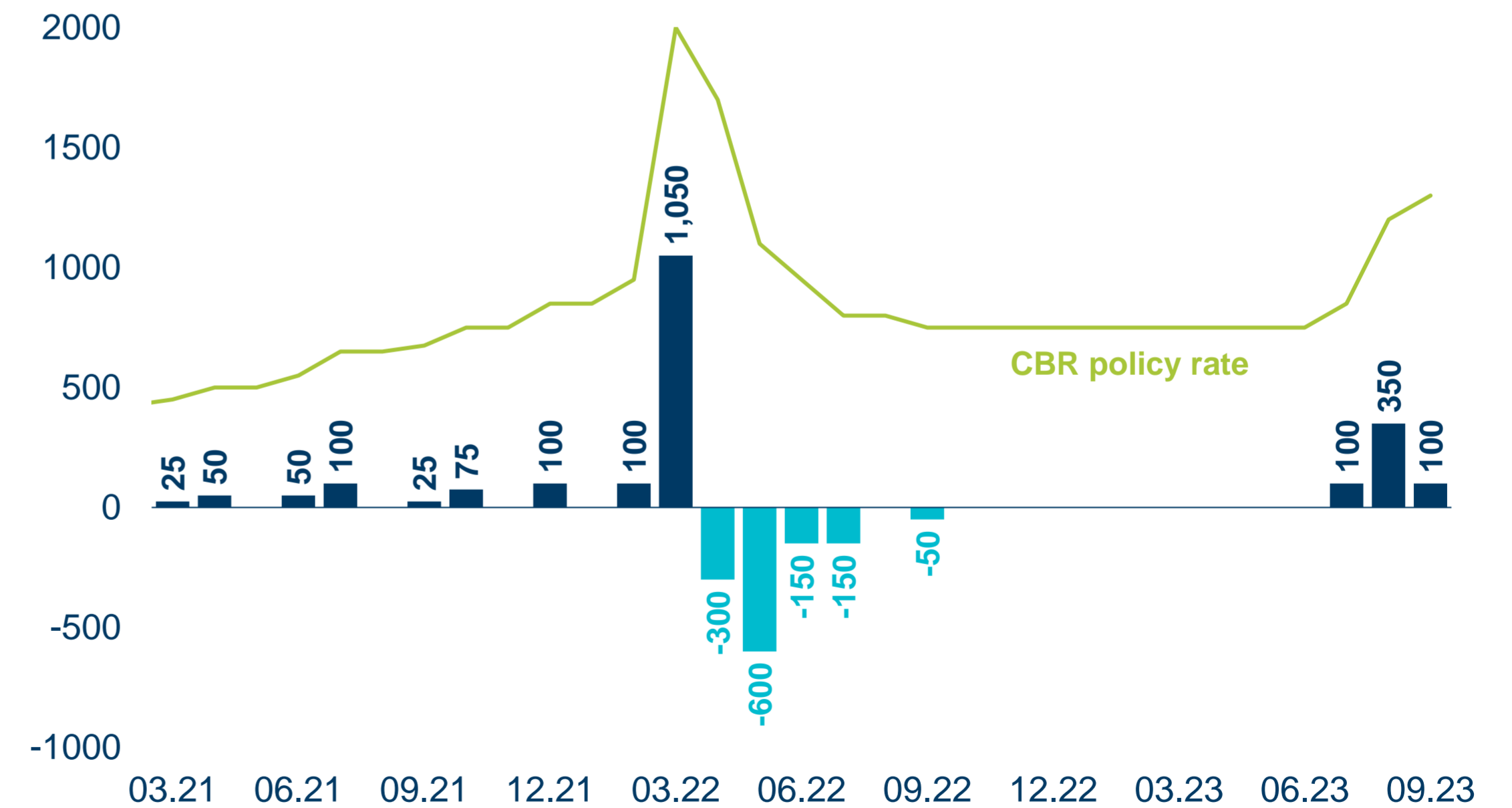
- Since October 2022, the ruble has lost close to 50% of its value against both the U.S. dollar and the euro.
- The CBR's recent rate hikes (550bps in July-September) did not fundamentally change the ruble's path.
- The weakening currency has also triggered a decision by authorities to return to stricter capital controls.

Ruble-U.S. dollar exchange rate



Source: Bank of Russia, KSE Institute

CBR policy rate and MPC decisions, in bps

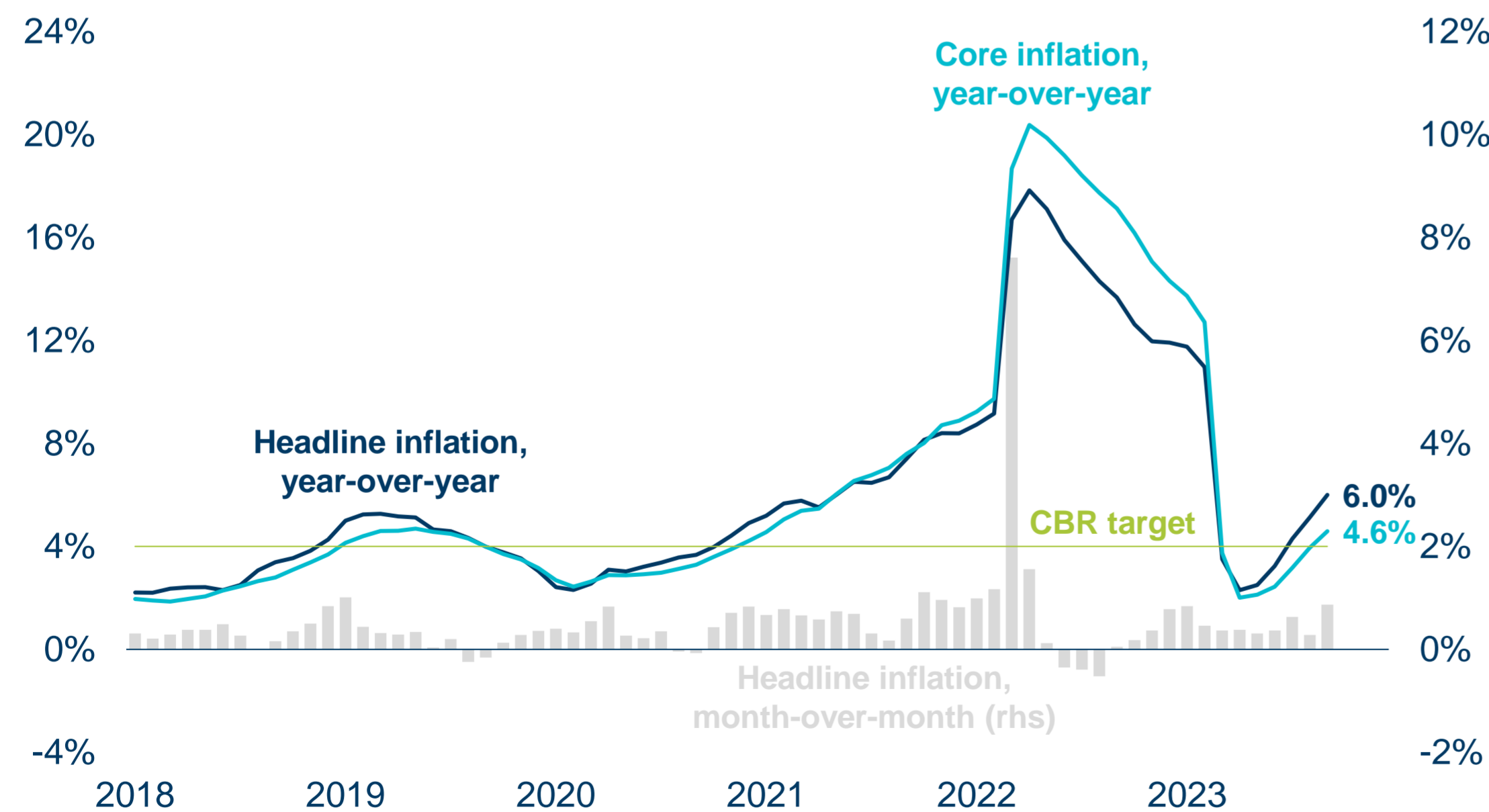


Source: Bank of Russia, KSE Institute

## Inflation begins to pick back up as base effects fade.

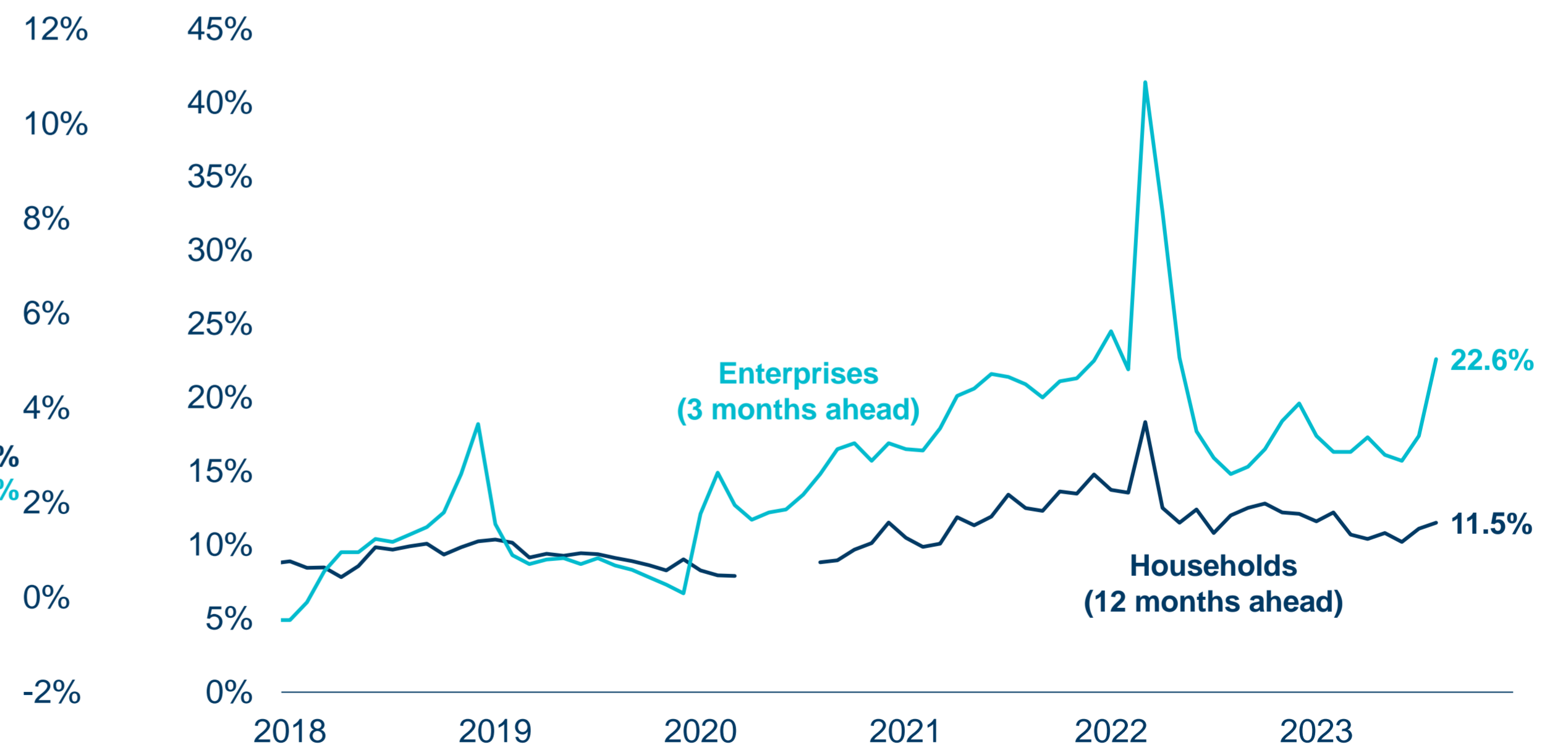
- Following a base effects-driven drop in spring/summer, both headline and core inflation are rising again.
- Based on current price dynamics, headline inflation will likely rise to around 7% by the end of the year.
- Inflation expectations by enterprises point to increasing concerns, with households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

Inflation, in %



Source: Bank of Russia, KSE Institute

Inflation expectations, in %



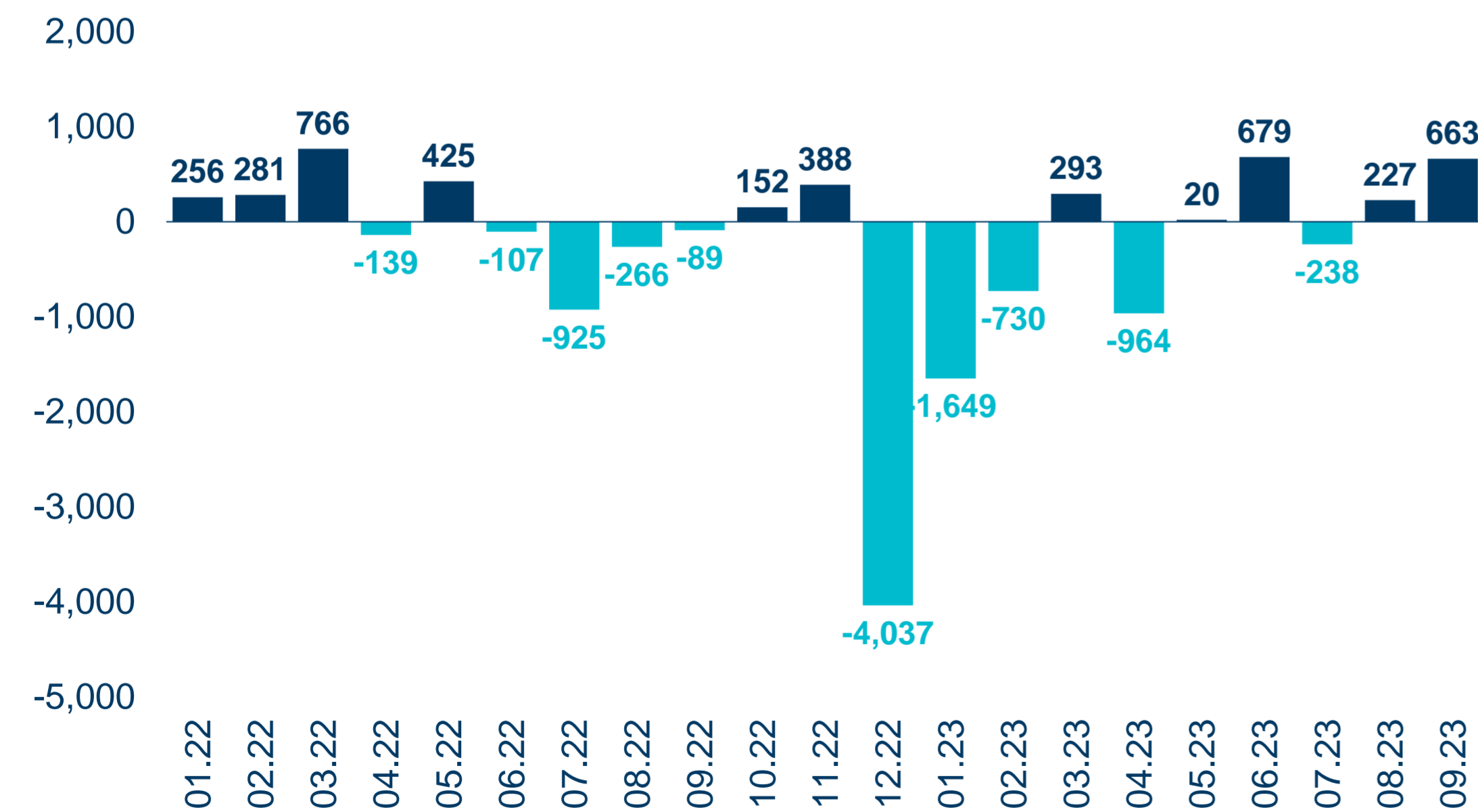
Source: Bank of Russia, KSE Institute

**Budget: weaker ruble supports oil  
and gas revenues, continued expenditure  
restraint, moderate financing needs**

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

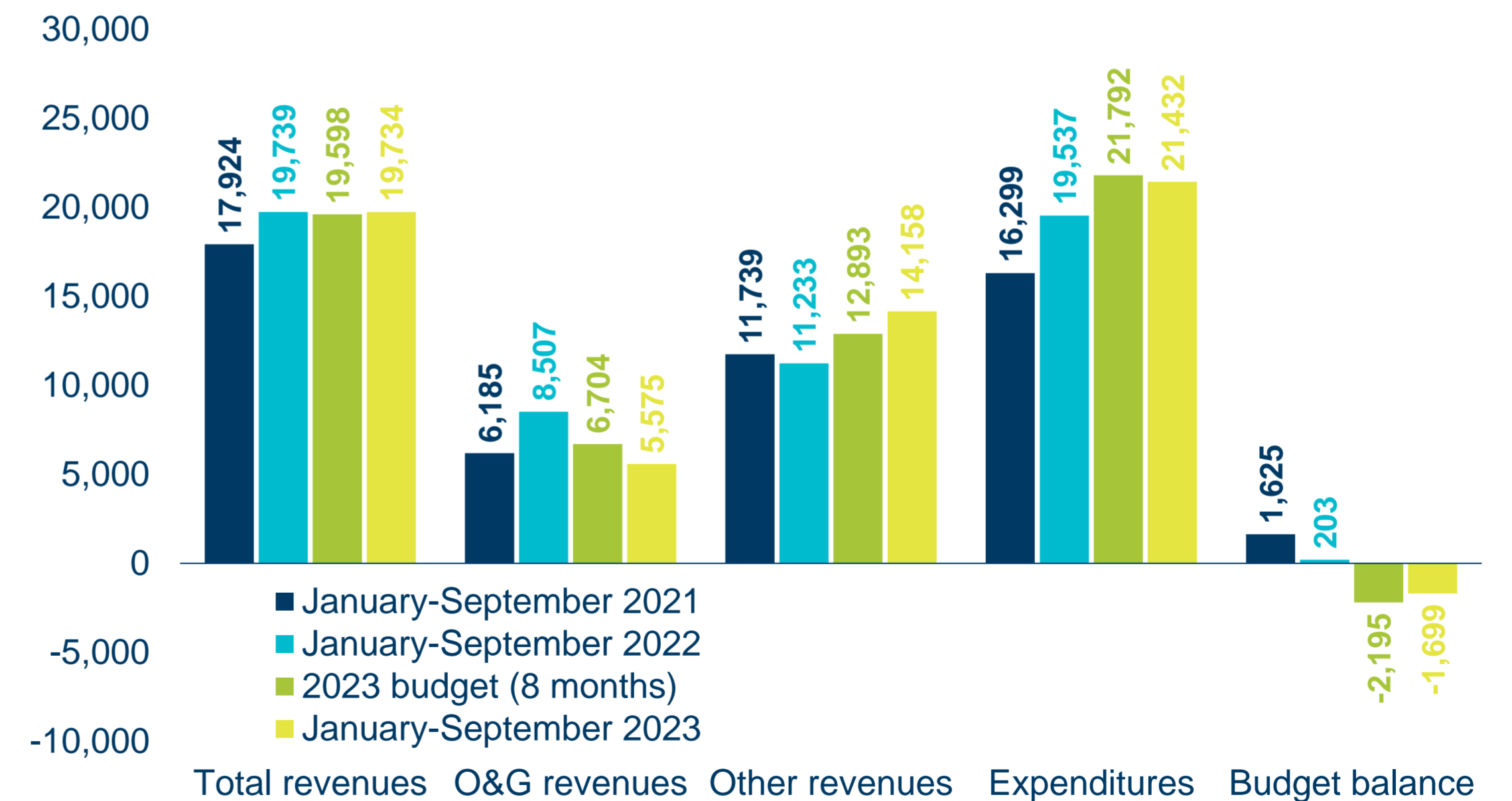
- Russia's budget shifted back into surplus in August, with recent months displaying a significant overall improvement.
- Strong revenue collection, in particular non-O&G, and expenditure restraint are the drivers behind these dynamics.
- A January-September deficit of 1.7 trillion rubles represents 58% of the full-year number planned in the 2023 budget.

