



Bank of Russia



FEBRUARY 2023

MONETARY POLICY REPORT

20 February 2023

The data cut-off date for forecast calculations is 9 February 2023.
If any statistics or other important data are released after the cut-off date, they may be included in the report.

The [electronic version](#) of the information and analytical review is available on the Bank of Russia website in the section Bank of Russia Publications / Monetary Policy Report.

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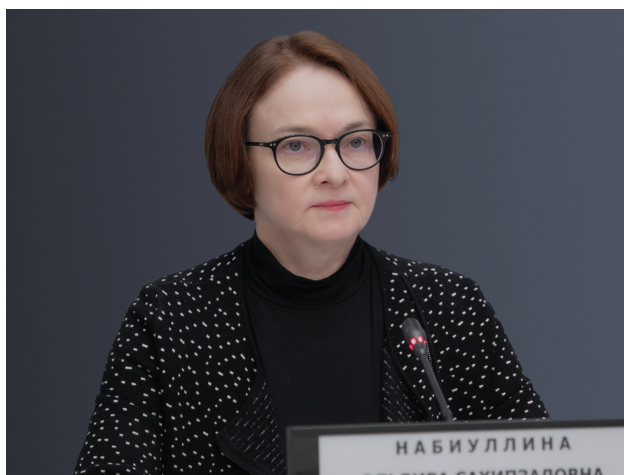
CONTENTS

STATEMENT BY BANK OF RUSSIA GOVERNOR ELVIRA NABIULLINA	1
BANK OF RUSSIA'S MEDIUM-TERM FORECAST	5
Key assumptions	6
Main factors for adjusting the forecast.....	7
EXTERNAL ENVIRONMENT	8
Inflation started to slow down globally	8
Central banks are tightening their monetary policies further	9
Global economic growth is better than expected.....	10
Financial conditions eased worldwide.....	12
Global economic growth will slow down due to monetary policy	13
Energy commodities became cheaper, whereas prices for other commodities changed diversely.....	14
Exports contracted, while imports continued to bounce back.....	15
Ruble weakened in December–January	16
Current account surplus will decrease	16
Box 1. Russian crude prices	18
RUSSIA'S ECONOMY.....	19
Yields on long-term OFZ bonds were up	19
Inflow of funds into household deposits continued	21
Monetary conditions stay neutral overall	21
Lending growth forecast remained unchanged	22
Box 2. Broad money M2X.....	23
Economic activity trends in 2022 surpassed expectations.....	26
Consumer demand was subdued	27
Investment activity remained high.....	28
Budgetary expenditures were raised and advanced	29
Unemployment is close to its record low.....	29
GDP forecast for 2023 was improved	30
Current price growth sped up	32
Inflation expectations remained elevated	33
Inflation will stabilise close to 4% in 2024.....	34
Box 3. Specifics of changes in households' inflation expectations in 2022	36
Box 4. Analysts' consensus forecasts.....	40

MAIN RISKS FOR THE BASELINE SCENARIO	42
ANNEX	43
System of monetary policy instruments and other monetary policy measures	43
LIST OF PUBLICATIONS	47
CALENDAR OF KEY RATE DECISIONS FOR 2023.....	48
REQUIRED RESERVES AVERAGING PERIODS IN 2023.....	49
STATISTICAL TABLES.....	50
GLOSSARY	56
ABBREVIATIONS.....	59

STATEMENT BY BANK OF RUSSIA GOVERNOR ELVIRA NABIULLINA

IN FOLLOW-UP TO BOARD OF DIRECTORS MEETING ON 10 FEBRUARY 2023



Good afternoon,

Today, we have made the [decision](#) to keep the key rate at 7.50% per annum.

The situation has significantly changed recently. On the one hand, foreign trade conditions have worsened notably as Russian crude prices went down. On the other hand, the situation in the economy is developing better than expected in the October forecast. The structure of demand continues to alter: consumption remains subdued, the growth

of private investment is slowing down, whereas budget expenditures are increasing. Besides, proinflationary risks have risen overall. In view of this, the key rate is more likely to be raised rather than cut this year. The rationale for changing the key rate will depend on future developments.

I would now dwell on the reasons behind our today's decision.

Inflation trends remain moderate.

By the moment, we do not yet have complete statistics on inflation in January, but weekly data show that current price growth probably sped up in January, reaching the maximum rate since April 2022 (leaving out the periods of the indexation of administered tariffs). This acceleration is primarily associated with volatile components such as fruit and vegetables, but more steady components, for example, prices for services, are also contributing to it.

Overall, the growth of prices for steady components of inflation is still moderate, according to our estimates. This is largely explained by subdued consumer demand. Household spending for large purchases, namely real estate, cars, repairs, and foreign travel, has declined amid changes in supply and high uncertainty. Some households prefer to save these funds instead as the propensity to save is now high. Nevertheless, there have been emerging signs of an improvement in consumer sentiment recently.

A revival in consumer activity may be driven by inflation expectations that remain elevated. Companies' price expectations also stay considerably above their multi-year averages. Inflation expectations included in interest rates on federal government bonds also exceed the inflation target.

Despite a gradual increase in current price growth rates, annual inflation will considerably drop in the next few months due to the base effect. As we have already said, annual inflation will very likely drop even below 4% in spring from today's 11.8%. However, this will

not reflect current inflation trends and will only be because the high rates, when prices peaked in March–April 2022, will be excluded from the calculation of annual inflation.

The structural transformation of the economy, the completion of the pass-through of businesses' higher costs to consumer prices, and the existing external trade restrictions will still affect price growth this year. Our monetary policy takes this into account. It is aimed at stabilising inflation close to the target of 4% in 2024 considering the extent of the impact of these factors on the economy.

Major structural shifts in the economy are still underway.

We have improved our GDP forecast for this year. This is associated with an upward revision of the assessments for previous periods, on the one hand, and with higher budget expenditures than assumed in our October forecast, on the other hand.

Structural changes in the economy cause a steady expansion of output in a number of sectors, while others are facing a decline in their output. The former include, among others, some manufacturing sectors and construction that are ramping up their output. Transportation infrastructure is quickly developing, with government investment becoming increasingly important in this industry. Contrastingly, investment projects in the private sector can be suspended or decreased because the required equipment is unavailable or companies are uncertain about future demand. The contribution of budget expenditures to aggregate demand dynamics is growing overall.

A major indicator of structural shifts in the economy is the labour market. Unemployment has declined to its record low. Staff shortages in agriculture and construction are becoming more acute. As to Russian regions, staff shortages are most serious in the Urals and Siberia due to the expansion of the industrial sector in these regions, as well as in the Far East where new logistics and trade infrastructure is being built.

Structural changes inevitably entail higher costs in many sectors. Detailed analytics on this topic are available in the February issue of the Regional Economy report prepared by the Bank of Russia's main branches. Nonetheless, the pressure put by higher costs on prices will be weakening gradually. Already now, we can observe some improvements in logistics, specifically in the transportation of imported goods from Far Eastern seaports to European Russia.

Summing up, it is possible to say that the economy is actively adjusting to the current developments. Our assessment of the GDP decline over 2022 is 2.5%. This year, GDP is forecast to change from minus one to plus one per cent.

Now, I would like to speak of external conditions.

Global recession risks have decreased. There are three factors that have improved sentiment in world markets. The first contributor is the reopening of the Chinese economy after the country lifted its coronavirus restrictions. The second driver is that central banks in advanced economies, which are striving to bring down their inflation rates, are now close to the peaks of their policy rates. The third factor is a reduction in energy commodity prices, first of all in Europe. All this has a favourable effect on developing market economies, including Russia's key trading partners. However, the positive influence of these developments on Russia will be restricted by the sanctions.

As compared to our previous forecast, we have revised the impact of the sanctions on Russian crude. The Russian oil sector was adjusting to the changes in December—

January by decreasing prices rather than output. Today, the Government has announced that, beginning from March, Russia will voluntarily reduce oil production by 500,000 barrels per day. We will monitor how this decision will be influencing oil price trends. Nevertheless, we have lowered our forecast for oil prices in 2023, as compared to October. As before, we publish the forecast Urals crude price in the table with the forecast. However, when preparing our macroeconomic forecast, we now take into account in greater detail that, after the enactment of the price caps, export prices for Russian oil significantly vary depending on its grades and shipping points. Accordingly, the actual average export price for Russian crude and its forecast might substantially differ from Urals benchmark prices. As to possible implications of the embargo on petroleum products, it was enacted just a few days ago, and its effects are still to be assessed.

We have revised our forecast of the balance of payments for this year. The forecast of exports has decreased, whereas that of imports, to the contrary, has been improved taking into account the trends of recent months. As a result, the forecast surplus of the current account for 2023 has been reduced to 66 billion US dollars. For the inflation forecast, this means a proinflationary shift caused by external conditions.

Monetary conditions have stayed neutral overall, although individual indicators have been changing diversely.

Since our December meeting, the yield curve of federal government bonds has shifted upwards by 10–55 basis points, and the slope of the curve has increased even more. Yields are still affected by elevated economic uncertainty coupled with substantial supply of government securities in the primary market.

The situation in the credit market has remained unchanged. The corporate loan portfolio continues to expand at a double-digit pace. This growth is partially associated with structural shifts, including the substitution of borrowings in Western markets that are now inaccessible.

The deposit market is stable. In our opinion, the accelerated growth of funds in individuals' accounts in December was caused by an increase in budget payments, rather than a further rise in the propensity to save.

At the end of last year, companies received considerable funds from the budget to their accounts. At the beginning of 2023, this trend continued. The flows of budgetary funds will affect aggregate demand regardless of how they are being used. Even when budgetary funds are used to finance investment projects or make government purchases, a considerable portion of them is ultimately paid as wages to employees working at these projects and production facilities. The pace at which the impact of these budgetary flows will translate into price movements will depend on how quickly they will move into consumption.

The annual expansion of money supply continued to speed up in December–January. This was primarily driven by higher government expenditures at the end of last year and the rescheduling of a part of payments under state orders for the beginning of 2023. This earlier budget spending intensifies the impact of fiscal policy on aggregate demand in the first half of the year. The resulting effect on inflation will depend on changes in other components of aggregate demand. However, all else being equal, maintaining the same inflation path amid higher demand from the government, a greater contribution of the budget to the expansion of money supply somewhat reduces room for growth in credit to the economy.

I will now speak of the risks that might cause a deviation of inflation from the baseline forecast. According to our estimate, the balance of risks has shifted towards proinflationary ones even more.

In addition to the more significant impact of fiscal policy, which I have already mentioned, I should speak of three risks. First of all, this is a fast rise in consumption amid elevated inflation expectations, which is possible if the factors constraining consumer activity weaken. The second risk is increasing staff shortages and a slower growth rate of labour productivity as compared to that of wages. And finally, there is still a serious risk of a further tightening of the sanctions.

Winding up, I would like to comment on our future decisions.

Despite the strengthening of proinflationary factors mentioned above, our forecast of inflation for this year remains at 5–7%. I would like to note that, for this, we might need a higher path of the key rate than assumed in October. In our updated forecast for this year and the next year, the ranges of the average key rate have been revised upwards by a half of a percentage point – to 7.0–9.0% per annum for this year and 6.5–7.5% per annum for the next year. This does not mean that the key rate cannot be cut this year, but this probability and the extent of this decrease have become lower. In contrast, there is now a higher probability that we might need to raise the key rate somewhat in order to bring inflation close to 4% in 2024.

Thank you for attention.

Bank of Russia Governor

Elvira Nabiullina

BANK OF RUSSIA'S MEDIUM-TERM FORECAST

IN THE FOLLOW-UP TO THE BOARD OF DIRECTORS POLICY MEETING ON
10 FEBRUARY 2023

KEY FORECAST PARAMETERS OF THE BANK OF RUSSIA'S BASELINE SCENARIO
(growth, % YoY, unless indicated otherwise)

Table 1

	2022 (actual / estimate)	2023	2024	2025
Inflation, % in December YoY	11.9	5.0–7.0	4.0	4.0
Inflation, yearly average, % YoY	14.5	4.0–5.3	4.5–5.3	4.0
Key rate, yearly average, % per annum	10.6	7.0–9.0 ¹	6.5–7.5	5.0–6.0
Gross domestic product	-2.5	(-1.0)–(+1.0)	0.5–2.5	1.5–2.5
– % change in Q4 YoY	-4.6	(-1.0)–(+1.0)	0.5–2.5	1.5–2.5
Final consumption expenditure	-1.3	0.5–2.5	0.0–2.0	1.5–2.5
– households	-1.8	0.0–2.0	0.0–2.0	1.5–2.5
Gross capital formation	-5.2	0.5–3.5	(-4.0)–(-1.0)	2.0–4.0
– gross fixed capital formation	5.5	(-4.5)–(-1.5)	(-2.0)–(+1.0)	1.0–3.0
Exports	-15.1	(-2.5)–(+0.5)	2.5–5.5	1.0–3.0
Imports	-17.7	12.5–15.5	(-3.0)–0.0	1.0–3.0
Money supply (national definition)	24.4	13–17	9–14	6–11
Banking system's claims on the economy in rubles and foreign currency ²	12.0	9–13	9–14	8–13
– on organisations	13.2	8–12	8–13	8–13
– on households, including housing mortgage loans	9.4	10–14	9–14	8–13
	17.6	12–16	10–15	10–15

¹ Given that from 1 January through 12 February 2023 the average key rate is 7.5%, the average key rate from 13 February through 31 December 2023 is forecast in the range of 6.9–9.2%. Additional information on the format of the key rate forecast is available in the [methodological note](#).

² The banking system's claims on the economy mean all claims of the banking system on non-financial and financial institutions and households in Russian rubles, foreign currency, and precious metals, which include loans issued (including overdue loans), overdue interest on loans, credit institutions' investment in debt and equity securities and promissory notes, as well as other forms of equity interest in non-financial and financial institutions, and other receivables under settlement operations with non-financial and financial institutions and households. The growth rate of claims is adjusted for foreign currency revaluation. For the purpose of the adjustment for foreign currency revaluation, the growth of claims in foreign currencies and precious metals is recalculated into rubles at the period average RUB/USD exchange rate. Housing mortgage loans, net of claims on such loans acquired by banks.

Source: Bank of Russia.

RUSSIA'S BALANCE OF PAYMENTS INDICATORS UNDER THE BASELINE SCENARIO¹
(billions of US dollars, unless indicated otherwise)

Table 2

	2022 (actual / estimate)	2023	2024	2025
Current account	227	66	48	41
Goods and services	282	123	106	100
Exports	628	507	492	493
Imports	346	384	386	393
Balance of primary and secondary income	-55	-57	-58	-59
Current and capital account balance	229	66	48	41
Financial account including reserve assets	223	66	48	41
Net errors and omissions	-6	0	0	0
Balance of the private sector's financial transactions	217	68	57	44
Urals crude price, yearly average, USD/barrel	76	55	55	55

¹ On the basis of the methodology set out in the 6th edition of the Balance of Payments and International Investment Position Manual (BPM6). In the financial account, '+' denotes net lending and '-' denotes net borrowing. Final values may differ from the total of the respective values due to rounding.

Source: Bank of Russia.

KEY ASSUMPTIONS

The Bank of Russia's forecast is based on a number of assumptions, and changes in them might have a considerable influence on the path of the Russian economy.

- **World economy.** The situation in the world economy at the end of 2022 turned out to be better than expected. The risk of a global recession in 2023–2024 is abating as China lifts its quarantine restrictions, although trends in major economies can remain diverse. Inflation pressures start to moderate, and foreign central banks will be able to return to their inflation targets closer to 2024. Advanced economies will be tightening their monetary policies, with policy rates increasing further and inflation decelerating. Global financial stability risks have subsided.
- **Geopolitical conditions.** The baseline scenario does not assume any significant changes in geopolitical conditions throughout the forecast horizon. The enacted external restrictions on Russian exports, imports, investment, and technology cooperation will stay in effect over the medium-term horizon.
- **Export prices.** Russian exported goods are still sold in the global market with discounts. Moreover, the discount on crude oil expanded in December 2022–January 2023 because of the EU's embargo and price cap. According to the baseline scenario, the crude oil discount will decrease moderately and the discounts on most other goods will remain at the current level until the end of the forecast horizon. The long-term price for Urals is expected to equal \$55 per barrel. However, the average export price for Russian crude in the current conditions significantly differ from the Urals price. The Bank of Russia takes this fact into account in its forecast of the balance of payments.
- **Potential output.** The structural transformation of the economy is associated with a major supply shock and accompanying changes in potential output. In the course of the transformation of the economy, its growth will be slower than expected before, but might speed up further on owing to new production interrelations to be formed in the economy, enhancement of workers' skills, higher efficiency of the use of available capital, and the commissioning of new production facilities.
- **Fiscal policy.** The fiscal assumptions in the baseline scenario rely on the Guidelines for Fiscal, Tax, and Customs and Tariff Policy for 2023–2025 (hereinafter, the Fiscal Policy Guidelines for 2023–2025) and on additional expenditures at the end of 2022 (which totalled ₺31.1 trillion, with the target under the Fiscal Policy Guidelines for 2023–2025 amounting to ₺29.0 trillion).
- **Neutral rate of interest.** The assessment of the level of the longer-run neutral key rate during the structural transformation of the economy is associated with elevated uncertainty. There are factors that might both increase and decrease this level. The Bank of Russia will assess the overall effect of these factors as it accumulates relevant information. Currently, the Bank of Russia relies on the previous estimate of the longer-run real neutral key rate equalling 1–2%. The nominal neutral rate of 5–6% corresponds to this value, with the target of inflation being close to 4%.

MAIN FACTORS FOR ADJUSTING THE FORECAST

The Bank of Russia published its previous baseline forecast after the meeting of its Board of Directors on 28 October 2022 and in [MPR 4/22](#). Since then, the Bank of Russia made the following adjustments.

The growth rate of global GDP was slightly raised to 2.8% (+0.1 pp) for 2023 owing to the cancellation of the restrictions in China, but reduced to 3.0–3.2% (-0.2 pp) for 2024–2025 due to tight monetary policies in advanced economies.

- Price pressures start weakening both across the entire range of products and services as a result of declining prices for energy commodities and across particular basic components. The world economy will be significantly affected by the lifting of the quarantine restrictions in China and the slowdown in advanced economies following the tightening of their monetary conditions.
- The central banks of advanced economies continued tightening their monetary policies in order to bring inflation back to the targets. In 2023, the largest advanced economies are expected to complete the cycle of increases in their policy rates and keep them at high levels further on. This will decelerate the growth of demand in 2023–2024 even more.

The forecast of the surplus of the current account for 2023 was cut to \$66 billion and that for 2024–2025 is expected to decrease further, although more gradually.

- Considering the actual movements in late 2022–early 2023, oil and gas prices will be lower in 2023–2024.
- Oil export quantities were increased over the entire forecast horizon as the prospects of redirecting supplies to alternative destinations improved.
- Imports will be higher over the entire forecast horizon considering the actual pace of the import recovery in 2022 H2.

The growth rate of Russia's GDP in 2023 was raised to (-1.0)–(+1.0)%. Output is expected to increase by 0.5–2.5% in 2024 and by 1.5–2.5% in 2025.

- GDP will be larger as a result of both its higher level accumulated by early 2021, taking into account its revision for 2020–2021, and more positive data for 2022 Q3–Q4.
- Consumer demand remained subdued in 2022 Q4, but started to demonstrate signs of its rebound in early 2023 amid more positive consumer sentiment.
- The private sector's investment activity is slowing down, whereas government investment is expanding.
- Budget expenditures were higher at the end of 2022, as compared to the figures given in the Fiscal Policy Guidelines for 2023–2025. These expenditures were partly made in advance, whereas the funds will actually be used and influence aggregate demand and output throughout 2023.

The inflation forecast for 2023 remained unchanged at 5.0–7.0%. Inflation will stabilise at its 4% target in 2024.

- In 2022 Q4, price growth was below the path forecast in MPR 4/22. According to statistics for January and early February, current price growth is accelerating.
- The weakening of the exchange rate since November may have an additional proinflationary impact due to the pass-through effect which is extended over time.
- Inflation expectations lowered slightly, while staying elevated.

As compared to MPR 4/22, the forecast of the average key rate for 2023–2024 was raised by 0.5 pp to 7.0–9.0% per annum and 6.5–7.5% per annum, respectively.

- To bring inflation back to its target of close to 4%, the Bank of Russia might need a higher path of the key rate than assumed in the October forecast.
- Considering that inflation is expected to stabilise near 4% in 2024, the forecast of the average key rate for 2025 corresponds to its neutral range of 5.0–6.0% per annum, just as in MPR 4/22.

EXTERNAL ENVIRONMENT

The situation in the world economy in late 2022–early 2023 turned out to be better than expected. The risk of a recession in the largest economies of the world abated. Inflation started to slow down. This became possible as a result of both declining prices for energy commodities and the substantial tightening of monetary policies by major central banks in 2022. In addition, central banks still note that price pressures are persistently elevated, which requires them to raise their policy rates further in 2023 and maintain tight monetary policies for a long period.

Tighter monetary policies in 2023–2024 will result in a slightly more modest expansion of the world economy in the medium term, as compared to that expected in MPR 4/22. Nevertheless, the lifting of the quarantine restrictions in China will support global growth in 2023.

Updating its forecast, the Bank of Russia revised global prices for energy commodities downwards due to weak demand from advanced economies and larger supply than assumed in MPR 4/22.

The decline in global prices for many commodities and the toughening of the restrictions on exports induced a reduction in the value of Russian exports in 2022 Q4. Contrastingly, the restoration of imports was faster than expected as a result of the refocusing on alternative suppliers and the launch of parallel imports. The surplus of the current account in 2022 Q4 was smaller than expected in MPR 4/22.

MAIN PARAMETERS OF EXTERNAL CONDITIONS OF THE BANK OF RUSSIA'S BASELINE FORECAST

Table 1

	2019	2020	2021	2022	2023	2024	2025
World GDP, % YoY	2.8	-3.1	6.1	3.4	2.8	3.0	3.2
GDP, US, % YoY	2.3	-2.8	5.9	2.1	0.7	0.6	1.8
GDP, euro area, % YoY	1.6	-6.3	5.3	3.3	0.3	0.6	1.0
GDP, China, % YoY	6.0	1.8	8.6	3.0	5.5	4.9	4.5
Inflation, USA,* % YoY	1.5	1.1	4.4	6.3	2.8	2.3	2.1
Inflation, euro area,** % YoY	1.2	0.1	2.9	8.7	4.4	2.1	1.9
US Fed funds rate,*** % as of the year-end	1.75	0.25	0.25	4.5	4.75	3.75	3.00
ECB rate,**** % as of the year-end	-0.5	-0.5	-0.5	2.0	3.15	2.5	2.0

* Core PCE, USA.

** Core HICP, euro area.

*** Fed Funds target rate, the upper bound of the range.

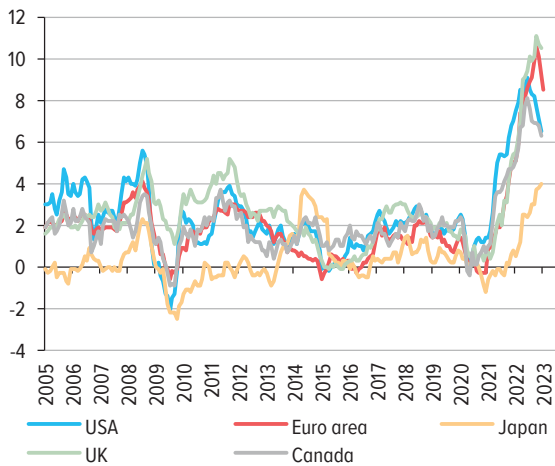
**** ECB deposit facility rate.

Sources: US Fed, ECB, IMF, Investing, Bank of Russia calculations.

INFLATION STARTED TO SLOW DOWN GLOBALLY

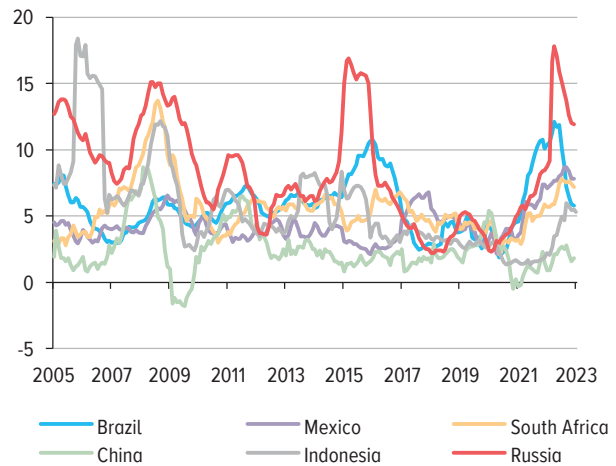
After peaking in 2022 Q4, inflation in many advanced economies began to decelerate (**Chart 1**). Many EMEs demonstrated similar trends (**Chart 2**). At the end of 2022, inflation was slowing down faster than forecast. An important reason behind this trend was the decline in global prices for energy commodities (**Chart 3**). Another meaningful factor was the complete removal of the bottlenecks in global logistics and production chains induced in 2020–2021 by anti-coronavirus restrictions. The Global Supply Chain Pressure Index returned to the level of early 2020. The World Container Index in 2022 Q4 came closer to its 2019 levels in nominal terms (**Chart 4**).

INFLATION IN ADVANCED ECONOMIES (% YoY) *Chart 1*



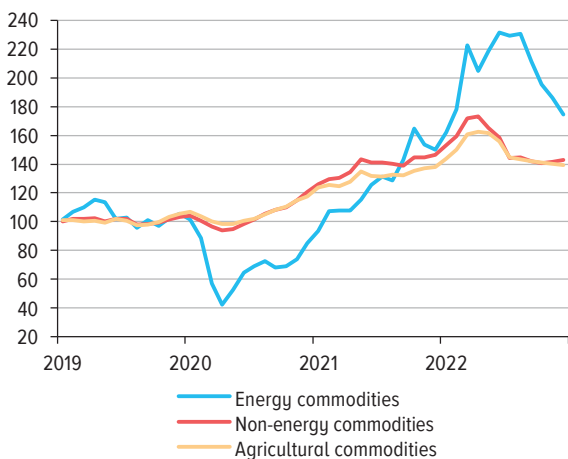
Source: Investing.

INFLATION IN EMES (% YoY) *Chart 2*



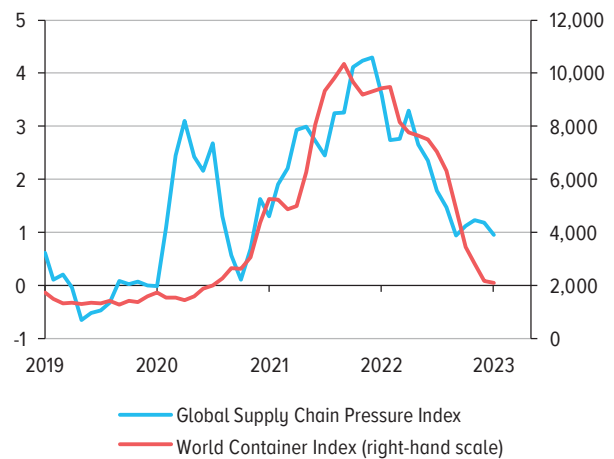
Source: Investing.

CHANGES IN NOMINAL COMMODITY INDICES, \$ (2010 = 100) *Chart 3*



Source: World Bank.

CHANGES IN LOGISTICS PERFORMANCE INDICES (p) *Chart 4*



Source: Investing.

