Bank of Russia

MONETARY POLICY GUIDELINES FOR 2026–2028

Moscow

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INTRODUCTION

In the Monetary Policy Guidelines, the Bank of Russia each year describes the goals of monetary policy and approaches to its implementation and provides its view of the current situation in the economy and forecasts of its development in the medium term.

The Bank of Russia implements its monetary policy taking into account its core function stipulated by the Constitution of the Russian Federation, which is protecting the ruble and ensuring its strength. In accordance with Federal Law No. 86-FZ, dated 10 July 2002, 'On the Central Bank of the Russian Federation (Bank of Russia)', this function shall be performed by maintaining price stability, that is, steadily low inflation. Securing price stability, the Bank of Russia creates an essential condition to foster balanced and stable economic development.

In 2024 H2, the Russian economy continued to expand quickly, still driven primarily by strong domestic demand, supported by households' rising incomes, increasing credit, and significant fiscal stimuli. However, enterprises were unable to meet high demand as their capacities to ramp up supply were limited: they were facing staff shortages and working in the conditions of very high capacity utilisation rates. Other constraints included OPEC+ agreements limiting oil production and adverse weather conditions affecting the harvest. The widening demand and supply gap exacerbated inflationary pressures. In these conditions, the Bank of Russia was increasing the key rate in July–October 2024. Overall, the key rate was raised by 5 pp from 16.00% p.a. to 21.00% p.a.

The monetary policy tightening was gradually transmitting to the dynamics of economic indicators, leading to a rise in market interest rates in 2024 H2. Over the said period, interest rates were also affected by the progressive normalisation of banking regulation and the tightening of macroprudential requirements. The growth of market interest rates considerably cooled credit activity in late 2024–2025 H1. The labour market started to demonstrate the first signs of easing, with staff shortages diminishing and wages growing more moderately. All this helped gradually dampen domestic demand. Tight monetary policy was also moderating the demand for imports, while a high interest rate differential (higher interest rates in Russia as compared to other countries) made ruble assets and savings more attractive to households and businesses. As a result, in 2025 H1, the ruble considerably strengthened against the main foreign currencies. In turn, the cooling of domestic demand and the ruble appreciation led to a gradual easing of current inflationary pressures. However, the slowdown in inflation was uneven, with non-food price growth decelerating most quickly as the effect of tight monetary conditions in this segment was the strongest. Contrastingly, the growth rates of food and service prices were going down more slowly, while remaining elevated. For tight monetary policy to fully translate into economic indicators and the decline in inflationary pressures to become sustained, the Bank of Russia kept the key rate at 21.00% p.a. until June 2025. In June 2025, having ascertained that the disinflationary processes in the economy were stable, the Bank of Russia began to reduce the key rate. In June and July 2025, the Bank of Russia cut the key rate by 100 bp and 200 bp to 20.00% p.a. and 18.00% p.a., respectively. In September 2025, the Bank of Russia noted a rise in lending in July–August 2025 and persistently high inflation expectations and proinflationary risks, including those associated with fiscal policy. Taking into account these factors, the Bank of Russia stressed that it was essential to adhere to a cautious approach to monetary policy easing. In September 2025, the regulator reduced the key rate by 100 bp to 17.00% p.a. In September–October 2025, a number of proinflationary risks materialised, specifically the growth of motor fuel prices accelerated and the Government announced an increase in the budget deficit in 2025, a rise in VAT in 2026, and more significant

indexations of utility rates in the next few years than planned before. These factors are of a one-off nature. As their impact is exhausted, the Bank of Russia expects that disinflation will continue and be sustainable. Therefore, the regulator cut the key rate again in October, although reducing the pace to 50 bp. As a result, over June–October 2025, the key rate decreased by 4.5 pp to 16.50% p.a.

The Bank of Russia's baseline scenario assumes that international trade tensions between the largest economies will continue to constrain the expansion of global demand. After the surge in 2025, import tariffs will go down, but their level will still be higher than before. Combined with a fast increase in OPEC+ oil production, a decline in global demand will provoke a surplus in the oil market in 2025–2026 and a reduction in oil prices. As forecast by the Bank of Russia, the Russian crude price, calculated for tax purposes, will be close to $58 per barrel in 2025 and $55 per barrel in 2026. As trade restrictions are eased and global demand rebounds, Russian crude prices will grow to average $60 per barrel in 2027–2028. The baseline scenario also assumes that the imposed foreign sanctions will remain in the medium term, thus entrenching the changes that have occurred in the Russian economy since 2022, namely its refocusing on the domestic market and the development of import substitution. Domestic demand will prevail in the structure of the economy, while the proportion of exports and imports in GDP will be smaller than before the enactment of the sanctions.

The Bank of Russia's baseline scenario assumes that the growth rates of consumer and investment demand will be more moderate in 2025–2026 than in 2023–2024, which will help reduce the gap between supply and demand that surged over the past few years. Economic growth will temporarily slow down to 0.5–1.0% in 2025 and 0.5–1.5% in 2026. In 2027, the economy will sustainably return to a potential growth rate of 1.5–2.5% per year. Annual inflation will decelerate to 6.5–7.0% in 2025 and 4.0–5.0% in 2026. In 2027–2028, inflation will stay at the target. The key rate will average 19.2% p.a. in 2025 and 13.0–15.0% p.a. in 2026. In 2027–2028, the key rate will average 7.5–8.5% p.a., which is in line with the estimated range of the long-term neutral rate in the Russian economy.

The main risks to the development of the Russian economy are related to both internal and external conditions. In view of this, the Bank of Russia considers two unfavourable alternative scenarios. The proinflationary scenario assumes a combination of internal and external factors, which will be the reasons why demand will be higher and supply will be lower than predicted in the baseline scenario. Due to tightening sanctions, the growth rate of production capacities will be lower than in the baseline scenario. Tighter sanctions will also lead to Russian crude prices stabilising at lower levels. To prop up the economy, the Russian Government will expand subsidised lending programmes and strengthen protectionist measures aimed at encouraging import substitution. However, supply will still be lagging behind rising demand, which will amplify inflationary pressures. Prices will also be affected by heightened inflation expectations as they will be declining more slowly and be more responsive to all proinflationary factors. The risk scenario assumes escalation of international trade tensions, intensification of deglobalisation processes, import tariff increases worldwide above the levels predicted in the baseline scenario, and a sharp decline in the growth rates of the largest economies. Combined, these factors will entail a global financial crisis, the scale of which might be comparable with the 2007–2008 crisis. The sanction pressure on the Russian economy is likely to strengthen in this scenario as well. According to the Bank of Russia's estimates, the materialisation of risks in these two scenarios will speed up inflation in the next few years and require tighter monetary policy, as compared to the baseline scenario. Inflation will return to the target later than in the baseline scenario.

Nevertheless, in certain conditions, developments in the Russian economy may be more favourable than in the baseline scenario. The disinflationary scenario assumes that growth in fixed capital investment and in total factor productivity will help expand aggregate supply more quickly than in

the baseline scenario (increase potential output more significantly in 2026–2027). As in the baseline scenario, inflation will return to the target in 2026, while monetary policy easing will be faster.

An important factor that will influence the economy under any of the scenarios in the coming years is fiscal policy. Preparing its macroeconomic forecast and making its key rate decisions, the Bank of Russia takes into account the fiscal policy parameters and measures planned. If these parameters change, the Bank of Russia might need to adjust its monetary policy. Responsible and well-balanced fiscal policy relying on the fiscal rule is critical to maintain macroeconomic stability.

Under any scenario of future developments both in the domestic economy and worldwide, the Bank of Russia's monetary policy will be aimed at achieving its main goal, that is, price stability. Ensuring steadily low inflation, the Bank of Russia promotes necessary conditions for the development of the domestic economy, including for balanced and sustainable economic growth. Price stability:

- enables businesses and households to better plan their activity;
- increases the affordability of borrowings inside the country;
- protects households' incomes and savings against a significant unpredictable devaluation;
- enhances confidence in the national currency and makes it more attractive as a store of value; and
- promotes the ruble as a currency for settlements and contracts, including at the international level.

Since 2015, the Bank of Russia has been implementing its monetary policy under the inflation targeting regime, relying on the world's best practices.

The Bank of Russia sets a quantitative inflation target, which is an annual inflation rate of close to 4%. The target is effective on a permanent basis. Furthermore, the Monetary Policy Review carried out by the Bank of Russia in 2021–2023 shows that the Russian economy has formed prerequisites for reducing the inflation target in the future. The Bank of Russia will assess the reasonableness of such a decrease after inflation slows down and stabilises close to 4%. A reduction in the inflation target will only be possible beyond the three-year forecast horizon, that is, no earlier than 2029. If the Bank of Russia makes such a decision, it will be announced in advance.

Implementing its monetary policy, the Bank of Russia influences price movements through the key rate and communication regarding its possible changes in the future. This influence is ensured through a long chain of interconnections known as the transmission mechanism. Changes in the key rate and communication about its possible dynamics in the future impact interest rates in various segments of the financial market, securities prices, and the ruble exchange rate. In turn, changes in these indicators influence economic agents' decisions on savings, consumption, and investment. All these factors ultimately create domestic demand in the economy, which affects price dynamics. It takes time for monetary policy decisions to be fully transmitted to price dynamics through the above chain of interconnections. As estimated by the Bank of Russia, this process takes three to six quarters. Therefore, making its monetary policy decisions, the Bank of Russia relies on the macroeconomic forecast that helps estimate what conditions should form in the economy to ensure the inflation rate of close to 4% over the time horizon of the impact of monetary policy. To build the forecast, the Bank of Russia uses advanced macroeconomic models.

Targeting inflation, the Bank of Russia pursues the floating exchange rate regime. It enables the regulator to implement monetary policy independently of other countries. A floating exchange rate smooths out the impact of external factors on the economy and helps it adjust to a changing external environment. Currently, amid limited capital flows, the movements of the ruble exchange rate to a greater extent depend on the ratio between importers' demand for foreign currency and exporters'

supply of foreign currency. The effect of capital flows on the dynamics of the exchange rate stays less significant than before. Furthermore, the difference in interest rates between Russia and other countries continues to influence residents' and non-residents' demand for investments in ruble assets and, as a result, the ruble exchange rate. The capital controls that are still in place are predominantly of a non-economic and bilateral nature.

The Bank of Russia seeks to promptly communicate the information on its monetary policy to the fullest extent possible. The regulator is continuously working to expand the coverage of the audience and make its communication more targeted. The Bank of Russia's communication transparency about its monetary policy helps form a more predictable environment for decision-making and enhances the effect of monetary policy on the economy and inflation.

These Guidelines have the following structure.

Section 1 describes the goals and principles of the Bank of Russia's monetary policy, as well as the interaction of monetary policy with other state policies. The section includes five boxes about the level of the inflation target in Russia, the benefits of a floating exchange rate, enhancement of model-based approaches, the combined effect of fiscal and monetary policies on the economy, and the interplay of monetary policy and financial sector stability policy.

Section 2 offers a retrospective overview of the Bank of Russia's monetary policy from late 2024 until now. The section includes three boxes about inflation dynamics in the Russian regions, the use of business monitoring results for the purposes of monetary policy, and the analysis of the experience of banking regulation normalisation and macroprudential policy tightening after the easing in 2022.

Section 3 focuses on the baseline and alternative forecast scenarios of the Bank of Russia. The section also comprises boxes describing the effect of fiscal policy on the economy and an economic equilibrium.

Section 4, as always, covers the operational procedure of the Bank of Russia's monetary policy: its operational objective and system of instruments, as well as the factors influencing the trends and forecast of the banking sector liquidity.

The document also contains appendices and boxes addressing both the theoretical aspects of monetary policy in the Russian context and the most relevant economic issues.

SECTION 1. MONETARY POLICY GOALS, PRINCIPLES AND INSTRUMENTS

The goal of monetary policy is to maintain steadily low inflation that is critical to ensure stable economic development and protect households' and companies' incomes and savings

In accordance with the Constitution of the Russian Federation, the key function of the Bank of Russia is to protect the ruble and ensure its strength.[1] **Pursuant to the Federal Law 'On the Central Bank of the Russian Federation (Bank of Russia)', the main goal of the Bank of Russia's monetary policy is to protect the ruble and ensure its strength by maintaining price stability, which will create conditions promoting balanced and sustainable economic growth.**[2] **Price stability implies steadily low inflation.**

A crucial prerequisite for economic development is macroeconomic stability achieved through both responsible fiscal policy and monetary policy aimed at ensuring price stability. **Price stability is the Bank of Russia's contribution to the development of the national economy** and an essential element of an environment that is favourable for living and doing business.

Steadily low inflation ensures a stable purchasing power of the national currency – the ruble. When inflation is low, wages, pensions, and other earnings, as well as ruble-denominated savings of households and companies are protected against a significant unpredictable devaluation. Stability makes it possible to plan spending, including long-term expenses, with greater confidence, maintain living standards, and prevent an aggravation of social inequality.[3]

Low and steady inflation is favourable for businesses. Setting a clear inflation target and adhering to it are essential elements of a predictable economic environment. In such conditions, it is easier for companies to develop their business and make long-term financial and investment plans. Low and stable inflation improves the accessibility of borrowings inside the country: investors are more willing to provide financing to enterprises. High and volatile inflation is a source of risks to all economic agents, including banks and their clients. To receive returns on investment during high and volatile inflation, banks price in an elevated inflation premium when setting loan rates, whereas low and stable inflation reduces banks' risks. As a result, interest rates form at a lower level, while volatility of interest rates (especially long-term ones) decreases.

Steadily low inflation promotes confidence in the national currency and helps reduce the proportion of foreign currency-denominated assets and liabilities in the economy. This improves the economy's resilience to changes in the external environment. When inflation in the country is steadily low, the ruble is more attractive as a currency for international settlements and contracts. The longer the period of price stability is, the more confident counterparties are in the long-term purchasing power of the ruble and the more willing they are to use the ruble in their international business.

Monetary policy promotes conditions necessary for the development of the domestic economy and its structural transformation. However, monetary policy alone cannot drive a sustainable increase in the economy's potential. The economy's potential depends on fixed capital formation, the labour force

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1 Part 2 of Article 75 of the Constitution of the Russian Federation.

2 Articles 3 and 34.1 of Federal Law No. 86-FZ, dated 10 July 2002, 'On the Central Bank of the Russian Federation (Bank of Russia)'.

3 For details about the influence of inflation on social inequality, refer to Appendix 3 to MPG 2018–2020.

size, as well as labour and capital productivity, including as a result of using more efficient forms of labour and deploying innovative technologies. Monetary policy can influence the intensity of using these factors, thus reducing the scale of a cyclical downturn or economic overheating and ensuring price stability. This is the countercyclical role of monetary policy.

To enable a sustainable expansion of production capacities in the economy and boost potential economic growth rates, it is necessary to implement other measures. In the first place, these are measures of structural, fiscal policy (changes in the structure of budget expenditures to promote the modernisation of the economy and increase human capital) and institutional changes. These measures should encourage private initiative, support innovations, foster the development of alternative and new technologies, facilitate the adaptation, enhance the flexibility of the labour market (including as part of reskilling and upskilling programmes), and create predictable conditions for economic activity. Alongside macroeconomic stability, efficient implementation of the above measures can ensure successful transformation of the economy, promoting its transition to a new equilibrium, with a subsequent increase in its potential growth rates.

Key monetary policy principles

Implementing the inflation targeting strategy, the Bank of Russia pursues the following principles in its monetary policy:

- **a permanent public quantitative inflation target;**
- **a floating exchange rate of the ruble;**
- **the key rate and communication as the main monetary policy instruments;**
- **decision-making based on a macroeconomic forecast; and**
- **communication transparency.**

Pursuing the inflation targeting strategy, the Bank of Russia relies on the world best practices of monetary policy implementation (see Appendix 10 'Inflation targeting: cross-country comparisons'). The advantage of inflation targeting is its flexibility. This strategy does not imply that the inflation target should be achieved at all costs. To the contrary, seeking to ensure low and stable inflation, monetary policy mitigates the scale of cyclical fluctuations of output, improves the predictability of the economic environment, and thus creates conditions for balanced economic growth. The benefits of inflation targeting amid various challenges are evidenced by the studies carried out by the Bank of Russia as part of its Monetary Policy Review in 2021–2023.[4]

Permanent public quantitative inflation target

The Bank of Russia sets a permanent quantitative inflation target and announces it for households, businesses, and financial market participants to take it into account in their planning and decision-making. The Bank of Russia implements its monetary policy to achieve the announced inflation target. To set a quantitative inflation target, the Bank of Russia determines the targeted measure and its type and level.

[4] For details, refer to the Bank of Russia's Monetary Policy Review subsection in the Monetary Policy section on the Bank of Russia website.

The goal of the Bank of Russia's monetary policy is to maintain annual inflation close to 4%. The inflation target is effective on a permanent basis. An inflation rate of not above 4% is what households and companies perceive as price stability, according to the surveys.[5] It is set for the annual growth rate of consumer prices in Russia, that is, for the change in prices for goods and services purchased by households over the past 12 months. **The Bank of Russia uses the CPI to measure the growth rate of consumer prices (inflation).** The CPI is calculated and published by Rosstat.

The Bank of Russia sets the inflation target as a point. Compared to target ranges of inflation, a point gives the clearest signal to society about the goal of monetary policy. This target type provides a clearer understanding to economic agents. In practice, a point helps anchor inflation expectations to the target more efficiently.

The wording 'close to 4%' implies that inflation might slightly hover around 4%. These fluctuations are natural and associated with a continuous adjustment of relative prices. Being influenced by multiple factors, prices for goods and services are always changing. As a result, price growth rates may vary across certain product and service markets and in different regions (see Box 6 'Inflation in Russian regions').

Monetary policy is continuously aimed at ensuring an inflation rate of around 4%. However, there can be factors arising over time that might create risks of an inflation deviation from the target. If such factors emerge, the Bank of Russia assesses the reasons behind them and the duration of their impact on inflation in order to make appropriate decisions on monetary policy measures. In a situation where inflation deviates from the target, the Bank of Russia chooses the pace for returning inflation to the target taking into account the scale of the deviation and the influence of monetary policy measures on economic activity (see the subsection 'The key rate and communication as the main monetary policy instruments').

In 2021–2023, the Bank of Russia carried out its Monetary Policy Review. The findings of the studies showed that, by the end of 2021, the Russian economy had formed the prerequisites for reducing the inflation target in the future (see Box 1 'The level of the inflation target in Russia'). However, in 2022, the Russian economy started a structural transformation that was accompanied by significant adjustments in relative prices[6] across a wide range of goods and services. In these conditions, inflation went up and stayed above the target. The Bank of Russia's plan was to return inflation to 4% in 2024. However, from 2023, the Russian economy considerably deviated upwards from a balanced growth path, due to which more time is needed to bring inflation back to the target. The Bank of Russia will ensure the return of inflation to the target in 2026. After inflation stabilises at around 4%, the Bank of Russia will assess the reasonableness of decreasing the inflation target. However, a reduction in the inflation target will only be possible beyond the three-year forecast horizon, that is, no earlier than 2029. If the Bank of Russia makes such a decision, it will be announced a few years before the change. This will help mitigate the costs of switching to a new level of the target. The Bank of Russia will continue discussing this issue with businesses, the analyst and expert community, public organisations, the Government and the Federal Assembly of the Russian Federation.

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[5] InFOM's household surveys (March and October 2022 and February 2023); the Bank of Russia's monitoring of businesses (February and October 2022).

[6] Relative prices are prices for individual goods and services in the consumer basket relative to the average (overall) level of prices in the economy. In the conditions of considerable shocks, the adjustment of relative prices can be observed across a wide range of goods and services.

Floating exchange rate of the ruble

The Bank of Russia pursues a floating exchange rate regime. This means that the exchange rates of foreign currencies against the ruble are determined by market forces, that is, the ratio between the demand for and supply of foreign currency in the FX market. The Bank of Russia neither sets any targets or limits for the level of the exchange rate or the pace of its movements nor conducts FX operations to influence the dynamics of the exchange rate. That said, the Bank of Russia can conduct operations in the FX market aimed at maintaining financial stability.

A floating exchange rate is an essential condition for efficient implementation of monetary policy within the framework of inflation targeting. It helps the economy better absorb external shocks and allows the central bank to pursue an independent monetary policy, enhancing its ability to smooth the business cycle. As a result, monetary policy ensures low and stable inflation more efficiently (see Box 2 'Benefits of a floating exchange rate').

In the conditions of the sanctions and blocking of the Bank of Russia's foreign currency accounts, the Bank of Russia tightened capital controls from 2022 to prevent materialisation of financial stability risks. As the situation stabilised, the controls were partially eased. The restrictions that are still in place are predominantly of a non-economic and bilateral nature. They offset the effect of the external sanctions aimed at incentivising foreign investors to withdraw capital from Russia and prohibiting potential future capital inflows. Despite the effective capital controls, the exchange rate of the ruble remains floating. In the new environment, its movements to a greater extent than before depend on the ratio between importers' demand for foreign currency and its supply by exporters. The effect of capital flows on the dynamics of the exchange rate stays less significant than before. Furthermore, the difference in interest rates between Russia and other countries continues to influence residents' and non-residents' demand for investments in ruble assets and, as a result, the ruble exchange rate.

Capital controls are solely a policy instrument employed to maintain financial stability. The theory and practice of monetary policy generally confirm that a temporary use of capital controls to mitigate financial stability risks is compatible with inflation targeting and a floating exchange rate. However, if large-scale capital controls remain in place for a long time, this might entail persistent negative implications for the economy and its growth potential.[7]

The key rate and communication as the main monetary policy instruments

The key rate is the main instrument of the Bank of Russia's monetary policy. The key rate is an interest rate used by the Bank of Russia to form such monetary conditions in the economy that help keep inflation close to the target. To this end, the Bank of Russia conducts regular liquidity management operations to provide liquidity to banks or absorb it from them. The Bank of Russia sets interest rates on the main liquidity management operations at the level of the key rate.[8] Interest rates on other operations are linked to the key rate.

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[7] For details, refer to Box 3 'Capital controls and inflation targeting' in MPG 2023–2025.

[8] The minimum interest rate at the Bank of Russia's one-week repo auctions and the maximum interest rate at the Bank of Russia's one-week deposit auctions (interest rates on the main operations conducted by the Bank of Russia to manage the banking sector liquidity) are set at the level of the key rate. Nevertheless, the actual interest rate as of the end of the auctions might slightly deviate from the key rate within the interest rate corridor.

Performing liquidity management operations, the Bank of Russia seeks to keep overnight money market rates close to the key rate. This is the operational objective of monetary policy (see Section 4 'Monetary policy operational procedure in 2025 and 2026–2028'). Changes in short-term money market rates influence interest rates on longer-term transactions. These changes in turn translate into the dynamics of loan and deposit rates and securities prices. Amid the sanctions and the capital controls introduced in response, the key rate impacts the ruble exchange rate indirectly, primarily through the demand for imports. Changes in price parameters in various segments of the financial market influence economic agents' propensity to consume, save, and invest. This factor determines domestic demand in the economy, while the ratio between it and supply affects price dynamics. The complex of the interdependencies between economic processes, making it possible to impact inflation through changes in the key rate, is called the monetary policy transmission mechanism (see Appendix 1 'Monetary policy transmission mechanism in Russia').

Key rate changes influence demand and prices to the fullest extent not instantaneously but with a time lag. According to the Bank of Russia's estimates, it takes three to six quarters for the effects of key rate changes to manifest themselves in full. Accordingly, the Bank of Russia can bring inflation back to the target over a horizon from 12 to 18 months, barring new serious shocks.

The Bank of Russia Board of Directors makes its key rate decisions on a regular basis, specifically eight times a year, in accordance with the approved and publicly available calendar. Decision-making according to the calendar is essential to increase the predictability of the key rate path. Key rate decisions made according to the calendar become effective on the next business day. Drastic changes in the economic situation might require prompt decisions on the key rate. In this case, the Bank of Russia Board of Directors may hold unscheduled meetings. If a key rate decision is made at an unscheduled meeting, the Bank of Russia may specify its effective date in the related press release.

Given that monetary policy measures have a time-lagged effect on the economy, **the Bank of Russia relies on sustainable economic trends and long-lasting factors when making its decisions on the key rate**. The Bank of Russia revises the key rate if current trends suggest a persistent deviation of inflation from the target over the forecast horizon or there are long-acting factors that will most probably cause such a persistent deviation. To estimate the impact of various factors on inflation, the Bank of Russia prepares a macroeconomic forecast (see the subsection 'Decision-making based on a macroeconomic forecast').

The Bank of Russia takes no response measures if the existing deviation of inflation from the target results from temporary factors and inflation is expected to steadily return to the target in the short run without any additional measures. Such an approach to decision-making helps avoid undesirable volatility of economic indicators. A change in the key rate in response to transitory factors might pull inflation away from the target in the opposite direction, which does not conform to the task of maintaining inflation close to 4%.

Nevertheless, the Bank of Russia analyses the influence of temporary factors on inflation expectations (see Appendix 4 'One-off supply-side inflation factors'). If factors originally considered to be transitory cause a notable rise in inflation expectations and changes in economic agents' behaviour and involve significant risks to the achievement of the inflation target in the medium term, the Bank of Russia takes these factors into account when making its key rate decisions.

By changing the key rate to bring inflation close to the target, the central bank thus smooths the economic cycle and returns the economy to a balanced and stable economic growth path. This is the

countercyclical role of monetary policy. To deliver on the inflation target, the Bank of Russia influences demand trends. When the economy is in a long-term equilibrium, that is, when inflation and inflation expectations are close to the target and output is near its potential, monetary policy should be neither contractionary nor expansionary for demand and the economy. Such monetary policy is called neutral.

In a situation where growth rates and aggregate demand start to exceed the economy's production capacity, the economy deviates from its potential upwards. In order to prevent its overheating and the resulting deviation of inflation and inflation expectations upwards from the target, the central bank needs to temporarily increase the key rate above its neutral level. Monetary tightening in these conditions helps slow down the expansion of demand and drive the economy back to a balanced growth path and inflation to its target. To the contrary, when aggregate demand decreases below the economy's production capacity, the economy deviates downwards from its potential and inflation downwards from its target. This situation requires a temporary reduction in the key rate below its neutral level. Monetary policy easing will support aggregate demand and bring inflation back to the target.

A neutral level of the interest rate can only be estimated roughly based on observed economic indicators. During the period of dramatic changes in the economy, the estimates of the neutral interest rate become more uncertain (see Appendix 7 'Neutral interest rate and its estimate').

Communication on monetary policy decisions influences economic agents' expectations and behaviour and is an important monetary policy instrument. Economic agents' expectations have a considerable impact on the economy in general and on inflation in particular. For the central bank's measures to be more efficient, it is critical to anchor households' and businesses' inflation expectations to the target. This is only possible if economic agents are confident in the Bank of Russia and its monetary policy. Confidence is developing when the central bank successfully achieves the inflation target and society comprehends the central bank's policy. The Bank of Russia seeks to be as transparent as possible. This is a key principle of its monetary policy as part of the inflation targeting strategy (see the subsection 'Communication transparency').

The Bank of Russia does not only disclose the rationale behind its monetary policy decisions, but also gives a verbal signal regarding possible future decisions. The signal is no less important than the key rate decision itself since it impacts economic agents' expectations of the central bank's further moves and, accordingly, their behaviour.

The Bank of Russia also publishes the projected path of the key rate as part of its medium-term macroeconomic forecast. This means that if the economic situation unfolds in line with the Bank of Russia's forecast, it will change the key rate following the projected path. If the economic situation develops not as assumed by the macroeconomic forecast, the Bank of Russia will need to revise both the forecast and the projected path of the key rate. The projected path is presented as ranges of the average key rate for every calendar year. The projected path of the key rate intensifies the Bank of Russia's verbal signal having an additional effect on market participants' expectations regarding future changes in the key rate, and consequently, on monetary conditions.

Decision-making based on a macroeconomic forecast

The Bank of Russia makes its monetary policy decisions based on a macroeconomic forecast as their effect on price dynamics is time-lagged. The Bank of Russia's forecast is a coordinated view of the

Bank of Russia Board of Directors with respect to future economic trends and indicators. The forecast relies on the results of model-based calculations made using a wide range of modern quantitative models describing economic dynamics.[9] The Bank of Russia is continuously improving its model-based approaches (see Box 3 'Model-based approaches and their evolution'). That said, the Bank of Russia's forecast is not generated from model-based assessments automatically, but takes into account the Board of Directors' expert opinions regarding the hypotheses and factors that cannot always be incorporated into the models. Certain hypotheses are verified at the regional level. The Heads of the Bank of Russia Main Branches then report on the findings to the Board of Directors.

The Bank of Russia does a complete revision of its macroeconomic forecast before the Board of Directors' core meetings on the key rate, four times a year. Following such meetings, the Bank of Russia publishes the revised forecast along with the press release on the key rate. The main parameters of the forecast are inflation, economic growth, monetary indicators, the balance of payments, and the scenario path of the key rate.

Preparing its macroeconomic forecast, the Bank of Russia conducts an in-depth analysis of a wide range of data. The Bank of Russia analyses, among other things, the actual situation in the Russian economy and in global commodity and financial markets, economic policies in major foreign countries, and possible changes in fiscal, tax, social, and other areas of Russia's economic policy. Relying on this information, the Bank of Russia formulates assumptions for its forecast scenarios – a complex of external and internal economic factors that might have a material effect on the Russian economy and inflation trends, as well as assesses inflation risks.

When developing its macroeconomic forecast, the Bank of Russia takes into account the fact that decisions on monetary policy are always made when there is no complete certainty. There can be various factors of uncertainty, including not only future economic developments and forecast assumptions, but also new information on the past and present situation in the economy. The uncertainty may also be associated with the specifics of model-based techniques. Therefore, the Bank of Russia places a high emphasis on the rationale for monetary policy decisions it makes. Specifically, this involves the use of a broad range of models and forecasting of several different scenarios of developments in the Russian and world economies with a number of variations of these scenarios. This approach enables the Bank of Russia to estimate the robustness of its macroeconomic forecast and monetary policy decisions made based on this forecast.

The Bank of Russia follows the conservative approach when assessing the ratio of inflation risks over the forecast horizon, while focusing slightly more on proinflationary factors and risks. This is associated with the specifics of inflation expectations in Russia. Professional market participants' inflation expectations are generally anchored at the target, whereas households' and businesses' inflation expectations remain sensitive to the impact of short-term proinflationary factors. Moreover, inflation expectations respond to price movements asymmetrically: households and businesses are more responsive to an acceleration of price growth, rather than to its slowdown. In such a situation, underestimation of proinflationary factors and risks might entail a persistent and long-lasting deviation of inflation upwards from the target. Therefore, when formulating assumptions for its forecast, the Bank of Russia especially focuses on those drivers of price movements that might push inflation and inflation expectations upwards.

[9] For details about developing a macroeconomic forecast and model-based approaches applied by the Bank of Russia, refer to the Forecasting and models subsection in the Monetary Policy section on the Bank of Russia website.

Communication transparency

For monetary policy pursued as part of the inflation targeting strategy to be efficient, it is necessary to ensure society's understanding of and confidence in it. When households and businesses are confident that the central bank is able and determined to maintain price stability, their inflation expectations do not change notably in response to short-term price fluctuations or events that might temporarily speed up or slow down inflation.

If economic agents comprehend the central bank's decisions and communication signals, they take them into account to quickly and accurately adjust their expectations about the level of interest rates when making decisions on borrowings, savings, wage indexations, and pricing. As a result, the impact of monetary policy on the economy and inflation strengthens, and the scale and duration of an inflation deviation from the target decrease.

To promote understanding and confidence, it is necessary to ensure not only that inflation stays steadily close to the target but also that the central bank's communication regarding its monetary policy is transparent. Hence, **the Bank of Russia seeks to promptly and amply communicate the information on the goals, principles, measures, and results of its monetary policy, as well as on the assessment of the economic situation and its prospects**.

The Bank of Russia performs its functions of protecting the ruble and ensuring its strength independently of other government authorities. However, this does not mean that its decisions are isolated. The Bank of Russia continuously interacts with the executive authorities and reports to the State Duma of the Federal Assembly of the Russian Federation and the National Financial Board. The Bank of Russia's communication policy is aimed at supporting an ongoing dialogue with society.

The monetary policy goals and principles are communicated annually in the Monetary Policy Guidelines. On the day when the Board of Directors makes its key rate decision, the Bank of Russia issues a press release with the analysis of the factors behind the decision made and an explanation of its logic and carries out the Bank of Russia Governor's live press conference.[10] Furthermore, four times a year after the Board of Directors' core meetings (in February, April, July, and October), the Bank of Russia also publishes its medium-term macroeconomic forecast along with the press release on the key rate. Approximately ten days after each meeting, the Bank of Russia releases the Summary of the Key Rate Discussion that discloses the details of the deliberations about the key rate during the week preceding the Board of Directors' meeting and directly in the course of the meeting. As part of the core rounds, alongside the Summary, the Bank of Russia also publishes its Commentary on the Medium-term Forecast detailing the assumptions and parameters of the macroeconomic forecast and the reasons for their revision.[11] Furthermore, the Bank of Russia issues various commentaries on the dynamics of macroeconomic indicators.[12]

The Bank of Russia is seeking to expand the coverage of its monetary policy communications and make them more targeted, including at the regional level. The Bank of Russia's communication policy takes into account target audiences' regional, age, and professional specifics and needs, including the level of education.

[10] In the case of unscheduled meetings on the key rate (not included in the released calendar), there can be no press conference of the Bank of Russia Governor.

[11] Before the end of 2023, this information was disclosed in the Monetary Policy Report.

[12] The commentaries are available in the Analytics subsection of the Monetary Policy section and in the Macroeconomic Bulletins subsection of the Research section on the Bank of Russia website.

To this end, the Bank of Russia uses various channels of communication, including its website, mass media, social networks, as well as bloggers. The main principles of the Bank of Russia's interaction with media are timely releases of the commentaries and easy-to-understand content. Furthermore, to explain its monetary policy decisions, the Bank of Russia communicates with households and businesses directly, using both in-person formats (meetings, panel discussions, speeches at conferences, and lectures at schools, vocational schools, and universities) and remote formats (interviews on federal and regional TV and radio, as well as online conferences, lectures, and seminars). Specifically, after each decision on the key rate, the Bank of Russia holds a series of meetings with representatives of the analyst and academic community, companies, and banks. Such meetings are held both at the federal level and in regions. The main objectives of these meetings are to provide details about the monetary policy stance, answer the questions, and receive feedback (for details about the Bank of Russia's communication in 2025, see Appendix 6 'The Bank of Russia's communication on monetary policy issues').

The Bank of Russia also makes efforts to enhance financial literacy among individuals. In order to promote the understanding of how monetary policy operates and what instruments it employs, the Bank of Russia publishes tailored topic-related materials on its financial literacy website Financial Culture. The Bank of Russia actively participates in the development of the Strategy for Improving Financial Literacy and Developing Financial Culture.

When making its monetary policy decisions, the Bank of Russia factors in the mutual influence of various areas of the country's economic policy

The Bank of Russia is directly responsible for several areas of economic policy. **The goals of the Bank of Russia's work are to:**

- protect the ruble and ensure its strength through maintaining price stability;
- develop and enhance the Russian banking system;
- ensure the stability and advancement of the national payment system;
- develop the Russian financial market; and
- maintain the stability of the Russian financial market.

In the long run, the Bank of Russia's goals complement each other. A critical condition for successful implementation of monetary policy is efficiency and smooth functioning of the payment and banking systems and the financial market. By achieving these goals, the Bank of Russia helps form conditions promoting balanced and sustainable economic growth, improving Russian citizens' welfare and maintaining it at a high level, which is the principal goal of the country's economic policy.

The correlation and consistency of measures in all the areas are achieved through their discussion at the meetings of the Bank of Russia Board of Directors and through the participation of representatives of various areas in the work of dedicated committees and working groups within the Bank of Russia.

When preparing its macroeconomic forecast, the Bank of Russia also factors in how the economic situation is influenced by measures taken in other areas of economic policy that are not the Bank of Russia's mandate. To achieve the correlation and consistency of measures, representatives of the Bank of Russia take part in the work of dedicated committees and working groups dealing with various state policy areas.

Monetary policy and financial sector stability

The Bank of Russia adheres to the principle of independent targets and instruments for monetary policy and financial sector stability policy. **To deliver on the inflation target, the Bank of Russia employs monetary policy instruments – the key rate and communication. The resilience of the financial sector (the banking system and the financial market) is ensured through other mechanisms.** In the first place, these are **microprudential regulation** (the regulation of credit and other financial institutions), supervision, and financial resolution measures. Secondly, these are **macroprudential policy measures** that support the stability of the financial system in general by helping prevent accumulation of excessive risks in its individual segments and mitigate the probability of crises and their implications. Furthermore, the Bank of Russia takes into account the mutual influence of these two policies and their effects on the conditions of monetary policy implementation (see Box 5 'Monetary policy and financial sector stability').

The stability of the financial sector is crucial for efficient transmission of monetary policy decisions to the economy. Only a stable financial sector is able to ensure smooth processing of payments and transformation of savings into investment. By limiting the accumulation of systemic risks, it is possible to reduce the probability of financial crises and increase the degree of certainty for financial market participants. In case of adverse developments in financial markets, including due to external factors, macroprudential easing enables the financial sector to perform its core functions stably and helps mitigate negative effects on the real economy. All that drives the expansion and development of the financial sector by promoting confidence in it and its attractiveness to all groups of participants, and thus, reducing risk premiums and increasing the depth and liquidity of financial markets.

In most cases, changes in microprudential regulation influence long-term and structural aspects of financial institutions' operations; therefore, relevant decisions are made irrespective of medium-term monetary policy decisions. Furthermore, changes in microprudential regulation (in contrast to macroprudential regulation) are generally introduced on a continuous basis and do not depend on a particular stage of the financial and economic cycle. In view of the above, normally they do not have any effect on the monetary policy environment. The only exception is rare cases where microprudential regulation might be significantly altered, which would prompt the financial sector to adjust to the changes (usually, during crisis and post-crisis periods). In addition, there may be situations when banks technically lack sufficient capital to meet the increased demand for credit at current interest rates. In such cases, the Bank of Russia takes into account the effect of microprudential measures on monetary conditions when making decisions on the key rate and certain parameters of monetary policy operations (see Box 8 'Changes in banking regulation over 2023–2025 and their effect on monetary policy').

Macroprudential policy decisions are largely associated with cyclical fluctuations in the financial sector. Therefore, when taking macroprudential measures, the Bank of Russia factors in its key rate decisions. In turn, macroprudential policy measures can impact the monetary policy environment, including lending trends and interest rates in individual segments. Therefore, in making its monetary policy decisions, the Bank of Russia takes into account the influence of macroprudential policy measures.

Other measures aimed at ensuring the financial sector's stability can also influence the monetary policy environment. Thus, liquidity provision to credit institutions as part of financial resolution measures shifts the structural liquidity balance in the banking sector. The Bank of Russia takes these changes into account when setting limits on operations to absorb or provide liquidity, thereby mitigating their potential effect on the operational procedure of monetary policy and on monetary conditions.

The Bank of Russia normally changes the key rate only to ensure price stability. However, if the probability of materialisation of systemic risk rises considerably, the Bank of Russia can use the key rate to maintain the stability of financial markets and the financial sector as a whole. By using the key rate for these purposes, the Bank of Russia, among other things, stabilises economic agents' exchange rate and inflation expectations, which is critical for ensuring price stability.

Monetary policy and financial market development

The financial market development policy implemented by the Bank of Russia jointly with the Government of the Russian Federation promotes the accessibility of financing to a wide range of economic agents and creates conditions for investment activity growth and national economic development. The financial market is a key element to transmit the impulse from the key rate to the economy. The larger the size and liquidity of the financial market, the stronger and quicker the transmission of the key rate to the economy. The maturity level of the financial market also impacts the level of the neutral rate. In particular, when the capital market is more mature, this contributes to an increase in the saving ratio in the economy and, accordingly, to a reduction in the level of the neutral rate.

Despite the extensive changes in 2022, the Russian financial market today continues to render the entire range of services to people and businesses. However, as foreign participants exited the Russian financial market, its liquidity remains limited. This means that the transmission of key rate decisions through the channels associated with price dynamics in the financial market has been less efficient. In the future, the efficiency might increase. Specifically, considering the enacted restrictions, investment in foreign securities might be expected to become even less attractive, while the proportion of Russian assets in household savings and the role of domestic debt financing might grow. Furthermore, the share of securities in households' savings has been expanding in recent years. Another important factor accelerating payments and settlements and improving the accessibility of financing, thus making the transmission mechanism more efficient, will be the continuing digitalisation of the financial market.

Policy measures jointly implemented by the Government of the Russian Federation and the Bank of Russia also foster the development of the country's financial market (refer to the Russian Financial Market Development Programme, as well as Appendix 8 'Financial market development').

Monetary policy and fiscal policy

Fiscal and monetary policies, together, help achieve the key priorities of social and economic development: sustainable and well-balanced economic growth. The goals of the two policies complement each other. Taking into account the limited resources (labour force and fixed capital) available to the economy and the necessity to maintain macroeconomic stability, fiscal and monetary policies are creating the basis for progressive economic development (see Box 4 'Interaction of monetary and fiscal policies').

Just like monetary policy, fiscal policy affects aggregate demand in the economy, and through it, price dynamics. However, compared to monetary policy, fiscal policy usually has a quicker effect on aggregate demand. Therefore, the announcement of fiscal measures in advance (their scale and the period of their implementation), a decrease in unscheduled fiscal policy changes, and strong commitment to the announced budget targets are critical for the Bank of Russia to timely make its monetary policy decisions.

A considerable temporary easing of fiscal policy (an increase in the budget deficit or a reduction in the structural surplus) may result in quicker growth of aggregate demand and accelerate inflation, whereas budget consolidation (a decrease in the structural budget deficit or creation of a structural surplus), to the contrary, may cool aggregate demand and slow down price growth. Furthermore, inflation dynamics are influenced not only by direct changes in the structural budget deficit / surplus but also by second-round effects from changes in the structure of budget revenues and expenditures. Specifically, a surge in aggregate demand might be caused by an expansion of credit to the economy at subsidised interest rates (see Box 11 'Subsidised lending and its impact on the transmission mechanism').

If the contribution of fiscal policy to aggregate demand increases or decreases, monetary policy acts as a stabiliser to mitigate the gap between aggregate demand growth and the economy's production capacities, thus ensuring price stability. For example, if fiscal policy easing or changes in the structure of budget expenditures and revenues of the economy involve risks of its upward deviation from a balanced growth path and rising inflationary pressures, the central bank has to tighten its monetary policy to proportionately decrease private demand impulse. Furthermore, if fiscal policy remains expansionary for a long period, this might be a factor contributing to a rise in the neutral rate. In other words, all else being equal, when fiscal policy remains expansionary for an extended period, the level of interest rates in the economy should be higher.

Government expenditures, in particular investment in the development of certain industries, infrastructure, and human capital, may expand the economy's potential through an increase in production factors and total factor productivity. However, this is a gradual and long-term process and the result can only be achieved if the expenditures turn out to be highly efficient. In the short and medium term, these expenditures boost demand and, therefore, might intensify inflationary pressures and require monetary policy measures.

Prices may be influenced by tax policy measures as well. For example, an increase in indirect taxes generally causes a one-off adjustment of prices and does not require any monetary policy response. Conversely, if inflation expectations respond to changes in taxes, the central bank can be forced to take monetary policy measures so as to limit the risk of an inflation deviation from the target. A rise in direct taxes might have both proinflationary and disinflationary effects, which will depend on whether or not it will cause secondary effects associated with the impact of the tax changes on households' and businesses' behaviour as well as the areas of budget spending.

Overall, responsible fiscal policy is a critical condition to maintain price stability. An important component of such policy is a fiscal rule, especially in resource-rich countries. The fiscal rule helps these countries limit the impact of the commodity cycle on the economy by stabilising aggregate demand and reducing its dependence on the foreign trade environment. This decreases uncertainty in the economy and strengthens macroeconomic stability, including price stability. The use of the fiscal rule also mitigates fluctuations in the real effective exchange rate caused by changes in the commodity market. This increases the competitiveness of domestic goods and favours the development of manufacturing in non-commodity sectors.

The first part of the fiscal rule implies limiting budget expenditures to the amount of revenues earned with a certain equilibrium level of commodity prices. The second part is about forming the reserves. The funds accumulated during a period of high commodity prices may be used to support aggregate demand during a period of low prices and declining revenues. This makes it possible to alleviate a crisis period for the economy. The level of fiscal rule-based commodity prices (the cut-off price) should be determined in line with a conservative estimate of a long-term equilibrium in global commodity

markets. If the cut-off price is not conservative enough, this will involve a higher risk of the exhaustion of the reserves and an increase in the budget deficit. Such a situation, all else being equal, may require monetary policy tightening to mitigate the negative effects on the economy and inflation.

The fiscal rule is a key element of public finance stability and is aimed at preventing an excessive increase in government debt. Predictable fiscal policy and public finance stability are essential to enhance confidence in macroeconomic policy as a whole. As a result, the macroeconomic risk premium included in interest rates and capital costs decreases. Furthermore, this helps reduce and anchor inflation expectations, which enables the central bank to implement its countercyclical monetary policy more efficiently as the economy's deviation from an equilibrium requires smaller-scale monetary policy measures.

As part of the fiscal rule, the Bank of Russia conducts operations to buy (sell) foreign currency in the domestic FX market. The Bank of Russia conducts operations with the Chinese yuan, considering the expansion of its proportion in foreign trade settlements, the increase in the amount of transactions with this currency in the FX market, and the blocking of the Bank of Russia's USD and EUR accounts. In order to mitigate the impact of these transactions on exchange rate fluctuations, the Bank of Russia buys (sells) foreign currency in the market uniformly during each trading day of a month. The Bank of Russia conducts these operations depending on the liquidity level in the FX market.

Similarly to how the Bank of Russia factors in fiscal policy decisions when implementing its monetary policy (see Box 9 'Fiscal policy in 2025–2028 under the baseline scenario and its impact on the economy'), the Ministry of Finance and the Ministry of Economic Development of the Russian Federation, in turn, take into account the inflation target and the effect of monetary policy on the economy and inflation trends when preparing a draft federal budget and a social and economic development forecast. The correlation and consistency of monetary policy and fiscal policy measures are achieved through continuous communication between the Bank of Russia and the Ministries of Finance and Economic Development. Namely, they hold regular joint meetings to cross-check their estimates of key macroeconomic indicators and discuss macroeconomic forecast assumptions and scenarios. Furthermore, consistent communication on related topics is essential to enhance confidence in monetary and fiscal policies.

Overall, the use of the fiscal rule in conjunction with inflation targeting creates a synergistic effect. When combined, their contribution to demand and price stability increases.

Monetary policy and other state policies

Measures implemented by other government authorities also help support price stability. First and foremost, these are measures to reduce the impact of supply-side factors on inflation. These factors are events not associated with monetary policy that might induce irregular changes in supply. For example, these might be a poor harvest, disruptions in product supplies, or phytosanitary restrictions on food imports. Influenced by these factors, inflation might fluctuate considerably, and their impact might be both short-term and longer-lasting. They might entail secondary effects, such as a rise in inflation expectations, and cause a long period of high inflation.

There are various instruments used to mitigate the negative impact of supply-side factors on inflation. These instruments can be roughly classified into permanent mechanisms and ad hoc measures. The first group includes the regulation of prices and tariffs for infrastructure companies' goods and services, customs duty mechanisms, programmes fostering economic efficiency and promoting competition, and control over prices for socially important goods in certain circumstances.

The indexation of regulated prices and tariffs depending on the inflation target is essential to support price stability. When headline inflation deviates upwards from the target, it may be necessary to eliminate the accumulated gap between the inflation rate and the level of administered prices and tariffs through temporarily elevated rates of their indexation. This will help form a financial basis for the development of infrastructure industries. However, if the indexation of administered prices and tariffs persistently exceeds the inflation target and the accumulated price growth in the economy, this will exacerbate inflationary pressures through several channels. Such increases push up companies' costs, forcing them to raise prices for their products and use a more significant proportion of profits to cover operating expenses instead of investing in business development. Excessive indexation also causes a rise in households' and businesses' inflation expectations, thus provoking second-round effects in price dynamics. Moreover, it discourages infrastructure companies from enhancing productivity and optimising costs. In the long run, this approach will increase the variance of relative prices, which will be distorting price signals for businesses and investors, make long-term planning more difficult, and impair the efficiency of resource allocation in the economy.

Price or mark-up caps set in certain market segments in exceptional circumstances might decelerate price growth for a while. However, in the long term, such caps may cause a contraction of the supply of goods subject to pricing regulation, a reduction in investment in these industries, and a worsening of consumer sentiment.

If economic conditions deteriorate, the second group of instruments – ad hoc measures – can be employed, e.g. temporary measures to support the transformation of the economy. Among others, these are measures implemented to facilitate business operations, including by decreasing the administrative burden on businesses, simplifying customs, certification and transportation procedures, and accelerating digitalisation processes, the mechanism of parallel imports, and programmes for subsidised lending to priority industries.

The Bank of Russia carefully monitors the measures that are implemented and planned by the government authorities and discusses their effects with businesses, the financial community, and the government authorities. Furthermore, the Bank of Russia provides its expertise to analyse product and service markets and proposes ways to address problems. At the regional level, the Bank of Russia's regional branches regularly communicate on these issues with local authorities and the business community. The Bank of Russia will continue to assess the effect of the adopted measures on the economy and take them into account when preparing its macroeconomic forecast and making its monetary policy decisions (see Appendix 4 'One-off supply-side inflation factors').

BOX 1. THE LEVEL OF THE INFLATION TARGET IN RUSSIA

The Bank of Russia seeks to maintain inflation close to 4% and will assess the reasonableness of decreasing the inflation target in the future

Setting the format of the inflation target, including its level, type,[1] time horizon and price index,[2] is a fundamental issue within the framework of inflation targeting. That said, choosing an inflation target that would be optimal[3] for the national economy is quite a complex task. On the one hand, the inflation target should reflect society's views about price stability and promote the conditions enhancing confidence in monetary policy. On the other hand, the target should be reasonably achievable for the central bank and factor in the specifics of the economic environment where it implements its monetary policy.

In addition, the effectiveness of inflation targeting also depends on how consistent the central bank is in pursuing the inflation target established. When the inflation target is adjusted often or when inflation deviations from the target are long-lasting or frequent, this might intensify the uncertainty of economic conditions for households, businesses, and financial market participants and decrease confidence in the central bank's monetary policy. Hence, in practice, central banks generally select inflation targets and their format very carefully.

Switching to the inflation targeting regime in 2015, the Bank of Russia set the goal of its monetary policy as lowering inflation to 4% in the medium term and keeping it close to this level further on. The Bank of Russia chose this target considering the actual specifics of pricing and the structure of the Russian economy, as well as the extensive experience of inflation targeting worldwide. Specifically, the rate of 4% was consistent with the median level of EMEs' inflation targets, but was slightly higher than in countries with a stable and predictable macroeconomic environment, long-term experience of maintaining price stability, strong confidence in monetary authorities, and low inflation expectations. These countries normally set their inflation targets in the range from 1% to 3%.

The Bank of Russia estimated that it might be very hard to continuously maintain inflation below 4% in Russia due to high and unanchored inflation expectations among various groups of economic agents having a multi-decade experience of high and volatile inflation, insufficient maturity of the market mechanisms, and low sectoral diversification of the domestic economy. In addition, the rate of 4% was generally close to the inflation level in Russia's main trading partners. Furthermore, the Bank of Russia chose the inflation target of close to 4%, considering that this rate would mitigate the risks of deflation trends in certain product markets.

The studies[4] carried out in 2021–2023 as part of the Monetary Policy Review prove that the inflation target of 4% chosen by the Bank of Russia at the initial stage of inflation targeting was generally reasonable. In addition, by the end of 2021, the Russian economy had formed prerequisites for reducing the inflation target in the future. This is proven by the following:

Over the past years of inflation targeting, the Bank of Russia has made a leap forward in strengthening confidence in its monetary policy. Professional market participants' medium-term inflation expectations have been anchored to the target beginning from 2017. Besides, even where households' and businesses' inflation expectations are not anchored, they do not prevent central banks from targeting lower inflation in the economy since the real sector's inflation expectations, even in countries having successful and long-term experience of maintaining price stability, tend to be very adaptive, being influenced by actual inflation trends.

Model-based estimates for the Russian economy relying on 2015–2021 data also prove that there is room for reducing the inflation target. These estimates include both those based on the New Keynesian DSGE

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[1] An inflation target can be set as a point, a point with a range of permissible deviations, or a target range.

[2] This means an index used by the central bank in inflation targeting (a target index).

[3] Technically, an optimal format can imply such a format of the inflation target through which monetary policy can mitigate public welfare losses from price fluctuations amid cyclical changes in the economy.

[4] Meshcheryakov, A., Sukhomlinov, A., and Glazova, A. (2023). Inflation Target Format. Comprehensive analytical note. Bank of Russia.

Model[5] calibrated for the Russian economy and econometric assessments based on cross-country comparisons.[6]

According to the surveys,[7] an inflation rate of 4% or lower is a level perceived as 'comfortable'[8] by the absolute majority of Russian people and businesses.

A lower inflation level would intensify the risks of deflation in the Russian economy. The slowdown in inflation over the years of inflation targeting has also been accompanied by a reduction in the variance of inflation and the size of relative price fluctuations. Nevertheless, there is still room for a further decrease in costs from price fluctuations in the Russian economy.

In the current conditions, the issue of the ELB and ZLB of the key rate does not seem significant for the Russian economy in the context of selecting an inflation target. In other words, it is hardly probable that setting a lower inflation target might cause exhaustion of room for the key rate to respond to disinflationary shocks.

In terms of its structural specifics and the extent of its diversification, Russia's economy is quite similar to the countries that are targeting lower inflation, including developing economies.

A lower inflation target in Russia would be consistent with the levels of the inflation targets in Russia's trading partners to a greater extent, even considering a growing share of developing economies among these countries. The practice of recent years also shows that the largest developing economies continue to progressively decrease their inflation targets as they accumulate inflation targeting experience.

A lower inflation target, provided that it is achieved sustainably, will help decrease economic agents' inflation expectations. This means that interest rates in the economy, in the first place long-term ones, will also be lower than with an inflation rate of close to 4%. In other words, the environment for expanding investment activity will also be more beneficial. Furthermore, when inflation is lower, fluctuations of relative prices in the economy are smaller as well. Inflation will become more homogeneous across consumer basket components. This will be another factor helping anchor inflation expectations at a lower level. In addition, output will become less volatile, while the distribution of factors of production in the economy will become more efficient. Finally, a reduction in Russia's inflation target will bring it closer to the levels of the inflation targets in economies that are similar to Russia in terms of the development level and in Russia's trading partners. All else being equal, a smaller difference in inflation rates in Russia and Russia's trading partners will make the ruble exchange rate stabler.

Setting a lower inflation target in the economy (provided that the economy has formed prerequisites for this) does not involve a trade-off for monetary policy between output and inflation in the long run. This is because, in the conditions of full flexibility of prices existing over a long-term horizon, monetary policy does not affect potential economic growth rates. In the longer run, economic growth rates depend on the dynamics of labour and capital in the economy and their productivity. However, the economy might face costs at the stage of the transition to a lower target, that is, in the short term. These costs could be mitigated or avoided by announcing a lower target in advance (several years before the actual reduction) to promote a gradual adjustment of economic agents' inflation expectations, by pursuing consistent monetary policy stabilising inflation at the target and ensuring high information transparency, and by enhancing the coordination between the government and the central bank at the stage of the transition, including to factor in the inflation target when developing fiscal policy parameters and approaches to the indexation of administered prices and tariffs.

Over the past few years, inflation in Russia was above 4%, which was associated with both the structural transformation of the economy and the adjustment of relative prices, resulting from the large-scale

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[5] Glazova, A. (2023). Optimal Level of Inflation Target, ZLB, and Equilibrium Real Interest Rate. Working paper. Bank of Russia.

[6] Meshcheryakov, A., Sukhomlinov A., and Kolosov, A. (2023). Factors Determining the Choice of Inflation Target Levels: Theory and Global Practice. Working paper. Bank of Russia.

[7] InFOM's household surveys (March and October 2022 and February 2023); the Bank of Russia's monitoring of businesses (February and October 2022).