Federal government balance, in ruble billion



Source: Ministry of Finance, KSE Institute

Revenues and expenditures, in ruble billion



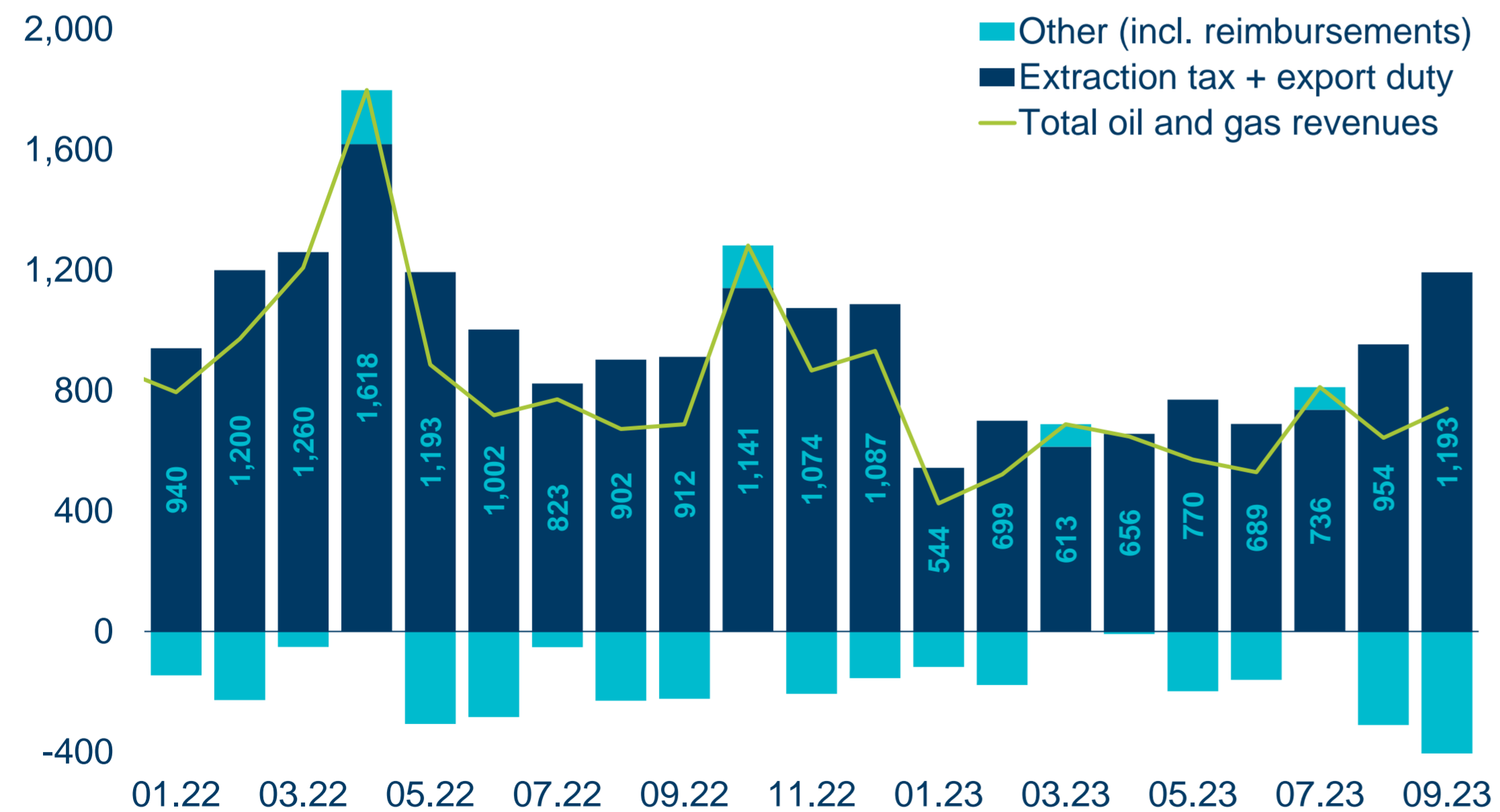
Source: Ministry of Finance, KSE Institute



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

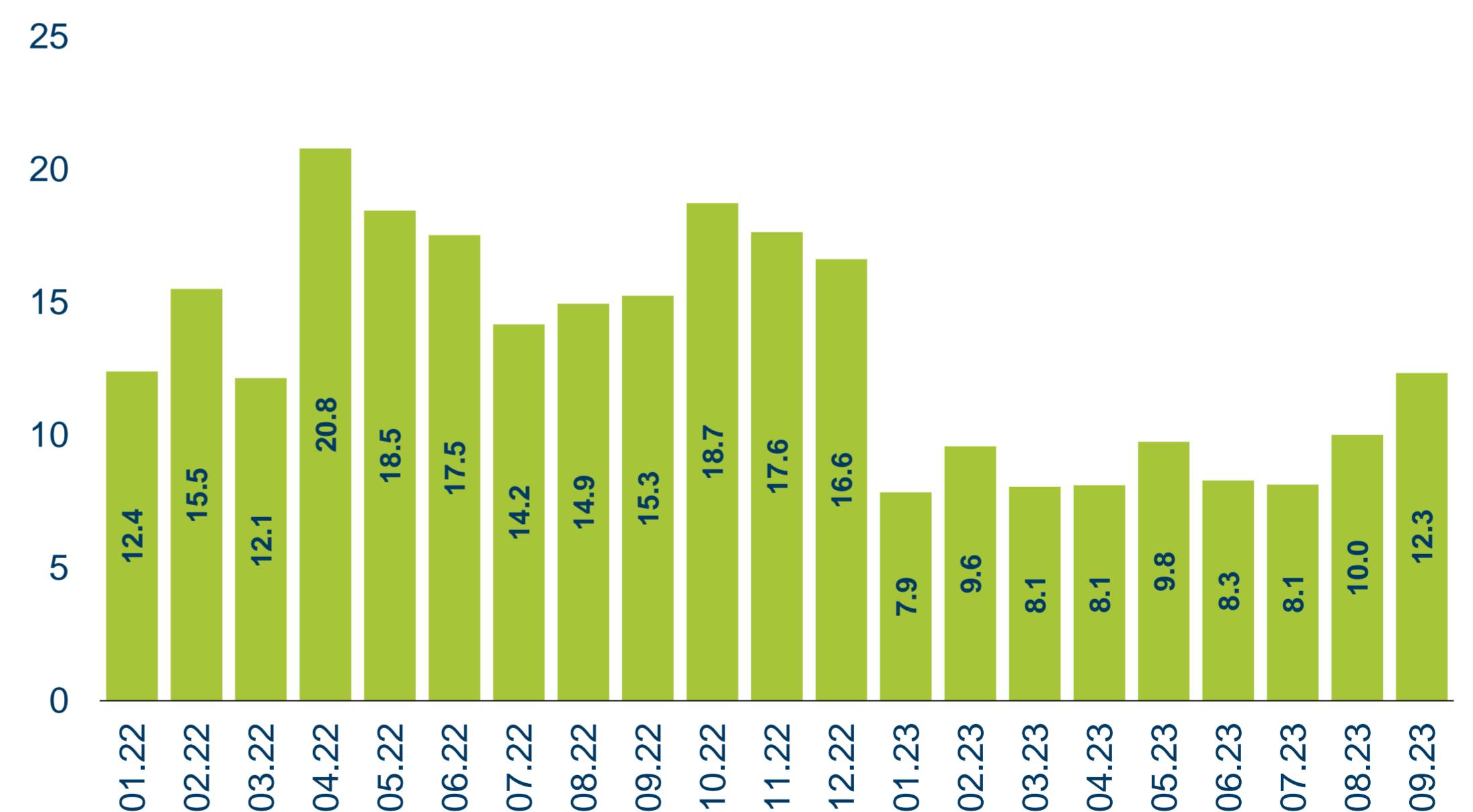
- Extraction taxes and export duties reached close to 1.2 trillion rubles in August, the highest since May 2022.
- While the budget benefits from the weaker ruble, oil and gas revenues in U.S. dollar terms are also rising.
- The narrowing of Urals-Brent spreads means that changes to the tax oil price 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\*



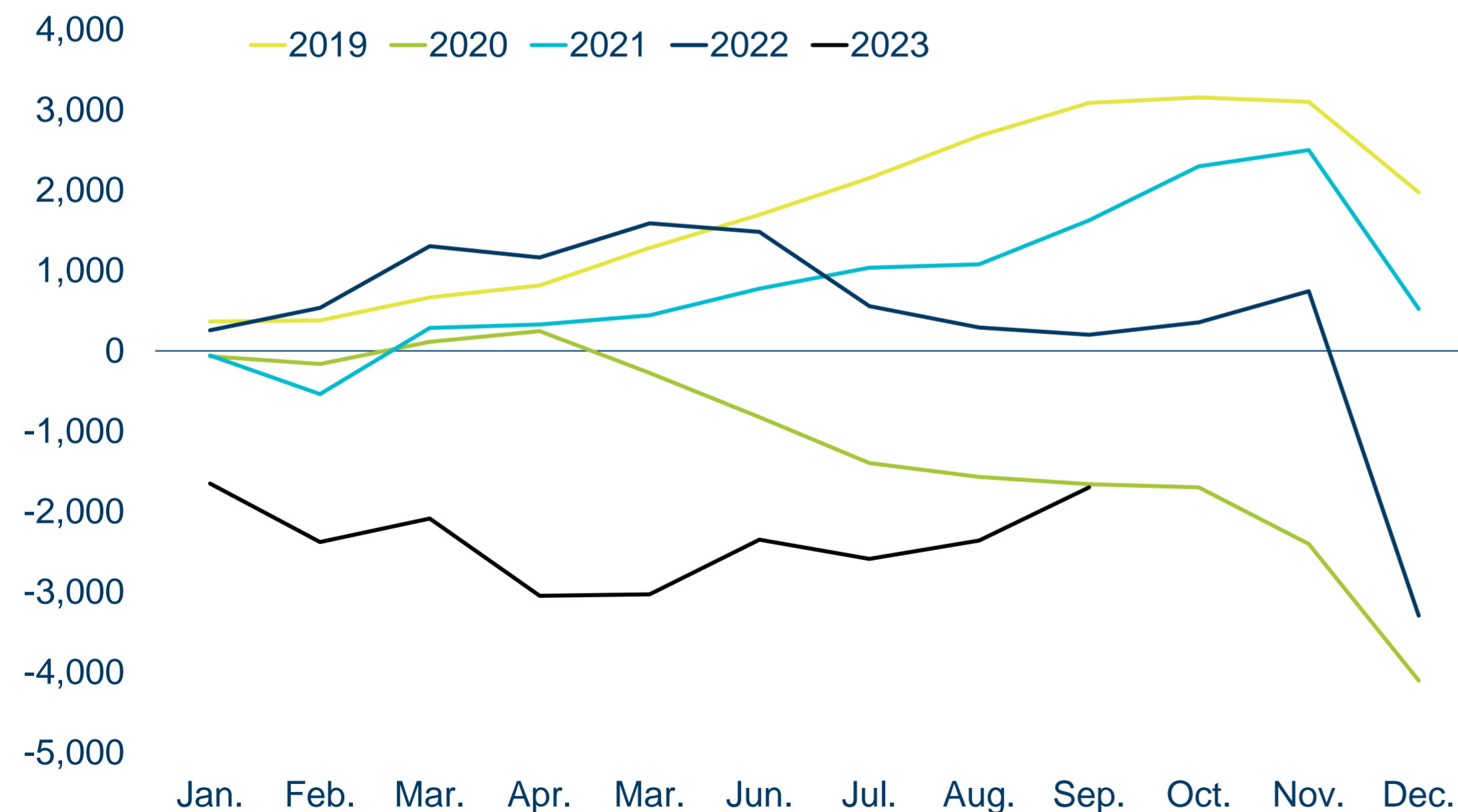
Source: International Monetary Fund, Ministry of Finance, KSE Institute

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

## Reliance on NWF and OFZ issuance sharply lower in 2023.

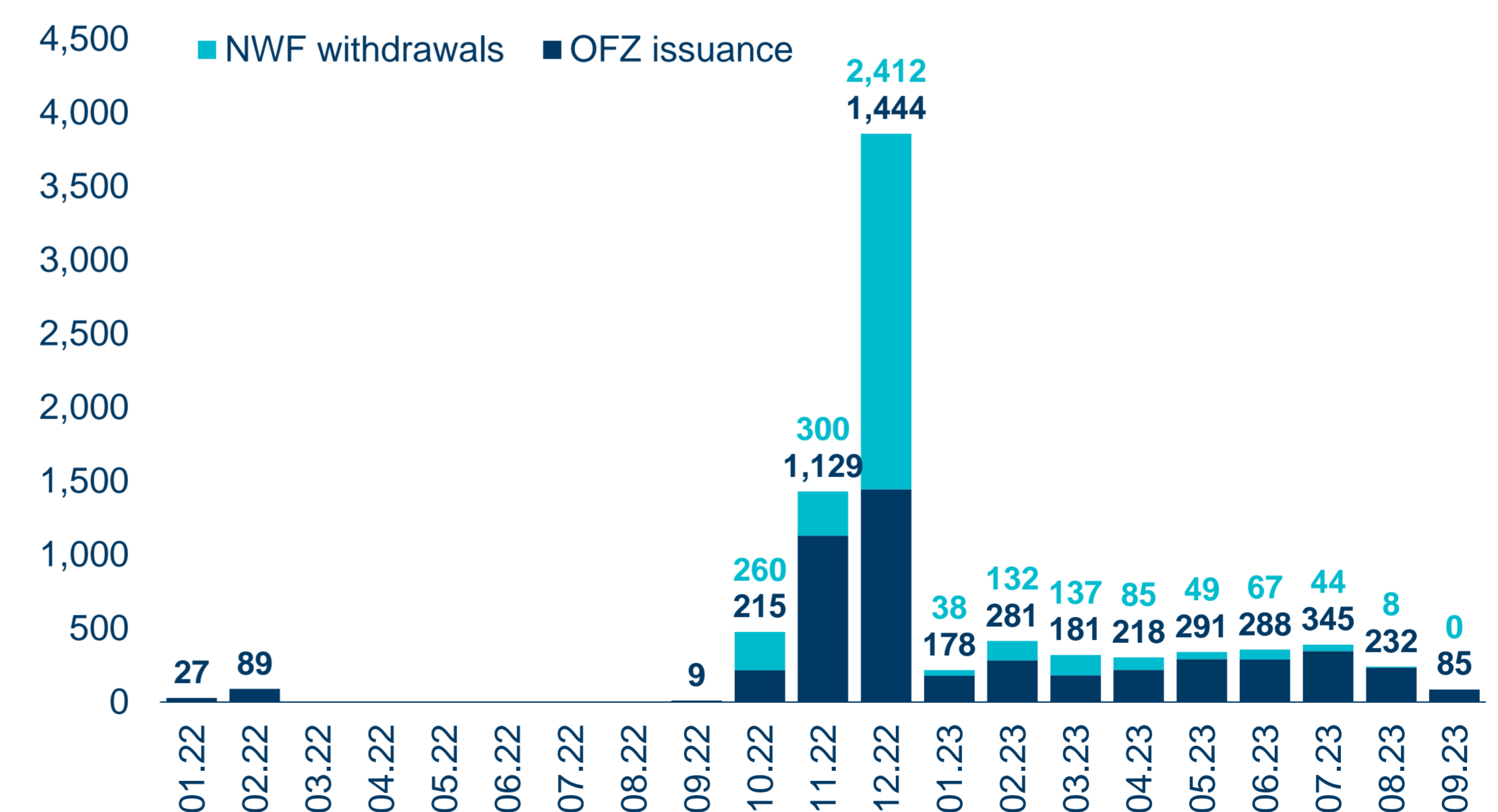
- Due to smaller deficits, Russia needs to rely less on two key financing channels—NWF withdrawals and OFZ issuance.
- New issuance of domestic debt was 2.1 trillion rubles in January-September 2023, significantly less than in Q4 2022.
- At the same time, the NWF only sold assets worth 560 billion rubles 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