CENTRAL BANKS ARE TIGHTENING THEIR MONETARY POLICIES FURTHER

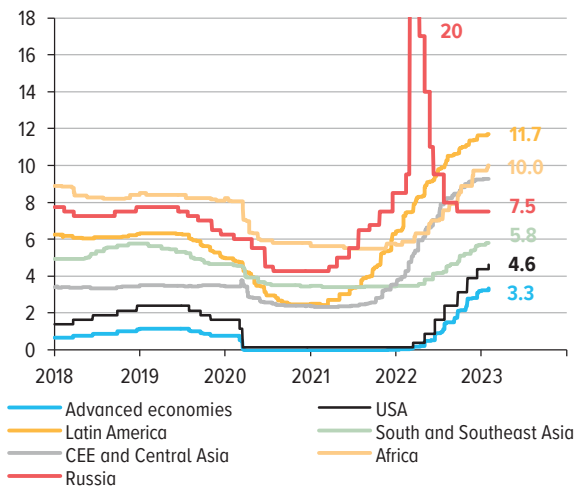
As inflation pressures are weakening in most regions, central banks in both advanced economies and EMEs continue the tightening more fractionally as compared to the expectations in October. Besides, the countries that started the tightening earlier than others announce the completion of that cycle or a pause in policy rate increases.¹ As a result, markets feel more confident that the cycle of monetary policy tightening globally will soon end.

Markets expect the regulators of the largest advanced economies (e.g., the US Fed and the Bank of England) to start monetary policy normalisation by the end of this year. However, the central banks themselves are still cautious in estimating how steady the current slowdown of inflation is and signal the need to maintain tight monetary policies over a long period. As inflation in EMEs remain high and proinflationary risks persist, markets expect the central banks to reduce their policy rates no earlier than next year.

¹ As to EMEs, these are the central banks of Brazil, Chile, Poland, Hungary, Kazakhstan and Indonesia, among others. As regards advanced economies, these are the central banks of South Korea and Canada.

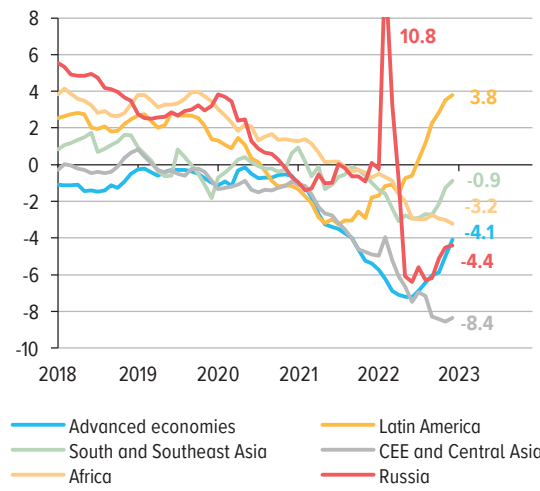
POLICY RATES
(% p.a.)

Chart 5



REAL INTEREST RATES
(% p.a.)

Chart 6



Note. The calculations are based on the averages of inflation and policy rates weighted by GDP within each group. Groups of countries: advanced economies – the USA, the euro area, Japan, the UK, Canada, Norway, Sweden, Australia, New Zealand, Israel, Iceland, South Korea, and the Czech Republic; Latin America – Mexico, Columbia, Peru, Brazil, Chile, the Dominican Republic, Jamaica, Costa Rica, Guatemala, Paraguay, and Uruguay; South and Southeast Asia – Thailand, Indonesia, India, the Philippines, and Sri Lanka; Central and Eastern Europe and Central Asia – Poland, Hungary, Romania, Serbia, Albania, Moldova, Kazakhstan, Armenia, Georgia; Africa – South Africa, the Republic of Seychelles, Ghana, and Uganda. Sources: Cbonds, World Bank, Bank of Russia calculations.

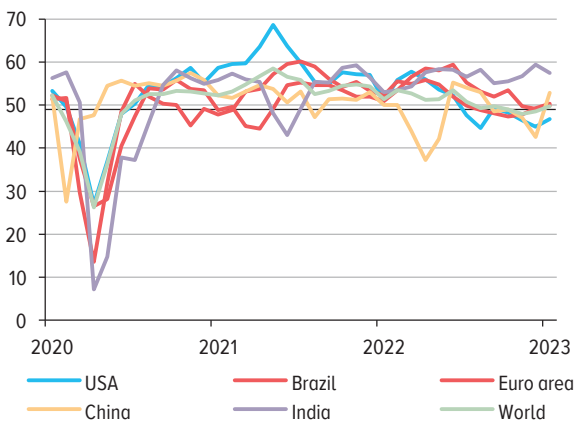
GLOBAL ECONOMIC GROWTH IS BETTER THAN EXPECTED

After declining below 50 points in 2022 Q3, the global business activity index PMI Composite started to bounce back, driven primarily by improved sentiment in the euro area (**Chart 7**). This also influenced the economic surprise index: the actual figures turned out to be better than expected by markets in 2022 H2. Data on EMEs at the end of 2022 also proved to be more positive as compared to expectations (**Chart 8**).

USA. After slowing in 2022 Q1–Q2, the annual GDP growth in the USA returned to positive territory in Q3–Q4, which was better than expected. Although the situation in the industries depending on interest rates (e.g., housing construction) worsened, this did not cause a considerable deceleration in the US economy in late 2022. This is also confirmed by data on the labour market. As a result of a significant increase in new jobs in January, the unemployment rate edged down to 3.4%, which is a

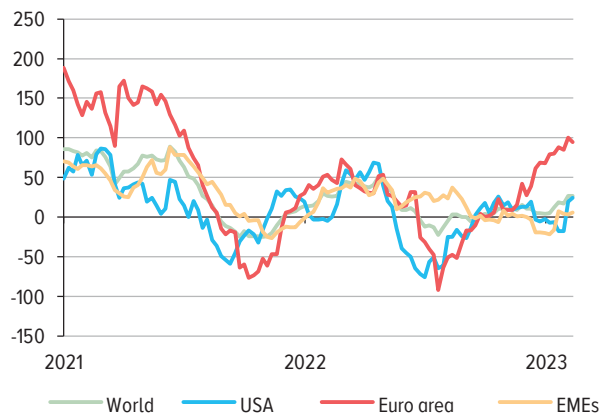
CHANGES IN PMI COMPOSITE
(p)

Chart 7



CHANGES IN THE ECONOMIC SURPRISE INDEX
(p)

Chart 8

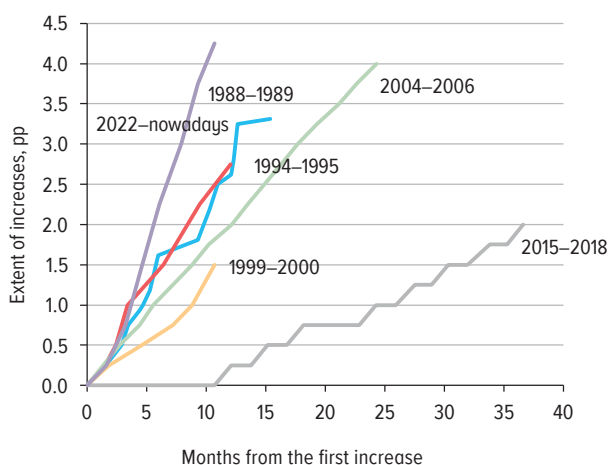


Source: IHS Markit.

Source: CitiFX.

COMPARISON OF US MONETARY POLICY
TIGHTENING CYCLES

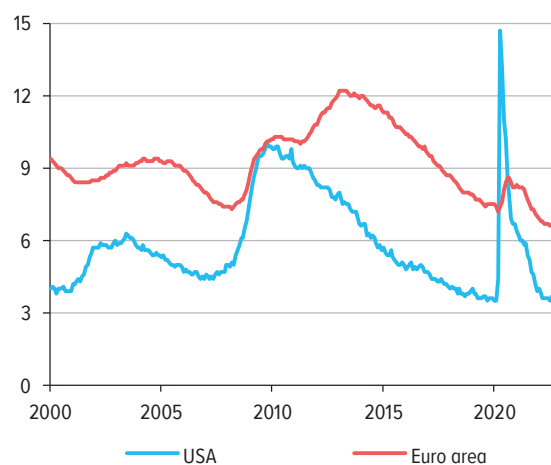
Chart 9



Source: US Fed.

UNEMPLOYMENT IN THE USA AND EURO AREA
(%)

Chart 10



Source: Investing.

record low over the previous 53 years (**Chart 10**). Moreover, the ratio of job vacancies to job seekers (1.89) remains at a high level which is comparable with its maximums of early 2022. Hence, the cycle of the rapid tightening of the US Fed's monetary policy (**Chart 9**) has not yet caused a notable slowdown of economic activity needed for a steady return of inflation to the targets. At its meeting on 1 February, the US Fed raised its federal funds rate by 25 bp to 4.50–4.75% signalling a possible further tightening of its monetary policy in 2023 H1.

Euro area. The data on both GDP and inflation for 2022 Q3 turned out to be better than expected. The economy was shored up by subsidies to moderate the effects of high prices for energy commodities. The preliminary estimates of the growth rates in the largest economies of the euro area over 2022 Q4 also surpass expectations. The PMI indices in 2022 Q4 evidenced a slower decline in business activity than in 2022 Q3, while the preliminary data on the euro area for January 2023 suggest an increase (>50 points). Mild weather was an additional factor behind the decline in prices for energy commodities, which supported demand and output. At its meeting on 2 February, the ECB raised its three key interest rates by 50 basis points. According to ECB representatives, they need to continue monetary policy tightening in 2023 to be able to bring inflation back to the target.

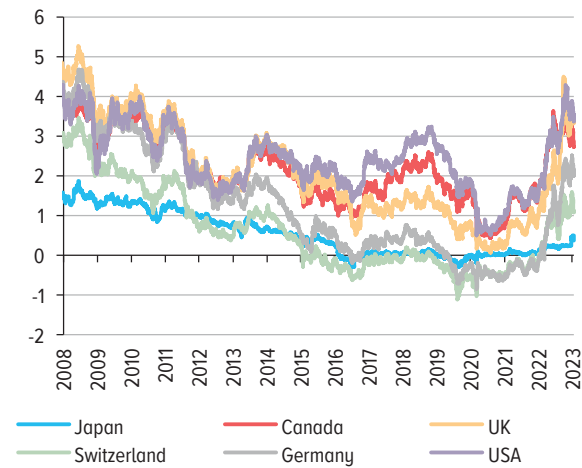
China. The tough quarantine restrictions introduced in early November were lifted by the end of 2022. Already in early 2023, China cancelled the remaining restrictions and reopened its borders for travel. Despite the minimum annual growth of GDP since the outbreak of the pandemic (3.0% YoY with the target growth rate of 5.5% YoY), 2022 Q4 turned out to be better than expected. The real estate sector still experiences difficulties due to the tightening of the restrictions imposed by the regulator in 2021–2022 and the need to restructure developers' problem debts accumulated over the period of the construction boom. By the end of the year, the Chinese authorities started changing their policy in this sector gradually and somewhat eased the restrictions on lending. According to PBC representatives, monetary authorities will support the economy amid the lifting of the quarantine restrictions.

FINANCIAL CONDITIONS EASED WORLDWIDE

International investors perceived the global inflation statistics for November–December positively. Inflation trends confirm that the main regulators of the world are able to rein in inflation by raising policy rates, and market participants believe that the risks of its acceleration are going down. As a result, the expected paths of the main central banks’ policy rates were revised downwards, which in turn slightly decreased yields on major advanced economies’ long-term bonds from the levels observed in October–November.

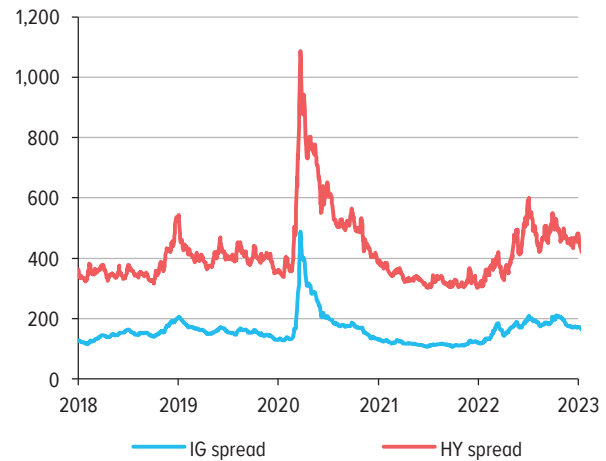
A shorter expected period of high policy rates improves the prospects of the world economy and inspires international investors to revise the cost of risk. At the beginning of the year, the cost of risk dropped to low levels relative to 2022 H2. This makes risky assets more attractive: the trend of the US dollar weakening continues (**Chart 14**), whereas stock indices are going up.

10-YEAR YIELDS ON ADVANCED ECONOMIES’ GOVERNMENT BONDS (%) *Chart 11*



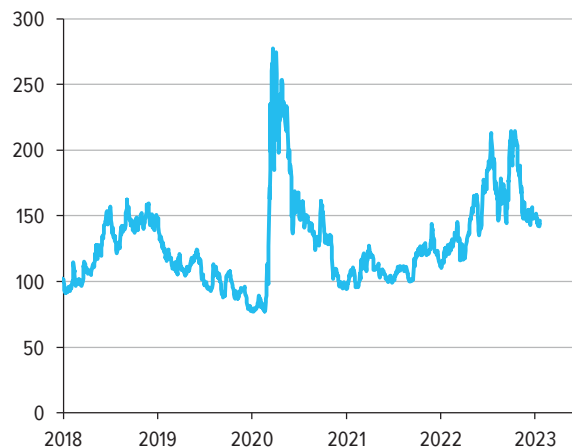
Source: Investing.

YIELD SPREADS IN SEGMENTS OF HY, IG ISSUERS IN THE USA (bp) *Chart 12*



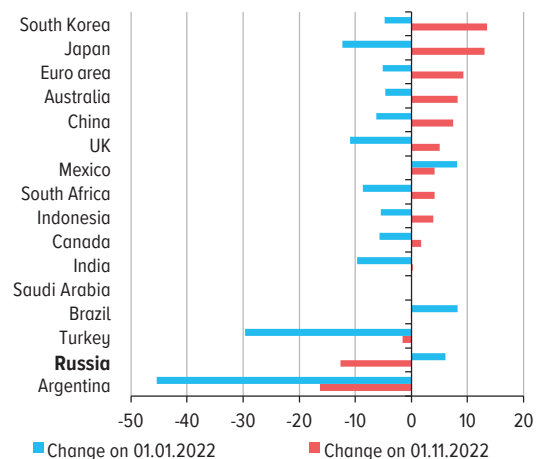
Sources: FRED Economic Data, Bank of Russia calculations.

CHANGES IN EMES’ CDS INDEX (bp) *Chart 13*



Sources: Cbonds, Bank of Russia calculations.

EXCHANGE RATES OF G20 CURRENCIES AGAINST THE US DOLLAR ('+' – APPRECIATION) (%) *Chart 14*



Sources: Cbonds, Bank of Russia calculations.

GLOBAL ECONOMIC GROWTH WILL SLOW DOWN DUE TO MONETARY POLICY

Considering the current trends in global economic activity, inflation dynamics, and monetary policy, the Bank of Russia updated its forecast for the main foreign economies. In 2023, the world economy might slow down to 2.8% from 3.4% in 2022.² As compared to MPR 4/22, the growth rate of the world economy for 2023 was raised a little amid the lifting of the quarantine restrictions in China. The growth rates of the world economy for 2024–2025 were slightly revised downwards due to tighter monetary policies than expected in MPR 4/22.

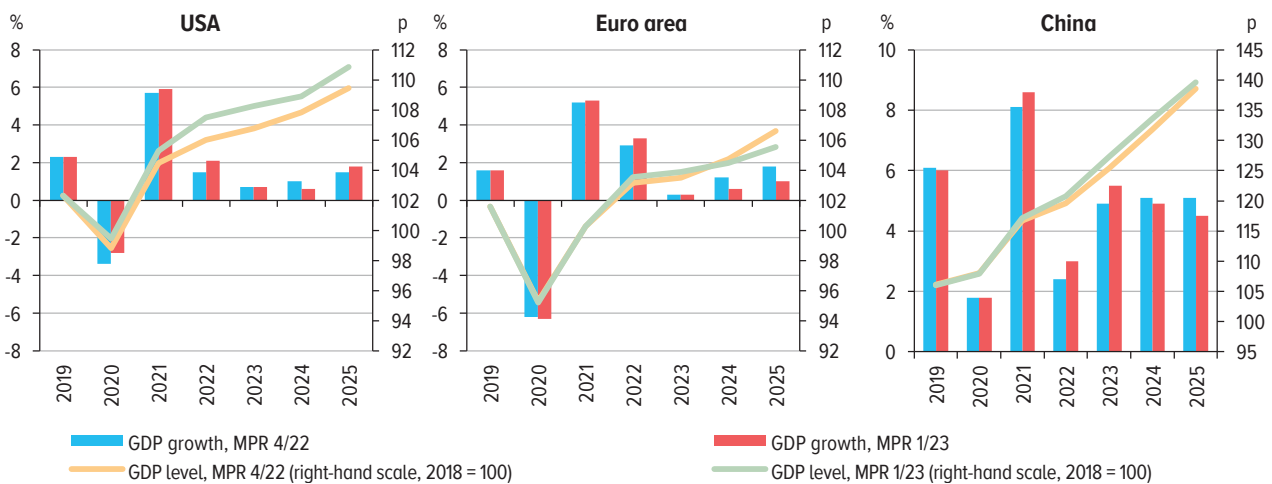
USA. GDP growth in 2023–2024 is expected to slow down to 0.6% and 0.7%, respectively, predominantly due to tighter monetary policy. Consumer activity is predicted to weaken amid a reduction in savings accumulated over the period of the pandemic and the base effect from the return to the consumption of services. Because of high interest rates, the housing construction sector will remain one of the most vulnerable ones. Lower demand and a high cost of borrowings will exert pressure on companies' investment activity. The US economy is assumed to reach the bottom of the economic cycle in 2023 and resume growth beginning from 2025 (1.8%).

Euro area. GDP growth in 2022 Q4 remained positive, even surpassing the expectations. As a result, the assessment for 2022 was revised upwards. The growth rates of the economy and inflation in 2023–2024 will still be affected by the situation with energy commodities (mostly, natural gas) and the restoration of global trade. A higher forecast path of the ECB interest rates will limit the economic recovery in the region in 2023–2024. The forecast of GDP growth for 2023–2024 was revised downwards to 0.3% and 0.6%, respectively. Beginning from 2025, economic growth is expected to speed up somewhat (up to 1.0%), driven by a recovery of global demand.

China. Recent statistics, coupled with the reopening of the economy in 2023 Q1 after the cancellation of the quarantine restrictions of 2022 Q4, made it possible to revise the assessment for 2022 upwards and expect higher growth rates (5.5%) in 2023, to be significantly driven by the recovery. In 2024–2025, economic activity will normalise gradually and GDP growth will return to its long-term trend.

FORECAST FOREIGN GDP GROWTH IN THE BANK OF RUSSIA'S BASELINE SCENARIO

Chart 15



Source: Bank of Russia calculations.

² The 2022 data are the estimate of the IMF as of January 2023.

ENERGY COMMODITIES BECAME CHEAPER, WHEREAS PRICES FOR OTHER COMMODITIES CHANGED DIVERSELY

Prices for energy commodities declined due to warm weather in Europe, as well as because the quantities of Russian crude and petroleum products supplied to the global market remained unchanged after the enactment of the embargo and the price cap on 5 December. Besides, price growth is limited by a gradual expansion of non-OPEC+ oil production. Prices for other commodities changed more moderately in recent months, showing diverse dynamics.

Oil. After a short rise to \$94 per barrel in October, the Brent crude price resumed its decline in November–December amid concerns about a slower increase in global oil consumption, dropping to \$91 and \$81 per barrel, respectively. In January, prices adjusted to \$84 per barrel, driven by more positive sentiment as a result of the easing of the anti-coronavirus restrictions in China.

Prices for Russian crude also predominantly declined in November–January. In November, December and January, the average indicative price for Urals CIF in Northwest Europe and the Mediterranean dropped to \$70, \$55 and \$54 per barrel, respectively, whereas the price for Urals FOB in the Primorsk seaport declined to \$62, \$45 and \$44 per barrel, respectively, as calculated by the Argus pricing agency. Concurrently, the price for ESPO crude in the East, which is most close to Brent crude, decreased to \$83 and \$75 per barrel in November–December, respectively, and then rose to \$80 per barrel in January. The EU's embargo and price cap exerted additional pressure on the Russian crude price making the spread between the Urals and Brent prices expand.

Natural gas. By the end of the year, the gas price in Europe plummeted due to relatively warm winter and a high level of gas volumes in European underground gas storages. In December, the price of Dutch TTF gas approximated \$1,390 per 1,000 cubic metres, which is 37% lower than in September. In January, the gas price continued to decline quickly, dropping to about \$700 during the last week of the month, which is, nevertheless, 15% above the 2021 average.

Thermal coal. Thermal coal prices in Europe were decreasing following gas prices. In 2022 Q3, the thermal coal price in Rotterdam averaged about \$360 per ton, whereas in 2022 Q4, it dropped to \$243 per ton, reaching \$169 per ton in January 2023.

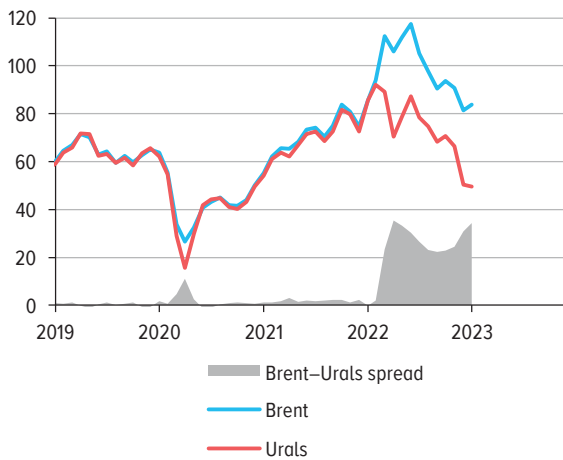
Non-ferrous metals. In 2022 Q4, prices for non-ferrous metals rose by up to 3% on average, as compared to the previous quarter. The price growth in December–January was driven by improved expectations about demand from China after it abandoned its zero-COVID policy.

Ferrous metals and coking coal. Driven by higher demand from China, iron ore prices began to go up in December–January after the adjustment in October–November, adding 20% over December and another 9% over January to surpass the 2022 Q3 average by 22%. Steel prices in the Black Sea region also rose in December–January by 5% and 14%, respectively, exceeding the 2022 Q3 average by 10%. The coking coal price in China adjusted by 15% in December, after reaching its maximum since June at the end of November, and then resumed growth in January, adding 4% to surpass the 2022 Q3 average by 7%.

Agricultural commodities. After surging in spring, global prices for agricultural commodities continued to edge down gradually in November–January. Over the three months, wheat prices declined by 13% owing to the harvesting in the Global South that supported the supply. In January, the FAO Food Price Index was decreasing for the tenth consecutive month, reaching 131.2 points, which is 5% lower than in 2022 Q3.

OIL PRICES, \$

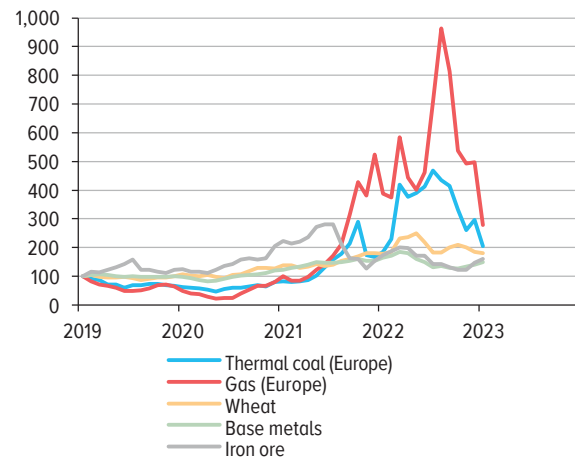
Chart 16



Sources: Bloomberg, Ministry of Finance of the Russian Federation.

PRICES FOR OTHER COMMODITIES
(01.01.2019 = 100)

Chart 17



Sources: Bloomberg, World Bank.

EXPORTS CONTRACTED, WHILE IMPORTS CONTINUED TO BOUNCE BACK

According to the preliminary estimate, in 2022 Q4, the surplus of the current account shrank to \$31 billion (in 2021 Q4: +\$47 billion), with exports contracting and imports restoring.

Exports. The value of goods and services exports declined by 15% year-on-year (2022 Q3: +4% YoY). Price trends in the world market worsened, the EU enacted its price cap on Russian crude, and the impact of the EU's embargo strengthened.³ Non-oil and gas exports shrank year-on-year because of the restrictions and concerns about a global recession.

Imports. Imports continued to rebound in 2022 Q4. The decrease in the value of goods and services imports slowed down to 9% YoY (2022 Q3: -13% YoY), supported by the refocusing on countries that had not imposed restrictions against Russia, the expansion of parallel imports, and the ruble strengthening year-on-year.

Financial account. Amid declining revenues from foreign trade, the growth of foreign assets decelerated, and the surplus of the financial account shrank to \$30 billion in 2022 Q4 (vs \$48 billion in 2021 Q4). In 2022 Q4, the surplus was mostly the result of a faster reduction in the economy's external liabilities.

As compared to the forecast presented in MPR 4/22, the surplus of the current account in 2022 Q4 and over the year in general turned out to be smaller than under the baseline scenario, which was predominantly because of imports that surpassed expectations. In addition, exports were below the forecast given in MPR 4/22 due to lower global prices for commodities, including crude.

³ The ban on oil imports to the EU from Russia was introduced back in June within the sixth package of sanctions. Nevertheless, until 5 December, it did not cover oil supplies under contracts signed before 4 June and one-off transactions for near-term delivery.

RUBLE WEAKENED IN DECEMBER–JANUARY

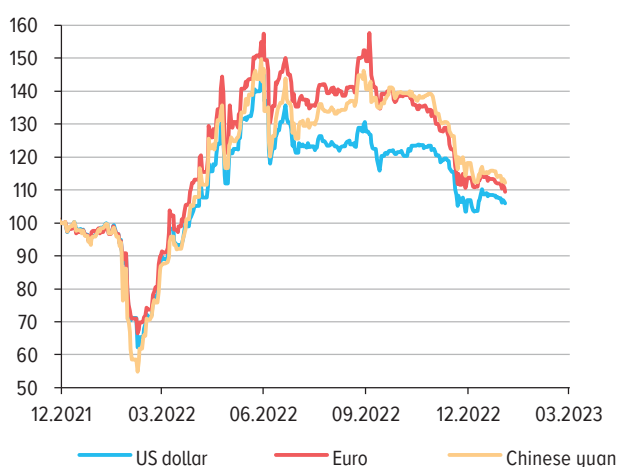
At the end of December, the foreign exchange market became more volatile. The main factors influencing the exchange rate of the ruble were oil price movements, expanding imports, and elevated demand from local market participants that was partially explained by seasonal factors.

Despite the weakening, the nominal exchange rate of the ruble remains stronger than in early 2022, and the real effective exchange rate of the ruble is close to its 2010–2013 levels.

In January 2023, Russia launched a new mechanism of fiscal rule-based operations in the foreign exchange market: the Bank of Russia will buy (sell) foreign currency for replenishing (or spending) the resources of the NWF.⁴ These operations will help stabilise the exchange rate of the ruble.