[8] An inflation level perceived as 'comfortable' means that price fluctuations in the economy do not any longer have a significant impact on households' and businesses' economic decisions, including both long-term and current decisions.

sanctions enacted by foreign states, and the economy's overheating (2023–early 2025). Nevertheless, **the Bank of Russia does not consider the possibility of raising the level of the inflation target. Such a decision would entail considerable costs for the Russian economy.** The higher is inflation, the higher are nominal interest rates in the economy, all else being equal. Setting interest rates on loans, creditors have to price in high inflation as their goal is to receive return on investment. Accordingly, a higher inflation target would lead to higher nominal interest rates in the economy. An increase in the inflation target might undermine confidence in monetary policy as it might be perceived as an attempt to pass on economic difficulties to households and businesses through 'inflation tax', which will only exacerbate macroeconomic instability in the long term. A rise in the inflation target would also entail steadily higher growth rates of the economy and might even have a negative impact on its potential as higher inflation reduces the efficiency of the distribution of limited labour and capital resources. Generally, high inflation is accompanied by frequent and persistent price fluctuations and an elevated variance of price dynamics (high dispersion), which significantly increases the level of economic uncertainty. Current and future price signals become distorted as companies and households find it more difficult to distinguish between fluctuations of relative prices in individual product and service markets and changes in the overall price level. This makes it harder to prepare financial and investment plans and reduces the planning horizon, forcing households, companies, and investors to focus on short-term transactions rather than long-term projects. As a result, the economy's total productivity may decline.

An increase in the inflation target in the current conditions would also undermine confidence in the national currency and reduce its purchasing power. The amount of goods and services that the ruble can acquire inside the country will decrease over time. Moreover, Russian goods and services in international markets will also gradually become less competitive in terms of prices. Targets above 4% are a rare case in the world and mainly chosen by countries whose share in global (PPP) GDP is below 4%. Therefore, with the target exceeding 4%, people will prefer to save in foreign currency rather than in rubles. In addition, higher and more volatile inflation, compared to other countries, will make the ruble less attractive as a currency for international settlements, as compared to the currencies of countries with stabler prices.

After inflation slows down and stabilises at around 4%, the Bank of Russia will assess the reasonableness of decreasing the inflation target. However, a reduction in the inflation target will only be possible beyond the three-year forecast horizon, that is, no earlier than 2029. If the Bank of Russia makes such a decision, it will be announced a few years before the change. This will help mitigate the costs of switching to a new level of the target. The Bank of Russia will continue discussing this issue with businesses, the analyst and expert community, public organisations, the Government and the Federal Assembly of the Russian Federation.

BOX 2. BENEFITS OF A FLOATING EXCHANGE RATE

A floating exchange rate of the ruble protects the economy against external shocks and enables the regulator to implement an independent monetary policy. A floating exchange rate is an essential component of the inflation targeting regime

The Bank of Russia switched to a floating exchange rate of the ruble in November 2014. That was an integral element of the transition to inflation targeting from 2015. What are the main benefits of this regime?

In the first place, a floating exchange rate acts as a 'built-in stabiliser' of the economy. In contrast to a managed exchange rate, a floating one helps the economy better absorb external shocks. In other words, if external conditions alter, a floating exchange rate will help reduce the extent of overheating or downturn in economic activity.

Russia's experience has proven this. The decline in GDP in 2015 (amid the slump in global crude prices and the enactment of sanctions), in 2020 (during the crisis instigated by the coronavirus pandemic), and in 2022 (due to the imposition of new extensive sanctions) was not as significant as during the GFC of 2008–2009, while the scale of external effects was comparable or even greater, but the exchange rate regime was different.

How does the 'built-in stabiliser' work? When the national currency depreciates, export prices for foreign buyers[1] go down. This makes domestic goods and services more competitive in the international market, offsetting the negative change in the external environment. Concurrently, in terms of domestic demand (including both consumer and investor demand), a weaker national currency makes imports more expensive, which supports the competitiveness of domestic products in the internal market and promotes import substitution. In turn, a stronger national currency has a countercyclical effect on the economy, limiting the risks of its overheating. This is possible through better availability of imports to domestic buyers. Hence, a floating exchange rate regime ensures a sufficient flexibility of relative prices enabling economic agents to respond to changes in the external environment more quickly and at lower costs.

Secondly, a floating exchange rate enables the Bank of Russia to implement an autonomous monetary policy aimed at addressing internal issues, first and foremost at maintaining inflation close to the target, independently of other countries' policies and the external economic environment.

In particular, when the exchange rate is regulated, interest rates in the economy have to follow global interest rates due to arbitrage. Contrastingly, if the central bank does not target the exchange rate, it may adjust monetary conditions in the economy setting interest rates independently at a level needed to ensure low and stable inflation. In turn, inflationary pressures stemming from exchange rate movements through the effect of their pass-through to consumer prices are taken into account by the central bank in the course of implementation of its monetary policy.

Finally, a floating exchange rate makes it possible to balance the interests of different economic agents thus helping diversify the economy and enhancing its resilience. This is crucial during periods of structural economic transformations or heightened uncertainty.

Just like administered domestic prices, a regulated exchange rate distorts the market pricing principles. The exchange rate shall reflect the state of the country's balance of payments adjusting to objective changes in foreign trade and financial flows. A short- and long-term equilibrium in the FX market can be effectively achieved only through continuous interaction among a diversity of market participants. If the central bank

[1] The magnitude of this effect depends on the currency of a particular foreign trade contract. As the practice of setting prices in the main reserve currencies is widespread in modern conditions, the dynamics of the exchange rate of the national currency has a somewhat smaller countercyclical effect on the economy in the short term. This is because exchange rate fluctuations do not directly cause changes in prices for exports from the perspective of foreign counterparties – buyers and, accordingly, all else being equal, do not lead to changes in the demand for exports. Nonetheless, for exporters – sellers in general, movements of the exchange rate influence the amount of foreign currency earnings denominated in the national currency, which impacts the level of consumer and investor demand in the economy from their perspective.

strives to maintain a certain level of the exchange rate of the national currency, it will have to search for this equilibrium artificially.

Moreover, any attempts to maintain the nominal exchange rate at a certain level might not correlate with the dynamics of the real exchange rate of the national currency that normally reflect changes in the structure of the economy.[2] If the nominal exchange rate is kept at the same level, this might create favourable conditions for individual industries, but only temporarily and at the expense of other sectors of the economy.

The experience of the crises in Russia in 1998 and 2008 and in other countries proves that the pegging of the national currency to a foreign one is inefficient in the conditions of the modern world economy. This pegging will provoke and increase imbalances in the economy in the short term and is impossible in the longer run: when there are powerful negative external factors, any attempts to prevent the national currency from weakening would exhaust the country's foreign currency reserves, which would be inevitably followed by rapid depreciation.

Nevertheless, certain measures reducing exchange rate volatility associated with price fluctuations in global commodity markets may have positive effects on commodity exporting economies. To improve their macroeconomic stability, these countries, including Russia, seek to limit the impact of the external commodity cycle on the internal business cycle and, to this end, employ various instruments, e.g. a fiscal rule. In some cases, the mechanism of a fiscal rule also helps reduce exchange rate volatility stemming from crude price fluctuations. Russia first introduced the fiscal rule in 2004 and has then been gradually modifying it.

[2] In particular, the real exchange rate in a developing economy might grow owing to higher labour productivity in tradable sectors causing an increase in relative prices for non-tradable goods (the Balassa–Samuelson effect). Although changes in relative prices might be cyclical as well, this only makes it more complicated for the central bank to determine an equilibrium level of the exchange rate of the national currency.

BOX 3. MODEL-BASED APPROACHES AND THEIR EVOLUTION

The history of development of the Bank of Russia's projection models and latest upgrades

The Bank of Russia's model-based approaches rely on a wide range of models of various classes and focus areas. They include both models for short-term forecasting to analyse current trends and predict the most likely changes in macroeconomic variables in the next one to two quarters and models for medium-term forecasting to estimate changes in macroeconomic indicators in the next three to four years in various scenario conditions and with variations of individual parameters. The choice of a model depends on the task to be addressed, the subject area, and the nature of the data used.[1]

One of the main models used by the Bank of Russia to analyse the domestic economy is the QPM.[2] This model was designed in 2007 as part of the calibration of the macroeconomic forecasting system and is currently applied to make medium-term projections and prepare recommendations on monetary policy, as well as to carry out scenario analysis and develop stress tests. The Monetary Policy Department presents its QPM-based forecast estimates at the meetings with the Bank of Russia executives during the week preceding a key rate decision and at the meetings of the Bank of Russia Board of Directors.

To enhance the robustness of forecast estimates, the Research and Forecasting Department presents alternative (independent) forecast calculations relying on its own models. Its main projection model is also one of the versions of the standard QPM.[3] It comprises two complementary – fiscal and credit – blocks in addition to the standard equations. The fiscal block is to estimate and take into account the effects of changes in the main public finance indicators, including by modelling the fiscal rule. The credit block describes the credit impulse considering the impact of subsidised lending programmes on the dynamics of lending.

To provide a more comprehensive view of the economic situation, the meetings with the Bank of Russia executives preceding key rate decisions are also attended by the Heads of the Bank of Russia Main Branches to present their region-level forecast estimates. All the Bank of Russia Main Branches completed the development of their region-level structural and/or semi-structural models in 2024. Their models rely on the same principles as the models for the Russian economy as a whole, while focusing more on the regional specifics and interpretations of countrywide trends. Normally, region-level models decompose the country's economy into a particular region and the rest of Russia. Papers studying a number of region-level models are already available on the Bank of Russia website[4] and in the Russian Journal of Money and Finance[5] issued by the Bank of Russia.

The Bank of Russia has been continuously enhancing its model-based approaches taking into account latest research and developments by Russian and foreign experts in macroeconomics and quantitative methods. Over the past few years, the main changes introduced to the QPM were as follows.

In 2012–2013, the basic QPM was expanded to encompass the breakdown of inflation into food products, non-food goods and services, excluding housing and utility services. A specification for the Phillips curve was made separately for each of the above categories of inflation. This breakdown helped analyse changes in relative prices for tradable and non-tradable goods considering movements of the real exchange rate.

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[1] For details, refer to the Forecasting and models subsection in the Monetary Policy section on the Bank of Russia website.

[2] For details, refer to Orlov, A. and Sharafutdinov, A. (August 2024). Quarterly Projection Model for Russia with the Labour Market Component.

[3] For details, refer to the Quarterly Projection Model by the Bank of Russia Research and Forecasting Department (October 2024).

[4] The model for the Volga-Vyatka macroregion is described in Monetary Policy in a Regionally Heterogeneous Economy: Approaches Based on Aggregate and Regional Data, the model for the Urals – in DEMUR: A Regional Semi-structural Model of the Ural Macroregion, the model for the Central Federal District – in Forecasting Regional Indicators Based on the Quarterly Projection Model, and the model for the Far East – in Semi-structural Economic Model of the Far Eastern Macroregion.

[5] The model for the Siberian macroregion is described in the article Quarterly Projection Model for the Siberian Macroregion, and the model for the Southern macroregion – in the article Semi-Structural Model of Economy of the Southern Macroregion of Russia.

In 2013–2014, the QPM was tailored to the inflation targeting regime: the elements accounting for managed floating of the exchange rate were replaced with those representing the transmission mechanism of the key rate effect on the economy.

In 2019–2021, the QPM was expanded to include the block covering the public sector, which makes it possible to measure the size of the fiscal stimulus in the economy depending on fiscal policy parameters. In addition, the maturity structure of interest rates was added to the model, which enables direct tracking of the monetary policy transmission to interest rates of various maturities.[6]

In 2022, after a series of external shocks and the tightening of the capital controls, the QPM was again adjusted to the new conditions. First of all, the modifications allowed direct modelling of trade flows (i.e. decomposing aggregate output into exports and imports) and adjusting the interconnections between Russian and foreign markets (i.e. weakening of the interdependence between the exchange rate and the financial channel and adding a response to a change in the balance of trade and trade conditions in the equation for uncovered interest rate parity).[7]

In 2023, the Bank of Russia introduced two key changes to the QPM. First, the breakdown into food and non-food goods and services (excluding housing and utility services) was replaced with core inflation and non-core inflation components. Considering the over 10-year period of the economic development and the adaptation of the economy to the inflation targeting regime, the previous breakdown into three categories became less relevant to describe inflation dynamics. Concurrently, it was becoming increasingly pertinent to differentiate between the underlying component of inflation, demonstrating sustained price growth in the economy, and short-term fluctuations triggered by one-off factors in individual markets. One of the metrics of the underlying component of inflation is core inflation, i.e. inflation adjusted for the effects of administrative, seasonal or volatile factors. The Phillips curve in this model is specified only for core inflation. Non-core inflation components include fruit and vegetables, petroleum products, administered services, and other volatile components. They are modelled based on autoregressions with the convergence towards the inflation target taking into account certain additional elements and adjustment for a deviation of relative prices.

Second, the model was expanded to include the block capturing the labour market that comprises wage and unemployment variables. The labour market is a key factor influencing price dynamics in any economy. Adding this block in the QPM helps improve the understanding of the main interconnections in the Russian economy, including the ratio between aggregate demand and supply.

Furthermore, the model was complemented with a multi-level production function as a deeper analysis of the interconnections among labour market indicators requires structural modelling of factors of production and supply-side factors. Specifically, the model sets out separately a production function for domestically oriented output and a production function for the export sector's output (with a breakdown into the oil and gas and the non-oil and gas sectors).

The production functions describe companies' choice between labour, capital and intermediate imports, taking into account their relative costs and spending to additionally increase a particular factor of production. Besides, spending is assumed to grow in the following order: imports, capital, and then, labour. Domestically oriented output requires all the three factors, while the output of non-oil and gas exports – only labour and capital. The output of oil and gas exports does not require details for the production function and is modelled exogenously.

Domestically oriented supply and finished imports cover domestic demand, which in turn depends on the level of interest rates in the economy, the fiscal stimulus, labour incomes, and terms of trade. The export sector's output responds to demand from trading partners.

Employment, unemployment, and real wages depend on companies' demand for labour (considering wage rigidities and specifics of the Russian labour market). In turn, inflation is influenced by maximum actual costs

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[6] This version of the model was presented in the paper by Orlov, A. (March 2021). Quarterly Projection Model for Russia.

[7] For details about this modification of the model, refer to the Box 'Adaptation of the Quarterly Projection Model to the capital flow control framework' in Monetary Policy Report, No. 2 (38) (May 2022).

incurred by manufacturers of domestic goods and importers and reflects the ratio between demand and supply in the economy, including the demand for and supply of factors of production.[8]

For details about the update of the QPM, the specifics of adding the block covering the labour market, and the main changes in the equations, refer to the paper Quarterly Projection Model for Russia with the Labour Market Component.

In April 2025, the Bank of Russia published the programme codes of the QPMs of the Monetary Policy Department and the Research and Forecasting Department, which complemented the descriptions of the macroeconomic models published by the regulator earlier: the Quarterly Projection Model for Russia with the Labour Market Component and the Quarterly Projection Model by the Bank of Russia Research and Forecasting Department. These codes were published to demonstrate the results of the programme implementation of the QPMs. Nevertheless, the results of the calculations based on these codes should not be considered or referred to as the Bank of Russia's official position, official policy, or decisions. When employing the codes and the resulting computations, it is essential to remember that, although relying on model-based calculations, the Bank of Russia's macroeconomic forecast is not generated from them automatically but also takes into account expert judgements regarding the factors that are difficult to capture in quantifications. The Bank of Russia's official forecast is a coordinated view of the Bank of Russia Board of Directors about future economic trends and indicators. Making its key rate decisions, the regulator relies on the forecast it releases.

[8] For details about the model, refer to the Appendix to Monetary Policy Report, No. 3 (43) (July 2023).

BOX 4. INTERACTION OF MONETARY AND FISCAL POLICIES

The goals of fiscal and monetary policies complement each other. Maintaining a stable macroeconomic environment, the government and the central bank jointly create prerequisites for delivering on key public development priorities

The role of macroeconomic policy in the economy

Sustainable and balanced economic growth and price stability are **the key priorities of social and economic development**. While having different mandates and instruments, fiscal and monetary policies jointly create prerequisites for implementing these priorities, taking into account limited labour and fixed capital resources available to the economy and the necessity to maintain macroeconomic stability.

Price stability is the objective of monetary policy pursued by the central bank. In an inflation targeting environment, the central bank ensures price stability by changing its policy rate, thus influencing aggregate demand to minimise its deviations from a long-term balanced (potential) growth path.[1] Low and stable inflation reduces inflation premiums in interest rates (especially long-term ones), limits the growth of factor costs in the economy, and generally improves the quality and predictability of the business environment. Although impacting the economy primarily through aggregate demand, monetary policy indirectly improves the efficiency of factors of production in the economy by smoothing business cycle fluctuations and making macroeconomic conditions more predictable. This has a positive effect on long-term economic growth.

Fiscal policy pursued by the government addresses a wide range of strategic objectives of the government in the area of social and economic development. Through taxes and expenditures, the government reallocates resources in accordance with society's priorities, implementing national investment and infrastructure projects, financing social programmes and other measures supporting people and businesses, and ensuring the operation of public institutions. In the short and medium term, similarly to monetary policy, fiscal policy affects the economy through aggregate demand. The main effects are normally achieved through planned budget revenues and expenditures approved according to the standard budgeting procedure. An additional effect may be produced in two ways, specifically by employing discretionary measures, e.g. unscheduled changes in spending or taxes, and automatic stabilisers, which are integrated budget elements that are sensitive to a business cycle phase.[2] As to the long term, fiscal policy also influences aggregate supply through investment in human capital, infrastructure, and technology development. This means that fiscal policy may, over time, affect potential output not only through the stabilising effect but also through a direct increase in production factors and their productivity.

Monetary and fiscal policies interact in a natural way. **The goals of the two policies differ, while complementing each other.** Thus, price stability makes long-term planning of budget revenues and expenditures more predictable, while the government's actual obligations become more sustainable over time. Overall, this improves the effectiveness and expands opportunities for government investment. In turn, being implemented in the conditions of controlled deficits and a stable debt level, spending prioritisation, and commitment to fiscal rules, fiscal policy helps monetary policy in achieving the objective of stabilising inflation at a low level. That said, when forming a budget, the government normally takes into account the inflation target, which improves the consistency and predictability of macroeconomic policy.

An essential condition for efficient interaction between fiscal and monetary policies is foreseeable actions. As the time lags of the two policies differ, fiscal policy affects the economy faster. Direct budget spending impacts aggregate demand instantaneously, whereas key rate changes fully translate into its dynamics with a lag of several quarters. Hence, transparent budget targets and commitment to the fiscal rule enable the central bank to timely factor in the fiscal policy path when tightening or easing monetary conditions.

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[1] A balanced (potential) growth path of output is a long-term economic growth path where output expands at a pace consistent with the maximum possible utilisation of available factors of production (labour and fixed capital) without risks of an excessive increase or decrease in inflationary pressures, that is, without a deviation of inflation from the target.

[2] Specifically, an economic downturn leads to a reduction in tax revenues and a simultaneous rise in expenditures on transfers and social payments, thus automatically supporting aggregate demand and employment and smoothing economic activity fluctuations.

In turn, when publishing the projected path of the key rate and explaining the rationale behind its decisions, the central bank gives a guiding framework for budget planning to the government. Predictable fiscal and monetary policies strengthen economic agents' confidence and enhance the resilience of the macroeconomic system as a whole.

Finally, in the course of the interaction of the two policies, it is monetary policy that is primarily responsible for ensuring a balanced increase in aggregate demand consistent with the capacities to ramp up aggregate supply. Certain circumstances (e.g. when the contribution of fiscal policy increases to deliver on socially important priorities) might cause substantial shifts in the structure of aggregate demand. In such cases, supporting price stability, **monetary policy primarily acts as a stabiliser** changing monetary conditions so as to increase or decrease room for private demand growth (including through credit). This approach creates conditions where fiscal policy can deliver on public priorities without excessive inflationary pressures.

The response of fiscal and monetary policies to shocks

The economy is periodically exposed to shocks induced by internal or external conditions. For the economy to stay in an equilibrium, fiscal and monetary policy response measures are needed. However, the scale and efficiency of this response depend on the policy space available to the government and the central bank.

A critical factor for the central bank is society's confidence as it helps anchor inflation expectations at a low level and make them less responsive to short-term shocks. In particular, insufficient confidence would also require a more significant monetary policy response to proinflationary shocks in order to stabilise the situation. Furthermore, if the level of confidence is not high enough, the central bank's capacity to ease monetary conditions in response to the economy's deviation downwards from potential will be lower, because such easing might decrease confidence even more and accelerate inflation. In addition, during acute crisis periods, mitigating financial stability risks may require a monetary policy response to maintain the resilience of the financial system. To the contrary, sustainably low inflation will be improving the anchoring of inflation expectations at the target over time and strengthening confidence in the central bank, thereby helping monetary policy perform its countercyclical role in the economy more efficiently.

The key for the government is the so-called fiscal space, which is a safety cushion of fiscal policy enabling the government to dampen the effects of shocks on the economy in crisis situations, without compromising the long-term stability of government finance. Fiscal space is usually created during periods of stable economic growth (e.g. through a budget surplus, debt reduction, or reserve accumulation) so as to increase spending or cut taxes in case of a recession without the risk of a debt crisis. This approach to implementing fiscal policy dampens business cycle volatility (specifically, prevents GDP slumps and accelerates economic recovery).

If the government has sufficient fiscal space, it has the opportunity to expand borrowings at more moderate interest rates because fiscal buffers and the commitment to fiscal rules lower risk premiums as perceived by sovereign debt holders. Furthermore, when government debt is small and deficits are moderate, the budget is less sensitive to cyclical fluctuations of short-term interest rates. To the contrary, when high deficits persist for a long time, while fiscal buffers are limited, this may push up the neutral (equilibrium) interest rate as increased government borrowings entail a reduction in available private savings, with investors demanding higher risk premiums when financing government debt.

A sufficient level of confidence (and in the case of fiscal policy – adequate fiscal space) increases the government's and the central bank's flexibility in responding to shocks. Among other things, this provides the opportunity of easing fiscal and monetary policies in case of materialisation of the risks of a large downward deviation of the economy from its potential and of inflation from its target. When the two policies are both accommodative in such a situation, they will be able to accelerate the economy's rebound and return to its equilibrium. Furthermore, the countercyclical effect of macroeconomic policy would also mean a gradual normalisation of fiscal and monetary policies as the economy returns to a potential growth path and inflation to the target. In turn, it is monetary policy that will mostly perform the stabilising function to ensure a balanced increase in aggregate demand.

Fiscal and monetary policies in Russia since early 2000s

From the beginning of the 2000s, the macroeconomic structure in Russia has been progressively evolving in order to address internal and external shocks more efficiently and create prerequisites for delivering on key public development priorities.

In the 2000s, the Russian economy was developing against the backdrop of a favourable external environment and internal recovery growth (including the rebound of its potential after the transformational decline of the 1990s). Fiscal policy was gradually moving from procyclicality towards accumulation of fiscal buffers. Monetary policy was implemented under the regime of a managed ruble exchange rate, with FX interventions being a key policy instrument.

The 2009–2010 crisis[3] was the first large-scale external shock. Fiscal policy played the main role in stabilising the economy by using the extensive fiscal stimulus that became possible owing to the budget reserves accumulated over the previous years. Monetary policy contributed to the smooth functioning of the financial system by preventing a liquidity deficit. However, it was unable to perform the countercyclical function adequately because the exchange rate was not flexible and the level of confidence was insufficient. The experience of that crisis revealed vulnerabilities in the structure of macroeconomic policy in terms of its ability to absorb external shocks, which inspired further enhancement of the approaches, including the gradual preparation of the Bank of Russia to switch to the inflation targeting regime.

The 2014–2015 crisis was also induced by external events and was associated with a considerable decline in oil prices and rising geopolitical tensions. The crisis occurred at the time when the Bank of Russia was completing the transition to a floating exchange rate and the inflation targeting regime. In response to the deterioration of the external environment in late 2014, the Bank of Russia sharply raised the key rate to address both price and financial stability risks. As the situation stabilised, as early as the beginning of February 2015, the Bank of Russia could start reducing the key rate, but considerable proinflationary shocks necessitated tight monetary policy to decrease inflation to 4% until the end of 2017. At the time, fiscal policy lacked sufficient space to support the economy as long as the slump in crude prices was due to structural reasons. The budget had to adapt to a new equilibrium by cutting expenditures (in real terms) and implementing a new fiscal policy mechanism with a conservative estimate of long-term equilibrium oil prices. The transition to the floating exchange rate regime helped significantly dampen the consequences of the deterioration of external conditions for the Russian economy, as a result of which the extent of the GDP decline in 2015 was notably smaller than in 2009. As both fiscal and monetary policies were committed to achieve macroeconomic stability, inflation was reduced to 4% by mid-2017.

The coronavirus-induced crisis of 2020 was accompanied by severe demand and supply shocks simultaneously. For the first time, fiscal and monetary policies were both accommodative to prop up the economy. The Bank of Russia cut the key rate to historical lows, while the Government considerably expanded fiscal support. This became possible owing to higher confidence in the Bank of Russia's monetary policy, the accumulated reserves, and the resilience of the budget framework. The extensive support helped significantly mitigate the extent of the economic downturn in 2022 and the risks of a downward deviation of inflation from the target. However, as demand quickly rebounded amid considerable supply-side constraints (including due to anti-epidemic measures), this subsequently caused substantial overheating in the Russian economy. Monetary policy responded to it through an increase in the key rate, while the Government adjusted its fiscal policy by gradually reducing the budget deficit and returning to the long-term parameters of the fiscal rule.

The year 2022 became an episode of an acute financial and structural shock. In February 2022, following the enactment of large-scale external trade and financial restrictions, the Bank of Russia temporarily significantly tightened its monetary policy to mitigate price and financial stability risks, but then shifted towards policy easing as the situation stabilised. Fiscal policy, still having a sufficient safety cushion (small government debt and substantial reserves), was able to expand spending. From mid-2022 to mid-2023, fiscal and monetary policies were again codirectional, stimulating the economy and supporting its adaptation to the new environment.

[3] The crisis that followed the GFC.

From mid-2023, the situation changed as the Russian economy considerably deviated upwards from its potential growth path. The Government continued to finance priority expenditures to support the structural transformation, while the Bank of Russia started consistent monetary tightening by raising the key rate. Such an approach implies rebalancing rather than the lack of coordination: as fiscal policy increased its contribution in the structure of aggregate demand, it was tight monetary policy that performed the main stabilising role, limiting the extent of overheating. This promoted the conditions for a gradual return of the economy to a balanced (potential) growth path and inflation to the target. That said, fiscal policy remained committed to long-term macroeconomic stability as the Government planned to decrease the structural primary deficit of the federal budget to zero and return to the fiscal rule in the medium term.

BOX 5. MONETARY POLICY AND FINANCIAL SECTOR STABILITY

Banking regulation may affect the parameters of bank operations and dynamics of lending and deposit amounts. Regulatory measures are not used to change monetary tightness for inflation targeting purposes, but are taken into account as an autonomous factor when making key rate decisions

Monetary policy influences the tightness of monetary conditions and, accordingly, demand and inflation through the key rate and communication.[1] The central bank, adjusting the tightness of monetary conditions over a short-term horizon, stabilises output close to its potential level and supports inflation near the target.[2] An important element of the monetary policy transmission mechanism is bank loan and deposit rates and the amount of respective operations. Owing to the transmission mechanism, by changing the key rate, the Bank of Russia is able to influence interest rates on bank transactions, which in turn affects credit demand.

Concurrently, the regulation of financial institutions (primarily banks) may also influence the functioning of the monetary policy transmission mechanism. For example, banking regulation may affect the banking sector's lending capacity and the main parameters of credit supply – minimum interest rates and maximum transaction amounts. This regulation is an autonomous contributor to the extent of monetary tightness, setting rules and limits for the financial market.

The autonomous effect implies that banking regulation decisions do not change the tightness of monetary conditions, irrespective of inflation targeting purposes.

The objective of banking regulation is maintaining banks' uninterrupted operation in order to protect depositors and creditors as well as ensure and support financial stability

Banking regulation is divided into prudential and non-prudential measures. After the GFC, banking regulators worldwide started to distinguish between microprudential and macroprudential regulation.

Banking regulation helps ensure that credit institutions comply with the rules of corporate governance and transactions and maintain their liquidity and equity at least at the minimum permissible levels. This allows the regulator to manage banks' risks using a top-down approach in order to protect depositors' and creditors' rights and interests and to ensure and support financial stability.

A critical regulation area is prudential management of the banking sector's credit and liquidity risks, which is done primarily through the capital adequacy, liquidity coverage, and net stable funding ratios

Credit risk regulation is related to the approach implying that a bank's capital is a means to absorb unexpected losses, which, as opposed to expected losses, are not covered by loss provisions in accounting and are absorbed using the part of capital remaining after the provisions. Unexpected losses that might occur in banking can be caused by the risk of a default on a loan or revaluation of a bank's assets and liabilities. To limit their liquidity risks, banks generally monitor payment processing on their own and seek to avoid any problems with client transactions. Nevertheless, the liquidity ratios establish conservative balance sheet management rules for banks requiring them to create liquidity buffers and maintain a stable funding structure. This enables banks to process payments, including in stress situations when their liabilities might be more volatile than normally.

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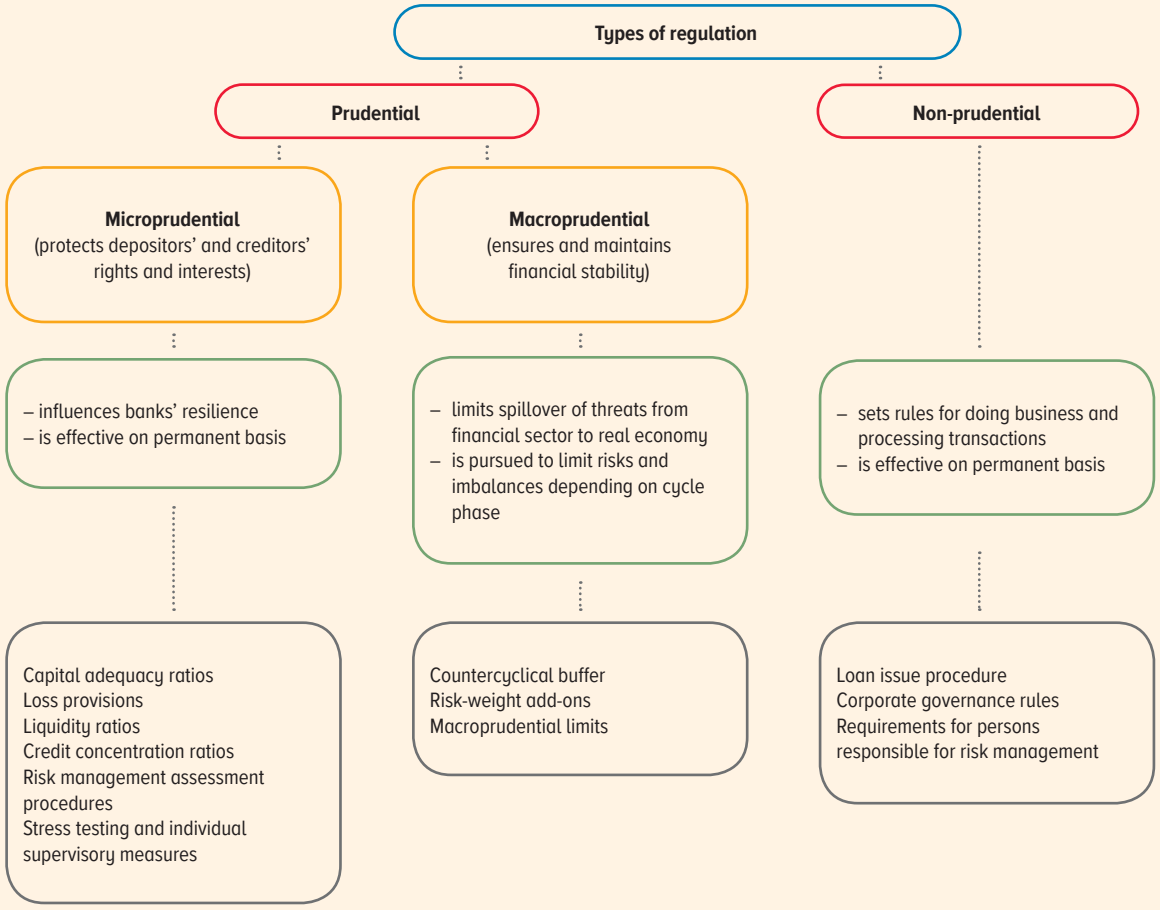
[1] See Appendix 1 'Monetary policy transmission mechanism in Russia'.

[2] See Box 10 'The concept of a long-term economic equilibrium and deviations of key macroeconomic variables from it'.

BANKING REGULATION *Chart 5.1*



Source: Bank of Russia.

Credit and liquidity risk regulation[3] is taken into account by banks in pricing as positive and negative adjustments of bank transfer rates,[4] as well as affects the structure of bank assets and liabilities.

While adapting to the requirements, banks adjust their interest rates, product ranges, and non-price terms of transactions, thus managing their lending and deposit amounts to achieve the required balance sheet structure

Specifically, the **capital adequacy ratios** may limit credit supply *in the short term* as banks are unable to build up capital instantaneously, which pushes up loan rates. This effect is produced when banks technically lack sufficient capital to meet the increased demand for credit at current interest rates or when the regulatory requirements are tightened. Furthermore, capital adequacy regulation is aimed at restricting risky lending, which is also a factor constraining the expansion of credit supply. *In the long term*, banks increase their capital from profit or additional investment taken into account in equity sources, which enables them to expand lending, while complying with the capital adequacy ratios.

[3] Market and operational risks, as well as interest rate risk on the banking book may affect banking product rates and bank asset formation, but are not analysed in this box for the following reasons: market risk in Russia's banking sector accounts for 4–5% of the risks taken into account in the capital adequacy ratios, and interest rate risk on the banking book in the effective version of Russia's banking regulation is technically not included in the metric and components related to the calculations of banks' capital and required ratios.

[4] See Box 12 'The transfer curve and formation of interest rates on bank operations'. Banks raise loan rates by adding a surcharge for net capital spending calculated according to the formula CAR * RW * (ROE – RF), where CAR is the target capital adequacy ratio, RW is the risk weight in the capital adequacy ratio, ROW is the target return on equity, and RF is the risk-free return on equity. Therefore, if the capital adequacy ratio is raised to maintain the target return on equity, the surcharge will increase, which will cause a rise in loan rates.

To comply with the **liquidity coverage ratio** and the **net stable funding ratio**, banks change the balance sheet structure *in the short term* as follows:

- They seek to increase stable liabilities. Thus, unlike interbank lending, raising funds from individuals and legal entities helps improve the required liquidity ratios. Therefore, the required liquidity ratios might increase interest rates on clients' deposits, especially long-term ones.
- To improve the liquidity coverage ratio, banks raise funds from the central bank against assets, other than highly liquid ones. Interest rates on such transactions are usually higher than IBL rates, and this ultimately has an upward effect on the cost of funding as well.
- Banks acquire financial assets classified as highly liquid, e.g. government bonds, which reduces securities yields and might force banks to raise interest rates on loans (and other asset-related transactions) in order to maintain the return on equity, if banks are not willing to decrease it for the sake of the market share in the current competitive environment.

In the long term, banks can raise the actual value of the liquidity coverage ratio by consistently changing the structure of their balance sheets largely through an increase in the proportion of highly liquid assets. This is because, in a long-term equilibrium, banks' liability structure is determined by households' and companies' preferences, while adjustments in the structure of balance sheet liabilities may help the banking sector adapt to compliance with the required liquidity ratios to a lesser extent. When stable and long-term resources are limited, by raising interest rates or tightening non-price lending conditions, banks may restrict credit supply. They can thus slow down the growth of the demand for funding that may increase expected outflows in terms of the liquidity coverage ratio or can be unstable in terms of the net stable funding ratio. This process might be accompanied by, among other things, a rise in term premiums for clients on deposit transactions in order to increase the maturity of the resource base.

Hence, the situation with the supply and pricing of banking products may vary depending on how strongly the required ratios limit the expansion of banks' balance sheets or affect their structure

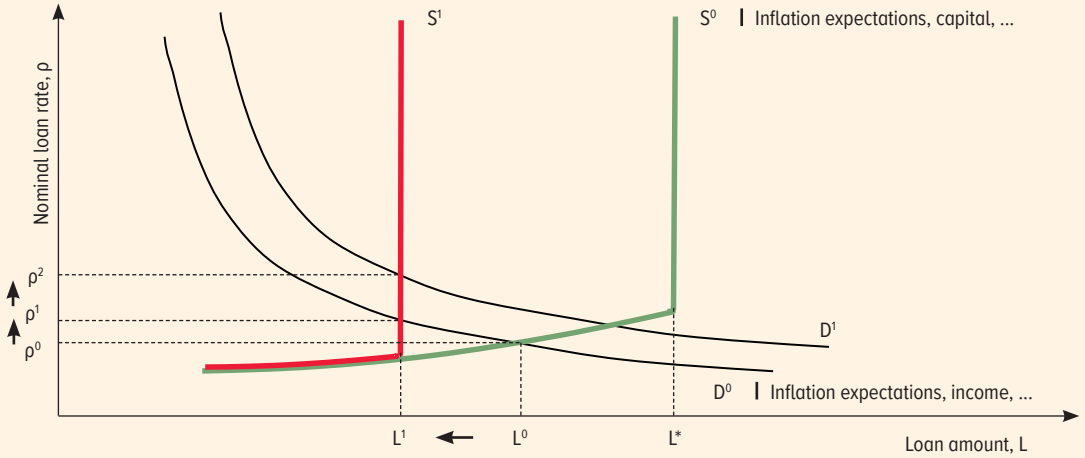
This thesis can be illustrated by the example of equilibria in the credit market.

Demand in the chart (the D^0 curve) shows how many loans (L) borrowers are ready to raise with a given level of the nominal loan rate (ρ). The position of the curve is affected by, among other factors, borrowers' incomes and accumulated debt burden, as well as inflation expectations. For example, an increase in inflation expectations will shift the credit demand curve upwards to the right.

Supply in the chart (the S^0 curve) shows how many loans (L) banks are ready to issue with a given level of the nominal loan rate (ρ). Banks function in the conditions of regulatory capital requirements and cannot replenish capital instantaneously. Hence, when the loan portfolio (L*) reaches a certain amount, the supply curve becomes vertical – banks are unable to increase disbursements irrespective of the level of loan rates, that is, to issue loans in excess of L* determined by the vertical section of the S^0 supply curve. When banks deplete the funds provided for by the required ratios (the shift along the supply curve towards its vertical section), this limits the expansion of lending even despite monetary policy easing and the corresponding key rate reduction. The position of the supply curve is affected by, among other factors, prudential regulation measures, potential borrowers' accumulated debt burden, inflation expectations, and banks' internal risk metrics determining their risk appetite. In the absence of any regulatory requirements for banks, the loan supply curve would only depend on the overall amount of borrowed funds.

Prior to regulation tightening, an equilibrium in the credit market is achieved at the point (L^0, ρ^0). A rise in the capital adequacy ratio shifts the supply curve to the left (S^1). If credit demand remains at the same level, lending amounts will not exceed (L^1) until banks increase capital. If the propensity to save in the economy declines, while credit demand goes up (the demand curve shifts to the right from D^0 to D^1), this situation will not cause growth in the loan portfolio but will only push up the loan rate. A new equilibrium will form at the point (L^1, ρ^2). A further expansion of lending amid the same capital requirements will be possible by building up capital through distribution of profit in the conditions when a higher loan rate will ensure the target return on equity taking into account banks' costs and risks. In the long term, as a result of an increase in capital, the supply curve will almost flatten, with the value (L*) shifting to the right.

SHORT-TERM EQUILIBRIUM IN CREDIT MARKET AMID INCREASES IN CAPITAL ADEQUACY AND REQUIRED LIQUIDITY RATIOS *Chart 5.2*



Source: Bank of Russia.

Microprudential and macroprudential regulation tightening might cause a rise in banks' deposit and loan rates. Contrastingly, if the required ratios are reduced, this will decrease the regulatory burden on banks, which will influence interest rates and credit supply, among other things.

Banks' capital adequacy and liquidity ratios can autonomously influence monetary tightness, regardless of the actual or expected key rate path. If banks have depleted the funds provided for by the required ratios, their capacity to lend may be limited even despite a low key rate

Therefore, the Bank of Russia takes into account the impact of banking regulation as an autonomous factor, when making monetary policy decisions and forecasting the path of changes in monetary conditions and economic indicators.[5] Other factors not associated with monetary policy, which might affect the tightness of monetary conditions, include fine-tuning of prudential regulation, e.g. adjustment of banks' capital adequacy ratios, and other measures, such as an easing of requirements for provisions depending on debt servicing by borrowers. That said, prudential regulation measures **are not used** to change monetary tightness for inflation targeting purposes, although they may affect the parameters of bank operations and dynamics of lending amounts in the banking sector.[6]

Thus, prudential policy measures restricting the expansion of lending, e.g. capital adequacy ratios in general or add-ons to them, with the demand for credit staying at the same level, will cause a rise in loan rates, because the interest rate will depend on the position of the demand curve, as well as alter the structure of lending. Specifically, if the demand for credit remains high, the spread between bank and risk-free rates (the key rate, interest rate swaps) will be expanding. As a result, monetary conditions for ultimate borrowers might tighten even more rapidly and considerably, as well as in an uncontrolled manner than in a situation where credit activity is impacted through a key rate change.

Macroprudential policy tightening in individual lending segments may not necessarily decelerate the overall growth of lending and, accordingly, have a sustainable disinflationary effect as long as banks might use capital to lend in other segments or adjust their approaches to supplying credit products in order to expand the client base. If policy is tightened across all lending segments simultaneously, e.g. in the case of an increase in the countercyclical buffer, this might provoke growth in both retail and corporate loan rates, which will be difficult to predict. Prudential easing cannot boost lending automatically as an equilibrium in the credit market still depends on the demand for borrowings and banks' risk appetite. Furthermore, macroprudential policy instruments may not be used to ensure price stability as, in this case, they will run

[5] In many countries, banking regulation and supervision measures are totally autonomous factors for monetary policy when the central bank as the monetary regulator and financial regulation agencies have absolutely independent legal and administrative mandates.

[6] The Bank of Russia's opinion on this issue is detailed in the report Main Macroprudential Policy Approaches (2025).

counter to the financial stability objective, entailing an excessively tough assessment of risks or, to the contrary, their underestimation.

Influencing interest rates in the economy, monetary policy has a direct effect on the demand for loans and deposits and thus affects investment, consumption, and savings. In addition, monetary policy decisions, including during rare crisis episodes, **are not intended to** impact financial institutions' resilience or financial stability.[7]

Monetary policy and prudential regulation measures are aimed at dealing with different objectives. Within these processes, both policies impact monetary conditions, including through demand and supply in the credit market. Demand and supply in turn are interconnected with the dynamics of interest rates in the banking sector. Thus, a restriction of credit supply will still ultimately translate into a higher average level of loan rates, which will be limiting the demand for credit. Furthermore, managing their loan portfolios, banks are seeking to, among other things, diversify risks in the medium term and optimise the structure of their balance sheets. Hence, tight regulation of credit supply or, to the contrary, significant easing only has a limited effect on the structure of bank operations.

[7] The difference between the resilience of financial institutions and the stability of the financial system, as well as the role of monetary policy relative to these two functions is covered in the working paper Monetary Policy and Financial Stability (2023) prepared as part of the Monetary Policy Review.

SECTION 2. MONETARY POLICY ENVIRONMENT AND CORE MEASURES IN LATE 2024 AND 2025

Inflation stayed high due to soaring demand surpassing the capacities to ramp up supply. In order to bring inflation back to the target, the Bank of Russia was maintaining tight monetary conditions

In 2024 H2, the economy's deviation from a balanced growth path increased again, which was fuelled predominantly by domestic demand. Its growth exceeded the capacities to expand supply as enterprises were utilising almost all available production and labour resources and were working under sanction pressure. The overheating of demand was caused by the accumulated effect of the surge in lending and the large-scale fiscal stimulus over the previous periods. In such conditions, current inflationary pressures were intensifying. Households' and businesses' inflation expectations were rising, which was also preventing price growth deceleration. Seeking to reduce the gap between demand and supply and ensure a slowdown in inflation, the Bank of Russia was tightening its monetary policy beginning from mid-2024. At the end of October 2024, the regulator raised the key rate to 21.00% p.a., announcing the possibility of its further increase if needed, and maintained it at this level until June 2025.

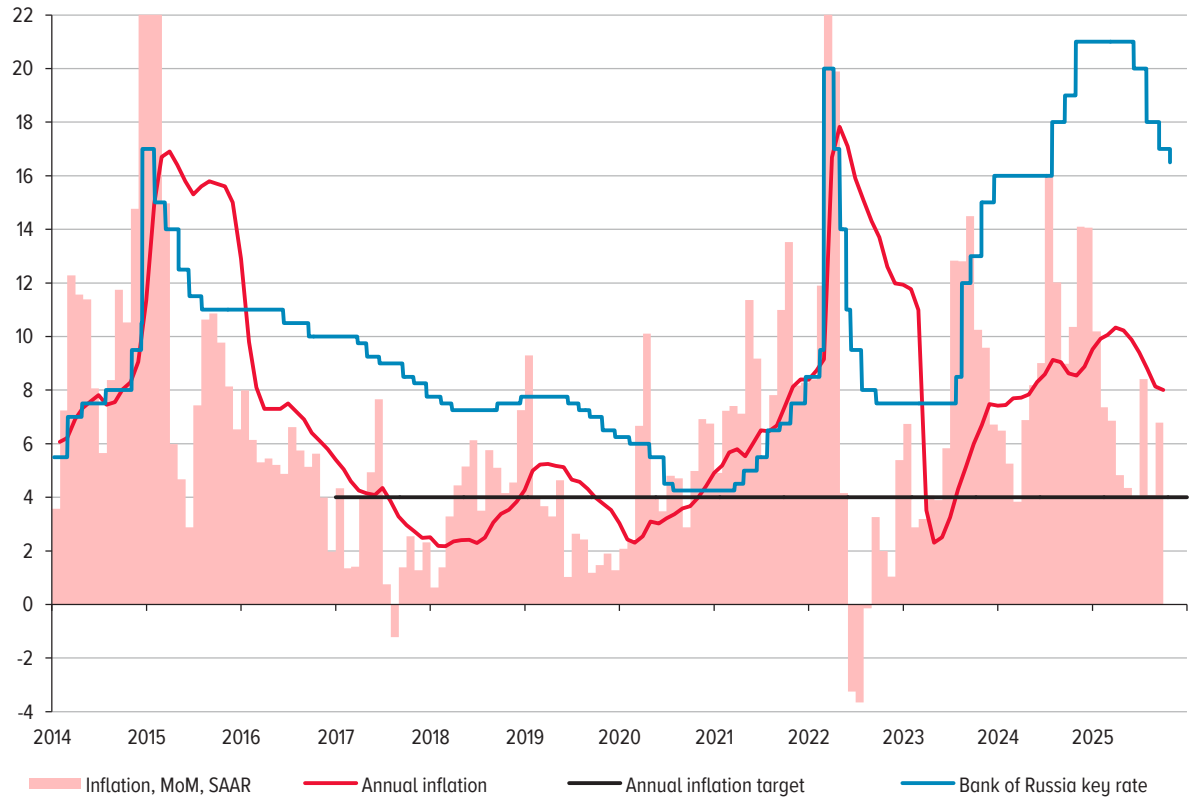
In 2025 H1, owing to tight monetary policy, the gap between demand and companies' production capacities started to narrow gradually, which somewhat decelerated the growth of consumption and investment. The expansion in lending slowed down notably, whereas savings continued to increase quickly. The labour market recorded some signs of a slight easing. As a result, current price growth decelerated significantly. Having ascertained that these factors were stable, the Bank of Russia started to reduce the key rate in June 2025. Overall, from June to October 2025, the key rate was cut from 21.00% p.a. to 16.50% p.a. The Bank of Russia noted that, due to high inflation expectations in the economy, monetary conditions should remain restrictive for an extended period, which was necessary for a further steady decrease in inflation to the target.

The Bank of Russia raised the key rate to 21.00% p.a. at the end of October 2024 and was keeping it at this level until June 2025[1]

Annual inflation was still significantly exceeding the target level. As of the end of 2024, consumer prices in Russia were up by 9.5%. The main reason for the considerable deviation of inflation from the target in late 2024 and 2025 H1 was the underestimation of high demand in 2024 by the Bank of Russia. As monetary policy was not tight enough, demand was fuelled by a fast inflow of credit and budget resources. Combined with a limited expansion of supply and almost 100% utilisation of production capacities and labour resources, as well as the sanction pressure, this reversed the trend in current price growth rates upwards in 2024 Q2.

[1] On 25 October 2024, the Bank of Russia decided to set the key rate at 21.00% p.a. from 28 October 2024 and, on 6 June 2025, to reduce the key rate to 20.00% p.a. from 9 June 2025.

BANK OF RUSSIA KEY RATE AND INFLATION *Chart 2.1*
(%)



Sources: Rosstat, Bank of Russia calculations.

INDIVIDUAL MEASURES OF CURRENT ECONOMIC SITUATION *Table 2.1*

	2023 Q1	2023 Q2	2023 Q3	2023 Q4	2024 Q1	2024 Q2	2024 Q3	2024 Q4	2025 Q1	2025 Q2	2025 Q3 (actual / forecast)
CPI, % QoQ, SAAR	4.3	4.6	13.4	8.8	5.2	8.0	12.3	12.9	8.1	4.4	6.4
Core CPI, % QoQ, SAAR	1.9	4.9	10.6	10.5	5.9	8.1	8.3	13.4	8.8	4.4	4.3
GDP, % YoY	-0.9	5.3	6.2	5.3	5.4	4.3	3.3	4.5	1.4	1.1	–/0.4
Key rate, % p.a., as of quarter end	7.5	7.5	13.0	16.0	16.0	16.0	19.0	21.0	21.0	20.0	17.0
Banking system claims on economy in rubles and foreign currency,[1] % YoY	11.3	17.1	21.6	22.3	23.2	23.0	20.0	16.4	13.4	10.5	9.3
– on organisations	11.9	17.0	21.3	22.0	23.3	22.8	21.3	19.0	16.4	14.8	13.4
– on households	10.0	17.2	22.3	23.0	23.0	23.3	16.9	9.7	5.7	0.0	-1.1

[1] *The banking system's claims on the economy mean all claims of the banking system on non-financial and financial organisations and households in 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 participation in non-financial and financial organisations' equity, and other receivables on settlements with non-financial and financial organisations and households. The growth rates of claims are adjusted for foreign currency revaluation. For the purpose of the adjustment for foreign currency revaluation, the growth of claims in foreign currency and precious metals is recalculated into rubles at the period average RUB/USD exchange rate.*

Sources: Rosstat, Bank of Russia calculations.

COMPARISON OF ACTUAL DYNAMICS AGAINST FORECAST OF BANK OF RUSSIA'S BASELINE SCENARIO IN MPG 2024–2026 AND MPG 2025–2027

Table 2.2

KEY FORECAST PARAMETERS OF BANK OF RUSSIA'S BASELINE SCENARIO
(% GROWTH YOY, UNLESS INDICATED OTHERWISE)

	2024			2025	
	Forecast (October 2023)	Forecast (October 2024)	Actual	Forecast (October 2024)	Forecast (October 2025)
Inflation, % in December YoY	4.0–4.5	8.0–8.5	9.5	4.5–5.0	6.5–7.0
Inflation, yearly average, % YoY	5.8–6.5	8.2–8.4	8.4	6.1–6.8	8.8–8.9
Key rate, yearly average, % p.a.	12.5–14.5	17.5	17.5	17.0–20.0	19.2[1]
Gross domestic product	0.5–1.5	3.5–4.0	4.3	0.5–1.5	0.5–1.0
– % change in Q4 YoY	0.5–1.5	2.0–3.0	4.5	0.5-1.5	(-0.5)–0.5
Final consumption expenditure	(-0.5)–(+0.5)	3.5–4.5	5.2	0.0–1.0	1.0–2.0
– households	*(-2.0)–(-1.0)*	*4.5–5.5*	*5.4*	*0.0–1.0*	*1.0–2.0*
Gross capital formation	(-5.0)–(-3.0)	3.5–5.5	2.1	0.5–2.5	(-1.0)–1.0
– gross fixed capital formation	*0.0–2.0*	*6.0–8.0*	*6*	*0.5–2.5*	*1.0–3.0*
Exports	1.5–3.5	(-2.0)–0.0	–[2]	0.5–2.5	(-3.0)–(-1.0)
Imports	(-6.5)–(-4.5)	(-3.0)–(-1.0)	–[2]	0.5–2.5	(-2.0)–0.0
Money supply (national definition)	8–13	17–20	19.2	6–11	7–10
Banking system claims on economy in rubles and foreign currency[3]	5–10	15–18	16.4	8–13	8–11
– on organisations	*5–10*	*17–20*	*19.0*	*8–13*	*10–13*
– on households, including	*5–10*	*12–15*	*9.7*	*6–11*	*1–4*
housing mortgage loans	*7–12*	*8–11*	*10.4*	*8–13*	*3–6*

[1] *Given that from 1 January 2025 through 26 October 2025 the average key rate was 19.8%, the average key rate from 27 October 2025 through 31 December 2025 is forecast in the range of 16.4–16.5%.*
[2] *Rosstat has not released the 2024 data on GDP by expenditure in terms of exports and imports.*
[3] *The banking system's claims on the economy mean all claims of the banking system on non-financial and financial organisations and households in 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 participation in non-financial and financial organisations' equity, and other receivables on settlements with non-financial and financial organisations and households. The growth rates of claims are adjusted for foreign currency revaluation. For the purpose of the adjustment for foreign currency revaluation, the growth of claims in foreign currency and precious metals is recalculated into rubles at the period average RUB/USD exchange rate.*

RUSSIA'S BALANCE OF PAYMENT INDICATORS UNDER BASELINE SCENARIO[4]
($ BN)

	2024			2025	
	Forecast (October 2023)	Forecast (October 2024)	Actual	Forecast (October 2024)	Forecast (October 2025)
Current account	**75**	**61**	**63**	**51**	**38**
Balance of trade	149	133	132	120	116
Exports	*441*	*422*	*434*	*423*	*414*
Imports	*292*	*289*	*302*	*303*	*298*
Balance of services	-31	-38	-38	-38	-45
Exports	*44*	*42*	*43*	*44*	*47*
Imports	*75*	*80*	*81*	*82*	*92*
Balance of primary and secondary income	-43	-34	-30	-31	-32
Current account and capital account balance	**75**	**61**	**63**	**51**	**38**
Financial account balance, net of reserve assets	**61**	**78**	**57**	**52**	**51**
Net incurrence of liabilities	23	-20	9	-1	1
Net acquisition of financial assets, net of reserve assets	84	58	66	51	52
Net errors and omissions	0	4	-10	0	-11
Change in reserve assets	**14**	**-14**	**-4**	**-1**	**-24**

[4] *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.

To resume disinflation, it was necessary to increase the tightness of monetary conditions so as to slow down growth in lending and encourage the propensity to save. Hence, from July 2024, the Bank of Russia again started to gradually raise the key rate.[2] Given the time lags, this tightening had not yet fully transmitted to current price growth by late 2024–early 2025, but helped stop its acceleration. The effect of the tightening started to manifest itself in annualised inflation rates from April 2025.[3]

As of the end of 2025 Q1, the annual price growth rate equalled 10.3%. In its baseline forecast prepared in February and April 2025, the regulator expected a slowdown in inflation to 7–8% in 2025 and its stabilisation at the target further on.

Current inflationary pressures intensified in 2024 H2, but were easing from 2025 H1 owing to restrictive monetary policy. On average, consumer prices rose by 12.9% SAAR over 2024 Q4 vs 12.3% SAAR in 2024 Q3. Due to the significant demand and supply gap, companies were still able to pass on their rising costs to consumer prices.