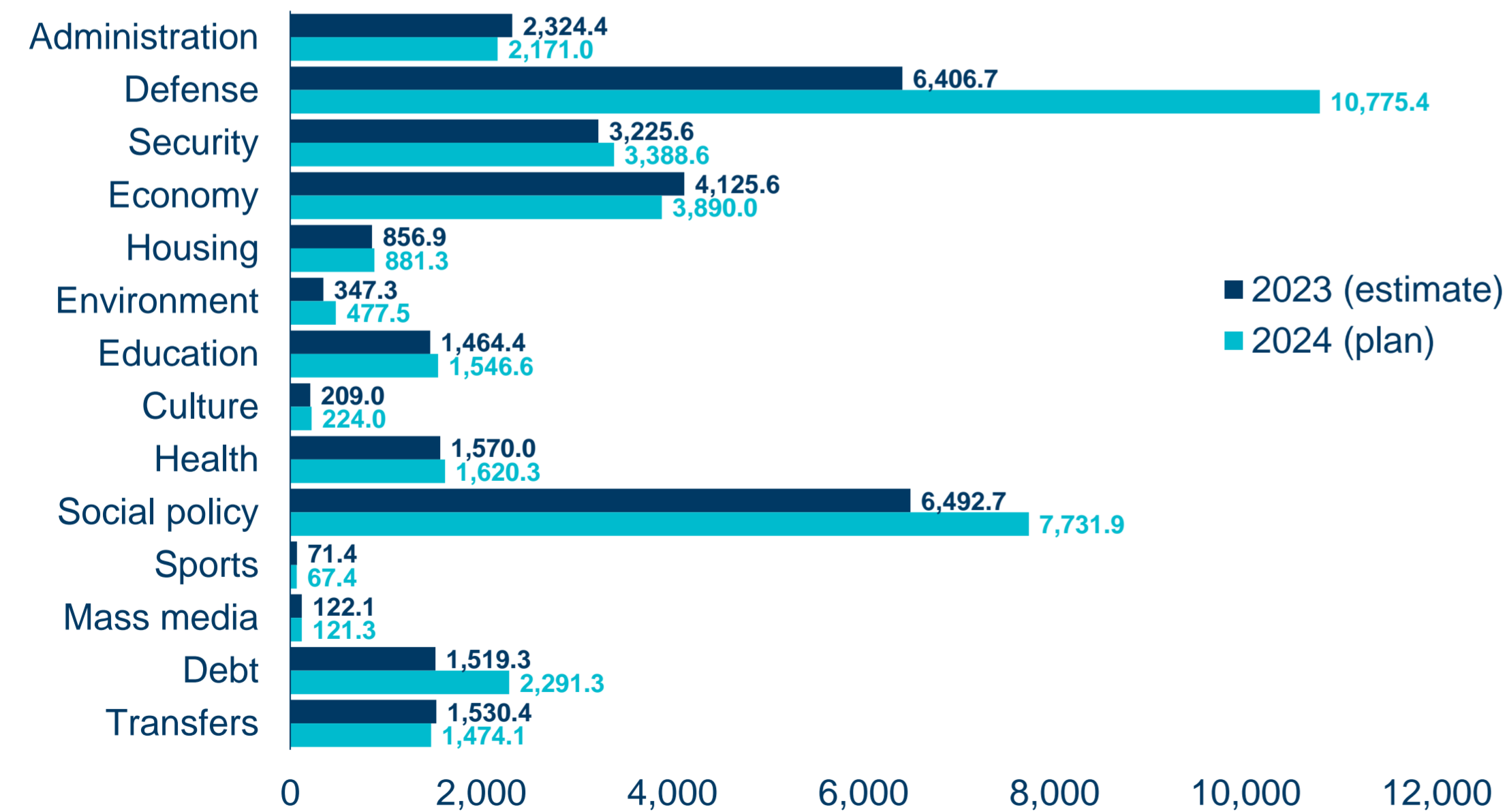


Source: Ministry of Finance, KSE Institute

## Significant increase in defense budget planned for 2024.

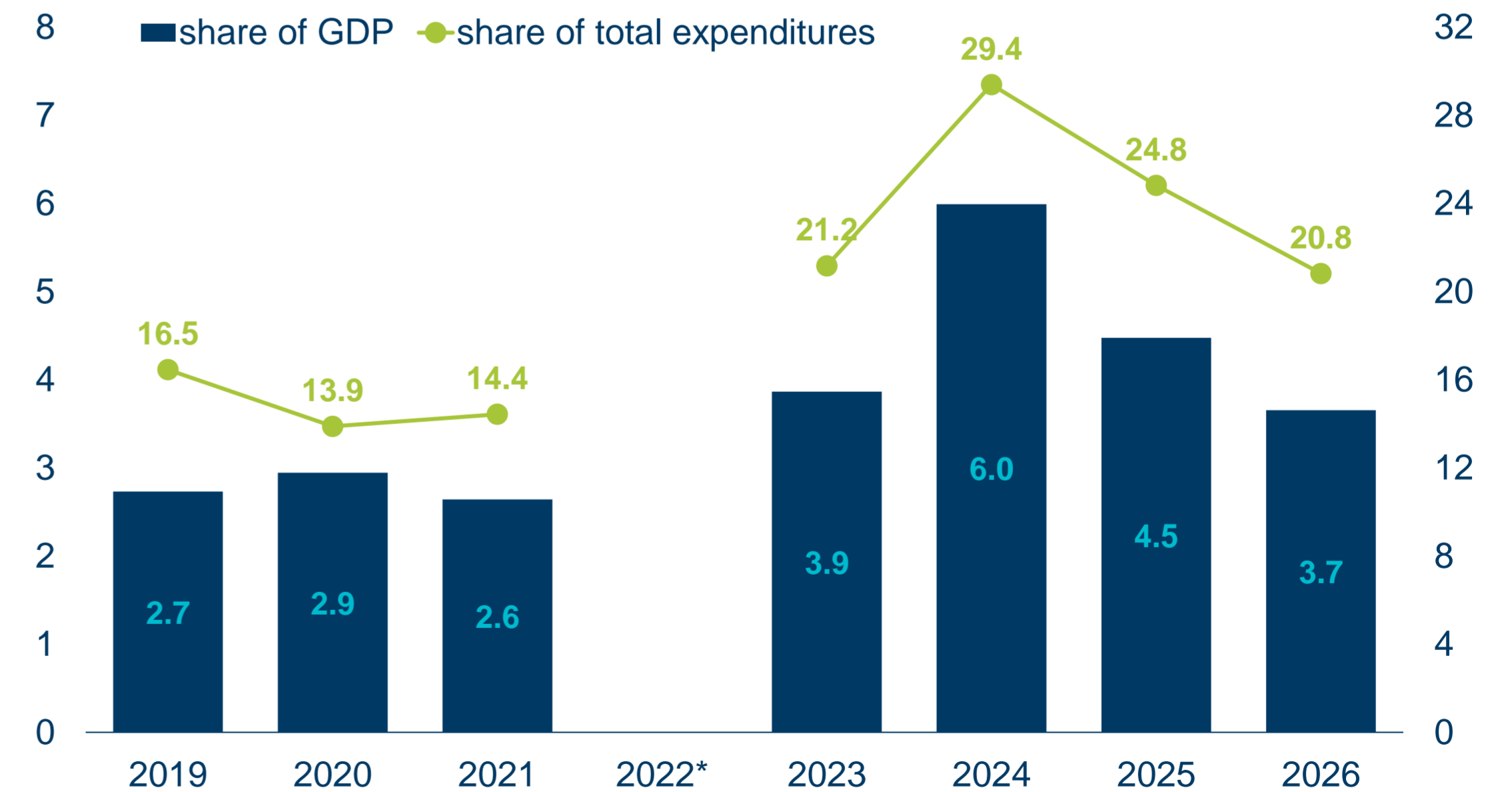
- The Russian government plans to spend 10.7 trillion rubles (~\$100 billion) on defense in 2024 (+68% vs. this year).
- At 6% of GDP and close to 30% of the total federal budget, defense clearly dominates government expenditures.
- This demonstrates the regime’s commitment to the war but also illustrates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

Federal budget expenditure details, in ruble billion



Source: Ministry of Finance, KSE Institute

Federal defense expenditures, in %

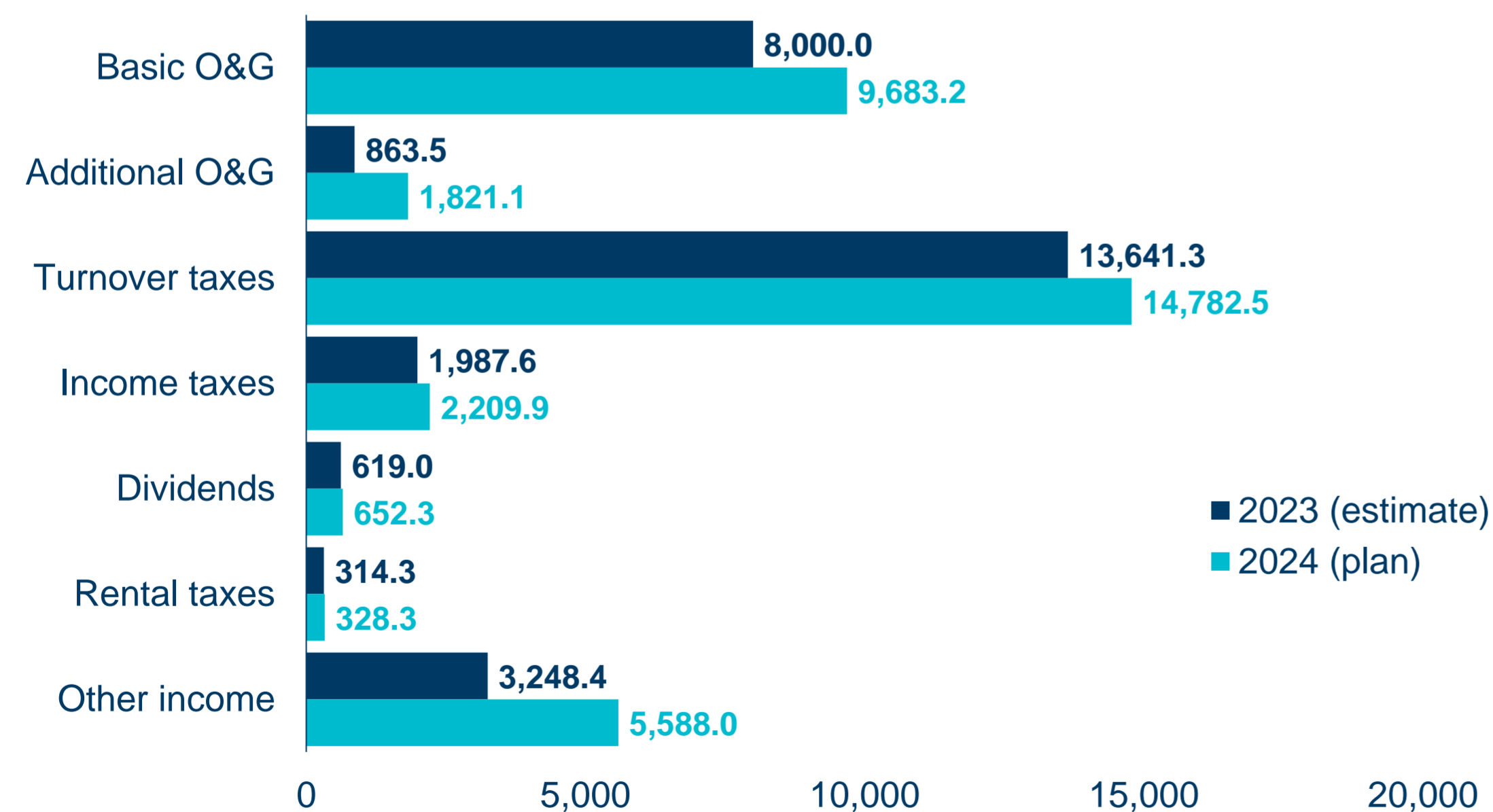


Source: Ministry of Finance, KSE Institute \*no expenditure breakdown published

## Expectation of moderate deficits in the coming years.

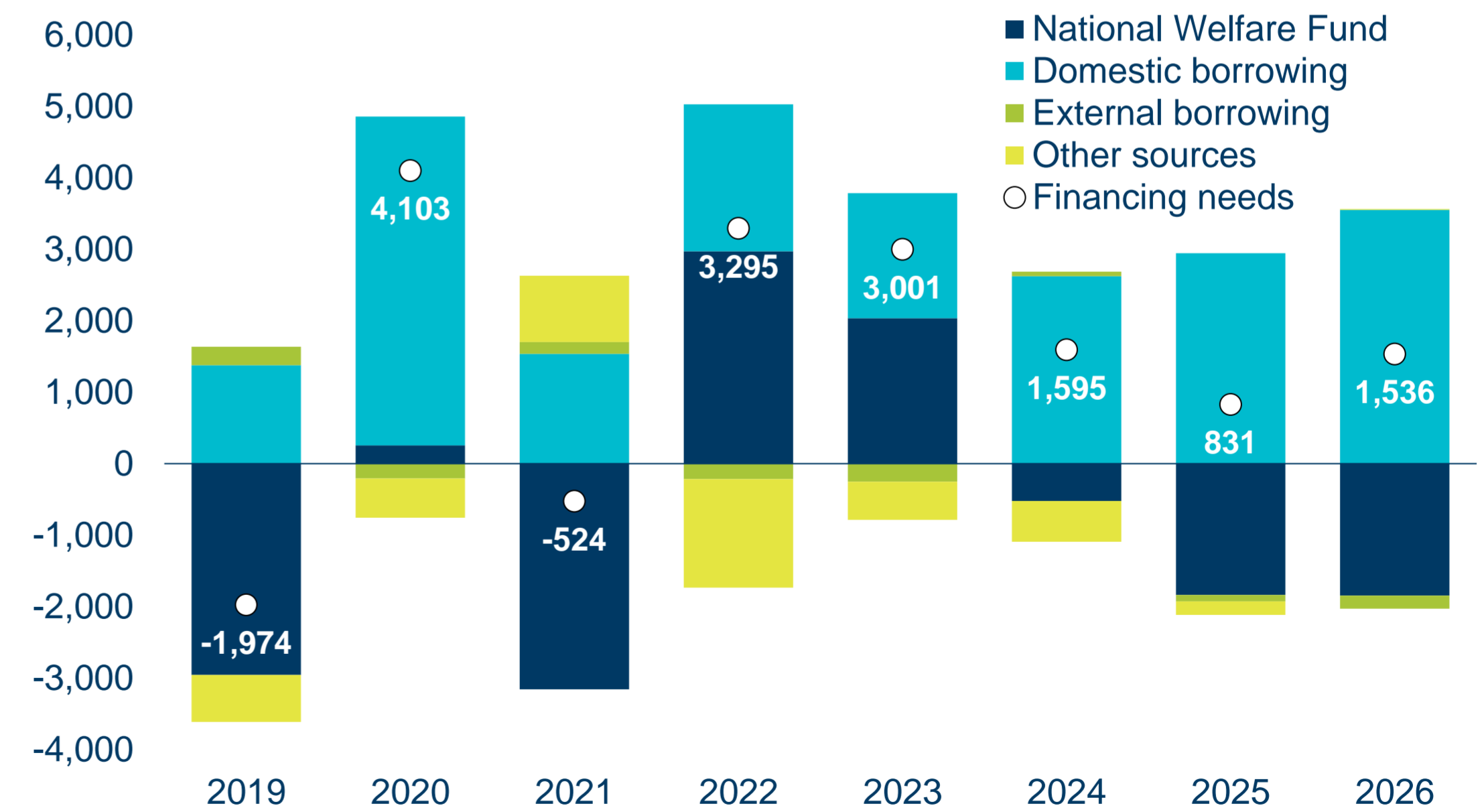
- Russia’s Ministry of Finance expects revenue growth of 22% in 2024, driven by oil & gas revenues and turnover taxes.
- The federal budget deficit is projected to be at or below 1% of GDP in 2024-26 and to be financed by domestic borrowing.
- Planned net issuance is 3 trillion rubles this year, followed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