INDICES OF THE NOMINAL EXCHANGE RATE OF THE RUBLE AGAINST MAIN FOREIGN CURRENCIES (01.01.2022 = 100)

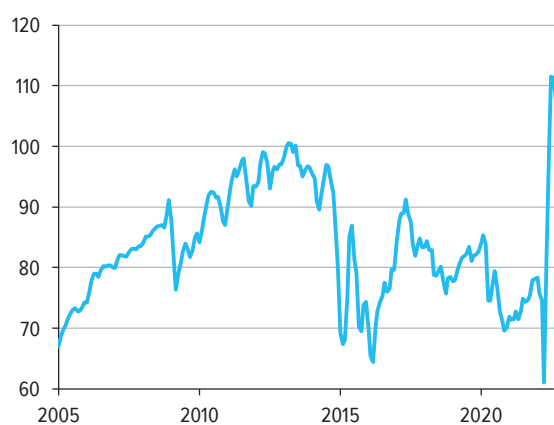
Chart 18



Sources: Moscow Exchange, Bank of Russia calculations.

INDEX OF THE REAL EFFECTIVE EXCHANGE RATE OF THE RUBLE (2013 = 100)

Chart 19



Source: Bank of Russia calculations.

CURRENT ACCOUNT SURPLUS WILL DECREASE

Forecast of oil and gas prices. Considering the current oil price trends, the Bank of Russia lowered its forecast of Russian crude prices in 2023 to \$55 per barrel, expecting the price to remain at this level until 2025 (**Chart 20**). Besides, following the decline in European benchmarks, the Bank of Russia adjusted its short-term forecast of gas prices, but still expects elevated price levels until the end of the year and their gradual adjustment in 2024–2025.

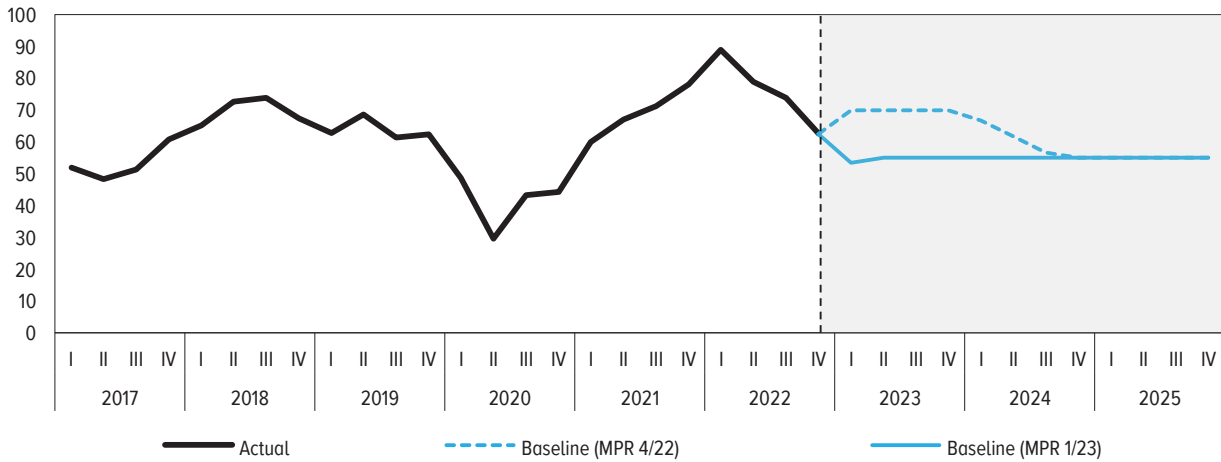
Export forecast. As oil and gas prices for 2023 were adjusted downwards, the forecast of exports was reduced. Nonetheless, the forecast of exports factors in that oil prices in the current conditions may vary depending on oil grades and shipping destinations (see Box 1 ‘Russian crude prices’). In 2024, the value of exports will continue to decline due to lower gas prices. In 2025, exports are expected to edge up slightly following the recovery in oil exports and the expansion of non-oil and gas exports amid improving conditions in the world economy. As a result, in 2025, the value of exports is forecast to surpass the level predicted in the baseline scenario of MPR 4/22.

Import forecast. Considering a faster recovery at the end of 2022, the forecast of imports was raised over the entire forecast horizon. However, the quicker expansion of imports after the contraction in 2022 also caused a downward adjustment of the forecast of the current account surplus for 2023–2024.

⁴ [Press release of the Ministry of Finance of the Russian Federation, commentary by the Bank of Russia.](#)

OIL PRICE PATH IN THE BANK OF RUSSIA'S BASELINE SCENARIO
(\$ per barrel)

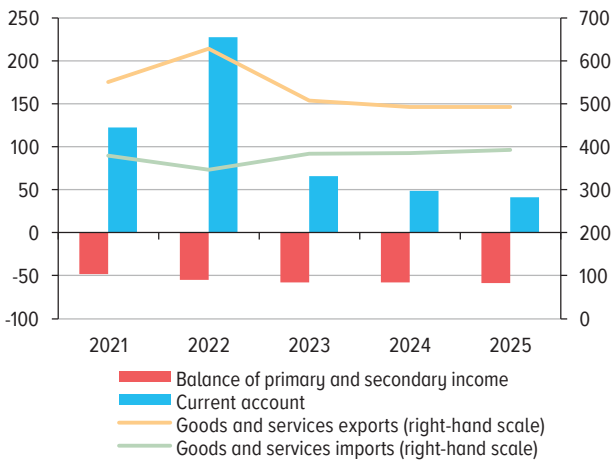
Chart 20



Note. Nominal prices for Urals crude (the arithmetic mean of prices for Urals crude delivered to the Mediterranean and Northwest European markets).
Source: Bank of Russia calculations.

CURRENT ACCOUNT FORECAST IN THE BANK OF RUSSIA'S BASELINE SCENARIO
(billions of US dollars)

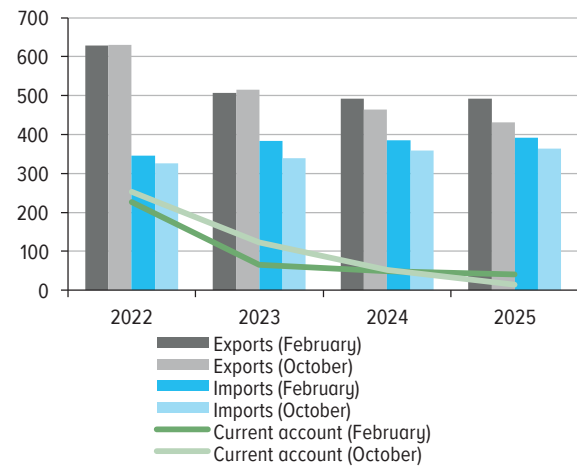
Chart 21



Source: Bank of Russia calculations.

CHANGE IN THE FORECAST IN FEBRUARY VS OCTOBER
(billions of US dollars)

Chart 22



Source: Bank of Russia calculations.

Current account forecast. The surplus of the current account in 2023 will be below the level predicted in MPR 4/22 due to the increase in imports, whereas in 2025, it will be higher because of steadier export trends. However, the surplus of the current account over the forecast horizon in general will continue to shrink.

Financial account forecast. The surplus of the financial account is also forecast to contract, most notably in 2023. Considering the reduction in exports due to declining global prices for commodities in 2023, the accumulation of foreign assets through foreign currency revenues is expected to be less significant.

BOX 1. RUSSIAN CRUDE PRICES

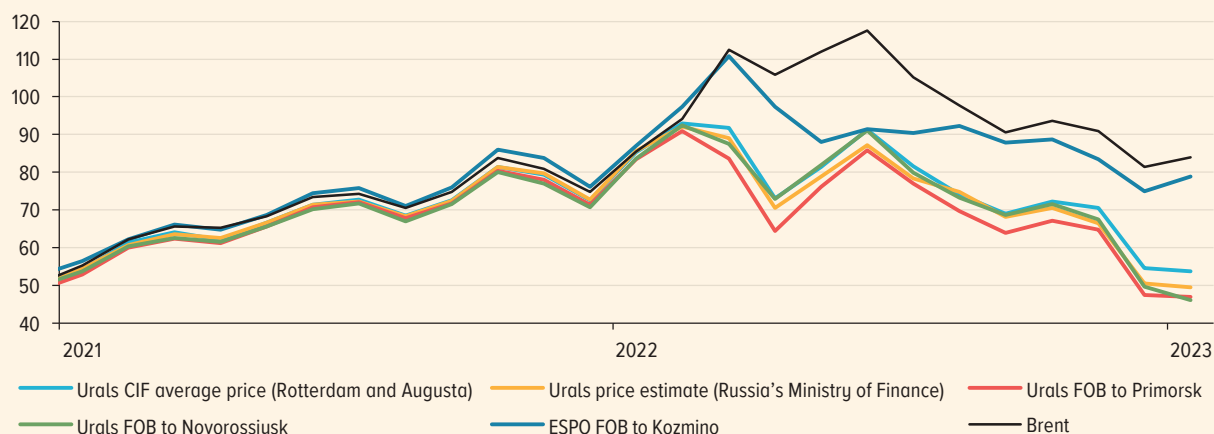
The restrictions in the oil market in 2022 entailed considerable changes in the calculations of prices for certain grades of Russian crude, raising multiple questions regarding movements of actual oil prices and the spread between them and the international Brent benchmark. Currently, the main grades of Russian crude are Urals, ESPO, Siberian Light, Sokol, Vityaz, ARCO, and Sakhalin Blend.

Traditionally, Urals crude accounts for the largest portion of oil production and exports (nearly 80%). Urals crude is heavy sour oil which is a mix of light oil of Western Siberia and heavy sour oil of the Urals and the Volga Region. Urals crude is exported via the Druzhba pipeline and from the seaports of the Baltic Sea, the Black Sea, Primorsk, Ust-Luga, and Novorossiysk. This is the Urals price which is commonly associated with the price for Russian oil and used by Russia's Ministry of Finance to calculate the export duty. Nevertheless, it is essential to comprehend that even Urals oil prices might vary depending on the delivery basis and destinations. The traditional focus was on average Urals crude prices in the seaports of Rotterdam (the Netherlands) and Augusta (Italy) with the delivery basis CIF (Cost, Insurance and Freight) covering freight and insurance costs, as calculated by the Argus pricing agency. However, following the enactment of the EU's embargo on the import of Russian crude, the deliveries to these destinations actually discontinued, and the prices became indicative. In view of this, the Argus agency suggested alternative prices: in the Russian seaports of Primorsk and Novorossiysk with the delivery basis FOB (Free on Board) not covering freight and insurance costs. Since the new prices have a different delivery basis, it would be incorrect to compare them with the previous ones directly. The restrictions and changes in logistics increased Russian oil shipping and insurance costs. As a result, FOB prices turned out to be significantly lower than CIF prices, and the spread between them and the Brent price exceeded \$40 per barrel. Concurrently, prices for the buyers of Russian crude declined much more moderately. Thus, prices in Indian ports published by S&P since recently show that the spread between them and Brent is about \$15–20 per barrel.

The price for the Far Eastern ESPO blend supplied from Eastern Siberian fields via the pipeline directly to China, as well as to the Kozmino port, was more stable. In contrast to Urals, ESPO is light sweet crude and, owing to a shorter shipping distance to Asian destinations, is traded with a much lower discount relative to Brent (and before 2022 – frequently with a premium).

Hence, in the current conditions, the Urals price can hardly reflect the trends of average export prices for Russian crude and petroleum products. Preparing the forecast of exports presented within the medium-term forecast of the balance of payments (page 5, Table 2), the Bank of Russia relies exactly on estimates for average export prices that factor in the differences in pricing and the distribution of volumes across various delivery bases and destinations.

RUSSIAN CRUDE PRICES
(\$ per barrel)



Sources: Bloomberg, Ministry of Finance of the Russian Federation, Argus.

RUSSIA'S ECONOMY

Monetary conditions remained neutral overall, although yields on OFZ bonds and the slope of the yield curve increased somewhat. The inflow of funds into households' deposits continued. Credit activity was still high, even after banks slightly raised their assessments of borrowers' credit risks.

Economic activity in 2022 H2 exceeded the forecast in MPR 4/22. The output was mainly supported by construction and the agricultural sector with the record-high harvest this year. Output in mining and quarrying also surpassed expectations. As to the use components, household final consumption declined less significantly, while staying subdued. The growth of investment, driven by effective contracts and new government infrastructure projects, turned out to be significantly better than forecast.

Unemployment dropped to its record low. The reduction in labour demand was limited in 2022 as labour supply had been decreasing throughout the year. By the end of the year, the deficit of labour supply expanded, and real wages resumed growth in annualised terms. According to the Bank of Russia's updated forecast, the growth of GDP as of the end of 2023 will equal (-1.0)–(+1.0)%, in 2024 – from 0.5% to 2.5%, and in 2025 – from 1.5% to 2.5%.

The current growth rate of consumer prices in the Russian economy edged up. The increase in prices at the end of 2022 was largely associated with volatile components and administered prices, namely higher prices for fruit and vegetables, elevated volatility of prices for tourism services, and the rescheduling of the indexation of utility rates. Households' and businesses' inflation expectations stay elevated. By spring 2023, annual inflation might slow down below 4% due to the base effect. Over the next months, as the low monthly rates of 2022 H2 are excluded from the calculation and the stable rates of price growth go up, inflation will accelerate, fuelled by proinflationary factors (higher government and consumer expenditures and increasing imbalances in the labour market). Given the monetary policy pursued, annual inflation will come in at 5.0–7.0% as of the end of 2023, return to 4% in 2024, and stay close to 4% further on.

SHORT-TERM INFLATION AND GDP DYNAMICS

Table 1

	2022 Q2	2022 Q3	2022 Q4 (for reference)	2023 Q1 (for reference)	2022 Q4	2023 Q4 (forecast)	2024 Q4 (forecast)	2025 Q4 (forecast)
Inflation, % YoY	15.9	13.7	11.9	3.6**	11.9	5.0–7.0	4.0	4.0
GDP, % YoY**	-4.1	-3.7	-4.6*	-2.4**	-4.6*	(-1.0)–(+1.0)	0.5–2.5	1.5–2.5

* The Bank of Russia's assessment.

** The values of the GDP and inflation growth rates for 2023 Q1 correspond to the centres of the shaded areas in **Chart 41** 'GDP growth path in the Bank of Russia's baseline scenario' and **Chart 50** 'Inflation path in the Bank of Russia's baseline scenario' and are provided for reference. The ranges for 2023 Q4, 2024 Q4, and 2025 Q4 are the forecast of the Bank of Russia. Source: Bank of Russia.

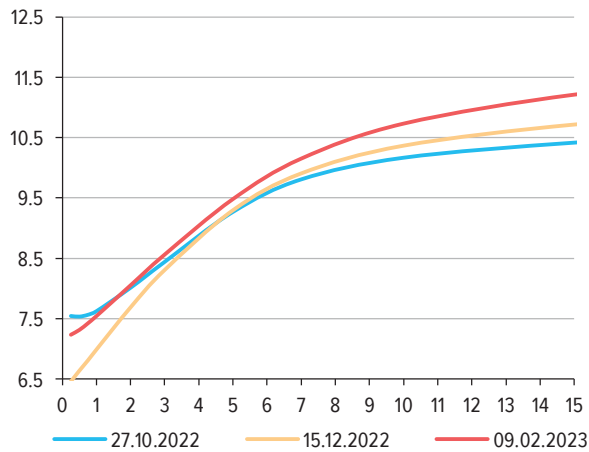
YIELDS ON LONG-TERM OFZ BONDS WERE UP

Since the meeting of the Bank of Russia Board of Directors in December, yields in the debt market edged up. Yields in the short section of the curve (one-year OFZ bonds) are at the level of 7.6%, which is close to the key rate and corresponds to the level at the time of the October meeting, but is higher than in December. Zero coupon yields on ten-year OFZ bonds are about 10.7%, exceeding the levels of both December (10.4%) and October (10.1%). Thus, the slope of the curve (10Y–1Y) increased by 50–80 bp from 250 bp at the end of October to 300–330 bp in early February (**Chart 23**). This increase is largely the result of the expansion of the government borrowing

programme. Implied inflation for inflation-indexed federal government bonds (OFZ-IN 52002) stays high as well (from 6% to 7%), reflecting market participants' concerns about a possible realisation of proinflationary factors that became stronger at the end of 2022 (**Chart 24**).

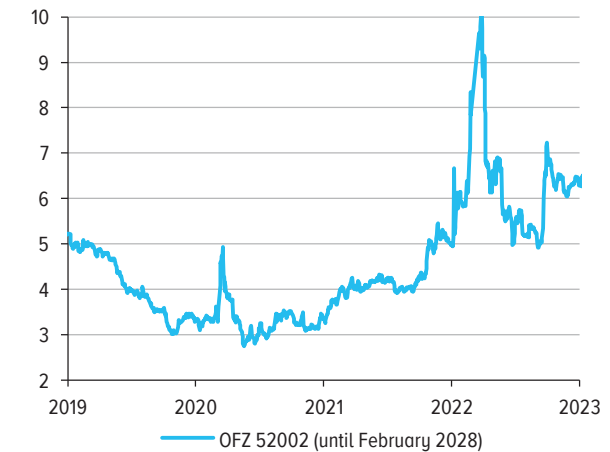
Credit spreads in the corporate debt market surged in mid-December, reaching 250 bp, but then dropped to 210–240 bp in January (**Chart 25**). Nevertheless, judging by the MOEX Index movements, the estimates of public corporations' development prospects remained almost unchanged: the Index equalled about 2,200 p in early February, which is approximately the same as at the end of October (**Chart 26**).

OFZ ZERO COUPON YIELD CURVES AS OF THE DATE OF THE BANK OF RUSSIA BOARD OF DIRECTORS' MEETING Chart 23
(%)



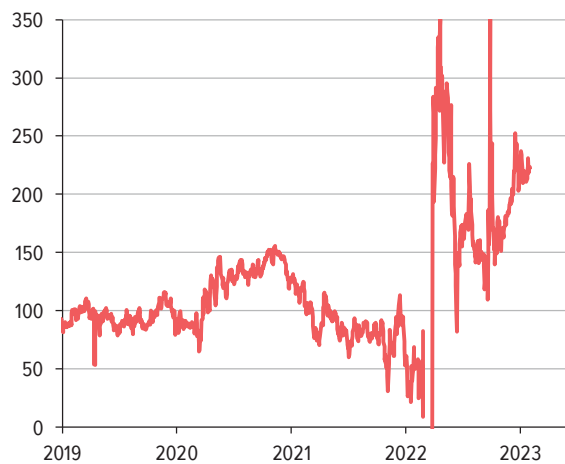
Sources: PJSC Moscow Exchange, Bank of Russia calculations.

IMPLIED INFLATION (FROM OFZ-IN) (%) Chart 24



Sources: PJSC Moscow Exchange, Bank of Russia calculations.

SPREAD BETWEEN YIELDS ON CORPORATE AND GOVERNMENT BONDS Chart 25
(bp)



Sources: Cbonds, Bank of Russia calculations.

MOEX INDEX (p) Chart 26



Source: PJSC Moscow Exchange.

INFLOW OF FUNDS INTO HOUSEHOLD DEPOSITS CONTINUED

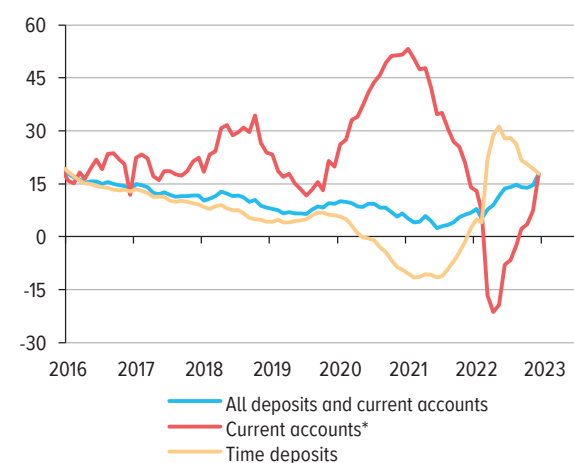
With the key rate unchanged, banks raised their deposit rates in October responding to households' rising demand for cash rubles, which helped restore the inflow of households' funds. The annual growth of deposits sped up from 4.4% as of early October to 6.4% as of the end of December (**Chart 27**).

The trends of changes in the deposit portfolio composition observed in previous periods remained in 2022 Q4 as well. The dedollarisation of deposits continued: ruble deposits and current accounts made up the entire inflow of households' funds into banks, whereas foreign currency deposits continued to decrease (**Chart 28**). This outflow was offset by a decline in the nominal exchange rate of the ruble and, by the end of the quarter, the percentage of foreign currency deposits in the total amount of deposits remained almost the same, staying close to its record lows (less than 11% of household deposits).

In October–December, savers increased both current accounts and time deposits. The growth of time deposits (for over one year) was associated with market factors to a certain extent, specifically the desire to fix the temporarily increased deposit rates. The inflow of funds into current accounts in December largely resulted from the growth of budget payments.

ANNUAL GROWTH IN HOUSEHOLDS' RUBLE DEPOSITS* (%)

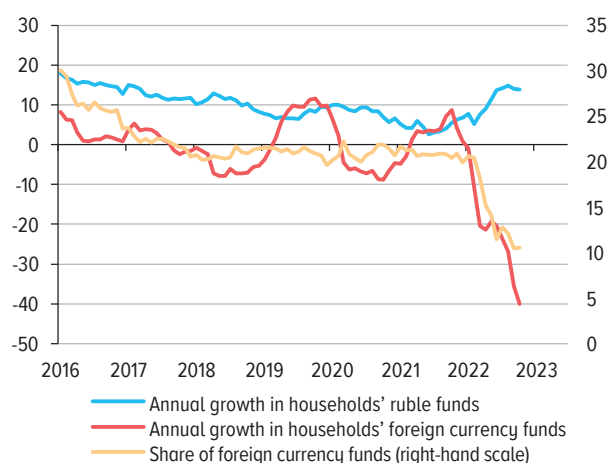
Chart 27



* Including time deposits.
Source: Bank of Russia.

GROWTH OF FUNDS IN INDIVIDUALS' ACCOUNTS (%)

Chart 28

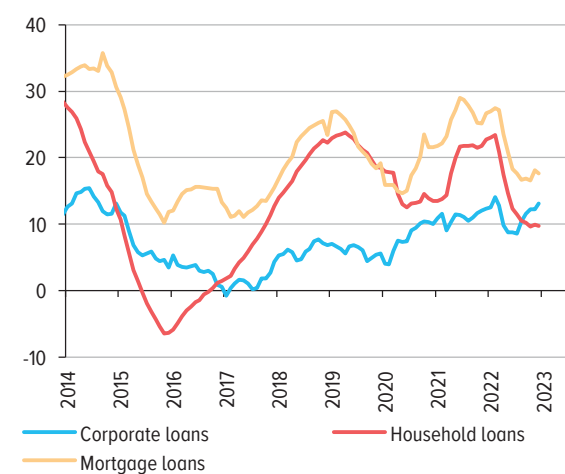


Source: Bank of Russia.

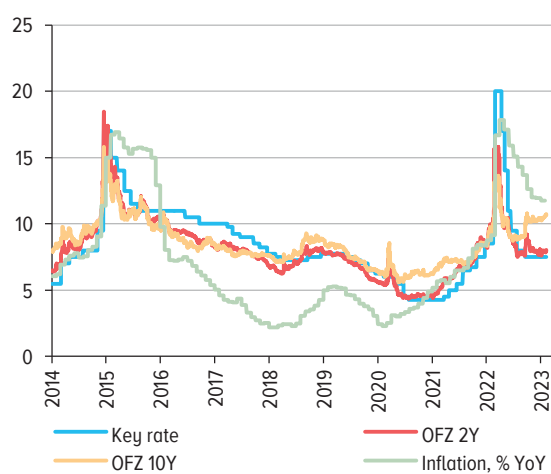
MONETARY CONDITIONS STAY NEUTRAL OVERALL

As the key rate remains the same since 19 September 2022, credit rates changed due to other factors, namely because banks raised their assessments of borrowers' credit risks and funding became more expensive. Interest rates on certain financial products, predominantly retail ones, edged up. Nevertheless, credit activity stayed high.

Government programmes and subsidised lending mechanisms implemented jointly with developers remained effective in the retail lending segment. As a result, the annual growth of the mortgage portfolio reached 17.6% as of the end of December, as compared to 16.8% as of early October. Contrastingly, the demand for consumer loans declined, with the growth of the retail loan portfolio slightly decreasing over 2022 Q4 in general.

ANNUAL GROWTH OF RUSSIAN BANKS' LOAN PORTFOLIO (%) *Chart 29*

Source: Bank of Russia.

INTEREST RATES AND INFLATION (%) *Chart 30*

Sources: Cbonds, Rosstat.

Interest rates on corporate loans in 2022 Q4 were close to the September level, with lending amounts growing steadily. Dedollarisation in the corporate credit market continued. At the end of the year, the segment of corporate lending for over three years started to revive, with these loans accounting for more than a half of the quarterly growth of the portfolio. Longer maturities of corporate loans may be a sign of companies' gradual adaptation to the new environment.

LENDING GROWTH FORECAST REMAINED UNCHANGED

The Bank of Russia's baseline scenario assumes that, considering the decision made on 10 February, the average key rate for 2023 will equal 7.0–9.0% per annum, which means that it might be both cut and raised. Nevertheless, taking into account the ratio of proinflationary and disinflationary risks, the key rate is more likely to be raised rather than cut. If the situation develops in line with the Bank of Russia's baseline forecast, the average key rate for 2024 will be in the range of 6.5–7.5% per annum, returning to its neutral level of 5.0–6.0% per annum in 2025. With this path of the key rate, annual inflation will return to 4% in 2024 and stay close to 4% further on.

Considering this path of the key rate, the banking system's claims on the economy will increase by 9–13% as of the end of 2023, which is generally in line with the forecast presented in MPR 4/22. This growth rate is comparable with 2022 figures, but slightly lower than in 2021. The expansion of lending is subdued because borrowers still demonstrate cautious consumer behaviour that limits the demand for new loans. Banks' willingness to increase lending also remains moderate as their assessments of new borrowers' risks remain elevated. Another factor limiting lending will be expansionary fiscal policy helping budget-funded entities partially cover their need for financial resources without borrowings.

The increase in the banking system's claims on households in 2023 will range from 10% to 14%, taking into account the growth of mortgage lending by 12–16%, among other factors. The expansion of retail lending will be driven by the progressing adjustment of the economy to the new conditions and record-low unemployment, which improves the prospects for a rise in households' incomes. Credit activity in the mortgage segment will also be supported by the government subsidised lending programmes that will remain in place in 2023.

Banks' claims on organisations will grow by 8–12% in 2023, declining slightly compared to the previous year. As external liabilities decrease, the substitution of Russian companies' external debt for Russian banks' loans will slow down, playing an increasingly less important role in the demand for loans. Amid the structural transformation of the economy, banks will need to carry out a more thorough analysis of potential borrowers and adjust their assessments of companies' financial stability and efficiency of their business models, which might slow down the rise in new loans somewhat.

As in 2022, money supply in the national definition in 2023 will grow faster than claims on the economy, driven by expansionary fiscal policy and steadily low demand for foreign currency deposits. In these conditions, money supply in the national definition (M2) will continue to expand faster than broad money (M2X) (see Box 2 'Broad money M2X'). Further on, as fiscal policy normalises and anti-crisis measures are ended, the contribution of fiscal operations to the expansion of money supply will decrease. The potential of the transfer of funds from foreign currency deposits to ruble deposits will diminish gradually. Accordingly, as in previous years, the growth of money supply in 2024–2025 will be mostly driven by an increase in claims on the economy, with the growth rates of money supply in the national definition and broad money converging.