In 2025 Q1, price growth decelerated to 8.1% SAAR on average and, in April 2025, to 4.8% SAAR. Most measures of underlying inflation (i.e. indicators adjusted for the impact of one-off factors or the most volatile components) notably decreased as well. Nevertheless, the Bank of Russia remained cautious when estimating the sustainability of disinflation. In addition, the regulator took into account that inflationary processes were uneven and heterogeneous across both consumer basket segments and the Russian regions.[4]

Economic agents' inflation expectations remained high, being one of the factors increasing the inertia of inflation dynamics and hindering its steadier deceleration. Households' inflation expectations for the next 12 months rose to 13.4% In October 2024, fluctuating from 13% to 14% in January–May 2025. Companies' expectations about output prices demonstrated a downward trend from January 2025, but like households' expectations, were persistently exceeding the levels of 2017–2019 when inflation was at the target on average. According to the Bank of Russia's surveys, analysts' forecasts for 2025, prepared in 2025 H1, were close to the forecast inflation rate in the regulator's baseline scenario, but their forecasts for 2026 were still somewhat higher than the target in Russia.[5]

Monetary conditions helped gradually cool lending and demand. Driven by the key rate increase in 2024 H2, nominal interest rates on financial instruments and loan rates were going up, reaching their maximum levels by 2025 Q1. In January–May 2025, price conditions in real terms, that is, adjusted for expected inflation, remained restrictive, despite a slight reduction in nominal interest rates. Non-price conditions were also tight over that period, with banks raising certain requirements for borrowers and collaterals. Deposit rates remained attractive, boosting savings. As a result, households' ruble deposits with banks continued to notably increase, with their growth rates staying slightly below 30% YoY from January to May 2025.

Monetary conditions additionally tightened owing to factors not associated with monetary policy[6] that manifested themselves in November–December 2024. These factors contributed to banks' shift from

[2] See the table 'Interest rates of the Bank of Russia's monetary policy and RUONIA from 2023'.

[3] According to Rosstat, annual inflation in March 2025 was 10.34%, in April 2025 – 10.23%, and in May 2025 – 9.88%.

[4] For details, see Appendix 2 'Inflation measures used by the Bank of Russia' and Box 6 'Inflation in Russian regions'.

[5] For details about the entire range of inflation expectations indicators, see Appendix 5 'Economic agents' inflation expectations'.

[6] These autonomous factors were related to the cancellation in 2023 of the regulatory easing measures implemented in 2022 to support banks. Furthermore, the Bank of Russia introduced additional requirements for banks' capital and liquid assets. For details, see Box 8 'Changes in banking regulation over 2023–2025 and their effect on monetary policy'.

the accelerated expansion of lending to the phase of a more rational use of capital and liquid assets. Because of these autonomous factors, monetary conditions in late 2024 were actually more restrictive than the Bank of Russia had predicted in its October baseline forecast. A further key rate increase at that moment could restrain the growth rate of lending to the economy in 2025 too much as well as further cool down demand in the economy. In view of this, the Bank of Russia did not need to raise the key rate in December 2024. As the banking sector adapted to the regulation normalisation, the impact of the autonomous factors was gradually weakening.

The effect of tight monetary policy on the growth rates of retail lending was amplified by macroprudential measures implemented to reduce the risks in unsecured consumer lending. The portfolio of unsecured consumer loans continued to contract in 2025 Q1 (-1.4%[7] vs -2.0% in 2024 Q4). The growth in mortgage lending considerably slowed down after the termination of the non-targeted subsidised mortgage programme in mid-2024. Households' outstanding mortgages remained nearly the same in 2025 Q1, after the 1.0% increase in 2024 Q4.

Corporate lending continued to surge at the end of 2024, but then its growth slowed down in early 2025. The deceleration was associated with a decline in the overall demand for credit for the following reasons. The first one was tough price conditions, which had formed owing to monetary policy given the time lags, and tightened non-price conditions (the requirements for borrowers' financial standing and collaterals) under the influence of the factors not related to monetary policy. The second reason was extensive use of budget financing by government-funded companies. In January–February 2025, the growth rate of budget spending was higher than usual during that period due to the transition to more even advanced funding of government contracts throughout the year. The corporate loan portfolio decreased by 0.1% in 2025 Q1, after expanding by 2.9% in 2024 Q4.

The annual growth rate of credit to the economy declined. In February–April 2025, the Bank of Russia forecast a 6–11% rise in the banking sector's claims on organisations and households as of the end of 2025, compared to the 16.4% increase over 2024. The expansion of money supply decelerated to a more moderate pace observed earlier during the period of price stability in 2017–2019.

In 2025 Q1, the increase in domestic demand decelerated, primarily as a result of a slower rise in consumption, which was most notable in the segment of non-food goods, especially durables. However, consumption in services remained elevated.

Investment continued to expand fast in 2025 Q1, driven predominantly by companies' own funds, including the accumulated reserves and previous years' profits. High investment levels were also supported by government-owned projects having access to subsidised financing. Companies were seeking to accomplish investment projects launched earlier.

Business activity started to grow at a more moderate rate. According to the Bank of Russia's monitoring of businesses,[8] companies were setting more modest output targets for the next periods, reporting postponements of new projects, and cutting their borrowing plans. The assessments of the current output of products and services and of the demand for products confirmed that the increase in economic activity was decelerating somewhat.

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7 For statistics on outstanding loans in the credit market segments, refer to the analytical review Banking Sector.

8 For details, see Box 7 'Monitoring of businesses for the purposes of monetary policy'.

As reported by the Bank of Russia Main Branches, more signs of an easing in the labour market were emerging gradually, specifically a decline in labour demand in certain industries, a more active migration of manpower across companies and sectors, and more moderate wage indexation plans in 2025 compared to the previous two years.

Deteriorating global economic growth prospects amid the escalation of trade tensions provoked a reduction in prices for main Russian exports, but tight monetary conditions propped up the ruble exchange rate. The rise in US import tariffs and the retaliatory measures introduced by other countries increased the probability of a slowdown in the world economy's growth and inflation acceleration in a number of major economies. Rising uncertainty about further developments and expectations of weaker global demand exerted downward pressure on prices in global commodity markets. Thus, export prices for Russian crude, which reached $70 per barrel in early 2025, dropped to about $55 per barrel by mid-April 2025.

Concurrently, as the growth of domestic demand was decelerating gradually, the demand for imports was declining faster than the demand for exports. Stable supply of foreign currency by exporters amid moderate demand for it from importers supported the ruble exchange rate. Furthermore, owing to high interest rates, ruble assets remained attractive. The ruble notably appreciated compared to 2024 Q4, which was the result of tight monetary policy transmitted through the exchange rate channel. Nevertheless, the Bank of Russia was cautious in estimating the sustainability of the exchange rate dynamics, taking into account that, in 2025 H1, the ruble exchange rate was also affected by market expectations about geopolitical developments, which were highly uncertain.

The ratio of risks to the inflation rate in the Bank of Russia's baseline forecast remained shifted towards upside ones, although there were some disinflationary risks as well. The main proinflationary risks were associated with a longer-lasting deviation of the Russian economy upwards from its balanced growth path and persistence of high inflation expectations. Moreover, the regulator highlighted the risk of deterioration in foreign trade conditions, which could have a proinflationary effect through the exchange rate dynamics.

Disinflationary risks included mainly a more considerable slowdown of the increase in lending and domestic demand as a result of tight monetary conditions. Another possible disinflationary factor was improvement in external conditions in the event of geopolitical de-escalation, which became a little more likely in 2025 H1.

Making its key rate decisions, the Bank of Russia relied on the announced parameters of fiscal policy and took into account that its normalisation in 2025 would produce a disinflationary effect. Nevertheless, the regulator also noted that changes in the fiscal policy parameters would necessitate an adjustment of the monetary policy stance.

The Bank of Russia continued to implement restrictive monetary policy. In December 2024, having assessed the tightness of monetary conditions as high, the Bank of Russia decided to switch from increasing the key rate to maintaining it at the level needed to bring inflation back to the target in 2026.

While keeping the key rate at 21.00% p.a. until June 2025, the Bank of Russia did not rule out the possibility of its increase if needed. The Bank of Russia gave that signal in its communication following the Board of Directors' key rate meetings. Until the meeting in April 2025, the Bank of Russia signalled that it would explore the need to further raise the key rate. In April 2025, the Bank of Russia changed the signal to neutral, admitting the possibility of both raising or cutting the key rate in the future.

In June–October 2025, the Bank of Russia was reducing the key rate, while ensuring the required degree of monetary tightness to return inflation to the target[9]

Most measures of current underlying inflationary pressures, which the Bank of Russia largely relies on when pursuing its monetary policy, decreased from 7–9% (in annualised terms) in 2025 Q1 to 4–6% in 2025 Q3–Q4, which was the result of a slower rise in domestic demand to a level more consistent with the growth rate of supply. The deceleration in demand was achieved through tight monetary policy, which both affected lending and savings and propped up the ruble exchange rate. In April–August 2025, current price growth was slowing down more quickly than predicted by the Bank of Russia in its April baseline forecast, whereas in September 2025, it edged up, primarily because of one-off factors. On average, over April–September 2025, current price growth decelerated to 5.4% SAAR from 8.1% in 2025 Q1.

However, price dynamics across consumer basket components were still highly heterogeneous. Specifically, non-food prices were rising at a very moderate pace: their growth rates averaged 2.3% SAAR over April–September 2025 vs 3.5% in 2025 Q1. As for food prices, their growth rates over that period declined to 5.2% from 9.1% in 2025 Q1. The growth of service prices slowed down to 9.5% over April–September 2025 from 12.5% in 2025 Q1. Such significant heterogeneity was partially associated with the fact that monetary conditions impact different segments of consumption with different time lags. Specifically, consumers tend to postpone the purchase of expensive durables more frequently compared to other goods and services. Furthermore, prices for services during that period were also affected by a number of one-off factors, including the increase in administered prices and tariffs and the change in the method for measuring the growth rate of air fares.[10] According to the Bank of Russia, the heterogeneity in price dynamics may persist for some time amid the continuing adaptation of the economy to changes in external conditions and the residual adjustment of relative prices. Furthermore, the heterogeneity in price dynamics was associated with the shift in consumption towards a higher proportion of services, which was driven by a rise in households' incomes.

Economic agents' inflation expectations remained high. Their inertia was attributed to the fact that inflation had been exceeding the target for several years and the overall level of prices had notably increased over that period. A downward trend in breakeven inflation calculated from yields on financial market instruments, which had continued since July 2024, reversed in September–October 2025. In 2025 Q2–Q3, businesses' price expectations remained nearly unchanged, but in October 2025, companies responded to the plans for increasing taxes in 2026 by raising their expectations. Analysts slightly lowered their inflation forecasts for 2025 as compared to the forecasts made at the beginning of the year. However, after the announcement of the tax modifications, inflation forecasts were up to approximately 5%. Nevertheless, analysts' forecasts for a two-year horizon stay sustainably anchored at the inflation target. Despite the slowdown of actual inflation, households' inflation expectations for a year ahead barely decreased. In June–October 2025, they remained at a level of about 13%. This could be explained by a more significant indexation of housing and utility rates in July 2025 as they account for a considerable proportion of expenses in the consumer basket. Another factor that could affect

[9] On 6 June 2025, the Bank of Russia decided to set the key rate at 20.00% p.a. from 9 June 2025; on 25 July 2025, to reduce the key rate to 18.00% p.a. from 28 July 2025; on 12 September 2025, to cut the key rate to 17.00% p.a. from 15 September 2025; and on 24 October 2025, to establish the key rate at 16.50% p.a. from 27 October 2025.

[10] In 2025, Rosstat changed the methodology for monitoring air fares. Previously, prices were recorded for tickets with a flight date in a week and in a month, while starting from this year, prices are recorded for tickets with a flight date in one to two months. As a result, more expensive summer flights are now taken into account already from April, which caused a one-off rise in prices for these services. The effect in August–September was opposite.

households' inflation expectations was a rise in petrol prices in summer and autumn. Concurrently, the future rise in VAT has not yet affected households' inflation expectations. The Bank of Russia stated that a further reduction in inflation expectations was an essential condition for returning inflation to the target.

Owing to tight monetary policy, annual inflation was steadily decelerating, namely to 9.4% in June 2025 and 8.0% in September 2025. Considering the actual pace of disinflation, in July 2025, the Bank of Russia decreased its inflation forecast for 2025 to 6.0–7.0%, but in October 2025, reduced this range to 6.5–7.0%.

Monetary conditions were easing, while remaining tight in real terms. Although nominal interest rates declined due to the key rate decisions made and the revision of the expectations regarding the future key rate path, loan and deposit rates and yields on financial instruments stayed high in real terms. This supported the propensity to save at a high level, while moderating the expansion of credit activity.

In 2025 H1, the pace of the increase in lending to the economy became more moderate. The annual growth rate of the portfolio of unsecured consumer loans, including securitised loans, turned negative. These dynamics were associated with both tight monetary policy and macroprudential requirements. The expansion in corporate lending sped up in 2025 Q3, driven by the actual easing of monetary conditions. Retail lending edged up as well in August–September 2025. Activity in mortgage lending increased somewhat, fuelled primarily by government subsidised mortgages, but the annual growth rate stayed close to its historical lows.

Further adjustment of monetary conditions and lending trends will be an important factor influencing future key rate decisions.

The growth rate of broad money was not high in 2025 Q2 amid the cooling in credit activity, but then slightly rose in 2025 Q3. However, the increase in the monetary aggregates was still slower than in 2023–2024. The annul growth rate of broad money declined from 15.0% as of early 2025 to 12.2% as of 1 October 2025.

Domestic demand shifted towards more moderate growth rates, while household consumption and investment continued to increase. According to surveys, companies expected investments in 2025 Q2–Q3 to remain at the high level of 2025 Q1, while their plans to expand investments for for the year in general slightly improved compared to spring 2025. The majority of the surveyed companies expected investments in 2025 to either remain at the same level as in 2024 or increase modestly.

Industrial output edged up by 1.0% SA in 2025 Q2 vs 2025 Q1, but contracted by 0.2% SA in 2025 Q3 compared to 2025 Q2. Output in manufacturing continued to grow in 2025 Q2, primarily driven by the output of investment goods. In 2025 Q3, the output of intermediate goods declined, due to which the overall output in manufacturing was down by 0.5%.

Consumer demand was increasing moderately in 2025 Q2, rising by 0.4% SA vs 2025 Q1. In July–August 2025, its growth accelerated to 1.0% SA compared to 2025 Q2. In addition, over the first eight months of 2025, the expansion of demand in the product segment slowed down somewhat more than in services. As reported by companies, the growth was more significant in public catering and tourism, which exerted stronger upward pressure on prices in these segments.

The labour market remained tight. Nevertheless, companies complained about staff shortages less frequently in July–October 2025. A larger number of enterprises reported being fully staffed. According to the monitoring, businesses cut their hiring plans in 2025 H2 as compared to January 2025. Companies' plans for wage indexations in 2025 also became more modest than the figures expected at the beginning of the year. Nonetheless, unemployment stayed at its historical lows,[11] while the annual growth rate of wages was still high on average, even despite the slowdown to 15.2% in April–July 2025 compared to the average of 15.8% recorded over December 2024–March 2025.[12] As estimated by the Bank of Russia, in the future, the labour market may adjust to the slowdown in demand growth primarily through wage dynamics and labour utilisation rates, rather than unemployment levels. A greater consistency in the growth rates of wages and labour productivity, as well as companies' measures enhancing labour productivity will be easing labour market tightness and its proinflationary pressure.

Making its key rate decisions, the Bank of Russia relied on the announced parameters of fiscal policy. Furthermore, when updating its medium-term forecast in October 2025, the regulator took into account the expansion of the budget deficit as of the end of 2025 and the increases in taxes, charges, and tariffs in 2026, which the Government announced in September 2025.

In May–September 2025, high-frequency indicators suggested a slowdown in global economic growth, which was associated with the arising negative effects of import tariffs introduced by countries. Moreover, further developments remain highly uncertain, including due to the US tariff policy. For the Russian economy, a lower growth rate of the world economy would mean a possible decline in prices for Russian exports. Taking into account the forecast of global demand and an increase in OPEC+ oil production, the Bank of Russia assumed lower oil prices vs 2023–2024 when preparing its medium-term forecast. Nevertheless, the Bank of Russia's tight monetary policy supported the ruble exchange rate.

Proinflationary risks in June–October 2025 still prevailed over disinflationary ones. The list of risks generally remained the same. However, as compared to early 2025, the risk of a protracted deviation of the economy's growth from a balanced path decreased somewhat. Nonetheless, the risks of persistently high inflation expectations in the economy and their further growth remained, which, all else being equal, implies the need to maintain the key rate at a higher level to be able to bring inflation down to the target. Moreover, the situation in the labour market, which might remain tight for a long time or become even tighter, worsening of the foreign trade environment, and geopolitical tensions still posed significant risks. In October 2025, the Bank of Russia also noted transitory proinflationary risks related to potential additional effects of the increases in taxes and administered tariffs, which might exceed the figures assumed in the baseline forecast.

As for disinflationary risks, the Bank of Russia mainly highlighted an excessive decline in domestic demand.

In June 2025, the Bank of Russia began to reduce the key rate. There was enough evidence confirming the sustainability of the economic trends leading to a decline in inflation to 4%. With the key rate kept unchanged, monetary tightness could increase amid the considerable easing in current inflationary pressures and ultimately become excessive.

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[11] In May–July 2025, the unemployment rate was 2.2% SA, and in August 2025, it edged down to 2.1% SA (as calculated by the Bank of Russia based on Rosstat's data).

[12] The comparison with the four-month average seems to be more appropriate than with the indicator for 2025 Q1 when, due to the rescheduling of bonus payments from March 2025 to December 2024, wage dynamics significantly differed from the figures which are typical of this period.

In June 2025, the Bank of Russia cut the key rate from 21.00% p.a. to 20.00% p.a. In July 2025, taking into account the continuing downward trend in current price growth indicators, including underlying components, additional signs of labour market easing, and a further decrease in domestic demand, the Bank of Russia reduced the key rate to 18.00% p.a. Given the actual deceleration of inflation and slower economic growth, in September 2025, the Bank of Russia decided to cut the key rate only by 1 pp to 17.00% p.a. In making this decision, the Bank of Russia adhered to a cautious approach, assessing further adjustment of monetary conditions, especially given a rise in credit activity over July–August 2025 and persisting proinflationary risks. In October 2025, the Bank of Russia decreased the key rate by 50 bp to 16.50% p.a. Concurrently, the regulator revised its medium-term forecast, slightly increasing its inflation forecast for 2026 compared to July, namely to 4–5%. The upper bound of this range shows that inflation might exceed 4% due to the plans to raise housing and utility rates in 2026 by a percentage exceeding headline inflation, as well as the effects of higher taxes and charges. Nevertheless, the Bank of Russia noted that, in the medium term, financing of expenditures from higher tax payments would make the budget better balanced, as opposed to financing from borrowings, and accordingly, the rise in taxes would produce a disinflationary effect.

Making its key rate decisions in June–October 2025, the Bank of Russia emphasised that monetary conditions should remain restrictive for a prolonged period to bring inflation down to the target and stabilise it at this level. Nevertheless, monetary conditions may stay restrictive enough even with the key rate being cut, provided that current price growth rates and the entire range of inflation expectations indicators in the economy decrease as well.

As long as proinflationary risks prevailed, the Bank of Russia's signal about future key rate decisions was neutral in June–October 2025, assuming the possibility of pauses in key rate reduction.

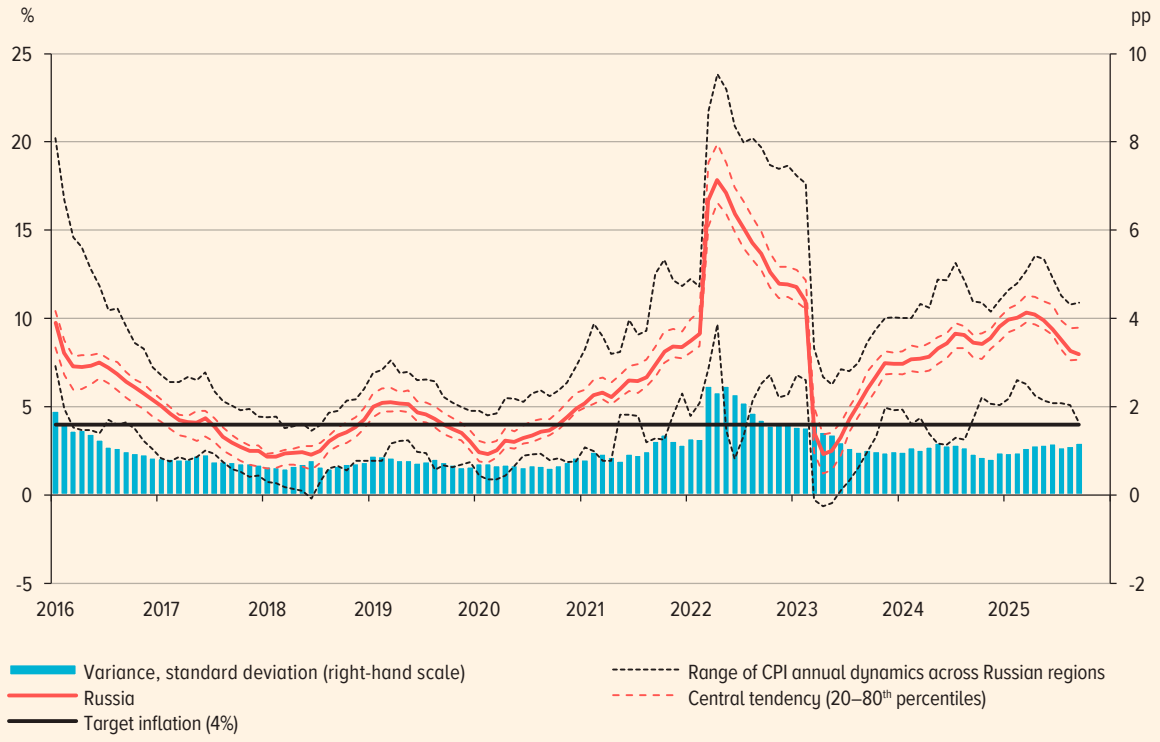
BOX 6. INFLATION IN RUSSIAN REGIONS

Price growth rates may vary across the Russian regions, especially during periods of high inflation. Nonetheless, if inflation slows down in the country in general, the variance of regional inflation decreases as well. Monetary policy pursued by the Bank of Russia is common countrywide

The annual inflation target is 4% and is set as a countrywide indicator. Regional inflation rates may significantly deviate from the countrywide trend during periods of economic instability, but then converge when price growth rates return to the target. The variance decreases to the minimum because macroeconomic stability at the federal level (in most regions) contributes to the stabilisation of price dynamics in the constituent territories where the impact of shocks on the economy was more severe. In particular, in 2016–2019 when average inflation across Russia was close to 4%, the standard deviation of regional growth rates of consumer prices ranged from 0.6 pp to 0.9 pp. Amid high inflation in 2021–2023, the standard deviation increased to 1.4 pp on average. Over January 2024–September 2025, it declined to 1.1 pp, but remained high compared to the period when inflation stayed close to the target.

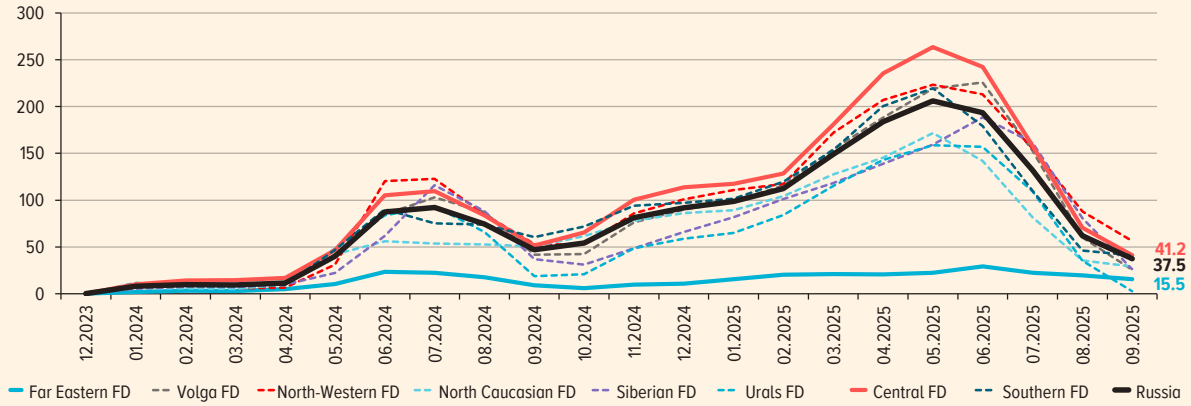
The speed of the convergence of the regional and countrywide average inflation rates depends on structural factors, such as geographical, social and cultural, administrative, as well as other characteristics of the Russian regions, which predetermine the structure of the economy. This in turn impacts the time lags of the effects of the monetary policy transmission mechanism on inflation in a particular constituent territory, as well as the response of regional prices to economy-wide shocks. For example, in January 2024–September 2025, prices in different constituent territories of the country were changing differently amid a decline in the harvest of potatoes.

VARIANCE OF ANNUAL INFLATION ACROSS RUSSIAN REGIONS RELATIVE TO COUNTRYWIDE DYNAMICS *Chart 6.1*



Sources: Rosstat, Bank of Russia calculations.

GROWTH RATES OF POTATO PRICES ACROSS FEDERAL DISTRICTS VS DECEMBER 2023 = 0 *Chart 6.2*
(%)



Sources: Rosstat, Bank of Russia calculations.

Thus, in January 2024–May 2025, potato prices rose most significantly, namely by a factor of 3.6, in the Central FD, whereas the Far Eastern FD recorded the lowest growth rate, specifically 22%. This gap was predominantly related to the geography of imports. The structure of potato imports (across countries) in the western regions of Russia differs from the structure typical of the eastern regions. The heterogeneity was also associated with the stocks of potatoes and the proportion of imports. The regions, which used to consume cheap domestic potatoes for the most part, experienced a surge in prices after the increase in the share of expensive imports (due to the decline in the harvest in 2024). That said, potato prices changed the least in the regions where the proportion of imports had been high before as well. In July–September 2025, owing to the new harvest of domestic potatoes, potato prices were declining on average countrywide, while the variance of the price growth rates across the Russian regions notably decreased.

Similarly, structural factors determine the effects of other economic shocks on price dynamics in the Russian regions. This is the reason for price heterogeneity, which can be both short-term as the economy has not yet had enough time to adjust to changes and longer-lasting when it stays close to a balanced growth (equilibrium) path.

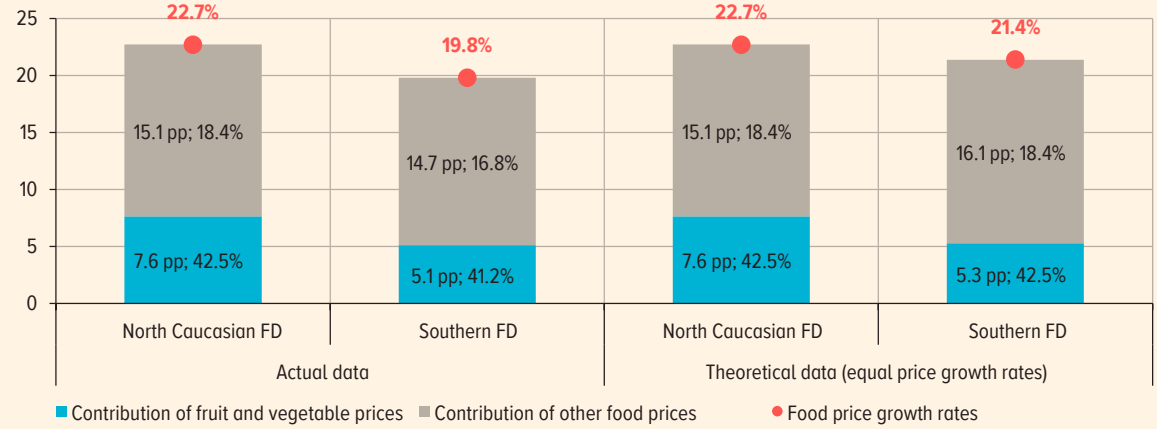
In the short term, the heterogeneity of price growth rates can be caused by two reasons.

The first one is the existing differences in the composition of the consumer basket, which is especially evident during periods of sharp changes. For instance, in March 2022, the highest growth rates of food prices were recorded in the North Caucasian FD. This was predominantly associated with the share of fruit and vegetables in the structure of consumption in this FD (8.2% vs 4.6% across Russia as a whole) as fruit and vegetable prices were then soaring countrywide. Hence, with the growth rates of fruit and vegetable prices being almost equal in the North Caucasian and Southern FDs, primarily because of the differences in the structure of consumption (the share – 8.2% in the North Caucasian FD vs 5.2% in the Southern FD), the contribution of fruit and vegetable prices to food price growth in the North Caucasian FD was 1.5 times higher than in the Southern FD, accounting for 7.6 pp compared to 5.1 pp, respectively.

If the growth rate of prices for fruit and vegetables and other food products in the Southern FD equalled that recorded in the North Caucasian FD, the difference in the structure of consumption could be the reason why the overall food price growth in the North Caucasian FD in March 2022 exceeded the dynamics in the Southern FD by 1.3 pp (the contribution of fruit and vegetable prices in the North Caucasian FD would have been 2.3 pp higher, while that of other food prices – 1.0 pp lower than in the Southern FD).

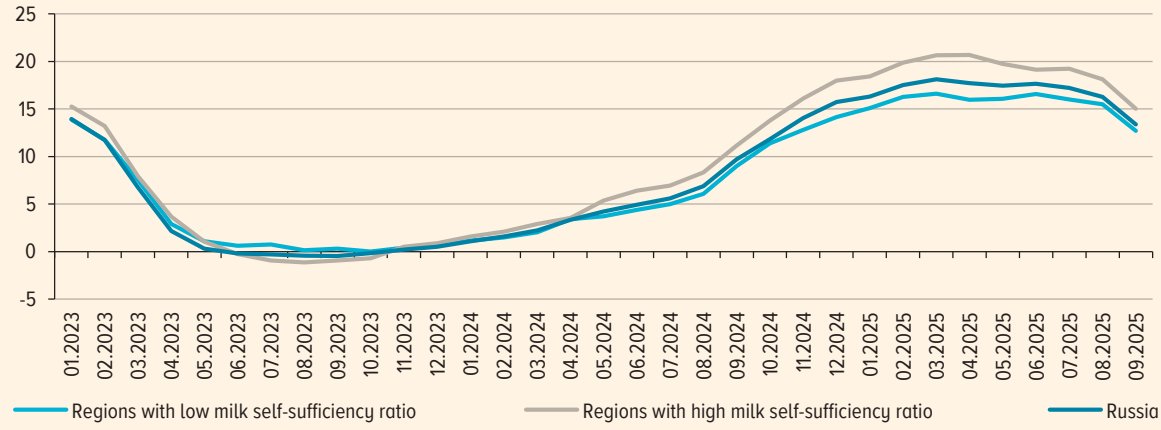
The second reason is deviations in the growth rates of prices for particular products and services due to geographical specifics. For example, because of its proximity to Asian markets, the non-food price growth rate in the Far East in 2022 was lower than the Russian average. The impact of this factor was especially evident in March 2022. Prices for tools and equipment were growing more slowly (21.8% vs 31.6% YoY

CONTRIBUTION OF FRUIT AND VEGETABLE PRICES TO FOOD PRICE GROWTH IN SOUTHERN AND NORTH-WESTERN FEDERAL DISTRICTS IN MARCH 2022 *Chart 6.3*



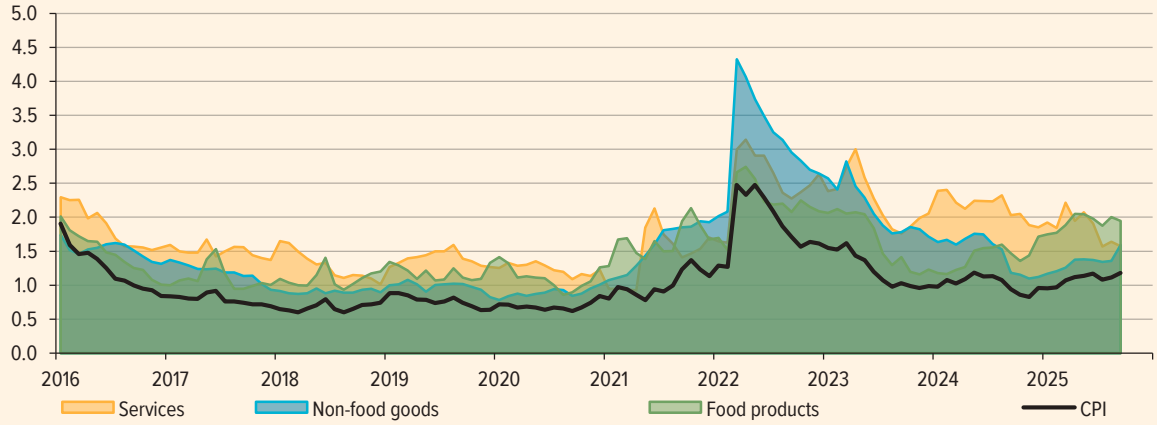
Sources: Rosstat, Bank of Russia calculations.

ANNUAL GROWTH RATES OF PRICES FOR MILK AND DAIRY PRODUCTS (SAMPLE OF 20 RUSSIAN REGIONS) *Chart 6.4*
(%)



Sources: Rosstat, Bank of Russia calculations.

VARIANCE (STANDARD DEVIATION) OF REGIONAL PRICE GROWTH RATES, YOY* *Chart 6.5*
(PP)



* *Excluding the statistics on the City of Sevastopol and the Republic of Crimea for 2016–2017.*
Sources: Rosstat, Bank of Russia calculations.

across Russia), just as prices for TV and radio goods (33.7% vs 42.1% YoY) and electronics and household appliances (34.4% vs 38.5% YoY).

Similarly, geographical specifics also affect food price dynamics. Thus, in 2024 H2–2025 H1, the growth rates of prices for milk and dairy products in the Russian regions with high self-sufficiency ratios exceeded the Russian average (while in nominal terms, prices in rubles remained below the Russian average). The heterogeneity was attributed to differences in the structure of retail prices. In regions with high self-sufficiency ratios, the retail price largely depends on the price for raw milk. As for regions with low self-sufficiency ratios, logistics and distribution costs account for a considerable share of the retail price there as these regions supply dairy products from other constituent territories of Russia or from foreign countries. The rise in prices for dairy products in 2024 H2 was largely associated with a higher price for raw milk. Companies passed through the increased price for raw milk to output prices in almost all Russian regions, but regions with low self-sufficiency ratios were affected less notably due to a substantial proportion of other components in the structure of the retail price. As a result, regions with high self-sufficiency ratios faced a more significant rise in prices for milk and dairy products, compared to regions with low self-sufficiency ratios.

In 2020–2025, as the impact of economic shocks strengthened, the heterogeneity (standard deviation) of regional growth rates of consumer prices increased and remained high relative to the stable period of 2016–2019. The heterogeneity was most significant in 2022, especially in the non-food segment. Later on, as the influence of the shocks on the economy weakened and monetary policy transmitted to prices, the variance (standard deviation) of prices was decreasing.

In January–August 2025, the standard deviation of regional growth rates of non-food prices was close to the 2016–2019 level, while in September 2025, it was slightly higher primarily because of the difference in the growth rates of prices for petroleum products across the Russian regions. As for the food segment, which faced supply shocks in 2024 (in the markets of dairy products, fruit and vegetables, meat products, and coffee) that are still translating into the economy in 2025, the standard deviation of price growth rates in the Russian regions stayed above the 2016–2019 level on average. The variance of prices for services remained high, which was associated with, among other factors, differences in consumption and the extent of overheating in regional labour markets.

In the long term, the heterogeneity of price growth rates arises when inflation across Russia stays at the target for a long time, with the economy being in an equilibrium. During such a period, growth rates of consumer prices across the Russian regions may slightly deviate from 4%. These are persistent deviations (structural inflation).

A basic macroeconomic concept to analyse structural inflation is the law of one price.[1] In practice, economists explore the effects entailing violations of this law (deviation of prices from parity).

For example, the Balassa–Samuelson effect is the tendency when a rise in labour productivity in the tradable sector of individual regions results in wage growth in the tradable sector of these regions at relatively higher rates, without affecting final prices for manufactured goods. Consequently, the growth of all wages speeds up, including in non-tradable sectors, e.g. services, which accelerates the increase in service prices and the CPI in general. An indirect evidence of the fact that the growth rates of service prices are more heterogeneous depending on regional factors is high values of their variance relative to food and non-food price dynamics, including in 2017–2019 when inflation was close to the target.

The Bank of Russia pays particular attention to analysing the reasons for the regional heterogeneity of inflation dynamics. For details about this issue, refer to the analytical note Regional Heterogeneity of the Russian Economy and the Functioning of the Monetary Policy Transmission Mechanism on the Bank of Russia website. The findings of the Bank of Russia's regional branches about the heterogeneity of price growth rates in 2020–2025 are presented in issue No. 36 of the report Regional Economy: Commentaries by Bank of Russia Main Branches.

[1] According to the law of one price, tradable foods in regions should be sold at the same price adjusted for transaction costs. If prices in some regions differ significantly, this creates an arbitrage opportunity to purchase a product at a lower price in one region and to sell it at a higher price in another region, which aligns the prices for this product.

BOX 7. MONITORING OF BUSINESSES FOR THE PURPOSES OF MONETARY POLICY

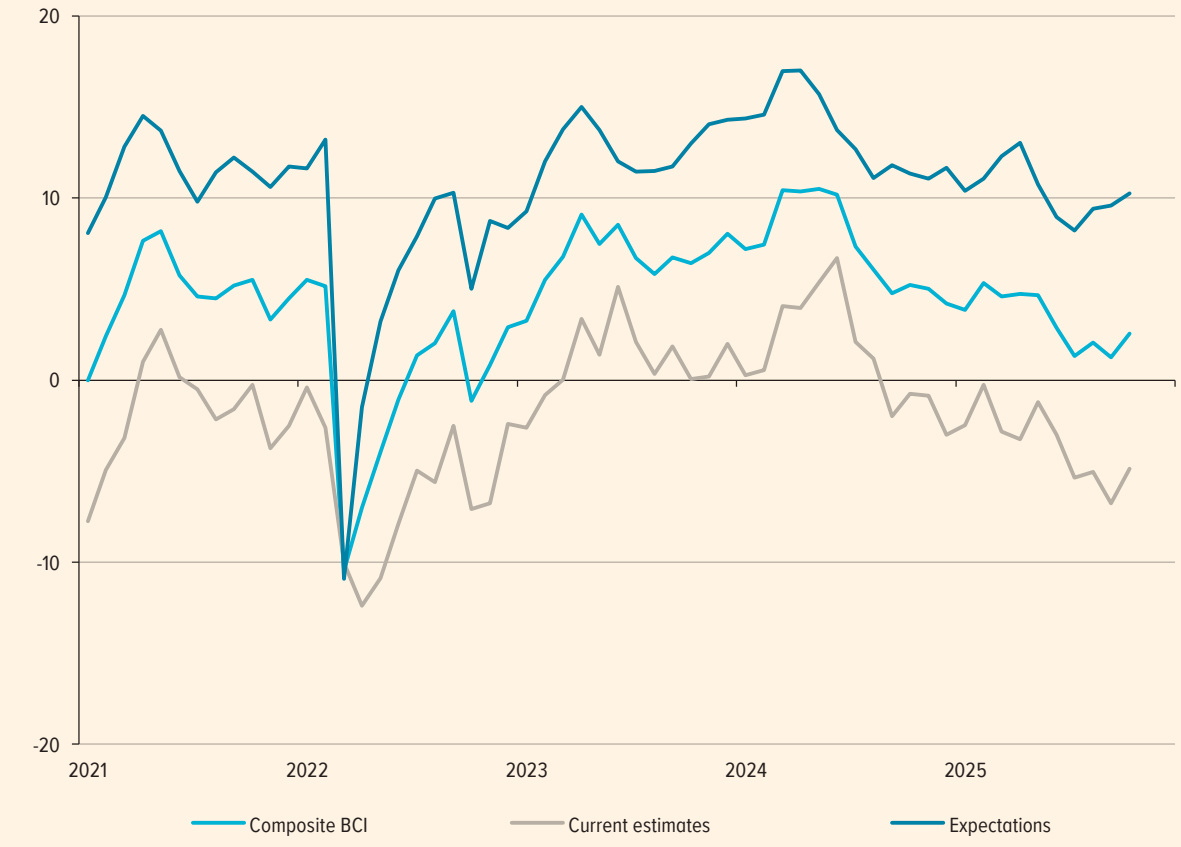
The Bank of Russia uses business monitoring results as leading indicators of the economic situation when it prepares its monetary policy decisions

To analyse economic activity, it is essential to comprehend current trends. To this end, the Bank of Russia uses the results of surveys because official statistics are released with significant time lags. The Bank of Russia conducts regular surveys of companies, including a standardised survey of a wide sample (monthly monitoring of businesses)[1] and a more flexible survey of a truncated sample (high-frequency survey).[2] Their results remain a key source of up-to-date information on the economic situation when the Bank of Russia prepares its key rate decisions.

The analysis of the Bank of Russia's composite BCI provides an understanding of a further economic development path. The BCI comprises companies' current estimates and short-term expectations of output and demand. The dynamics of the composite BCI were diverse in 2025 and indicated a moderate rise in business activity. Thus, the composite BCI equalled 2.6 p in October 2025; 1.2 p in September 2025; 1.5 p, 4.1 p, and 4.6 p in 2025 Q3, 2025 Q2, and 2025 Q1, respectively; and 4.8 p and 6.1 p in 2024 Q4 and 2024 Q3, respectively.

BANK OF RUSSIA'S BCI
(P, SA)

Chart 7.1



Source: Bank of Russia calculations.

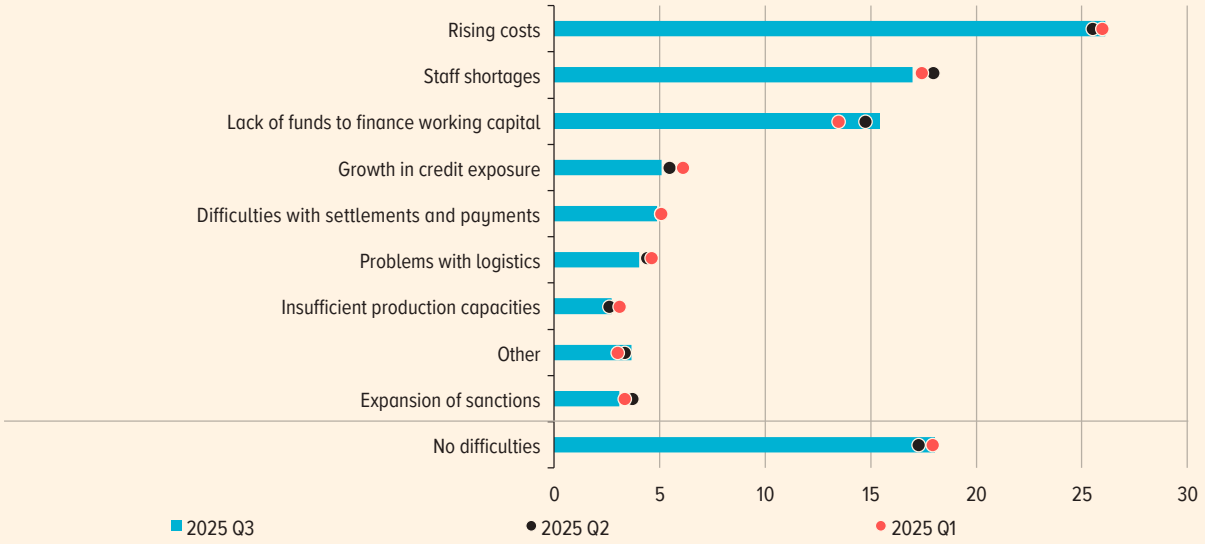
[1] Regular surveys of over 15,000 industrial, construction, transportation and storage, agricultural, trade, and service companies.

[2] High-frequency surveys of approximately 1,300 companies.

The current estimates of the BCI were up in October 2025 after their notable decline in the previous month, coming closer to the levels of July–August 2025. Companies' short-term expectations were rising for the third month in a row (10.3 p in October 2025). Respondents complained about higher costs (26%) and staff shortages (17%) as the main factors constraining companies' current operations. That was associated with the persistent deficit of physical resources in the economy for manufacturing products and services.

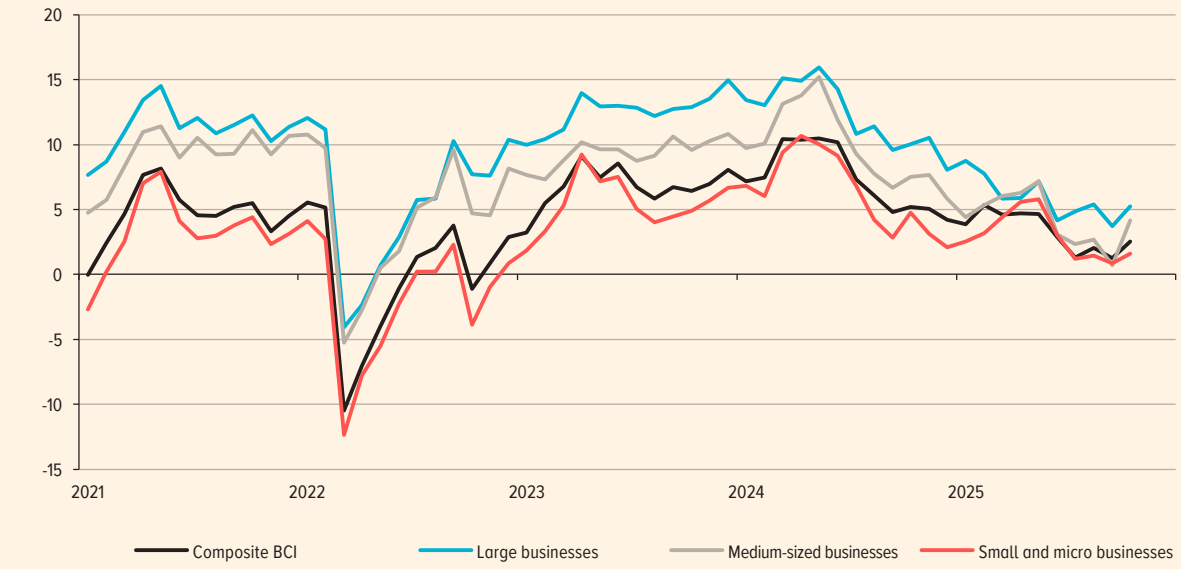
The dynamics of the composite BCI in October 2025 were driven by improved estimates of the business climate in all groups of companies (large, medium-sized, small and micro businesses), while medium-sized enterprises increased their estimates the most.

FACTORS CONSTRAINING COMPANIES' CURRENT OPERATIONS* *Chart 7.2*
(% OF RESPONSES IN TOTAL NUMBER OF RESPONDENTS)



* *A new question (added to the survey since April 2025).*
Source: Bank of Russia calculations.

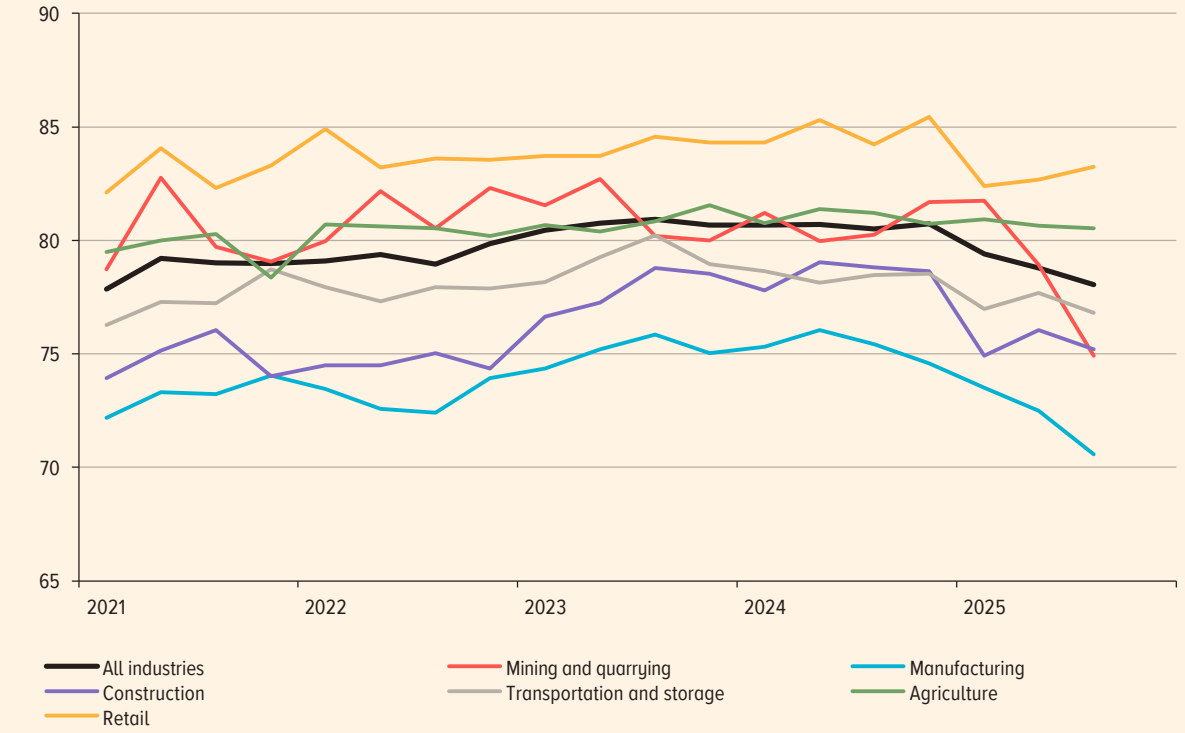
BANK OF RUSSIA'S BCI, BY BUSINESS TYPE *Chart 7.3*
(P, SA)



Source: Bank of Russia calculations.

CAPACITY UTILISATION RATES
(% SA)

Chart 7.4



Source: Bank of Russia calculations.

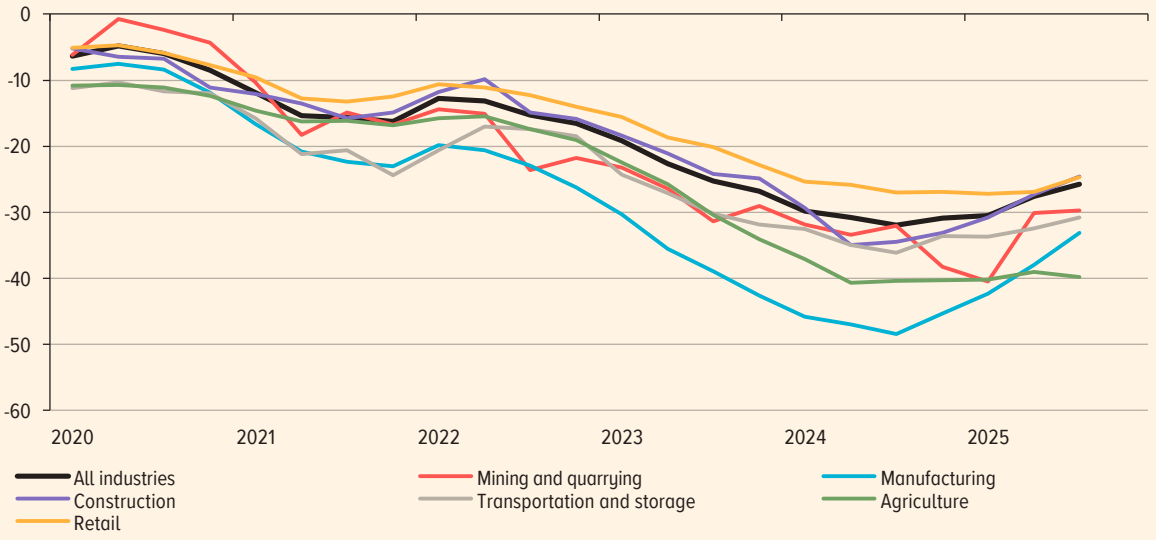
The dynamics of business activity varied across industries in 2025. After its increase in services and wholesale trade in January–May 2025, its estimates in these sectors worsened in June–September 2025. One of the reasons for that change in trade was tougher competition, including on the part of marketplaces, and adjustments of the estimates of expected demand in retail and wholesale trade. The BCI values in construction over January–October 2025 were below the level of 2024, which was partly associated with the termination of the non-targeted programme of subsidised mortgage lending for new housing and high interest rates on market-based mortgages. The BCI in agriculture traditionally stayed at the maximum level compared to other industries, which was the result of government support to agricultural enterprises.

The capacity utilisation rate continued to go down in 2025 Q3, decreasing to 78% from 78.8% in 2025 Q2, but it still remains higher than in 2017–2019. Reductions in utilisation rates were recorded in almost all industries, especially in mining and quarrying and at enterprises manufacturing investment and intermediate goods. Contrastingly, a number of industries (sale of motor vehicles, retail, services, power supply, and water supply) increased capacity utilisation rates.

As part of its monitoring of businesses, the Bank of Russia attaches great importance to labour market indicators, specifically the growth rate of payroll expenses as one of the proinflationary factors. For this, in addition to such indicators as staffing levels and expected changes in the number of the employed in the next quarter, from March 2025, the questionnaire includes questions that help estimate the expected change in payroll expenses (quantitative parameter) and the contribution (percentage) of these expenses to the expected growth rate of prices for companies' products.

The problem of staff shortages continued into 2025, but it became slightly less acute in a number of industries, except for agriculture. The deficit of personnel in agriculture is still at very high levels compared to other industries. Staffing levels in 2025 Q3 decreased in the economy as a whole to -25.7 p, which is above the historical minimum recorded in 2024 Q3.

ASSESSMENTS OF COMPANIES' STAFFING LEVELS ACROSS INDUSTRIES *Chart 7.5*
(BALANCE OF RESPONSES, P, SA)

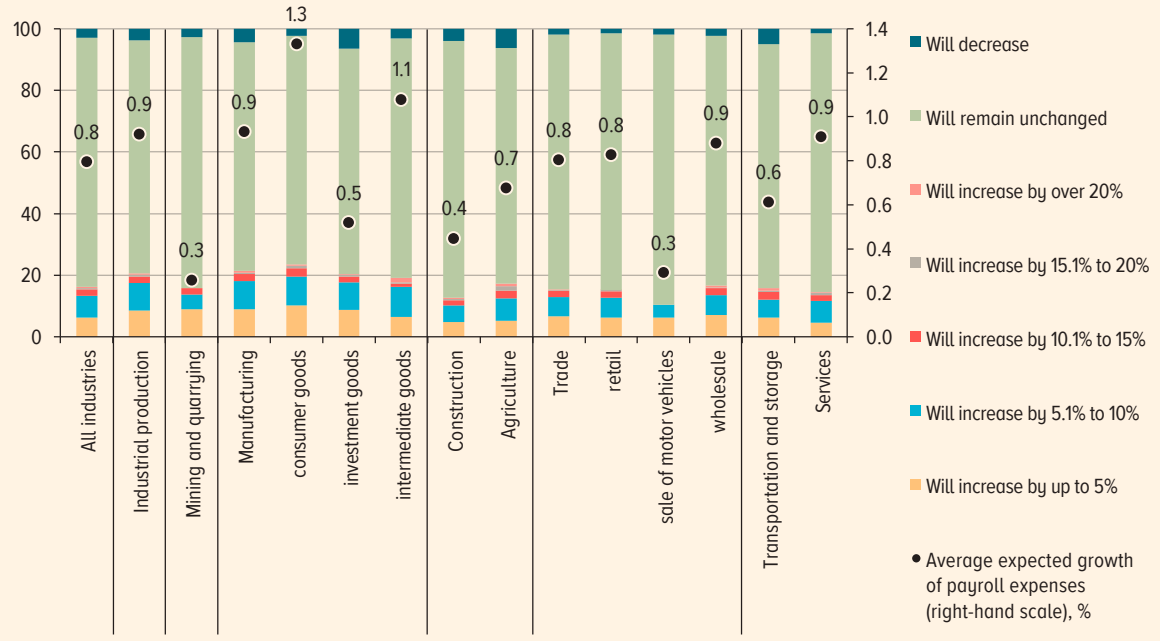


Source: Bank of Russia calculations.

To retain employees, most companies still raise wages, but surveys show that the indexations are becoming more moderate and their proinflationary pressure is easing gradually. Thus, the growth rate of wages expected in 2025 Q4 across the economy equalled 0.8%. In terms of industries, enterprises manufacturing consumer and intermediate goods plan the highest wage indexations in 2025 Q4, namely 1.3% and 1.1%, respectively.