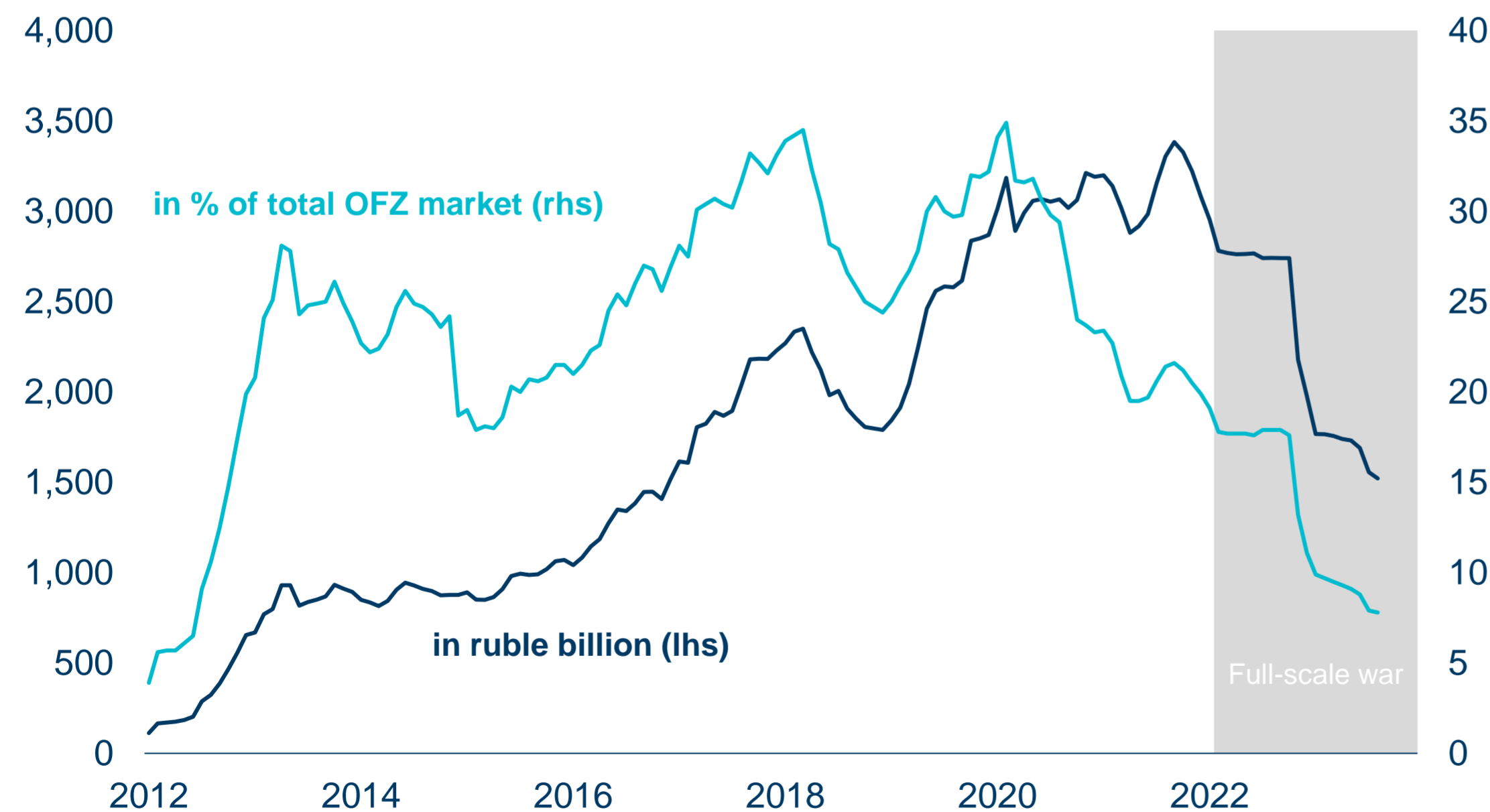


Source: Ministry of Finance, KSE Institute

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

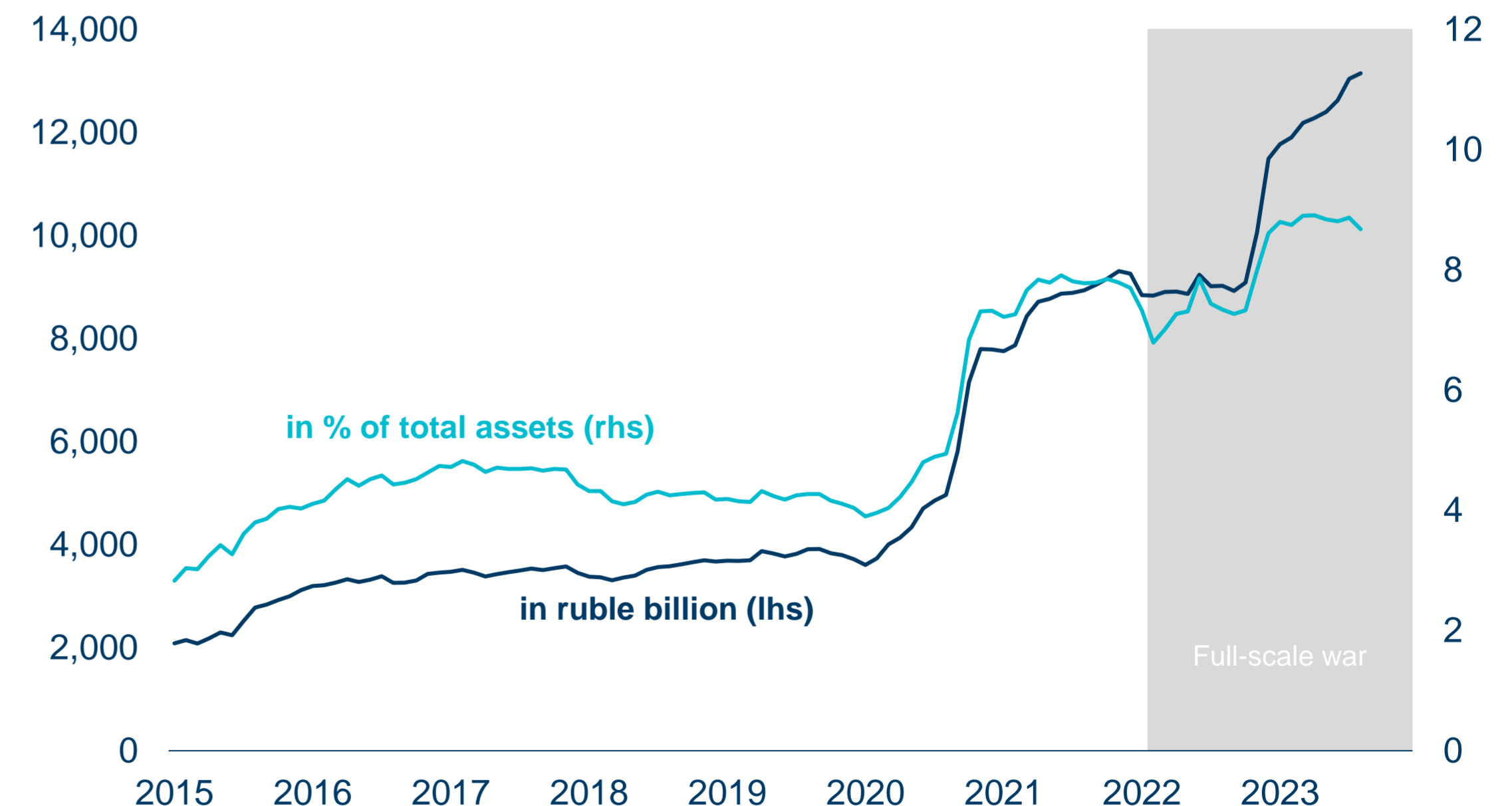
- Foreigners have largely disengaged from the Russian sovereign debt market since the start of the war.
- Non-resident holdings have dropped by 1.2 trillion rubles (or 44%) since November as bonds matured.
- Over the same period, credit institutions' holdings have risen by more than 4 trillion rubles (or 45%).

Non-resident OFZ holdings



Source: Bank of Russia, KSE Institute

Credit institutions OFZ holdings

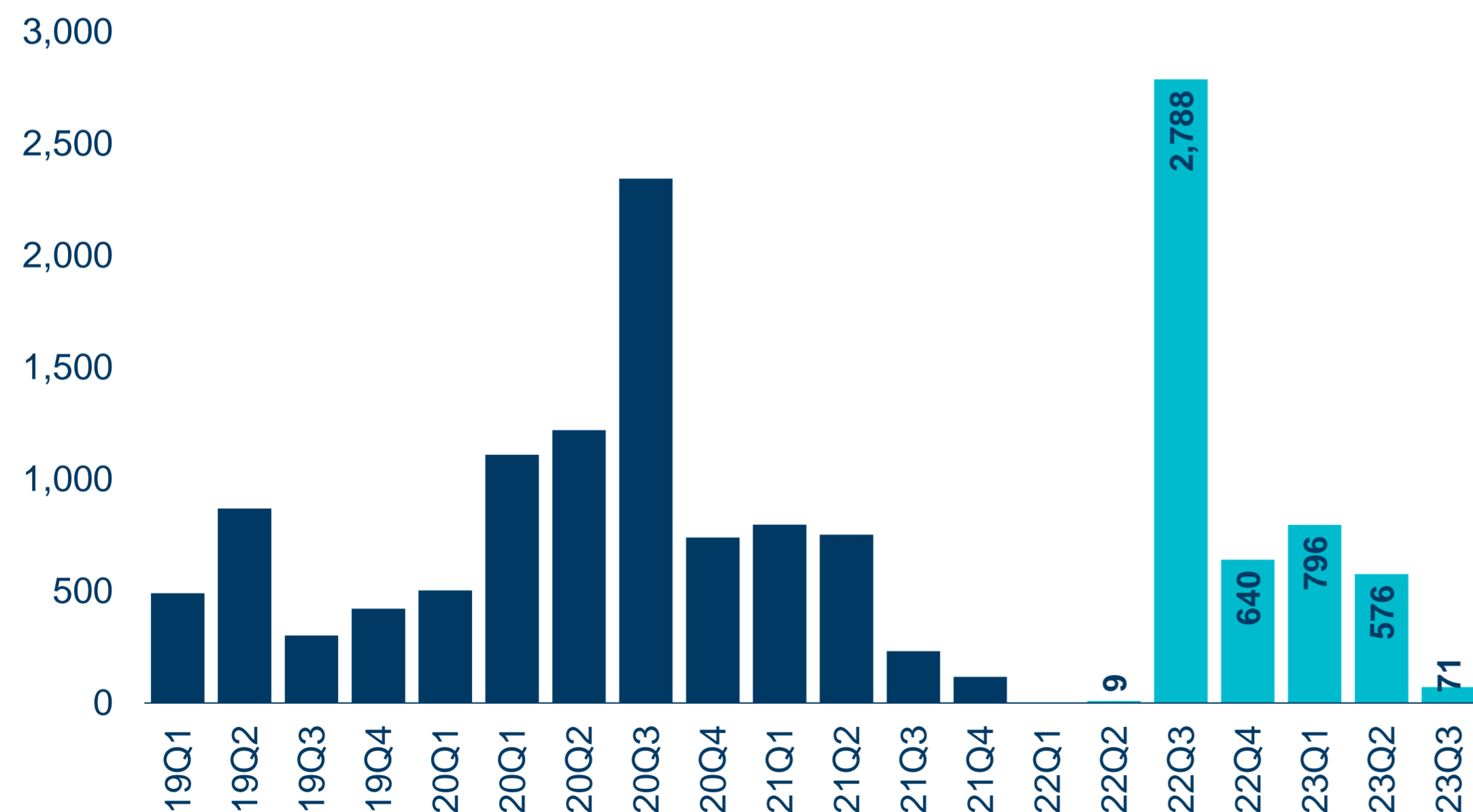


Source: Bank of Russia, KSE Institute

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

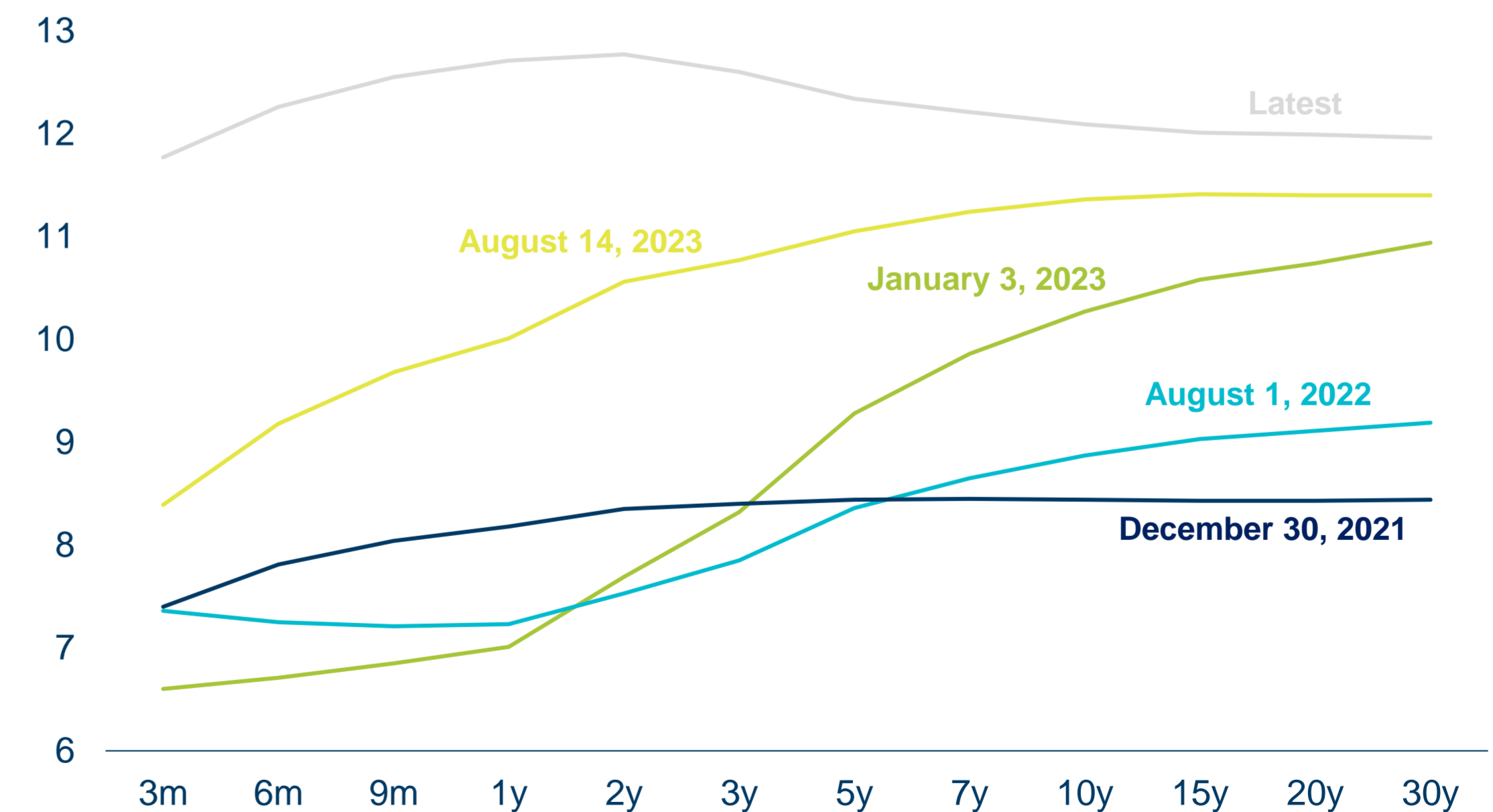
- Due to the improved fiscal picture, we do not expect a significant increase in auction volumes for the rest of 2023.
- The OFZ yield curve reflects the recent CBR rate hikes (of cumulative 550bps) with the short end shifting up sharply.
- Longer maturity interest rates will inevitably follow suit in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



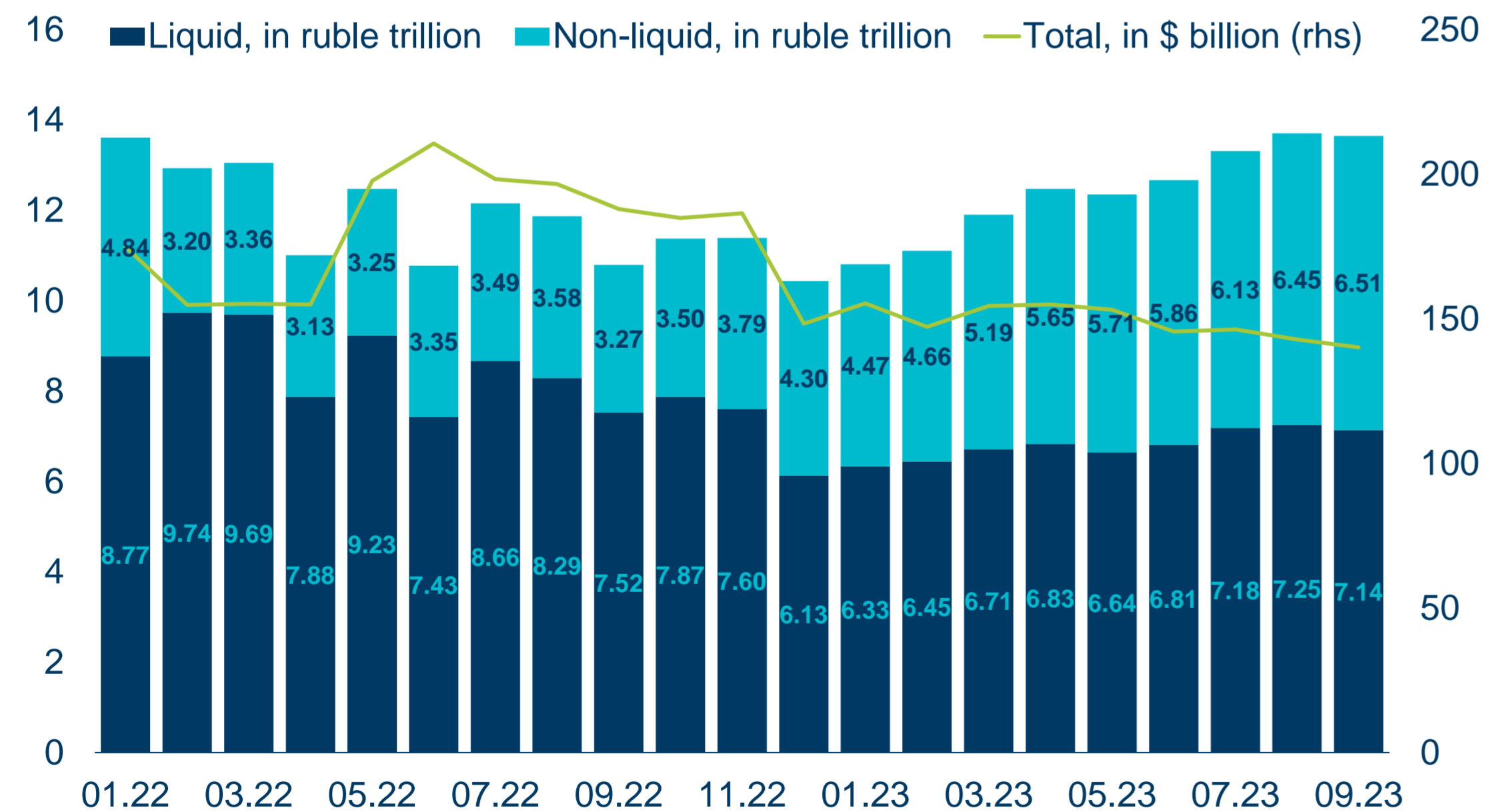
Source: Bank of Russia, KSE Institute

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

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

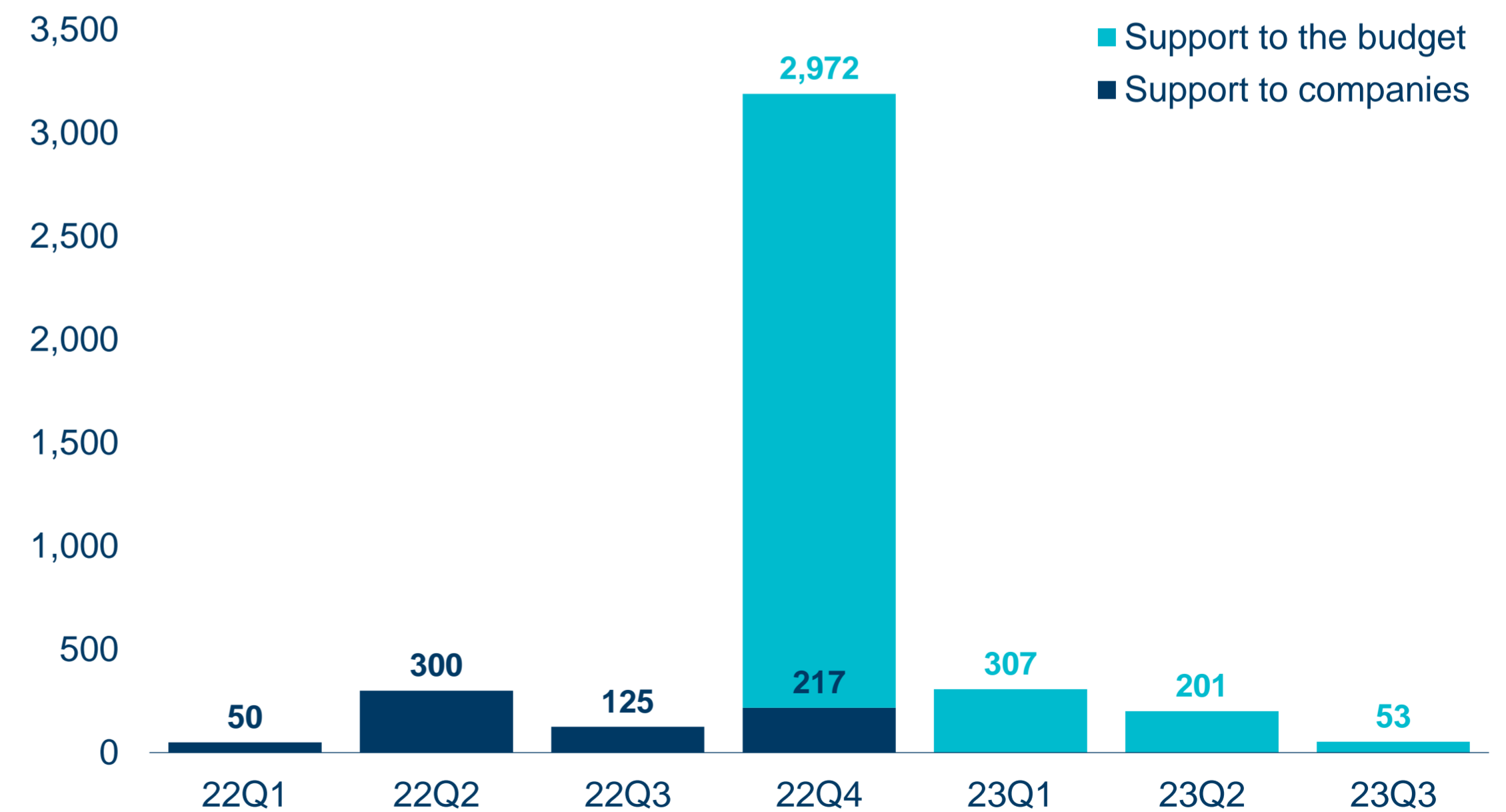
- Total assets of the National Welfare Fund stood at 13.6 trillion rubles (\$140.1 billion or 9.1% of GDP) at the end of August.
- Liquid assets (e.g., foreign currency and gold) accounted for 52% of the total and non-liquid assets (e.g., stocks) for 48%.
- Withdrawals from the NWF support companies 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