BOX 2. BROAD MONEY M2X

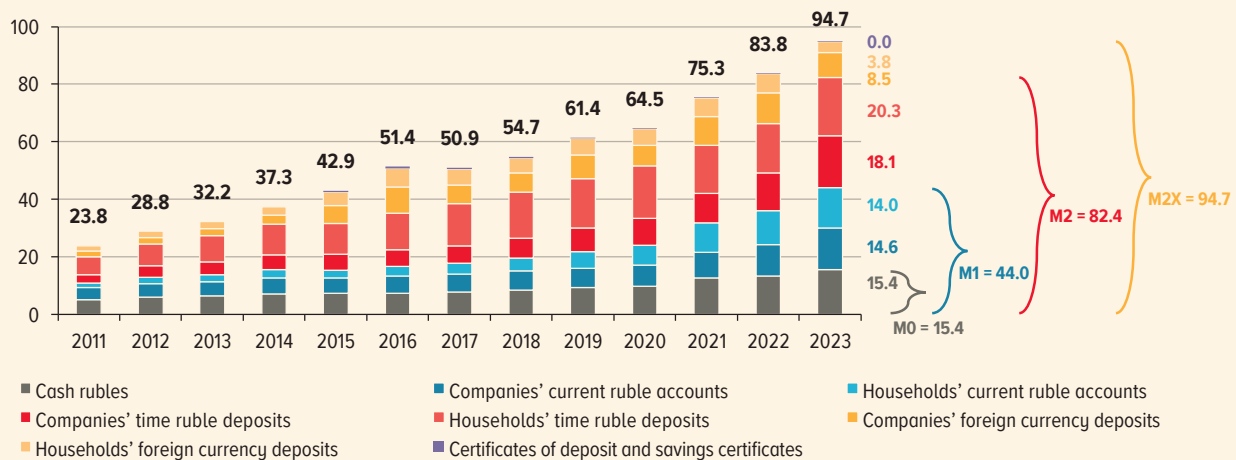
Money supply is the total amount of cash and non-cash items available in a country's economy. If money supply expands much faster than the economy, the risk of inflation grows, all else being equal. This effect is non-linear. Fluctuations in the supply of goods, changes in inflation expectations and consumer sentiment, and structural shifts in the monetary sector itself can intensify or moderate for a while inflationary consequences of the growth of money supply. However, when changes in money supply are significant and steady enough relative to GDP dynamics, they always have an impact on demand and inflation.

Therefore, central banks generally carry out a comprehensive analysis of money supply trends. To this end, they calculate several monetary aggregates¹ that differ in terms of how quickly and at what costs the funds may be used to pay for goods and services (**Chart B-1**).

There is no uniform definition of money supply in global practice. Depending on the specifics of a national economy, the authorities choose the financial instruments to be included or not included in the monetary aggregates used in national statistics.

STRUCTURE OF MONEY SUPPLY AS OF THE BEGINNING OF THE YEAR
(trillions of rubles)

Chart B-1



Source: Bank of Russia calculations.

¹ The monetary aggregates used in Russian statistics are described in the monthly material [Monetary Aggregates](#) detailing the methodology for calculating monetary aggregates and characterising main trends in their changes and composition.

In particular, there is no single approach to how foreign currency deposits should be taken into account in money supply. Foreign currency deposits can be included in all monetary aggregates (the euro area, Norway, and Mexico), or only in the broadest monetary aggregates (Canada, Japan, the Philippines, and Turkey), or not included in the calculation of money supply (the USA, China, Australia, and South Korea).

In Russia, foreign currency deposits are not that different from ruble ones in terms of their economic nature. Banks create them, just as ruble deposits, as a result of the issue of loans or asset purchases.² Foreign currency deposits may be at any moment converted into rubles and used to purchase goods or carry out financial transactions in the domestic market. Besides, foreign currency in Russia has been playing and continues to play an important role in exports, imports, and other external economic transactions.

However, Russian law prohibits direct settlements in foreign currency between residents and the conversion of foreign currency into rubles involves a fee or a spread between buy and sell rates, which discourages the use of foreign currency funds in settlements. Hence, the approach applied in Russian practice is the same as in Canada or Japan: foreign currency deposits are included in the broadest monetary aggregate, namely broad money (the M2X aggregate), as a financial instrument, the use of which in domestic settlements involves increased costs, i.e., the liquidity of which is slightly lower than that of the national currency.

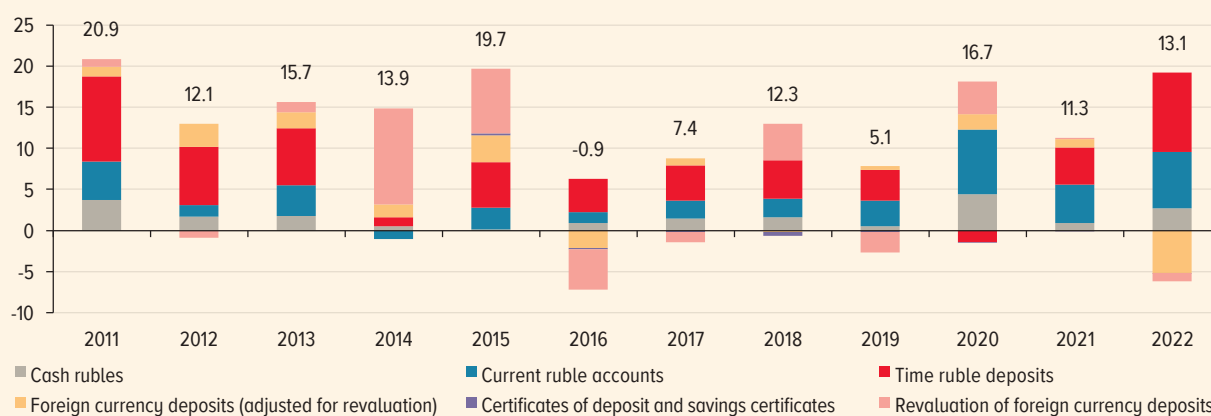
The Bank of Russia's materials generally present money supply in the national definition (the M2 aggregate) comprising only ruble instruments. This is associated with long-standing practice (beginning from 1993, the Bank of Russia uses the M2 aggregate preparing its Annual Report) and serves illustrative purposes. Broad money is exposed to considerable fluctuations due to the reappraisal of the ruble value of foreign currency deposits. Accordingly, to make a correct analysis of changes in broad money, it should be adjusted for foreign currency revaluation (**Charts B-2 and B-3**).

Although characterising not all funds circulating in the Russian economy, the use of the M2 aggregate during the periods of a steady dollarisation level reflects general trends in money supply properly. In recent decades, the growth rates of foreign currency deposits were slightly lower than those of ruble deposits, but the difference between these rates remained moderate, with the M2 aggregate increasing approximately as fast as broad money adjusted for foreign currency revaluation. Significant differences in the changes of the two monetary aggregates were recorded only in 2009–2010 due to the transfer of households' funds from ruble deposits to foreign currency ones during the global financial crisis and the reverse transfer of funds after households regained confidence in the national currency.

However, the situation in 2022 changed (**Chart B-2**). As ruble deposits continued to increase (by 26% over the year), households' and businesses' foreign currency deposits plummeted (by 40% and 17%,

CONTRIBUTION OF INDIVIDUAL COMPONENTS TO THE ANNUAL GROWTH OF BROAD MONEY*
(pp)

Chart B-2

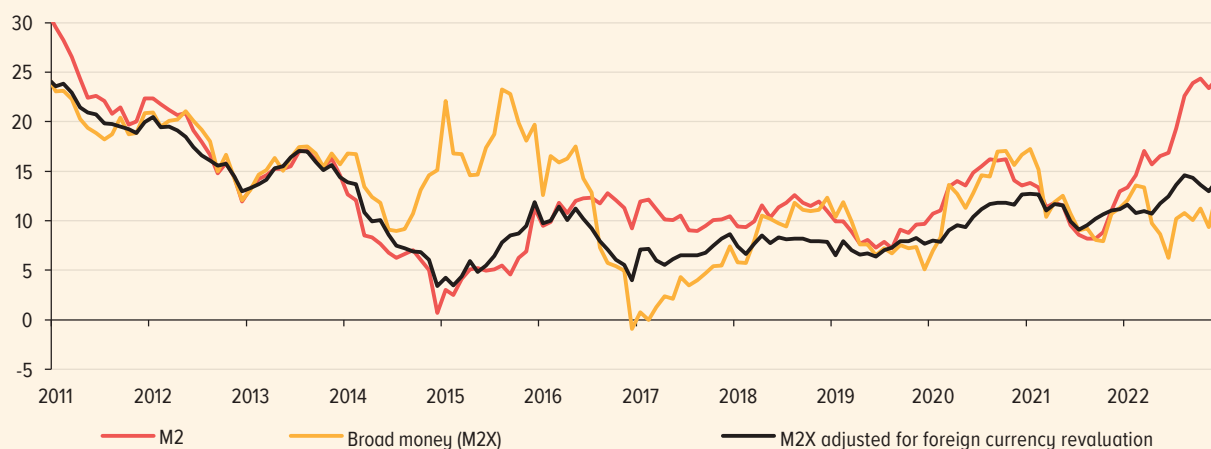


* The overall growth rate of M2X, adjusted for foreign currency revaluation, is specified above the bars. In 2015, the broad money calculation methodology was revised to include certificates of deposit and savings certificates. The M2X growth rate for 2015 is given net of certificates of deposit included in money supply.
Source: Bank of Russia calculations.

² Refer to Appendix 10 to the Monetary Policy Guidelines for 2018–2020.

ANNUAL GROWTH OF MONETARY AGGREGATES (%)

Chart B-3



Source: Bank of Russia calculations.

respectively). There were a number of reasons behind this trend. First, amid the sanctions against the largest Russian banks, depositors were concerned about their foreign currency deposits with these banks. Second, after the enactment of the restrictions on operations with foreign currency deposits, the use of funds in these accounts became less convenient and flexible. Moreover, as exports and imports contracted and foreign currency settlements in external trade were partially replaced with ruble settlements, companies' need for foreign currency deposits decreased. Thus, households' and businesses' foreign currency deposits partially transformed into foreign assets (foreign cash and deposits with foreign banks) and partially were replaced with ruble deposits. This process was limited by the emerging trend towards substituting currencies of unfriendly states for those of other countries.

As a result, the difference between the growth rates of broad money (14% as of the beginning of 2023) and the M2 aggregate (24% as of the same date) reached its maximum since the global financial crisis. During such a period, M2 dynamics cannot reflect overall trends in money supply. Analysing changes in money supply, it is essential to consider the specifics of all its aggregates. To make these indicators more transparent, in February 2023, the Bank of Russia started publishing [preliminary high-frequency data on money supply changes](#).

The Bank of Russia forecasts that, in the medium term, the dollarisation of money supply will stabilise at a lower level and the growth rates of broad money and the M2 aggregate will converge again. However, as long as the dedollarisation of money supply continues, it is critical to consider the M2X aggregate in addition to the M2 aggregate when analysing the monetary sector.

ECONOMIC ACTIVITY TRENDS IN 2022 SURPASSED EXPECTATIONS

As assessed by the Bank of Russia, GDP contracted by 2.5% in 2022, whereas the forecast was -3.0–3.5%. The decline was below the Bank of Russia's estimate in both 2022 Q3 (-3.7% according to Rosstat compared to -4.0% according to the Bank of Russia) and 2022 Q4 (-4.6% according to the Bank of Russia's updated estimate compared to -6.4–7.8% given in MPR 4/22). In addition, Rosstat released its revised assessments of the increase in output over 2020–2021. The acceleration of the GDP expansion to 5.6% in 2021 and the data for 2022 released by the moment make it possible to suggest a higher level of GDP in 2022 as compared to the Bank of Russia's expectations in October.

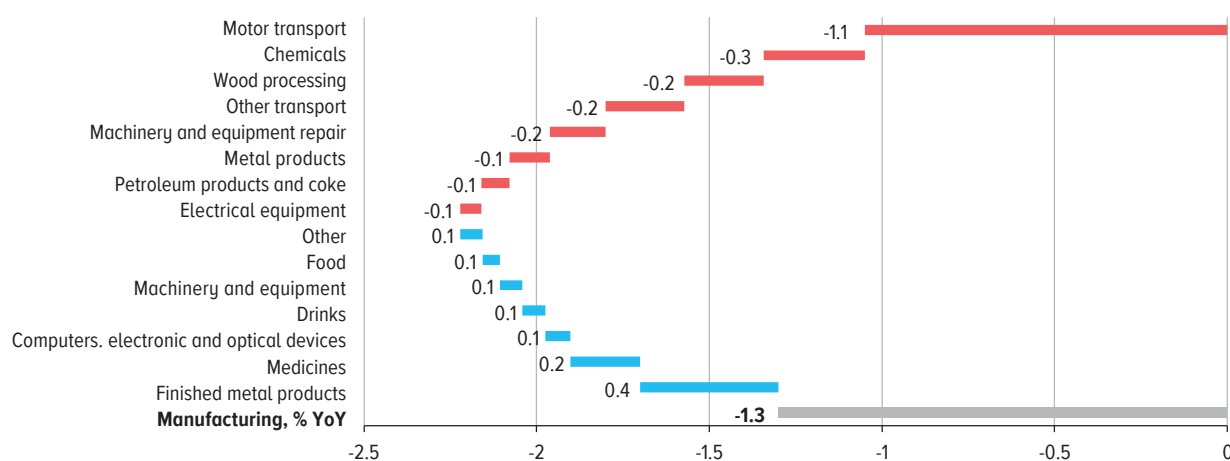
Speaking of industries, the main drivers supporting output over the year were the steadily growing construction sector and agriculture owing to the record-large harvest. The mining and quarrying sector demonstrated slightly better results than expected, increasing its output by 0.8% relative to the previous year. The main contributor was the expansion of output in 2022 Q3: sequentially (SA), output surged as compared to 2022 Q2 after plummeting a quarter earlier. According to the Bank of Russia's estimate, output in mining and quarrying was down in 2022 Q4 in both sequential and annualised terms.

Output in manufacturing shrank by 1.3% as of the end of the year. The main drags were manufacturing of intermediate goods (chemicals, wood processing, metallurgy, and petroleum products) and consumer goods, as well as motor vehicles, especially cars that may be classified as consumer goods (**Chart 31**). In sequential terms, the expansion of output in 2022 Q3 reversed to a slight decline in 2022 Q4. The main drag was the output of non-food consumer goods.

In January, the Bank of Russia's Business Climate Index remained the same as in December, staying positive for the third month in a row (**Chart 32**).¹ Companies' expectations for the next three months improved again, although the current estimates of the business climate worsened somewhat, primarily among mining companies, which was associated with the tightening of the sanctions. In most industries, companies' short-term expectations were more positive in January than in December and October. Expectations were most optimistic in agriculture and manufacturing, especially among investment goods manufacturers. Business sentiment became more positive as a result of the development of import substitution programmes and a larger number of orders in the domestic market, among other things.

DECOMPOSITION OF ANNUAL GROWTH IN MANUFACTURING IN 2022
(pp)

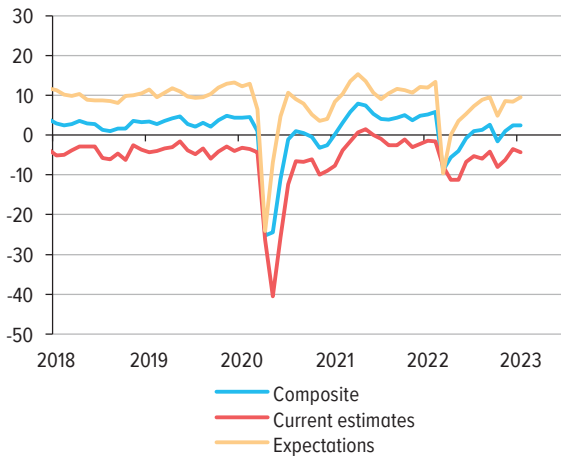
Chart 31



Sources: Rosstat, Bank of Russia calculations.

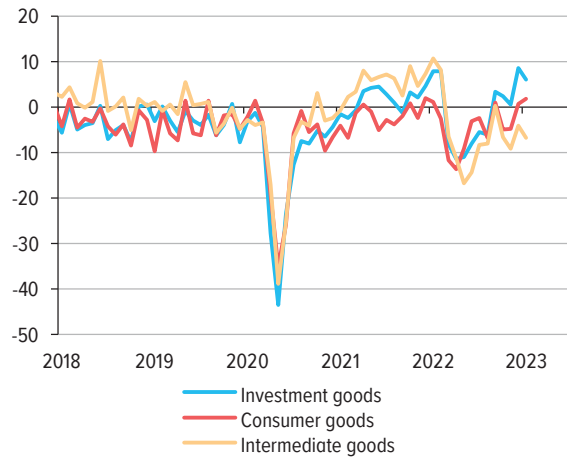
¹ Refer to the information and analytical commentary [Monitoring of Businesses: Assessments, Expectations and Comments, No. 1 \(9\), January 2023](#).

THE BANK OF RUSSIA'S BUSINESS CLIMATE INDEX ACROSS THE ECONOMY (p SA) *Chart 32*



Source: Bank of Russia.

THE BANK OF RUSSIA'S BUSINESS CLIMATE INDEX ACROSS SECTORS (p SA) *Chart 33*



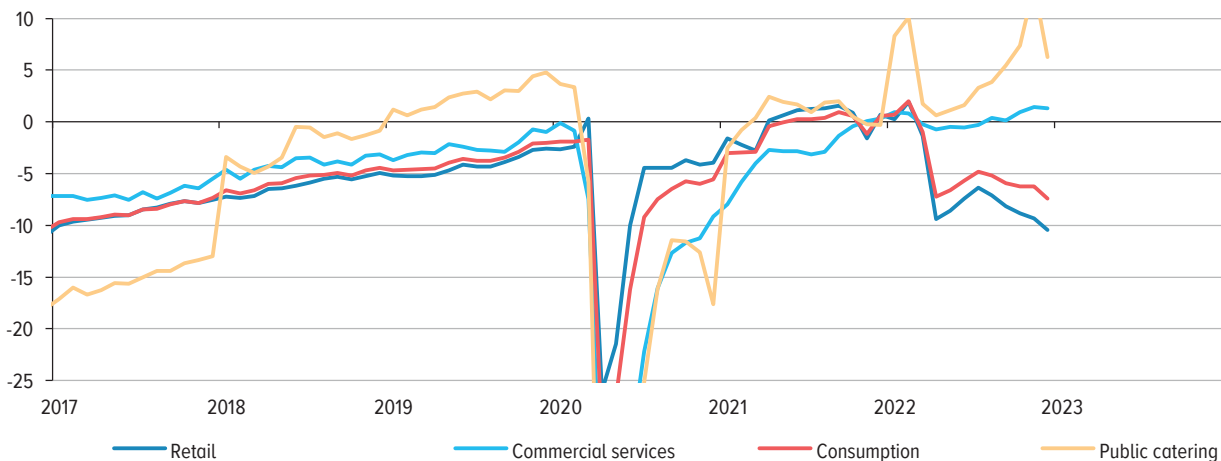
Source: Bank of Russia.

CONSUMER DEMAND WAS SUBDUED

Consumer activity remained almost unchanged in October–November, but then edged down in December. The decline in consumer activity in December was recorded across all major groups, and most notably in non-food retail (**Chart 34**). Consumer activity in commercial services and public catering decreased after a slight rise in October–November. Furthermore, high-frequency indicators tracking consumer expenditure (e.g., data of the SberIndex laboratory) demonstrate signs of an improvement in consumer activity in January and February 2023 (**Chart 35**).

CONSUMER ACTIVITY (% on 2021 Q4, SA) *Chart 34*

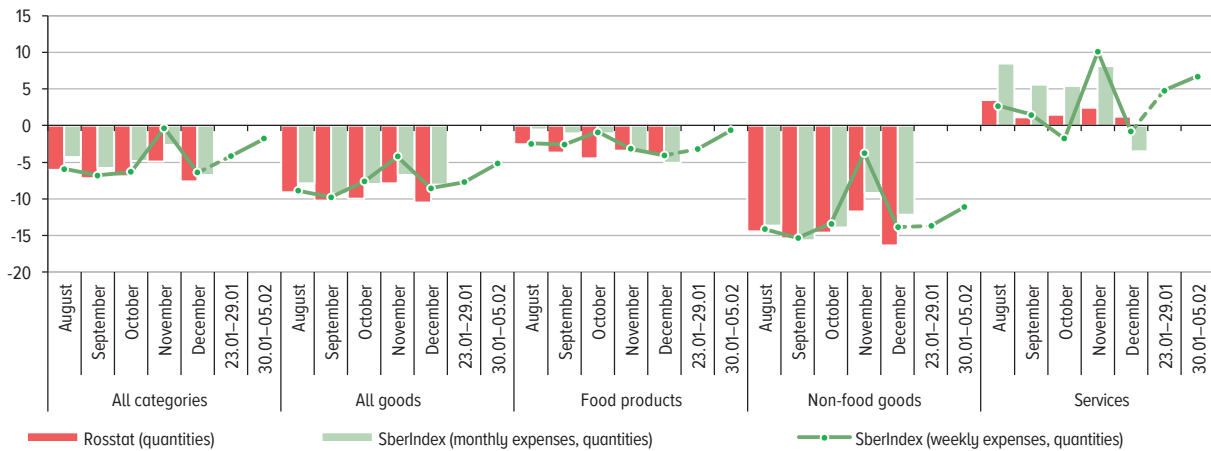
Chart 34



Sources: Rosstat, Bank of Russia calculations.

CONSUMER ACTIVITY INDICATORS IN 2022–EARLY 2023
(% change YoY)

Chart 35



Note. The data of the SberIndex laboratory on consumer spending are published in nominal terms. The quantity indices are calculated using the price deflators of retail sales (of food and non-food goods) and the deflator of the value of commercial services to households. Weekly deflators are calculated based on the deflator for the previous month adjusted for the change in weekly inflation. If the monthly deflator of retail sales and the value of commercial services was not released, it is calculated based on the available deflator for the previous month adjusted for the change in monthly inflation.

Sources: Rosstat, SberIndex laboratory, Bank of Russia calculations.

INVESTMENT ACTIVITY REMAINED HIGH

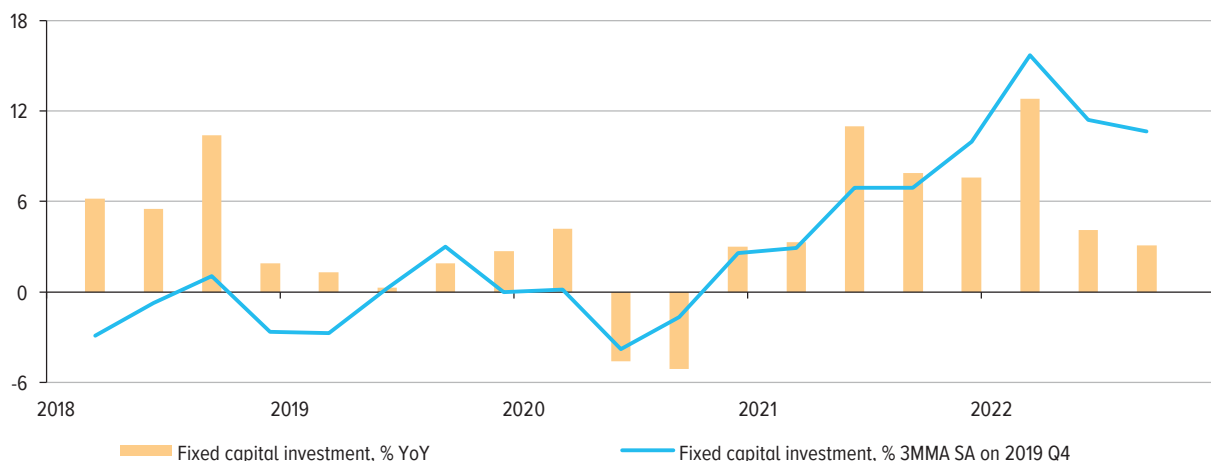
Despite external shocks and rising uncertainty in 2022 H1, investment activity generally remained high over 2022.

First, it was supported by accumulated dynamics, that is, investments have been consistently expanding since the middle of 2020. In 2022 Q1, fixed capital investment reached its highest level over recent years (**Chart 36**). Companies were seeking to accomplish their close-to-completion projects more quickly due to the risks of restrictions on investment goods imports.

Second, the rise in investment demand in the private sector slowed down in 2022 Q2–Q3 simultaneously with the expansion of government investment. Specifically, the financing of the Comprehensive Plan for Upgrading and Expanding Core Infrastructure increased in 2022 by 24.6% compared to 2021 to exceed the target of early 2022 1.5 times (which largely resulted from an increase in the financing of two federal projects ‘Western Europe – Western China Expressway’ and ‘Development of Regional Airports and Routes’). According to the ROSINFRA platform and the

FIXED CAPITAL INVESTMENT

Chart 36



Sources: Rosstat, Bank of Russia calculations.

National Center for PPP, in 2022, the public–private partnership sector reached the highest results over the past three years. The amount of private investment in PPP projects stayed close to the 2021 level, whereas that of government co-financing expanded notably.

However, deadlines for many investment projects were changed diversely throughout the year. The public sector preponed its projects, whereas the private sector, to the contrary, postponed them. Investment projects in the private sector can be suspended or decreased because the required equipment is unavailable or companies are uncertain about future demand.

BUDGETARY EXPENDITURES WERE RAISED AND ADVANCED

As of the end of 2022, federal budget expenditures reached ₹31.1 trillion, exceeding the target of ₹29.0 trillion set in the Fiscal Policy Guidelines for 2023–2025.

This was because some expenditures of 2023 were made earlier, namely transfers from the federal budget to extra-budgetary funds. This creates room for other federal budget expenditures in 2023 in addition to the allocations provided for by the law on the federal budget for 2023–2025, with the forecast budget deficit kept unchanged at the level of 2% of GDP. Such extra allocations will increase the public sector's contribution to aggregate demand in 2023.

At the beginning of 2023, the federal budget financed government purchases faster, making payments in advance for goods and services to be supplied during the year. These advance payments do not increase aggregate demand throughout the year in general, but probably reflect a quicker performance of plans under state orders than usually, which will strengthen the fiscal stimulus in 2023 H1 as compared to traditional seasonal trends. The faster implementation of a number of both federal and regional infrastructure projects, including the rescheduling for 2023 of projects earlier planned for 2024, is also a factor intensifying the effect of the public sector on aggregate demand this year.

The Bank of Russia's forecast takes into account the influence of this redistribution of budgetary expenditures on aggregate demand and inflation. In addition, the forecast assumes that the deficit of the federal budget will be gradually decreasing in the medium term following the path set in the Fiscal Policy Guidelines for 2023–2025 (2023: 2.0% of GDP; 2024: 1.4% of GDP; and 2025: 0.7% of GDP). This path suggests that the period of transition to the new parameters of the fiscal rule (basic oil and gas revenues total ₹8 trillion) will be completed in 2025.