Important data supplementing the Bank of Russia's assumptions regarding the future economic development path are companies' quarterly estimates of current investment activity and its expected changes. Thus, the estimates of changes in investment activity equalled 2.3 p in 2025 Q3 vs 3.2 p

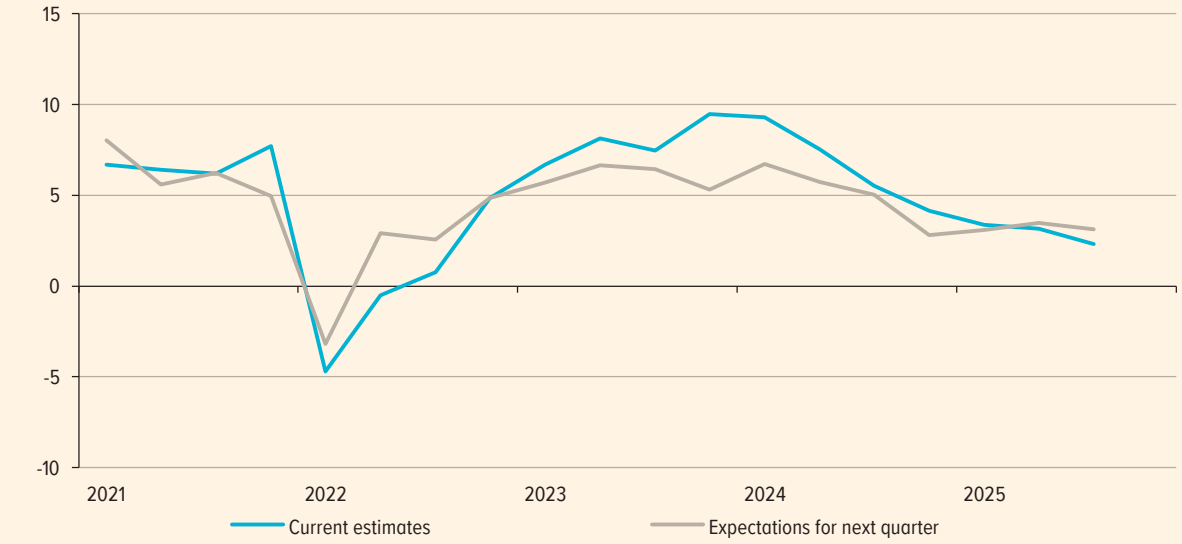
COMPANIES' EXPECTATIONS ABOUT CHANGES IN PAYROLL EXPENSES IN 2025 Q4 *Chart 7.6*
(% OF RESPONDENTS)



Source: Bank of Russia calculations.

ESTIMATES OF CHANGES IN INVESTMENT ACTIVITY
(P, SA)

Chart 7.7



Source: Bank of Russia calculations.

in 2025 Q2. This indicates a continuing increase in investment, although at a more moderate pace than over the previous quarter and on average over 2024. The growth of investment slowed down most notably in mining and quarrying. Contrastingly, agricultural, construction, trade and electric power enterprises recorded a faster rise in investment. As for the factors constraining enterprises' investment activity, the impact of economic uncertainty, limited amounts of companies' own funds available for investment, and subdued demand for their products significantly strengthened. The cost of borrowings is only the fourth on the list of constraints.

When making its monetary policy decisions, the regulator also analyses companies' price expectations (for details about the dynamics of businesses' price expectations, see Appendix 5 'Economic agents' inflation expectations'). This indicator is measured monthly based on business executives' responses to the question 'How will prices for the company's finished products (services) change in the next three months?' (possible answers: 'will increase', 'will remain unchanged', and 'will decrease'). Price expectations are an important indicator of their reaction to the monetary policy stance and may be used as an indicator of a future inflation path, especially in trade.

The Bank of Russia continues to conduct comprehensive studies and expand the areas of using the monitoring results when assessing business activity and the output gap, the labour market and investment activity, as well as companies' price expectations.

BOX 8. CHANGES IN BANKING REGULATION OVER 2023–2025 AND THEIR EFFECT ON MONETARY POLICY

As banks adapted to the scheduled rollback of the easing related to the LCR and the add-ons to capital adequacy ratios, as well as to the toughening of macroprudential policy, this caused autonomous monetary tightening. Making its key rate decisions, the Bank of Russia took into account how banking regulation was affecting interest rates on bank products and the dynamics of credit and deposit aggregates.

In 2024 H2, the Bank of Russia was implementing tight monetary policy to reduce the gap between demand and supply in the domestic economy and slow down inflation. Nevertheless, in 2024 Q4, monetary conditions were for the first time considerably impacted by factors not associated with monetary policy: the scheduled normalisation of banking regulation, in particular the rollback of the LCR-related easing and the restoration of the add-ons to capital adequacy ratios, as well as the tightening of macroprudential policy.[1]

Banking regulation was normalised according to the schedule throughout 2024, after the period of the regulatory easing measures introduced in 2022.[2] Concurrently, responding to increased risks in the financial system attributed to overheating in the credit market and growth in borrowers' debt burden, the Bank of Russia continued to tighten macroprudential policy. These changes were mostly related to the liquidity ratio, add-ons to capital adequacy ratios, macroprudential risk-weight add-ons, and macroprudential limits on retail loans.[3]

Banks were to start their adaptation to the banking regulation normalisation and macroprudential policy tightening in advance. Nevertheless, by the middle of 2024 Q4, credit activity remained high, primarily in the corporate segment, which was largely associated with persistently high demand for borrowings, mostly from non-financial organisations (namely, developers and companies implementing earlier started investment projects). Combined with the efforts of certain banks to increase their market share, this caused the banking sector to almost completely deplete its buffers provided for by capital adequacy ratios and its highly liquid assets included in the LCR calculation.

In 2024 Q4, banks needed to actively adjust to the banking regulation normalisation and macroprudential policy tightening in the conditions of low buffers according to the requirements for capital ratios

On the one hand, banks notably expanded their credit portfolio over the year, but on the other hand, their liabilities to clients increased. Consequently, the amount of expected outflows of funds rose, whereas highly liquid assets were not growing commensurately. The resulting asset and liability structure was exerting pressure on banks' LCR. Furthermore, expectations of a further key rate increase remained. In view of this, clients preferred to deposit funds only for short terms. In order to comply with the LCR, banks were forced to raise more funds through Bank of Russia loans within the PM backed by non-marketable assets. However, the opportunities to improve the LCR that way were almost exhausted as well because certain banks used up to 100% of such collaterals.

As the banking sector needed more funding, the competition for client funds among systemically important banks increased. As a result, the overall level of deposit rates was growing faster than the key rate. In order to avoid an outflow of funds, credit institutions, other than systemically important banks, were also raising interest rates.

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[1] For details about how banking regulation affects monetary conditions, see Box 5 'Monetary policy and financial sector stability'.

[2] The Bank of Russia's measures to support the financial sector introduced on 25 February 2022 in respect of the LCR, to support credit institutions introduced on 28 February 2022, and to support the financial sector and lending to the economy introduced on 15 April 2022.

[3] For details, refer to the following press releases on the Bank of Russia website: 'Partial cancellation of easing, new measures to support banks, and certain changes in banking regulation in 2023'; 'Bank of Russia establishes procedure for exiting from liquidity coverage ratio easing and provides irrevocable credit lines'; 'Bank of Russia's decisions on banking regulation'; 'Bank of Russia's decisions on macroprudential requirements for unsecured consumer loans'; 'Bank of Russia's decisions on macroprudential add-ons for mortgage loans and loans to large over-indebted companies'; and 'Bank of Russia's decisions on macroprudential policy'.

In November–December 2024, the rise in deposit rates was translating into loan rates as well. The spread between loan rates and money market rates expanded, which was caused not only by higher costs of funding, but also by the need to increase capital adequacy, as well as by a more conservative approach to assessing borrower risks, adopted by banks, which implied, among other things, a considerable rise in premiums that banks included in loan rates offered to their clients – ultimate borrowers.

Hence, banks' adaptation to the exit from the regulatory easing and macroprudential measures became the autonomous factors tightening monetary conditions, which was not related to the actual or forecast key rate dynamics.

Specifically, that was because certain banks needed more time to adjust to the rollback of the regulatory easing measures amid the active expansion of the loan portfolio. Although the Bank of Russia continued the monetary tightening cycle at the end of 2024, the autonomous rise in loan and deposit rates was hindering the co-directional change in interest rates of similar maturities and made it more difficult to predict the spreads between them. This in turn was affecting the transmission of monetary policy and the basis risk as a source of interest rate risk for credit institutions.

In addition to the rise in interest rates, which promoted conditions for cooling the demand for loans, the need to adapt to the restoration of capital adequacy ratios and macroprudential policy tightening also changed credit supply. In 2024 Q4, non-price lending conditions tightened, with banks switching to a strategy of using their capital more moderately and reasonably when setting lending targets. Furthermore, banks preferred not to increase their risk appetite, which limited their capacity to actively expand lending further.

Thus, by the end of 2024, the phasing-out of the regulatory easing measures and the toughening of macroprudential policy, as well as the resulting autonomous tightening of monetary conditions formed prerequisites for a significant cooling in the credit market in 2025. The observed monetary tightening was actually similar to the key rate increase to 24% p.a. or even higher,[4] which is notably above the level needed to slow down inflation.

Therefore, by the end of 2024, the Bank of Russia decided to maintain the key rate at 21.00% p.a. and implemented measures for credit institutions to better adapt to the rollback of the regulatory easing measures.

For banks to more easily adjust to the LCR normalisation, in November–December 2024, the Bank of Russia temporarily expanded the opportunities for systemically important banks to use an ICL for compliance with the LCR,[5] by changing the dates when systemically important banks should start complying with the LCR using their own highly liquid assets.[6] As the economy received large budget payments in late 2024–early 2025 and these funds were distributed across companies' and households' bank accounts, this improved the situation with banks' compliance with the LCR, including owing to an increased share of stable client funds. As a result, the autonomous tightening of monetary conditions, associated with the impact of the required liquidity ratios, progressively weakened in 2025 Q1. Consequently, the spreads between interest rates on deposits and loans and money market rates narrowed, which gradually eliminated the effect on the monetary policy transmission in 2025 H1. Following the introduction of the national LCR[7] in 2025 Q4, calibrated based on data on Russian banks, the effect of this aspect of banking regulation on monetary conditions will be smoothed.

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[4] Refer to the Summary of the Key Rate Discussion during the quiet period and in the course of the meeting of the Bank of Russia Board of Directors, dated 20 December 2024.

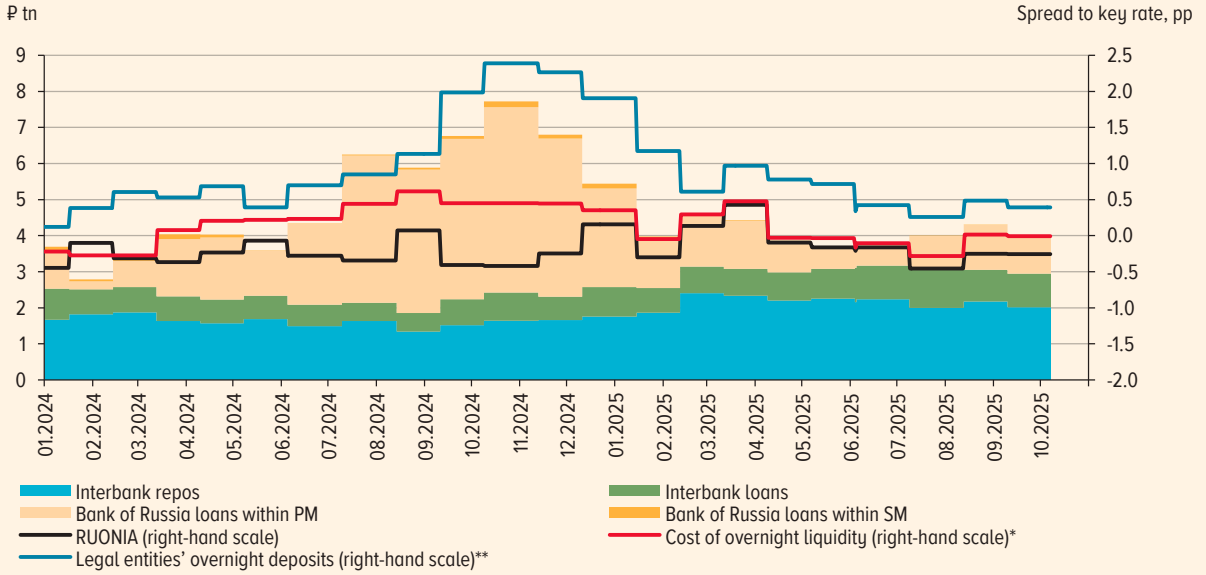
[5] For details, refer to the press releases on the Bank of Russia website 'Bank of Russia's decisions on banking regulation' and 'Bank of Russia allows credit institutions to increase irrevocable credit lines limits'.

[6] For details, refer to the press release on the Bank of Russia website 'Bank of Russia's decisions on banking regulation'.

[7] Refer to National liquidity coverage ratio for SICIs: calculation procedure.

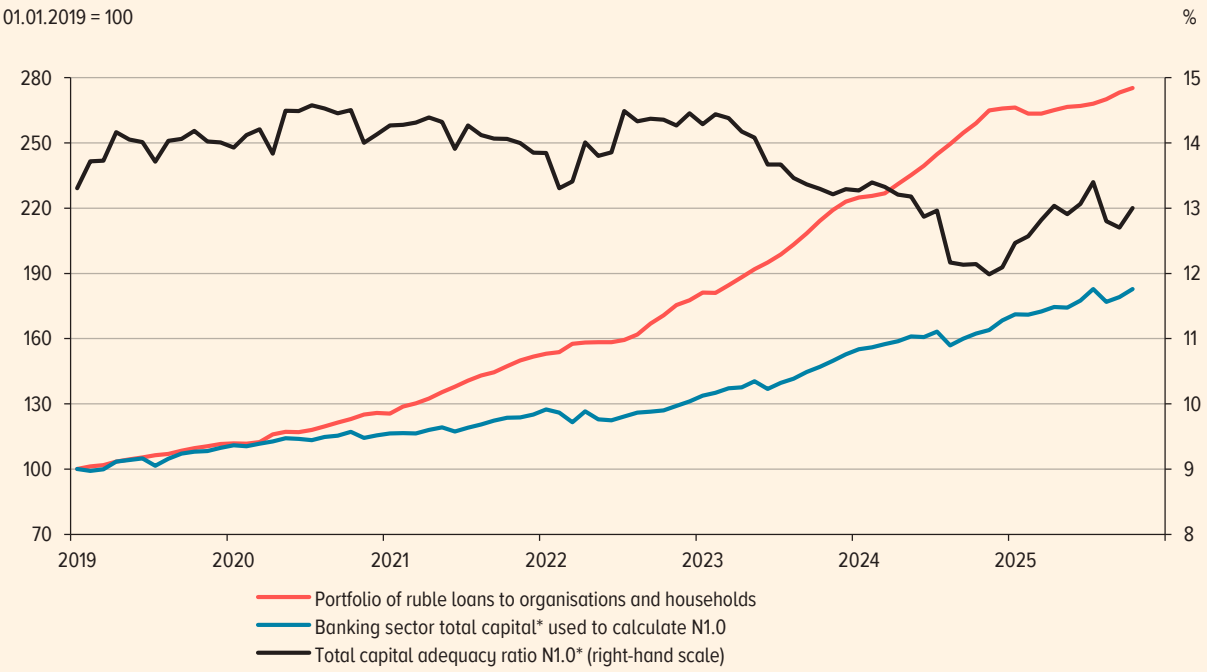
As to the situation with capital adequacy, there were two factors contributing to the reduction in the regulatory burden on capital. First, banks used profits received in 2024 to increase their capital in 2025 Q2. Second, already at the end of 2024, the expansion of lending started to decelerate as a result of the decline in borrowers' demand amid tight monetary policy and a more conservative approach to approving loan applications adopted by banks.

AMOUNT AND COST OF OVERNIGHT LENDING (AVERAGE OVER AVERAGING PERIODS) *Chart 8.1*



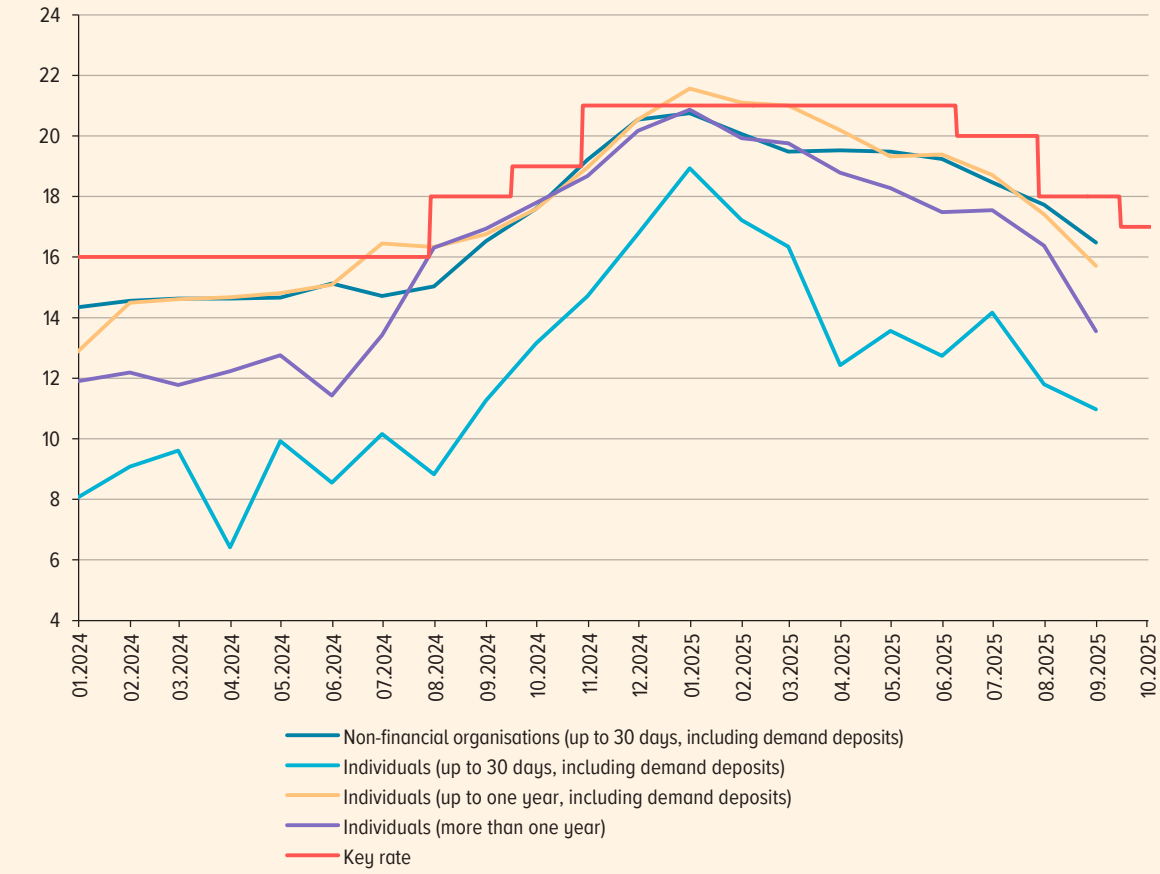
* *The weighted average cost of overnight lending in the money market and taking into account Bank of Russia standing facilities.*
** *The cost of raising liquidity from legal entities, adjusted for required reserves. The sample comprises certain transactions of large legal entities where the payment details include the transaction parameters.*
Source: Bank of Russia.

CAPITAL ADEQUACY AND GROWTH IN BANKING SECTOR ASSETS *Chart 8.2*



* *Only credit institutions obliged to comply with the ratio are taken into account.*
Sources: credit institutions' Reporting Forms 0409101 and 0409135.

WEIGHTED AVERAGE COST OF CORPORATE AND RETAIL DEPOSITS (BY MATURITY) *Chart 8.3*
(% P.A.)



Sources: Bank of Russia, credit institutions' Reporting Form 0409129.

In 2025 H1, the autonomous factors, namely the termination of the regulatory support measures and the tightening of macroprudential policy, still continued to affect lending conditions, although to a much lesser extent as compared to late 2024. Specifically, as assessed by the Bank of Russia, given the surge in interest rates offered to ultimate borrowers and the decline in credit activity, the monetary tightness achieved by the end of 2024 formed prerequisites for the resumption of disinflation and the return of inflation to the target. The effect of tight monetary conditions on demand eased inflationary pressures, as a result of which the Bank of Russia was able not to raise the key rate further.

SECTION 3. MACROECONOMIC SCENARIOS AND MONETARY POLICY IN 2025 AND 2026–2028

The Bank of Russia considered the baseline and three alternative forecast scenarios. Whatever the scenario, monetary policy will be aimed at ensuring an inflation rate of close to 4%

Decision-making based on a medium-term macroeconomic forecast is a key principle of the Bank of Russia's monetary policy. However, changes in multiple parameters of the Russian and world economies over a horizon of several years may involve high uncertainty, which is particularly evident from the developments over the past three to five years. This is why the Bank of Russia prepares several scenarios relying on different assumptions regarding internal and external conditions. The Bank of Russia is thus able to make the most balanced monetary policy decisions, promptly respond in case of materialisation of some risks, as well as increase certainty for all economic agents, by communicating its view of the projected paths of inflation, the key rate, and the main macroeconomic and financial indicators under different circumstances.

The Monetary Policy Guidelines for 2025–2027 presented a baseline scenario and three alternative scenarios of the medium-term economic development. The growth rates of the economy and inflation in late 2024–early 2025 turned out to be higher than expected in the baseline scenario.[1] A faster rise in domestic demand was driven by the accumulated effects of expansionary fiscal policy and the surge in lending over 2024. Amid persistent staff shortages and heightened inflation expectations, this amplified inflationary pressures.

The deviation from the baseline was towards the proinflationary scenario 'Higher Demand', but that is not to say that the situation was unfolding exactly in line with its assumptions and expected trends or that all the proinflationary factors predicted therein did occur in 2025. As for external conditions, they were somewhat worse than forecast in the baseline scenario, especially with regard to global oil prices and the quantities of Russian exports, but were nonetheless far from the projections of the risk scenario 'Global Crisis'.

The Bank of Russia's prompt response to intensifying inflationary pressures in 2024 H2 made it possible to reverse the trend and ensure a gradual deceleration of inflation. By raising the key rate in July–October 2024 and keeping it at a high level in 2025 H1, the Bank of Russia was able to moderate credit activity and increase the attractiveness of savings in the national currency, which in turn helped gradually slow down the expansion in domestic demand and strengthen the ruble. As a result, current price growth rates notably declined as early as mid-2025, which enabled the Bank of Russia to start cutting the key rate in June 2025.

According to the updated forecast, the average level of the key rate in 2025 is closer to the upper bound of the range predicted in the baseline forecast of MPG 2025–2027. Nevertheless, monetary policy should remain restrictive for a rather long period. This will help return the economy to a balanced growth path, decelerate annual inflation to 4.0–5.0% in 2026 and stabilise it close to the target level further on.

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[1] See Section 2 'Monetary policy environment and core measures in late 2024 and 2025' and Appendix 3 'Quantitative analysis of reasons for the inflation deviation from the target and decomposition of GDP dynamics into shocks'.

The Bank of Russia also considers alternative scenarios where additional factors might either exacerbate or dampen inflationary pressures as compared to the baseline scenario and, accordingly, require an adjustment of monetary policy.

The baseline and alternative scenarios rely on different assumptions about both internal and external conditions

The Bank of Russia Board of Directors approved the baseline scenario on 24 October 2025. It assumes that the Russian and world economies will continue to develop in line with the already existing trends. International trade tensions between the largest economies will be constraining the expansion of output in the world economy and international trade. These factors will affect the Russian economy primarily through lower global oil prices, including due to a rapid expansion of OPEC+ oil production. The sanctions against Russia's economy that will remain in place will somewhat hinder the growth in exports and imports and will be the reason why transaction costs will stay elevated.

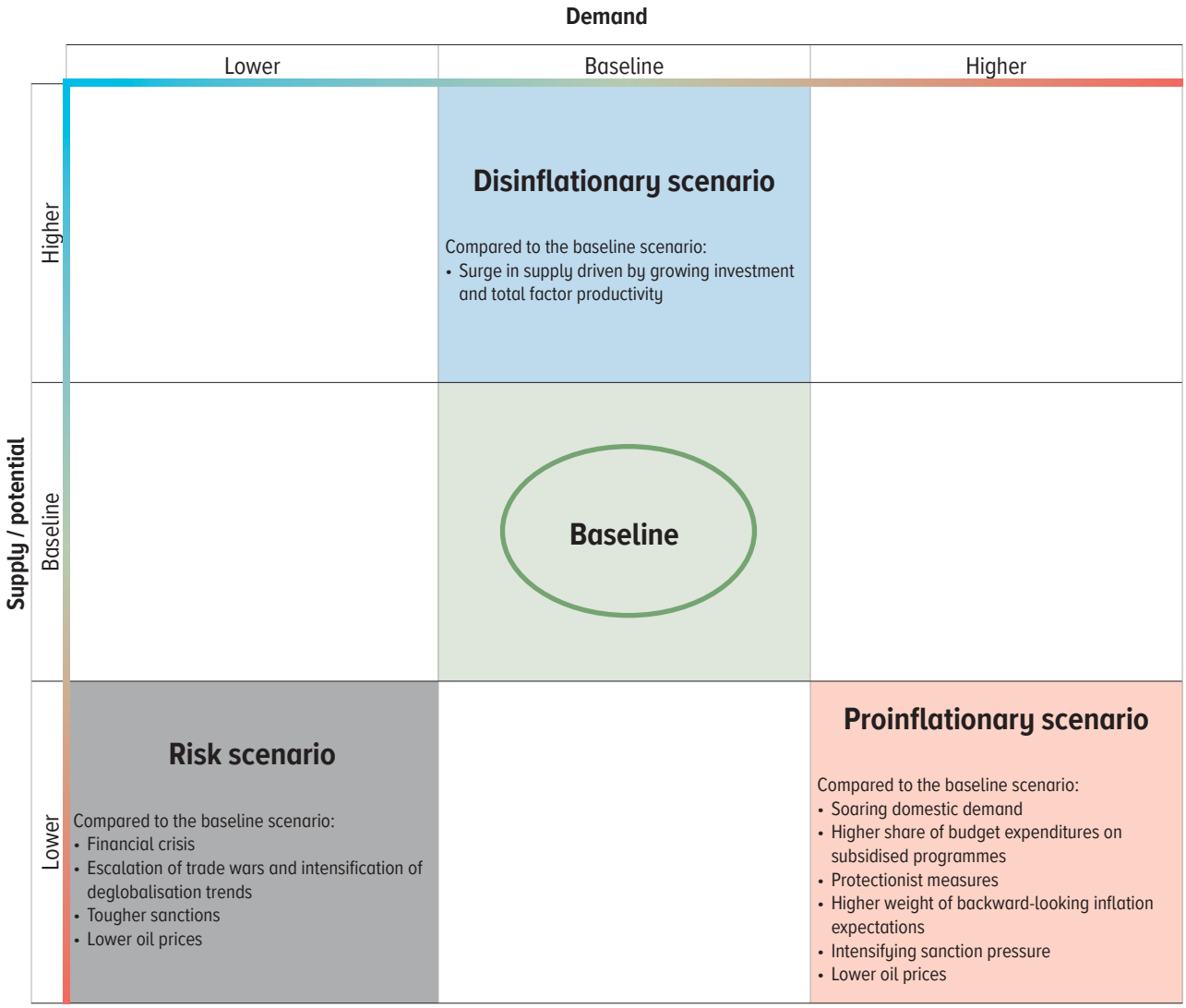
The baseline scenario also assumes that fiscal policy normalisation and the return to expenditure budgeting in accordance with the long-term parameters of the fiscal rule from 2026 will have a disinflationary effect over the forecast horizon. Other factors, which will contribute to this, include a gradual decline in the base crude price provided for by the fiscal rule, which suggests a reduction in the amount of the oil and gas rent allocated to finance budget expenditures and the resumption of asset accumulation at the NWF in the event of materialisation of the baseline scenario as regards external conditions. Furthermore, all the forecast scenarios take into account the increase in VAT from 20% to 22% in 2026 and other announced changes in taxes and tariffs that will affect administered product and service prices. As estimated by the Bank of Russia, these changes will be a one-off proinflationary factor in the short term and may also adversely impact the dynamics of inflation expectations. However, in the medium term, the increase in taxes is aimed at achieving a better balanced structure of the budget, which will produce a disinflationary effect as compared to a situation where a rise in budget revenues would fail to cover growing budget spending.

The long-term potential growth rate of Russian GDP in 2025–2028 will be in the range of 1.5–2.5%. Given the current demographic trends limiting the increase in labour resources, the expansion of potential will be driven predominantly by a rise in total factor productivity and in fixed capital.

The baseline scenario is the most probable one, but it is still a forecast. Its realisation depends on both processes inside the country and external conditions.

Firstly, an important source of uncertainty is the relationships between the largest economies in international trade. A considerable increase in US protectionism and retaliatory measures implemented by other countries are affecting the growth prospects of global trade and the world economy as a whole. Furthermore, deglobalisation processes have a negative impact on labour productivity and potential growth rates due to disruptions in production and logistics chains, as well as amplify inflationary pressures in the countries raising import tariffs. The scale and duration of these factors might be significant and vary depending on further changes in foreign trade policies of certain countries. Moreover, there is still high uncertainty about geopolitical developments.

SCENARIOS ASSUMED IN BANK OF RUSSIA'S MACROECONOMIC FORECAST *Chart 3.1*



Source: Bank of Russia.

Secondly, the Russian economy is still undergoing a structural transformation associated with the redistribution of resources across sectors and industries, including because they redirected supplies to the domestic market and alternative destinations. This increases the uncertainty about the scale and pace of the transmission of the implemented government support measures and investments made over the past few years to the growth of the Russian economy's potential, which is essential to expand the capacities to ramp up output without amplifying inflationary pressures. The pace and sustainability of disinflation might also depend on developments in the labour market still experiencing staff shortages. The dynamics of inflation expectations might be one of the reasons for a deviation from the baseline scenario. Specifically, a prolonged period of elevated inflation observed over the past few years might have a more pronounced effect on households' and businesses' expectations than assumed in the baseline scenario. Namely, inflation expectations might become more backward-looking, i.e. based on the past negative experience, thus decreasing more slowly, following the actual inflation rate, and responding more considerably and persistently even to one-off spikes in prices. This in turn will affect people's choices, including about saving and consumption, thus increasing the inertia in inflation dynamics and, all else equal, requiring tighter monetary policy. Another important domestic assumption underlying the scenarios is related to fiscal policy parameters.

Taking into account these factors of uncertainty and risks, in addition to the baseline scenario, the Bank of Russia also presents alternative macroeconomic scenarios of the medium-term development of the Russian economy, which differ from each other in terms of the composition and intensity of shocks that might occur in the domestic economy.

The disinflationary scenario assumes that higher growth rates of total factor productivity and increasing fixed capital investment will considerably boost supply in the economy. As a result, the economy will demonstrate a faster expansion of output without intensifying inflationary pressures. Accordingly, the Bank of Russia will be able to ease its monetary policy compared to the baseline scenario.

The proinflationary scenario assumes a notable increase in inflationary pressures in 2026, which might be induced by a combination of internal and external factors, which will be the reasons why demand will be higher and supply will be lower than predicted in the baseline scenario. Demand might be rising faster due to changes in certain parameters of fiscal policy relative to the baseline scenario, namely an expansion of subsidised lending programmes. Another proinflationary factor might be a possible increase in protectionist measures to encourage import substitution, which will be pushing up import prices and the demand for domestic products, exerting upward pressure on their prices. Concurrently, this scenario suggests that, due to tightening sanctions, the growth rate of production capacities will be lower than in the baseline scenario. Tighter sanctions will also lead to a higher discount, due to which Russian crude prices will stabilise at lower levels.

If the expansion of demand surpasses the capacities to ramp up supply again, enterprises will still be facing high competition for workers. Consequently, the growth rate of wages will continue to significantly exceed that of labour productivity, also pushing prices higher. Another important factor will be the dynamics of households' and businesses' inflation expectations, which are predicted to decrease more slowly than in the baseline scenario and become more responsive to all other proinflationary factors. Accordingly, this will impact consumer sentiment, people's propensity to save, and as a result, domestic demand. The combined effect of these shocks will exacerbate inflationary pressures and require an appropriate monetary policy response.

The risk scenario combines the entire range of adverse external conditions. Escalation of international trade tensions will cause a sharp decline in the growth rate of the largest economies. Deglobalisation processes become more intense in this scenario. Trade relationships between the USA and China are developing in the most negative way, with import tariffs remaining at a higher level than assumed in the baseline scenario over the entire forecast horizon. Combined, these factors will entail a global financial crisis, the scale of which might be comparable with the 2007–2008 crisis. Worsening growth prospects of demand will be dragging down global commodity prices. Moreover, this scenario assumes that the Russian economy will be experiencing increasing sanction pressure, which will be constraining exports and imports and additionally pushing up costs incurred by exporters and importers. A global crisis and tighter sanctions will entail a slowdown in both current and potential growth rates of the Russian economy, accompanied by intensifying inflationary pressures, which will require an appropriate monetary policy response.

Overall, the scenarios differ in terms of the ratios between demand- and supply-side factors they assume, as well as the combinations of external conditions.

Compared to the baseline scenario, the proinflationary scenario assumes higher demand combined with lower supply; the disinflationary scenario suggests higher supply; and in the risk scenario, both demand and supply are expected to be lower, with proinflationary supply-side factors prevailing.

As regards external conditions, the baseline and disinflationary scenarios assume that the current trends in the world economy and the sanction pressure will remain almost unchanged, whereas the risk and proinflationary scenarios suggest possibly tighter sanctions and worsening external conditions, with the negative effects being more pronounced in the risk scenario.

The baseline scenario is considered to be the most probable one. As for the disinflationary and proinflationary scenarios, the latter is more probable. The risk scenario has become slightly more likely than last year, but the probability of its realisation is still low.

Whatever the scenario, the Bank of Russia's monetary policy will be aimed at returning inflation to 4% and stabilising it sustainably close to this level. The complex of measures and decisions made will be adjusted depending on the state of the Russian economy, inflation trends, and the main indicators in financial markets.

The assumptions and trajectories of the key macroeconomic indicators in each of the scenarios are detailed below.

Baseline scenario

Forecast assumptions

The average growth rate of the world economy in 2025–2028 will be below the 2000–2019 levels.[2] The US international trade policy will remain an important factor: the baseline scenario still assumes a gradual reduction in import tariffs over the medium-term horizon after their sharp increase in 2025.

Protectionism and higher uncertainty will be adversely affecting both actual output and its potential level in the largest economies. Inflationary pressures in the USA and the euro area will continue to ease next year, but due to the effects of higher import tariffs, this process will be more uneven. The US Fed will continue easing its monetary policy in 2025–2026 to prop up the economy as inflation decelerates.

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 persist over the medium-term horizon in this scenario.

[2] In 2000–2019, the growth rate of the world economy averaged 3.8% per year (IMF).

MAIN PARAMETERS OF EXTERNAL CONDITIONS OF BANK OF RUSSIA'S SCENARIOS *Table 3.1*

	2023	2024	2025 (forecast)	2026 (forecast)	2027 (forecast)	2028 (forecast)
World GDP, % YoY						
Baseline / Disinflationary / Proinflationary	3.4	3.3	3.2	3.1	3.2	2.9
Risk scenario				1.4	1.5	3.3
US GDP, % YoY						
Baseline / Disinflationary / Proinflationary	2.9	2.8	1.9	2.2	2.0	1.7
Risk scenario				-1.5	-0.2	3.1
Euro area GDP, % YoY						
Baseline / Disinflationary / Proinflationary	0.5	0.8	1.3	1.2	1.6	1.3
Risk scenario				-1.1	-0.9	1.7
Chinese GDP, % YoY						
Baseline / Disinflationary / Proinflationary	5.4	5.0	5.0	5.0	4.9	4.7
Risk scenario				3.5	3.6	4.7
US inflation,[1] % in December YoY						
Baseline / Disinflationary / Proinflationary	3.1	3.0	3.2	2.6	2.3	2.2
Risk scenario				2.8	1.5	1.4
Euro area inflation,[2] % in December YoY						
Baseline / Disinflationary / Proinflationary	3.4	2.7	2.3	1.8	2.0	2.1
Risk scenario				2.2	0.1	1.0
Chinese inflation,[3] % in December YoY						
Baseline / Disinflationary / Proinflationary	0.6	0.2	1.1	1.3	1.5	1.8
Risk scenario				1.3	0.8	1.0
US Fed rate,[4] %, Q4 average YoY						
Baseline / Disinflationary / Proinflationary	5.3	4.7	3.9	3.5	3.6	3.7
Risk scenario				0.4	0.1	0.7
ECB rate,[5] %, Q4 average YoY						
Baseline / Disinflationary / Proinflationary	4.0	3.3	2.0	2.0	2.2	2.4
Risk scenario				0.1	0	0.5
PBC rate,[6] %, Q4 average YoY						
Baseline / Disinflationary / Proinflationary	3.5	3.2	3.0	3.1	3.4	3.8
Risk scenario				1.9	1.6	2.0

[1] *Core PCE, USA.*
[2] *Core HICP, euro area.*
[3] *Core CPI, China.*
[4] *US Fed Effective Federal Funds Rate.*
[5] *ECB Deposit Facility Rate.*
[6] *People's Bank of China 1Y Loan Prime Rate.*

Sources: data from national statistical agencies, Bank of Russia calculations.

Forecast of key macroeconomic indicators

GDP. As estimated by the Bank of Russia, the economy's overheating was decreasing over 2025 H1, and this trend is expected to continue in 2025 H2. On average, GDP growth will slow down to 0.5–1.0% in 2025. In 2026, the dynamics of consumer and investment demand will remain moderate as a result of tight monetary policy, while the growth rate of GDP will be in the range of 0.5–1.5%. As interest rates go down, the contribution of consumer demand to GDP dynamics will increase in 2026–2028. The Russian economy will achieve its potential growth rates of 1.5–2.5% in 2027 and will continue to expand at the same pace further on.

Final consumption expenditure. Consumer demand continued to grow in 2025, driven by a fast rise in households' incomes, but still slowed down vs 2023–2024 as a result of tight monetary conditions encouraging people to save more. Consequently, the increase in final consumption expenditure will decelerate to 1.0–2.0% in 2025 and to 0.5–1.5% in 2026. From 2027, the rise in consumption is forecast to return to 1.5–2.5%, which is in line with a balanced growth path.

Gross capital formation. The dynamics of gross capital formation in 2025 are explained by the continued refocusing of Russia's economy on domestic demand, encouragement of import-substituting technologies, and adaptation to shifts in external conditions. However, the pace of these changes has become slower as the economy has almost completely adapted to a number of restrictions. The deceleration of the expansion of gross capital formation in 2025 is also attributed to a considerable negative contribution of the change in stocks to GDP, which was associated with the further adjustment of their levels amid restrictive monetary policy. Investment demand continued to grow in 2025, driven by, among other things, support from the Government (specifically, as part of government investment and infrastructure projects). Taking this into account, the growth rate of gross fixed capital formation in 2025 will equal 1.0–3.0%, while the dynamics of gross capital formation in general will be in the range of (-1.0)–1.0%. In 2026, the increase in gross capital formation will accelerate to 0.5–2.5% owing to a sustainable rise in investment (by 0.5–2.5%), while the contribution of changes in stocks to the growth rate of GDP will stabilise at a close-to-zero level. As monetary conditions become neutral and the economy returns to a balanced growth path, investment will be increasing at a stable pace of 1.0–3.0% from 2027.

Exports. The Bank of Russia expects export quantities to decrease by 1.0–3.0% in 2025, which will be primarily attributable to a reduction in oil and gas exports caused by infrastructure factors and a slight deterioration of the situation in the market, as well as to lower food export quantities amid the unfavourable harvest dynamics in 2024. In 2026, exports will rebound, with the growth rate reaching 0.5–2.5%. From 2027, as companies adapt to the change in the external environment, the expansion of exports will reach a steady pace of 1.0–3.0%

Imports. The dynamics of import quantities are expected to range from -2.0% to 0% in 2025. The decline in the demand for imports is related to both tight monetary conditions helping optimise the stocks of imported end and intermediary goods and the impact of a number of one-off factors, including the increase in the recycling fee, which considerably reduced the imports of new cars compared to last year (when distributors were seeking to build up the stocks expecting the announced changes in the fee). In 2026, import quantities will be rebounding at a pace of 0.5–2.5%. In 2027–2028, the growth rates of imports will stabilise at a long-term steady level corresponding to the new structure of the economy. Furthermore, over the entire forecast horizon, the economy's greater focus on domestic manufacturing will cause a reduction in the percentage of imports in consumption compared to historical levels.

BANK OF RUSSIA'S FORECAST IN BASELINE SCENARIO

Table 3.2

	2023 (actual)	2024 (actual)	2025	2026	2027	2028
Key macroeconomic indicators (% growth YoY, unless indicated otherwise)						
Inflation, % in December YoY	7.4	9.5	6.5–7.0	4.0–5.0	4.0	4.0
Inflation, yearly average, % YoY	5.9	8.4	8.8–8.9	5.3–6.3	4.0	4.0
Key rate, yearly average, % p.a.	9.9	17.5	19.2[1]	13.0–15.0	7.5–8.5	7.5–8.5
Gross domestic product	4.1	4.3	0.5–1.0	0.5–1.5	1.5–2.5	1.5–2.5
– % change in Q4 YoY	*5.3*	*4.5*	*(-0.5)-0.5*	*1.0–2.0*	*1.5–2.5*	*1.5–2.5*
Final consumption expenditure	6.5	5.2	1.0–2.0	0.5–1.5	1.5–2.5	1.5–2.5
– households	*7.5*	*5.4*	*1.0–2.0*	*0.5–1.5*	*1.5–2.5*	*1.5–2.5*
Gross capital formation	19.8	2.1	(-1.0)–1.0	0.5–2.5	1.0–3.0	1.0–3.0
– gross fixed capital formation	*7.8*	*6.0*	*1.0–3.0*	*0.5–2.5*	*1.0–3.0*	*1.0–3.0*
Exports	–[2]	–[2]	(-3.0)–(-1.0)	0.5–2.5	1.0–3.0	1.0–3.0
Imports	–[2]	–[2]	(-2.0)–0.0	0.5–2.5	1.0–3.0	1.0–3.0
Money supply (national definition)	19.4	19.2	7–10	5–10	7–12	7–12
Banking system claims on economy in rubles and foreign currency[3]	22.3	16.4	8–11	6–11	8–13	8–13
– on organisations	*22.0*	*19.0*	*10–13*	*7–12*	*8–13*	*8–13*
– on households, including	*23.0*	*9.7*	*1–4*	*5–10*	*8–13*	*8–13*
housing mortgage loans	*29.4*	*10.4*	*3–6*	*6–11*	*10–15*	*10–15*
Balance of payments indicators[4] ($ bn, unless indicated otherwise)						
Current account	**49**	**63**	**38**	**27**	**32**	**32**
Balance of trade	122	132	116	104	112	112
Exports	*425*	*434*	*414*	*416*	*440*	*454*
Imports	*303*	*302*	*298*	*312*	*327*	*343*
Balance of services	-36	-38	-45	-45	-46	-46
Exports	*40*	*43*	*47*	*47*	*48*	*49*
Imports	*77*	*81*	*92*	*92*	*93*	*94*
Balance of primary and secondary income	-36	-30	-32	-33	-34	-35
Current account and capital account balance	**48**	**63**	**38**	**27**	**32**	**32**
Financial account balance, net of reserve assets	**49**	**57**	**51**	**41**	**30**	**29**
Net incurrence of liabilities	-7	9	1	5	6	7
Net acquisition of financial assets, net of reserve assets	41	66	52	46	36	36
Net errors and omissions	-9	-10	-11	0	0	0
Change in reserve assets	**-10**	**-4**	**-24**	**-14**	**2**	**3**
Oil price for tax purposes,[5] yearly average, $ per barrel	**63**	**68**	**58**	**55**	**60**	**60**

[1] *Given that from 1 January 2025 through 26 October 2025 the average key rate was 19.8%, the average key rate from 27 October 2025 through 31 December 2025 is forecast in the range of 16.4–16.5%. Additional information on the format of the key rate forecast is available in the methodological note.*

[2] *Rosstat has not yet released the 2023–2024 data on GDP by expenditure in terms of exports and imports.*

[3] *The banking system's claims on the economy mean all claims of the banking system on non-financial and financial organisations and households in 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 participation in non-financial and financial organisations' equity, and other receivables on settlements with non-financial and financial organisations and households. The growth rates of claims are adjusted for foreign currency revaluation. For the purpose of the adjustment for foreign currency revaluation, the growth of claims in foreign currency and precious metals is recalculated into rubles at the period average RUB/USD exchange rate.*

[4] *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.*

[5] *The Russian crude price determined for tax purposes and published on a monthly basis on the website of the Ministry of Economic Development of the Russian Federation.*

Source: Bank of Russia.

Inflation. The baseline scenario assumes that, as the Bank of Russia will continue to implement tight monetary policy and the economy returns to a balanced growth path, annual inflation will decrease to 6.5–7.0% as of the end of 2025, equal 4.0–5.0% as of the end of 2026, and stabilise at the target further on. Underlying inflation will slow down to 4% already in 2026 H2.

The baseline scenario takes into account the proinflationary impact of one-off supply-side factors that materialised in 2025 H2, including petrol prices, as well as the effects of the expected increase in VAT (its estimated contribution to inflation is up to 0.8 pp), and other tax and tariff changes announced by the Government that will influence administered product and service prices over the forecast horizon. The Bank of Russia also takes into account that these one-off factors might impact households' and businesses' inflation expectations.

Forecast of the balance of payments

Global environment. The negative effects of high tariffs will continue to exert pressure on commodity prices. As forecast by the Bank of Russia, the Russian crude price, calculated for tax purposes, will be close to $58 per barrel in 2025 and $55 per barrel in 2026. The expansion in global oil production, including due to an increase in OPEC+ oil output, will continue to drag down prices. Russian crude prices will return to the equilibrium level of $60 per barrel as late as 2027–2028. Gas prices in 2025 will remain above the 2015–2021 average, but will edge down compared to the previous year and continue to decline further on as a result of commissioning of additional large production capacities. Prices for other Russian exports will be rising in the medium term following global inflation trends.

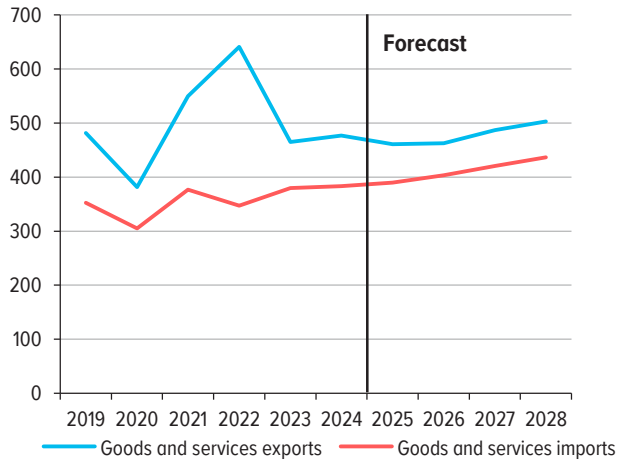
Exports. Taking into account lower energy commodity prices than in 2024 and a decline in export quantities, the value of exports will go down in 2025. The expansion of exports in 2026 vs 2025 will be driven by non-oil and gas supplies. In 2027, the growth of total exports in nominal terms will accelerate as a result of a rebound in oil prices. In 2028, exports will continue to go up, supported by other goods and services, but the growth will slow down as oil prices stabilise.

Imports. The value of goods and services imports will be growing moderately over the medium-term horizon, driven by a rise in domestic demand. In addition, imports will be supported by the ruble appreciation that happened in 2025. In 2026–2028, the quantities of imports are forecast to increase as a result of the development of logistics chains and payments. However, in the medium term, the imports-to-GDP ratio will remain lower than before 2022. Import prices will be growing at a pace close to the rate of foreign inflation.

Current account. Due to a reduction in exports, the current account surplus is forecast to decrease to $38 billion in 2025 and to $27 billion in 2026, while imports will be surging. In 2027, as the growth of exports speeds up, the current account surplus will increase to $32 billion and stabilise at this level in 2028.

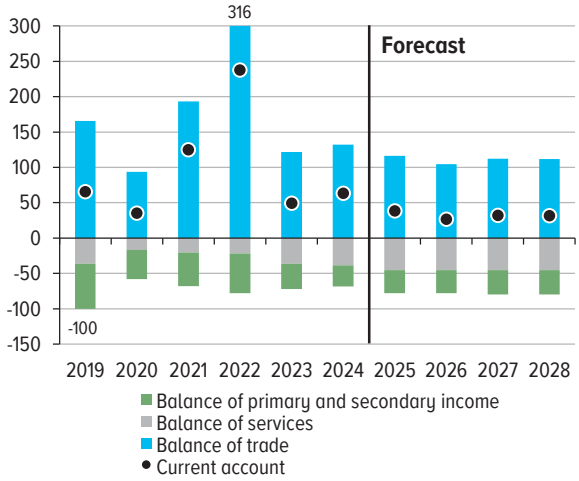
Financial account. The financial account balance, net of reserves, is expected to shrink over the forecast horizon, namely from $51 billion in 2025 to $41 billion in 2026 and $29–30 billion in 2027–2028. The surplus will be mostly ensured by an increase in foreign assets, net of reserves. In 2025–2026, reserves are forecast to decline due to the sale of foreign currency as part of fiscal rule-based operations and investment of the NWF's resources inside the Russian economy (as well as, in 2025, because of operations mirroring spending from the NWF beyond the fiscal rule).

EXPORT AND IMPORT FORECAST IN BASELINE SCENARIO
($ BN)
Chart 3.2



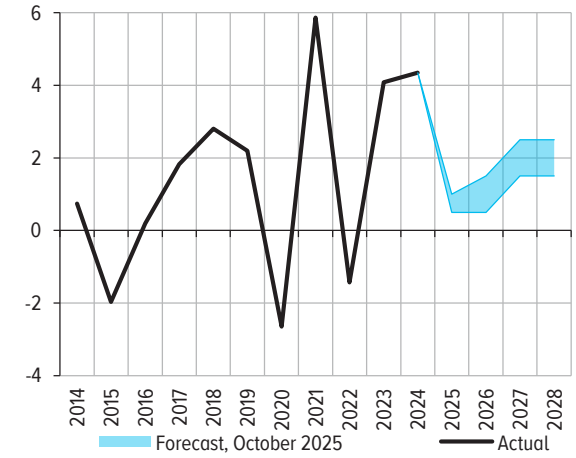
Source: Bank of Russia calculations.

CURRENT ACCOUNT FORECAST IN BASELINE SCENARIO
($ BN)
Chart 3.3



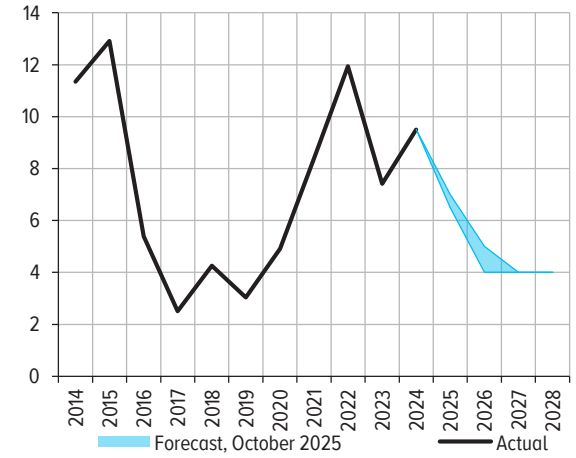
Source: Bank of Russia calculations.

GDP GROWTH IN BASELINE SCENARIO
(% CHANGE YOY)
Chart 3.4



Source: Bank of Russia calculations.

INFLATION PATH IN BASELINE SCENARIO
(% IN DECEMBER YOY)
Chart 3.5



Source: Bank of Russia calculations.

In 2027–2028, crude prices are predicted to exceed the base price provided for by the fiscal rule,[3] which will make it possible to switch to foreign currency purchases and reserve accumulation.

Forecast of monetary indicators

Key rate. Given the decision made on 24 October 2025, the key rate will average 19.2% p.a. in 2025. In 2026 as inflationary pressures ease gradually, thus creating space for a progressive decrease in monetary policy tightness, the average key rate will range from 13% p.a. to 15% p.a. In 2027, the key rate will return to neutral territory and will stay there further on. According to the Bank of Russia's assessment, the long-term real neutral rate for the Russian economy stays at the level of 3.5–4.5% p.a. With the inflation target being close to 4%, this range corresponds to the nominal neutral rate of 7.5–8.5% p.a.

[3] According to the updated budget projections, the base oil price will decline by $1 per barrel each year from $60 per barrel in 2025 to $55 per barrel in 2030.

Claims of the banking system on the economy. The forecast of the growth rate of claims on the economy reflects the effects of tight monetary conditions formed as a result of both restrictive monetary policy and a more conservative approach adopted by banks to using capital and liquidity amid normalisation of the main prudential ratios. Furthermore, monetary tightening ensures cooling in the demand for loans, especially in retail lending. Corporate lending is still supported by large government-funded investment projects, project financing, and the continuing expansion of investment. As a result, claims on organisations increased by 10–13%, which is notably lower than in 2024, and claims on households were up by 1–4%. The growth rate in the retail segment will remain positive owing to mortgage lending, driven by targeted subsidised lending programmes and the rebound of market-based mortgage lending following the start of the key rate reduction cycle. As market rates on loans go down further and the propensity to consume restores gradually, the growth rate of claims on households will rise in 2026 to reach 5–10%. Claims on organisations will increase by 7–12%, while the growth of claims on the economy as a whole will stay close to the rates of 2025. In 2027–2028, claims on the economy will be increasing at a steady pace of 8–13% consistent with the economy's balanced growth path.

Money supply. Over the entire forecast horizon, growth in money supply in the national definition (M2) will be driven by lending to the economy coupled with a sustained inflow of budget funds. However, as credit activity declines in 2025, money supply will expand by 7–10%, which is significantly below the level of the past three years. In 2026, the M2 aggregate is expected to increase similarly to 2025, specifically by 5–10%. In 2027–2028, the growth rate of money supply will equal 7–12% as a result of a rise in credit activity amid weakening inflationary risks and easing lending terms.

Alternative scenarios

Disinflationary scenario

Fixed capital investment has been surging over the past four years. The growth rate of gross fixed capital formation equalled 7.8% in 2023 and 6.0% in 2024. Investment has continued to expand in 2025 as well, driven by the refocusing of the Russian economy on domestic demand, encouragement of import-substituting technologies, and adaptation to the external trade and financial restrictions. More severe staff shortages are forcing companies to make larger investment to intensify production. Furthermore, investment has been expanding in both the private and public sectors. Investment in the private sector is boosted by companies' high financial performance achieved over previous years. As for the public sector, the increase in investment has been associated with, among other things, investment from the NWF in infrastructure and large investment projects of state-owned companies (for details about the effect of fiscal policy on the economy, see Box 9 'Fiscal policy in 2025–2028 under the baseline scenario and its impact on the economy').

The disinflationary scenario assumes that, as companies implement investment projects and increase total factor productivity, the expansion of supply (growth in potential output in 2026–2027) will become more considerable compared to the baseline scenario. Over this period, fixed capital investment will also be growing faster than in the baseline scenario, but this quicker increase will be temporary and will only cause a shift in the level of potential rather than its long-term growth rates. In 2028, both GDP and gross capital formation will return to their balanced growth paths similar to those assumed in the baseline scenario.

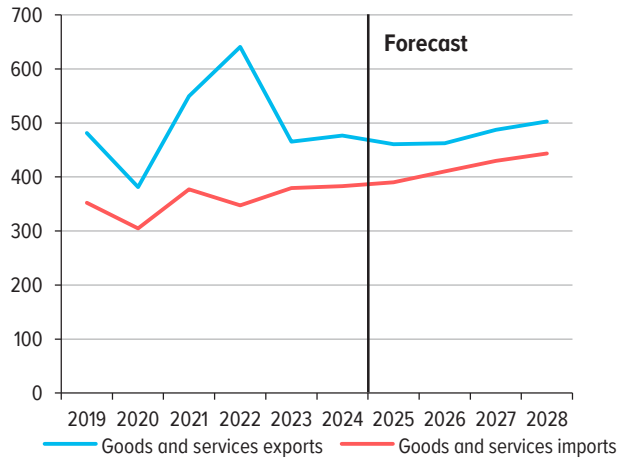
Increasing supply will fully meet domestic demand in 2026–2027. A fast rise in real wages will not have a notable proinflationary effect owing to higher labour productivity, while the employment rate will return to its equilibrium more quickly. The assumptions related to fiscal policy are the same as in the baseline scenario: the Government will be progressively normalising fiscal policy and return to expenditure budgeting in accordance with the long-term parameters of the fiscal rule from 2026.