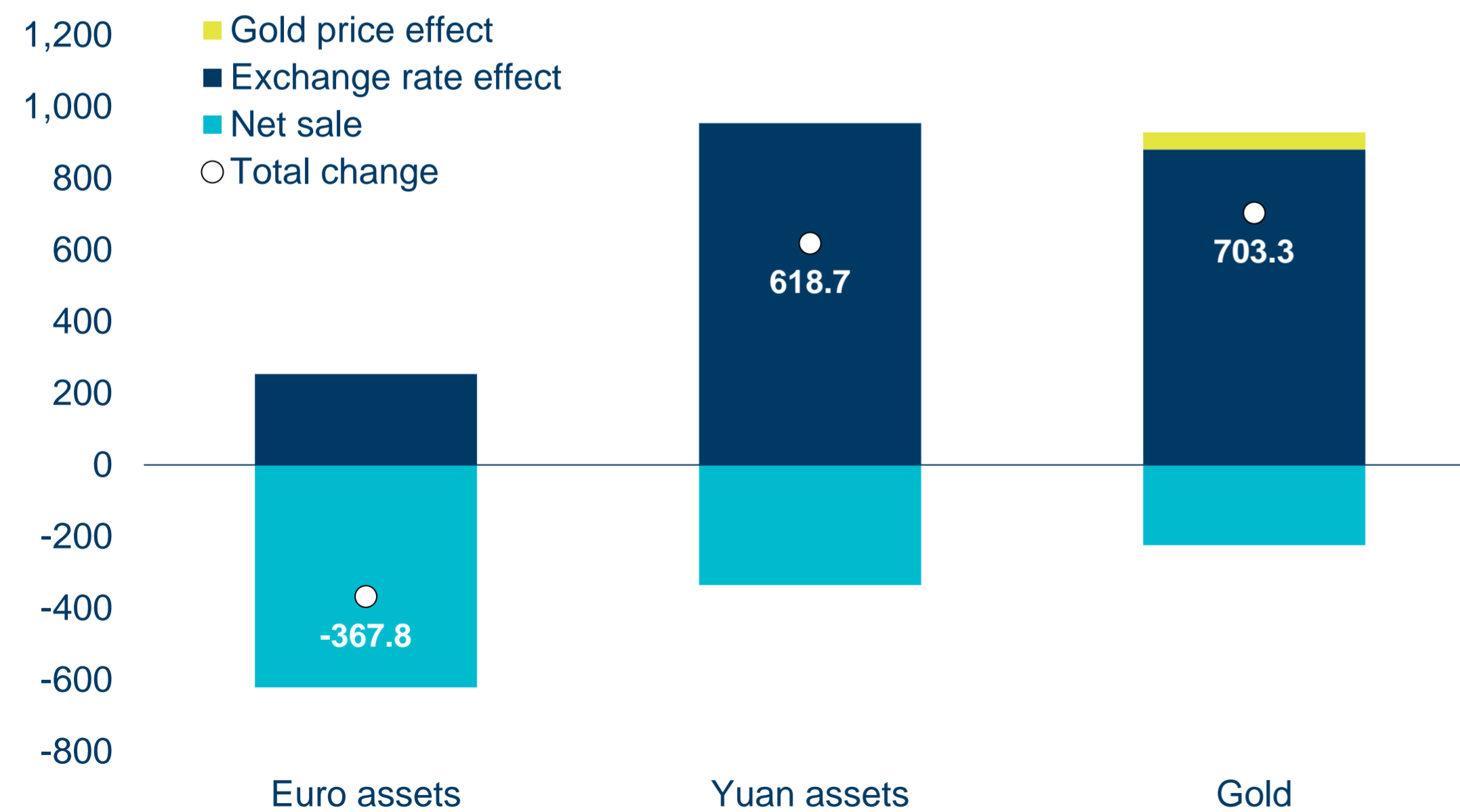
Source: Ministry of Finance, KSE Institute



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

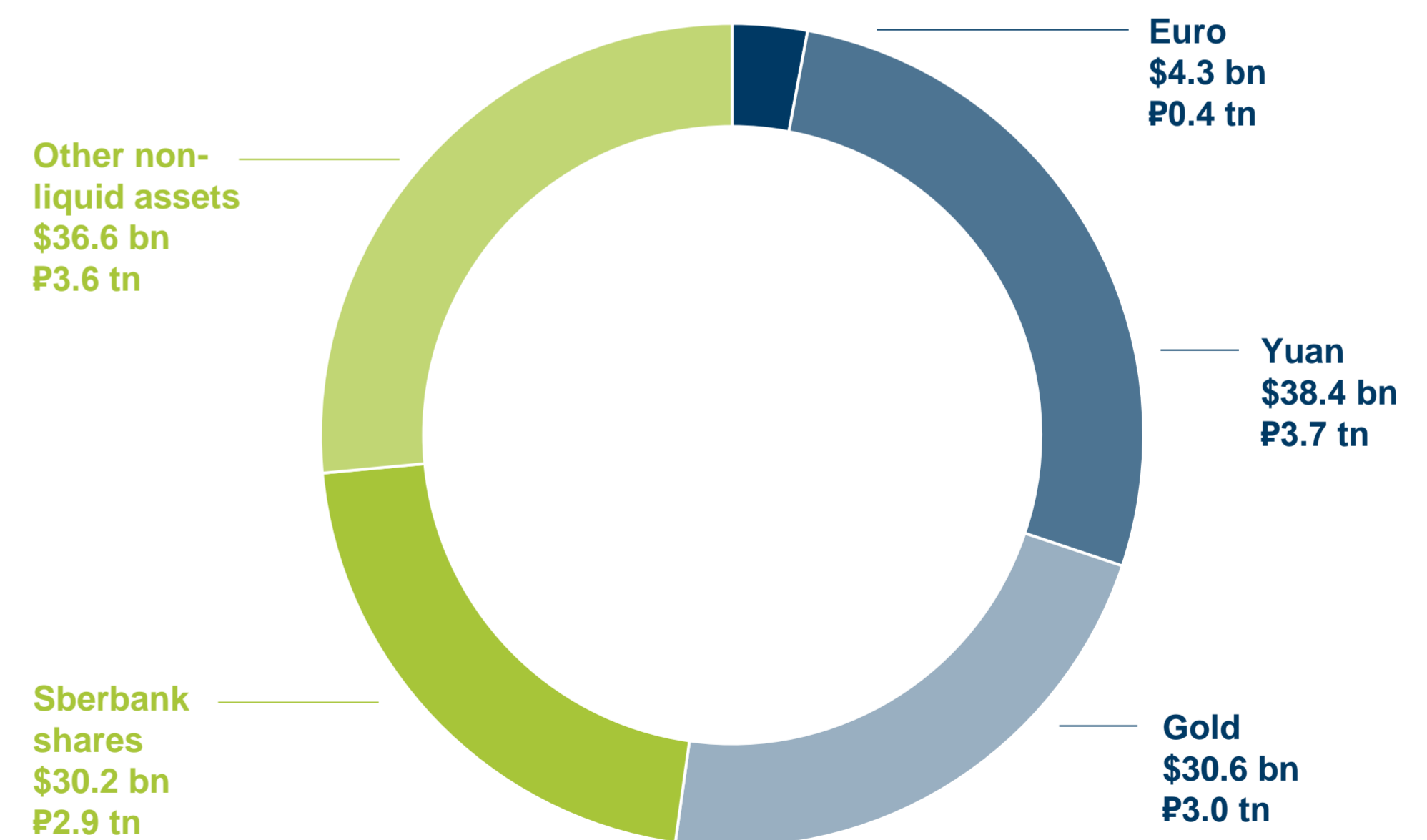
- Moderate net sales of euro/yuan assets and gold were offset by exchange rate, valuation effects.
- In the absence of a much wider deficit, withdrawals will likely remain moderate for the rest of the year.
- Therefore, Russia will be able to rely for longer than originally anticipated on the NWF for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

Change in assets (Sep. 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 October 1, 2023\*

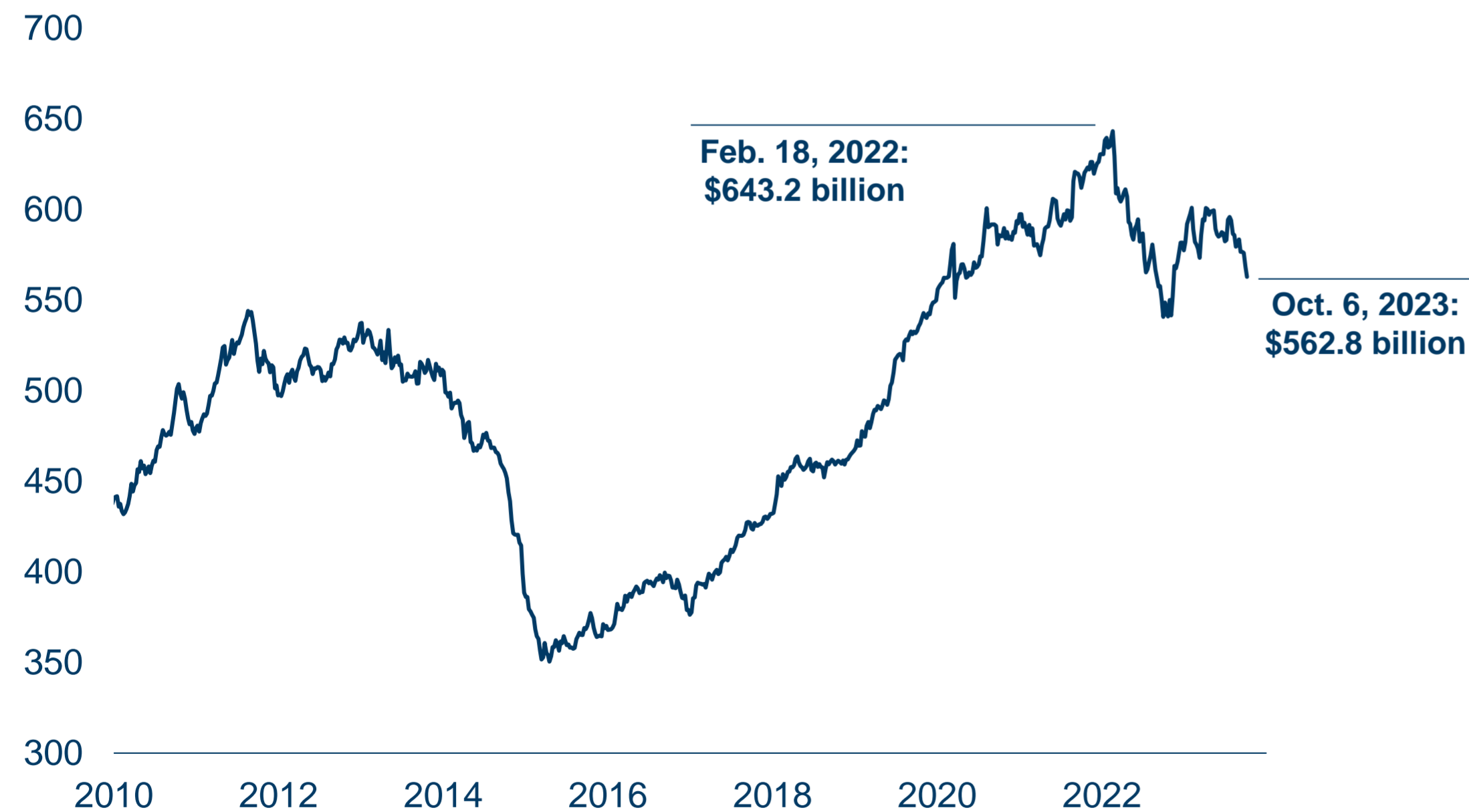


Source: Ministry of Finance, KSE Institute \*based on market exchange rates/prices

## A substantial share of international reserves have been immobilized.

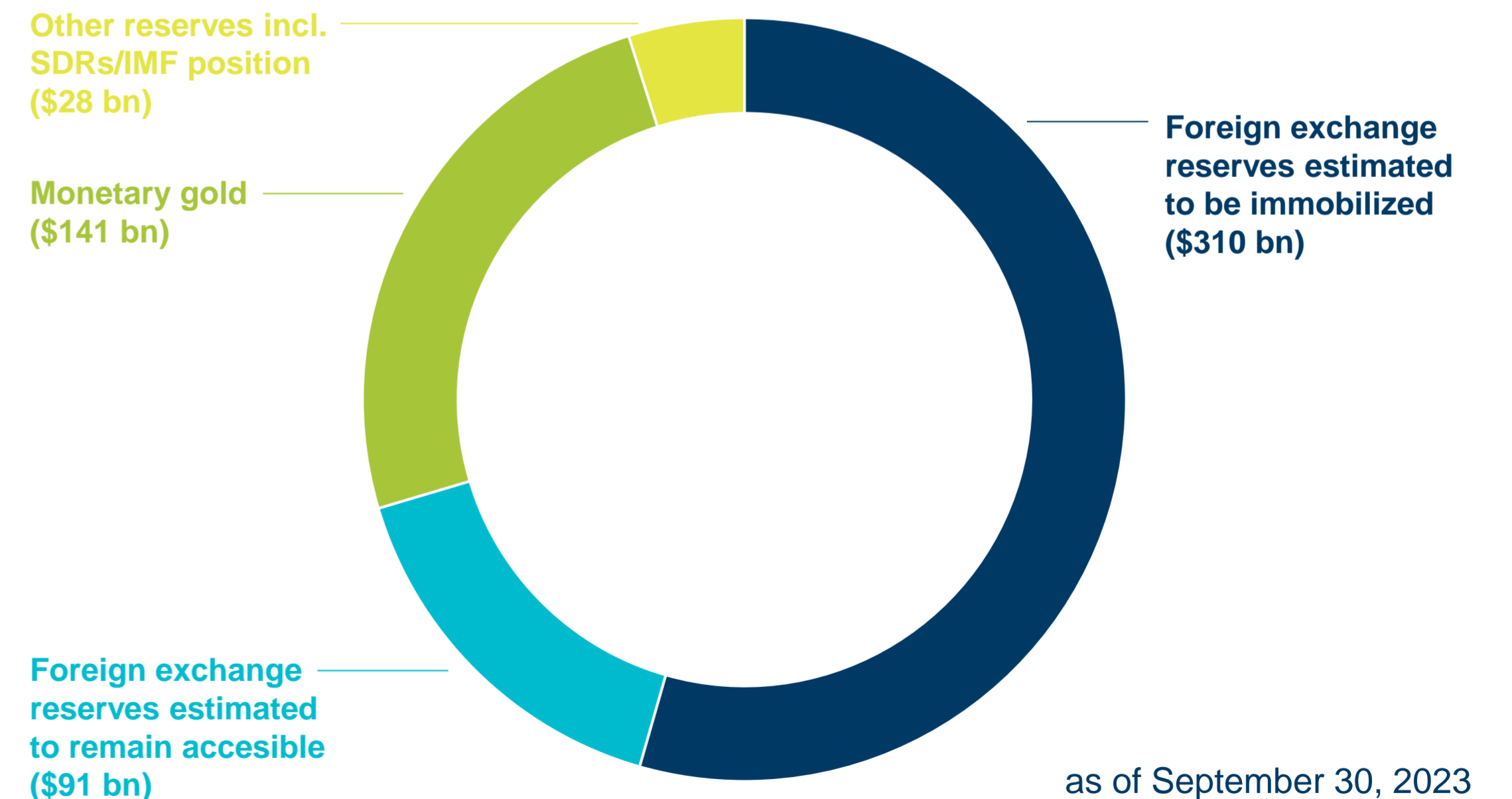
- Before the invasion, Russia held \$634 billion in international reserves, part of what is described as “Fortress Russia”.
- We estimate that around \$310 billion are currently immobilized due to international sanctions on CBR and NWF.
- This leaves Russia with access to \$141 billion in monetary gold and roughly \$91 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