UNEMPLOYMENT IS CLOSE TO ITS RECORD LOW

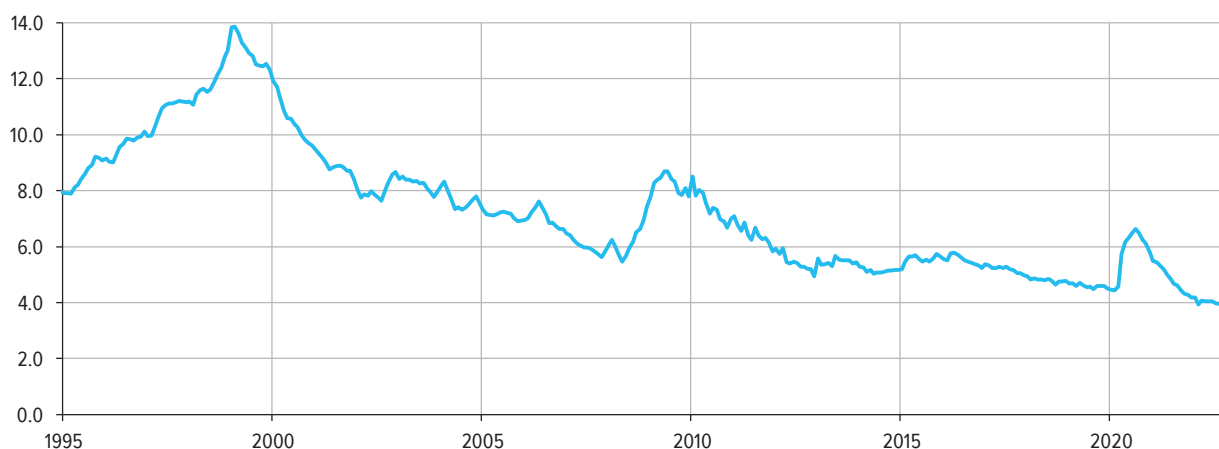
Unemployment had been decreasing throughout the year to hit a new record low of 3.6% (SA) by December (**Chart 37**). This trend was driven by two factors.

First, the decline in labour demand in March–April 2022 was partially offset by part-time employment schemes and furloughs that are common in the Russian labour market. The Russian Government's policy aimed at preserving jobs also limited possible unfavourable consequences associated with the termination of operation of a number of foreign companies in Russia. Together, this helped maintain low unemployment rates during the initial period after the enactment of the external restrictions. Nonetheless, real wages declined considerably during that period, including because of soaring inflation.

Second, the private sector increased the demand for labour amid the structural transformation that started after the imposition of the external restrictions. Besides, as the public sector was implementing infrastructure development projects, it raised the demand for labour in the second half of the year. However, labour supply in some categories contracted due to both the partial mobilisation of employees and their relocation to other countries. By the end of the year, the decrease in unemployment sped up. By November, real wages nearly restored to the level of February 2022, driven by the rise in nominal wages amid the deceleration of annual inflation (**Chart 39**).

UNEMPLOYMENT
(% SA)

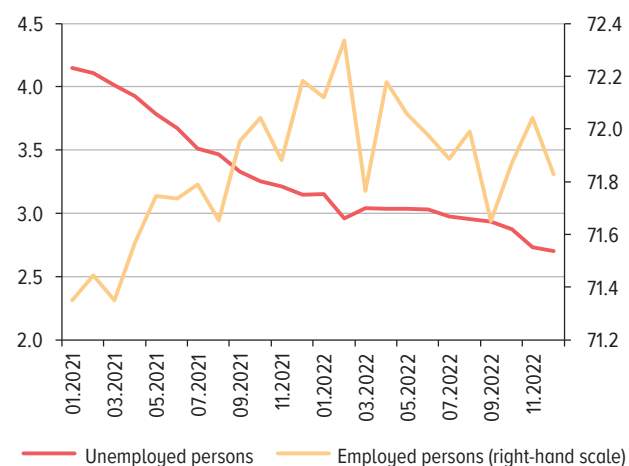
Chart 37



Sources: Rosstat, Bank of Russia calculations.

NUMBERS OF EMPLOYED AND UNEMPLOYED
PEOPLE
(mln, SA)

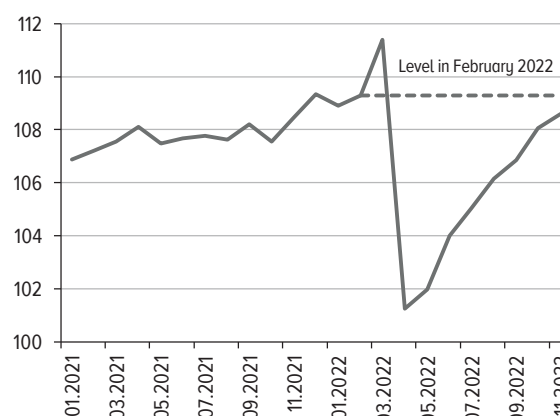
Chart 38



Sources: Rosstat, Bank of Russia calculations.

REAL WAGES IN 2022
(MoM SA, January 2019 = 100)

Chart 39



Sources: Rosstat, Bank of Russia calculations.

GDP FORECAST FOR 2023 WAS IMPROVED

Fiscal assumptions that the Bank of Russia relies on in its baseline scenario changed since the release of MPR 4/22. At the end of 2022, Russia's Ministry of Finance significantly expanded the target breakdown of federal budget expenditures relative to the projections presented in the Fiscal Policy Guidelines for 2023–2025. Additional expenditures are partly associated with transfers to extra-budgetary funds² and advanced funding of future expenditures that will influence the economy throughout 2023. Besides, the reduction in the oil price in the Bank of Russia's forecast for 2023 assumes that the budget deficit will expand and fiscal policy will have a more expansionary effect than predicted in MPR 4/22.

Higher output reached by the end of 2021, a smaller contraction of the economy in 2022 (the assessed decline was 2.5% compared to the forecast of -3.0–3.5%), and a higher level of fiscal stimulus in 2023 make it possible to improve the forecast of GDP to the range of (-1)–(+1)% in 2023,

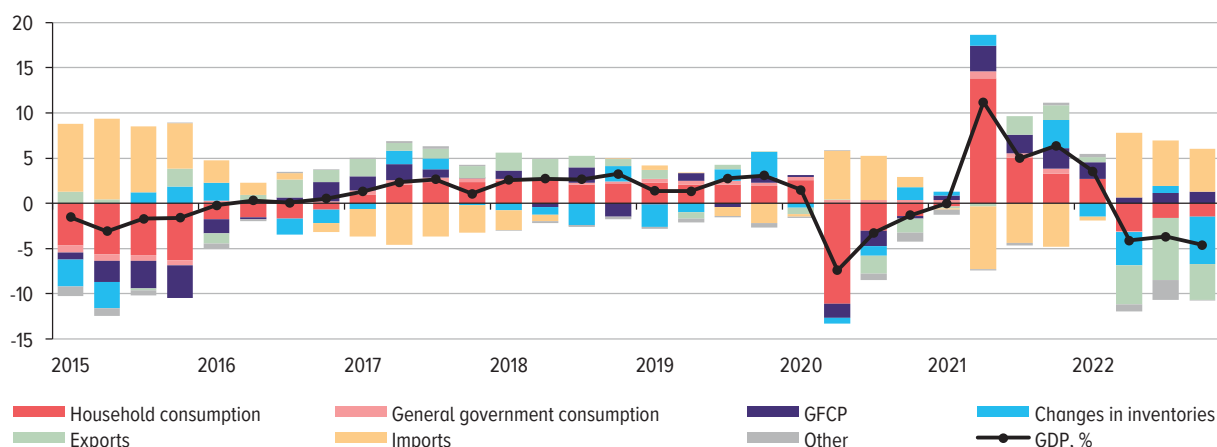
² Resolution of the Government of the Russian Federation No. 4154-r, dated 23 December 2022.

relative to a reduction from 1% to 4% assumed in MPR 4/22. Overall, this implies a less significant decline in potential output and a smaller deviation from it. In 2024, the economy will continue to restore, with its growth accelerating to 0.5–2.5% and stabilising in the range of 1.5–2.5% by 2025.

- **Household final consumption expenditure** remained subdued, but contracted less notably as of the end of 2022 than expected in October (the assessed decline was 1.8% compared to the forecast of -3.0–3.5%). Moreover, according to the data revised by Rosstat, consumption turned out to be higher than assessed before (the assessment of final consumption growth was raised considerably in 2020 and a little more in 2021). Household consumption in 2023–2024 will bounce back gradually, with a possible increase in the range of 0.0–2.0%. Households' sentiment will be affected by the continuing adjustment of consumption to the new environment, which might result in higher savings. In 2025, the growth of household expenditure will stabilise in the range of 1.5–2.5%.
- **Gross capital formation** shrank significantly less than expected in MPR 4/22 (the assessed decline was 5.2% compared to the forecast of -10.5–11.5%). **Inventories** that had contracted considerably in 2022 Q1–Q2 due to the sanctions, foreign companies' exit from the Russian market, and disruptions in logistics chains started to restore in 2022 H2. Gross fixed capital formation (**GFCF**) expanded in 2022 significantly more than expected in MPR 4/22 (+5.5% vs the forecast increase of 0.0–1.0%). Despite lower appetite for new private investment, the level of investment activity was supported by earlier approved investment projects and government expenditures. GFCF will shrink less notably in 2023 than forecast in MPR 4/22 (-1.5–4.5% vs -3.0–7.0% predicted before). Although private investment will contract, it may be supported by government infrastructure projects to a certain extent. In the future, the factor of fiscal support will become less significant due to the process of gradual consolidation. In 2024, GFCF will expand at a recovery pace amid an increasingly more sustainable transformation of the Russian economy and, in 2025, its growth pace will stabilise in the range of 1–3%.
- **Exports.** As assessed by the Bank of Russia, in 2022, export quantities shrank by 15.1%, which is in line with the forecast range presented in MPR 4/22 (-5–16%). In 2023, exports can increase by up to 0.5% as a result of a faster creation of new product sale chains. In 2024, export quantities will grow at a recovery pace of 2.5–5.5% and, further on, the growth will stabilise in the range of 1.0–3.0% owing to the continuing recovery of non-oil and gas exports and service exports.
- **Imports.** According to the Bank of Russia's assessment, import quantities contracted by 17.7%, which is better than forecast in MPR 4/22 (-22.5–23.5%). The level of imports also surpassed

GDP BY EXPENDITURE
(pp YoY)

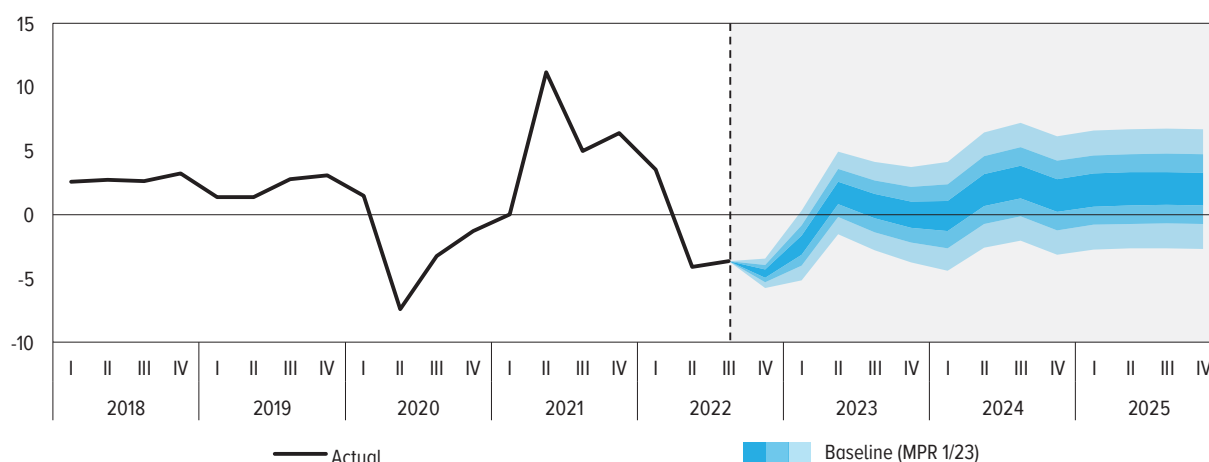
Chart 40



Note. Export and import components for 2022 Q1–Q4 are the Bank of Russia's estimate.
Sources: Rosstat, Bank of Russia calculations.

GDP GROWTH PATH IN THE BANK OF RUSSIA'S BASELINE SCENARIO
(% change YoY)

Chart 41



Note. The shaded blue areas over the forecast horizon show the probability of different GDP growth values. The confidence intervals are symmetrical and based on the historical estimates of GDP growth uncertainty. If the situation develops in line with the baseline scenario assumptions, GDP growth will reach a rate within the darkest central area only in 25 of 100 cases. Each of the pairs of the lighter areas accounts for 25 of 100 cases. Overall, GDP growth will reach a rate within the blue areas in 75 of 100 cases. In the remaining 25 cases, GDP growth may reach a rate outside the blue areas; over the forecast horizon, this area is shaded in grey.

Source: Bank of Russia calculations.

previous estimates, including as a result of the revision of Rosstat's assessment for 2021. Considering higher demand, the forecast of imports for 2023 was significantly improved: instead of declining, imports are expected to recover at a pace of 12.5–15.5%. By 2025, the growth of import quantities will stabilise in the range of 1.0–3.0%. The level of imports over the entire forecast horizon notably exceeds the figures predicted in MPR 4/22, which is associated with more successful rearrangement of logistics processes than assumed before.

CURRENT PRICE GROWTH SPED UP

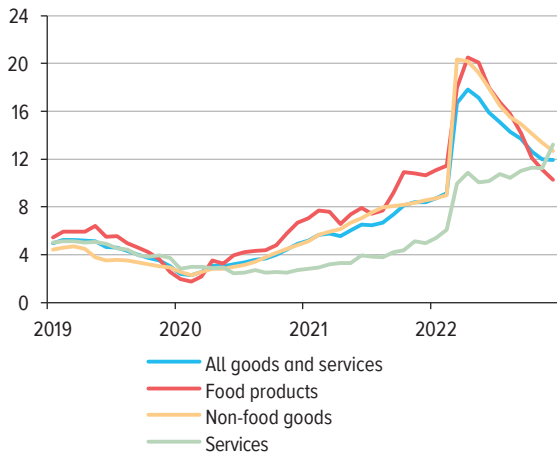
The rise in consumer prices that had resumed in September after its summer decline continued in 2022 Q4 (in monthly terms, SA). This upward trend remained in January 2023, although price growth was slower than in January 2022. Annual inflation continued to decelerate, dropping to 11.8%.³ In late 2022–early 2023, monthly price growth was largely induced by volatile components, namely prices for fruit and vegetables, tourism services and air flights, as well as the rescheduling of the indexation of utility tariffs from July 2023 to December 2022 and a more significant increase in tariffs for certain housing services in January 2023, as compared to the previous year. A proinflationary impact was also exerted by the ruble weakening at the end of last year–the beginning of this year. It considerably affected prices for fruit, household appliances, and electronic devices.

Price pressure persisted: it was put by rising costs amid contracting output and restrictions on the import of a number of goods and services.⁴ Nevertheless, subdued consumer demand limited the pass-through of higher costs to output prices, especially those for goods. A certain disinflationary effect was created by an increase in the supply of some food products owing to the good harvest of a range of agricultural crops (grains, oil crops, and sugar beets).

³ According to the Bank of Russia's assessment as of 6 February. Statistics on the growth of consumer prices in January 2023 were released after the meeting of the Bank of Russia Board of Directors and, therefore, are not part of the analysis carried out for MPR 1/23. In January, annual inflation reached 11.77%. For details, refer to the Bank of Russia's information and analytical commentary [Consumer Price Dynamics](#), No. 1 (85), January 2023.

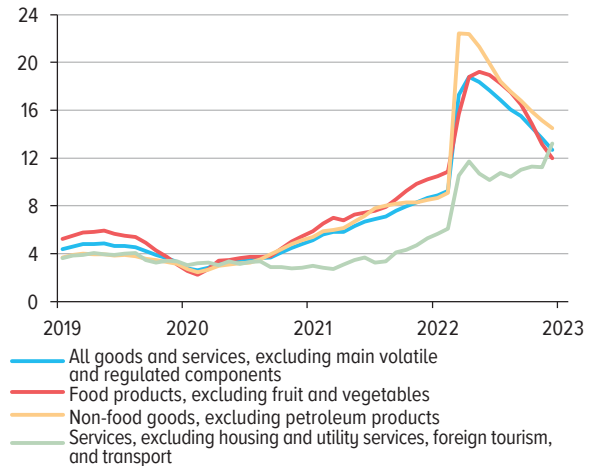
⁴ Refer to the Box 'Producer costs' in the report [Regional Economy: Commentaries by Bank of Russia Main Branches No. 17, February 2023](#).

PRICES FOR MAIN GROUPS OF GOODS AND SERVICES (*Chart 42*)
(% growth YoY)



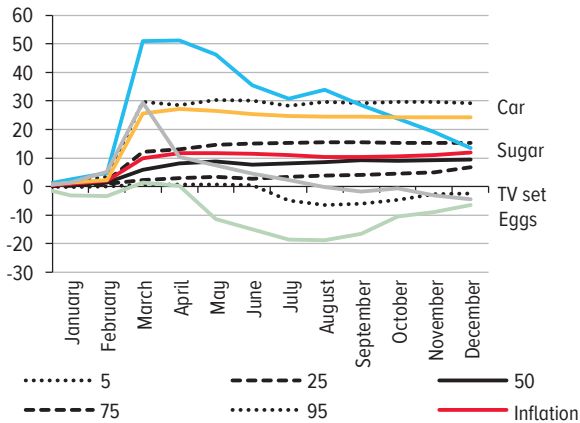
Sources: Rosstat, Bank of Russia calculations.

STABLE COMPONENTS OF INFLATION (*Chart 43*)
(% growth YoY)



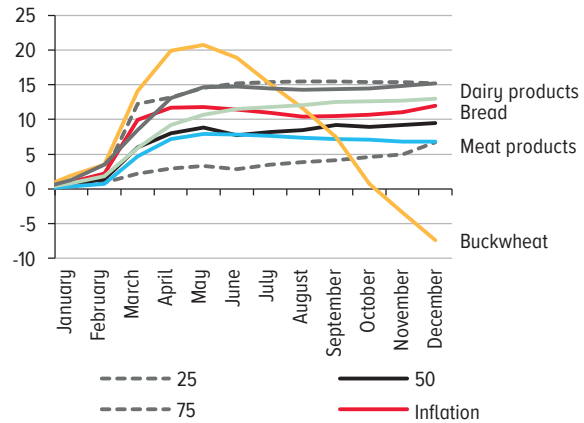
Sources: Rosstat, Bank of Russia calculations.

DISTRIBUTION OF PRICE INCREASES AND PRICES FOR CERTAIN GOODS (5–95TH PERCENTILES)* (*Chart 44*)
(% on December 2021, SA)



* The chart shows the quantiles of the distribution of price increases among CPI basket components accumulated since early 2022.
Sources: Rosstat, Bank of Russia calculations.

DISTRIBUTION OF PRICE INCREASES AND PRICES FOR CERTAIN GOODS (25–95TH PERCENTILES)* (*Chart 45*)
(% on December 2021, SA)



* The chart shows the quantiles of the distribution of price increases among CPI basket components accumulated since early 2022.
Sources: Rosstat, Bank of Russia calculations.

However, indicators excluding volatile components stayed below the level corresponding to the inflation rate of 4% (SA). The growth of prices for the main product groups in annualised terms did not exceed 4% SAAR and was below the level recorded last year.

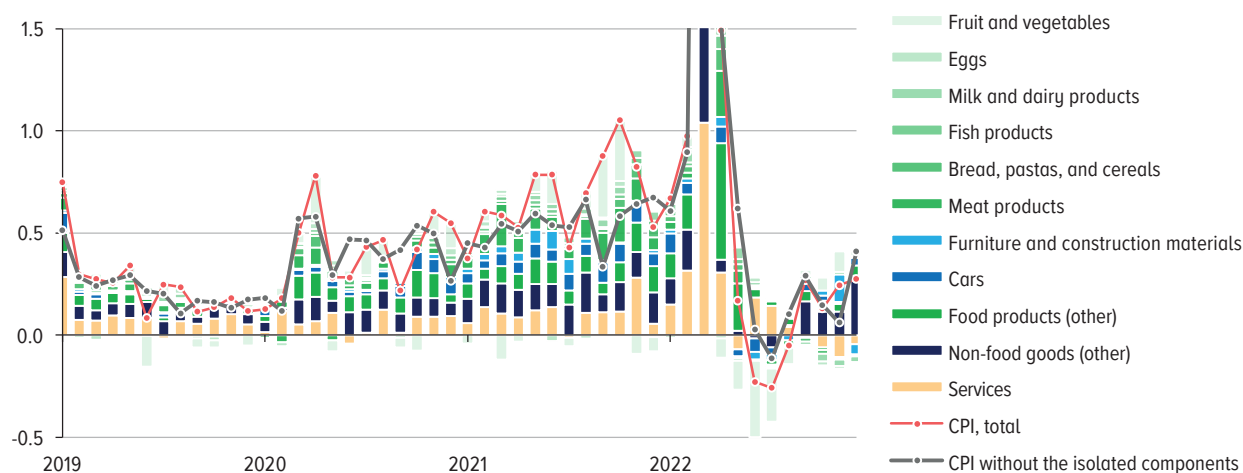
INFLATION EXPECTATIONS REMAINED ELEVATED

Households' inflation expectations declined in November 2022–January 2023, but remained elevated (**Chart 48**). Their median estimate equalled 11.6% in January 2023. The decrease in inflation expectations was generally the result of lower estimates among respondents without savings. Savers' expectations remain almost the same since September 2022 at the level of their 2021 average.

Inflation observed by households continued to edge down as well, dropping to 14.9% by January 2023. The estimates of observed inflation changed similarly among respondents both with and without savings.

CONTRIBUTION TO MONTHLY INFLATION
(pp SA)

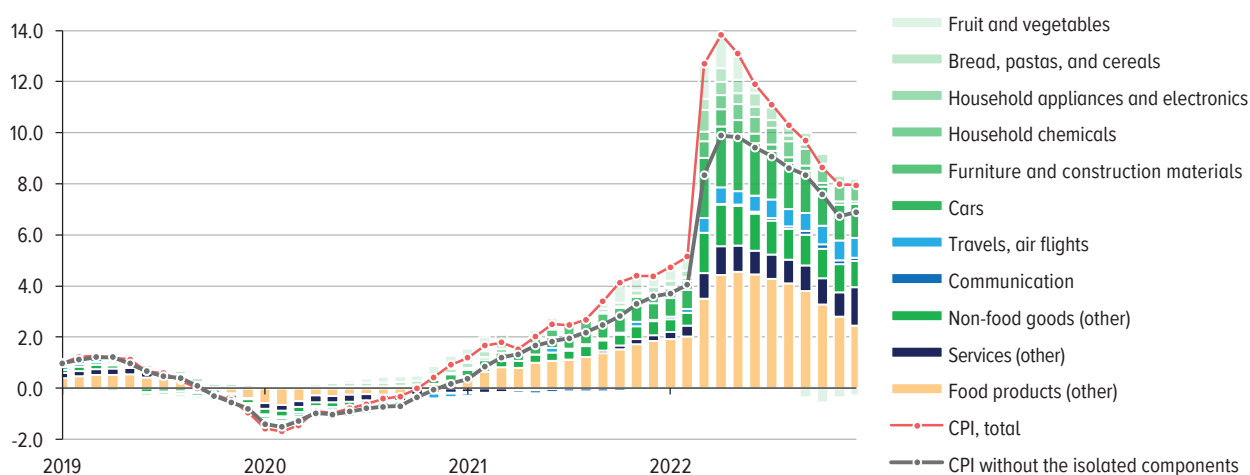
Chart 46



Sources: Rosstat, Bank of Russia calculations.

CONTRIBUTION TO THE DEVIATION OF ANNUAL INFLATION FROM 4%
(pp)

Chart 47



Sources: Rosstat, Bank of Russia calculations.

According to the Bank of Russia's [monitoring](#), companies' price expectations declined in January 2023 after the four months of their rise (**Chart 49**). The increase in price expectations at the end of 2022 was mainly provoked by the pass-through of higher costs to output prices planned by enterprises, including the indexation of utility tariffs (since 1 December 2022) and rail transportation rates (since 1 January 2023). In January 2023, price expectations changed as if that pass-through had already occurred. In January, the average price growth rate expected in the next three months reached 6.3% in annualised terms.⁵

INFLATION WILL STABILISE CLOSE TO 4% IN 2024

Annual inflation continues to slow down in line with the Bank of Russia's forecast. By spring 2023, it might decline below 4% due to the base effect (the external restrictions in early 2022 induced a surge in inflation in March–April 2022). Annual inflation is expected to drop to its minimum in

⁵ Refer to the information and analytical commentary [Inflation Expectations and Consumer Sentiment No. 1 \(73\), January 2023](#).

INFLATION OBSERVED AND EXPECTED BY
HOUSEHOLDS

Chart 48

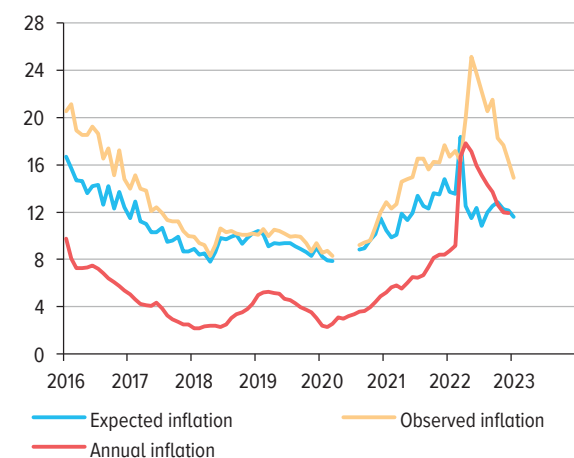
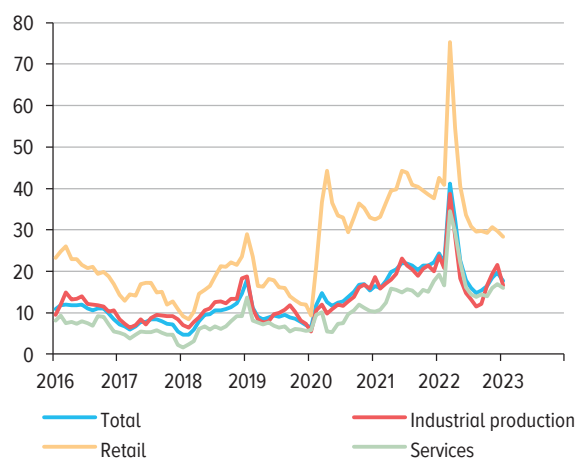
COMPANIES' PRICE EXPECTATIONS
(balance of responses, % SA)

Chart 49

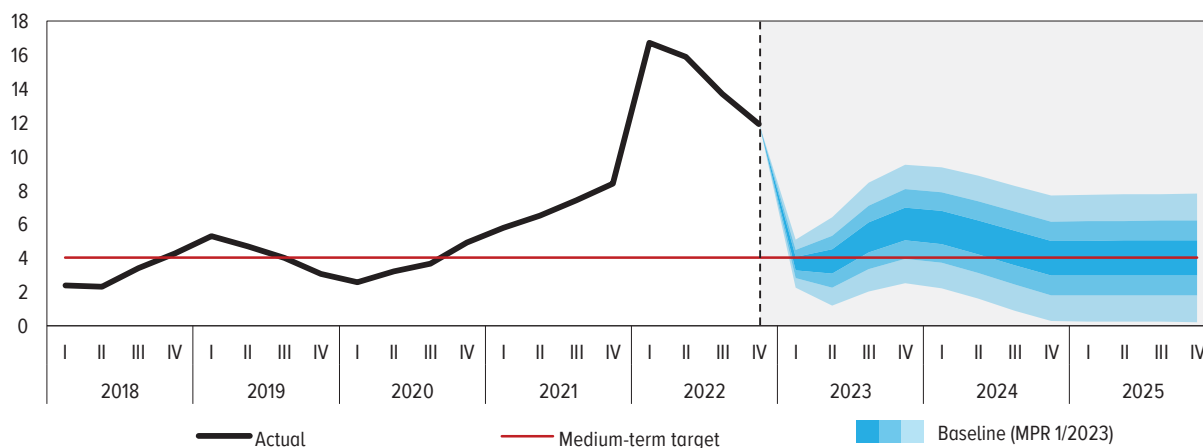


Sources: InFOM, Rosstat, Bank of Russia calculations.