As a result, inflationary pressures will be easing more quickly and sustainably, which will enable the Bank of Russia to ease its monetary policy more considerably than in the baseline scenario. This scenario assumes that the key rate will average 11.0–13.0% p.a. in 2026. In 2027, like in the baseline scenario, the average key rate will return to its neutral range and stay at this level further on. GDP growth will reach 2.5–3.5% in 2026 and 2.0–3.0% in 2027, returning to 1.5–2.5% in 2028 in line with the dynamics of potential output. A faster rise in domestic demand, compared to the baseline scenario, will be driven by both a more considerable increase in final consumption and gross capital formation.

The current account surplus will be smaller than in the baseline scenario due to larger imports, driven by higher domestic demand, amid comparable exports. The financial account balance will also be below the level assumed in the baseline scenario primarily because of smaller investment in foreign assets and higher domestic investment demand. Reserves will change similarly to the baseline scenario.

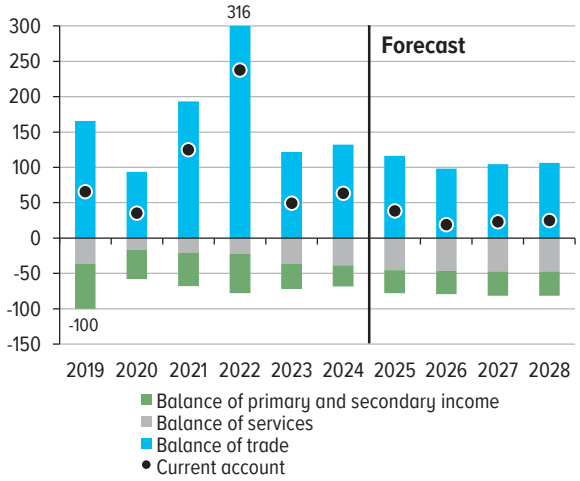
A rise in households' incomes amid high economic activity will expand the range of solvent borrowers, contributing to a faster increase in retail lending as compared to the baseline scenario. Concurrently, companies' potential to implement investment projects will improve and, as a result, they will increase the demand for borrowings. A faster expansion of lending will influence the dynamics of money supply. By the end of the forecast horizon, the growth rates of lending and money supply will return to the path assumed in the baseline scenario.

EXPORT AND IMPORT FORECAST IN DISINFLATIONARY SCENARIO *Chart 3.6*
($ BN)



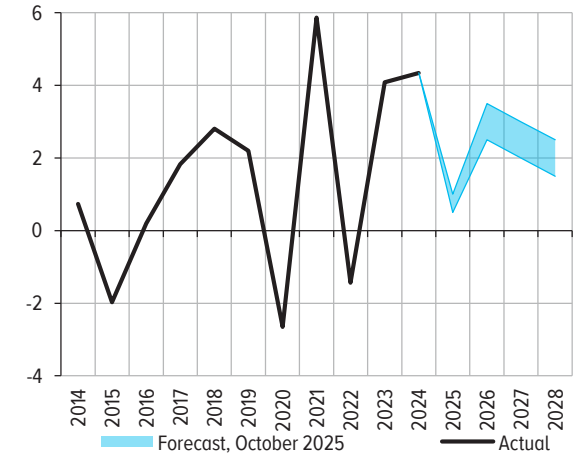
Source: Bank of Russia calculations.

CURRENT ACCOUNT FORECAST IN DISINFLATIONARY SCENARIO *Chart 3.7*
($ BN)



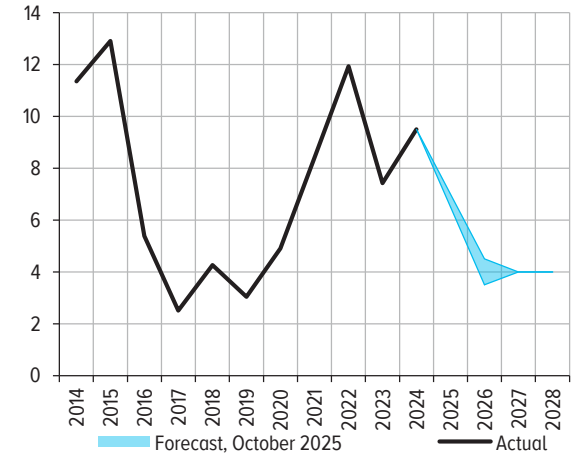
Source: Bank of Russia calculations.

GDP GROWTH PATH IN DISINFLATIONARY SCENARIO *Chart 3.8*
(% CHANGE YOY)



Source: Bank of Russia calculations.

INFLATION PATH IN DISINFLATIONARY SCENARIO *Chart 3.9*
(% CHANGE YOY)



Source: Bank of Russia calculations.

BANK OF RUSSIA'S FORECAST IN DISINFLATIONARY SCENARIO *Table 3.3*

	2023 (actual)	2024 (actual)	2025	2026	2027	2028
Key macroeconomic indicators (% growth YoY, unless indicated otherwise)						
Inflation, % in December YoY	7.4	9.5	6.5–7.0	3.5–4.5	4.0	4.0
Inflation, yearly average, % YoY	5.9	8.4	8.8–8.9	5.0–6.0	4.0	4.0
Key rate, yearly average, % p.a.	9.9	17.5	19.2[1]	11.0–13.0	7.5–8.5	7.5–8.5
Gross domestic product	4.1	4.3	0.5–1.0	2.5–3.5	2.0–3.0	1.5–2.5
– % change in Q4 YoY	*5.3*	*4.5*	*(-0.5)–0.5*	*2.5–3.5*	*2.0–3.0*	*1.5–2.5*
Final consumption expenditure	6.5	5.2	1.0–2.0	2.0–3.0	2.0–3.0	1.5–2.5
– households	*7.5*	*5.4*	*1.0–2.0*	*2.0–3.0*	*2.0–3.0*	*1.5–2.5*
Gross capital formation	19.8	2.1	(-1.0)–1.0	4.0–6.0	3.0–5.0	1.0–3.0
– gross fixed capital formation	*7.8*	*6.0*	*1.0–3.0*	*3.5–5.5*	*2.0–4.0*	*1.0–3.0*
Exports	–[2]	–[2]	(-3.0)–(-1.0)	0.5–2.5	1.0–3.0	1.0–3.0
Imports	–[2]	–[2]	(-2.0)–0.0	2.5–4.5	2.0–4.0	1.0–3.0
Money supply (national definition)	19.4	19.2	7–10	7–12	8–13	7–12
Banking system claims on economy in rubles and foreign currency[3]	22.3	16.4	8–11	8–13	9–14	8–13
– on organisations	*22.0*	*19.0*	*10–13*	*9–14*	*9–14*	*8–13*
– on households, including	*23.0*	*9.7*	*1–4*	*7–12*	*9–14*	*8–13*
housing mortgage loans	*29.4*	*10.4*	*3–6*	*8–13*	*10–15*	*10–15*
Balance of payments indicators[4] ($ bn, unless indicated otherwise)						
Current account	**49**	**63**	**38**	**19**	**23**	**25**
Balance of trade	122	132	116	98	105	106
Exports	*425*	*434*	*414*	*416*	*440*	*454*
Imports	*303*	*302*	*298*	*318*	*335*	*348*
Balance of services	-36	-38	-45	-46	-47	-47
Exports	*40*	*43*	*47*	*47*	*48*	*49*
Imports	*77*	*81*	*92*	*93*	*95*	*96*
Balance of primary and secondary income	-36	-30	-32	-33	-34	-34
Current account and capital account balance	**48**	**63**	**38**	**19**	**23**	**25**
Financial account balance, net of reserve assets	**49**	**57**	**51**	**33**	**21**	**22**
Net incurrence of liabilities	-7	9	1	6	7	8
Net acquisition of financial assets, net of reserve assets	41	66	52	39	28	30
Net errors and omissions	-9	-10	-11	0	0	0
Change in reserve assets	**-10**	**-4**	**-24**	**-14**	**2**	**3**
Oil price for tax purposes,[5] yearly average, $ per barrel	**63**	**68**	**58**	**55**	**60**	**60**

[1] *Given that from 1 January 2025 through 26 October 2025 the average key rate was 19.8%, the average key rate from 27 October 2025 through 31 December 2025 is forecast in the range of 16.4–16.5%. Additional information on the format of the key rate forecast is available in the methodological note.*

[2] *Rosstat has not yet released the 2023–2024 data on GDP by expenditure in terms of exports and imports.*

[3] *The banking system's claims on the economy mean all claims of the banking system on non-financial and financial organisations and households in 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 participation in non-financial and financial organisations' equity, and other receivables on settlements with non-financial and financial organisations and households. The growth rates of claims are adjusted for foreign currency revaluation. For the purpose of the adjustment for foreign currency revaluation, the growth of claims in foreign currency and precious metals is recalculated into rubles at the period average RUB/USD exchange rate.*

[4] *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.*

[5] *The Russian crude price determined for tax purposes and published on a monthly basis on the website of the Ministry of Economic Development of the Russian Federation.*

Source: Bank of Russia.

Proinflationary scenario

The scenario is based on a number of assumptions. Firstly, the cooling in domestic demand and the easing of inflationary pressures will turn out to be less stable than assumed in the baseline scenario. According to the proinflationary scenario, demand will be higher, whereas supply will be lower compared to the baseline scenario. Supply dynamics are expected to be adversely affected by increasing sanction pressure, which will be reducing productivity as some technologies will become inaccessible. Due to higher demand and lower supply, enterprises will still be facing high competition for workers. Consequently, the growth rate of wages will continue to significantly exceed that of labour productivity, also pushing up prices. Investment demand will be heightened as well, which will be associated with the need to expand production capacities given the constraints in the labour market and the loss of access to some foreign technologies. High domestic demand, coupled with companies' rising labour and investment costs, will cause higher inflationary pressures than in the baseline scenario.

Secondly, as long-lasting inflationary pressures will persist further, households' and businesses' inflation expectations will be more backward-looking than in the baseline scenario and rather rely on the factors that might change their future incomes, which will also have a proinflationary effect.

Thirdly, the scenario assumes a steadily higher share of budget expenditures on subsidised lending programmes. This will be translated into an even faster expansion of domestic demand, thus amplifying inflationary pressures. In the conditions of a steadily higher share of budget expenditures on subsidised programmes, the level of the longer-run neutral rate in the economy will be higher due a more significant increase in lending that is not responsive to the extent of monetary policy tightness.

Fourthly, the scenario assumes an expansion of measures of a protectionist nature to encourage import substitution amid the sanctions. Any new tariffs have a proinflationary effect. In this case, they will push up prices for imports and cause higher demand for domestic goods, which will increase prices for the latter. In the conditions of unanchored inflation expectations, the second-round effects of such measures on price dynamics might be more pronounced and longer-lasting.

Fifthly, due to tighter sanctions, Russian crude prices will be lower than in the baseline scenario. Tightening sanctions on Russian crude exports will entail a moderate rise in the discount for Russian crude grades relative to Brent, as a result of which the crude price calculated for tax purposes will stabilise at lower levels in the medium term than predicted in the baseline scenario.

Combined, the above factors will entail higher inflationary pressures beginning from 2026 than assumed in the baseline scenario, forcing the Bank of Russia to take more decisive measures so as to bring inflation down to the target. Consequently, the average key rate will equal 16.0–18.0% p.a. in 2026 and decrease to 10.5–11.5% p.a. in 2027. As the neutral level of the key rate is higher in this scenario, the key rate will average 8.5–9.5% in 2028. Given the monetary policy pursued, annual inflation will equal 5.0–6.0% in 2026 and return to its target further on.

Influenced by the above factors, primarily the situation in the labour market and inflation expectations, consumption will be growing faster in 2026 than assumed by the baseline scenario. Due to the loss of access to some technologies and higher domestic demand, companies will be actively using investment to expand their production capacities. As a result, the growth rate of GDP in 2026 will reach 1.0–2.0%, which is higher than in the baseline scenario. In 2027, GDP growth will decelerate to

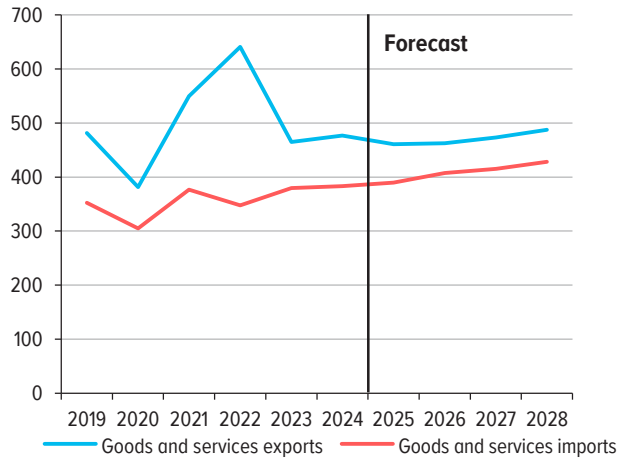
0.5–1.5% due to external sanctions, lower crude prices, and tight monetary conditions. In 2028, output dynamics will return to a balanced growth rate of 1.5–2.5%.

Because of lower crude prices, the current account surplus in 2027–2028 will be smaller than in the baseline scenario. As regards the financial account, the proinflationary scenario assumes that, because of high interest rates, Russian residents' demand for foreign assets in 2026–2027 will be lower than in the baseline forecast. According to this scenario, the Bank of Russia's reserves will decline in 2027–2028 due to fiscal rule-based foreign currency sales coupled with lower oil price dynamics than predicted in the baseline scenario.

Lending growth rates in 2026 will be higher compared to the baseline scenario. The inflow of budget funds into the economy implies a higher fiscal multiplier as the funds will be allocated through government support programmes. As a result, companies and households will demonstrate higher demand for loans in order to increase production and consumption, including real estate purchases. Tighter monetary policy will help limit credit activity, but in 2026, monetary tightening will not fully offset the effect of subsidised lending programmes. Consequently, money supply will expand more considerably than in the baseline scenario. In 2027–2028, the growth rate of money supply will return to that forecast in the baseline scenario.

EXPORT AND IMPORT FORECAST IN PROINFLATIONARY SCENARIO
($ BN)

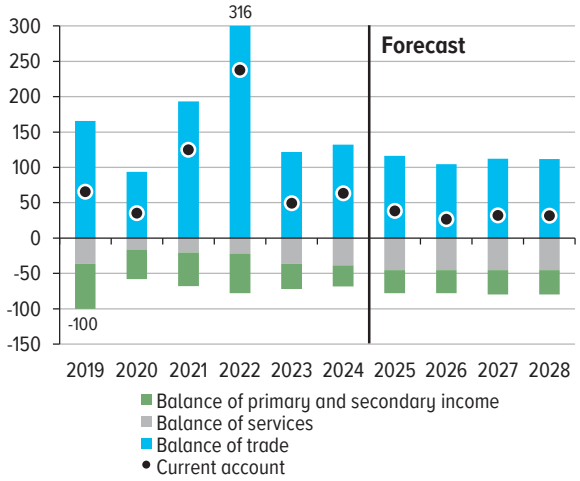
Chart 3.10



Source: Bank of Russia calculations.

CURRENT ACCOUNT FORECAST IN PROINFLATIONARY SCENARIO
($ BN)

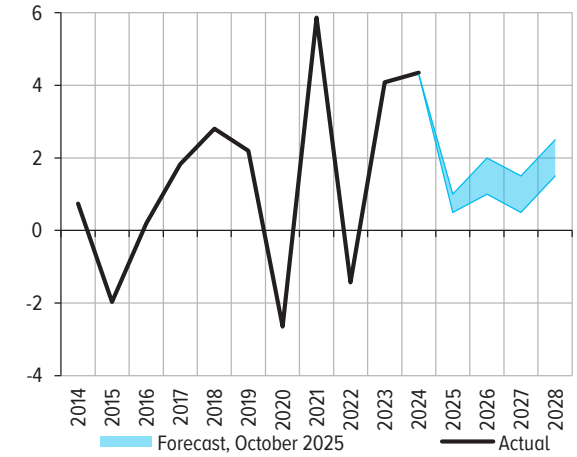
Chart 3.11



Source: Bank of Russia calculations.

GDP GROWTH PATH IN PROINFLATIONARY SCENARIO
(% CHANGE YOY)

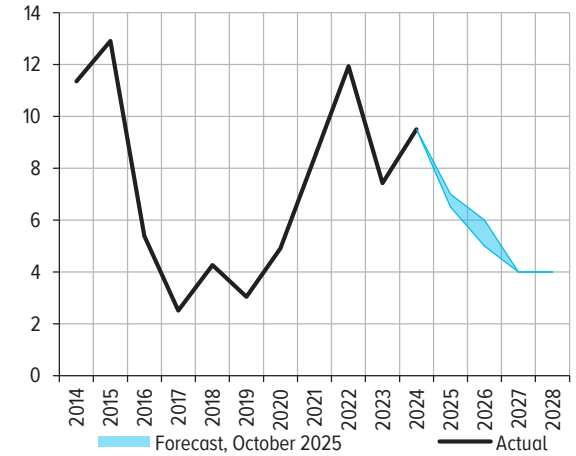
Chart 3.12



Source: Bank of Russia calculations.

INFLATION PATH IN PROINFLATIONARY SCENARIO
(% CHANGE YOY)

Chart 3.13



Source: Bank of Russia calculations.

BANK OF RUSSIA'S FORECAST IN PROINFLATIONARY SCENARIO *Table 3.4*

	2023 (actual)	2024 (actual)	2025	2026	2027	2028
Key macroeconomic indicators (% growth YoY, unless indicated otherwise)						
Inflation, % in December YoY	7.4	9.5	6.5–7.0	5.0–6.0	4.0	4.0
Inflation, yearly average, % YoY	5.9	8.4	8.8–8.9	5.9–6.9	4.0–4.5	4.0
Key rate, yearly average, % p.a.	9.9	17.5	19.2[1]	16.0–18.0	10.5–11.5	8.5–9.5
Gross domestic product	4.1	4.3	0.5–1.0	1.0–2.0	0.5–1.5	1.5–2.5
– % change in Q4 YoY	*5.3*	*4.5*	*(-0.5)–0.5*	*1.0–2.0*	*0.5–1.5*	*1.5–2.5*
Final consumption expenditure	6.5	5.2	1.0–2.0	1.5–2.5	0.5–1.5	1.5–2.5
– households	*7.5*	*5.4*	*1.0–2.0*	*1.5–2.5*	*0.5–1.5*	*1.5–2.5*
Gross capital formation	19.8	2.1	(-1.0)–1.0	(-0.5)–1.5	(-0.5)–1.5	1.0–3.0
– gross fixed capital formation	*7.8*	*6.0*	*1.0–3.0*	*1.0–3.0*	*0.5–2.5*	*1.0–3.0*
Exports	–[2]	–[2]	(-3.0)–(-1.0)	0.5–2.5	1.0–3.0	1.0–3.0
Imports	–[2]	–[2]	(-2.0)–0.0	1.5–3.5	(-1.0)–1.0	1.0–3.0
Money supply (national definition)	19.4	19.2	7–10	8–13	7–12	7–12
Banking system claims on economy in rubles and foreign currency[3]	22.3	16.4	8–11	9–14	8–13	8–13
– on organisations	*22.0*	*19.0*	*10–13*	*10–15*	*8–13*	*8–13*
– on households, including	*23.0*	*9.7*	*1–4*	*8–13*	*8–13*	*8–13*
housing mortgage loans	*29.4*	*10.4*	*3–6*	*9–14*	*10–15*	*10–15*
Balance of payments indicators[4] ($ bn, unless indicated otherwise)						
Current account	**49**	**63**	**38**	**24**	**26**	**27**
Balance of trade	122	132	116	101	105	106
Exports	*425*	*434*	*414*	*416*	*426*	*439*
Imports	*303*	*302*	*298*	*315*	*321*	*333*
Balance of services	-36	-38	-45	-45	-46	-46
Exports	*40*	*43*	*47*	*47*	*48*	*49*
Imports	*77*	*81*	*92*	*93*	*94*	*95*
Balance of primary and secondary income	-36	-30	-32	-32	-33	-33
Current account and capital account balance	**48**	**63**	**38**	**24**	**26**	**27**
Financial account balance, net of reserve assets	**49**	**57**	**51**	**37**	**29**	**29**
Net incurrence of liabilities	-7	9	1	5	5	6
Net acquisition of financial assets, net of reserve assets	41	66	52	42	34	35
Net errors and omissions	-9	-10	-11	0	0	0
Change in reserve assets	**-10**	**-4**	**-24**	**-14**	**-3**	**-2**
Oil price for tax purposes,[5] yearly average, $ per barrel	**63**	**68**	**58**	**55**	**55**	**55**

[1] *Given that from 1 January 2025 through 26 October 2025 the average key rate was 19.8%, the average key rate from 27 October 2025 through 31 December 2025 is forecast in the range of 16.4–16.5%. Additional information on the format of the key rate forecast is available in the methodological note.*

[2] *Rosstat has not yet released the 2023–2024 data on GDP by expenditure in terms of exports and imports.*

[3] *The banking system's claims on the economy mean all claims of the banking system on non-financial and financial organisations and households in 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 participation in non-financial and financial organisations' equity, and other receivables on settlements with non-financial and financial organisations and households. The growth rates of claims are adjusted for foreign currency revaluation. For the purpose of the adjustment for foreign currency revaluation, the growth of claims in foreign currency and precious metals is recalculated into rubles at the period average RUB/USD exchange rate.*

[4] *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.*

[5] *The Russian crude price determined for tax purposes and published on a monthly basis on the website of the Ministry of Economic Development of the Russian Federation.*

Source: Bank of Russia.

Risk scenario

The scenario assumes a significant deterioration of the external environment. Another sharp rise in tariffs in 2026 is expected to cause hard landing of major economies, in particular a recession in the USA and the euro area. Negative changes in the capital market induced by the crisis in the real economy and imbalances accumulated in advanced economies' financial markets will entail a global financial crisis, the scale of which might be comparable with that of the 2007–2008 crisis.

This scenario assumes that trade tariffs will considerably increase in 2026 Q1, while crisis developments will start in 2026 Q2, peaking in 2026 Q3–Q4. This is the difference between this scenario and the risk scenario 'Global Crisis', which was presented in MPG 2025–2027 and where crisis events began to manifest themselves earlier relative to the start of the forecast horizon, namely from 2025 Q1, peaking in 2025 Q2–Q3. The impact of crisis developments on the forecast dynamics of the key indicators will be extended over time as negative shocks materialise in the world economy.

Global demand will plummet amid a recession in the two largest economies (the USA and the euro area) and a considerable slowdown in China's economic growth. Central banks will respond to the crisis by cutting their policy rates. Oil prices will notably drop in 2026 and will not bounce back to the level of the baseline scenario even by the end of the forecast horizon.

In addition to the worsening terms of trade, tougher sanctions will lead to an increase in the discount for Russian exports and a decline in oil production and exports.

In 2026–2027, fiscal policy is assumed to prop up the economy owing to a structural primary deficit. In 2028, the Government is expected to return to expenditure budgeting according to the fiscal rule. However, a slump in commodity prices amid the current parameters of the fiscal rule will be the reason to extensively use the liquid part of the NWF, which involves the risks of a quick depletion of the NWF's resources already by the end of 2026. Given a lower equilibrium of global commodity prices, the Government will need to transform the fiscal rule gradually shifting towards new levels of the base crude price of $45 per barrel in 2026 and $40 per barrel from 2027. A reduction in basic OGR following a decline in the fiscal rule-based cut-off price will contribute to budget consolidation, that is, a gradual decrease in budget expenditures in relative terms.

GDP will contract by 2.5–3.5% in 2026 and by 2.0–3.0% in 2027. During the crisis period, budget spending to support the economy will increase compared to the baseline scenario but will still be lower than in 2020 and 2022–2023 due to reduced opportunities amid worse conditions in foreign trade. In 2028, the economy will be expanding at a recovery pace of 2.0–3.0%.

However, a global financial crisis and tougher sanctions will entail a decrease in the Russian economy's potential and its growth rate. A plunge in supply will cause elevated inflationary pressures. During the first crisis year, inflation will speed up to 10.5–12.5%. This will force the Bank of Russia to take decisive response measures in order to prevent a long-lasting deviation of inflation from the target and a persistent rise in inflation expectations – the key rate will average 17.5–19.5% p.a. over 2026. Crisis developments in the world economy will peak in 2026 Q2–Q3 and will continue to affect the Russian economy at the beginning of 2027 as well. Consequently, in early 2027, the Bank of Russia will be forced to maintain monetary conditions as restrictive as at the end of 2026, as a result of which the key rate will average 18.0–20.0% p.a. over the year. High interest rates will help slow down inflation to 8.0–10.0% in 2027. The key rate will not be cut to its neutral level by 2028 because inflationary pressures will remain high by the beginning of the year. As a result, the key rate will average

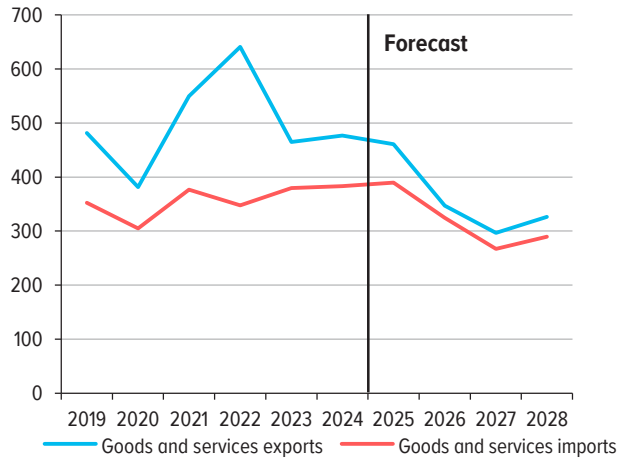
10.0–11.0% p.a. over 2028. As monetary conditions will stay restrictive, inflation will decelerate to 4.0–4.5% in 2028. The key rate will return to its neutral range beyond the forecast horizon.

Amid low oil and gas prices and contracting external demand, exports will plummet. Dragged down by lower domestic demand, imports will be declining as well, albeit more moderately. Consequently, the current account balance will decrease in 2026 and will be notably lower in 2027 than predicted in the baseline scenario. Nevertheless, it is expected to expand in 2028 as commodity exports bounce back.

High uncertainty about future incomes and, accordingly, the ability to repay loans will limit both the demand for corporate and retail loans and banks' willingness to expand lending. Combined with higher interest rates, this will considerably decelerate the growth of lending. Nevertheless, owing to increasing budget support for the economy in crisis conditions, the growth rate of money supply will not drop notably. In 2028, as the economy adapts to the situation and monetary policy eases, credit activity will be rebounding amid a gradual reduction in the amount of government aid to the economy. By the end of the forecast period, the growth rate of money supply dependent on these two factors will be close to the level assumed in the baseline scenario.

EXPORT AND IMPORT FORECAST IN RISK SCENARIO
($ BN)

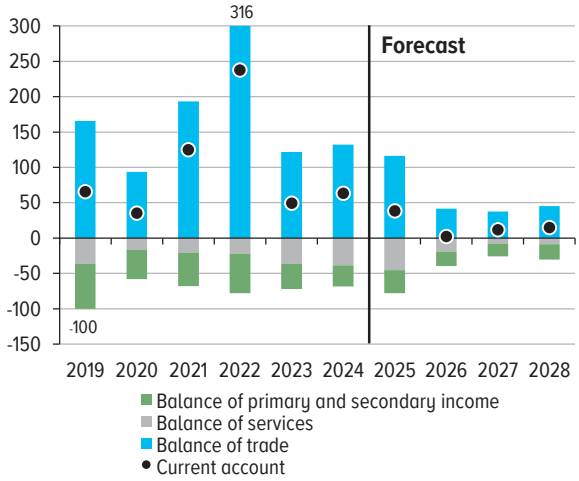
Chart 3.14



Source: Bank of Russia calculations.

CURRENT ACCOUNT FORECAST IN RISK SCENARIO
($ BN)

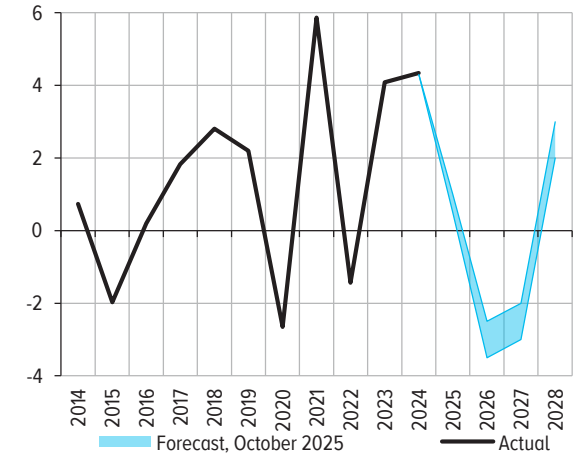
Chart 3.15



Source: Bank of Russia calculations.

GDP GROWTH PATH IN RISK SCENARIO
(% CHANGE YOY)

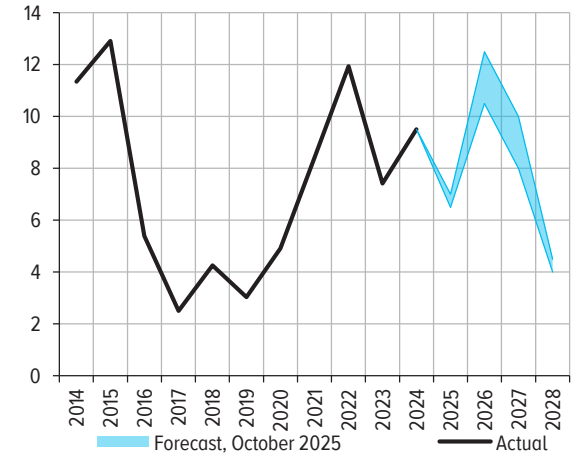
Chart 3.16



Source: Bank of Russia calculations.

INFLATION PATH IN RISK SCENARIO
(% CHANGE YOY)

Chart 3.17



Source: Bank of Russia calculations.

BANK OF RUSSIA'S FORECAST IN RISK SCENARIO

Table 3.5

	2023 (actual)	2024 (actual)	2025	2026	2027	2028
Key macroeconomic indicators (% growth YoY, unless indicated otherwise)						
Inflation, % in December YoY	7.4	9.5	6.5–7.0	10.5–12.5	8.0–10.0	4.0–4.5
Inflation, yearly average, % YoY	5.9	8.4	8.8–8.9	7.8–9.8	10.6–12.6	5.7–6.7
Key rate, yearly average, % p.a.	9.9	17.5	19.2[1]	17.5–19.5	18.0–20.0	10.0–11.0
Gross domestic product	4.1	4.3	0.5–1.0	(-3.5)–(-2.5)	(-3.0)–(-2.0)	2.0–3.0
– % change in Q4 YoY	*5.3*	*4.5*	*(-0.5)–0.5*	*(-7.0)–(-6.0)*	*0.0–1.0*	*3.0–4.0*
Final consumption expenditure	6.5	5.2	1.0–2.0	(-1.0)–0.0	(-6.5)–(-5.5)	2.5–3.5
– households	*7.5*	*5.4*	*1.0–2.0*	*(-1.5)–(-0.5)*	*(-7.0)–(-6.0)*	*3.0–4.0*
Gross capital formation	19.8	2.1	(-1.0)–1.0	(-13.0)–(-11.0)	(-7.0)–(-5.0)	2.5–4.5
– gross fixed capital formation	*7.8*	*6.0*	*1.0–3.0*	*(-4.0)–(-2.0)*	*(-2.0)–0.0*	*1.0–3.0*
Exports	–[2]	–[2]	(-3.0)–(-1.0)	(-4.0)–(-2.0)	(-6.0)–(-4.0)	2.0–4.0
Imports	–[2]	–[2]	(-2.0)–0.0	(-6.0)–(-4.0)	(-23.0)–(-21.0)	4.0–6.0
Money supply (national definition)	19.4	19.2	7–10	4–9	6–11	8–13
Banking system claims on economy in rubles and foreign currency[3]	22.3	16.4	8–11	0–5	2–7	9–14
– on organisations	*22.0*	*19.0*	*10–13*	*2–7*	*4–9*	*9–14*
– on households, including	*23.0*	*9.7*	*1–4*	*(-4)–1*	*(-2)–3*	*9–14*
housing mortgage loans	*29.4*	*10.4*	*3–6*	*1–6*	*1–6*	*11–16*
Balance of payments indicators[4] ($ bn, unless indicated otherwise)						
Current account	**49**	**63**	**38**	**2**	**12**	**15**
Balance of trade	122	132	116	42	38	45
Exports	*425*	*434*	*414*	*306*	*255*	*282*
Imports	*303*	*302*	*298*	*264*	*218*	*237*
Balance of services	-36	-38	-45	-19	-8	-9
Exports	*40*	*43*	*47*	*41*	*41*	*44*
Imports	*77*	*81*	*92*	*60*	*50*	*53*
Balance of primary and secondary income	-36	-30	-32	-20	-18	-22
Current account and capital account balance	**48**	**63**	**38**	**2**	**12**	**15**
Financial account balance, net of reserve assets	**49**	**57**	**51**	**17**	**20**	**19**
Net incurrence of liabilities	-7	9	1	-6	2	5
Net acquisition of financial assets, net of reserve assets	41	66	52	12	22	24
Net errors and omissions	-9	-10	-11	0	0	0
Change in reserve assets	**-10**	**-4**	**-24**	**-15**	**-8**	**-4**
Oil price for tax purposes,[5] yearly average, $ per barrel	**63**	**68**	**58**	**35**	**30**	**35**

[1] *Given that from 1 January 2025 through 26 October 2025 the average key rate was 19.8%, the average key rate from 27 October 2025 through 31 December 2025 is forecast in the range of 16.4–16.5%. Additional information on the format of the key rate forecast is available in the methodological note.*

[2] *Rosstat has not yet released the 2023–2024 data on GDP by expenditure in terms of exports and imports.*

[3] *The banking system's claims on the economy mean all claims of the banking system on non-financial and financial organisations and households in 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 participation in non-financial and financial organisations' equity, and other receivables on settlements with non-financial and financial organisations and households. The growth rates of claims are adjusted for foreign currency revaluation. For the purpose of the adjustment for foreign currency revaluation, the growth of claims in foreign currency and precious metals is recalculated into rubles at the period average RUB/USD exchange rate.*

[4] *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.*

[5] *The Russian crude price determined for tax purposes and published on a monthly basis on the website of the Ministry of Economic Development of the Russian Federation.*

Source: Bank of Russia.

BOX 9. FISCAL POLICY IN 2025–2028 UNDER THE BASELINE SCENARIO AND ITS IMPACT ON THE ECONOMY

Fiscal policy is an essential part of the assumptions of the forecast as it affects domestic demand, business activity, and inflation. Changes in fiscal policy are taken into account when the Bank of Russia updates its forecast

Fiscal policy remains a major factor influencing aggregate demand and inflation in Russia. The Bank of Russia's baseline scenario relies on the budget projections announced by the Ministry of Finance and its own macroeconomic assumptions. The forecast assumes that the Government will adjust the fiscal rule parameters over the forecast horizon and normalise its fiscal policy, returning to budget spending according to the fiscal rule and decreasing the structural primary deficit to zero beginning from 2026 (Chart 9.1).

BUDGET IN 2025 AND AMENDMENTS TO THE LAW ON THE BUDGET

The Ministry of Finance did not change its expenditure targets for 2025 stipulated according to the amendments to the law on the budget (₽42.3 trillion),[1] but noted that it might use the allocations of previous years that had not been used before, which means that total spending over the year will reach ₽42.8 trillion.

Concurrently, the Ministry of Finance significantly reduced the estimate of NOGR for 2025, which is attributable to both a weaker forecast of macroeconomic indicators and lower collection rates of a number of payments due (the most considerable adjustment is associated with imports-related payments and interest income from bank deposits).

The rise in planned expenditures combined with the decline in expected NOGR implies an increase in both the structural primary deficit, specifically from ₽0.4 trillion to ₽2.8 trillion, and borrowings (the Ministry of Finance expanded the programme of gross borrowing through OFZ by ₽2.2 trillion to ₽7 trillion).

MEDIUM-TERM FISCAL POLICY PATH

Taking into account the trends in the global energy commodity market and planned further investments from the NWF in infrastructure projects inside Russia, the Ministry of Finance proposes adjusting the base price path in the fiscal rule by providing for its gradual $1 decline every year, namely from $60 per barrel in 2025 to $55 per barrel in 2030.[2] The reduction in the cut-off price according to the fiscal rule means a decline in the oil rent, which depends on the external environment, that is used to cover budget expenditures (as estimated by the Ministry of Finance, basic OGR will drop from 4% of GDP in 2025 to 3.5% of GDP in 2028). This is in line with a certain tightening of fiscal policy in the next few years.

With expenditure budgeting according to the fiscal rule, the amount of spending in nominal terms will continue to grow in the next three years. This will be ensured through a number of innovations related to certain taxes and charges:

- the increase in the VAT base rate from 20% to 22% (up to ₽1.4–1.5 trillion in 2026 prices);
- the reduction in the threshold amount for applying the simplified and patent-based tax systems for SMEs (up to ₽0.2 trillion in 2026 prices);
- higher indexations of certain excise rates (up to ₽0.1 trillion in 2026 prices); and
- the introduction of taxes on gambling business (up to ₽0.1 trillion in 2026 prices).

According to the current version of the fiscal rule, additional expenditures will be financed from the new taxes and charges.

The Russian Government also plans to considerably expand social payments to households through a significant increase in the minimum monthly wage by 20.7% and the transition to two indexations of insurance pensions per year from 2027 (above inflation). As a result, the share of allocations for social policy in the structure of total expenditures will remain high.

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[1] Federal Law No. 152-FZ, dated 24 June 2025, 'On Amending the Federal Law 'On the Federal Budget for 2025 and the 2026–2027 Planning Period'.

[2] The base price for gas will remain at the level of $250 per 1,000 cubic metres until 2030. In the future, after 2030, base prices for oil and gas are planned to be indexed by 2% each year.

FISCAL IMPULSE ESTIMATES

There are multiple approaches to estimating a fiscal impulse, which are based on both deviations from long-term equilibrium levels of budget spending and changes in the parameters of budget spending between periods (an increase / decrease in the structural (non-cyclical) budget deficit / surplus).

One of the approaches implies that fiscal rule-based budget planning and spending are similar to neutral fiscal policy that does not have a significant effect on the deviation of output from its potential level and inflation from its target. Any extra inflows of budget funds into the economy mean a positive impulse, whereas additional outflows from the economy into the budget involve a negative impulse. Furthermore, a rise / shortfall in OGR is assessed as flows related to the external commodity cycle that are independent of the Russian Government's decisions.

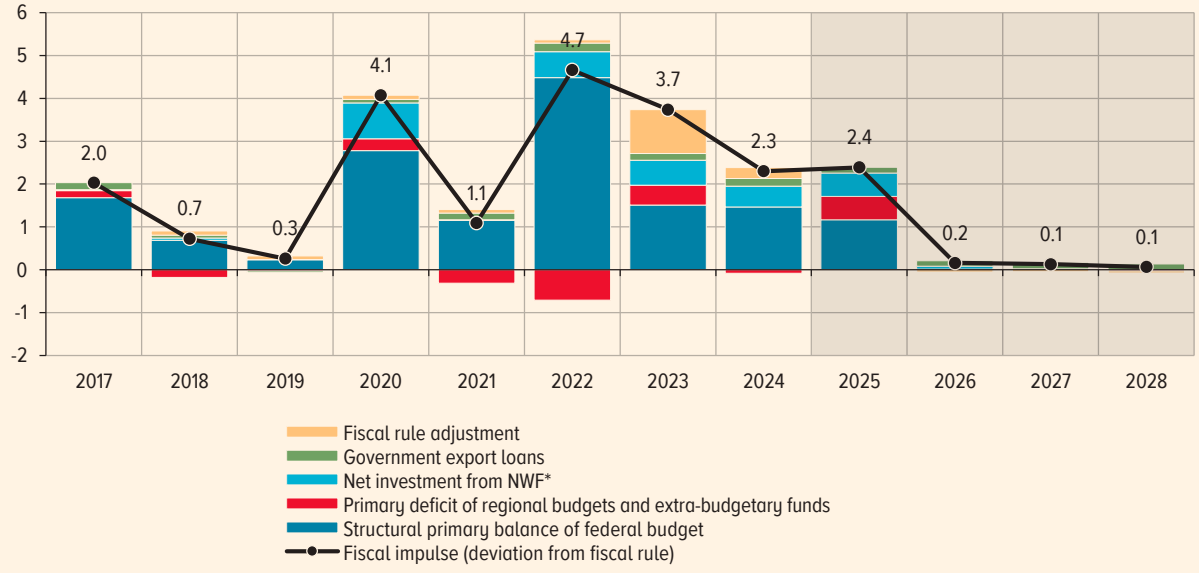
Pursuant to this approach, the overall fiscal impulse for Russia's economy may be calculated as the total of the following components:

- the deviation of federal budget spending from the level provided for by the fiscal rule (the structural primary deficit);
- the adjustment of the key parameter of the fiscal rule, which is base prices for commodities;
- the primary deficit of the consolidated budget of the Russian constituent territories and government extra-budgetary funds (for assessment at the level of the budget system);
- net investment from the NWF inside the Russian economy; and
- quasi-fiscal flows, which are statistically recognised in the sources of financing[3] (given that most components are minor, only net issuance of government export loans is taken into account).

A similar approach to estimating the fiscal impulse is presented by the Ministry of Finance in the draft Guidelines for Fiscal, Tax and Customs and Tariff Policy for 2026 and the 2027–2028 Planning Period.

From the effective date of the latest version of the fiscal rule, which is based on fixed base prices for energy commodities (has been applied with a number of pauses since 2017), the fiscal impulse has been almost always positive (Chart 9.1). During certain periods, namely in 2020 and 2022, its amount reached 4–5% of GDP, while in 2018–2019, fiscal policy was close to neutral according to this approach. Taking

FISCAL IMPULSE ESTIMATE *Chart 9.1*
(PP OF GDP)



* *Adjusted for the Bank of Russia's profit from selling its equity stake in Sberbank transferred to the budget.*
Sources: Ministry of Finance, Ministry of Economic Development, Rosstat, Bank of Russia calculations.

[3] In accordance with the methodology of budget reporting: fulfilment of government guarantees, the balance of transactions with precious metals and stones, privatisation, compensations for household savings, etc.

into account the budget projections submitted to the State Duma, **the positive fiscal impulse is expected to decline and the contribution of fiscal policy to the dynamics of the output gap and aggregate demand is supposed to decrease close to zero**, while the annual drop in the cut-off price provided for by the fiscal rule will reduce the overall impulse by up to 0.1 pp of GDP (Chart 9.1).

This approach almost completely leaves out the impact of the structure of revenues and expenditures on the economy and inflation (except for the exclusion from expenditures of government debt servicing costs). However, various types of taxes and charges, just like various areas of budget spending, may have different effects on the dynamics of aggregate demand and business activity.

FISCAL IMPULSE IN THE QUARTERLY PROJECTION MODEL

According to the Bank of Russia's QPM,[4] the fiscal impulse is calculated separately with regard to budget revenues and expenditures. The impulse from spending takes into account one-off deviations of primary expenditures from the long-term component (as % of GDP) provided for by the fiscal rule and long-term NOGR. The impulse from revenues also results from a deviation of NOGR from their equilibrium levels, which are estimated using the models and taking into account the projections of the Ministry of Finance and permanent tax changes. By using NOGR as the main revenues when estimating the impulse from revenues, it is possible to take into account the cyclical adjustment of the world economy (a rise / shortfall in OGR is only related to the external environment). However, there may also be an impulse resulting from adjustments of revenues and expenditures to new equilibrium levels when the structural parameters are changed. Specifically, a change in the fiscal rule parameters may create a separate impulse from basic OGR. Another impulse can result from discretionary spending – net investment in the NWF and a temporary deviation of the structural primary deficit from the level stipulated by the fiscal rule in 2023–2024.

Deviations from equilibrium levels and discretionary spending translate as fiscal shocks impacting the output gap with their own multiplier. A positive deviation of revenues and expenditures from their equilibrium levels has a negative and positive effect, respectively. This is how the effect on output is estimated at the level of both the federal budget and the regional budgets and extra-budgetary funds.

[4] For details, refer to Quarterly Projection Model for Russia with the Labour Market Component, codes of the model.

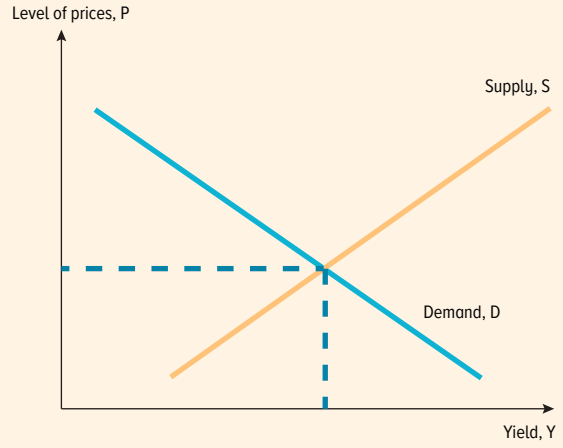
BOX 10. THE CONCEPT OF A LONG-TERM ECONOMIC EQUILIBRIUM AND DEVIATIONS OF KEY MACROECONOMIC VARIABLES FROM IT

The Bank of Russia assesses the extent of the economy's deviation from a balanced and stable growth path. Monetary policy aims to achieve low inflation and helps return the economy to this path

The concepts of a short- and long-term equilibrium in the economy are widely applied in the context of macroeconomic policy. In a **long-term equilibrium**, all key economic indicators grow at a constant pace determined by fundamental factors. In other words, a long-term equilibrium implies no specific point but rather a steady path of economic development. A **short-term equilibrium** is price and yield levels in a particular market or group of markets that balance current demand and supply. When the central bank implements its monetary policy under the inflation targeting regime in a long-term equilibrium, consumer prices rise at a pace consistent with the inflation target and economic growth rates are equal to potential ones.

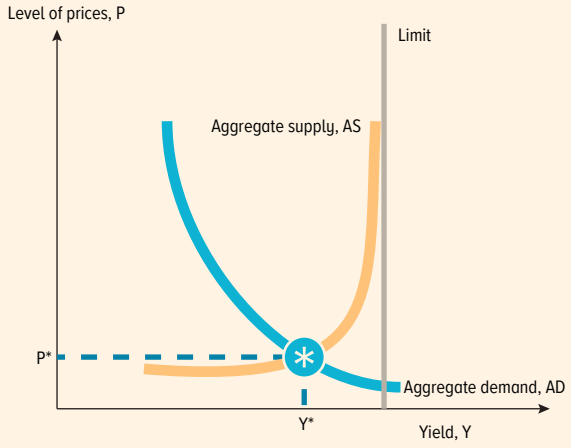
Let us consider demand and supply curves for a particular product or service. The demand curve (D) shows a negative correlation between consumption of a particular product or service and its price. The supply curve (S) in turn illustrates a positive correlation between yield / supply of a particular product or service and its price in the market. The point where these two curves intersect is a short-term equilibrium in a particular market.

DEMAND AND SUPPLY CURVES IN MARKET *Chart 10.1*



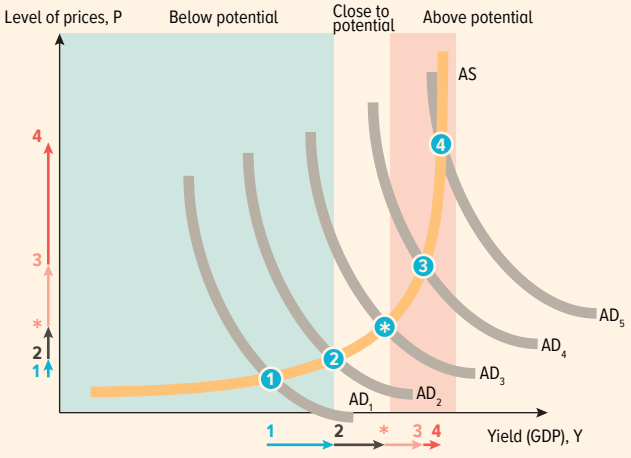
Source: Bank of Russia.

AGGREGATE DEMAND AND SUPPLY CURVES IN ECONOMY *Chart 10.2*



Source: Bank of Russia.

AD CURVE SHIFT AFTER DEMAND SHOCK *Chart 10.3*

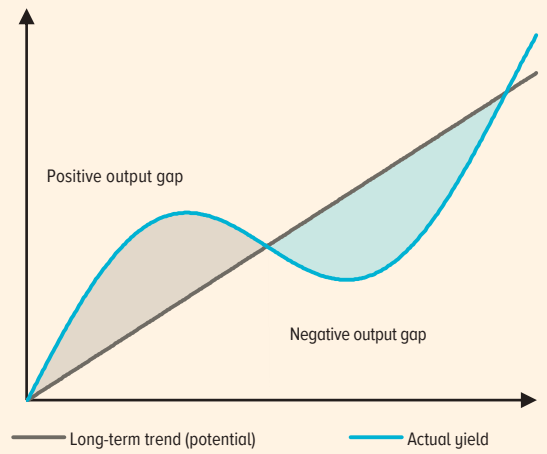


Source: Bank of Russia.

To generate such a chart for the economy in general, we need to aggregate all individual demand and supply curves for all products and services. It is possible to assume that this general chart will be similar to an individual one, but this is not true. There are constraints in the economy preventing it from expanding supply above a certain limit. They include, among other things, labour market tightness (it is impossible to quickly increase employment in the entire economy, especially when there are demographic, qualification, migration and other limitations), trade and investment barriers, etc. Therefore, the general chart for aggregate supply will look differently.

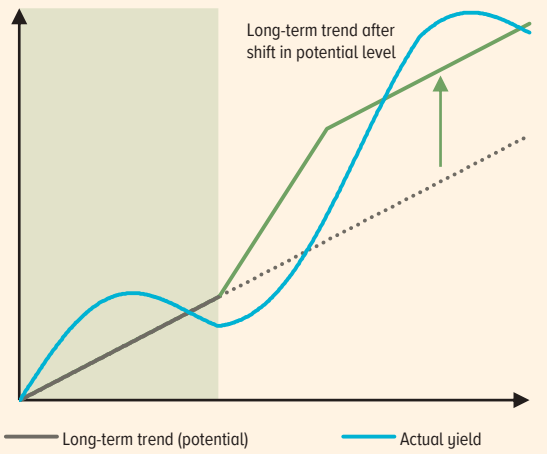
In this chart, AS is the aggregate supply curve in the country (output plus imports), and AD is the aggregate demand curve (consumption expenditure, investment, government spending, and exports). There is **only a current equilibrium**, that is, a point where the two curves intersect, at each particular moment of time (statistically recorded). What happens when there is a demand shock in the economy (e.g. due to a rise in government spending)? In this case, the aggregate demand curve will shift rightwards. Inflationary consequences of such a scenario will critically depend on how close the economy is to its **long-term equilibrium** (above or below its potential growth path).

LONG-TERM TREND AND OUTPUT GAP *Chart 10.4*



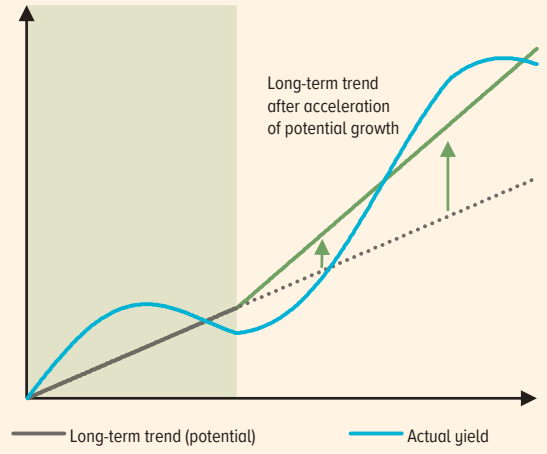
Source: Bank of Russia.

TREND LEVEL SHIFT *Chart 10.5*



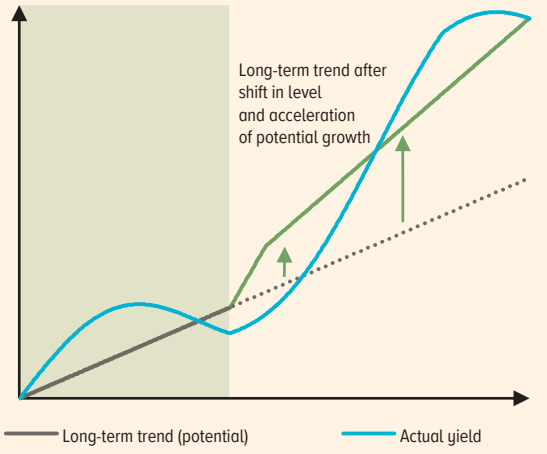
Source: Bank of Russia.

CHANGES IN TREND GROWTH RATES *Chart 10.6*



Source: Bank of Russia.

TREND LEVEL SHIFT AND CHANGES IN TREND GROWTH *Chart 10.7*



Source: Bank of Russia.

If the economy is in a negative phase of the cycle (below its potential) or close to its equilibrium, aggregate supply might relatively easily adjust to increased demand since the limit related to labour and capital constraints is still far. However, the further the demand curve shifts to the right, the more vertical the supply curve segment will become. Accordingly, the less the economy will expand output and the more prices will rise, that is, supply will no longer cover demand. Moreover, if the economy stays above its long-term equilibrium path for a long time, economic agents (companies and consumers) realise that the economy is accumulating imbalances. Consequently, their inflation expectations are rising, unanchoring from the inflation target. This makes it even more difficult to decelerate inflation. Hence, it is crucial for the central bank to avoid persistent overheating in the economy when it stays above its potential for too long. The central bank shall respond to such a situation by tightening its monetary policy.

If there is no external influence, the economy can remain in a long-term equilibrium for an indefinite period of time. Various internal and external cyclical shocks (e.g. rising commodity prices, higher budget expenditures, changes in consumer preferences, declining demand for exports, and so on) might cause a deviation of the economy from its potential path that is called a **gap**. Such a gap may occur when output, unemployment, the exchange rate, and other macroeconomic measures deviate from their long-term equilibrium values.