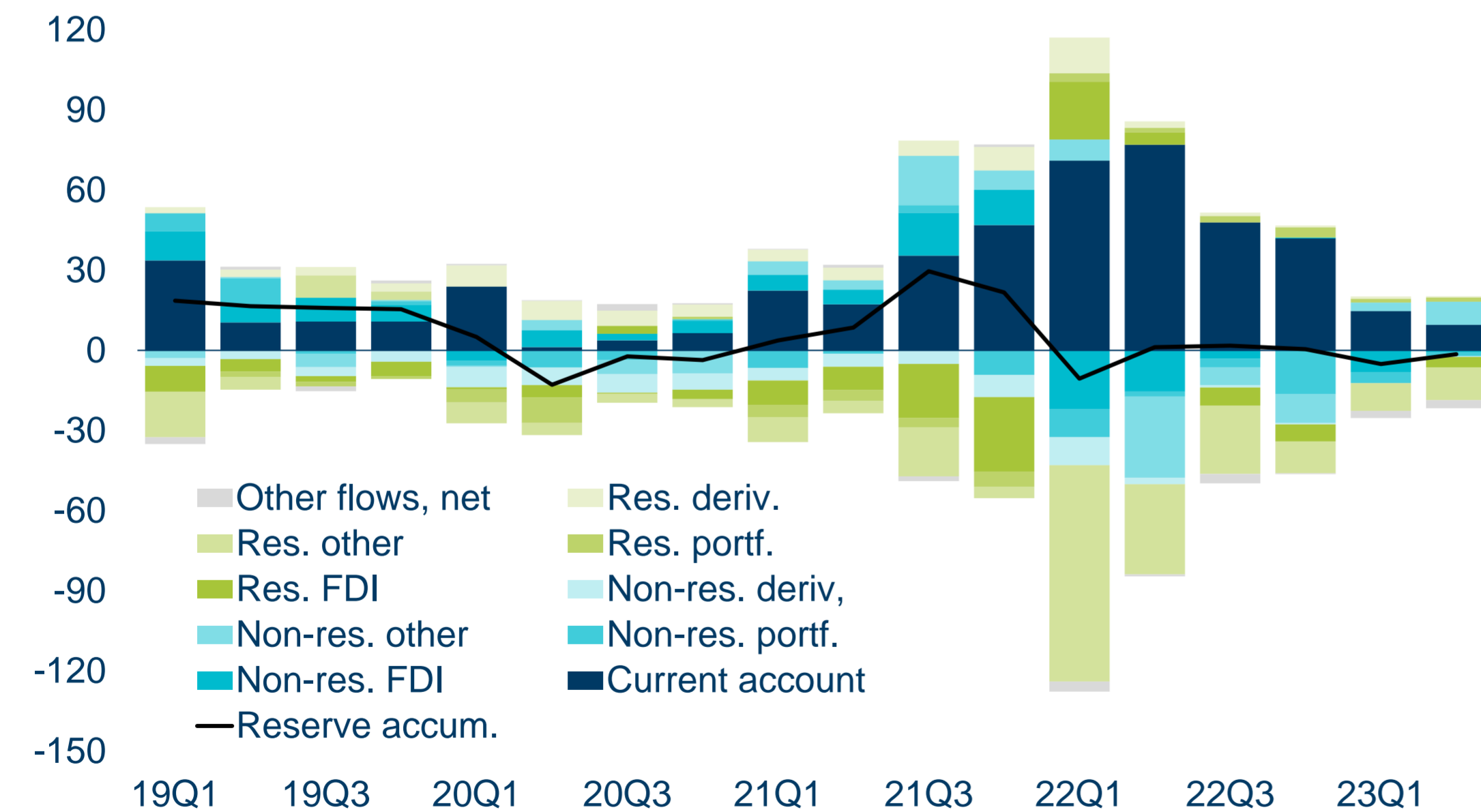
Source: Bank of Russia, KSE Institute

as of September 30, 2023

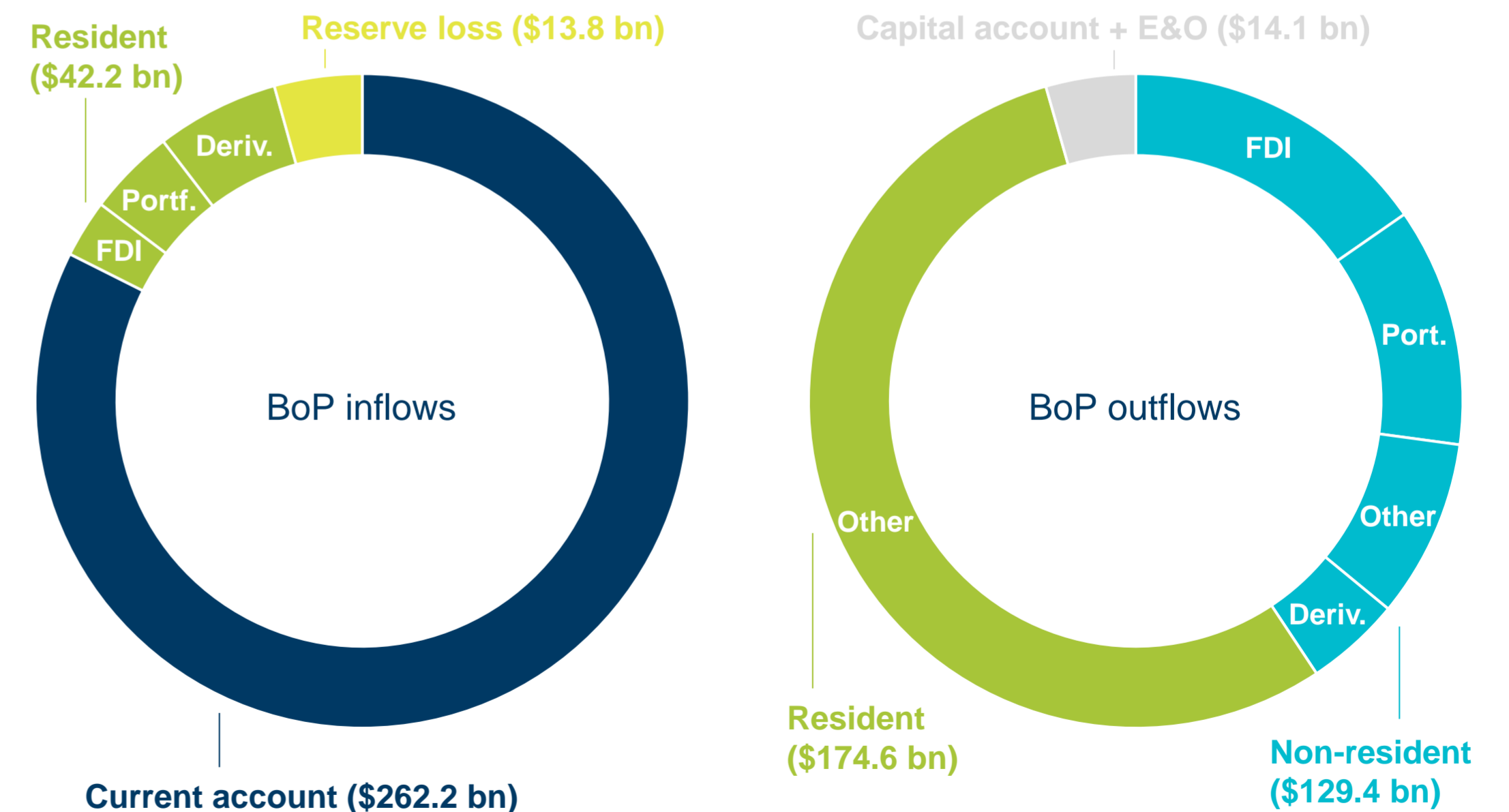
## Significant accumulation of new foreign assets in 2022-23.

- 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



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



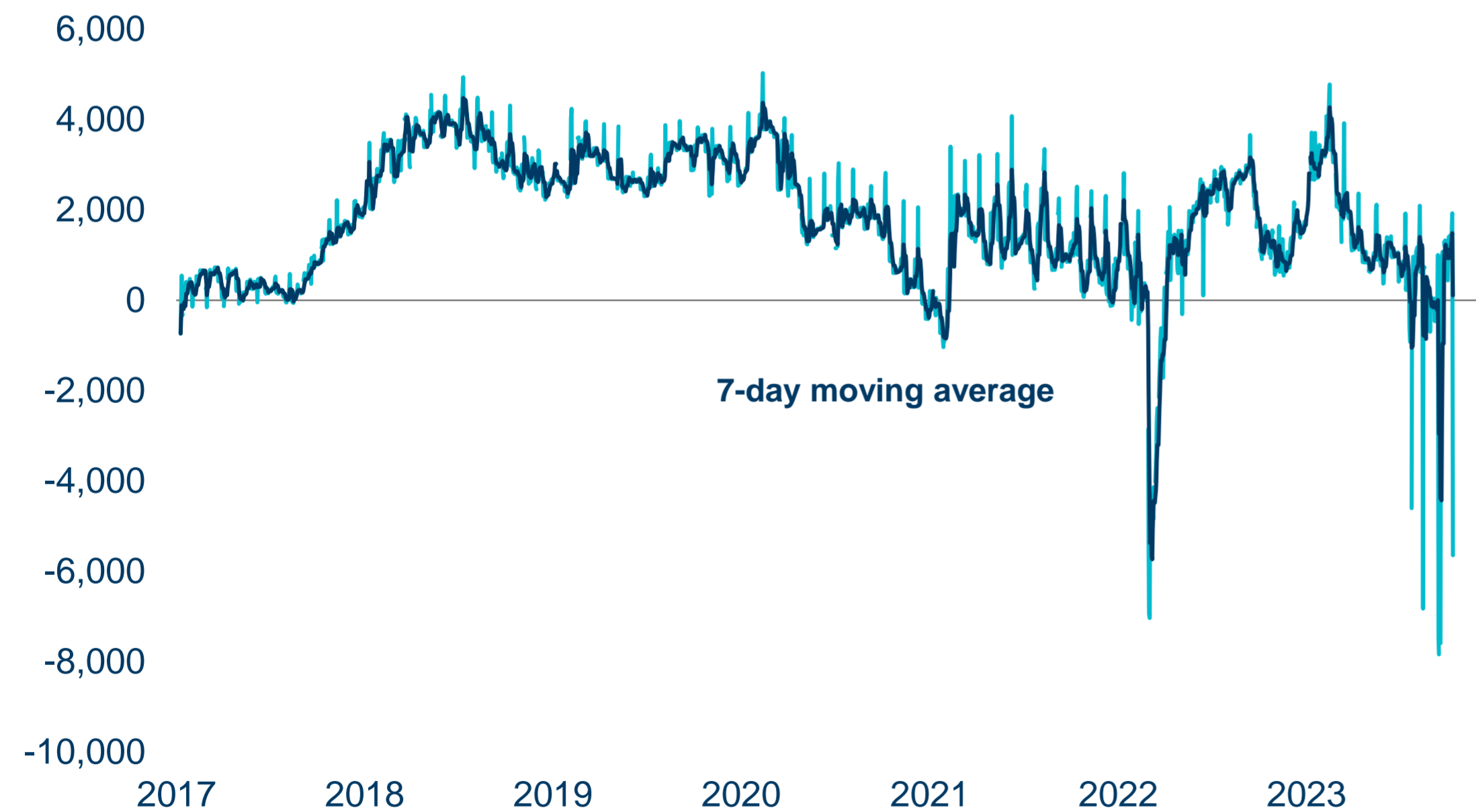
Source: Bank of Russia, KSE Institute

Source: Bank of Russia, KSE Institute

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

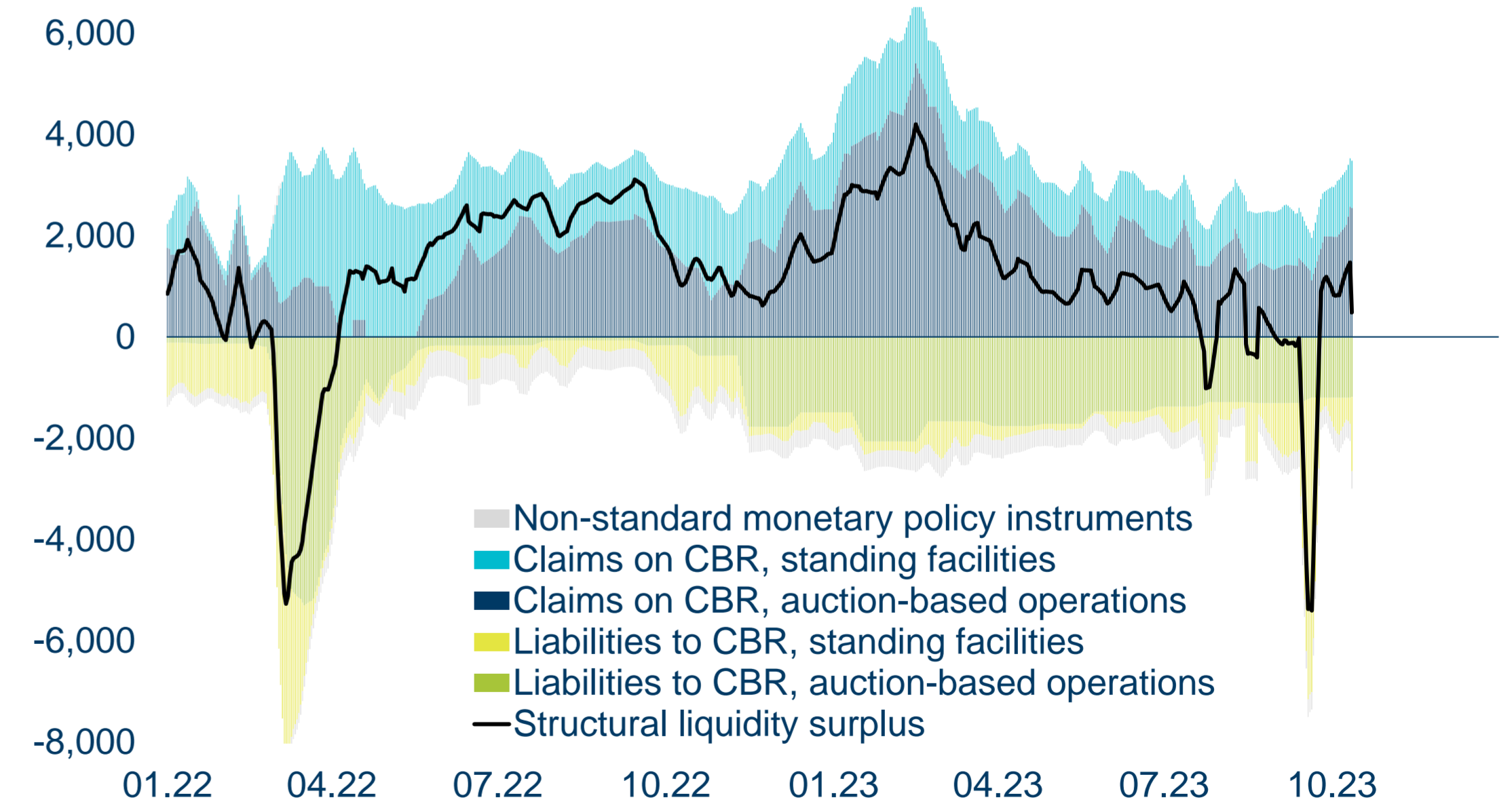
- Liquidity conditions recovered quickly after the initial shock from the full-scale war and imposition of sanctions.
- A closer look at the composition of the structural liquidity surplus points to some stress in the interbank market.
- The data clearly shows the (temporary) effects of the CBR’s monetary tightening in July-September (550bps).

Banking system structural liquidity surplus, in ruble billion



Source: Bank of Russia, KSE Institute

Composition of structural liquidity surplus, in ruble billion\*

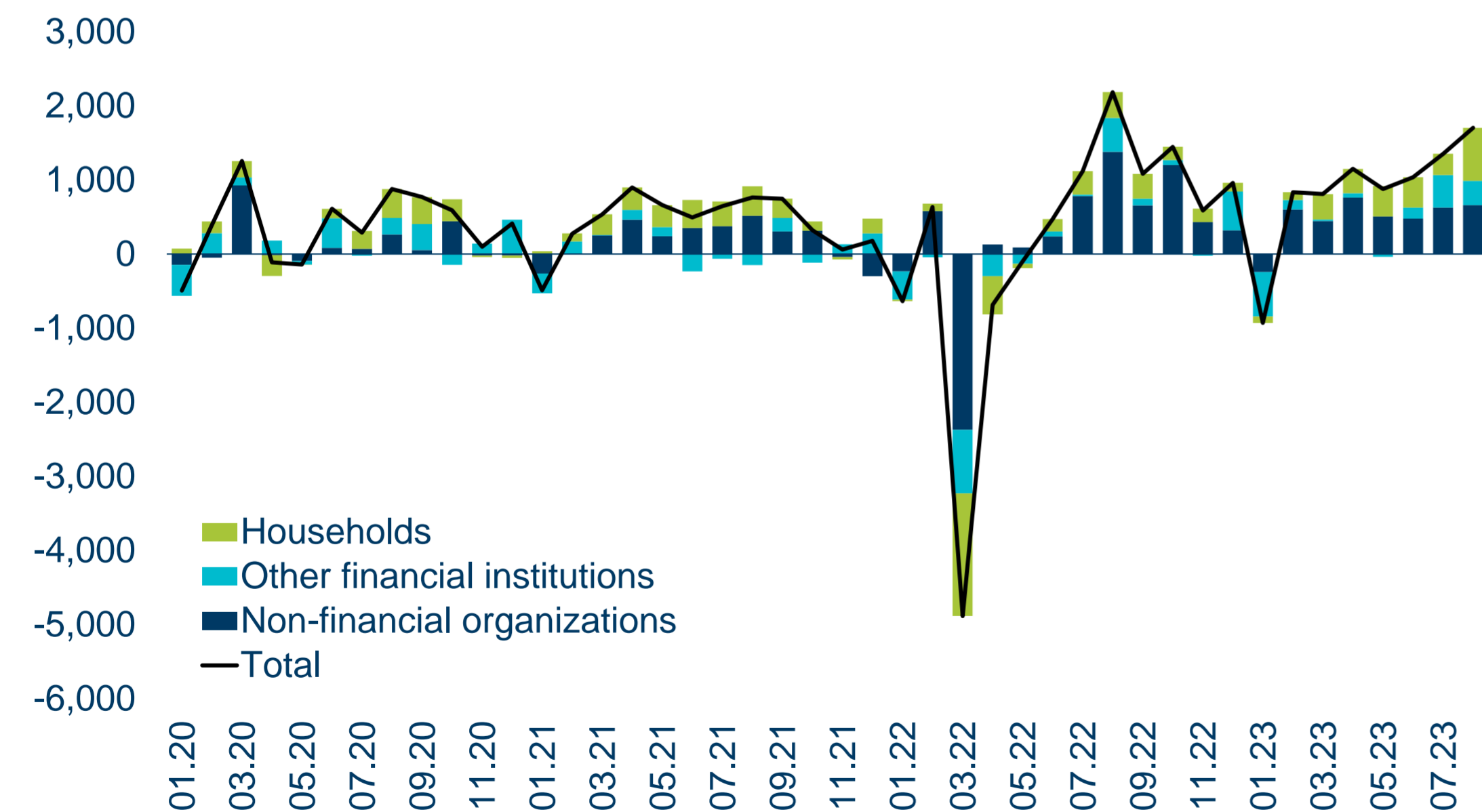


Source: Bank of Russia, KSE Institute \*7-day moving average

## Private sector credit growth robust for the moment.

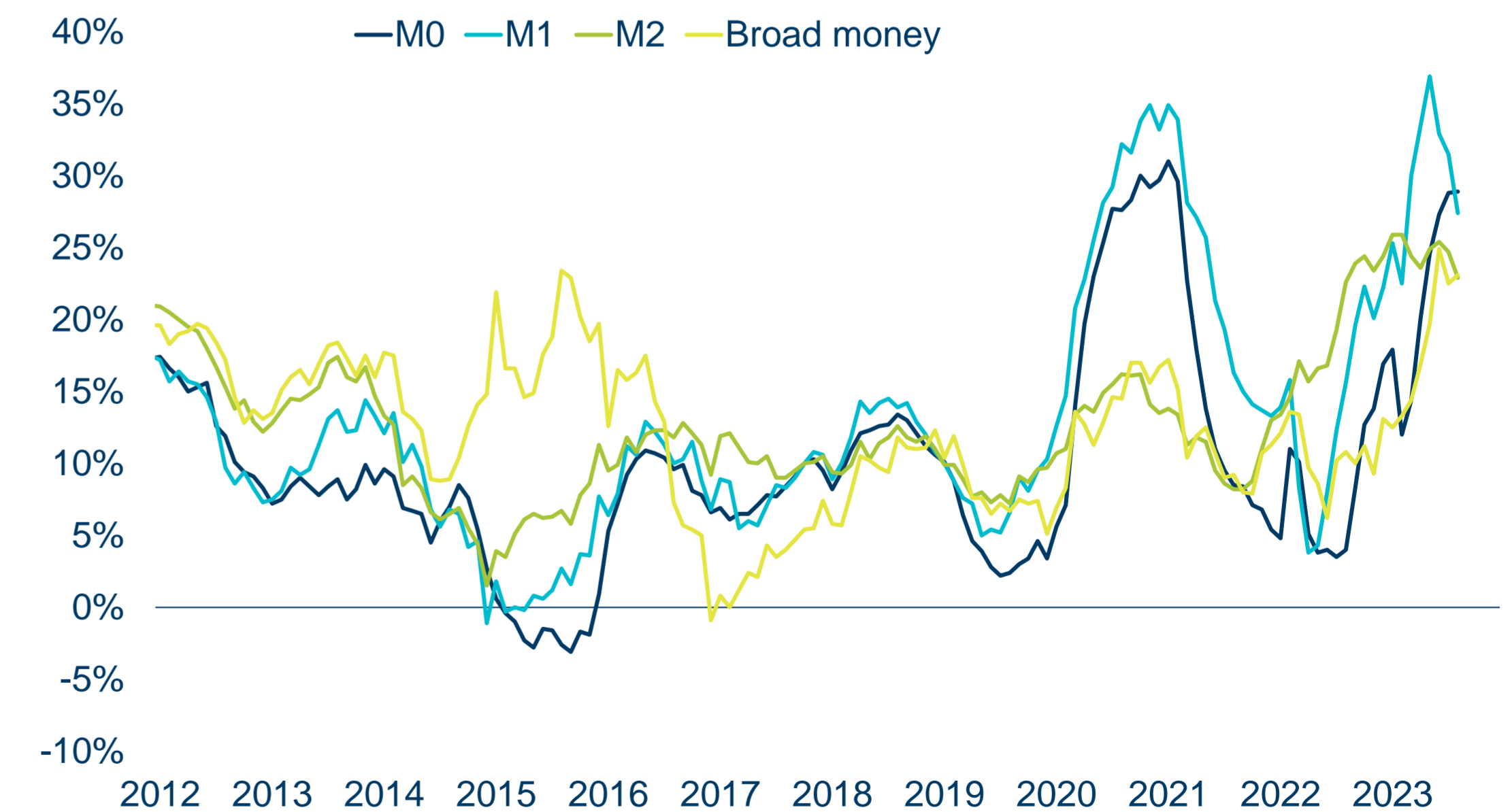
- Due to the provision of sufficient liquidity by the CBR, banks have been able to provide the private sector with credit.
- The CBR was able to simultaneously address monetary and financial stability in 2022 due to the supportive environment.
- With FX inflows down and the ruble under pressure, conflicts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