Sources: Rosstat, Bank of Russia.

INFLATION PATH IN THE BANK OF RUSSIA'S BASELINE SCENARIO
(% change YoY)

Chart 50



Note. The shaded blue areas over the forecast horizon show the probability of different inflation rates. The confidence intervals are symmetrical and based on the historical estimates of inflation uncertainty. If the situation develops in line with the baseline scenario assumptions, inflation will reach a rate within the darkest central area only in 25 of 100 cases. Each of the pairs of the lighter areas accounts for 25 of 100 cases. Overall, inflation will reach a rate within the blue areas in 75 of 100 cases. In the remaining 25 cases, inflation may reach a rate outside the blue areas; over the forecast horizon, this area is shaded in grey.

Source: Bank of Russia calculations.

April 2023. Over the next quarters, as the low monthly rates of 2022 H2 are excluded from the calculation of annual inflation, the impact of proinflationary factors will intensify gradually, whereas that of disinflationary factors will weaken.

Until the end of 2023, the main proinflationary factors will be a gradual increase in consumer demand for goods and services, rising budgetary expenditures, and growing pressure put by the labour market amid the existing imbalances between labour demand and supply. The shortage of some specialists might become more acute and, consequently, proinflationary pressure from wages will strengthen. Rising consumer expenditure and wages amid decreasing unemployment will accelerate price growth in sequential terms. Another proinflationary factor may be a reduction in available inventories and the termination of earlier signed contracts. Considering the monetary policy pursued, inflation will be in the range of 5.0–7.0% as of the end of 2023.

If the situation develops in line with the baseline forecast, annual inflation will return to 4% in 2024 and will stay close to 4% further on.

BOX 3. SPECIFICS OF CHANGES IN HOUSEHOLDS' INFLATION EXPECTATIONS IN 2022

The level and changes of households' inflation expectations are an important factor taken into account by the Bank of Russia when making monetary policy decisions. In their consumption and saving preferences, households are guided by the actual level of interest rates which they estimate considering their own vision of future inflation. An increase in the propensity to consume and higher consumer demand as a result of rising inflation expectations might in turn exert upward pressure on inflation. *All else being equal*, higher inflation expectations mean that the nominal interest rate should be kept at a higher level to ensure the required level of the real key rate.

The Bank of Russia measures inflation expectations based on a monthly survey carried out by INFOM. After the period of the inflation deceleration close to its 4% target ended in 2015–2016, median inflation expectations stayed in the range of 7–11% from mid-2017 to mid-2020. However, in 2020 Q4, they exceeded this range and were growing throughout 2021. This rise in inflation expectations was provoked by the acceleration of actual inflation. It is essential to emphasise that there is a mutual correlation here as higher inflation expectations amid the accommodative monetary policy of 2020 H2–2021 were equally strengthening consumer demand and price pressure.

The Russian economy started the year 2022 with already elevated inflation expectations (in December 2021, they peaked to their maximum over the five years since 2016). The geopolitical events of February, the subsequent sanctions, and the rapid weakening of the ruble provoked a surge in inflation expectations in March 2022 to their peak since January 2015.

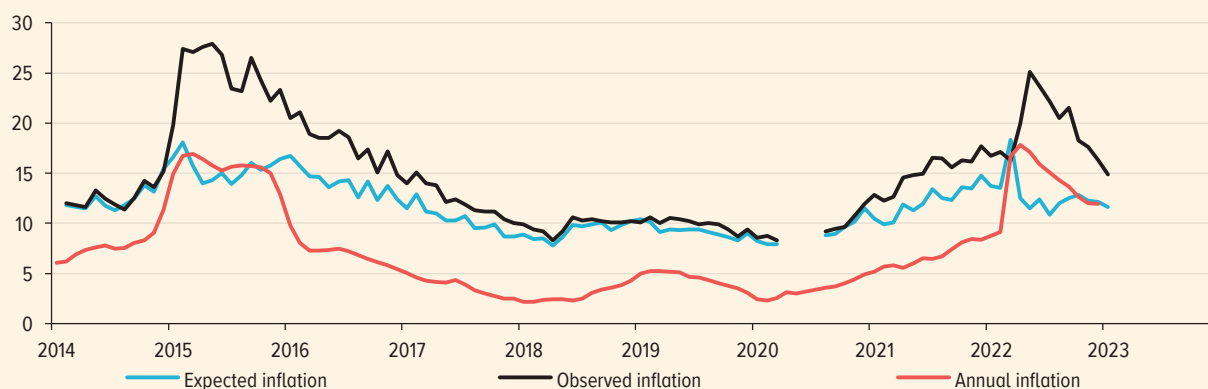
The following decrease in current price growth rates (**Chart B-2**), annual inflation (**Chart B-3**), and inflation expectations (**Chart B-4**) was faster than after the inflation shock of late 2014–early 2015. This was because the response of monetary policy in terms of the key rate rise was quicker and more decisive and because the devaluation of the ruble was temporary and followed by its considerable strengthening in 2022 Q2 (**Chart B-5**). Besides, trust towards the inflation targeting policy accumulated over the past years and confidence in the commitment of the Bank of Russia and the Russian authorities in general to the inflation target of close to 4% could also play a certain role.

Already at the end of spring, inflation expectations edged down to 12% and stayed close to this level throughout 2022 H2. During the previous crisis period of the rise in inflation expectations to comparable levels of 18%, the decrease to values below 12% took approximately two years (from early 2015 to early 2017).

This faster decline in inflation expectations enabled the Bank of Russia to cut the key rate more quickly this time. As early as September 2022, that is, six months after the increase, the key rate was reduced to 7.5% from 8.5% at the beginning of 2022. In 2015–2017, it took three years to return the key rate to 7.5%.

INFLATION OBSERVED AND EXPECTED BY HOUSEHOLDS*
(%)

Chart B-1

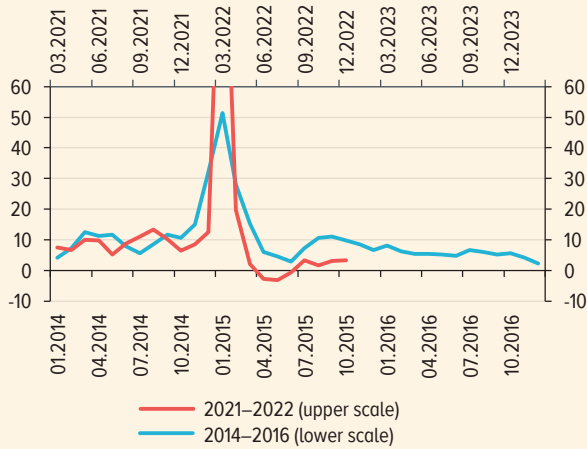


Note. Due to the epidemic situation, in April–July 2020, the surveys were carried out by telephone. Their results are not given in the chart because of their methodological differences with the results of personal interviews that are the main method of this survey.

* Data of INFOM's monthly survey commissioned by the Bank of Russia. Quantification of inflation expectations – the median of responses to the question 'What will be the price growth rate in the next 12 months, in your opinion?'. The results of the surveys are available on the Bank of Russia website.

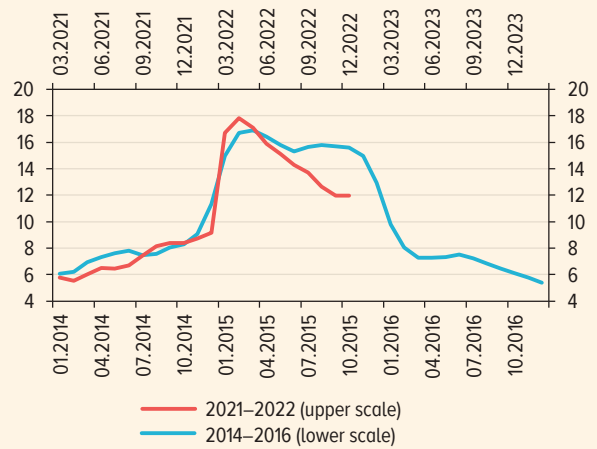
Sources: INFOM, Rosstat.

PRICE GROWTH MOM, SA ANNUALISED, IN 2014–2016 AND 2021–2022 (%) *Chart B-2*



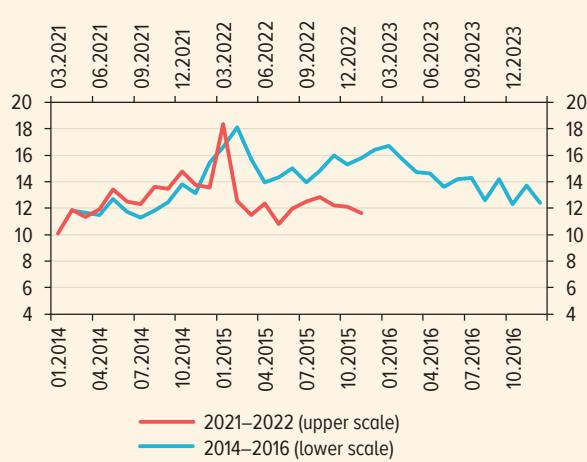
Source: Rosstat.

ANNUAL INFLATION IN 2014–2016 AND 2021–2022 (%) *Chart B-3*



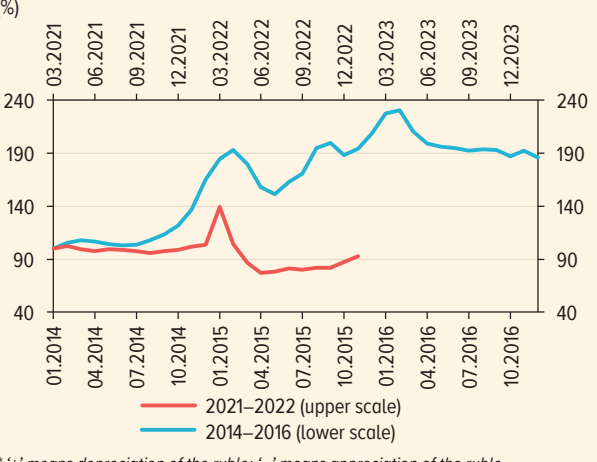
Source: Rosstat.

HOUSEHOLDS' INFLATION EXPECTATIONS IN 2014–2016 AND 2021–2022 (%) *Chart B-4*



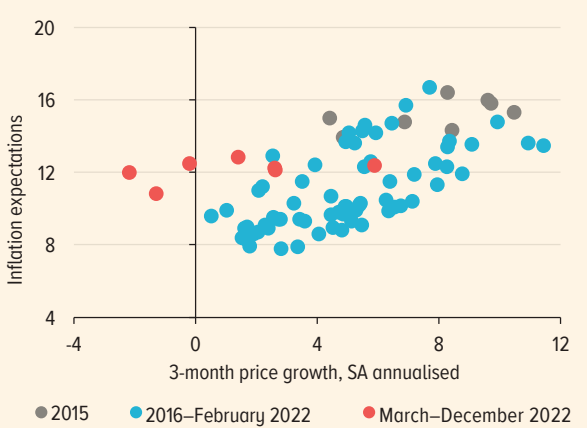
Source: InFOM.

RUB/USD EXCHANGE RATE IN 2014–2016 (JANUARY 2014 = 100) AND 2021–2022 (MARCH 2021 = 100)* (%) *Chart B-5*



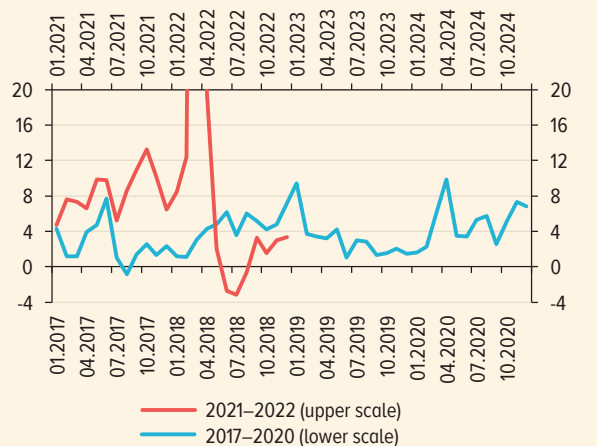
* '+' means depreciation of the ruble; '-' means appreciation of the ruble.
Source: Bank of Russia.

RATIO OF CURRENT PRICE GROWTH AND INFLATION EXPECTATIONS (%) *Chart B-6*



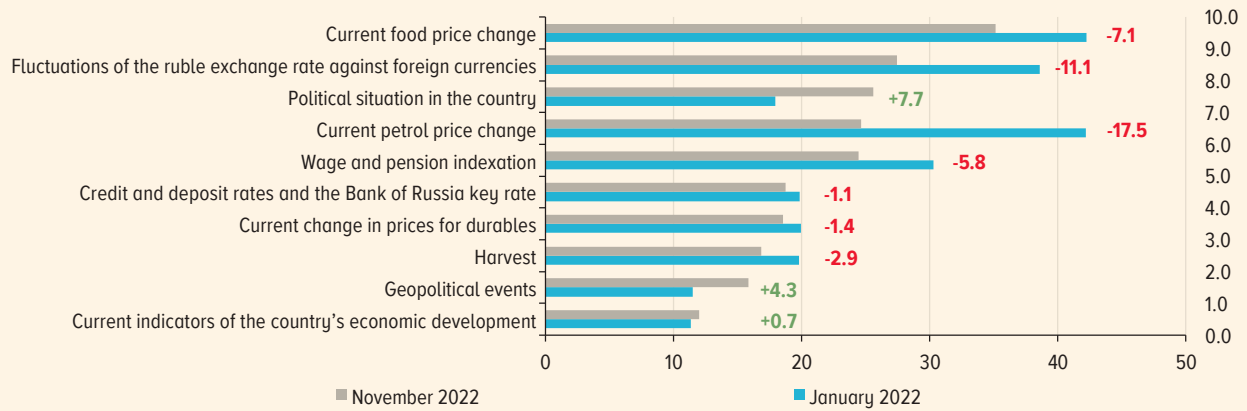
Note. The rates for January–April 2015 and March–May 2022 are beyond the chart.
Sources: InFOM, Rosstat, Bank of Russia calculations.

PRICE GROWTH MOM, SA ANNUALISED, IN 2017–2016 AND 2021–2022 (%) *Chart B-7*



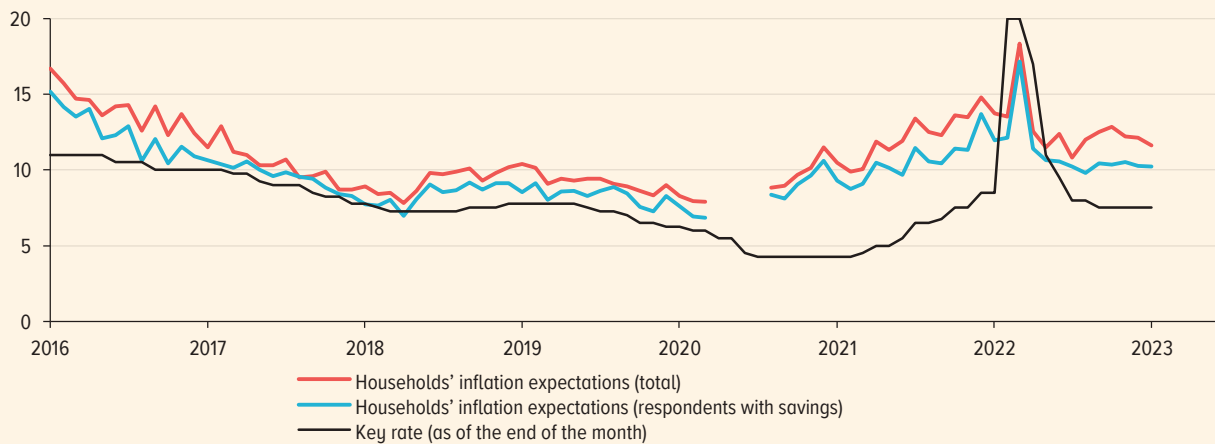
Source: Rosstat.

DISTRIBUTION OF RESPONSES TO THE QUESTION 'WHAT DO YOU PERCEIVE AS A SIGN OR A SIGNAL THAT PRICES WILL GROW AND THERE WILL BE INFLATION?' *Chart B-8*
(pp)



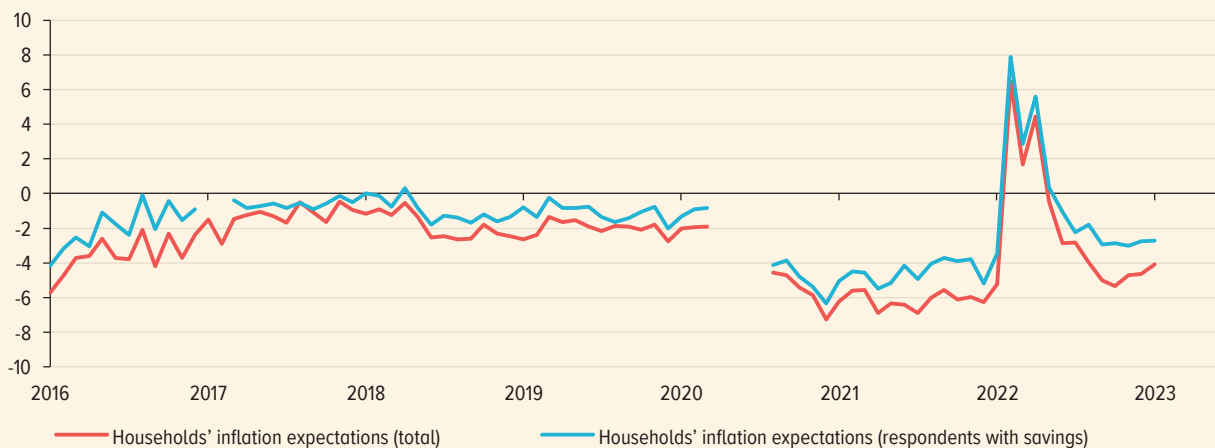
* Multiple options, top-10 possible responses, % of all respondents. The digits show changes: November 2022 vs January 2022.
* The option 'the upcoming holidays (the New Year, the Easter, etc.)' was excluded due to the seasonal factor in the responses.
Sources: InFOM, Bank of Russia calculations.

HOUSEHOLDS' INFLATION EXPECTATIONS AND THE BANK OF RUSSIA KEY RATE *Chart B-9*
(%)



Sources: InFOM, Bank of Russia, Bank of Russia calculations.

REAL KEY RATE (AS OF THE END OF THE MONTH) CALCULATED USING THE RATE OF HOUSEHOLDS' INFLATION EXPECTATIONS *Chart B-10*
(%)



Sources: InFOM, Bank of Russia, Bank of Russia calculations.

Nevertheless, the range of 10.5–13% where inflation expectations have been hovering since April 2022 still exceeds the range of 7–11% observed when inflation was close to 4%. This is exactly what (as well as the fact that similar trends are observed for both companies' price expectations and implied inflation for OFZ-IN bonds) evidences that inflation expectations are elevated. In addition, inflation expectations are considerably higher than in 2017–2020 although current price growth (month-on-month and annualised SA) has been staying notably below the rate of 2017–2020 for more than six months already (**Charts B-6 and B-7**).

Persistently elevated inflation expectations amid declining annual inflation and steadily low monthly price growth rates are probably associated with increased uncertainty regarding overall economic prospects, the continuing pressure of the sanctions, households' view of extra budgetary and quasi-budgetary expenditures and their impact on inflation. InFOM's survey proves that, in 2022, the influence of current price growth, changes in prices for marker products, the indexations, as well as the exchange rate on households' expectations about future price increases weakened, whereas the geopolitical situation became more important (**Chart B-8**).

The fact that inflation expectations have been staying almost unchanged in recent months also proves the opinion the Bank of Russia has expressed multiple times that three to four years of low inflation after two and a half decades of high inflation are not enough to reliably anchor inflation expectations. To tackle this task appropriately, the economy needs a longer period of price stability when inflation is kept at the target. Steadily low inflation expectations are critical to ensure a moderate level of long-term interest rates in the economy as they are largely influenced exactly by inflation expectations.

Besides, the assessment of the monetary policy stance for current monetary conditions also takes into account the level of the real key rate, that is, the nominal rate excluding inflation expectations (**Charts B-9 and B-10**). Currently, the real key rate assessed based on inflation expectations of both households in general and savers in particular (approximately a third of the sample) is substantially below its values of 2017–2020 H1 and close to the upper bounds of the corresponding ranges of 2020 H2–2021. This gives us grounds to believe that, considering the *current* trends of households' inflation expectations, monetary policy supports consumer demand approximately to the same extent as during the pandemic.

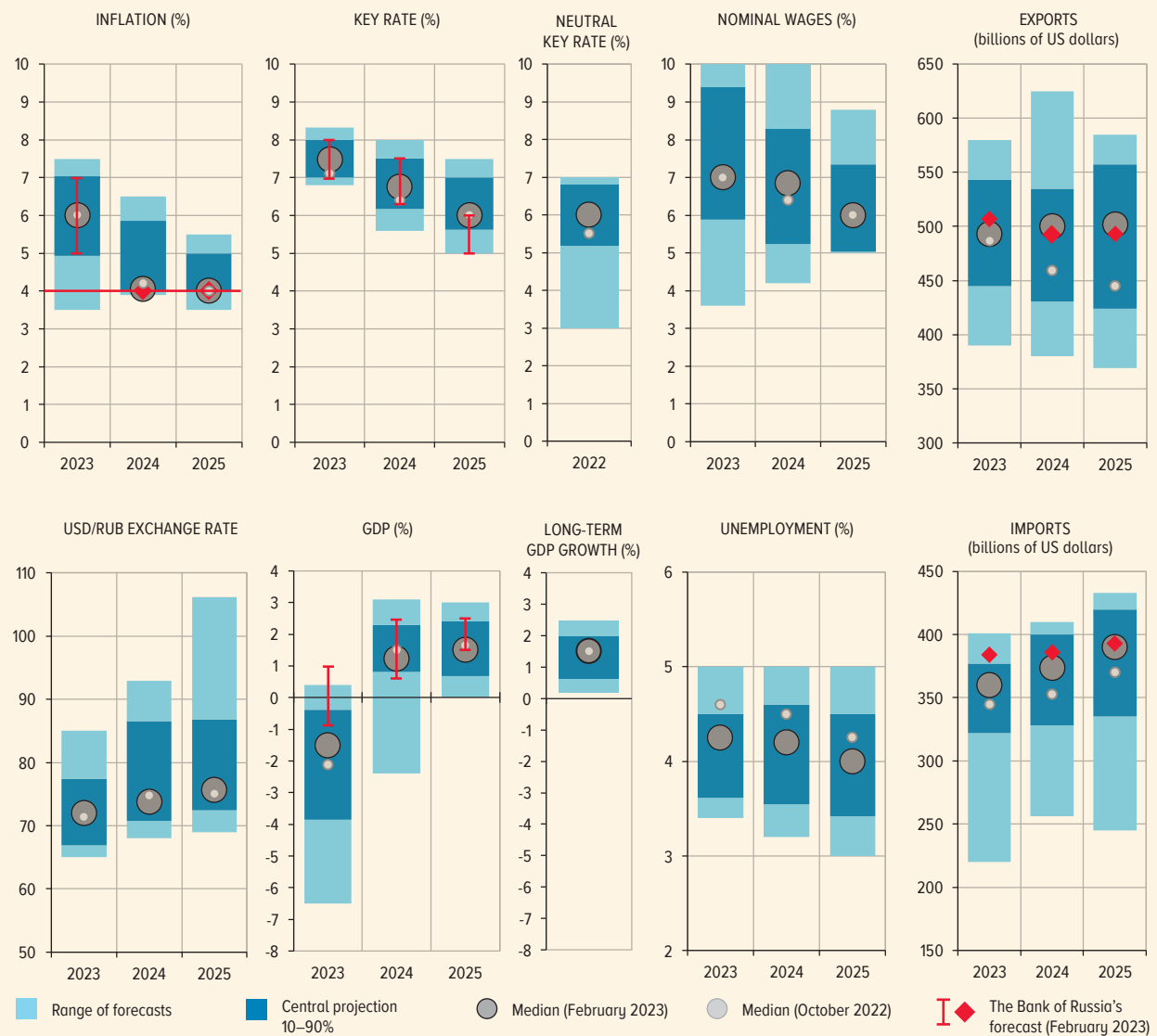
Changes in inflation expectations will continue to significantly affect the Bank of Russia's monetary policy decisions in 2023. A crucial prerequisite for returning the key rate to its longer-run neutral values is a decrease in inflation expectations to the levels observed when inflation stayed close to 4%. Until this happened, elevated inflation expectations that are a source of persistent inflationary pressure might provoke an acceleration of inflation if the effect of temporary disinflationary factors is exhausted (as it occurred in 2020 H2–2021).

BOX 4. ANALYSTS' CONSENSUS FORECASTS

According to the Bank of Russia's macroeconomic survey carried out in February, analysts expect inflation to equal 6% this year, return to the level of about 4% next year, and stay close to the target further on. The estimates for 2023 vary from 3.5% to 7.5%, while the central projection¹ (4.9–7.0%) is in line with the Bank of Russia's forecast (5.0–7.0%). Variances for subsequent years are becoming narrower. As forecast by the Bank of Russian, inflation will stay at the target in 2024–2025.

Analysts believe that the key rate will average 7.5% per annum in 2023, 6.8% per annum in 2024, and 6.0% per annum in 2025. The variance of their estimates for 2023 is considerably narrower than the Bank of Russia's forecast range and is shifted downwards relative to it: 6.8–8.3% and 7.0–9.0%, respectively. The central projection for 2024 (6.2–7.5%) is nearly the same as the Bank of Russia's forecast range (6.5–7.5%). The range of expectations for 2025 is wider than the Bank of Russia's forecast path, namely 5.0–7.5% compared to 5.0–6.0%.

ANALYSTS' CONSENSUS FORECASTS



Source: the Bank of Russia's macroeconomic survey.

¹ Hereinafter, the central projection implies the forecast range excluding the 10% of the lowest and highest values.

Analysts predict a 1.5% decline in GDP this year. The variance of their estimates is very wide from a contraction by 6.5% to a slight rise by 0.4%, whereas the Bank of Russia's forecast ranges from -1.0% to +1.0%. The central projection for 2024 (0.8–2.3%) is close to the Bank of Russia's forecast (0.5–2.5%). The variance of opinions for 2025 is wider than the Bank of Russia's forecast range, specifically 0–3% compared to 1.5–2.5%.

Analysts predict that unemployment will edge down gradually from 4.3% in 2023 to 4.0% in 2025. They do not expect unemployment to exceed 5%. According to analysts, in 2023–2025, nominal wages will rise by 7.0%, 6.8% and 6.0%, respectively. However, the forecast ranges for this and subsequent years are wide enough.

Analysts expect a gradual weakening of the ruble over the forecast horizon. The variance of estimates is widening towards the end of the forecast horizon. The consensus forecast for 2023–2025 is 72.0, 73.8 and 75.6 rubles against the US dollar, respectively.

The median forecasts of exports are close to the Bank of Russia's predictions. Besides, the ranges of analysts' expectations are very broad over the entire forecast horizon, namely \$390–580 billion, \$380–625 billion, and \$369–585 billion.