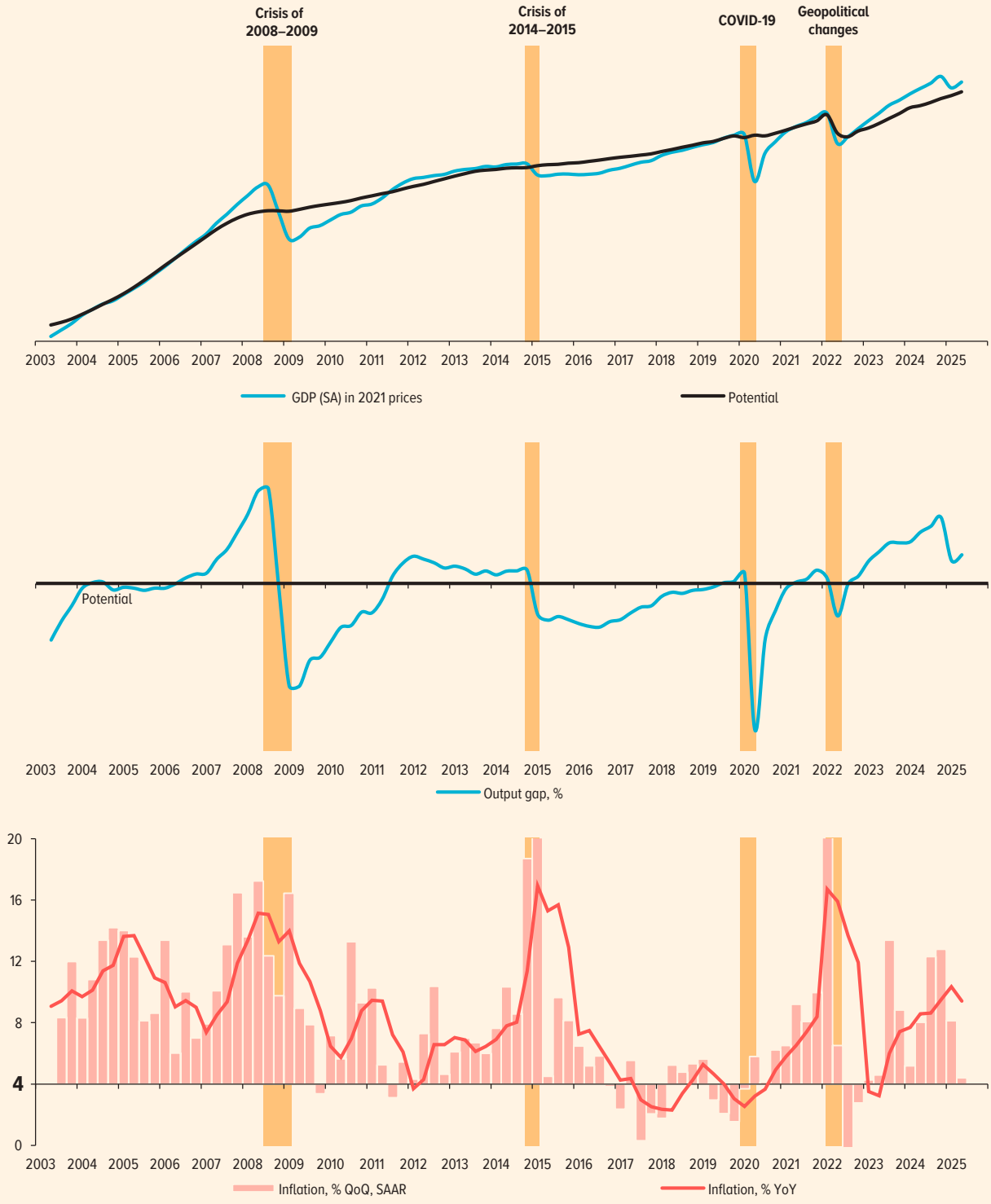
Economic publications most often refer to an **output gap**. This is an unobserved variable showing how much actual output has deviated from potential output. Potential output in turn is the level of output that the economy is able to generate with the full utilisation of factors of production under the existing resource, technological, and institutional constraints. In central banks' practice, the relevant concept of potential output is a level of output creating neither proinflationary nor disinflationary pressures, i.e. a level ensuring that inflation stays at the target, barring new shocks. Potential output is not constant, but is changing depending on the dynamics of factors of production (e.g. labour force growth, deployment of innovative technologies, or commissioning of new equipment) and the pace of technological advancement. Therefore, another characteristic of the economy is the growth rate of potential output, or the pace of changes in potential output over time. When the actual growth rate of output exceeds its potential due to the effect of cyclical shocks, this forms a positive (proinflationary) output gap in the economy. As supply expands not sufficiently compared to demand when the output gap is positive, the economy faces elevated inflationary pressures. Price growth starts to exceed the inflation target, and the central bank has to raise its policy rate to ensure that demand returns to an equilibrium with supply. Contrastingly, when the actual increase in output is below the potential pace, the output gap is negative (disinflationary), and price growth is slower as compared to the inflation target. In this case, the central bank needs to reduce the policy rate to drive demand upwards to the level of supply.

When the economy experiences large-scale structural transformations, this might change both the level and the growth rate of potential output. The effect of structural factors alters a long-run equilibrium, and the estimate of the output gap in the new conditions might turn out to be both above and below the previous one. However, the central bank's response is limited only to the part of the output gap that shows the deviation of the actual growth rate from a new equilibrium trend. Monetary policy measures (and other instruments available to the central bank) are not sufficient to return the economy to the earlier long-term trend.

The level of potential usually shifts due to one-off factors having a longer-run effect, such as a discovery of a rich mineral deposit, among other things. In this case, the path of long-term growth will shift upwards. However, the opposite is possible as well: for instance, a natural disaster might disrupt the economy's production capacities and shift the potential path downwards. Normally, the level of the potential changes not instantaneously but gradually, with the path moving slowly to a new level. This is why, at a particular moment, such a situation may be interpreted as a change in potential growth rates, yet these are different scenarios.

A long-term acceleration (or deceleration) of growth is always related to technological progress. In other words, there are no such one-off factors that could increase the angle of the potential growth path. This can only be done by improving total factor productivity, that is, by creating a favourable environment for doing business, enhancing the legal system and the quality of management, ensuring a better regulatory environment, advancing technologies, etc.

OUTPUT, OUTPUT GAP, AND INFLATION IN RUSSIA IN 2003–2025 *Chart 10.8*



Note. The decomposition of actual GDP into potential GDP and the gap depends on the specification and parametrisation of the model applied. The chart is given only for illustrative purposes to demonstrate the logic of the Bank of Russia's baseline scenario with regard to output and interpret historical data as part of the QPM, but does not replicate the respective quantifications. The shaded quarters correspond to the periods of GDP slumps (recessions).
Source: Bank of Russia.

When combined, the above factors may result in a scenario where the long-term output path and its growth rate both change. In particular, such a situation was observed in Russia in 2022–2023.

The coronavirus-induced crisis entailed a plunge in output worldwide, including in Russia. Suspension of operations, deferred investment projects, a reduction in labour force caused a decline in the level of potential output. Nevertheless, as long as technological progress was not compromised, long-term growth rates were not affected.

Contrastingly, the start of the period of the structural transformation was characterised not only by a reduction in actual output but also by changes in both the trend level and its growth rates. On the one hand, the capital controls, as well as new trade barriers and other sanctions entailed a decline in the level of potential. On the other hand, the restrictions on technology imports and the outflow of qualified personnel reduced GDP growth rates in the long run. Concurrently, higher government expenditures boosted a quick rebound in actual output to the levels of early 2022, which formed a considerable positive output gap, causing overheating in the economy.

The estimates of the output gap are among the factors considered by the Bank of Russia when implementing its monetary policy. A response of macroeconomic policy, including monetary policy, to the shocks occurring in the economy helps mitigate their implications for the economy and ensures its prompt return to a long-term equilibrium. In August 2025, the Bank of Russia published a working paper[1] on its website detailing the concepts of potential output and the neutral rate. The research also contains the respective estimates for Russia across a panel of models.

The concept of an equilibrium and gaps is mostly applied to real indicators – fluctuations of output relative to its potential are also referred to as a **business cycle.** However, in actual life, the economy comprises both real and financial measures. It is also possible to estimate an equilibrium and a gap for financial indicators – the gap in the total credit-to-GDP ratio is used most frequently.[2] Financial measures are also considered to have their own cycle that is imperfectly synchronised with the business cycle.

The main assumption is that consumer price dynamics (that is, inflationary pressures) and financial asset price dynamics might become desynchronised and change incoherently or, in some cases, even diversely. This, in turn, might cause accumulation of imbalances in the financial system and create 'bubbles' provoking financial crises. For example, an increase in output to a level above its potential (i.e. a positive output gap) is often accompanied by active growth in financial markets. For a certain period, demand stays at the same level and, therefore, prices are declining, whereas growth in financial markets increases the estimates of the value of real assets used as collaterals in lending (e.g. real estate), which further boosts lending, production, and ultimately, consumption. However, real assets cannot grow as fast as financial markets which, on top of that, might be driven by speculations. At a certain moment, financial resources increase so much that the number of eligibility criteria for their recipients declines to a minimum. When the number of such borrowers rises significantly, problems with repayments also become apparent for the system as a whole. Ultimately, the 'bubble' bursts provoking a financial or credit crisis.

In this case, accommodative monetary conditions are tightening independently of monetary policy. Financial institutions promptly toughen lending conditions not only for new borrowers but also for each other, setting limits on the amount of funds that may be raised in the interbank market. Thus, a credit crisis is accompanied by a crisis of confidence and rising uncertainty. The economy might rapidly shift from a positive output gap to a negative one, that is, output might drop below its potential. To ensure the economy's return to its potential, it is necessary to ease monetary conditions and support business and consumer sentiment. Hence, the central bank cuts its policy rate and, where needed, provides additional funding to banks (on a repayable basis), thus offsetting the decrease in the efficiency of the interbank market.

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[1] Ermakov, S. et al. (2025). Estimating Unobserved Variables in Russia: Putting Bars and Stars on R and Y. Bank of Russia.

[2] For research on this issue at the Bank of Russia, refer to (1) Deryugina, E. and Ponomarenko, A. (2017). Real-time Determination of Credit Cycle Phases in Emerging Markets. Bank of Russia Working Papers, No. 17; (2) Deryugina, E., Ponomarenko, A., and Rozhkova, A. (2018). When are Credit Gap Estimates Reliable? Bank of Russia Working Papers, No. 34; (3) Kozlovtseva, I., Ponomarenko, A., Sinyakov, A., and Tatarintsev, S. (2019). Financial Stability Implications of Policy Mix in a Small Open Commodity-Exporting Economy. Bank of Russia Working Papers, No. 42; and (4) Ponomarenko, A. and Tatarintsev, S. (2020). Incorporating Financial Development Indicators into Early Warning Systems. Bank of Russia Working Papers, No. 58.

Therefore, the financial system might exacerbate the economy's deviation from an equilibrium and might even be an original source of such a deviation. However, this connection is not always unambiguous and not totally one-way because of the mutual influence of the financial and real sectors. Similarly to other central banks, the Bank of Russia takes into account the state of the financial sector when developing macroprudential policy to a greater extent. Nevertheless, when preparing its monetary policy decisions, the Bank of Russia considers the situation in the financial sector as an essential element of the analysis and an important indicator of the economy's deviation from an equilibrium.

SECTION 4. MONETARY POLICY OPERATIONAL PROCEDURE IN 2025 AND 2026–2028

The Bank of Russia conducts operations with banks to converge short-term money market rates with the key rate

The operational objective of the Bank of Russia's monetary policy is to keep overnight money market rates close to the key rate. The operational benchmark of monetary policy is RUONIA, which is the weighted average interest rate charged on unsecured overnight loans in the IBL market. If banks and other professional securities market participants are confident that IBL rates will stay close to the key rate, they will be able to take into account these expectations when pricing other financial products with longer maturities. Due to this interconnection between different interest rates in the economy, by changing the key rate, the Bank of Russia can influence economic agents' propensity to save and consume and the dynamics of consumer prices.

Through its operations, the Bank of Russia creates necessary conditions for short-term interbank transactions to be conducted in the market at interest rates close to the key rate. In case of an outflow of funds from the banking sector or their inflow, the Bank of Russia offsets it through its operations to provide or absorb liquidity,[1] which helps ensure a balance between liquidity demand and supply in the money market.

Money market rates form within the interest rate corridor and can deviate from the key rate. Therefore, the average deviation of RUONIA from the key rate (the spread) over a required reserve AP is more informative. By conducting its operations, the Bank of Russia seeks to ensure that the average spread over an AP does not exceed 25 bp in absolute terms. However, the Bank of Russia does not strive to achieve this objective at all costs. The existing system of instruments is arranged so as to promote conditions for an active interbank market and help achieve the operational objective of monetary policy.

In 2025, the Bank of Russia has achieved the operational objective of its monetary policy

In 2025, RUONIA was mostly in the lower half of the Bank of Russia's interest rate corridor, close to the key rate. The spread between RUONIA and the key rate averaged -15 bp in January–September 2025 (vs -24 bp in 2024),[2] which is less than last year in absolute terms. The spread volatility remained unchanged over January–September 2025, equalling 37 bp, just as in 2024.

Similarly to previous years, an important liquidity factor was **budget operations**. In late 2024–early 2025, banks received payments from the budget, including those financed through the conversion of the NWF's resources worth ₽1.3 trillion beyond the framework of the fiscal rule, while the Federal Treasury

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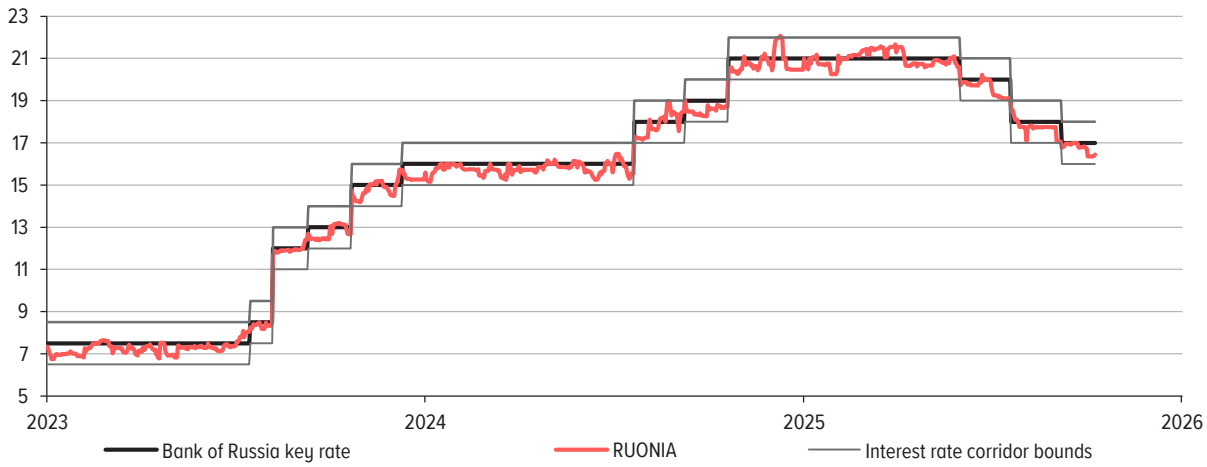
1 For details about the Bank of Russia's operations, refer to the BoR Operations section on the Bank of Russia website.

2 The average spread between RUONIA and the key rate and its volatility were calculated taking into account all calendar days over a month. For days when RUONIA was not calculated, its value was taken to be equal to the value of the previous day, for which the RUONIA Index was published.

MONEY MARKET RATES
(% P.A.)

Chart 4.1



Source: Bank of Russia.

increased the amount of temporarily available budget funds deposited with banks. As a result, the banking sector returned to a structural liquidity surplus.

In 2025, the Bank of Russia resumed **regular fiscal rule-based operations in the domestic FX market** that had been suspended in late 2024.[3] These operations are aimed at reducing the impact of the external environment and fiscal flows on the ruble exchange rage, aggregate demand, and inflation. The Bank of Russia makes these foreign currency purchases and sales in the amount of the transactions conducted by the Ministry of Finance with the NWF's resources, which is why they are called mirroring operations. These operations may be conducted not immediately, but with a lag and be extended over time, which is needed to mitigate their short-term effect on the FX market.

In addition to the amount of the foreign currency purchases and sales announced by the Ministry of Finance in 2025, the amount of the Bank of Russia's operations is also adjusted by the amount of the fiscal rule-based foreign currency sales suspended in 2024 and the amount of spending from the NWF to finance the budget deficit beyond the framework of the fiscal rule for 2024.[4] These additional operations will form a daily liquidity outflow from banks throughout 2025. Nevertheless, the operations mirroring the Ministry of Finance's fiscal rule-based transactions have a neutral effect on the banking sector liquidity.[5]

The inflow of funds into banks in 2025 H1 was driven by investment from the NFW, including in infrastructure projects. The Bank of Russia will mirror these operations evenly during 2025 H2, as a result of which their influence on the baking sector liquidity will become neutral by the end of the year.[6] Furthermore, part of the Bank of Russia's profit for 2024 was transferred to the budget

[3] Refer to the Bank of Russia's news, dated 27 November 2024.

[4] Refer to the Bank of Russia's news, dated 26 December 2024.

[5] The Ministry of Finance purchases foreign currency within the framework of the fiscal rule in the amount of additional OGR of the federal budget. These taxes are paid by banks' clients to the fiscal system, while the Federal Treasury cannot deposit them with banks, for example, or use them to finance current expenses. When the Bank of Russia mirrors these foreign currency purchases by the Ministry of Finance in the market, ruble liquidity returns to the banking sector in the amount of earlier transferred additional taxes. As a result, the combined effect of these operations on the banking sector liquidity becomes almost neutral.

[6] Refer to the Bank of Russia's news, dated 26 June 2025.

accounts. These funds were immediately transferred to banks – the Federal Treasury may use them to finance expenditures or temporarily deposit them with credit institutions.

The **Federal Treasury** continued to increase the efficiency of its instruments for managing temporarily available balances of budget funds. As before, the Federal Treasury was actively using long-term bank deposits and demand deposits, as well as increased the proportion of repos. As a result, the average balance of funds in the Treasury Single Account with the Bank of Russia was lower and less volatile in 2025 than in previous years. On the one hand, this increases interest income received by the budget, whereas on the other hand, this reduces the effect of budget operations on the banking sector liquidity, only redistributing the funds across credit institutions rather than changing their overall amount.

In addition to budget operations, the inflow of liquidity into banks in 2025 H1 was associated with a decline in **the amount of cash in circulation**. As the key rate and interest rates on bank deposits remained high, households still preferred to save. Like in the previous year, this decreased the demand for cash relative to the level expected taking into account the growth of the economy and payment amounts. From June 2025, the demand for cash rose, which might be because both households and businesses were seeking to accumulate cash for settlements. In September–the first half of October 2025, the demand for cash returned to its seasonal path, reflecting the economy's sustained demand for cash needed to make settlements. The proportion of cash in total money supply edged down by 0.5 pp from the beginning of the year to 14.2% as of early October 2025.

The **required reserves** that credit institutions keep in accounts with the Bank of Russia continued to increase in 2025. This was associated with the growth of bank deposits and caused a rise in banks' reservable liabilities, which in turn led to a reduction in the structural liquidity surplus. The impact of this factor on the banking sector liquidity somewhat weakened owing to the ruble appreciation and the foreign currency revaluation of assets.

In addition to the liquidity balance, the structure of the Bank of Russia's operations in early 2025 was still affected by the situation with systemically important credit institutions' compliance with the LCR. The LCR-related easing introduced in 2022 was cancelled from March 2024. The Bank of Russia established a transition period for banks to be able to adapt to the LCR. Specifically, systemically important credit institutions were allowed to use irrevocable credit lines opened with the Bank of Russia to cover the deficit of highly liquid assets if needed. However, many banks were still experiencing difficulties in complying with the LCR using only their own funds, which became particularly evident in late 2024. Banks had to take out more **loans from the Bank of Russia within the PM**. These operations enable banks to improve their LCRs, and therefore, banks were actively raising loans from the Bank of Russia in 2024–early 2025 despite their higher cost compared to borrowings in the money market. However, by the end of the year, a number of banks used almost all non-marketable assets as collateral within the PM. By using refinancing instruments this way, banks accumulate risks in the banking sector: if banks' collateral is used to ensure compliance with the required ratios, banks will be unable to use it in case of an outflow of liquidity. To discourage banks from using loans granted within the PM for the regulatory purposes, the Bank of Russia decided that, from 6 November 2024, any claims on loan agreements would be accepted as collateral only within the SM. Credit claims included before 6 November 2024 in the collateral pools for loans granted within the PM remained in these pools but without the right to increase their value.[7]

[7] Refer to the Bank of Russia's press release, dated 5 November 2024.

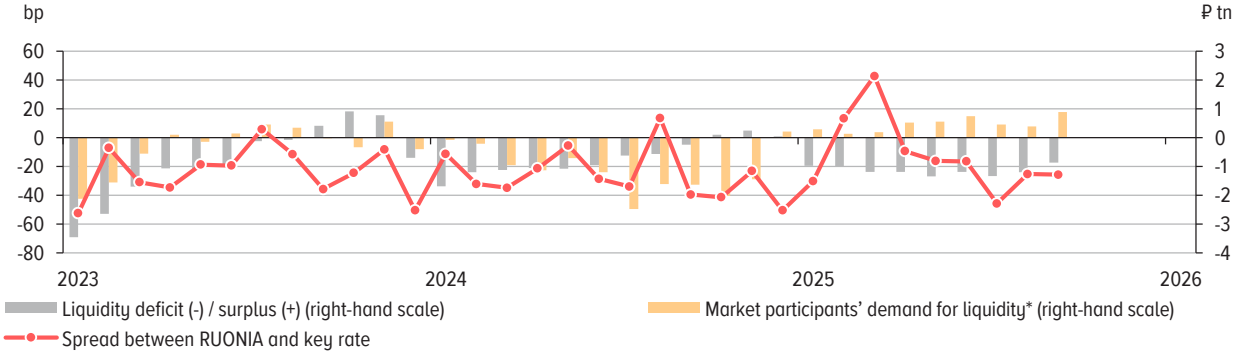
Concurrently with the rise in the demand for Bank of Russia loans, at the end of 2024, systemically important credit institutions increased competition for client funds and considerably raised interest rates on them. This tightened monetary conditions (see Box 8 'Changes in banking regulation over 2023–2025 and their effect on monetary policy'). In response to this, in November–December 2024, the Bank of Russia eased the schedule for systemically important credit institutions to comply with the required ratio using only their own funds, that is, without ICLs. As a result of the inflow of budget expenditures into the banking sector in late 2024–early 2025, banks' highly liquid assets increased and, combined with the above adjustment of the schedule, this helped banks improve their compliance with the LCR. Thus, banks were able to decrease their demand for Bank of Russia standing lending facilities within the PM.

Furthermore, banks used Bank of Russia loans to comply with the reserve requirements and process payments. After reducing the demand for Bank of Russia loans in connection with the LCR, in 2025, banks started to raise liquidity for this purpose from other sources. In addition, in early 2025, the Bank of Russia was consistently decreasing the amount of liquidity provided at **one-month repo auctions**, and in March 2025, credit institutions' debt on these operations was repaid. As a result, banks that still needed borrowings increased their demand in the money market, and the spread between RUONIA and the key rate in the February–March AP[8] turned positive.

In 2025 Q1, the Bank of Russia was gradually lowering the limits at its deposit auctions to ensure that supply in the market could meet market participants' higher demand. A number of banks increased the amount of funds placed in the money market, including for long terms. However, part of the money that became available was transferred to **standing deposit facilities with the Bank of Russia**. These funds are not supplied to the money market and are not used in the course of liquidity redistribution. Consequently, in 2025 Q1, despite the structural surplus in the banking sector as a whole, the market started to face a liquidity deficit.

When determining the purpose and amount of its main auctions, the Bank of Russia was taking into account the need for depositing or raising funds of those market participants that were ready to conduct transactions in the money market and, accordingly, influence pricing therein. Hence, from 15 April 2025, the Bank of Russia switched from one-week deposit auctions to **one-week repo auctions**.[9]

LIQUIDITY BALANCE AND SPREAD BETWEEN RUONIA AND KEY RATE *Chart 4.2*
(AVERAGE OVER AP, ₽ TN)



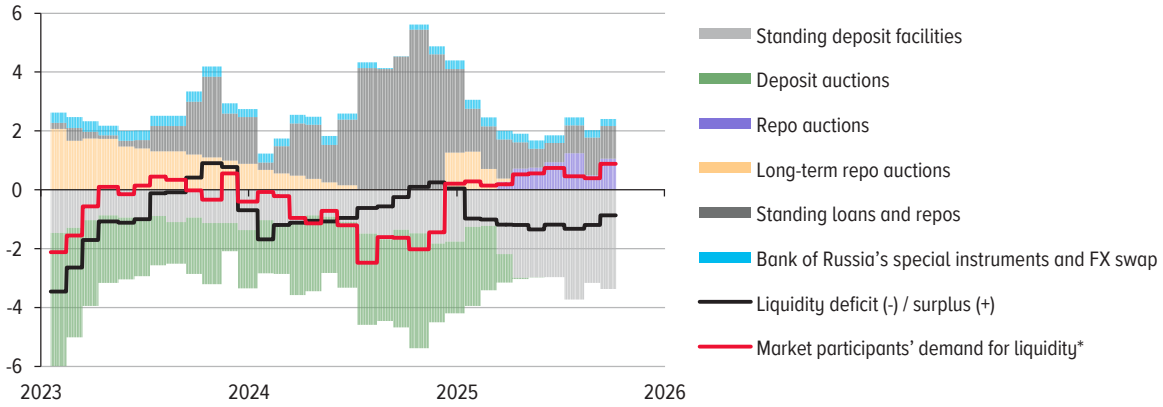
* *Calculated as the difference between the banking sector's structural liquidity deficit / surplus and operations, the demand for which is of a non-market nature (the demand for Bank of Russia loans raised for regulatory purposes, debt on special-purpose refinancing instruments, and deposits of banks – subsidiaries of non-residents with the Bank of Russia). The indicator characterises market participants' demand for Bank of Russia liquidity.*

Source: Bank of Russia.

[8] The February AP was from 12 February 2025 through 11 March 2025, and the March AP was from 12 March 2025 through 8 April 2025.

[9] Refer to the Bank of Russia's press release, dated 10 April 2025.

STRUCTURAL LIQUIDITY BALANCE AND BANK OF RUSSIA OPERATIONS *Chart 4.3*
(AVERAGE OVER AP, ₽ TN)



* *Calculated as the difference between the banking sector's structural liquidity deficit / surplus and operations, the demand for which is of a non-market nature (the demand for Bank of Russia loans raised for regulatory purposes, debt on special-purpose refinancing instruments, and deposits of banks – subsidiaries of non-residents with the Bank of Russia). The indicator characterises market participants' demand for Bank of Russia liquidity.*

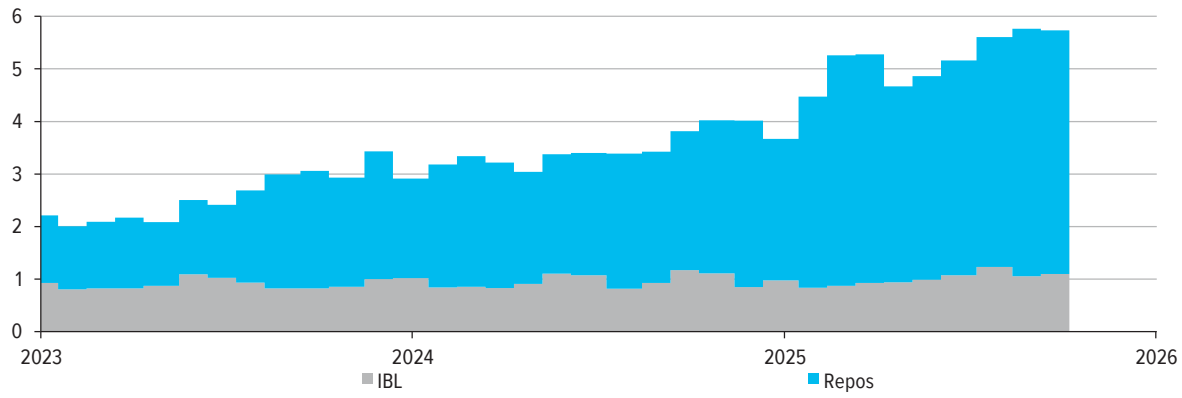
Source: Bank of Russia.

This helped offset banks' higher demand in the short-term money market segment and converge RUONIA with the key rate.

Banks' demand for both standing lending and deposit facilities of the Bank of Russia limits the amount of funds that may be distributed in the money market. Nevertheless, the Bank of Russia takes into account these transactions when setting the limits at its auctions, while the 200 bp width of the interest rate corridor still encourages market participants to transact with each other. Hence, **the amount of open positions in the IBL and repo segments** of the money market has continued to grow in 2025. By supporting high activity in the money market, the Bank of Russia is able to better translate monetary policy signals into interest rates in the economy.

On the last day of the APs when the mechanism of RR averaging does not allow banks to fully offset temporary imbalances between the demand for liquidity and its supply, as well as for the purpose of limiting interest rate fluctuations in the money market, the Bank of Russia held **fine-tuning auctions**. In 2025 Q1 at the end of the APs, the banking sector usually formed a surplus of liquidity, and accordingly, the Bank of Russia held fine-tuning deposit auctions. However, at the end of the March AP, taking into account the uneven distribution of liquidity and market participants' high demand for funds,

OPEN OVERNIGHT POSITIONS IN IBL AND REPO SEGMENTS OF MONEY MARKET *Chart 4.4*
(AVERAGE OVER AP, ₽ TN)



Source: Bank of Russia.

the Bank of Russia held fine-tuning repo auctions during the tax period and on the last day of the AP. In 2025 H2, depending on banks' averaging paths and their need for liquidity at the end of the APs, it was necessary to hold both deposit auctions and fine-tuning repo auctions. In the future, the Bank of Russia will continue to hold fine-tuning auctions on the last day of the APs in case of imbalances in the demand for liquidity and its supply so as to help banks better manage their liquidity and reduce interest rate fluctuations in the money market.

In 2025, the demand for loans secured by non-marketable assets within the PM was steadily decreasing as the situation with compliance with the LCR normalised, while the demand for refinancing within the SM was recorded rarely and only among individual market participants. The current **level of the collateral pool** within the PM remains sufficient for banks to raise funds if the money market experiences a liquidity deficit and to limit the deviation of IBL rates above the upper bound of the interest rate corridor.[10] The Bank of Russia will continue to pursue the countercyclical approach to collaterals for its operations. If the banking sector increases the demand for liquidity, the list of collaterals allowed for the PM may be expanded primarily by including assets acceptable within the SM in the list of collaterals allowed for the PM.

Other operations of the Bank of Russia

Bank lending to a number of industries and segments of the economy may be constrained by structural factors. In the first place, this is related to SMEs, non-commodity exporters, and companies implementing investment projects. To ensure equal access to credit for all economic agents, the Bank of Russia may use a number of refinancing instruments. As part of these operations, the Bank of Russia provides funds to the banks, which lend to such businesses, for long terms and at subsidised interest rates. The amount and maturities of such operations of the Bank of Russia are limited. Otherwise, this might excessively ease monetary conditions, and accordingly, the regulator might be forced to keep the key rate at a high level for a longer period. As a result, the cost of loans will go up, while they will become less affordable for all other companies that do not have access to subsidised programmes.

In 2025 H1, banks did not demonstrate demand for **FX swaps to sell Chinese yuan for rubles**. In October 2024, taking into account pricing trends in the FX swap segment and for mitigating the impact of its operations on market pricing, the Bank of Russia set the yuan interest rate and the ruble interest rate on FX swaps, used to calculate the swap difference, at the level of the key rate.[11] Furthermore, in 2025, fine-tuning FX swap auctions to buy US dollars and euros for rubles for periods from one to two days were removed from the Bank of Russia's system of monetary policy instruments. Given the current situation with liquidity and collaterals for Bank of Russia operations, there is no need for this instrument.

[10] For details about the Bank of Russia's system of instruments, refer to the Monetary Policy Operating Framework section on the Bank of Russia website.

[11] Refer to the Bank of Russia's press release, dated 25 October 2024.

In 2025, the banking sector will switch to a liquidity deficit, which will remain over the three-year horizon

Over the December AP in 2024,[12] the structural liquidity surplus was close to zero on average, which was below the level forecast by the Bank of Russia in MPG 2025–2027 and totalled from ₽0.2 trillion to ₽1.0 trillion. The deviation was caused by a lower-than-forecast amount of budget payments in 2024. Part of expenditures financed at the end of December 2024 was received by banks in early January 2025. Nevertheless, the dynamics of cash and required reserves were in line with the forecast.

In 2025, the banking sector is expected to switch from a structural surplus of liquidity to its structural deficit. **The structural liquidity deficit over the December AP in 2025 is forecast in the range from ₽0.5 trillion to ₽1.3 trillion.**

Budget operations are expected to cause an outflow of liquidity from banks in 2025. By conducting operations that mirror all current transactions with the NWF's resources performed by the Ministry of Finance, the Bank of Russia neutralises the effect of the budget on the banking sector liquidity. However, the uniform mirroring of the net sales of foreign currency conducted in 2024[13] will be gradually reducing banks' structural liquidity surplus. The impact of this outflow on liquidity in 2025 will be to a certain extent offset by budget expenditures received in January 2025 and the Federal Treasury's deposits that were not transferred to banks in December 2024.

The amount of cash in circulation is forecast to increase by ₽0.1–0.5 trillion in 2025, which is slightly below its historical levels. This is because of deposit rates staying high for the most part of the year, which inspired households to continue to save and hold their savings in bank deposits rather than in cash.

Required reserves are forecast to increase over the period under review through the overall expansion of money supply.

As the structural liquidity deficit goes up, the proportion of banks who need liquidity will be growing. This will increase banks' competition for funds that may be raised in the money market. As a result, RUONIA may slightly exceed the key rate, which will be tightening monetary conditions to a certain extent.

The structural liquidity deficit will persist over the three-year horizon. Expenditure budgeting is assumed to be in line with the long-term parameters of the fiscal rule over 2026–2028. Regular fiscal rule-based operations conducted by the Bank of Russia in the domestic FX market during that period to buy (sell) foreign currency and operations mirroring those associated with the use of the NWF's resources to invest them in permitted financial assets within the Russian economy will reduce the effect of budget operations on the banking sector liquidity.

An outflow of liquidity from banks over 2026–2028 will be associated with an increase in the amount of cash in circulation. According to the Bank of Russia's baseline forecast, the proportion of cash in total money supply will be gradually shrinking, including owing to a further expansion of the practice of cashless payments. Furthermore, banks' required reserves will be growing in line with the overall increase in broad money.

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12 The December AP was from 11 December 2024 through 14 January 2025.

13 Refer to the Bank of Russia's news, dated 26 December 2024.

Planned improvements to the operational procedure and other modifications

The Bank of Russia will continue to develop its system of monetary policy instruments, taking into account the situation with the banking sector liquidity and changes in the payment and financial infrastructure. This will ensure smooth processing of payments, enhance the efficiency of liquidity management, and make settlements more convenient to credit institutions. As a result, the transmission of monetary policy decisions will improve.

The planned **changes in the schedule of the functioning of the Bank of Russia PS** to ensure its 24/7 operation imply that banks should be ready to process increasing amounts of payments instantaneously and at any moment. The Bank of Russia will advance in the same direction, enhancing the accessibility of its services so that banks could offset uneven liquidity distribution. Specifically, banks will be able to raise intraday loans throughout the entire period of the operation of the Bank of Russia PS. As a result of these innovations, banks will not need to maintain an excessive amount of funds in correspondent accounts and will be able to manage their liquidity more flexibly. The banking sector will thus become more resilient to rapid changes in the liquidity level.

Jointly with the Federal Treasury and National Settlement Depository, the Bank of Russia is implementing a package of measures to deploy **a new mechanism for completing settlements on deposit and repo operations**. A unified settlement of liabilities on deposits and repos of the Federal Treasury, repos of the Bank of Russia with banks, and other transactions of National Settlement Depository, provided that settlements are completed in accounts opened with the Bank of Russia, will significantly decrease credit institutions' demand for liquidity. This mechanism will reduce the need for liquidity and improve the efficiency of settlements, as well as mitigate the risk of their delays.

The Bank of Russia will make its operations accessible to **foreign banks' branches**. It is planned that, similarly to non-bank credit institutions, foreign banks' branches will maintain required reserves in correspondent accounts opened to them with the Bank of Russia and will have access to the Bank of Russia's lending and deposit facilities.[14]

The Bank of Russia will continue to create **a single pool of assets** – securities and claims under loan agreements. This is needed for banks to process payments having access to the entire amount of an intraday loan available against any collateral that they have and that meets the Bank of Russia's requirements. That said, the approaches to managing banks' liquidity and the liquidity providing mechanisms will not change.

The Bank of Russia will continue to explore the issue of establishing a separate **urgent liquidity providing mechanism for financial market participants other than credit institutions**. Such a mechanism will be launched by the Bank of Russia in case of crisis developments for a limited period. These operations are planned to be organised on the basis of the exchange infrastructure.

Changes in banking regulation may also affect the use of monetary policy instruments by banks. Thus, from 30 October 2025, the Bank of Russia will start applying the new **national LCR** that will take into

[14] Federal Law No. 275-FZ, dated 8 August 2024, 'On Amending the Federal Law 'On Banks and Banking Activities' and Certain Laws of the Russian Federation'; Bank of Russia Regulation No. 852-P, dated 18 February 2025, 'On Required Reserves'; Bank of Russia Ordinance No. 6997-U, dated 19 February 2025, 'On the Form and Conditions of Refinancing for Foreign Banks Performing Operations in the Russian Federation Through Their Branches'.

account the national specifics of the Russian financial sector. This will enhance the regulation of banks' liquidity risk. The transition to the national LCR is expected to additionally decrease credit institutions' demand for the Bank of Russia's operations for regulatory purposes. It will thus be easier to predict the amount of the banking sector liquidity, which will improve the efficiency of the monetary policy operational procedure. Nevertheless, credit institutions will still be allowed to use ICLs, although the Bank of Russia will significantly revise their format.

In 2025, the Bank of Russia has continued the pilot testing of the **digital ruble** on real transactions. This is the digital form of the Russian national currency that the Bank of Russia plans to issue in addition to the existing forms of money. The digital ruble will be introduced stage by stage. Major banks and their clients – large retailers are obliged to provide the option of digital ruble transactions from 1 September 2026, other banks with a universal licence and their large clients – from 1 September 2027, and all other banks and retailers – from 1 September 2028. The introduction of the digital ruble might affect the situation with banks' liquidity, but will not cause a significant outflow of funds from the banking sector. The introduction of the digital ruble will be gradual. Credit institutions will be able to adapt to the launch of the digital ruble. As no interest will accrue on digital ruble accounts, the Bank of Russia does not expect a considerable outflow of funds from bank deposits and other financial instruments as a result of the introduction of the digital ruble.[15] Nevertheless, as the practice of using digital rubles expands, the Bank of Russia will take into account economic agents' demand for digital rubles when determining the limits on its operations and offset banks' need for liquidity caused by an outflow so as to maintain money market rates close to the key rate.

[15] For details about the effects of the introduction of the digital ruble on the banking sector liquidity and the monetary policy transmission mechanism, refer to Appendix 8 'The impact of the digital ruble on monetary policy' in MPG 2025–2027.

Appendix 1. Monetary policy transmission mechanism in Russia

Monetary policy affects inflation through several channels, the most important of which is the interest rate channel. This impact is extended over time

The main goal of the Bank of Russia's monetary policy is to ensure price stability, that is, steadily low and predictable inflation. The main instruments used to achieve this goal are the key rate and signals regarding its future changes (see Section 1 'Monetary policy goals, principles and instruments'). The key rate has a direct or indirect effect on all the segments of the financial market and, through them, on savings, consumption, investment, and ultimately, aggregate demand in the economy and the level of prices (see the Diagram). The complex of the interdependencies between economic processes making it possible to impact inflation through changes in the central bank's key rate is called the monetary policy transmission mechanism.

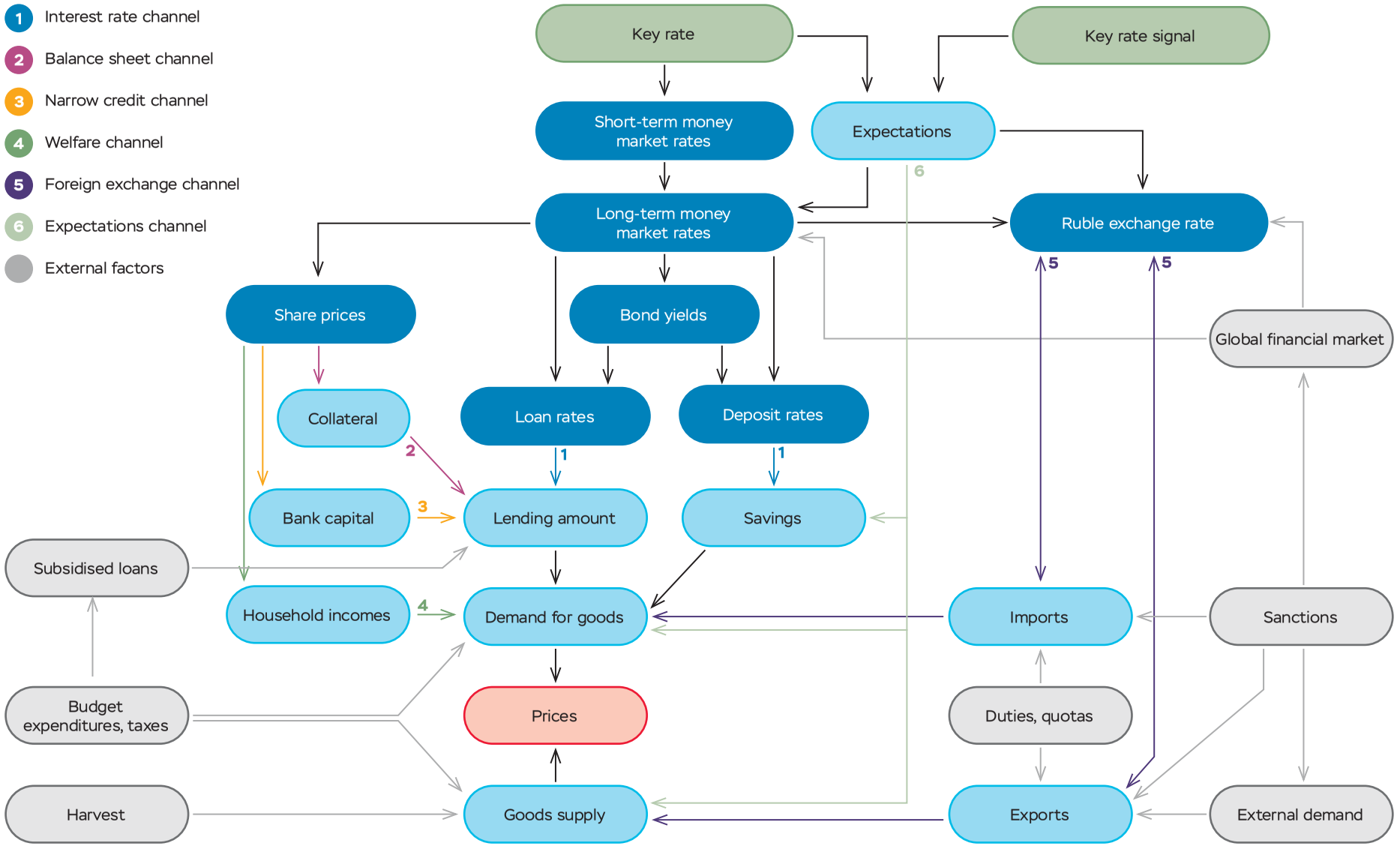
The transmission mechanism is a complex dynamic system. In the first place, price movements in the economy are driven not only by the key rate but also by multiple factors that are not connected with monetary policy, including political, environmental, demographic, and technological ones. Making a decision on a key rate change, the central bank takes into account the current state of the factors that are external to monetary policy and their possible changes in the future.

Secondly, just as the economy in general, the transmission mechanism is evolving. This evolution became especially notable in recent years when the extensive changes induced by the coronavirus pandemic and the geopolitical instability of 2022–2023 affected all economic processes, including the elements of the transmission mechanism. However, even when changes are not that significant (e.g. shifts in the sectoral structure of the Russian economy), they still affect the functioning of the transmission mechanism. Therefore, the approaches to pursuing monetary policy may be modified as well in order to reflect changes in the conditions of its implementation. This appendix describes either the common patterns of the functioning of the transmission mechanism or specific conditions of its functioning in recent years.[1]

Thirdly, economic processes, which are part of the transmission mechanism, are non-linear. Even when changes in economic indicators are similar, they do not always cause comparable changes in respective dependent variables. The effects are often asymmetrical, i.e. the response to a certain increase in a particular indicator might be stronger or weaker than the response to its proportionate decline. The most widely known phenomenon demonstrating this asymmetry is the ratchet effect when prices grow more quickly and notably, being pushed up by proinflationary factors, than they go down, being influenced by disinflationary factors. Consequently, a slowdown in inflation can take more time than its acceleration.

[1] Previously, there were also specific factors affecting the functioning of the transmission mechanism and the implementation of monetary policy. These factors were described in the earlier MPG editions.

Monetary policy transmission mechanism



In some cases, a particular effect of certain economic variables on others depends on the state of the economy. The most important interdependency is the impact of monetary policy on economic growth. Such influence is effective when monetary policy helps return the economy to its long-term equilibrium (restore economic activity during a recession or cool down an overheated economy) and close the output gap (see Box 10 'The concept of a long-term economic equilibrium and deviations of key macroeconomic variables from it'). Otherwise, monetary policy has an unsteady and, to a certain extent, conflicting effect on economic growth. Thus, when factors of production are underutilised, accommodative monetary policy might push down market interest rates in the short term below a neutral level (see Appendix 7 'Neutral interest rate and its estimate') and boost economic growth through an increase in the utilisation of factors of production. However, if monetary policy remains accommodative for a long period, demand grows faster than capacities to ramp up output, which inevitably accelerates inflation. Higher inflation expectations and estimates of inflationary risks, in turn, decrease appetite for long-term investment, limit the accessibility of investment resources for companies, and might ultimately hinder economic activity.

The Bank of Russia takes into account the complex and non-linear nature of the transmission mechanism and monitors the situation in the main segments of the Russian economy, seeking to reveal at early stages those changes that are critical to the transmission mechanism as a whole and its individual elements. Making its monetary policy decisions, the Bank of Russia factors in not only actual and expected inflation movements but also the progress of the structural transformation of the economy, which influences the functioning of the transmission mechanism or may affect it in the future.

The impact of the key rate on market rates in the economy

The basic element of the monetary policy transmission mechanism is the effect of the Bank of Russia key rate on interest rates and yields in the main segments of the Russian financial market. This impact is translated over the course of several stages (see the Diagram).

At the first stage, a key rate change instantaneously alters money market rates, first of all IBL rates. The Bank of Russia manages the banking sector liquidity by absorbing excess liquidity or covering a liquidity deficit (see Section 4 'Monetary policy operational procedure in 2025 and 2026–2028'). This consistently keeps money market rates close to the Bank of Russia key rate.

At the second stage, changes in overnight money market rates are translated into the movements of longer-term money market rates. Banks and other money market participants can choose between multiple sequential overnight transactions and one longer-term transaction. Accordingly, medium- and long-term interest rates are influenced not only by the current level of overnight rates, which depends on the key rate, but also by expectations of future changes in this level that are determined by, in particular, the Bank of Russia's communication, primarily its signal regarding possible future monetary policy decisions. Expectations of a rise in the key rate push medium- and long-term IBL rates upwards, whereas expectations of its decrease cause a reduction in these interest rates. Furthermore, when making investments for long terms, investors thus lose the opportunity to flexibly manage their assets. In the conditions of macroeconomic uncertainty (in particular, the uncertainty about inflation expectations), long-term interest rates price in a higher term premium.[2]

[2] Mukhametov, O. (2025). Term Premium and Its Determinants (Evidence from the OFZ Market).

Normally, large banks and financial institutions operating in the money market are also bond market participants, especially in the segment of risk-free OFZ. These market participants always have a choice between lending in the money market or investment in the securities market. Choosing an alternative ensuring higher yields, they contribute to the convergence between IBL rates and bond yields. Therefore, most frequently, bond yields adjust almost simultaneously with IBL rates of comparable maturities. Basically, the levels of IBL rates and OFZ yields diverge due to differences in the liquidity of these instruments (bonds can be sold or pledged by a bank experiencing difficulties with liquidity), their risk profiles (unlike OFZ, IBL involves credit risks), and tax treatment. However, the overall trend and the pace of changes in IBL rates and OFZ yields are comparable in most cases[3] (divergences in the dynamics might be associated with certain large transactions or differences in the composition of market participants, but they are occasional).

Corporate bond yields normally exceed OFZ yields of comparable maturities by the amount of the premium for credit risk related to a particular issuer. Accordingly, a change in government bond yields is followed by a commensurate adjustment in corporate bond yields. However, the dynamics of corporate bond and OFZ yields might diverge due to a revision of the assessment of the issuer's risks (like, for instance, in the middle of 2022 when OFZ yields already returned to the level of early 2022, whereas corporate bond yields still significantly exceeded that level).

As medium- and long-term money market rates and bond yields depend not only on the level of the key rate, but also on expectations regarding its future change, medium- and long-term interest rates often start to change not after but rather before a key rate revision when market participants have strong expectations of an upcoming adjustment of the key rate. Examples of this were the decline in bond yields in early 2019 or their increase in early 2021, a few months before the respective key rate changes.

The other side of the influence of expectations on long-term interest rates is a mild response of the latter to a significant key rate increase if this change is perceived as short-term. Assuming that the key rate will soon be cut, market participants take into account the expected reduction in long-term interest rates and yields. One example of this is the rise in bond yields in 2022 H1 that was nearly twice as small as the key rate increase.

As assessed by the Bank of Russia, following a 1 pp increase in the overnight IBL rate, over the next two weeks, IBL rates with maturities of less than one year rise by 0.6–1 pp, IBL rates with maturities from one to three years – by 0.2–0.5 pp, and IBL rates with maturities of over three years – by 0.1–0.2 pp.[4] The longer the time to maturity, the weaker the response of interest rates to the change in overnight IBL rates. This can be because market participants expect the key rate to return to its neutral level in the medium term.

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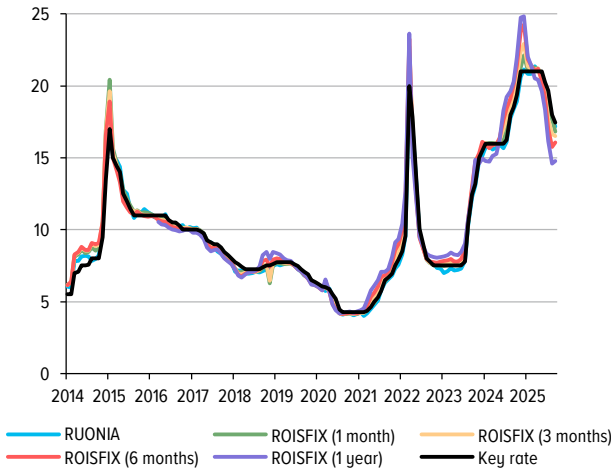
[3] The most general logic of economic processes is characterised hereinafter (including in the Diagram). Alongside the causal relationships described above, there are also more specific interdependencies having an effect only in certain circumstances or in the short run. For example, bond yields may be affected by changes in banking regulation and expectations regarding fiscal policy.

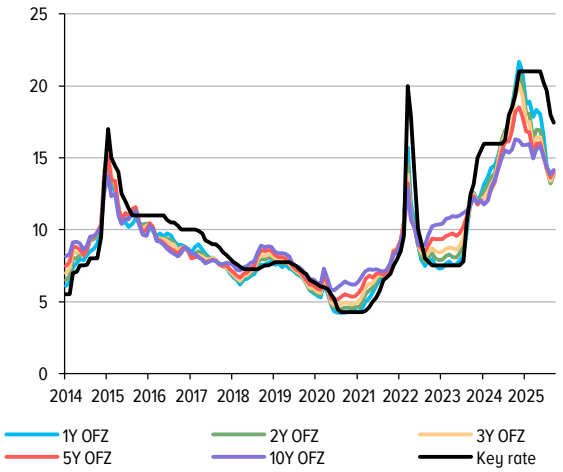
[4] Hereinafter (unless specified otherwise), the impact of some economic indicators on others is assumed to be symmetrical. For example, if it is written that a rise in an overnight interest rate increases loan rates for up to one year by 0.6 pp, it is implied that a 1 pp decline in an overnight interest rate decreases loan rates for up to one year by 0.6 pp alike. Furthermore, all estimates are made when all other things are equal, that is, factors influencing the resulting indicator remain the same.

KEY RATE AND MONEY MARKET RATES *Chart A-1*



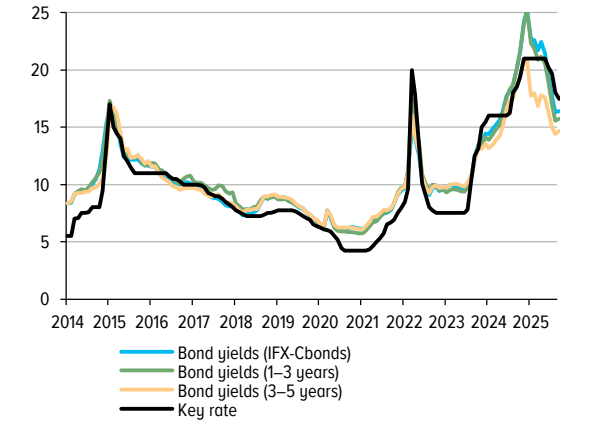
Source: Bank of Russia calculations.

KEY RATE AND GOVERNMENT BOND YIELDS *Chart A-2*



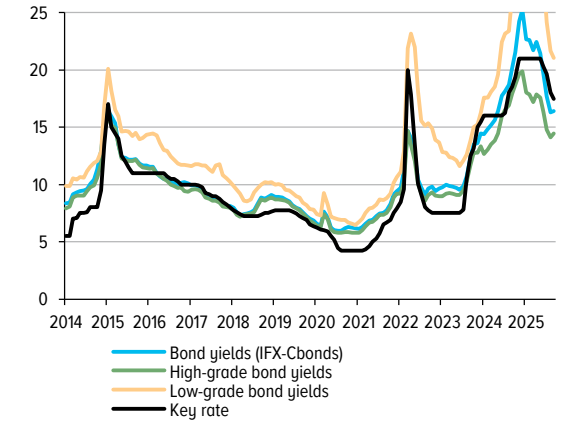
Source: Bank of Russia calculations.

KEY RATE AND CORPORATE BOND YIELDS *Chart A-3*



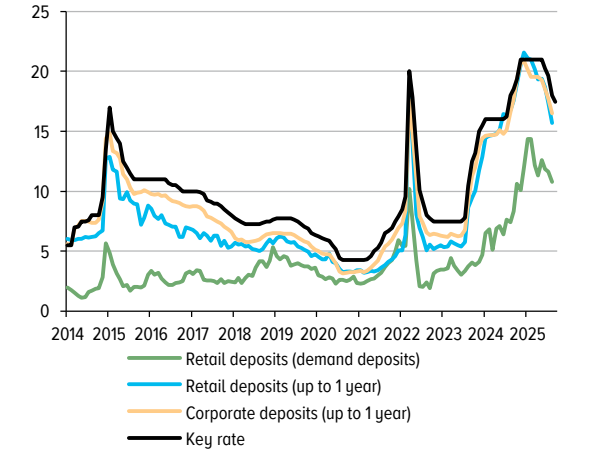
Source: Bank of Russia calculations.

KEY RATE AND CORPORATE BOND YIELDS *Chart A-4*



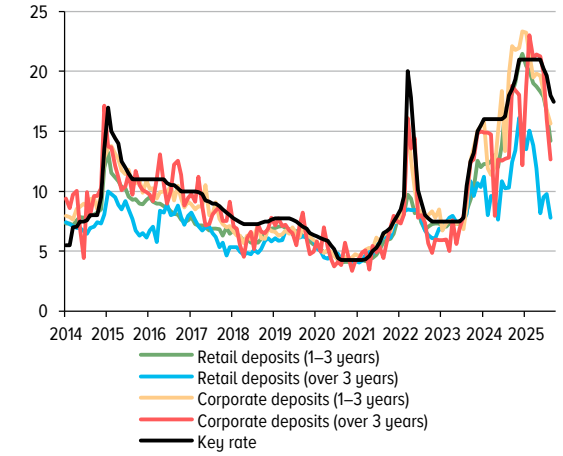
Source: Bank of Russia calculations.

KEY RATE AND SHORT-TERM DEPOSIT RATES *Chart A-5*



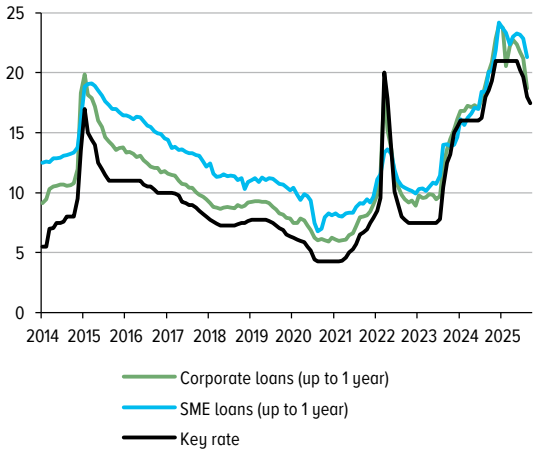
Source: Bank of Russia calculations.

KEY RATE AND LONG-TERM DEPOSIT RATES *Chart A-6*



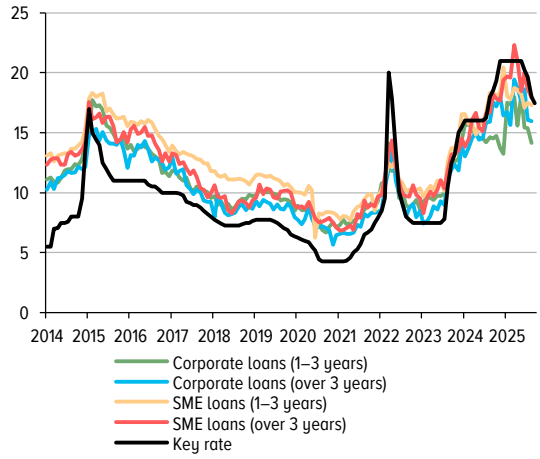
Source: Bank of Russia calculations.