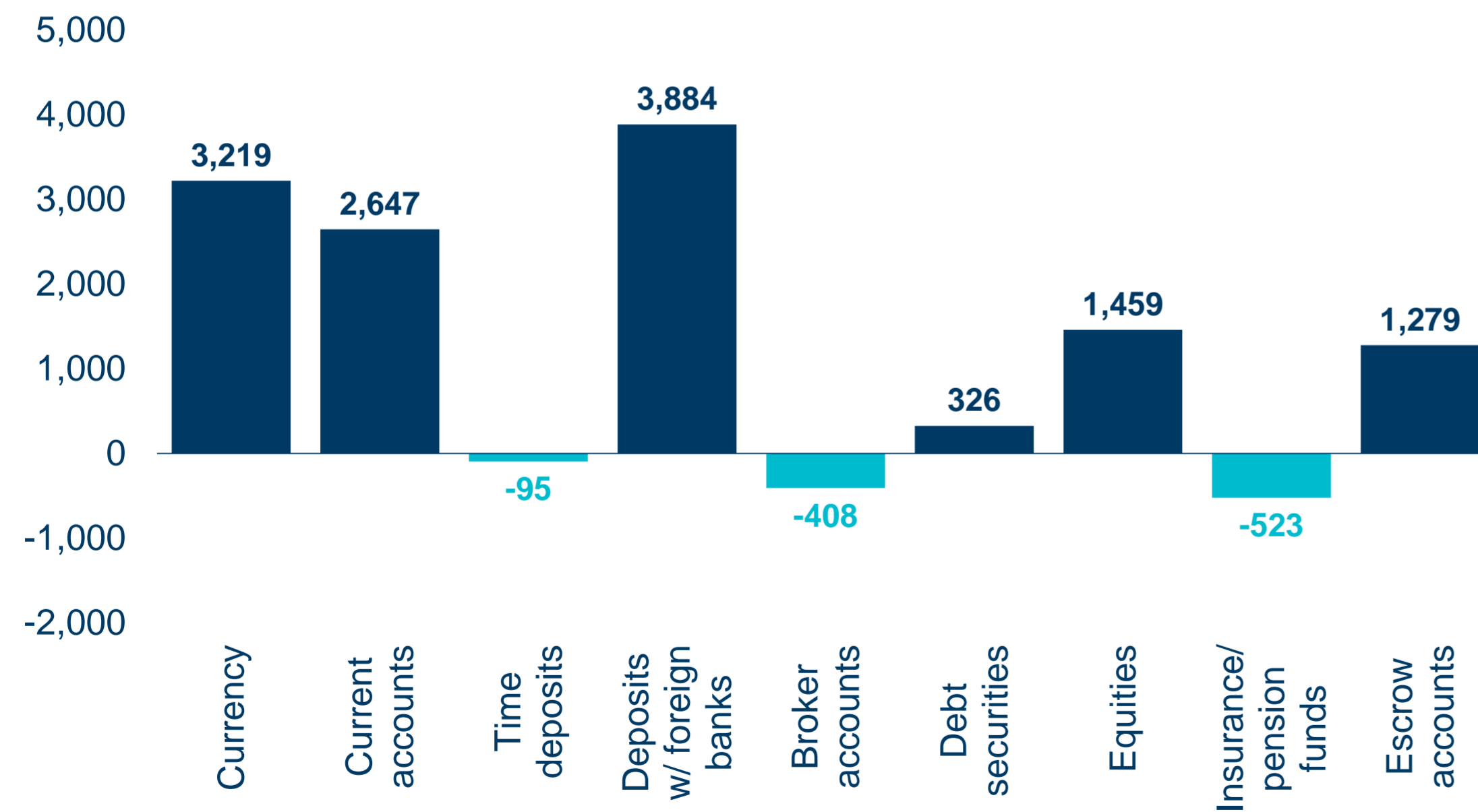


Source: Bank of Russia, KSE Institute

## Underlying financial vulnerabilities remain and could resurface quickly.

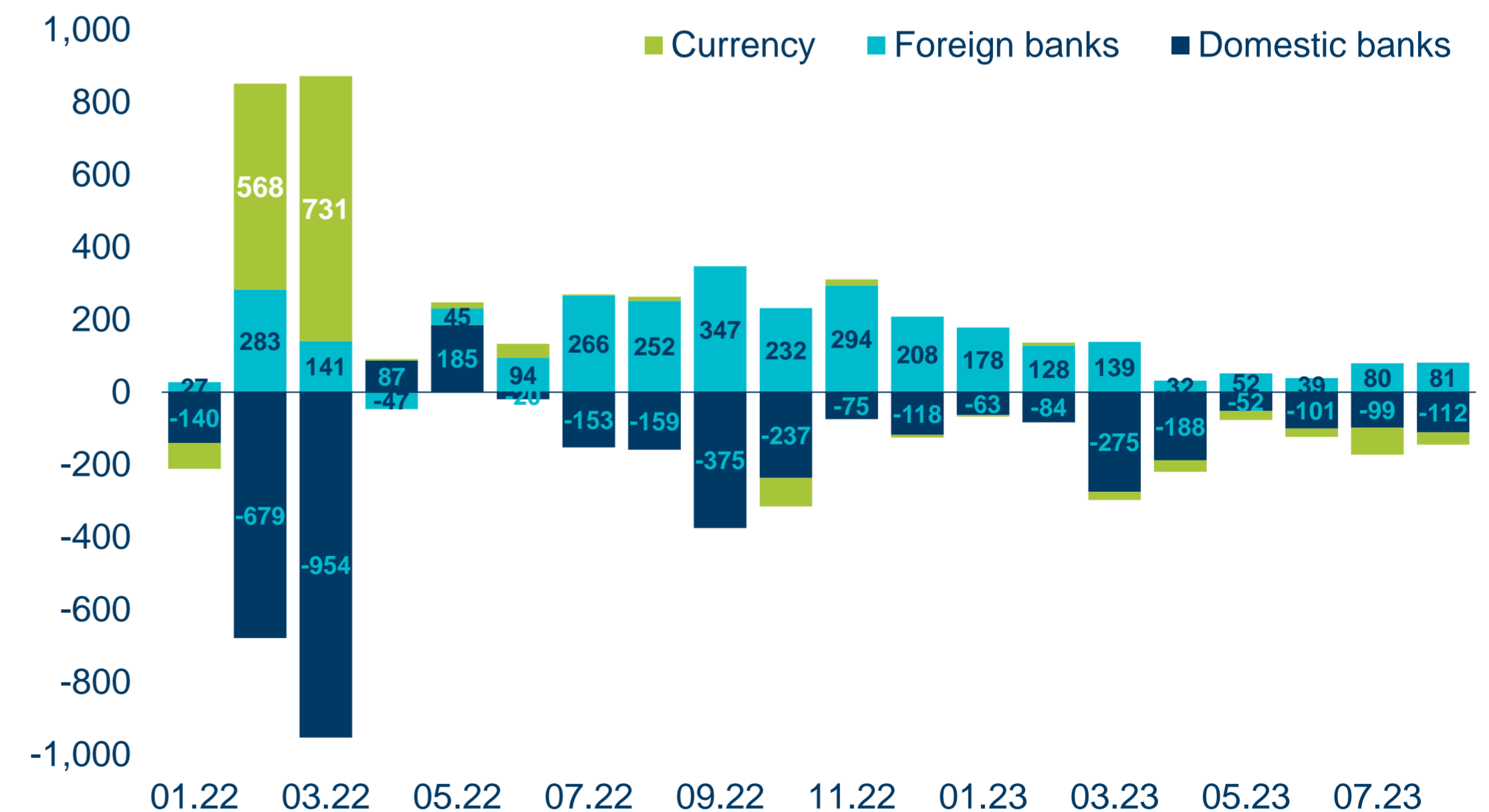
- While a systemic financial crisis was avoided, clear signs of vulnerabilities exist, including household asset movements.
- For instance, households moved funds from longer-term investments to cash holdings, current accounts, and foreign banks.
- As in previous crises, foreign currency was pulled from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



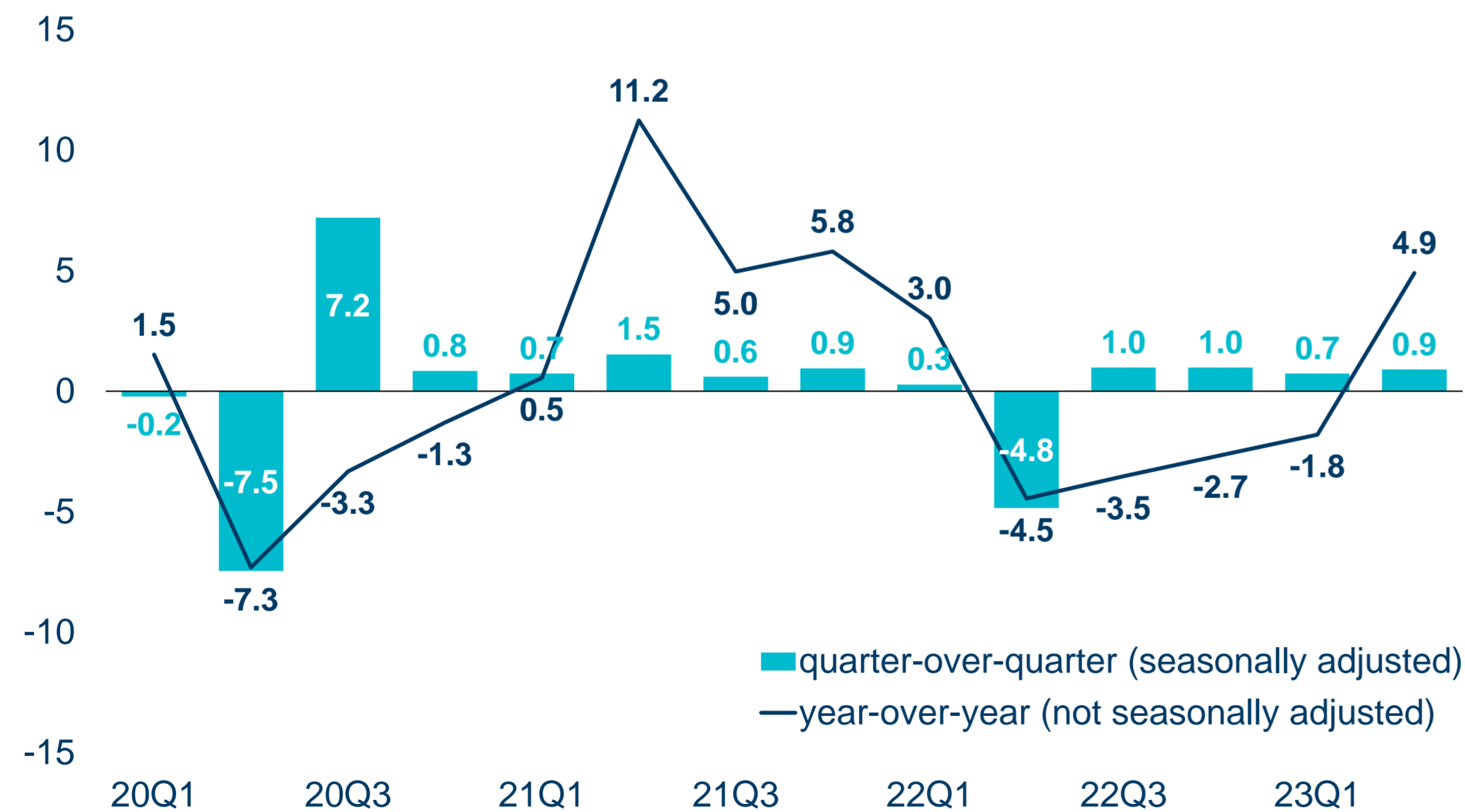
Source: Bank of Russia, KSE Institute

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

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

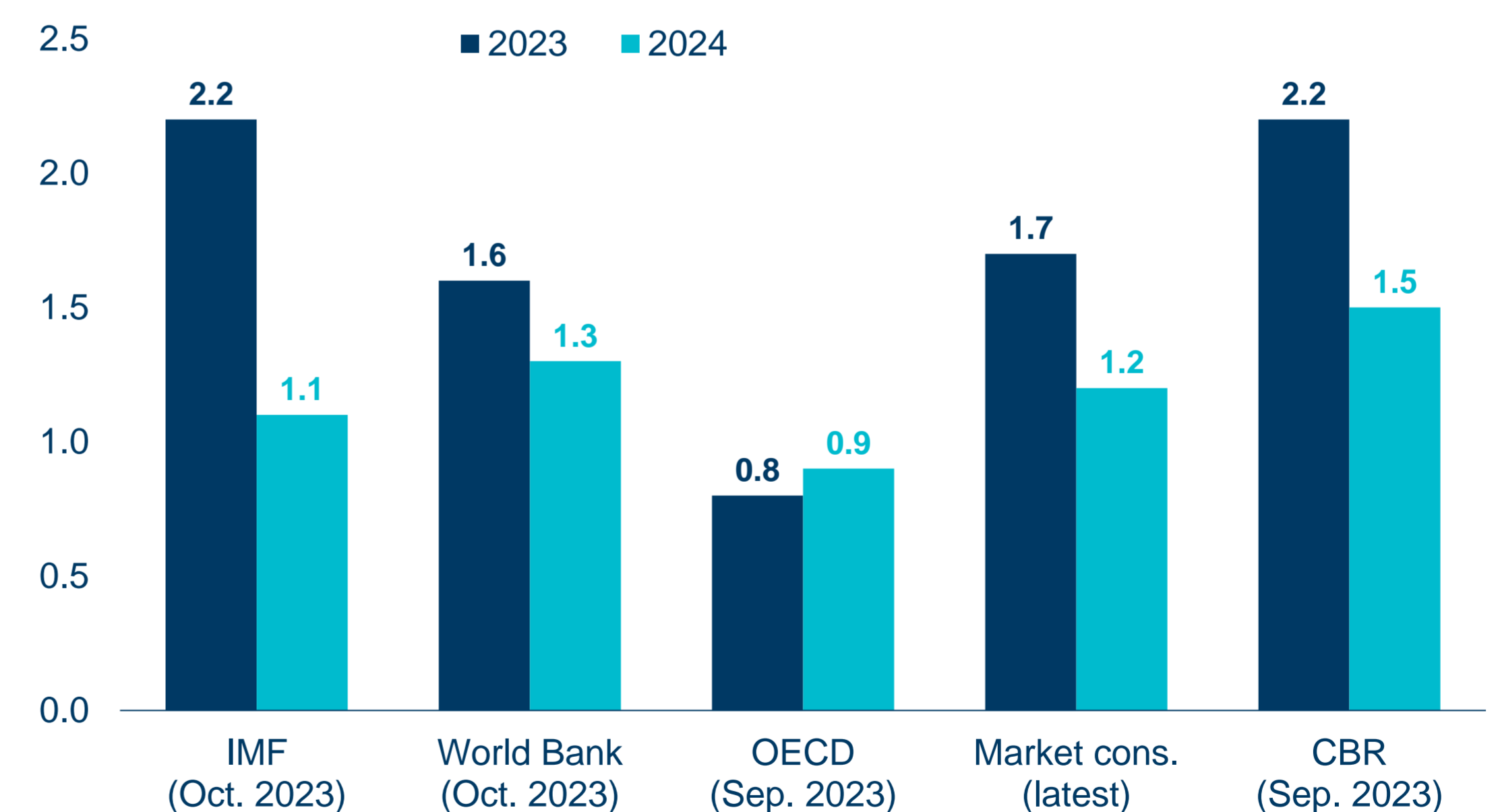
- Rosstat reported an ongoing recovery in H1 2023, resulting in 4.9% year-over-year growth in Q2 due to base effects.
- For the full year, the economy is expected to growth at 1.6-2.2% with most forecasts revised upward in recent months.
- Key factors for the recovery: robust private sector credit growth 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\*