The Bank of Russia's forecast of imports for 2023 exceeds that of analysts, but they converge further on. Analysts' forecast ranges remain wide, specifically \$220–401 billion, \$256–410 billion and \$245–433 billion in 2023, 2024 and 2025, respectively.

As regards long-term levels of the key rate and GDP growth, in February, analysts estimated the neutral key rate at 6.0% per annum. This is in line with the upper bound of the Bank of Russia's estimate (5.0–6.0% per annum for the nominal neutral rate). Analysts' central projection is 5.2–6.8% per annum. The median estimate of long-term GDP growth is 1.5%, with the central projection ranging from 0.6% to 2.0%.

MAIN RISKS FOR THE BASELINE SCENARIO

The forecast remains highly uncertain. Proinflationary risks rose in the short term and still prevail over disinflationary ones. As to the medium term, the balance of risks is still shifted towards proinflationary ones.

Among the main risks, the Bank of Russia highlights the following.

Proinflationary risks:

▲ A slowdown in the world economy and a further tightening of external trade and financial restrictions might weaken foreign demand for Russian exports and have a proinflationary effect through foreign exchange movements. Besides, the external restrictions might have a stronger impact on the potential of the Russian economy than expected at the moment.

▲ An additional expansion of the budget deficit above the already announced target parameters might cause an accelerated rise in demand that might speed up price growth.

▲ High and unanchored inflation expectations that are especially sensitive to exchange rate fluctuations might accelerate consumer demand in the conditions of accumulated liquid assets in the structure of savings.

▲ Staff shortages in certain industries might further slow down the growth of labour productivity as compared to that of real wages, which will intensify pressure put by companies' costs.

Disinflationary risks:

▼ If households' propensity to save remains high and they need long time to adjust to the new structure of supply in consumer markets, this might contain demand to a greater extent and for a longer period than currently expected.

▼ A rise in the risk premium in bond yields and credit rates might additionally tighten monetary conditions, limiting credit activity in the economy.

▼ A faster adaptation of the economy accompanied with, among other things, an active rebound of imports might help offset supply-side shocks more quickly.

ANNEX

SYSTEM OF MONETARY POLICY INSTRUMENTS AND OTHER MONETARY POLICY MEASURES

Banking sector liquidity. In the second half of October 2022–the first half of February 2023, the structural liquidity surplus contracted on average across the required reserves averaging periods (APs) to ₺2.0 trillion (from ₺2.4 trillion over the July–September APs). As of the end of 2022, it amounted to ₺2.8 trillion, which is in line with the Bank of Russia’s forecast of ₺2.6–3.2 trillion. Furthermore, budget operations caused a larger inflow of funds into banks than expected. This inflow was partially offset by higher demand for cash that exceeded seasonal values. In addition, balances in banks’ correspondent accounts as of early January were higher than the level that banks needed for required reserves averaging.

By the end of January 2023, the surplus increased by another ₺0.4 trillion, reaching ₺3.2 trillion. At the beginning of the year, after the New Year holidays, cash is returned to banks, which is typical of that season. In addition, credit institutions reduced balances in their correspondent accounts and raised their placements in Bank of Russia deposits. As to budget operations, there was an outflow of liquidity.

Budget account operations. In November–December 2022, budget spending increased year-on-year, partially covered from the NWF.¹ Due to the changes in the external economic environment and the infrastructure constraints, from the end of January 2022, the Bank of Russia did not mirror the operations with the NWF’s resources in the foreign exchange market, due to which they caused an inflow of funds into banks and an increase in the liquidity surplus.² Overall, making its inflation forecast and monetary policy decisions, the Bank of Russia factors in the impact of budgetary operations and the sources of budget deficit financing. Hence, this factor does not involve any additional proinflationary risks.

Budget revenues also increased in annualised terms, although to a lesser extent than spending. The rise in revenues was driven, in particular, by the measures implemented in the oil and gas industry,³ as well as by the transfer to the budget of a part of PJSC Gazprom dividends for 2022 H1.

The Ministry of Finance of Russia increased its borrowings through OFZ bonds. This entailed an outflow of liquidity from the banking sector. Concurrently, the Federal Treasury (FT) ramped up the amount of funds placed with banks, which smoothed the impact of budget operations on liquidity.

In January 2023, according to the data of the Bank of Russia Payment System, budget spending increased and revenues contracted, in annualised terms. The FT temporarily reduced the amount of deposits with banks, due to which the outflow through the budget channel approximated ₺0.7 trillion. However, as early as the beginning of February, these funds returned to the banking sector through budget spending. From mid-January, the Bank of Russia resumed foreign currency

¹ The NWF was replenished according to the fiscal rule from extra oil and gas revenues. The NWF’s resources were predominantly formed during the periods of high oil prices. Then, those extra revenues were not transferred to the economy, but were kept in general government accounts with the Bank of Russia. Such resources were accumulated to later on, during periods of an unfavourable macroeconomic situation, be used in order to cover the budget deficit. In line with this strategy, in 2022, the Ministry of Finance of Russia started using these earlier accumulated funds to cover budget spending.

² Fiscal rule-based operations in the foreign exchange market will offset the impact of changes in budget revenues on the banking sector liquidity. When oil prices are low, banks’ clients make smaller tax payments to the budget, and vice versa. All else being equal, when the level of budgetary expenditures is fixed, there will be either a budget deficit or a surplus. Accordingly, if there are no foreign currency sales or purchases in the market, this causes an inflow or an outflow of funds into/from credit institutions’ accounts.

³ A one-time increase in the mineral extraction tax rate in October–December 2022 by ₺0.4 trillion monthly in accordance with Federal Law No. 323-FZ, dated 14 July 2022, ‘On Amending Part 2 of the Tax Code of the Russian Federation’.

operations within the implementation of the fiscal rule mechanism by the Ministry of Finance of the Russian Federation. This also somewhat offset the current impact on the banking sector liquidity resulting from budgetary expenditures exceeding revenues.

Cash in circulation. The increase in the amount of cash in circulation in November 2022–January 2023 exceeded seasonal dynamics. Overall, beginning from September, the additional growth of cash in circulation, in excess of the seasonal trend, is estimated as more than ₺1.5 trillion. The withdrawals from bank accounts are partly associated with households' demand for cash. People hold these funds as liquid savings or use them for current payments instead of cashless instruments. Nevertheless, an increase in cash as such involves no additional proinflationary risks. This topic was covered in greater detail in MPR 4/22.

System of monetary policy instruments and achieving the operational objective of monetary policy. The spread between short-term interest rates in the IBL segment of the money market⁴ and the key rate over the October 2022–January 2023 APs expanded on average across the APs to equal -23 bp (vs -3 bp in the July–September AP), fluctuating from -75 bp to +22 bp (vs from -46 bp to +67 bp in the July–September AP).

Sharp changes in the structural liquidity surplus over the period under review were influencing the movements of market rates. Specifically, in September–October, due to the increase in the demand for cash, the surplus shrank, and the spread between RUONIA and the key rate turned positive. Contrastingly, in January, after banks received budgetary funds at the end of the year and the surplus expanded, the negative spread widened notably. This is because liquidity is withdrawn or transferred to banks unevenly. For example, budgetary funds are transferred mostly to a limited number of banks, and the distribution of these funds across the banking sector takes time. Further on, as banks adjust to the increased surplus, the spread of market rates will narrow and return to its averages observed in 2019–2022, as it has happened before.

Despite the overall surplus of liquidity, some large banks still need refinancing. Therefore, in November 2022 when there was a rise in volatility, including of budget operations, the Bank of Russia raised the limit at its one-month repo auction from ₺0.1 trillion to ₺1.5 trillion and maintained this level until January 2023. In February, this limit was reduced to ₺1 trillion. These operations helped maintain money market rates close to the key rate and, accordingly, did not affect the stance of monetary policy. The demand for long-term repo auctions is expected to decline as the budgetary funds received are distributed across the banking sector.

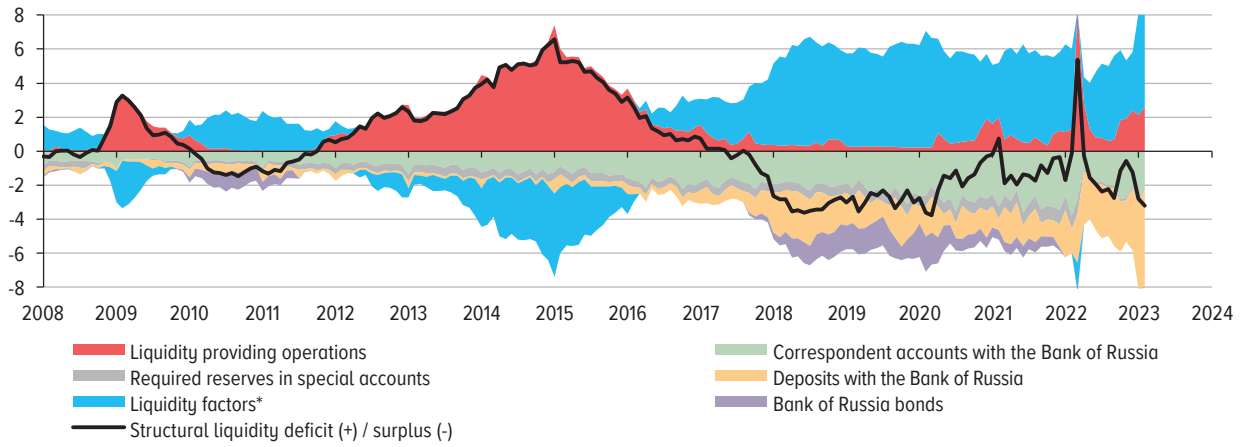
The forecast of the structural liquidity surplus for the end of 2023 is estimated in the range from ₺2.8 trillion to ₺3.4 trillion. This forecast takes into account the relaunch in 2023 of the fiscal rule and related operations to sell foreign currency in the domestic foreign exchange market. Besides, budgetary expenditures may be partially financed through the operations of the Government of the Russian Federation. These operations and investment from the NWF will generate the main inflow of liquidity into banks. The amount of cash in circulation is forecast to increase by the end of the year by ₺0.6–0.8 trillion. In addition, the forecast factors in the approximate dates announced by the Bank of Russia for the two stages of the increase in the required reserve ratios.⁵ As estimated by the Bank of Russia, this will cause a rise in the required reserves to be averaged in correspondent accounts, as compared to the January level of required reserves, by ₺1.0 trillion and ₺0.9 trillion in April and July, respectively. As a result, by the end of 2023, compared to the value as of 1 January 2023, balances in banks' correspondent accounts with the Bank of Russia will grow by ₺1.4–1.6 trillion, considering the forecast pace of the expansion of money supply in the national definition. Consequently, the liquidity surplus will change only slightly over 2023.

⁴ The IBL interest rate is the RUONIA (Ruble Overnight Index Average) rate, which is the weighted interest rate on overnight interbank ruble loans (deposits) that reflects the estimated cost of unsecured overnight borrowing.

⁵ [Press release of the Bank of Russia, dated 23 December 2022.](#)

THE BANK OF RUSSIA'S BALANCE SHEET
(start of business, trillions of rubles)

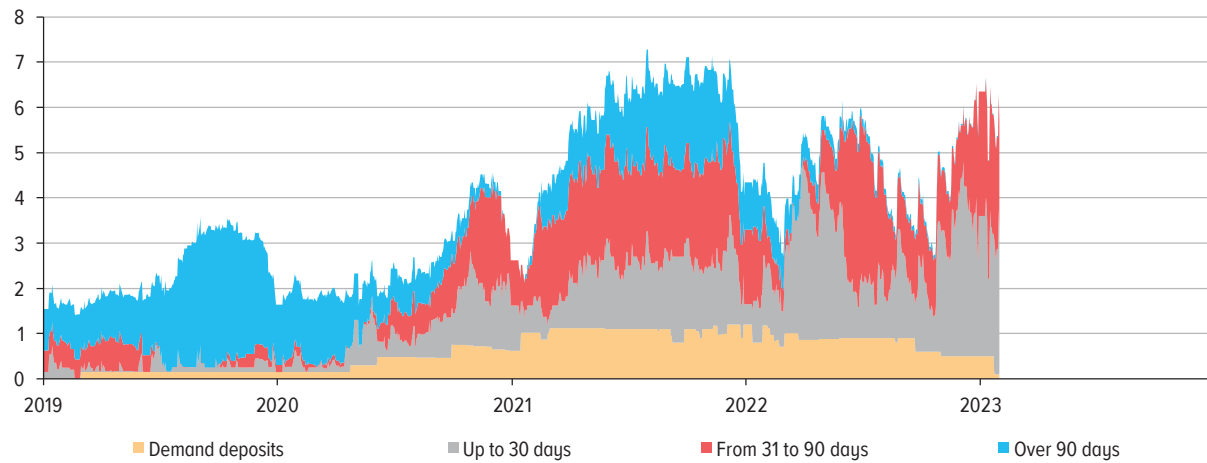
Chart A-1



* This item is consolidating and comprises changes in all other, not differentiated, items of the Bank of Russia's balance sheet.
Source: Bank of Russia calculations.

BANKS' OUTSTANDING AMOUNTS ON FEDERAL TREASURY DEPOSITS, REPOS AND SWAPS
(trillions of rubles)

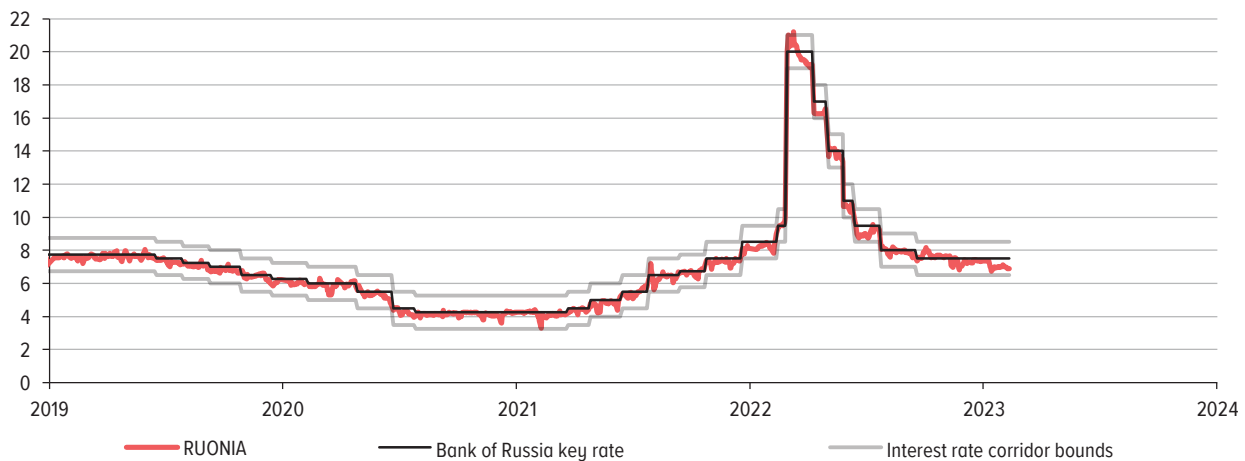
Chart A-2



Sources: Federal Treasury, Bank of Russia calculations.

RUONIA AND THE BANK OF RUSSIA INTEREST RATE CORRIDOR
(% p.a.)

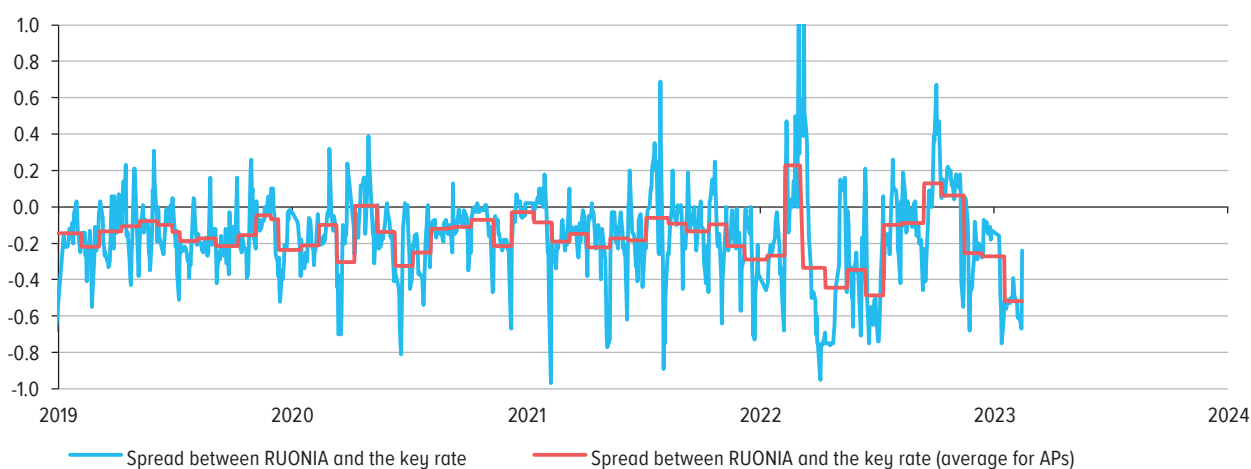
Chart A-3



Source: Bank of Russia.

SPREAD BETWEEN RUONIA AND THE KEY RATE
(pp)

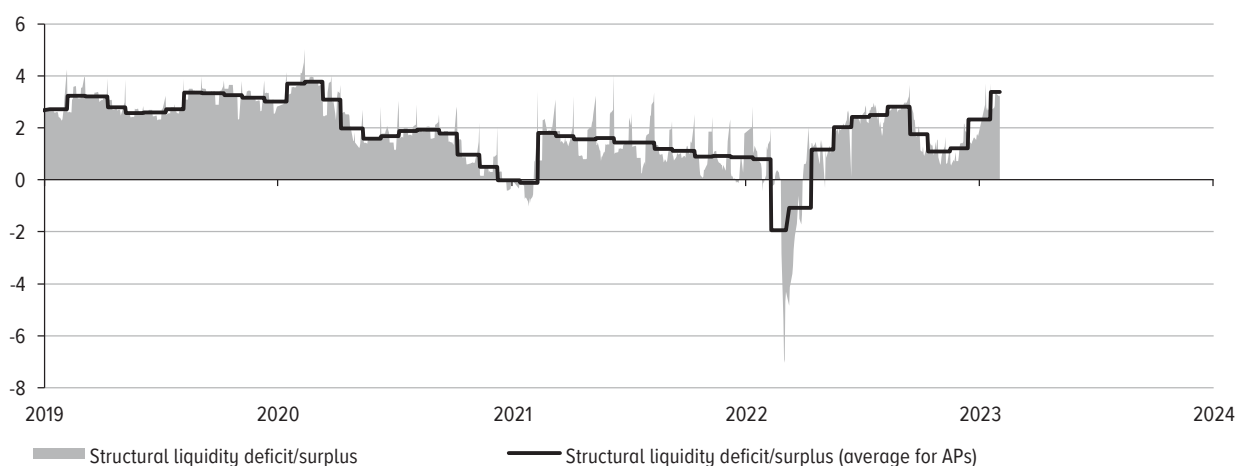
Chart A-4



Source: Bank of Russia calculations.

STRUCTURAL LIQUIDITY SURPLUS
(trillions of rubles)

Chart A-5



Source: Bank of Russia calculations.

STRUCTURAL LIQUIDITY SURPLUS AND LIQUIDITY FACTORS
(trillions of rubles)

	November 2022	December 2022	2022	January 2023	2023 (forecast)
1. Liquidity factors	0.0	2.5	1.5	-0.5	[1.5; 1.9]
– change in the balances of funds in general government accounts with the Bank of Russia, and other operations*	0.1	3.3	3.2	-0.7	[2.5; 2.7]
– change in the amount of cash in circulation	-0.1	-0.8	-2.3	0.2	[-0.8; -0.6]
– the Bank of Russia's interventions in the domestic FX market	-	-	-0.1	-	-
– regulation of banks' required reserves with the Bank of Russia	0.0	0.0	0.7	0.0	-0.1
2. Change in free bank reserves (correspondent accounts)	-0.7	0.9	0.3	-0.9	[1.4; 1.6]
3. Change in banks' claims on deposits with the Bank of Russia and coupon OBRs	1.2	1.3	2.1	0.9	[-0.7; -0.1]
4. Change in outstanding amounts on Bank of Russia refinancing operations (4 = 2 + 3 - 1)	0.5	-0.3	1.0	0.4	-0.6
Structural liquidity deficit (+) / surplus (-) (as of the period-end)	-1.2	-2.8		-3.2	[-3.4; -2.8]

* Including fiscal rule-based operations to buy (sell) foreign currency in the domestic FX market and other operations.

Source: Bank of Russia calculations.

LIST OF PUBLICATIONS

The Bank of Russia's information and analytical commentaries released after the publication of MPR 4/22 on 1 November 2022:¹

1. [Consumer Price Dynamics, No. 10 \(82\), October 2022 \(14 November 2022\)](#).
2. [Consumer Price Dynamics, No. 11 \(83\), November 2022 \(19 December 2022\)](#).
3. [Consumer Price Dynamics, No. 12 \(84\), December 2022 \(19 January 2022\)](#).
4. [Inflation Expectations and Consumer Sentiment, No. 11 \(71\), November 2022 \(24 November 2022\)](#).
5. [Inflation Expectations and Consumer Sentiment, No. 12 \(72\), December 2022 \(21 December 2022\)](#).
6. [Inflation Expectations and Consumer Sentiment, No. 1 \(73\), January 2023 \(31 January 2023\)](#).
7. [Monetary Conditions and Monetary Policy Transmission Mechanism, No. 4, October 2022 \(18 November 2022\)](#).
8. [Monetary Conditions and Monetary Policy Transmission Mechanism, No. 5, November 2022 \(19 December 2022\)](#).
9. [Monetary Conditions and Monetary Policy Transmission Mechanism, No. 6, December 2022 \(20 January 2023\)](#).
10. [Russia's Balance of Payments, No. 4 \(13\), 2022 Q4 \(26 January 2022\)](#).
11. [Regional Economy: Commentaries by Bank of Russia Main Branches, No. 16, December 2022 \(8 December 2022\)](#).
12. [Regional Economy: Commentaries by Bank of Russia Main Branches, No. 17, February 2023 \(1 February 2023\)](#).
13. [Monitoring of Businesses: Assessments, Expectations and Comments, November 2022 \(24 November 2022\)](#).
14. [Monitoring of Businesses: Assessments, Expectations and Comments, December 2022 \(26 December 2022\)](#).
15. [Monitoring of Businesses: Assessments, Expectations and Comments, January 2023 \(27 January 2023\)](#).

¹ The date in the brackets is the date of publication on the Bank of Russia website.

CALENDAR OF KEY RATE DECISIONS FOR 2023

Date	Event
10 February 2023	Bank of Russia Board of Directors' key rate meeting
	Press release on the key rate with the medium-term forecast
	Press conference by the Governor of the Bank of Russia
20 February 2023	Monetary Policy Report
17 March 2023	Bank of Russia Board of Directors' key rate meeting
	Press release on the key rate
	Press conference by the Governor of the Bank of Russia
28 April 2023	Bank of Russia Board of Directors' key rate meeting
	Press release on the key rate with the medium-term forecast
	Press conference by the Governor of the Bank of Russia
11 May 2023	Monetary Policy Report
9 June 2023	Bank of Russia Board of Directors' key rate meeting
	Press release on the key rate
	Press conference by the Governor of the Bank of Russia
21 July 2023	Bank of Russia Board of Directors' key rate meeting
	Press release on the key rate with the medium-term forecast
	Press conference by the Governor of the Bank of Russia
31 July 2023	Monetary Policy Report
15 September 2023	Bank of Russia Board of Directors' key rate meeting
	Press release on the key rate
	Press conference by the Governor of the Bank of Russia
27 October 2023	Bank of Russia Board of Directors' key rate meeting
	Press release on the key rate with the medium-term forecast
	Press conference by the Governor of the Bank of Russia
7 November 2023	Monetary Policy Report
15 December 2023	Bank of Russia Board of Directors' key rate meeting
	Press release on the key rate
	Press conference by the Governor of the Bank of Russia

Note. The dates in bold are those of the core meetings of the Bank of Russia Board of Directors on the key rate that are held four times a year (once a quarter). The core meetings are followed by the release of a medium-term forecast within the baseline scenario. After each core meeting, the Bank of Russia also publishes its Monetary Policy Report.

REQUIRED RESERVES AVERAGING PERIODS IN 2023

Averaging period to calculate required reserves for a corresponding reporting period	Averaging period duration (days)	Memo item	
		Reporting period	Required reserves regulation period
18.01.2023–14.02.2023	28	December 2022	24.01.2023–26.01.2023
15.02.2023–14.03.2023	28	January 2023	16.02.2023–20.02.2023 (as recalculated)
15.03.2023–11.04.2023	28	February 2023	17.03.2023–21.03.2023
12.04.2023–16.05.2023	35	March 2023	18.04.2023–20.04.2023
17.05.2023–13.06.2023	28	April 2023	19.05.2023–23.05.2023
14.06.2023–11.07.2023	28	May 2023	19.06.2023–21.06.2023
12.07.2023–08.08.2023	28	June 2023	18.07.2023–20.07.2023
09.08.2023–12.09.2023	35	July 2023	16.08.2023–18.08.2023
13.09.2023–10.10.2023	28	August 2023	18.09.2023–20.09.2023
11.10.2023–14.11.2023	35	September 2023	17.10.2023–19.10.2023
15.11.2023–12.12.2023	28	October 2023	17.11.2023–21.11.2023
13.12.2023–16.01.2024	35	November 2023	18.12.2023–20.12.2023

Table 1

INTEREST RATES ON MONETARY POLICY INSTRUMENTS¹

(% p.a.)

Purpose	Instrument type	Instrument	Maturity	Frequency	Spread between interest rates and the key rate (pp)	From 20.12.2021	From 14.02.2022	From 28.02.2022	From 01.03.2022	From 25.03.2022	From 11.04.2022	From 04.05.2022	From 27.05.2022	From 14.06.2022	From 25.07.2022	From 19.09.2022	
Liquidity provision	Standing facilities	Overnight loans, lombard loans, loans secured by non-marketable assets, repos, FX swaps ²	1 day	Daily	+1.00	9.50	10.50	21.00	21.00	21.00	18.00	15.00	12.00	10.50	9.00	8.50	
			From 2 to 90 days ³		+1.00	-	-	21.00	21.00	18.00	15.00	12.00	9.00	8.50			
		From 2 to 90 days ³	+1.007		10.25	11.25	21.00	21.00	18.00	15.00	12.00	9.00	8.50				
		From 91 to 549 days ³	+1.75		10.25	11.25	21.75	21.75	18.75	15.75	12.75	9.75	9.25				
	Open market operations (minimum interest rates)	Auctions to grant loans secured by non-marketable assets	3 months ^{3,4}	Monthly	+0.25	8.75	9.75	20.25	20.25	20.25	17.25	14.25	11.25	9.75	8.25	7.75	
			1 year ³		+0.10	8.60	9.60	20.10	20.10	17.10	14.10	11.10	9.60	7.60			
			1 month ³														
		Repo auctions	1 week	Weekly ⁵													
			From 1 to 6 days	On a non-regular basis ⁶													
			From 1 to 2 days														
Liquidity absorption	Open market operations (maximum interest rates)	FX swap auctions ²	From 1 to 6 days	Weekly ⁵	0.00 (key rate)	8.50	9.50	20.00	20.00	20.00	17.00	14.00	11.00	9.50	8.00	7.50	
		Deposit auctions	1 week														
	Standing facilities	Overnight deposits	1 day	Daily	-1.00	7.50	8.50	19.00	19.00	19.00	16.00	13.00	10.00	8.50	7.00	6.50	

Note: From 1 January 2016, the value of the Bank of Russia refinancing rate equals its key rate as of the relevant date.