KEY RATE AND SHORT-TERM CORPORATE LOAN RATES *Chart A-7*



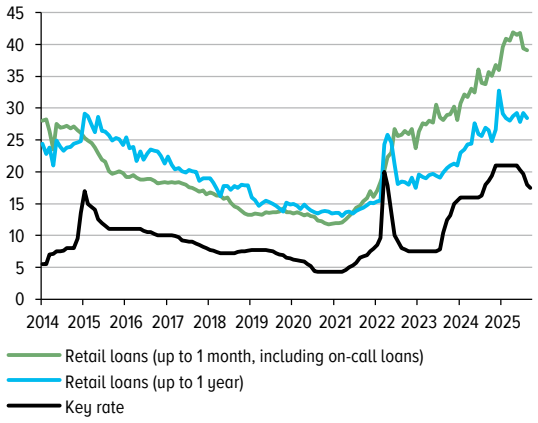
Source: Bank of Russia calculations.

KEY RATE AND LONG-TERM CORPORATE LOAN RATES *Chart A-8*



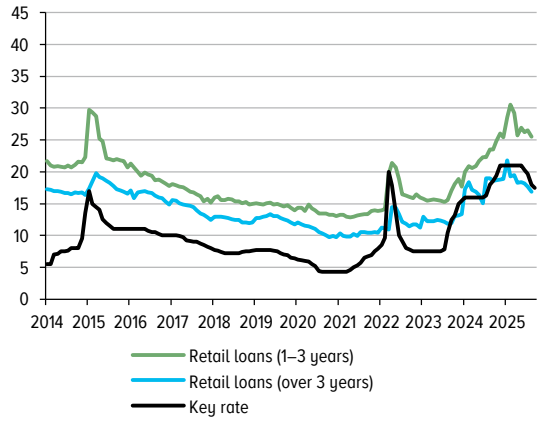
Source: Bank of Russia calculations.

KEY RATE AND SHORT-TERM RETAIL LOAN RATES *Chart A-9*



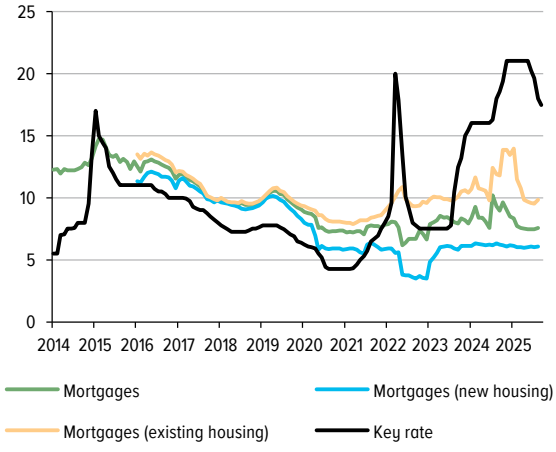
Source: Bank of Russia calculations.

KEY RATE AND LONG-TERM RETAIL LOAN RATES *Chart A-10*



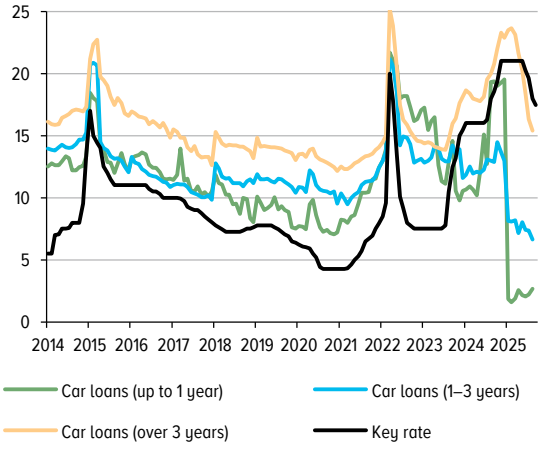
Source: Bank of Russia calculations.

KEY RATE AND MORTGAGE RATES *Chart A-11*



Source: Bank of Russia calculations.

KEY RATE AND CAR LOAN RATES *Chart A-12*



Source: Bank of Russia calculations.

At the third stage, bond yields and long-term money market rates influence interest rates on bank loans and deposits. Firstly, loans, bonds, and long-term transactions in the money market are interchangeable financial instruments. Large corporates can raise funds in both the credit and bond markets. Accordingly, loan rates and bond yields should be comparable (adjusted for differences in costs, risk levels, and regulatory standards). Secondly, further development of the securities market infrastructure simplifies investment in bonds for individuals. If deposit rates grow more slowly (or decrease faster) than bond yields, some depositors will opt for bonds, which forces banks to adjust their deposit rates. Thirdly, most large banks offering a diversified range of products set interest rates on their transactions relying on OFZ yields or long-term IBL rates as a reference point (see Box 12 'The transfer curve and formation of interest rates on bank operations').

The effect of money market rates and bond yields on loan rates is slower, weaker, and more uneven than the mutual influence of interest rates at the first and second stages. This is associated with individual terms of loan agreements (collaterals, repayment schedules, and covenants) affecting loan rates, a wide use of credit lines (as a result, terms of another tranche depend not only on the current market situation, but also on credit line parameters), and a relatively long period before the transaction date (due to which a transaction can actually be conducted several weeks or even months after setting the interest rate). Inflation is also a factor limiting the potential for interest rate decreases. Where deposits do not protect savings against depreciation caused by inflation, they become an unattractive option for depositors, and banks are unable to respond to a reduction in long-term interest rates by changing deposit rates (funded from the money raised through loans) commensurately.

The dynamics of deposit rates (and retail loan rates to a certain extent) respond to changes in money market rates and bond yields with a certain time lag because these instruments have a standard nature. Changes in interest rates on these instruments are subject to decisions on banks' interest rate policies. In addition, loan and deposit rates depend on the specifics of banking business that is exposed to interest rate risk (when market rates grow, depositors can withdraw their funds ahead of schedule and deposit these funds at higher interest rates, whereas interest rates on earlier issued loans remain unchanged; when interest rates go down, borrowers can refinance their loans at lower interest rates, whereas interest rates on earlier deposits remain unchanged). Seeking to avoid materialisation of interest rate risk, i.e. a situation where banks will have to pay high interest on their liabilities while earning low returns on their assets, banks respond to interest rate increases and cuts asymmetrically. When interest rates go down, banks reduce their loan rates more slowly than deposit rates. To the contrary, when interest rates go up, banks raise their loan rates faster.

There is another factor that has become more important in recent years and is influencing loan rates – lending programmes on specific terms where the key rate has a weak effect on the cost of borrowings (government subsidised lending programmes, developers' project financing). The larger the proportion of such loans in market turnover, the weaker the impact of the key rate on loan rates (see Box 11 'Subsidised lending and its impact on the transmission mechanism').

Due to the above specifics, the effect of monetary policy on interest rates on deposits and, particularly, loans might be limited in the short term. However, divergences in interest rates on clients' transactions and on money and securities market operations affect the relative attractiveness of financial transactions to banks, increase banks' operations in more attractive market segments, and are conducive to respective adjustments in interest rates. As a result, in the longer term, a revision of the key rate or expectations about its level translates into loan and deposit rates.

Furthermore, the Russian financial market is developing, which accelerates, to a certain extent, the response of deposit and loan rates to monetary policy changes. As online banking is becoming increasingly widespread and more advanced, agreements are concluded more quickly; the standardisation of loan agreements simplifies transactions and makes the market more homogeneous; and the expansion of aggregators strengthens competition among banks, encouraging them to respond to developments faster.

This was especially evident in the deposit market. According to the Bank of Russia's assessment, in 2019–2025, over 80% of the change in OFZ yields translated into long-term deposit rates within three months[5] and into short-term deposit rates – within one month (in 2013–2018, this process took six to seven months). As for the main segments of the credit market, the adjustment has accelerated as well, specifically from two to six months in 2013–2018 to two to four months in 2019–2025. The exception is long-term corporate lending where the spread of loans at interest rates that are weakly affected by market conditions caused a distortion and slowdown of the adjustment of average market rates to monetary policy changes.

Money market rates, bond yields, and loan and deposit rates form under the influence of monetary policy and, in turn, impact almost any economic agents' decisions affecting aggregate demand in the economy and inflation. Certain chains of the cause and effect relationships ensuring this result are called the transmission mechanism channels of monetary policy.

The interest rate channel of the transmission mechanism

The most important channel of the transmission mechanism in the Russian economy is the interest rate channel that is related to the influence of interest rates on decisions regarding consumption, investment, and savings.

Loan rates and bond yields affect the affordability of borrowings for households and businesses. The cheaper loans are, the greater number of companies and households will raise loans to purchase investment or consumer goods. Additional demand funded from borrowings pushes up prices in the market for related goods and accelerates inflation. A vivid example of this was the rise in housing prices in Russia during the effective period of the extensive subsidised mortgage lending programmes.

Interest rates on deposits and savings alternatives influence households' preferences for saving or consumption. The higher returns on savings are, the more households tend to postpone their purchases hoping to buy larger quantities of goods using their returns on savings or save enough money for expensive purchases.

According to the Bank of Russia's estimates, a change in loan and deposit rates is followed by a co-directional change in the saving ratio within one quarter. Over the course of the year, this effect is gradually strengthening since increasingly more people respond to a steady change in interest rates, making decisions to save or borrow funds.

As inflationary risks in Russia have been weakening in recent decades, households are more willing to increase savings and banks – to issue long-term loans to their clients. Furthermore, the reduction

[5] Hereinafter, the ratio between OFZ yields and average market fixed rates on new transactions is described. Certain banks might respond to changes considerably more slowly, and it can take up to three to four quarters for the credit and deposit markets to completely adjust to the changed situation.

in inflationary risks has strengthened confidence in the Russian financial system and contributed to dedollarisation of loans and deposits. As a result, the importance of the financial sector in the national economy has been growing progressively. Thus, as of early 2025, banks' claims on organisations accounted for over 53% of GDP, which is 1.5 times more than as of early 2014, while those on households were up from 15% to 19% of GDP over the said period. Funds with banks have been growing as well: corporate deposits included in money supply increased from 19% as of early 2014 to 27% of GDP, while retail deposits – from 23% to 30% of GDP.

As the amounts of financial transactions have been growing, the importance of the interest rate channel of the transmission mechanism has been increasing because of a rise in potential demand that can influence the dynamics of market rates. Lending has become the main source of demand in certain market segments. Specifically, mortgage loans backed by shared construction participation agreements issued over 2020–2024 totalled ₽11.3 trillion, which is nearly two-thirds of the amount transferred to escrow accounts over the said period. Car loans issued over the said period totalled ₽6.1 trillion, which is more than 40% of the overall value of cars sold in the domestic market.

The efficiency of the interest rate channel in the corporate segment of the credit market has also been influenced by a wider use of variable rate loans. By the middle of 2025, such loans accounted for nearly two-thirds of the corporate loan portfolio (compared to about one-third in early 2020). A change in the key rate and dependent interest rates instantaneously affects borrowers' interest expenses on variable rate loans, influencing their willingness to increase other expenses, raise additional borrowings, or repay earlier loans ahead of schedule. Concurrently, due to the growing popularity of these loans, the demand for new loans depends not only on the current level of interest rates, but also on expectations of its future change. If borrowers expect interest rates to go down soon, they might increase their borrowings despite currently high interest rates. To the contrary, if borrowers assume that interest rates might go up in the near future (e.g. if inflationary risks materialise), the stimulating effect of low interest rates on lending weakens.

Another factor impacting the functioning of the interest rate channel, which has become important in recent years, is the spread of lending programmes where interest rates are weakly affected by monetary policy. In the first place, these are subsidised lending programmes aimed at mitigating the consequences of pandemic-related and geopolitical shocks (see Box 11 'Subsidised lending and its impact on the transmission mechanism'), project finance in housing construction, and borrowings of certain large companies related to banks – lenders. In the conditions when interest rates on a considerable proportion of loans did no depend on monetary policy, more significant changes in the key rate could be needed to influence the level of demand in the economy.

Analysing the influence of interest rates on prices, experts sometimes speak of the cost channel alongside the interest rate channel. A rise in interest expenses caused by higher interest rates exerts upward pressure on prices through the cost channel.

Nevertheless, the impact of the latter on the overall effectiveness of the transmission mechanism is limited. In the first place, Russian non-financial companies' interest expenses do not exceed 5% of the cost of their sales[6] and, therefore, the effect on prices within the logic of the cost channel is relatively small. Secondly, although changes in interest rates might significantly affect costs of certain highly leveraged companies, the overall potential of the pass-through of interest expenses to prices is limited.

[6] Mogilat, A., Moskaleva, A., Popova, S., Turdyeva, N., and Tsoy, V. (November 2024). Russian Companies' Interest Expenses. Analytical note. Bank of Russia.

The extent of the pass-through depends on competition among manufacturers and the demand for their products, which in turn depends on the level of interest rates.

Thus, when interest rates go up, interest expenses increase. However, the demand for products declines. Seeking not to lose the market share (including due to competition with less leveraged companies that are, accordingly, less dependent on interest rate movements), manufacturers offset part of the rise in costs through their margin rather than higher prices. Contrastingly, when interest rates go down, the demand for products grows and companies are thus able not to reduce prices, while competing for buyers, but rather increase their margin as a result of lower interest expenses.

Furthermore, companies raising fixed rate loans to cover their costs face an increase in interest expenses not instantaneously after a rise in interest rates but rather at the moment when they decide to refinance their loans or raise new ones. Concurrently, higher market rates immediately begin to reduce the affordability of loans and thus contain the demand financed through them. As a result, compared with the interest rate channel, the effect of the cost channel on price dynamics is considerably weaker.

Transmission mechanism channels related to the impact of interest rates on asset prices

Interest rates, which are driven by monetary policy decisions, influence securities prices as well. Bond prices directly depend on the market level of interest rates (the higher market rates are, the lower the bond price should be for the fixed coupon to form market yield). The demand for shares and their prices go up when market rates go down, driven by both higher affordability of broker loans and expected growth of demand in the economy, companies' revenues and returns on equity investment.

Securities prices impact demand in the economy through several channels simultaneously. Firstly, securities can be used to back bank loans. Interest rates on collateralised loans are normally lower than those on unsecured ones. In addition, banks can issue a secured loan to a borrower even when the latter is not assessed as sufficiently reliable to receive an unsecured loan. Therefore, a rise in securities prices increases the accessibility of borrowings to securities holders and boosts lending. This effect of interest rates on lending amounts is called the balance sheet channel of the transmission mechanism.

Securities are held not only by banks' clients, but also by banks themselves. Revenues from a growing value of securities held by a bank is one of the sources of bank capital. An increase in bank capital, in turn, enables banks to issue more loans to their current borrowers and expand the range of potential borrowers. This channel is referred to as the narrow credit channel of the transmission mechanism.

The role of these two channels in the Russian economy is still limited. Loans backed by securities account for less than 3% of the corporate loan portfolio. In retail lending, securities are used as collaterals even more rarely. The importance of the narrow credit channel is limited by both the percentage of securities in bank assets (shares and equity stakes account for less than 3%, and bonds – for no more than 15%) and a high level of capital. During the first months of 2025, the capital adequacy ratio N1.0 exceeded 12%, which is 1.5 times higher than the minimum level. Furthermore, the potential effect of the pass-through of losses from securities revaluation to capital is limited by the possibility of regulatory easing like in 2014–2022. Nonetheless, the Russian bond market has been expanding nearly 1.5 times faster than the credit market over the past decade. If this trend continues,

the role of securities might be expected to increase further for both borrowers and investors. Accordingly, the balance sheet channel and the narrow credit channel might both become more important.

Securities prices affect inflation not only through the credit market. The economic literature also refers to the welfare channel related to how financial asset owners take into account their financial reserves when planning their expenses. When prices for securities go up, their holders increase their propensity to consume because of improved welfare. Contrastingly, lower prices for securities make their holders save more to offset the losses.

Currently, securities account for a rather small percentage in households' savings. As of early 2025, people's investment in bonds and listed shares amounted to approximately 21% of deposits and foreign cash holdings. Nevertheless, this figure has been steadily growing (it was almost two times lower in early 2020). Therefore, the potential role of the welfare channel in the Russian economy has been increasing.

In recent years, the effectiveness of all the three channels has been negatively affected by soaring volatility in the securities market (especially in the segment of shares) provoked by non-economic shocks. In the short and medium term, securities prices could be affected by changes in the quarantine regime during the pandemic period or the enactment of new sanctions much more strongly than by monetary policy changes.

The interest rate channel of the transmission mechanism and other channels related to asset prices ensure the effect of monetary policy on aggregate demand in the economy, thus contributing to a temporary rise or slowdown in economic activity. If there is a gap between the current level of economic activity and the potential one, which is referred to as the output gap (see Box 10 'The concept of a long-term economic equilibrium and deviations of key macroeconomic variables from it'), this affects the inflation rate.

According to the Bank of Russia's estimates, a 1% output gap entails a 0.6 pp change in annual inflation over a horizon of four to five quarters. Moreover, proinflationary (or disinflationary) effects are observed throughout the entire period when a positive (or negative) output gap persists, and not only when it expands or shrinks. The impact of the output gap on inflation has become much stronger in 2022–2024 because of lower cross-border mobility of capital (due to the existing sanctions, concerns about new sanctions, and the capital controls) and the changed nature of the influence of domestic demand on foreign trade transactions.

The foreign exchange channel of the transmission mechanism

Interest rates on ruble-denominated financial instruments forming under the influence of monetary policy affect not only the propensity to save, but also preferences for particular financial instruments. Specifically, the higher interest rates on ruble financial instruments are, the fewer investors prefer foreign currency instruments. In turn, changes in the demand for foreign currency-denominated financial instruments affect the ruble exchange rate. According to the Bank of Russia's estimates, a 1 pp change in the overnight IBL rate leads to an approximately 0.2% adjustment of the real effective exchange rate of the ruble.[7] This response weakened in 2022–2023 after the decrease in cross-border

[7] The weighted average change in the real exchange rate of the ruble against the currencies of Russia's main trading partners.

mobility of capital, whereas before that, the adjustment of the exchange rate following a shift in interest rates had been several times stronger.

The ruble exchange rate is a factor influencing prices in the domestic market. The impact of monetary policy on inflation associated with the dynamics of the ruble exchange rate is referred to as the foreign exchange channel of the transmission mechanism.

The foreign exchange channel comprises several chains of the cause and effect relationships. In the first place, the ruble exchange rate can affect inflation directly through prices for imported consumer goods and prices for raw materials and components imported by Russian companies, which influences the input costs of domestic goods. Secondly, the exchange rate affects the ruble value of exports and imports, which impacts price competitiveness of Russian and foreign goods. Thus, the ruble's weakening results in growth of the ruble value of both imports to Russia (which makes Russian manufacturers more competitive and expands their opportunities to raise prices for their products competing with more expensive imports) and exports from Russia (which encourages domestic exporters to ramp up exports or increase prices in the domestic market). The foreign exchange channel is characterised by pronounced asymmetry: when the ruble depreciates, prices grow faster than they drop when the national currency strengthens.

According to the Bank of Russia's estimates, the effect of the exchange rate on inflation has always been moderate (a weakening of the nominal effective exchange rate[8] by 1% caused a rise in inflation by no more than 0.1 pp), and in recent years, the pass-through of exchange rate movements to inflation has slowed down. It might take up to one year for exchange rate dynamics to fully translate into consumer prices (compared to six months in the recent past). However, spikes in the exchange rate might significantly alter prices already in one to two months.

First of all, the dynamics of demand and supply in the FX and commodity markets have been notably affected by the shocks associated with the disorganisation of the global commodity market during the 2020–2021 pandemic and changes in logistics, settlements and pricing in foreign trade amid the sanctions and shifts in the geographical structure of foreign trade transactions caused by growing geopolitical risks in 2022–2025 (see Appendix 4 'One-off supply-side inflation factors'), thus considerably distorting the effect of monetary policy.

Secondly, higher risks have triggered large-scale structural shifts influencing the efficiency of the foreign exchange channel of the transmission mechanism. The sanctions and capital controls have weakened the relationships between the Russian and foreign financial markets and, consequently, the effect of ruble interest rates on the foreign exchange rate.[9] Partial substitution of unfriendly states' currencies in foreign trade with rubles has reduced and slowed down the pass-through of exchange rate dynamics to domestic prices. Finally, the growing importance of domestic demand and production, which manifests itself in the declining proportions of imports and exports in GDP, has been weakening the role of the foreign exchange channel. Furthermore, a reduction in the demand for foreign currency from importers and its supply by exporters, has been decreasing the depth of the FX market, thus creating preconditions for stronger fluctuations of the ruble exchange rate, which partially offsets the weakening of the price response to them.

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[8] The weighted average change in the nominal exchange rates of the ruble against the currencies of Russia's main trading partners.

[9] For details about these controls and the mechanisms of their impact on the functioning of the transmission mechanism, refer to Box 10 'Impact of capital controls on the monetary policy transmission mechanism' in MPG 2024–2026.

In 2024, unfriendly countries imposed sanctions on Moscow Exchange, which provoked elevated exchange rate volatility for a while and resulted in the transfer of trading in US dollars and euros to the over-the-counter segment of the market. Nevertheless, this transition has not influenced the behaviour of the ruble exchange rate and, accordingly, the functioning of the foreign exchange channel of the transmission mechanism.

The majority of the above economic changes that have happened in recent years and have been impeding the functioning of the transmission mechanism are temporary. Accordingly, the monetary policy transmission mechanism may be expected to gradually restore its efficiency. However, such trends as a growing proportion of ruble settlements with non-residents and lower willingness to use foreign currency-denominated financial instruments can remain for a long time, thus weakening the influence of interest rates on the exchange rate and the effect of the exchange rate on foreign trade. Moreover, the toughening of the sanctions and restrictions enacted against Russia limits the range of potential counterparties for Russian exporters and importers, which also slows down the adjustment of foreign trade transactions to exchange rate movements. These alterations make the foreign exchange channel of the transmission mechanism less important.

The inflation expectations channel of the transmission mechanism

The above transmission mechanism channels are complemented by the inflation expectations channel. Expectations about future movements of product and service prices are taken into account by households when they make their decisions on savings and consumption, by companies when they estimate returns on investment and price their products, and by banks when they develop their interest rate policies. The Bank of Russia's monetary policy, including communication as its significant element, is among the factors that impact inflation expectations.

Thus, if the Bank of Russia raises the key rate or announces its planned increase, these are grounds for expecting a future slowdown in inflation. These expectations encourage companies to avoid a too fast rise in prices for their products, which might compromise their competitiveness, and households – to maintain moderate consumer activity without fearing a depreciation of their savings. As a result, both demand- and supply-side proinflationary factors weaken even before a key rate change is fully transmitted to bond yields and loan and deposit rates. Accordingly, the inflation expectations channel accelerates the functioning of the transmission mechanism in general, making it more efficient.

The above-mentioned weakening of the response of long-term interest rates to a key rate change (see the subsection 'The impact of the key rate on market rates in the economy') reflects the increasing importance of the inflation expectations channel. Estimating long-term interest rates, market participants consider inflation dynamics and the related key rate increase as temporary, not expecting inflation and the key rate to stay elevated for an extended period.

The shocks of recent years induced by the coronavirus pandemic and rising geopolitical risks have been hindering the functioning of the inflation expectations channel. The scale of the pandemic and the anti-Russian sanctions is unprecedented compared to any other events of recent decades, which makes it hard to form long-term expectations. Moreover, in 2024, the surge in demand persistently surpassing supply in the labour market, coupled with considerable government support for the economy, has resulted in a high level of consumer and financial confidence. These conditions are weakening the incentives to reduce credit despite higher interest rates, which also weakens the effectiveness of the inflation expectations channel. Seeking to maintain the effectiveness of this

channel, the Bank of Russia especially focuses on communication and disclosure of information on the situation in the Russian economy and monetary policy decisions made (see Appendix 6 'The Bank of Russia's communication on monetary policy issues').

Specifics of the functioning of the transmission mechanism during a long period of accommodative monetary policy

The above-described patterns in the functioning of the monetary policy transmission mechanism are observed when the main priority of monetary policy is to keep inflation at the target. However, central banks might be forced to pursue accommodative monetary policies in some situations (e.g. during the coronavirus pandemic).

In countries with steadily low inflation and anchored inflation expectations, money supply can be expanded (through accommodative monetary policy or expansionary fiscal policy) for quite a long period, supporting the national economy without any significant implications for the inflation rate. However, when confidence in price stability is disrupted and prices go up, the potential of such policy is exhausted, and ultra-accommodative monetary policy becomes an additional source of inflation.[10]

In countries where inflation expectations are not anchored and the economically active population has the experience of living in the conditions of high inflation, accommodative monetary policy might boost the economy during a short period, but afterwards, the functioning of the transmission mechanism starts to distort.

Low deposit rates, which are disproportionate to inflation, forming under the influence of accommodative monetary policy, cause a reduction in the demand for deposits. People may withdraw funds from deposits into the product market (which directly accelerates inflation), the FX market (which increases dollarisation of the national financial system, weakens the national currency, and pushes up domestic prices for imports), and the real estate and securities markets (which might create price 'bubbles' in the said markets). In some cases, people might use borrowings to make speculative purchases, which amplifies the proinflationary effect of low interest rates.

Weaker demand for deposits does not only reduce banks' capacities to finance credit transactions from deposits, but also increases liquidity risk. Fearing that depositors might withdraw their funds when inflation speeds up again, banks either avoid expanding long-term lending or set high long-term loan rates so that they cover banks' risks. A contraction in long-term lending might in turn adversely affect the investment climate in the country and overall economic activity.

A situation where domestic funding is unstable and inflationary risks are rising, preventing banks from expanding long-term lending in the national currency, provokes a rise in foreign currency lending (as it was in Russia at the end of the 1990s when over half of long-term lending was in foreign currency). When foreign currency lending goes up, banks have to raise more funds in the foreign currency deposit market, which further increases dollarisation of the economy.

Growing dollarisation not only makes the domestic economy more exposed to external shocks, but also impairs the effectiveness of the monetary policy transmission mechanism because the central

[10] Borio, C., Hofmann, B., and Zakrajšek, E. Does Money Growth Help Explain the Recent Inflation Surge? BIS Bulletin, No. 67.

bank's policy rates cannot influence interest rates on foreign currency-denominated loans and deposits. Therefore, when the need to slow down inflation in order to normalise the economic situation becomes obvious, the central bank might be forced to considerably tighten its monetary policy to achieve this objective.

Evolution of the monetary policy transmission mechanism

The transmission mechanism as a whole and its individual channels have been evolving together with the Russian economy. The main changes of recent years are detailed in the description of the transmission mechanism channels. The transmission mechanism will evolve further in the future.

Possible factors of its further transformation may be divided into three groups. Firstly, these are long-lasting trends observed in the Russian economy in recent decades that will remain important in the future.

The most significant of these trends is the advancement of the domestic financial market. The expansion of the real sector of the Russian economy boosts the demand for financial services. Moreover, a reduction in inflationary risks, enhancement of financial laws and regulations, higher resilience of financial institutions, and advancement of the infrastructure are strengthening confidence in the domestic financial sector and, accordingly, the willingness to use Russian financial instruments.

The most obvious result of this trend is dedollarisation of the domestic financial sector (foreign currency instruments in retail deposits being part of money supply accounted for 6% as of early 2025 vs 17% as of early 2014, and the proportion of banks' foreign currency claims on organisations dropped from 17% to 11% over the same period), which has been improving the efficiency of the interest rate channel of the transmission mechanism. Growing demand for cryptocurrencies may be an additional factor decreasing the use of traditional foreign currency instruments.

Another important trend associated with the evolution of the financial market is a stronger role of domestic sources for financing the national economy (over 2014–2024, Russian companies' external debt in the ruble equivalent surged by a factor of 1.2, while their liabilities on internal loans and bonds quadrupled). It is the domestic financial sector that the Bank of Russia influences through its monetary policy. Therefore, the higher the share of internal financial instruments in residents' transactions, the higher the efficiency of the transmission mechanism.

The Russian financial sector has grown in both quantitative and qualitative terms. Specifically, the financial sector has been sustainably expanding the use of digital technologies. The spread of online banking, internet trading, and financial aggregators has significantly simplified the transfer of private funds across both banks and Russian financial market segments, thus increasing market participants' competition for clients. Furthermore, the transfer of private funds across banks and, as a result, higher competition have been facilitated by enhancement of financial laws and regulations (the Bank of Russia established the maximum amount that a depositor may transfer for free between his/her accounts with different banks and adopted measures to prevent tied selling of financial services). The advancement of the technical and legal infrastructure of the market has improved the flexibility of loan and deposit rates and generally accelerated the response of certain market segments to changes in the environment in other market segments, which enhances the efficiency of all channels of the transmission mechanism.

There is another trend of recent decades associated with the growth of the domestic financial market, improvement of the mechanisms protecting retail investors, and simpler access to the securities market. This trend is an increasing number of private investors and a sustainable rise in households' investment in securities, which boosts the efficiency of both the interest rate channel (competing with the bond market for households' funds, banks adjust their deposit rates faster) and the welfare channel.

Furthermore, the domestic financial market has been developing by expanding the range of instruments available to market participants. In particular, banks widely offer variable rate corporate loans, and a number of banks began to offer variable rate deposits. In addition, the range of derivatives has expanded. Overall, the spread of more complex, flexible, and tailored financial instruments has enhanced the efficiency of the transmission of monetary policy impulses, but necessitated attention to changes in the functioning of the market. Thus, the wide use of variable rate loans has been strengthening and accelerating the impact of interest rates on demand in the economy, while restricting the opportunities to moderate lending through a considerable short-term rise in interest rates (see the subsection 'The interest rate channel of the transmission mechanism').

Long-lasting trends affecting the functioning of the transmission mechanism also include demographic trends. For example, an increase in life expectancy and population ageing create conditions for higher demand for long-term savings, which makes the saving channel more important. However, the impact of demographic processes on households' financial behaviour is complex and non-linear,[11] and therefore, the effect of demographic trends on the transmission mechanism in the medium term is limited.

The second group of factors influencing the transmission mechanism includes processes associated with the escalation of geopolitical tensions in recent years, which have affected all channels of the transmission mechanism to a certain extent. As geopolitical processes are complex and turbulent, it is hard to predict how steady this impact will be in the long term.

In the first place, these factors include sanctions imposed on the Russian economy by unfriendly countries. Their impact on the transmission mechanism is of a multifaceted nature. The mere fact of enactment of new sanctions affects market sentiment, inducing fluctuations of the exchange rate, securities prices, and assessments of companies' financial stability (and consequently, the risk premium included in loan rates). As a result, all this distorts the functioning of all channels of the transmission mechanism, especially the expectations channel. Moreover, a number of macroeconomic shocks, which are neutral without sanctions, become proinflationary as the economy is unable to adjust fast, which requires tighter monetary policy.[12]

Sanctions on Russian companies' foreign trade transactions (restrictions on supplies, bans on payment services) weaken the efficiency of the exchange rate channel as they reduce the opportunities to quickly expand or decrease foreign trade transactions. Nevertheless, the Russian economy has been progressively adapting to these sanctions, finding new ways of settlements and supply destinations, which are less exposed to sanctions-related shocks.

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[11] Bessonova, E., Denisova, I., Ivanova, N., and Moskaleva, A. (October 2024). Demography and Savings: Evidence from a Russian Household Survey. Bank of Russia Working Papers.

[12] Styrin, K. (December 2024). Monetary Policy Transmission in a Small Open Economy Under Financial and Trade Restrictions. Bank of Russia Working Papers.

Sanctions restricting Russian residents' transactions in the external financial market are also weakening the efficiency of the exchange rate channel, hindering capital flows across the Russian and global markets after a key rate change. The effects of this type of sanctions are more persistent since the global financial market is more transparent and transactions therein are more exposed to sanctions.

In recent years, capital mobility has been constrained not only by sanctions but also by the capital controls introduced to mitigate the consequences of geopolitical shocks. These constraints are also weakening the efficiency of the exchange rate channel.

Nevertheless, despite a considerable decrease in cross-border mobility of capital, key rate changes have continued to influence the exchange rate, including owing to the evolution of the Russian financial market. Although transactions in the external financial market have become less accessible, the Russian financial market has been able to quickly develop instruments meeting households' and companies' demand for foreign currency assets and borrowings (deposits in friendly countries' currencies, substitute bonds). Affecting the choice between these instruments and ruble-denominated transactions, the key rate has continued to impact the ruble exchange rate, albeit to a lesser extent than before (see the subsection 'The exchange rate channel of the transmission mechanism').

Sanctions have not only boosted further expansion of the range of financial instruments available in the domestic market, but also influenced other long-lasting trends of the Russian economy's development playing an important role in the evolution of the transmission mechanism. In particular, growing risks related to the use of financial instruments denominated in unfriendly states' have intensified the process of dedollarisation of the Russian economy. After access to transactions in the external financial market was restricted, the rise in related costs and risks became yet another factor encouraging companies and households to refocus on internal sources of borrowings and saving instruments.

The trend towards an increase in the proportion of securities in households' savings was temporarily weakened by adverse geopolitical developments. In 2022, the uncertainty of expectations regarding Russian securities and their negative revaluation, coupled with soaring deposit rates and higher demand for deposits, resulted in a decline in the proportion of securities in savings. Nevertheless, this effect was transitory, and the percentage of securities in households' savings resumed growth already in 2023, later on exceeding the maximum levels of late 2021–early 2022.

The third group of factors impacting the transmission mechanism are economic policy measures implemented by the Government, most of which are needed to protect the Russian economy in the conditions of the growing sanction pressure, among other things.

Specifically, concessional lending programmes, introduced to prop up the economy amid the worsening of the foreign trade environment, were extensively used already during the pandemic period or, in a number of market segments, even earlier. The spread of loans, the interest rates on which are weakly impacted by monetary policy (due to both subsidised interest rates and other forms of government support), reduces the efficiency of the transmission mechanism (see Box 11 'Subsidised lending and its impact on the transmission mechanism'). Nevertheless, in recent years, the identification of macroeconomic risks related to the surge in subsidised lending has helped optimise the existing subsidised lending programmes, in particular terminate a number of them (first of all, the non-targeted subsidised mortgage lending programme) and revise the parameters of others (a number of subsidised corporate lending programmes providing for a partial pass-through of changes in the Bank of Russia

key rate to interest rates for ultimate borrowers). As a result, the distorting effect of subsidised lending on the transmission mechanism has been steadily decreasing.

To facilitate smooth adaptation of the Russian banking system to the changed environment, in 2022, the Bank of Russia introduced regulatory easing measures reducing the burden on bank capital and, accordingly, the effectiveness of the narrow credit channel. Currently, the Bank of Russia is tapering off these measures.

Summing up the above, recent years have become a serious challenge to the Russian economy as a whole and monetary policy in particular. While the overall trend towards further development of the domestic financial market has continued, thus boosting the efficiency of the transmission mechanism, there are also factors related to geopolitical tensions (before that, the coronavirus pandemic) and regulatory measures aimed at mitigating the implications of external shocks. These factors have been distorting the functioning of the transmission mechanism channels. It is now difficult to assess the impact of each of these factors separately, but overall, they have been weakening the effect of the key rate on demand and inflation, necessitating more significant changes in the key rate to be able to achieve the goals of monetary policy.

Nonetheless, the Russian economy has largely managed to adapt to the changed situation. Already in 2024, the role of the shocks adversely affecting the efficiency of the transmission mechanism started to decrease gradually. The economy's further adaptation, the enhancement of economic policy measures, and the continuation of the trends associated with the advancement of the domestic financial market will promote long-term growth in the efficiency of the transmission mechanism. This will be facilitated by the deepening of the structural transformation and lower supply-side inflationary risks, as well as stronger confidence in monetary policy, a decrease in inflation expectations to the target level, and as a result, a reduction in demand-side inflationary risks.

BOX 11. SUBSIDISED LENDING AND ITS IMPACT ON THE TRANSMISSION MECHANISM

Implementing its monetary policy, the Bank of Russia takes into account the considerable amount of credit to the economy under various subsidised programmes as the terms of these loans are weakly responsive to key rate changes

With regard to certain types of credit transactions, the effect of monetary policy on interest rates for ultimate borrowers notably differs from the market logic described above. If the amount of such transactions is significant, the central bank needs to take them into account when planning and implementing its monetary policy. One of the most widespread types of such transactions are subsidised loans under government programmes where banks issue loans to certain categories of borrowers at lower interest rates, while the difference between market and subsidised rates is covered by the government through subsidies.

In terms of fiscal policy, subsidised lending is an appealing instrument to boost demand because it can promote a local increase in demand that might exceed manifold the current budget expenditures for subsidising interest rates. However, this subsidising is only effective when a programme offers only short-term loans for a limited period. Where maturities of subsidised loans become longer, the overall expenditures for subsidising interest rates on them might be comparable with the loan amount. Moreover, the expenditures for subsidising interest rates on long-term loans issued earlier limit the flexibility of fiscal policy many years after the one-off stimulating effect of such loans has been exhausted.

In terms of monetary policy, subsidised lending might have mixed effects as well. During periods of economic instability when banks select borrowers more cautiously, while households and companies are less willing to increase spending on consumption and investment, the implementation of subsidised lending programmes can support and strengthen the effect of monetary policy measures on the economy (as a key rate reduction might be not enough to prop up demand, including due to its slower response to the key rate change). This effect is relevant primarily for countries where monetary policy rates are close to zero. Therefore, during the coronavirus pandemic, many central banks worldwide were implementing funding for lending (FFL) programmes aimed at boosting specific credit market segments. More than a third of the 27 FFL programmes launched by 14 large central banks were meant to restore the efficiency of monetary policy.[1]

Moreover, if subsidised lending programmes remain in effect for a long time, they hinder the efficient implementation of monetary policy. Generally, monetary policy has a very weak effect on interest rates on subsidised loans. Therefore, an increase in subsidised lending, all else being equal, does not only ease monetary conditions in the economy, but also distorts the functioning of the interest rate channel of the transmission mechanism. The higher is the percentage of subsidised loans in the economy, the more significant should be a key rate change to ensure an adequate impact on credit activity, demand, and inflation.

The overall economic effect of subsidised lending programmes is still a matter of dispute. In the first place, these loans have the so-called substitution effect. This is a situation where borrowers who were ready to raise loans even on market terms use a subsidised programme instead. As a result, the amount of subsidised lending does not increase aggregate demand in the economy, but only substitutes market lending, thus augmenting the burden on the budget.

Second, subsidies ensuring lower interest rates are paid from the budget (i.e. from taxes paid by the entire economy), being a mechanism of funds redistribution among various groups of economic agents. In addition, in order to weaken the proinflationary effect of subsidised lending programmes, the central bank has to pursue tighter monetary policy. A reduction in the interest rate for some groups of borrowers is accompanied by its increase for all others. Ultimately, subsidised loans are paid for by both tax payers (through budget subsidies) and unsubsidised borrowers (through loans issued at higher market rates).

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[1] BIS Review Funding for lending programmes.

Subsidised mortgage programmes for households. Subsidised mortgage lending, which accounted for over 70% of the portfolio of subsidised loans as of 1 August 2025, was the largest area of subsidised lending in Russia.[2] In the group of subsidised mortgage lending programmes, the most extensive one was the non-targeted government subsidised mortgage programme for new housing, which was initiated to prop up the construction industry and increase the affordability of housing during the pandemic period. On the one hand, the programme really supported the construction industry: over its effective period, borrowers received 1.6 million loans worth ₽6 trillion, which enabled them to purchase housing with the total area of 76 million square metres. On the other hand, as it is impossible to expand housing construction as quickly as the ruble mortgage portfolio, the implementation of the subsidised mortgage programme nearly doubled new housing prices, with their growth rate significantly exceeding that of wages and inflation. As a result, housing became less affordable for people as the surge in prices completely eroded the benefits of low interest rates on subsidised mortgages. It is therefore very hard to evaluate the efficiency of this support measure.

Subsidised corporate lending programmes. A number of subsidised programmes for businesses have definitely proven to be effective, with the burden on the budget being moderate (e.g. the Payroll Fund 0 and Payroll Fund 2.0 programmes that helped alleviate the negative consequences of the pandemic and avoid a slump in employment). Generally, where subsidised lending is a temporary anti-crisis measure implemented to support the affordability of credit for the most vulnerable or top-priority industries amid extreme tightening of lending conditions, it may be effective, while the above disadvantages of this instrument are less important. A decrease in the demand for and supply of loans reduces room for the substitution effect. Anti-crisis measures to support lending has a temporary effect on the fiscal system and monetary policy, which is not that significant considering drastic changes in economic policy happening during any crisis.

Furthermore, as compared to subsidised mortgage lending, adverse proinflationary effects of the expansion of subsidised corporate lending and, accordingly, the necessity to tighten monetary policy to offset its impact are lower. On the one hand, the demand funded through subsidised corporate lending programmes is much less concentrated and its pressure on prices is not that strong. On the other hand, successful implementation of leveraged investment projects may in the medium term boost the economic potential and to a certain extent alleviate the inflationary consequences of the initial stimulation of demand.

In addition, it should be noted that subsidised interest rates are not the only form of government support in corporate lending. In January–August 2025, over a fourth of ruble loans issued at fixed interest rates were loans with interest expenses not above 12%.[3] Many of these loans are certainly market-based – they are related to developers' project financing or lending to bank-affiliated companies. However, part of these loans are related to subsidised lending or alternative lending support mechanisms (government guarantees, subsidised funding to lending banks, and direct lending at low interest rates with the engagement of government development institutions, the NWF and other government agencies). These mechanisms also involve both extra burden on the budget (in the form of lost profits, contingent liabilities to creditors, etc.) and inflationary risks. Therefore, the actual level of economic imbalances associated with concessional lending in general is higher in the Russian economy than might be assumed based on the statistics.

The Bank of Russia believes that government subsidised lending programmes are an efficient economic policy instrument to address such tasks as countercyclical stimulation of recovery in demand during economic downturns and targeted aid to certain groups of borrowers or individual industries. However, when such programmes may be used by a wide range of borrowers during a long time, this instrument becomes less powerful due to a stronger substitution effect, which increases burden on the budget, and weakening potential for growth in market-based lending to the economy at a pace compatible with price stability. Lending to the economy in general is affordable when, first and foremost, inflation is predictably low and, accordingly, investors' inflationary risks go down, which enables borrowers to raise loans on market terms without accumulating imbalances in the economy.

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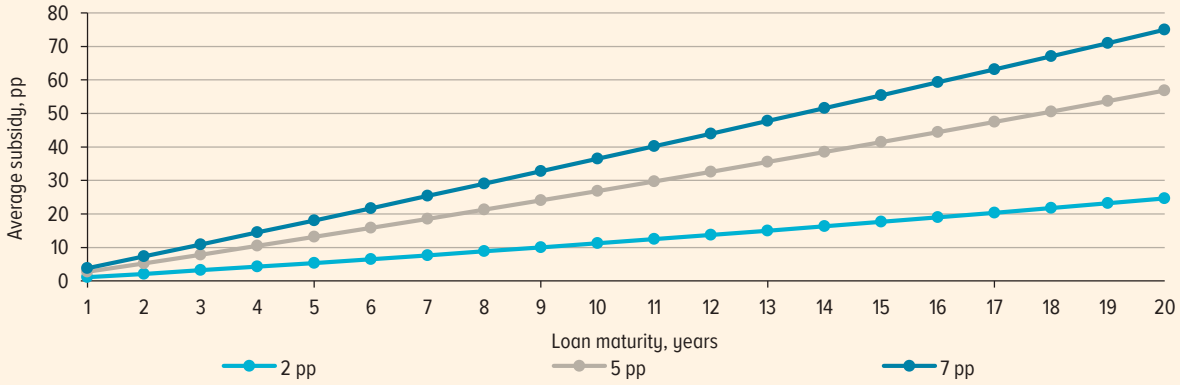
[2] The available financial data sources do not provide consistent and unified data on the amount of issued subsidised loans and debt on them. Hereinafter in Box 11, the estimates are made by combining data from several sources. They do not include statistics on some areas of subsidised lending (mortgages in agriculture, regional subsidised mortgage lending programmes, subsidised auto loans, etc.). Hence, the actual amount of subsidised lending exceeds the estimates given in the Box.

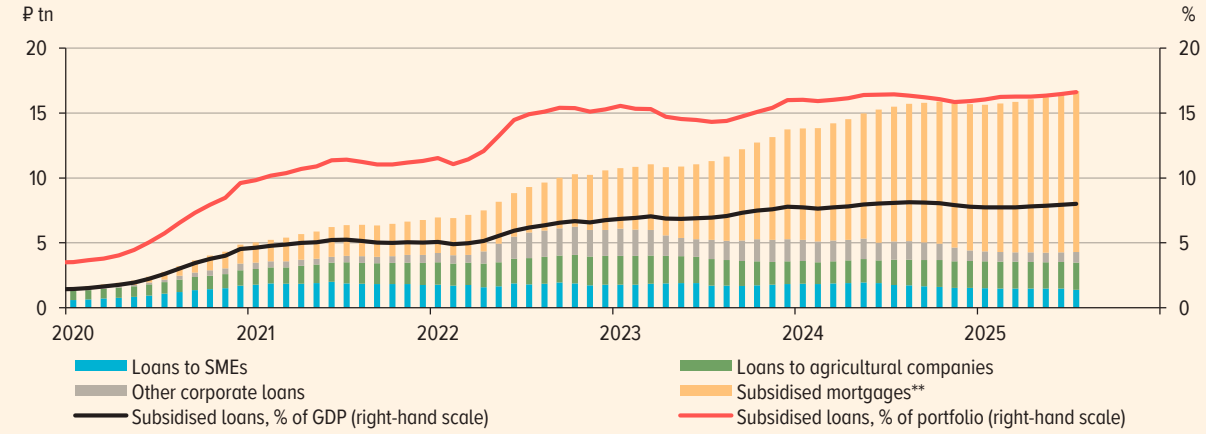
[3] For details about the structure of corporate loans, refer to the Granted Funds and Borrowings section on the Bank of Russia website.

BUDGET EXPENDITURES ON SUBSIDIES DEPENDING ON SUBSIDISED INTEREST RATES AND LOAN MATURITIES* *Chart 11.1*
(% OF AMOUNT OF ISSUED LOANS)



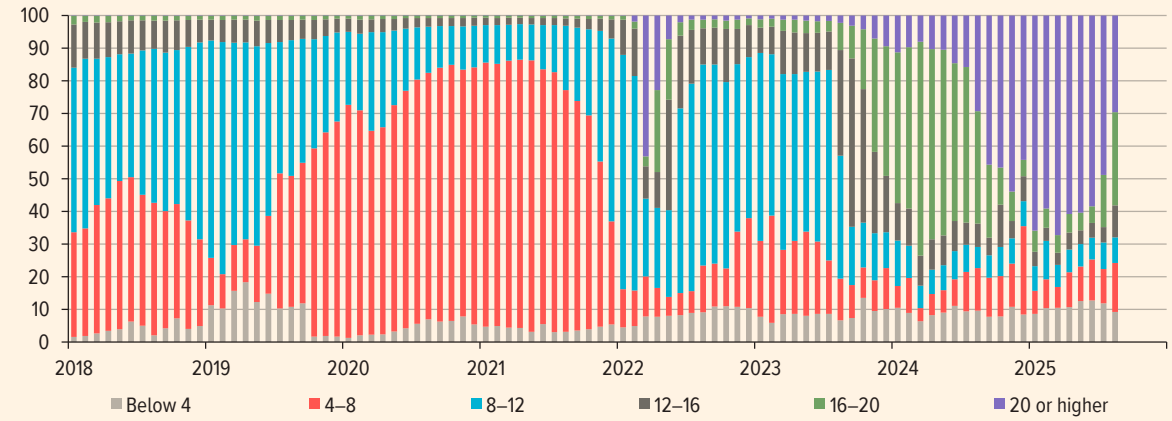
* *Total budget expenditures over the entire loan repayment period with different subsidy values (2 pp, 5 pp, or 7 pp on average over the repayment period).*
Source: Bank of Russia calculations.

STRUCTURE OF SUBSIDISED LOAN PORTFOLIO* *Chart 11.2*



* *Corporate loans are loans to resident non-financial organisations and individual entrepreneurs. Subsidised corporate loans – loans granted under government programmes at subsidised interest rates.*
** *Subsidised mortgages excluding agricultural mortgages and regional subsidised programmes.*
Source: Bank of Russia calculations.

STRUCTURE OF RUBLE LOANS TO NON-FINANCIAL BORROWERS AT FIXED RATES, BROKEN DOWN BY LOAN RATE *Chart 11.3*
(% OF TOTAL AMOUNT OF ISSUED LOANS)



Source: Bank of Russia calculations.

PROPORTION OF LOANS ISSUED TO NON-FINANCIAL ORGANISATIONS AT FIXED RATES WITHIN GIVEN RANGE IN TOTAL AMOUNT OF ISSUED LOANS, ON AVERAGE OVER PERIOD *Table 11.1*

Period	< 4%	4–8%	8–12%	12–16%	16–20%	≥20%	Key rate
2019 Q1	12.4	13.0	66.5	6.7	1.3	0.1	7.8
2019 Q2	15.1	18.1	58.0	7.3	1.4	0.1	7.7
2019 Q3	11.0	41.5	39.9	6.3	1.3	0.1	7.3
2019 Q4	1.8	61.9	30.0	5.1	1.1	0.1	6.6
2020 Q1	1.9	67.6	25.3	4.1	1.1	0.1	6.1
2020 Q2	3.3	68.4	23.7	3.6	0.9	0.1	5.5
2020 Q3	6.3	76.0	14.2	2.7	0.7	0.1	4.3
2020 Q4	6.6	77.5	12.6	2.4	0.7	0.0	4.3
2021 Q1	4.7	80.9	11.5	2.2	0.7	0.0	4.3
2021 Q2	4.4	81.1	11.8	2.0	0.7	0.1	5.0
2021 Q3	3.3	74.6	18.8	2.4	0.8	0.1	6.3
2021 Q4	4.7	49.2	40.8	4.2	1.0	0.1	7.4
2022 Q1	5.8	11.6	53.7	11.8	2.1	15.0	12.7
2022 Q2	8.0	7.1	35.9	22.4	15.9	10.7	13.8
2022 Q3	9.7	11.4	62.0	13.0	2.7	1.3	8.3
2022 Q4	10.7	20.7	52.5	12.3	2.5	1.3	7.5
2023 Q1	7.4	25.3	53.6	9.8	2.8	1.1	7.5
2023 Q2	8.5	23.4	50.7	12.2	3.7	1.6	7.5
2023 Q3	7.5	13.1	38.0	31.9	7.2	2.3	10.2
2023 Q4	11.1	10.4	13.0	27.7	30.9	6.9	14.6
2024 Q1	8.6	7.1	10.2	10.7	53.7	9.7	16.0
2024 Q2	9.5	7.2	7.9	9.2	54.5	11.8	16.0
2024 Q3	9.0	12.3	7.2	6.4	34.8	30.3	17.6
2024 Q4	9.1	17.5	8.1	8.6	8.5	48.2	20.4
2025 Q1	9.9	7.4	8.7	4.1	5.9	64.1	21.0
2025 Q2	12.0	11.3	6.8	4.6	5.4	59.9	20.8

Source: Bank of Russia calculations.

BOX 12. THE TRANSFER CURVE AND FORMATION OF INTEREST RATES ON BANK OPERATIONS

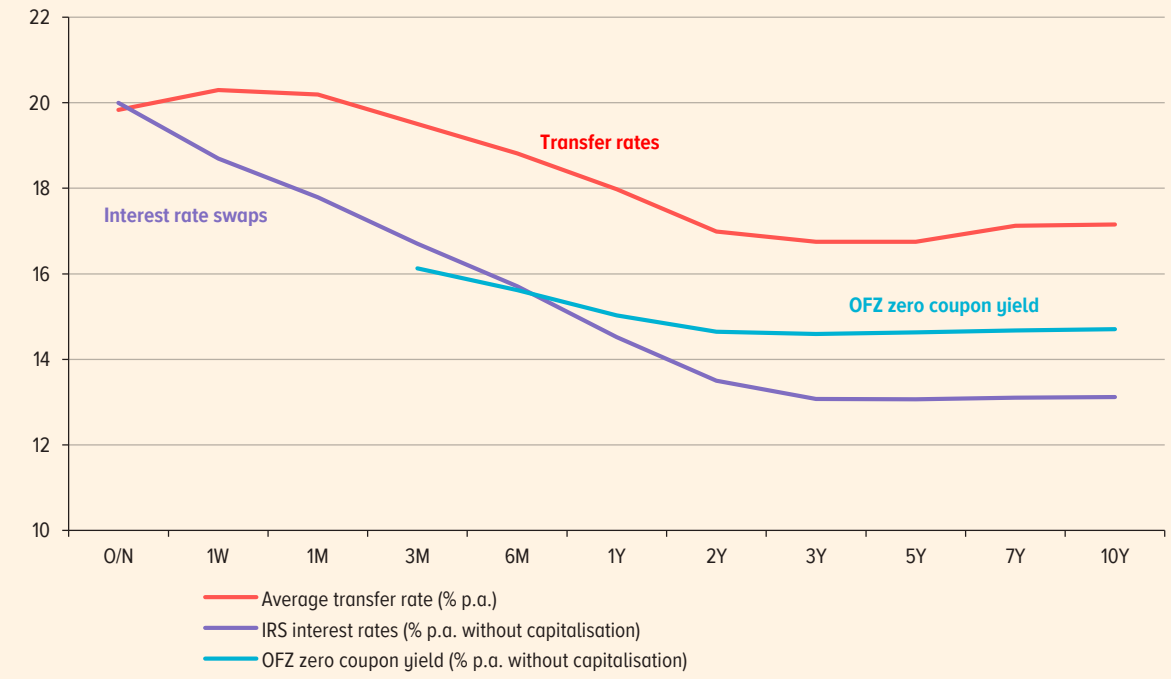
The transfer curve is a reference point for banks to establish loan and deposit rates. Banks build their transfer curves based on risk-free yield curves and their internal assessments

The transfer curve is a set of internal interest rates on transactions of various maturities that are established in a bank (its treasury, as a rule) for all its business units (deposit and credit units, etc.) as a reference point of the basic cost of banking products. This is an important element of the management mechanism to measure, as objectively as possible, the contribution of any business unit to the bank's overall financial performance. As a result, the credit institution's executives are able to arrange an effective system to incentivise employees, which considerably enhances the efficiency of management.

Nevertheless, the management function is not the only function of the transfer curve, although it is extremely important. The transfer curve is the core of the intrabank system of banking product pricing, which enables a credit institution to set a coherent range of prices and, when needed, to adjust the structure of its balance sheet by choosing between various sources of funding and areas of investment. In order to determine price conditions for any transaction (whether a credit, deposit, or securities transaction) of a particular maturity, a bank needs to set the transfer rate for this maturity and assess costs, benefits, and risks associated with a given transaction. Furthermore, the transfer curve is part of the liquidity and interest rate risk management mechanism. At the macrolevel, transfer curves of large banks are an integral part of the interest rate and credit channels of the monetary policy transmission mechanism.