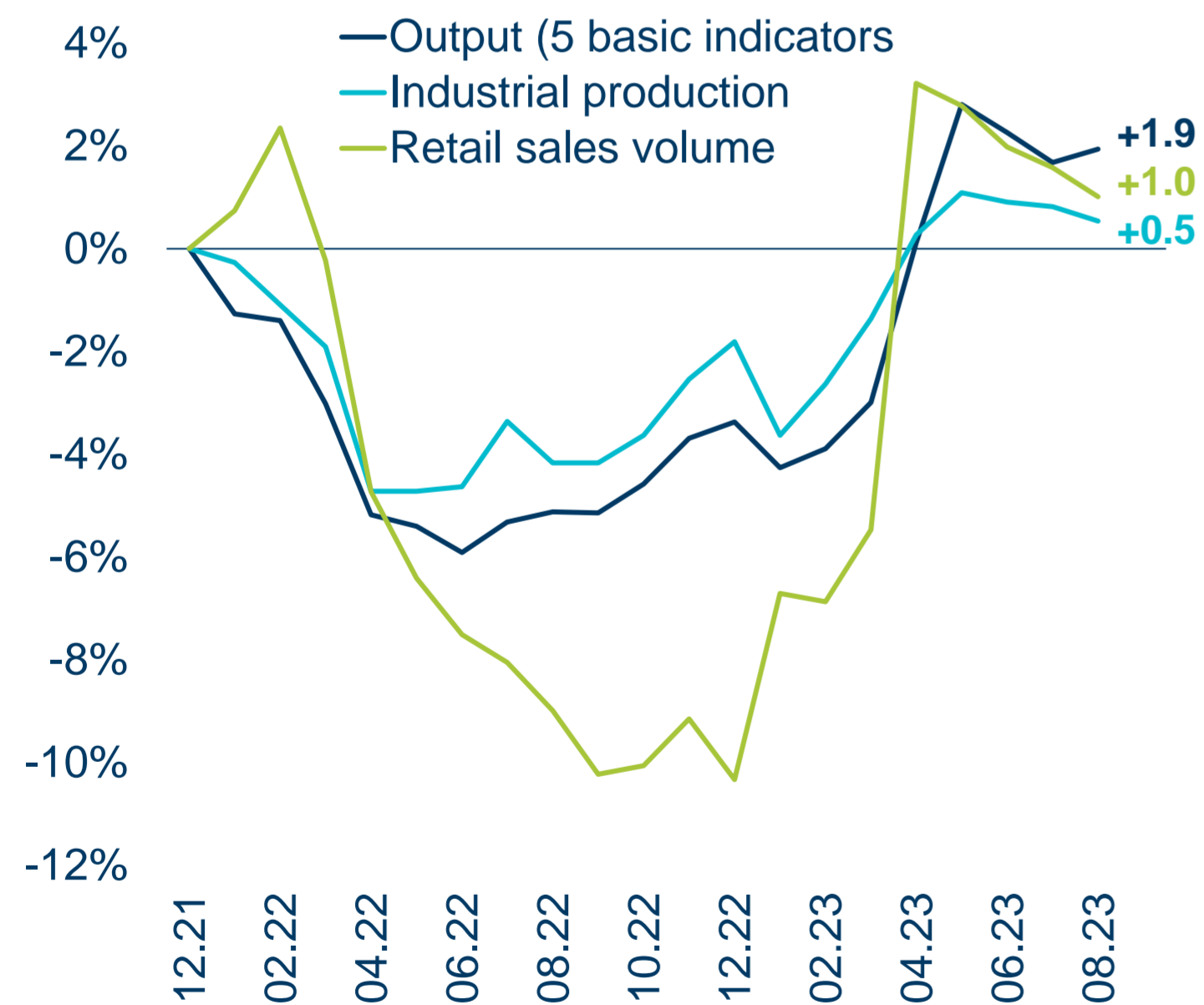
Source: Bank of Russia, Bloomberg, IMF, OECD, World Bank



## Broad range of indicators provides a consistent picture.

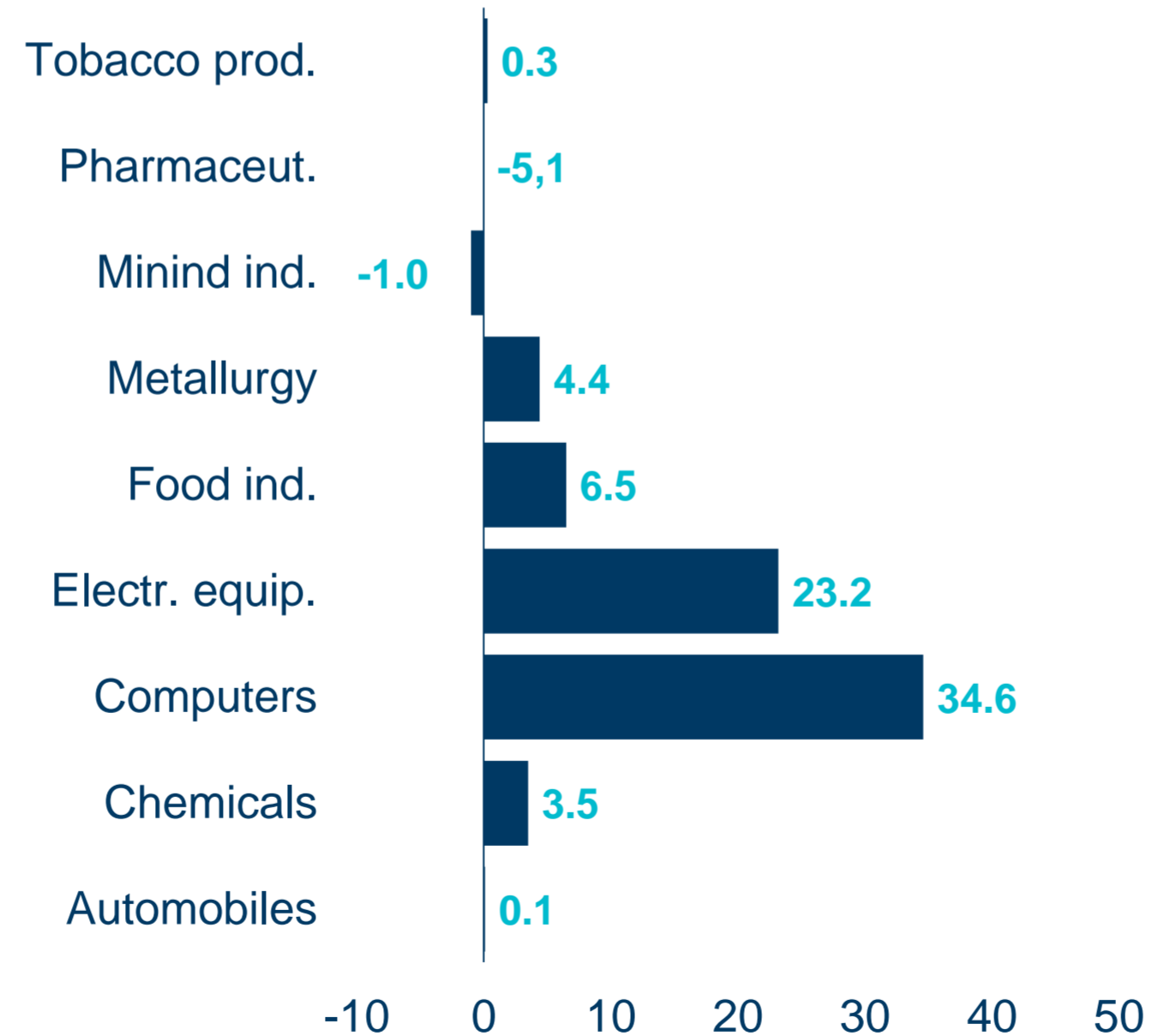
- Questions about the reliability of Russian GDP data are legitimate and pose challenges for any forecasting exercise.
- But a variety of indicators provide the consistent picture of an economic recovery that has essentially been completed.
- This is true for activity measures such as industrial production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

Activity indicators vs. December 2021, in %



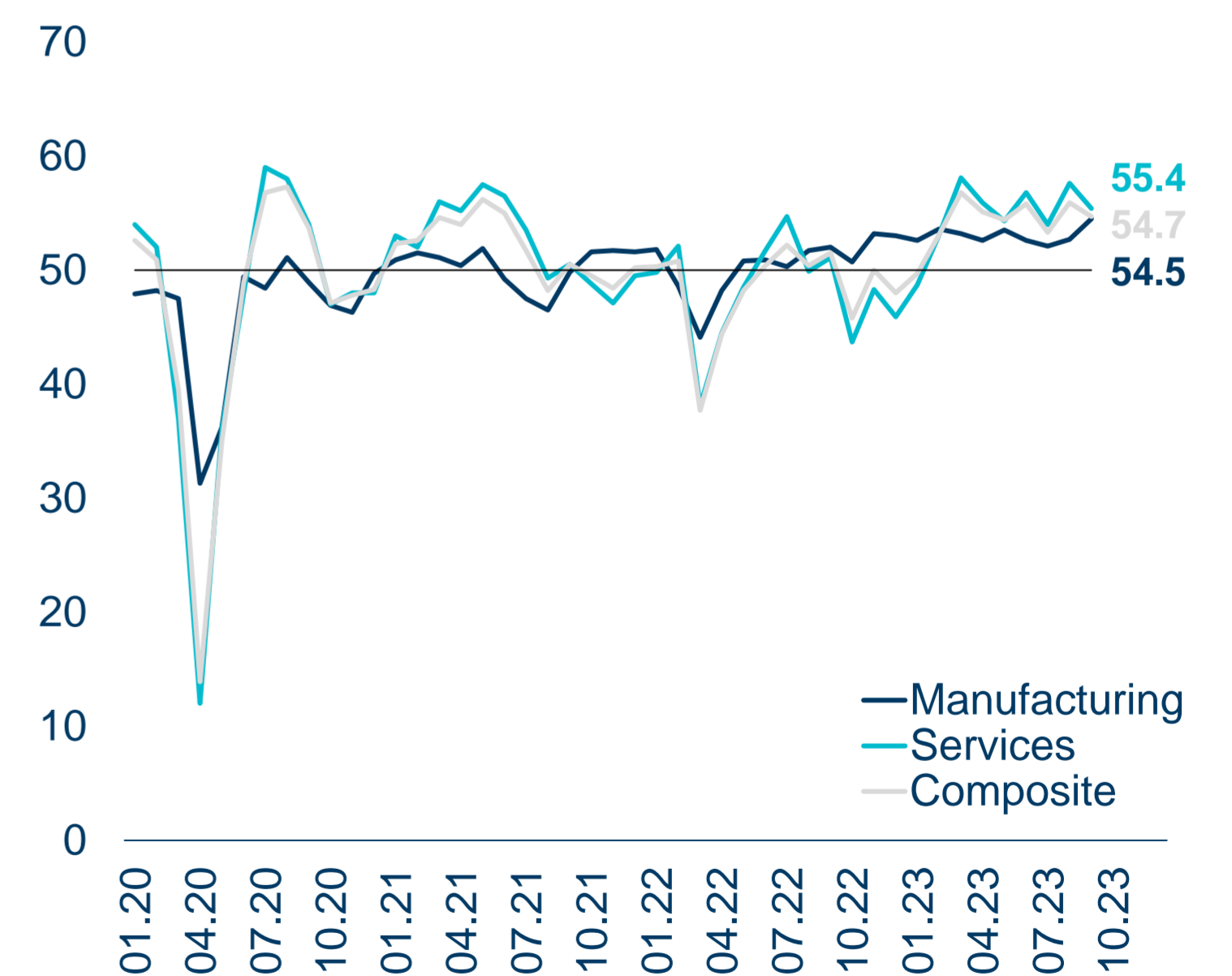
Source: Rosstat, KSE Institute

Sectoral production, in % year-over-year\*



Source: Rosstat, KSE Institute \*for January-August 2023

PMIs, index (50+ = expansion)

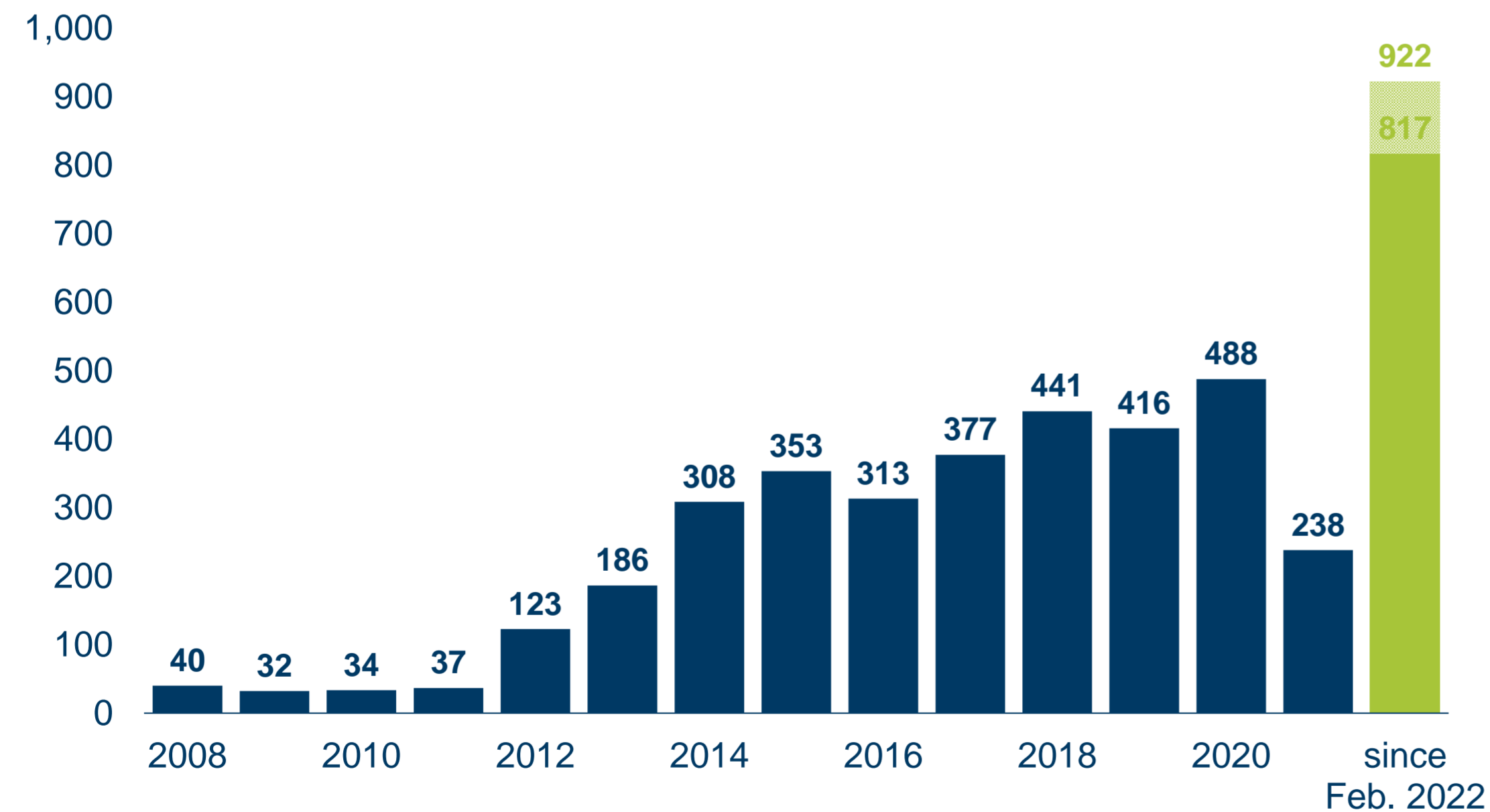


Source: S&P Global, KSE Institute

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

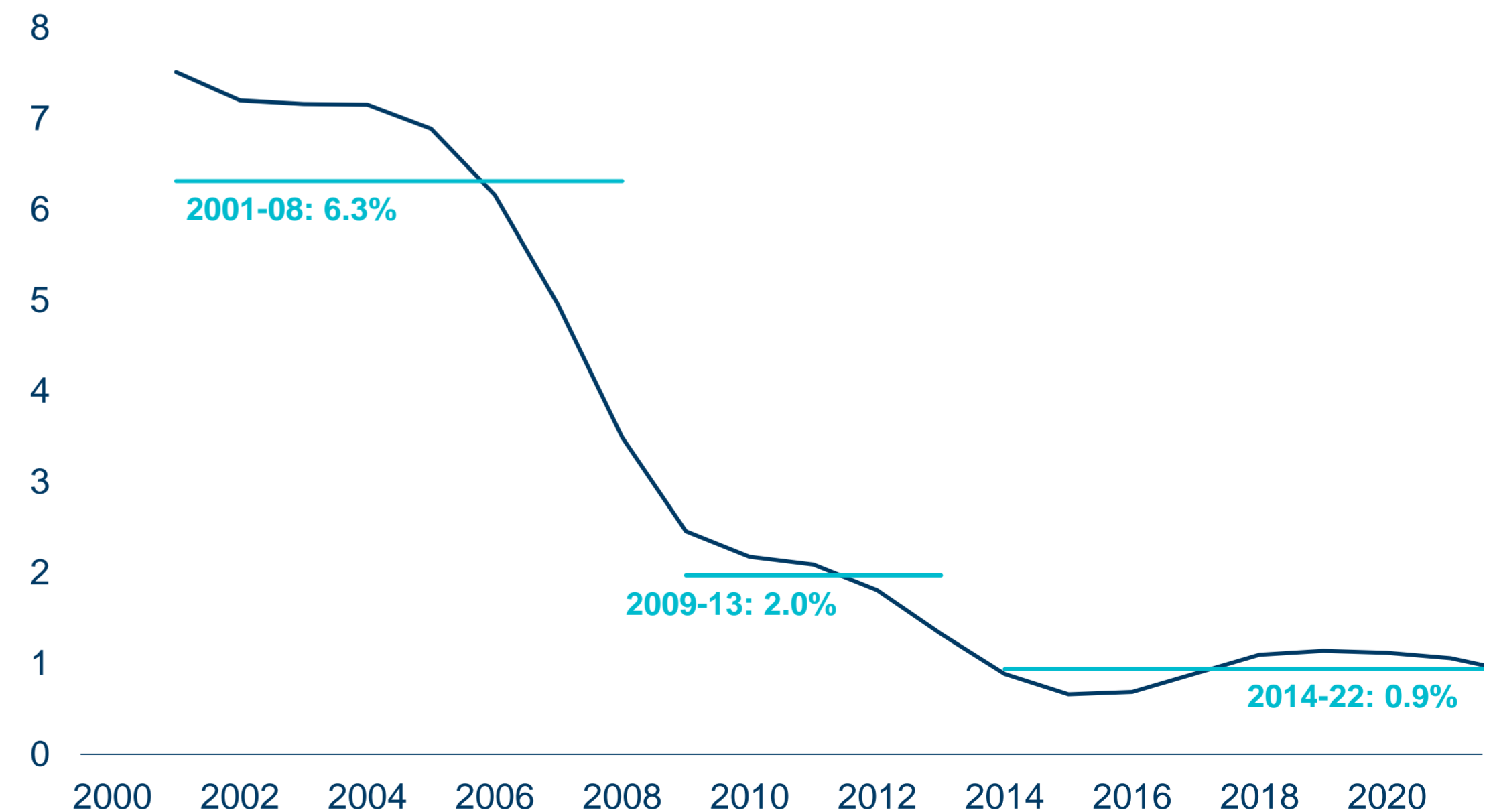
- Emigration is estimated to have picked up considerably since February 2022—to 817,000-922,000.
- Thus, an economy with previously abysmal potential growth is facing a significant shortage of (skilled) labor.
- Furthermore, once fiscal stimulus is withdrawn, the economy’s fundamental weaknesses will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

## Previous editions of KSE's Russia chartbook

- [September 2023](#)
- [July 2023](#)
- [May 2023](#)
- [April 2023](#)
- [March 2023](#)
- [February 2023](#)
- [December 2022](#)