¹ Interest rates established by the Bank of Russia Board of Directors.

² The interest rate is given for the ruble leg; operations were suspended due to changes in external economic conditions.

³ Loans and repos at a floating interest rate linked to the Bank of Russia key rate. For one-month repo auctions, a floating interest rate was established from 9 January 2023. Before that, a fixed interest rate had been used.

⁴ Loan auctions are not held from April 2016.

⁵ Depending on the liquidity situation, either a repo auction or a deposit auction is held.

⁶ Fine-tuning auctions.

⁷ From 1 March 2022; previously: +1.75.

Source: Bank of Russia.

Table 2

THE USE OF MONETARY POLICY INSTRUMENTS
(billions of rubles)

Purpose	Instrument type	Instrument	Maturity	Frequency	Bank of Russia claims under liquidity providing instruments and liabilities under liquidity absorbing instruments						
					As of 01.01.2022	As of 01.04.2022	As of 01.07.2022	As of 01.10.2022	As of 01.01.2023	As of 01.02.2023	
Liquidity provision	Standing facilities	Overnight loans	1 day	Daily	0.0	0.0	0.0	0.0	0.0	0.0	
		Repos			2.6	91.6	9.9	9.5	7.9	0.0	
		FX swaps ¹			0.0	-	-	-	-	-	
		Lombard loans	0.0		38.7	47.3	91.4	95.9	19.6		
		Loans secured by non-marketable assets	790.1		55.5	52.1	1,211.5	213.1	155.1		
	Open market operations	Auctions to grant loans secured by non-marketable assets	3 months	Monthly ²	0.0	0.0	0.0	0.0	0.0	0.0	
		1 year			15.6	75.1	70.0	166.0	484.3	554.5	
		1 month	100.8		11.1	100.7	0.0	1,007.3	1,510.9		
		1 week	0.0		2,212.2	0.0	0.0	0.0	0.0		
		From 1 to 6 days	1,625.9		0.0	1,838.4	1,663.9	3,621.2	4,469.0		
Liquidity absorption	Open market operations	Deposit auctions	1 week	Weekly ³	0.0	0.0	0.0	0.0	0.0	0.0	
		Auctions for placing coupon OBRs			0.0	0.0	0.0	0.0	0.0	0.0	
		Up to 3 months	0.0		0.0	0.0	0.0	0.0	0.0		
	Standing facilities	Overnight deposits	1 day		Daily	1,779	3,107.8	1,341.1	1,291.0	1,328.2	1,332.4
		On a non-regular basis ⁴	From 1 to 6 days			0.0	0.0	0.0	0.0	0.0	

¹ Suspended due to changes in external economic conditions.² Loan auctions are not held from April 2016.³ Depending on the liquidity situation, either a repo auction or a deposit auction is held.⁴ Fine-tuning auctions.⁵ Basically, a new OBR issue is offered once a month and subsequently – on a weekly basis. If the reporting date falls on a weekend or a holiday, the amount of outstanding OBRs at face value should be specified including the coupon yield accrued as of the first business day following the reporting date. Beginning from 19 October 2021, auctions for placing OBRs are not held.

Source: Bank of Russia.

REQUIRED RESERVE RATIOS
(%)

Table 3

Type of liabilities	Effective period							
	01.12.2017– 31.07.2018	01.08.2018– 31.03.2019	01.04.2019– 30.06.2019	01.07.2019– 02.03.2022 ¹	03.03.2022– 31.03.2022 ²	01.04.2022– 30.04.2022 ³	01.05.2022– 31.07.2022 ⁴	From 01.08.2022 ⁵
Banks with a universal licence								
To households in rubles								
Other liabilities in rubles	5.00	5.00	4.75	4.75			2.00	3.00
To non-resident legal entities in rubles					2.00	2.00		
To households in foreign currency	6.00	7.00	7.00					
To non-resident legal entities in foreign currency	7.00	8.00	8.00	8.00			4.00	5.00
Other liabilities in foreign currency								
Non-bank credit institutions								
To households in rubles								
Other liabilities in rubles	5.00	5.00	4.75	4.75				3.00
To non-resident legal entities in rubles					2.00	2.00	2.00	
To households in foreign currency	6.00	7.00	7.00	8.00				
To non-resident legal entities in foreign currency	7.00	8.00	8.00	8.00				5.00
Other liabilities in foreign currency								
Banks with a basic licence								
To households in rubles								
Other liabilities in rubles	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
To non-resident legal entities in rubles	5.00	5.00	4.75	4.75				
To households in foreign currency	6.00	7.00	7.00		2.00			
To non-resident legal entities in foreign currency	7.00	8.00	8.00	8.00		2.00	4.00	5.00
Other liabilities in foreign currency								

¹ Bank of Russia Ordinance No. 5158-U, dated 31 May 2019. Refer to the press release, dated 31 May 2019, on the Bank of Russia website.

² Bank of Russia Ordinance No. 6082-U, dated 3 March 2022. Refer to the press release, dated 2 March 2022, on the Bank of Russia website.

³ Bank of Russia Ordinance No. 6099-U, dated 23 March 2022. Refer to the press release, dated 21 March 2022, on the Bank of Russia website.

⁴ Bank of Russia Ordinance No. 6135-U, dated 29 April 2022. Refer to the press release, dated 29 April 2022, on the Bank of Russia website.

⁵ Bank of Russia Ordinance No. 6208-U, dated 27 June 2022. Refer to the press release, dated 25 July 2022, on the Bank of Russia website.

Source: Bank of Russia.

REQUIRED RESERVE AVERAGING RATIO

Table 4

Type of credit institutions	Effective date				
	01.07.2019 ¹	03.03.2022 ²	01.04.2022 ³	01.05.2022 ⁴	01.08.2022 ⁵
Banks with a universal licence and banks with a basic licence	0.8	0.9	0.9	0.9	0.9
Non-bank credit institutions	1.0	1.0	1.0	1.0	1.0

¹ Bank of Russia Ordinance No. 5158-U, dated 31 May 2019, 'On Required Reserves'.

² Bank of Russia Ordinance No. 6082-U, dated 3 March 2022, 'On Required Reserves'.

³ Bank of Russia Ordinance No. 6099-U, dated 23 March 2022, 'On Required Reserves'. From 1 August 2004 through 31 March 2022, credit institutions meeting certain criteria are entitled to calculate the averaged amount of required reserves using the averaging ratio not above the averaging ratios established by the Bank of Russia. From 1 April 2022, unified averaging ratios are mandatory.

⁴ Bank of Russia Ordinance No. 6135-U, dated 29 April 2022, 'On Required Reserves'.

⁵ Bank of Russia Ordinance No. 6208-U, dated 27 July 2022, 'On Required Reserves'.

Source: Bank of Russia.

Table 5
REQUIRED RESERVES AVERAGING PERIODS AND INFORMATION ON CREDIT INSTITUTIONS' COMPLIANCE WITH THE RESERVE REQUIREMENTS

Averaging period to calculate required reserves for a corresponding reporting period	Averaging period duration (days)	Memo item		Actual average daily balances in correspondent accounts (billions of rubles)	Required reserves to be averaged in correspondent accounts (billions of rubles)	Required reserves in related accounts (billions of rubles)
		Reporting period	Required reserves regulation period			
11.12.2019–14.01.2020	35	November 2019	13.12.2019–17.12.2019	2,526	2,428	617
15.01.2020–11.02.2020	28	December 2019	22.01.2020–24.01.2020	2,479	2,418	618
12.02.2020–10.03.2020	28	January 2020	14.02.2020–18.02.2020	2,474	2,398	613
11.03.2020–07.04.2020	28	February 2020	16.03.2020–18.03.2020	2,536	2,431	622
08.04.2020–12.05.2020	35	March 2020	14.04.2020–16.04.2020	2,685	2,605	665
13.05.2020–09.06.2020	28	April 2020	20.05.2020–22.05.2020	2,700	2,635	671
10.06.2020–07.07.2020	28	May 2020	15.06.2020–17.06.2020	2,636	2,570	656
08.07.2020–04.08.2020	28	June 2020	14.07.2020–16.07.2020	2,590	2,529	647
05.08.2020–08.09.2020	35	July 2020	14.08.2020–18.08.2020	2,632	2,578	659
09.09.2020–06.10.2020	28	August 2020	14.09.2020–16.09.2020	2,699	2,634	673
07.10.2020–10.11.2020	35	September 2020	14.10.2020–16.10.2020	2,753	2,688	686
11.11.2020–08.12.2020	28	October 2020	16.11.2020–18.11.2020	2,806	2,737	699
09.12.2020–12.01.2021	35	November 2020	14.12.2020–16.12.2020	2,902	2,791	714
13.01.2021–09.02.2021	28	December 2020	22.01.2021–26.01.2021	2,879	2,818	721
10.02.2021–09.03.2021	28	January 2021	12.02.2021–16.02.2021	2,895	2,825	722
10.03.2021–06.04.2021	28	February 2021	15.03.2021–17.03.2021	2,965	2,906	741
07.04.2021–11.05.2021	35	March 2021	14.04.2021–16.04.2021	3,011	2,934	749
12.05.2021–08.06.2021	28	April 2021	18.05.2021–20.05.2021	3,082	3,006	772
09.06.2021–06.07.2021	28	May 2021	15.06.2021–17.06.2021	3,134	3,032	772
07.07.2021–10.08.2021	35	June 2021	14.07.2021–16.07.2021	3,169	3,039	774
11.08.2021–07.09.2021	28	July 2021	13.08.2021–17.08.2021	3,194	3,059	778
08.09.2021–12.10.2021	35	August 2021	14.09.2021–16.09.2021	3,243	3,104	789
13.10.2021–09.11.2021	28	September 2021	14.10.2021–18.10.2021	3,265	3,132	794
10.11.2021–07.12.2021	28	October 2021	16.11.2021–18.11.2021	3,292	3,149	800
08.12.2021–11.01.2022	35	November 2021	14.12.2021–16.12.2021	3,353	3,207	815
12.01.2022–08.02.2022	28	December 2021	21.01.2022–25.01.2022	3,323	3,245	825
09.02.2022–08.03.2022	28	January 2022	14.02.2022–16.02.2022	3,307	3,305	843
09.03.2022–12.04.2022	35	February 2022	15.03.2022–17.03.2022	1,465	1,283	150
13.04.2022–17.05.2022	35	March 2022	14.04.2022–18.04.2022	1,542	1,421	162
18.05.2022–14.06.2022	28	April 2022	23.05.2022–25.05.2022 (as recalculated) ¹	1,465	1,326	146
15.06.2022–12.07.2022	28	May 2022	17.06.2022–21.06.2022	1,774	1,631	146
13.07.2022–09.08.2022	28	June 2022	18.07.2022–20.07.2022	1,720	1,569	146
10.08.2022–13.09.2022	35	July 2022	16.08.2022–18.08.2022	1,694	1,562	146
14.09.2022–11.10.2022	28	August 2022	16.09.2022–20.09.2022	2,452	2,321	146
12.10.2022–15.11.2022	35	September 2022	18.10.2022–20.10.2022	2,430	2,323	146
16.11.2022–13.12.2022	28	October 2022	17.11.2022–20.12.2022	2,407	2,305	146
14.12.2022–17.01.2023	35	November 2022	16.12.2022–20.12.2022	2,461	2,322	146
18.01.2023–14.02.2023	28	December 2022	24.01.2023–26.01.2023	2,513	2,432	146

¹ Effective from April 2022, the required reserves regulation period for credit institutions is established by Bank of Russia Regulation No. 753-P, dated 11 January 2021, 'On Credit Institutions' Required Reserves' (the 12th–14th business days of the month following the reporting month).

KEY ECONOMIC AND FINANCIAL INDICATORS: BALANCE OF PAYMENTS

Table 6

		2021 Q1	2021 Q2	2021 Q3	2021 Q4	2022 Q1	2022 Q2	2022 Q3	2022 Q4 ¹
Balance of payments²									
Urals crude price	% YoY	23.1	126.5	64.7	76.2	48.6	17.8	3.6	-19.9
Exchange rate against the US dollar (*+ – appreciation and *- – depreciation of the ruble)	% YoY	-11.1	-2.5	0.1	5.0	-12.3	12.4	23.7	16.5
Goods and services exports	% YoY	1.6	58.5	63.0	58.5	60.4	27.6	4.0	-15.4
Goods and services imports	% YoY	4.6	40.9	32.5	23.0	12.6	-23.4	-12.5	-9.1
Current account									
Current account	billions of US dollars	22.4	17.3	35.5	47.0	69.5	78.5	48.0	31.4
Goods and services	billions of US dollars	25.7	34.8	47.4	62.2	79.1	91.8	65.6	45.9
<i>Exports</i>	<i>billions of US dollars</i>	<i>104.8</i>	<i>127.9</i>	<i>146.2</i>	<i>171.0</i>	<i>168.2</i>	<i>163.2</i>	<i>152.0</i>	<i>144.7</i>
<i>Imports</i>	<i>billions of US dollars</i>	<i>79.1</i>	<i>93.2</i>	<i>98.9</i>	<i>108.8</i>	<i>89.1</i>	<i>71.4</i>	<i>86.5</i>	<i>98.9</i>
Balance of primary and secondary income	billions of US dollars	-3.3	-17.5	-11.9	-15.2	-9.6	-13.3	-17.5	-14.5
<i>Income receivable</i>	<i>billions of US dollars</i>	<i>16.5</i>	<i>19.6</i>	<i>27.4</i>	<i>32.7</i>	<i>12.5</i>	<i>11.0</i>	<i>11.8</i>	<i>12.3</i>
<i>Income payable</i>	<i>billions of US dollars</i>	<i>19.8</i>	<i>37.1</i>	<i>39.2</i>	<i>48.0</i>	<i>22.1</i>	<i>24.3</i>	<i>29.4</i>	<i>26.8</i>
Capital account	billions of US dollars	0.2	0.0	0.0	0.0	0.0	0.7	0.6	0.4
Current and capital account balance	billions of US dollars	22.6	17.3	35.5	47.0	69.5	79.2	48.7	31.8
Financial account, including changes in reserve assets	billions of US dollars	22.6	18.3	33.6	47.8	66.4	82.1	45.1	29.6
Net incurrence of liabilities	billions of US dollars	-0.3	2.8	32.1	2.9	-34.6	-55.5	-3.3	-22.6
Net acquisition of financial assets	billions of US dollars	22.3	21.1	65.7	50.6	31.8	26.5	41.9	6.9
Net errors and omissions	billions of US dollars	0.0	1.0	-1.9	0.8	-3.0	2.8	-3.5	-2.3

¹ Estimate.² Signs according to BPM6.

Table 7

KEY ECONOMIC AND FINANCIAL INDICATORS

	January 2022	February 2022	March 2022	April 2022	May 2022	June 2022	July 2022	August 2022	September 2022	October 2022	November 2022	December 2022	January 2023
Real sector													
Inflation	8.7	9.2	16.7	17.8	17.1	15.9	15.1	14.3	13.7	12.6	12.0	11.9	11.8
	% YoY		3.5			-4.1			-3.7				
GDP*			34.6			34.7			36.8				
	trillions of rubles												
GDP in current prices*	7.8	5.0	1.7	-2.7	-3.5	-4.5	-2.5	-1.0	-3.0	-2.6	-2.4	-4.3	
	% YoY												
Output by key EA	8.0	5.5	2.3	-2.7	-2.5	-2.5	-0.5	0.0	-3.1	-2.6	-1.8	-4.3	
	% YoY												
Industrial output	3.4	3.9	7.4	8.9	8.1	8.2	7.7	15.4	13.6	10.9	8.2	6.1	
	% YoY												
Agricultural output	0.3	5.1	5.4	9.6	2.6	0.0	6.5	6.7	2.8	8.7	5.1	6.9	
	% YoY												
Construction			12.8			4.1			3.1				
	% YoY												
Fixed capital investment*													
	% YoY												
Freight turnover	7.8	1.1	3.6	-1.4	-1.8	-5.8	-5.2	-4.1	-7.1	-6.7	-5.6	-4.6	
	% YoY												
PMI Composite Index	50.3	50.8	37.7	44.4	48.2	50.4	52.2	50.4	51.5	45.8	50.0	48.0	49.7
	% SA												
Retail turnover	3.1	5.5	2.0	-9.8	-10.1	-9.6	-9.0	-9.1	-10.2	-10.0	-7.9	-10.5	
	% YoY												
Real disposable income*			-1.2			-0.8			-3.4				
	% YoY												
Real wages	1.9	2.6	3.6	-7.2	-6.1	-3.2	-3.2	-1.2	-1.4	0.4	0.3		
	% YoY												
Nominal wages	10.8	12.0	20.9	9.4	10.0	12.2	11.4	12.9	12.1	13.1	12.3		
	% YoY												
Unemployment	4.2	3.9	4.1	4.0	4.0	4.0	4.0	3.9	3.9	3.8	3.7	3.6	
	% SA												
Banking sector													
Broad money	11.6	10.8	11.0	10.7	11.8	12.5	13.6	14.6	14.3	13.6	12.9	14.0	
	% YoY, AFCR												
Money supply (M2 monetary aggregate)	13.4	14.6	17.1	15.7	16.6	16.8	19.3	22.6	23.9	24.4	23.4	24.4	
	% YoY												
Household deposits	5.9	1.7	1.4	2.8	5.4	7.2	6.7	6.6	4.4	3.4	4.2	6.4	
	% YoY, AFCR												
in rubles	7.8	5.2	7.6	9.0	11.5	13.6	14.1	14.8	14.0	13.9	14.7	17.8	
	% YoY												
in foreign currency	-1.0	-10.7	-20.5	-21.3	-19.2	-20.4	-23.6	-26.9	-35.6	-40.1	-39.2	-40.7	
	% YoY												
dollarisation	20.6	20.4	18.2	15.2	14.0	11.5	12.8	12.1	10.5	10.5	10.2	10.6	
	%												
Loans to financial and non-financial institutions	12.5	14.1	12.8	9.9	8.7	8.8	8.5	10.4	11.6	12.2	12.3	13.1	
	% YoY, AFCR												
short-term (up to 1 year)	13.2	14.8	7.3	4.9	3.9	4.8	5.6	9.0	10.1	9.6	7.4	4.7	
	% YoY, AFCR												
long-term (more than 1 year)	14.3	15.8	15.4	12.3	11.1	11.7	10.2	11.8	13.1	14.1	15.4	16.8	
	% YoY, AFCR												
Household loans	23.0	23.4	20.9	17.4	14.6	12.4	11.5	10.5	10.2	9.6	9.9	9.7	
	% YoY, AFCR												
housing mortgage loans	27.0	27.4	27.2	23.5	20.8	18.3	17.6	16.7	16.8	16.5	18.1	17.6	
	% YoY, AFCR												
unsecured consumer loans	20.2	20.5	16.0	12.5	9.7	7.7	6.6	5.8	5.0	3.9	3.2	2.7	
	% YoY												

Note:

* – data for the quarter

YoY – on the same period of the previous year

SA – seasonally adjusted

EA – economic activity

AFCR – adjusted for foreign currency revaluation.

Sources: Rosstat, IHS Markit, Bank of Russia calculations.

GLOSSARY

BANK OF RUSSIA KEY RATE

The principal instrument of the Bank of Russia's monetary policy. The key rate is set by the Bank of Russia Board of Directors eight times a year. Changes in the key rate influence credit and economic activity and, ultimately, help achieve the key goal of monetary policy. The key rate corresponds to the minimum interest rate at the Bank of Russia's one-week repo auctions and to the maximum interest rate at the Bank of Russia's one-week deposit auctions.

BANKING SECTOR LIQUIDITY

Credit institutions' ruble-denominated funds held in correspondent accounts with the Bank of Russia primarily for making payments via the Bank of Russia's payment system and for fulfilling the reserve requirements.

CONSUMER PRICE INDEX (CPI)

The ratio of the value of a fixed set of goods and services in current-period prices to its value in previous (reference) period prices. This index is calculated by the Federal State Statistics Service (Rosstat). The CPI reflects changes over time in the overall level of prices for goods and services purchased by households for consumption. The CPI is calculated based on data on the actual structure of consumer spending and is, therefore, the principal indicator of the cost of living. In addition, the CPI has a range of characteristics making it convenient for common use, namely a simple and clear method of construction, monthly calculation, and timely publication.

CORE INFLATION

An indicator of inflation characterising its most stable part. Core inflation is measured based on the Core Consumer Price Index (CCPI). The difference between the CCPI and the Consumer Price Index (CPI) is that the CCPI is calculated excluding changes in prices for certain products and services that are subject to the influence of administrative and seasonal factors (individual categories of fruit and vegetables, passenger transportation services, communication services, housing and utility services, motor fuel, etc.).

DEFLATION

A steady general decline in prices for goods and services in the economy for at least 12 months and negative annual growth rates of consumer prices.

DOLLARISATION OF BANK DEPOSITS (LOANS)

The proportion of foreign currency-denominated deposits (loans) in the banking sector's overall portfolio of deposits (loans).

FEDERAL GOVERNMENT BONDS

Domestic government securities issued by the Ministry of Finance of the Russian Federation within its borrowing programme to cover the deficit of the federal budget.

FINANCIAL STABILITY

A state of the financial system involving no systemic risks which, in the case of their materialisation, might adversely affect the transformation of savings into investment and the real economy. Financial stability improves the resilience of the economy to external shocks.

FLOATING EXCHANGE RATE REGIME

An exchange rate regime where the central bank establishes no targets, including operational ones, whether for the level or movements of the exchange rate, with the exchange rate forming under the influence of market factors. However, the central bank reserves the right to purchase foreign currency in order to replenish the country's international reserves or to sell foreign currency in the case of any threats to financial stability.

INFLATION

A sustained rise in the overall level of goods and services prices in the economy. Inflation is generally associated with changes over time in the price of the consumer basket, that is, a set of food products, non-food goods, and services consumed by an average household (see also the article Consumer Price Index).

INFLATION EXPECTATIONS

Economic agents' expectations regarding price growth in the future. Inflation expectations are formed by businesses, households, financial markets, and analysts. Economic agents make economic decisions and their plans for the future (including those related to consumption, saving, borrowing, investment, and loan and deposit rates) relying on their expectations. Inflation expectations impact inflation and are, therefore, a critical indicator for making monetary policy decisions.

INFLATION TARGETING

A strategy of monetary policy based on the following principles: price stability is the key goal of monetary policy; the inflation target is clearly specified and announced; under a floating exchange rate regime, monetary policy influences the economy primarily through interest rates; monetary policy decisions are made based on the analysis of a wide range of macroeconomic indicators and their forecasts; the Bank of Russia seeks to provide clear benchmarks for households and businesses, including through enhancing information transparency.

LIQUIDITY ABSORBING OPERATIONS

Reverse operations carried out by the Bank of Russia to absorb liquidity from credit institutions. These are operations either to raise deposits or place Bank of Russia bonds.

MONETARY BASE

The total amount of the components of cash and credit institutions' funds in accounts and Bank of Russia bonds denominated in Russian rubles. In the narrow sense of the term, the monetary base comprises cash in circulation (outside the Bank of Russia) and credit institutions' funds in required reserve accounts for ruble-denominated funds raised by credit institutions. The broad monetary base includes cash in circulation (outside the Bank of Russia) and credit institutions' total funds in accounts and Bank of Russia bonds.

MONEY SUPPLY IN THE NATIONAL DEFINITION (M2 MONETARY AGGREGATE)

The total amount of cash in circulation outside the banking system and of the balances of Russian residents (non-financial and financial (other than credit) institutions and individuals) in settlement, current and other demand accounts (including in bank card accounts), time deposits, and other raised term funds in the banking system denominated in Russian rubles, as well as interest accrued on them.

MONEY SUPPLY

The total amount of Russian residents' funds (excluding general government's and credit institutions' funds). For the purposes of economic analysis, various monetary aggregates are calculated (M0, M1, M2, and M2X).

MSCI INDICES

A group of indices calculated by Morgan Stanley Capital International. The latter calculates indices for individual countries (including Russia), global indices (for various regions, advanced and emerging market economies), and the World Index.

NEUTRAL RATE OF INTEREST

The level of the key rate when monetary policy neither slows down, nor speeds up inflation.

REFINANCING OPERATIONS

Reverse operations conducted by the Bank of Russia to provide liquidity to credit institutions. They may be in the form of loans, repos, or FX swaps.

REQUIRED RESERVE RATIOS

Ratios that may range from 0% to 20% and that are applied to credit institutions' reservable liabilities to calculate the regulatory value of required reserves. These ratios are established by the Bank of Russia Board of Directors.

RUONIA BENCHMARK INTEREST RATE (RUBLE OVERNIGHT INDEX AVERAGE)

Ruble OverNight Index Average (RUONIA) is the weighted interest rate on overnight interbank ruble loans (deposits) reflecting the cost of unsecured overnight borrowing.

RUSSIA'S BALANCE OF PAYMENTS

A statistical system reflecting all economic operations between residents and non-residents of the Russian Federation over the course of the reporting period.

STRUCTURAL LIQUIDITY DEFICIT / SURPLUS OF THE BANKING SECTOR

A structural deficit in the banking sector is a situation when credit institutions demonstrate stable demand for liquidity from the Bank of Russia. A structural surplus is when credit institutions have a steady excess of liquidity and the Bank of Russia needs to carry out liquidity absorbing operations. The estimated level of a structural liquidity deficit / surplus is the difference between the outstanding amount on refinancing operations and the amount of liquidity absorbing operations of the Bank of Russia.

TRANSMISSION MECHANISM

The mechanism through which monetary policy decisions impact the economy in general and price movements in particular; the process of a gradual transmission of the central bank's signal regarding the maintenance of or a change in the key rate and its future path from financial market segments to the real sector of the economy and, ultimately, to the inflation rate. A change in the key rate is translated into the economy through multiple channels (interest rates, credit, foreign exchange, balance sheet, inflation expectations, etc.).

ABBREVIATIONS

AFCR – adjusted for foreign currency revaluation

AIT – additional income tax

bp – basis point (0.01 percentage points)

BPM6 – the 6th edition of the IMF’s Balance of Payments and International Investment Position Manual

CCPI – Core Consumer Price Index

CEE – Central and Eastern Europe

Coupon OBR – Bank of Russia coupon bond

CPI – Consumer Price Index

ECB – European Central Bank

EME – emerging market economy

EU – European Union

GDP – gross domestic product

GFCF – gross fixed capital formation

HY spread – the difference between yields on bonds of corporate issuers whose rating is below the investment grade (‘BB’ and below) and the yield curve of US Treasury bonds

IBL – interbank lending

IG spread – the difference between yields on bonds of corporate issuers having an investment-grade rating (‘BBB’) and the yield curve of US Treasury bonds

InFOM – Institute of the Public Opinion Foundation

mbd – million barrels per day

MET – mineral extraction tax

MPR – Monetary Policy Report (3/22 – No. 3, 2022; 4/22 – No. 4, 2022)

NWF – National Wealth Fund

OBR – Bank of Russia bond

OFZ – federal government bond

OPEC – Organization of the Petroleum Exporting Countries

PMI – Purchasing Managers’ Index

p – point

p.a. – per annum

pp – percentage point

RRs – required reserves

Ruble OverNight Index Average (RUONIA) – the weighted interest rate on overnight interbank ruble loans (deposits) reflecting the cost of unsecured overnight borrowing

SA – seasonally adjusted

SAAR – seasonally adjusted annual rate

US Fed – US Federal Reserve System