Each bank builds an individual transfer curve based on the yield curves of market instruments with minimum risk or, where necessary, relying on its internal assessments. The basic curve of ruble yields, which is usually referred to as risk-free in banks' internal documents, is based on yields on such instruments as OFZ, IRSs, and ROISfix for fixed interest rates and on IBL rates and the key rate for variable interest

FIXED TRANSFER RATES OF SYSTEMICALLY IMPORTANT BANKS AND MARKET MEASURES OF YIELDS AS OF 11 JULY 2025 *Chart 12.1*
(%)



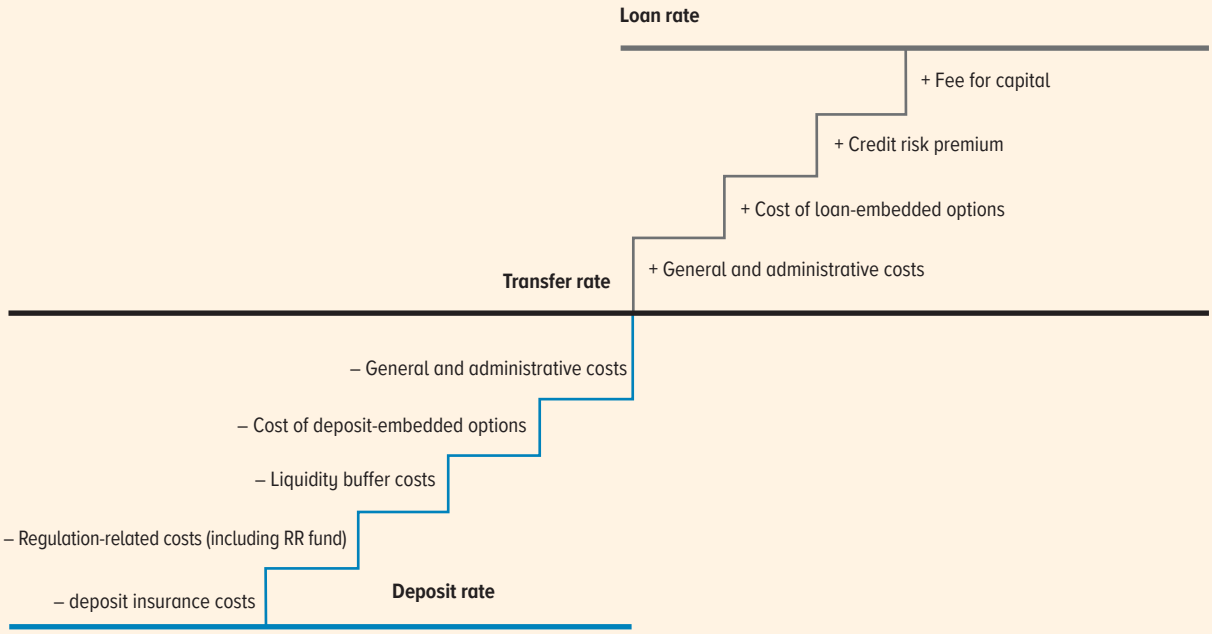
Note. Transfer curves are given as the average for systemically important credit institutions.
Sources: Bank of Russia, CBonds, surveys of credit institutions.

rates. Significant transformations in the functioning of financial markets might cause modifications in the calculation of the transfer curve. Thus, government bonds used to serve as the benchmark for pricing banking products with maturities of over one to two years for a long time, but in 2023 Q4, the ratio of demand and supply in the short-term OFZ market considerably changed causing undervaluation of short-term OFZ yields. In such a situation, when calculating transfer rates for these maturities, banks started to use IRSs or ROISfix as the market benchmark in addition to OFZ yields, considering them as instruments that better reflected the new conditions. Regardless of the choice of the basic yield curve, the shape of the transfer curve should take into account as fully as possible interest rate risk arising in the course of a bank's operations as a result of interest rate changes in the financial system, including because of inflation processes.

Transfer rates are only a reference point in banking product pricing. A market rate on each type of asset-related transactions should normally be no less than the transfer rate for the same term plus costs, risk premiums, the fee for using the bank's capital, and the cost of embedded options allowing changes in the amount and/or term of cash flows. To the contrary, a market rate on any type of liability-related transactions should normally be equal to the transfer rate minus the cost of embedded options, expenses, the fee for the liquidity buffer, costs related to compliance with regulatory requirements (including contributions to the RR fund), and, if applicable, premiums to the compulsory deposit insurance fund. As a result, regardless of the asset and liability structure, the spread between interest rates on asset- and liability-related transactions in normal business conditions enables a bank to cover all necessary costs and risks and generate profit. It should be noted that this general pricing scheme omits a bank's potential additional benefit from possible cross sales of other products to clients, as well as interest rate subsidising by the government or other third parties.

Factoring in the costs and risk premiums for various transactions might significantly influence banking product pricing, adjusting the response of deposit, loan and corporate bond rates to changes in the level and slope of the risk-free curve. Furthermore, interest rates for the real sector of the economy may also be affected by financial market parameters, including the extent of market segmentation, the level of competition for depositors' funds or for higher-quality borrowers, the specifics of business models employed by individual banks, as well as changes in the financial market regulation.

FORMATION OF DEPOSIT AND LOAN RATES FOR BANKS' CLIENTS USING TRANSFER CURVE *Chart 12.2*



Source: Bank of Russia.

BOX 13. COMPANIES' INTEREST EXPENSES AND THE COST CHANNEL

Russian non-financial companies' interest expenses do not exceed 5% of the cost of their sales. The year 2024 was no exception, even though interest payments on the debt were up in absolute terms

When the Bank of Russia raises the key rate and keeps it at a high level for an extended period, the research literature and the expert community intensify the discussion of the so-called cost channel. In contrast to the main channels of the transmission mechanism, the cost channel transmits the impact of monetary policy on macroeconomic indicators not through demand, but through supply and interest expenses. A key rate rise leads to higher market rates in the economy, which makes borrowings more expensive, including both new loans and the outstanding debt at variable rates on companies' balance sheets. This increases interest expenses, reducing companies' margin, which, technically, urges them to pass through a higher interest burden to prices. Following the logic of the cost channel, a number of researchers[1] tried to find the explanation of the price puzzle, that is, a rise in inflation in response to a policy rate increase. Although researchers have not found reliable evidence of the price puzzle,[2] including based on Russian data,[3] the issue of a potential impact of monetary policy on the economy not only through demand but also through supply remains on the agenda of the discussions on macroeconomic policy.

The Bank of Russia is closely monitoring the economic situation not only in terms of demand but also in terms of supply, including the dynamics of companies' interest expenses. In November 2024, the Bank of Russia published an analytical note[4] exploring in detail the ratio of interest expenses and the cost of sales both in the economy as a whole and in individual industries and other sections of the sample of non-financial companies from 2019 through 2023.

Given higher loan rates amid the increase in the Bank of Russia key rate, interest expenses expectedly rose in absolute terms over 2024. However, according to calculations based on a wide sample of companies from the SPARK database, this did not cause any significant changes in the findings of the research, including in regard to the impact of the cost channel on inflation. The key findings were as follows:

1. **Russian non-financial companies' average ratio[5] of interest payments to the cost of sales was up from 3.1% to 4.0% in 2024, while not exceeding 1.2% for half of the companies in the sample.** The interest burden of nearly 60% of companies in the sample was no more than 2.0% of the cost of sales. In absolute terms, these companies' interest expenses surged by 45.7% over 2024, while the cost of sales and sales revenue were up by 13.7% and 11.7%, respectively.

Note. Companies with non-zero interest expenses, which were included in the sample of the analysis after filtering the outliers,[6] numbered approximately 221,000, which is 8.6% more than over 2023.

2. **In the five largest industries in terms of the cost of sales (trade, manufacturing, mining and quarrying, construction, and logistics), the average ratio between interest expenses and the cost of sales equalled 3.9% in 2024 vs 2.9% in 2023.** The variance across industries was large, namely from 0.9% in public administration to 9.7% in petroleum refining. As compared to 2023, the growth was most significant in petroleum refining, which was associated with the preventive maintenance of equipment and the upgrade of production capacities in this industry, as well as in mining of metal ores and manufacture of transport.

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[1] Refer to, for example, Sims, C. (1992). Interpreting the Macroeconomic Time Series Facts: The Effects of Monetary Policy. European Economic Review, 36 (5), pp. 975–1000; Christiano, L. and Eichenbaum, M. (1992). Liquidity Effects and the Monetary Transmission Mechanism. American Economic Review, 82 (2), pp. 346–353.

[2] Refer to, for example, Boivin, J., Kiley, M.T., and Mishkin, F.S. (2010). How Has the Monetary Transmission Mechanism Evolved Over Time? Handbook of Monetary Economics; Ramey, V.A. (2016). Macroeconomic Shocks and Their Propagation. Handbook of Monetary Economics; Miranda-Agrippino, S. and Ricco, G. (2021). The Transmission of Monetary Policy Shocks. American Economic Journal: Macroeconomics, 13 (3), pp. 74–107.

[3] Refer to, for example, Shestakov, D. (2017). The Cost Channel of Monetary Policy Transmission in the Russian Economy. Russian Journal of Money and Finance, No. 9, pp. 38–44.

[4] Mogilat, A., Moskaleva, A., Popova, S., Turdyeva, N., and Tsoy, V. (November 2024). Russian Companies' Interest Expenses. Bank of Russia.

[5] Hereinafter, averages are weighted average values. All calculations were made for non-financial companies (all economic activities, except for 'Financial and insurance activities').

[6] The sampling and outlier filtering method is detailed in the analytical note by Mogilat, A. et al. (2024). Bank of Russia.

Concurrently, in a significant number of industries, such as logistics, manufacture of machines, manufacture of metal products, manufacture of construction products, mining and quarrying, as well as a whole range of sectors in services (public administration, education, human health activities, tourism, food and beverage service activities, etc.), the average ratio between interest expenses and the cost of sales edged up by no more than 1 pp. As for scientific and technical activities, the interest burden in this sector even decreased. **In terms of the size of companies, micro businesses still recorded the highest average ratio between interest expenses and the cost of sales,** which equalled 4.8% in 2024 vs 4.0% in 2023. As for large enterprises, the ratio was close to the average across the economy and below the average of SMEs.

3. **Over 2024, the debt burden of the most leveraged companies increased more notably.** The debt burden of loss-making businesses rose as well. The proportion of interest expenses in the cost of sales for 10% of the most leveraged companies in 2024 was twice as high as the average across the sample. The level of interest burden for 5% of companies in the sample with non-zero interest expenses exceeded the averages only in the 8–10th deciles of the distribution by leverage and in the group of loss-making companies.

4. **Taking into account the rise in loan rates in 2024, the maximum price growth rate due to the increase in companies' interest burden could reach 1.2 pp.** This is close to one of the scenarios presented in the analytical note by Mogilat et al. (2024). It should be emphasised that this is a top-down assessment for the following key reasons:

   4.1. **A significant part of Russian non-financial companies do not have any interest burden.** According to SPARK data, in 2024, their overall revenue and cost of sales in 2024 accounted for about 25% and 27%, respectively, of the amounts of the entire non-financial sector. The averages for six years were 28% and 31%, respectively.

   4.2. **A complete pass-through of higher costs to end prices is only possible when there is no response of demand.** At the level of the economy as well as key markets, this is not confirmed by the results of the analysis of other channels of the monetary policy transmission mechanism.[7]

   4.3. **Even a potential pass-through of interest expenses to prices is a short-term effect on the price level rather than on underlying inflation.** When monetary policy is eased, interest expenses go down and the effect of their pass-through to the price level drops out of the inflation calculation.

The detailed analysis of the cost channel and its effects for various sections of the sample of companies might help allay concerns about proinflationary consequences of monetary policy. Data for 2024 show that even when interest expenses rise considerably in absolute terms, the ratio between them and other expenses of non-financial companies in the conditions of high inflation changes much less notably. Moreover, there is a whole range of factors reducing the importance of the cost channel for the economy as a whole.

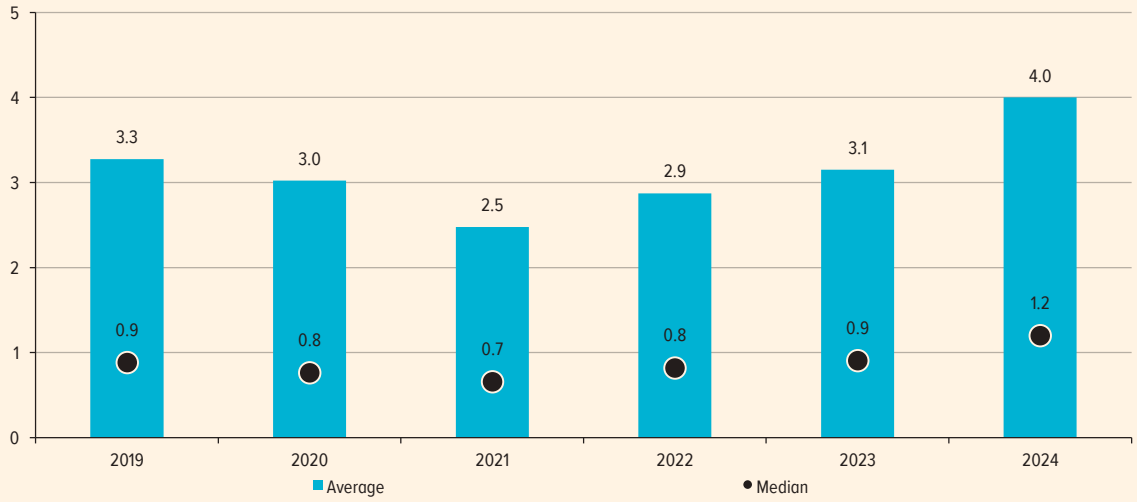
When monetary policy is eased, interest expenses go down as well. For companies that decided to pass through their interest expenses to prices to support their margins during the period of growing interest rates, this means an opportunity to regain the market share, which is critical in the conditions of declining demand. In other words, the cost channel will have a disinflationary effect on prices in this case, just like all other channels of the monetary policy transmission mechanism.

That said, overheated demand provokes a persistent rise in underlying inflation, and consequently, all costs in the economy. Therefore, a long period of high inflation is much more dangerous as it might drag down companies' investment in the long run. In such a situation, pursuing neutral or, the more so, accommodative monetary policy might lead to much higher price growth rates in the economy, and what is more, over a long-term horizon, than even a short-term potential effect of the cost channel. When the key rate is raised, the main channels of the monetary policy transmission mechanism, including the interest rate, exchange rate, credit and other channels, have a considerable moderating effect on prices by restricting demand, which in turn slows down the rise in producer costs as well. **As a result, the overall effect of higher interest rates in the economy is definitely disinflationary in any case.**

[7] Refer to MPG 2025–2027; Rabinovich, B., Petreneva, E., and Virovets, K. (March 2025). Specifics of the Functioning of the Transmission Mechanism in 2023–2024. Analytical note. Bank of Russia.

INTEREST BURDEN (INTEREST EXPENSES / COST OF SALES), % ACROSS COMPANIES WITH NON-ZERO INTEREST EXPENSES

Chart 13.1



Sources: SPARK, Bank of Russia calculations.

BREAKDOWN OF NUMBER OF COMPANIES AND THEIR REVENUE, BY INTEREST BURDEN (ACROSS COMPANIES WITH NON-ZERO INTEREST EXPENSES)*

Table 13.1

Level of interest burden, %	Number of companies, %						Sales revenue, %					
	2019	2020	2021	2022	2023	2024	2019	2020	2021	2022	2023	2024
	100	100	100	100	100	100	100	100	100	100	100	100
≤0.5	38	41	44	40	37	32	33	35	35	33	35	30
(0.5, 1]	14	14	14	15	15	14	12	14	15	16	11	10
(1, 2]	14	14	13	14	15	15	16	15	14	14	14	14
(2; 3]	7	7	6	7	8	8	7	8	10	7	8	9
(3; 5]	7	7	6	7	8	9	13	10	11	14	9	10
(5; 10]	7	6	6	6	7	9	12	11	10	9	15	15
(10; 20]	4	4	4	4	4	5	4	4	2	4	4	8
(20; 30]	2	2	2	2	2	2	1	1	1	1	1	2
(30; 50]	2	2	2	2	2	2	1	1	0.5	1	1	1
(50; 100]	2	2	2	2	2	2	0.6	0.6	0.7	1	0.5	0.6
>100	1	1	1	1	1	1	0.3	0.2	0.2	0.2	0.2	0.4
Memo item:												
≤2	67	69	72	69	67	61	61	64	64	63	61	55
≤5	81	83	84	83	83	79	81	82	85	83	78	74
No interest burden, as % of sample of companies: general sample and after technical filtering (TF)												
General sample	33	35	37	38	38	37	32	32	31	26	26	25
After TF	87	86	86	86	85	84	32	33	32	26	27	26

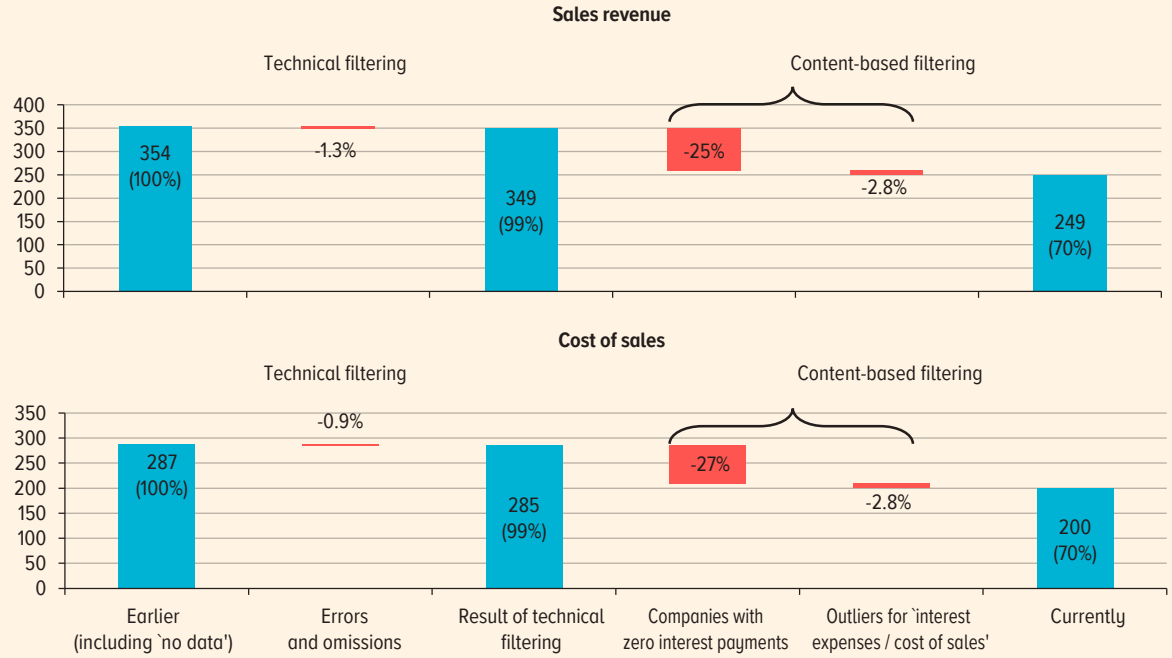
** Interest burden means the ratio of interest expenses to the cost of sales.*
Sources: SPARK, Bank of Russia calculations.

MAIN CHARACTERISTICS OF SAMPLE, BY YEAR *Table 13.2*

	2019	2020	2021	2022	2023	2024	Change 2024/2023, %
Number of companies							
Total*	1,149,390	1,213,281	1,287,399	1,334,251	1,370,536	1,418,387	+3.5
zero interest burden	994,377	1,049,046	1,111,864	1,142,334	1,161,104	1,190,903	+2.6
non-zero interest burden	155,013	164,235	175,535	191,917	209,432	227,484	+8.6
without outliers	150,361	159,307	170,267	186,159	203,148	220,658	+8.6
% of sample	13	13	13	14	15	16	**+0.7 pp**
Sales revenue, ₽ bn							
Total*	212,435	211,342	255,036	269,759	315,644	349,498	+10.7
zero interest burden	68,194	68,732	81,111	71,066	84,569	90,403	+6.9
non-zero interest burden	144,241	142,610	173,925	198,693	231,075	259,096	+12.1
without outliers	138,904	137,515	167,463	192,670	223,182	249,206	+11.7
% of sample	65	65	66	71	71	71	**+0.3 pp**
Cost of sales, ₽ bn							
Total*	171,294	171,808	203,073	228,052	253,803	285,389	+12.4
zero interest burden	57,579	57,925	68,713	74,165	71,419	77,024	+7.8
non-zero interest burden	113,714	113,883	134,360	153,887	182,383	208,364	+14.2
without outliers	109,425	110,008	129,093	149,046	176,001	200,185	+13.7
% of sample	64	64	64	65	69	70	**+1.1 pp**
Interest expenses, ₽ bn							
Total*	3,830	3,590	3,406	4,783	6,052	9,033	+49.3
zero interest burden	–	–	–	–	–	–	–
non-zero interest burden	3,830	3,590	3,406	4,783	6,052	9,033	+49.3
without outliers	3,585	3,326	3,197	4,282	5,544	8,077	+45.7
% of sample	94	93	94	90	92	89	**-2.6 pp**

* *After technical filtering of the sample; for details about the criteria, refer to Mogilat, A. et al. (2024).*
Sources: SPARK, Bank of Russia calculations.

FILTERING OF 2024 DATA *Chart 13.2*
(₽ TN)



Sources: SPARK, Bank of Russia calculations.

INTEREST BURDEN (INTEREST EXPENSES / COST OF SALES), BY INDUSTRY AND BUSINESS SIZE, % ACROSS COMPANIES WITH NON-ZERO INTEREST EXPENSES

Table 13.3

	Share in cost of sales, by industry		Average			Median		
Year	2023	2024	2023	2024	Change, pp	2023	2024	Change, pp
Total	**100**	**100**	**3.1**	**4.0**	**0.9**	**0.9**	**1.2**	**0.3**
By industry								
Trade	40.5	41.9	1.8	2.8	1.0	0.7	0.9	0.2
Manufacturing	16.0	16.6	3.4	4.7	1.3	0.9	1.2	0.3
Food, beverages	3.6	4.1	1.8	2.9	1.1	1.0	1.4	0.4
Metallurgy	2.4	2.5	4.7	7.1	2.4	0.8	1.2	0.4
Machine building	1.4	1.6	2.4	3.0	0.6	0.8	1.1	0.3
Metal goods[1]	1.2	1.4	1.7	2.3	0.6	0.7	1.0	0.3
Vehicles	1.4	1.3	3.8	6.0	2.2	1.0	1.3	0.3
Petroleum products and coke	1.5	1.2	5.8	9.7	3.9	1.8	2.8	1.0
Chemicals	1.1	1.1	5.7	6.8	1.1	1.0	1.5	0.5
Consumer goods and other[2]	0.9	0.9	2.4	3.5	1.1	1.0	1.3	0.3
Wood processing, paper	0.7	0.8	5.4	6.8	1.4	1.2	1.4	0.2
Construction materials[3]	0.8	0.8	3.1	3.7	0.6	0.9	1.2	0.3
Rubber, plastics	0.6	0.6	1.7	2.7	1.0	0.9	1.2	0.3
Repair, installation	0.4	0.3	1.2	2.1	0.9	0.7	0.9	0.2
Mining and quarrying	10.2	9.3	5.2	5.7	0.5	1.4	1.7	0.3
Construction[4]	7.4	7.8	3.5	4.5	1.0	1.3	1.5	0.2
Logistics	8.3	7.2	4.2	5.1	0.9	0.8	1.1	0.3
Power supply	4.4	4.0	3.7	4.8	1.1	0.7	0.9	0.2
Information and communications	2.5	2.7	5.8	7.0	1.2	1.0	1.2	0.2
Agriculture[5]	2.2	2.3	5.2	7.0	1.8	1.9	2.3	0.4
Water supply	0.8	0.8	1.8	2.5	0.7	0.7	1.0	0.3
Hotels and public catering	0.7	0.7	4.2	4.8	0.6	0.9	1.3	0.4
Other services, including:	6.9	6.6	4.1	3.7	-0.4	1.1	1.4	0.3
Science and technology	5.0	4.6	4.7	3.9	-0.8	1.2	1.5	0.3
Administration	0.7	0.8	4.2	5.4	1.2	0.9	1.1	0.2
Culture and sports	0.7	0.8	0.9	1.1	0.2	1.1	1.7	0.6
Healthcare	0.3	0.3	3.0	3.4	0.4	1.0	1.4	0.4
Other services	0.1	0.1	1.7	2.7	1.0	0.9	1.5	0.6
Education	0.0	0.0	2.8	3.0	0.2	1.0	1.3	0.3
General government	0.0	0.0	0.9	0.9	0.0	0.8	0.7	-0.1
By company size								
Large	81.3	81.1	3.2	4.2	1.0	0.8	1.2	0.4
Medium-sized	8.1	8.4	2.5	3.2	0.7	0.7	1.0	0.3
Small	8.4	8.4	2.7	3.3	0.6	0.6	0.9	0.3
Micro	2.2	2.1	4.0	4.8	0.8	1.2	1.5	0.3

[1] *Other finished goods, except machinery and equipment.*
[2] *Pharmaceuticals, apparel, furniture, other finished goods, leather and leather goods, tobacco products, printing.*
[3] *Other non-metallic mineral products.*
[4] *Construction and real estate transactions.*
[5] *Including forestry, fishing, and aquaculture.*

Note. The industries are listed by percentage in the cost of sales in the economy as a whole in 2024.
Sources: SPARK, Bank of Russia calculations.

Appendix 2. Inflation measures used by the Bank of Russia

To comprehensively analyse price dynamics, the Bank of Russia uses multiple measures of current inflationary pressures and underlying inflation in addition to the annual inflation rate

The Bank of Russia's monetary policy is aimed at ensuring price stability in the economy. The key measure of inflation for the Bank of Russia is the annual CPI calculated by Rosstat. This index is the most precise measure of price changes. For the index to be as accurate as possible, Rosstat annually determines the up-to-date structure of consumer expenses on products and services and, based on this structure, revises the composition and weights of the items included in the calculation of the index. In 2025, the CPI has been calculated based on prices for 556 products and services. The CPI is the indicator for which the Bank of Russia stipulates the main goal of its monetary policy – an inflation rate of close to 4%.

When implementing its monetary policy, the Bank of Russia employs a wide range of inflation metrics, which may be roughly divided into the measures of underlying inflation reflecting medium-term trends in price dynamics and the indicators of current inflationary pressures that take into account short-term, one-off price fluctuations.

Indicators of current price pressures

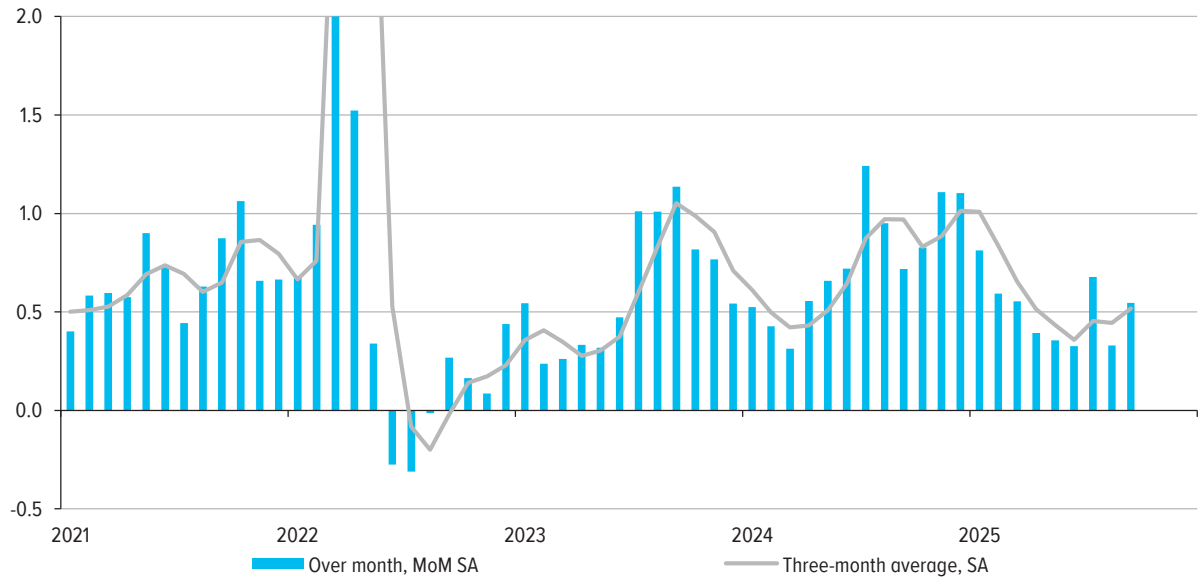
Current inflation, reflecting short-term price fluctuations, has an immediate impact on households' and businesses' behaviour: consumers see a rise in product and fuel prices rather than the median rate of inflation. This forms inflation expectations[1] that might turn out to be self-fulfilling. In view of this as well as to better comprehend how likely the change in the direction of the price momentum is, the Bank of Russia analyses the indicators of current price pressures.

To assess current price dynamics, the Bank of Russia monitors monthly price growth rates. These indicators of the CPI factor in seasonality. Therefore, to accurately compare the neighbouring points, the calculation is based on seasonally adjusted data. Seasonality refers to recurring slowdowns and accelerations in price levels that happen every year. One example of products characterised by seasonal price fluctuations is fruit and vegetables, prices for which peak in the winter and summer months and drop during the harvesting period every year. The seasonal adjustment procedure removes seasonal patterns from price dynamics, and the resulting data are used by the Bank of Russia to carry out the analysis and to identify and scrutinise irregular shocks. To mitigate the quickly fading effect of one-off outliers, the analysis relies on the seasonally adjusted average price growth rate over three months. This data processing makes it possible to analyse a rise or a decline in price pressures, without taking into account transitory fluctuations.

In 2025 H1, monthly price growth and three-month average price growth both sustainably decelerated. In July–September 2025, the fluctuations of the monthly price growth rate were largely caused by one-off factors (more significant-than-usual indexation of utility rates and increases in prices for educational services) and volatile components (fruit and vegetables, petroleum products, tourism services, and transport).

[1] For details about inflation expectations, see Appendix 5 'Economic agents' inflation expectations'.

MEASURES OF CURRENT INFLATION *Chart A-13*
(%)



Sources: Rosstat, Bank of Russia calculations.

The dynamics of the headline CPI are frequently affected by a change in prices for a small group of products or services. One of the instruments to identify and analyse abnormal price dynamics is to assess the variance of price increases relative to the average. Normally, the variance is associated with a wide range of fluctuations of prices for a relatively small number of products and services. The dynamics of prices for these products and services may significantly differ from the averages and may intensify the volatility of inflation. To analyse how movements of prices for certain products and services correlate with the overall price trend, the Bank of Russia relies on relative price indices calculated as ratios between price indices of individual product and service groups. The analysis also takes into account monthly distributions of price growth rates. These instruments help assess how extreme price changes in particular product groups are.

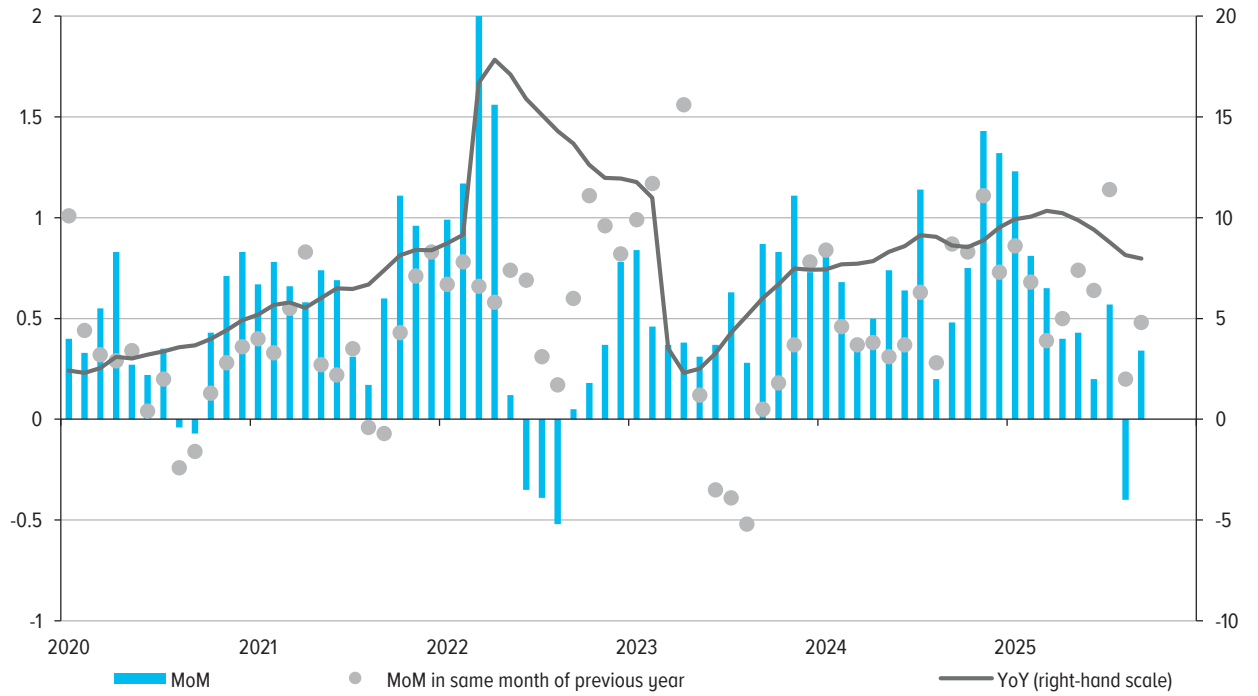
On the ratio between annual and monthly price increases

The year-on-year rate of inflation is calculated from month-on-month price increases over the past 12 months. For example, inflation in April (YoY) is calculated based on the 12 month-on-month price growth rates from May of the previous year through April of the current year. The change in the annual inflation rate for two adjacent months is normally small: for adjacent months, 11 out of 12 month-on-month price increases are identical. During an individual month, annual inflation changes by the difference between the month-on-month price increases over this month and the same month of the previous year (the influence of the corresponding month on annual inflation is often referred to as the base effect). Thus, in April 2025, annual inflation edged down by 0.1 pp to 10.2%, which is equal to the difference between the month-on-month growth rates in March 2025 (0.4%) and March 2024 (0.5%).

Hence, the dynamics of annual inflation and month-on-month growth rates may differ. Annual inflation decelerates when month-on-month price growth rates are lower than those recorded in the corresponding months of the previous year.

RATIO BETWEEN MONTHLY AND ANNUAL PRICE INCREASES
(%)

Chart A-14



Sources: Rosstat, Bank of Russia calculations.

Measures of underlying inflation

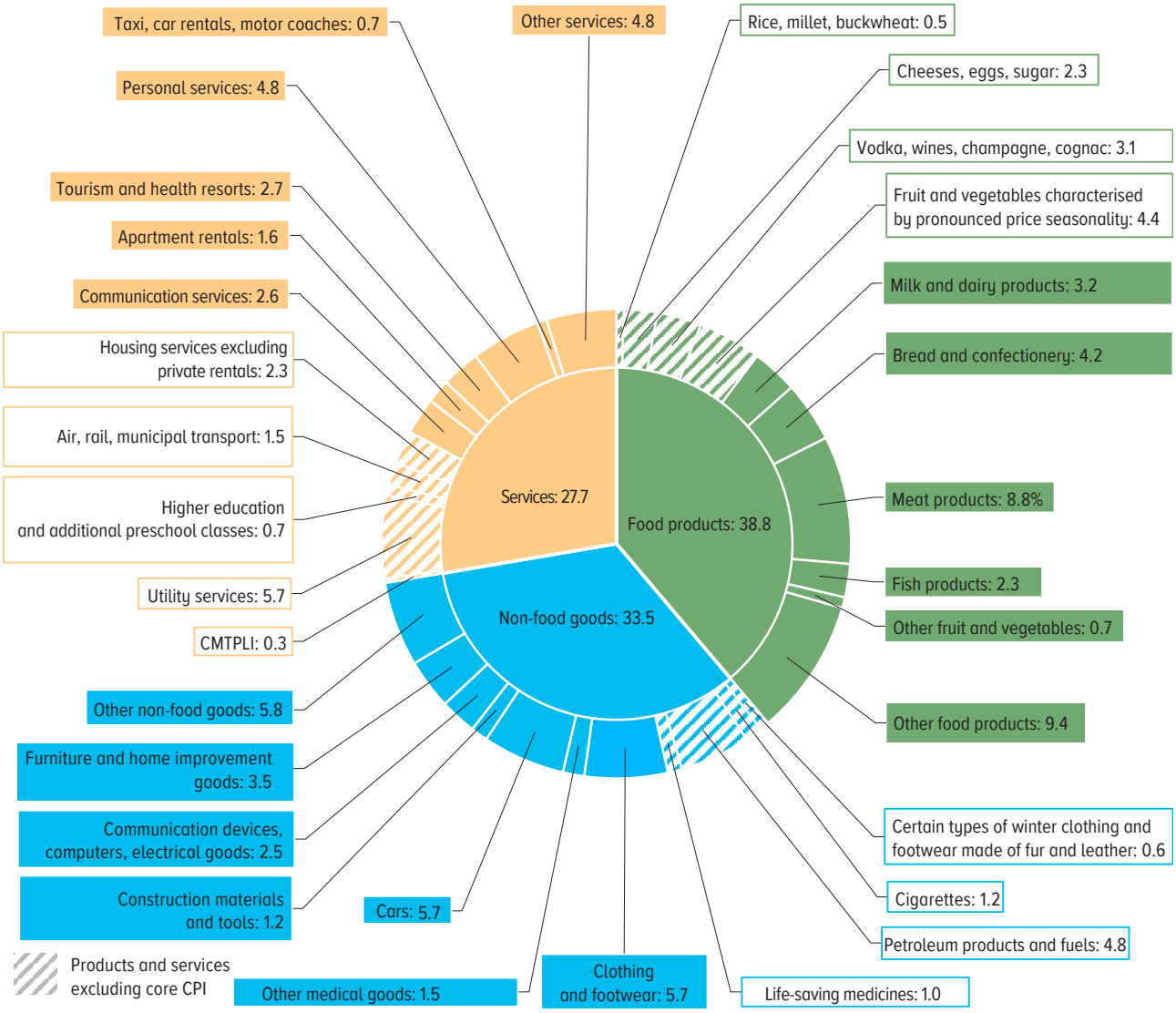
Underlying inflation is fundamental pricing processes that will most likely continue in the medium term. Underlying inflation is an important benchmark for the Bank of Russia's monetary policy. In a situation where inflationary pressures can sharply fluctuate due to transitory factors, such as external supply-side shocks, underlying measures enable the Bank of Russia to maintain the focus of its monetary policy on long-term price stability.

The main task when constructing the measures of underlying inflation is to remove distortions and identify underlying inflation processes. Basically, distortions imply transitory and irregular price fluctuations frequently caused by changes in relative prices for particular products and services. The paths of prices for certain products significantly differ from most others, which creates outliers in the variance of price increases. These swings are attributed to temporary factors that quickly dwindle. They decrease the accuracy of the forecast if they are taken into account in the analysis of medium-term price movements. The easiest way to exclude short-term spikes is to remove the most volatile components from the calculation, such as prices for fruit and vegetables, alcoholic beverages, or administered services. The range of such components may be either fixed (when the calculation excludes the same products and services) or variable (when the basket changes every month depending on a certain criterion, e.g. 20% of the most volatile components are left out).

Statistical subindices excluding the most volatile components

Core inflation is one of the most popular measures, which strips out the most volatile components. It is calculated excluding changes in prices for certain products and services that are influenced by administrative, one-off, and seasonal factors (individual categories of fruit and vegetables, passenger transport, communications, housing utility services, motor fuels, and other services).

WEIGHT OF CERTAIN PRODUCTS AND SERVICES IN CONSUMER BASKET FOR CPI CALCULATION IN 2025 *Chart A-15*
(%)



Sources: Rosstat, Bank of Russia calculations.

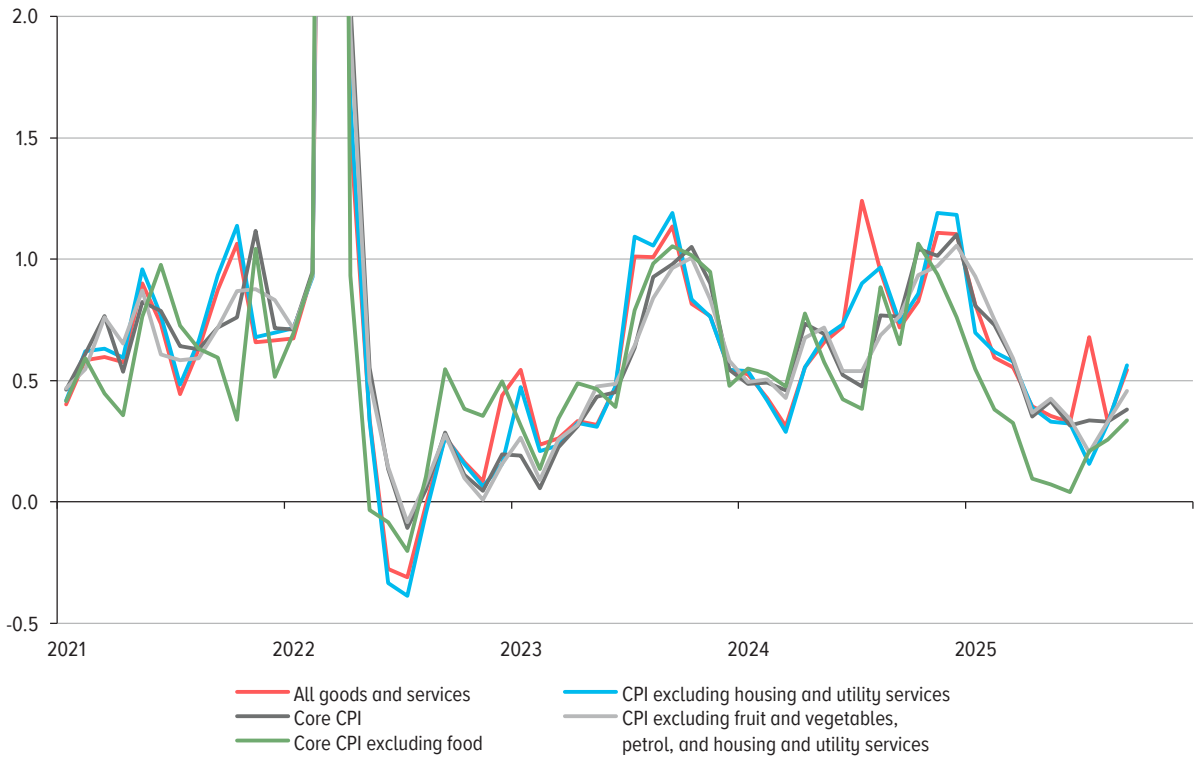
Core inflation is a simple and easily interpretable measure, which has its own limitations. The exclusion of a fixed number of categories is conditional as other categories may also be volatile at different times. In view of this, the analysis also uses other groups of excluded components, which makes it possible to better adapt the measures to the current structure of price volatility.

The reasons explaining price volatility of certain products include seasonal factors, responsiveness to the external environment and weather conditions, the situation in foreign markets, and tariff regulation not connected with the demand and supply ratio in the economy.

In addition to core inflation, the measures that strip out a fixed range of the most volatile components are the CPI excluding housing and utility services, the growth rate of prices for non-food goods excluding petroleum products, and the growth rate of prices for services excluding housing and utility services.

STATISTICAL SUBINDICES EXCLUDING MOST VOLATILE COMPONENTS
(% GROWTH, MOM SA)

Chart A-16



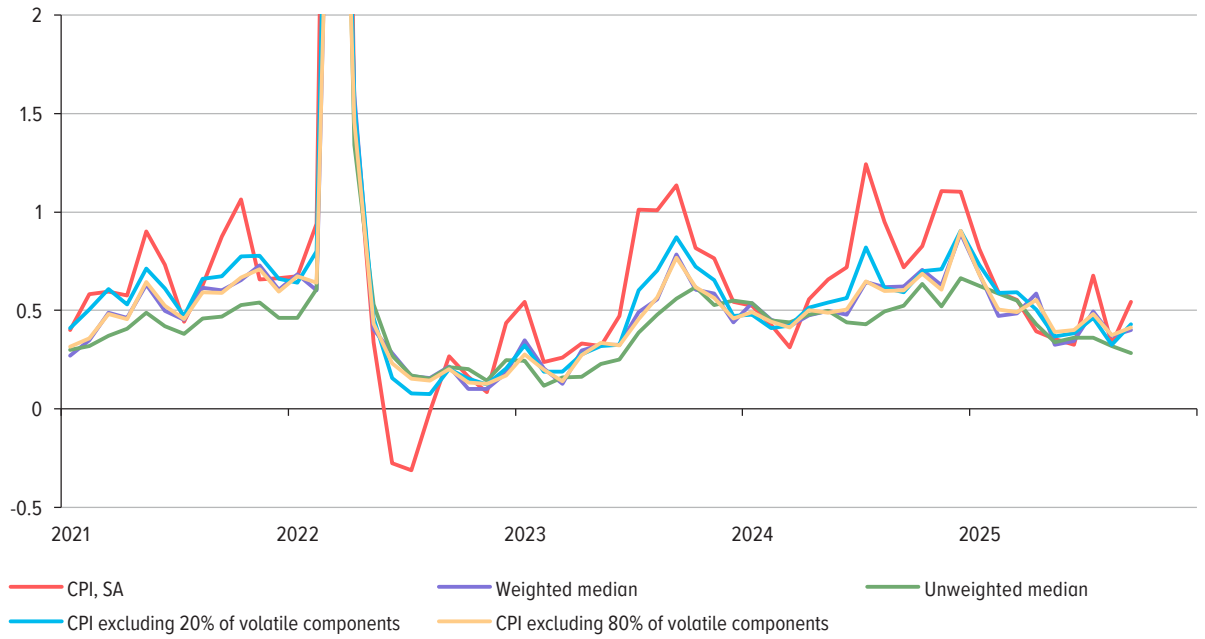
Sources: Rosstat, Bank of Russia calculations.

The statistical measures of inflation calculated without taking into account the most volatile components vividly demonstrate the impact of the removed components on headline inflation. Thus, **in July 2025, price growth accelerated, which was primarily fuelled by the indexation of utility rates**. Furthermore, the removal of certain products and services helps identify new price trends encompassing a wide range of items, which are otherwise not obvious in the overall price dynamics. **Beginning from 2024 Q4, core inflation excluding all food prices started to slow down steadily, indicating a gradual decline in price pressures across the economy.**

In addition to the measures stripping out a fixed set of products and services, price dynamics are analysed based on indicators that leave out a variable set of volatile components, such as average inflation excluding the most volatile components (e.g. 20% of products and services with the most volatile prices), median inflation, which is a change in the price of a median product (this inflation rate is robust to outliers), and median inflation taking into account the weights of the components in the consumer basket.

Such measures as median inflation or inflation excluding 20% of the most volatile products and services help identify episodes when inflation speeds up or slows down due to a relatively small range of products and services, while price growth in a broader basket does not accelerate. Thus, **in September–November 2024, headline inflation was up, but this was not confirmed by the measures of underlying inflation calculated excluding a variable set of volatile components**. This acceleration was fuelled by higher prices for fruit and vegetables and was transitory. **In January–September 2025, the measures which strip out a variable set of volatile components were close to the inflation rate on average.**

MONTHLY GROWTH IN INFLATION SUBINDICES EXCLUDING VARIABLE SET OF COMPONENTS *Chart A-17*
(% SA)



* *The median is a value dividing a sample into two equal parts, with a higher and a lower price growth rate. Calculated based on the distribution of price growth rates depending on their weights in the consumer basket, seasonally adjusted according to the Bank of Russia's method.*
** *Calculated without taking into account the weights, for the entire basket (556 products and services in 2025), seasonally adjusted using an automated procedure.*
Sources: Rosstat, Bank of Russia calculations.

The Bank of Russia analyses a large number of the measures of underlying inflation removing volatile outliers. When making decisions, the Bank of Russia scrutinises the dynamics of certain measures taking into account their individual features and aggregates the measures to assess the central tendency.

Model-based measures of underlying inflation: economic interpretability and structural analysis

Model-based approaches to measuring underlying inflation take into account economic interconnections and historical patterns in price dynamics. The advantage of a model-based approach is its deep economic interpretability as underlying inflation is associated with fundamental factors, such as the output gap, inflation expectations, the exchange rate, and costs. This is why model-based indicators are particularly valuable providing an understanding of the sources of inflation.

When building econometric models, underlying inflation is understood as price growth in an economic equilibrium when there are no significant shocks. The Bank of Russia determines the equilibrium level of inflation using models assessing trend inflation (e.g. dynamic factor models), models of unobserved components adjusted for demand and supply shocks (e.g. state-space models based on core inflation), and others.

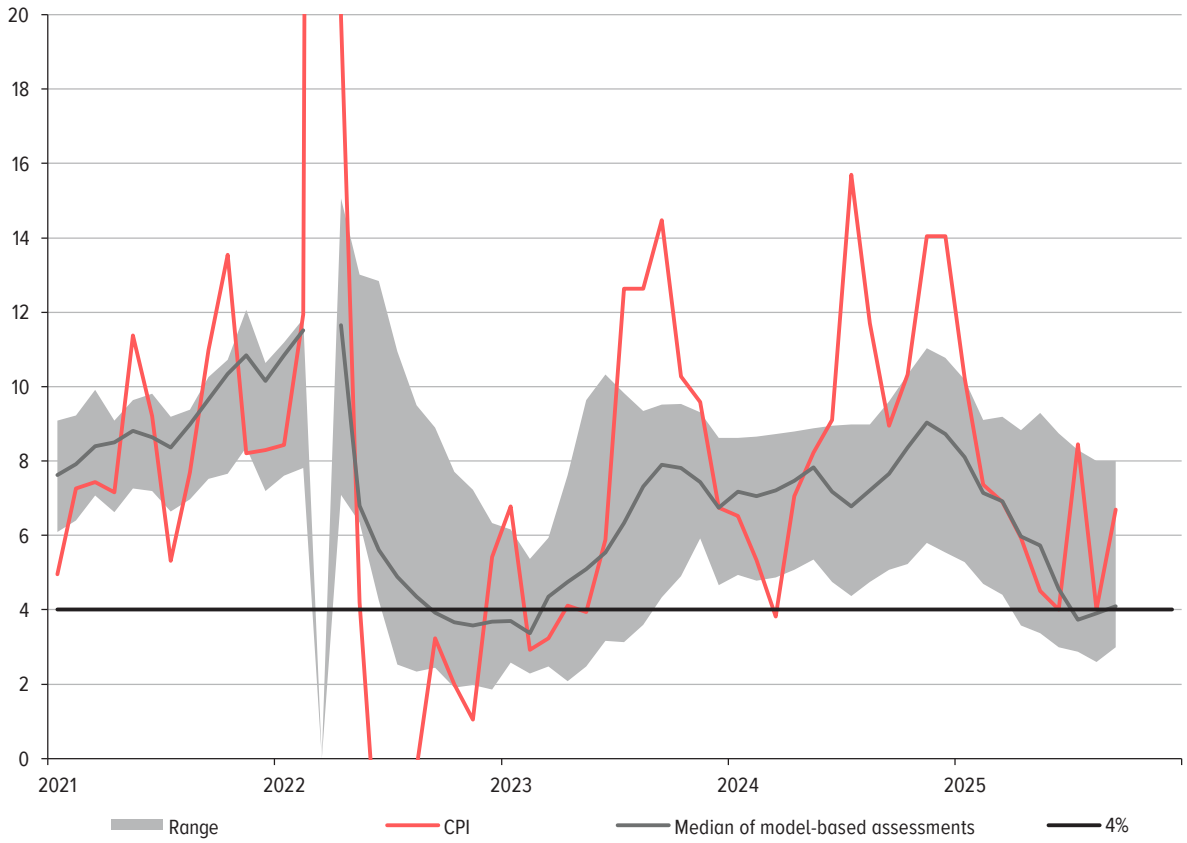
In January–August 2025, model-based assessments of underlying inflation were declining steadily overall. In September 2025, they edged up.

By using a variety of measures of underlying inflation, the Bank of Russia is able to analyse inflation comprehensively. Specifically, statistical measures of underlying inflation that analyse each particular data point generally indicate that current price pressures are easing. Contrastingly, model-based measures gauging the equilibrium level of inflation show that the risks of inflation acceleration persist.

The Bank of Russia analyses multiple measures of underlying inflation. When making decisions, the Bank of Russia also scrutinises the dynamics of certain measures taking into account their individual features and aggregates the measures to assess the central tendency. One of the ways to illustrate the central tendency of the measures is their median. Most frequently, the medians of statistical and model-based measures are assessed separately.

MODEL-BASED MEASURES OF INFLATION
(ANNUALISED % GROWTH, MOM SA)

Chart A-18



Sources: Rosstat, Bank of Russia calculations.

Appendix 3. Quantitative analysis of reasons for the inflation deviation from the target and decomposition of GDP dynamics into shocks

In 2024, inflation deviated upwards from the target primarily due to a greater-than-expected rise in producer costs and a gap between demand and the Russian economy's production capacities

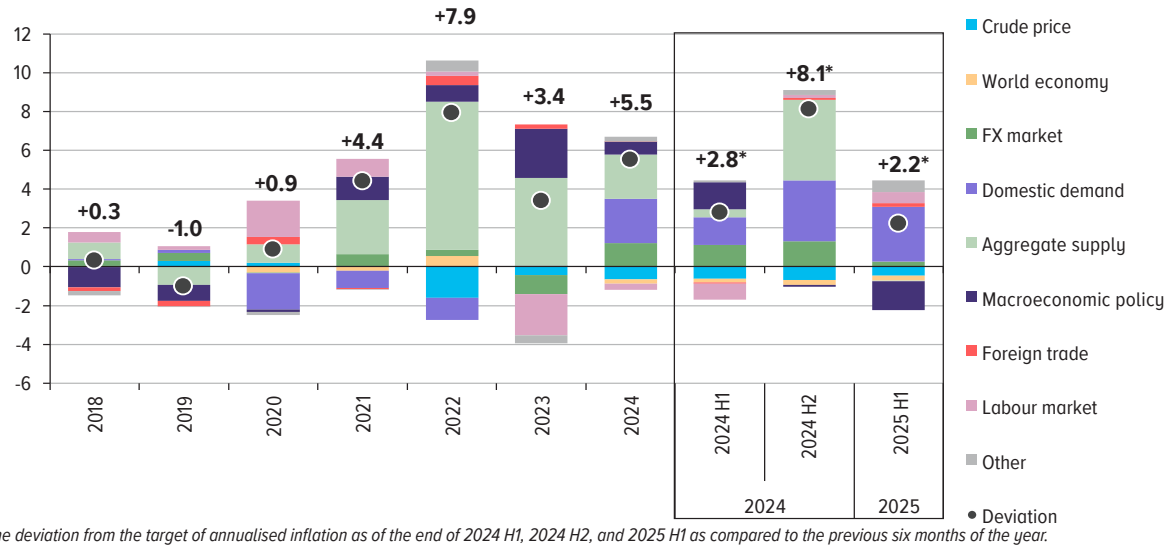
The traditional quantitative analysis of the reasons behind the inflation deviation from the 4% target provides a more detailed and structured assessment of inflation dynamics in the Russian economy over 2024. Aggregate demand and supply dynamics have been a great contributor to the understanding of the nature of inflation in Russia. In view of this, similarly to MPG 2025–2027, the current analysis in MPG 2026–2028 is supplemented with the assessment of the decomposition of GDP dynamics into shocks. Nevertheless, the decomposition into shocks differs from that into factors. The main difference in the interpretation is as follows: the decomposition into shocks shows how external (exogenous) shocks not explained by the model have been affecting the dynamics of a macro indicator, whereas the decomposition into factors identifies internal (endogenous) factors captured by the model that have been contributing to the dynamics of a certain macro indicator. Furthermore, any decomposition reflects average dynamics of an indicator over a year in general , that are affected by changes in the factors of previous periods (given the lagged structure of the model), which might significantly influence the interpretation of shocks over the course of the year. In addition, all decompositions are based on certain vintage data revised retrospectively by Rosstat, which complicates the comparative analysis of decompositions from different periods.

All the decompositions are based on the Quarterly Projection Model for Russia with the Labour Market Component.

Decomposition of the inflation deviation from the target into shocks

In **2024**, inflation deviated upwards from the target by 5.5 pp, which was mostly attributed to domestic demand and supply shocks.

DECOMPOSITION OF INFLATION DEVIATION FROM 4% TARGET INTO SHOCKS *Chart A-19*
(PP ON AVERAGE OVER PERIOD)



** The deviation from the target of annualised inflation as of the end of 2024 H1, 2024 H2, and 2025 H1 as compared to the previous six months of the year.*
Source: Bank of Russia calculations.

Domestic demand. The shocks of domestic demand (+2.3 pp) were associated with a higher level of consumer activity and a rise in investment expenditures. The Russian economy proved to be more resilient and was expanding faster than predicted by model-based calculations. The contribution of these shocks to the deviation of inflation from the target increased in 2024 H2, while the timely tightening of monetary policy by the Bank of Russia ensured disinflation in 2025 H1.

Aggregate supply. The proinflationary impact was still primarily caused by **aggregate supply shocks** (+2.3 pp). This was related to a more significant contribution of higher producer costs than was assumed by the model, especially in 2024 H2. These shocks also include the indexation of administered services and the rise in the recycling fee. Moreover, the toughening of the export-related sanctions by unfriendly states forced Russian companies to search for alternative routes of imports from abroad, which is also a supply factor accelerating inflation.

FX market. The shocks of the FX market exerted a significant proinflationary impact (+1.2 pp). In 2024, the nominal exchange rate of the ruble continued to weaken, but the real exchange rate, taking into account inflation, generally stayed at the level of 2023. Furthermore, given the lagged structure of the model and the gradual effect of the pass-through, the weakening of the ruble in 2023 also had a proinflationary impact.

World economy. The effect of **the world economy shocks** on inflation in Russia turned out to be relatively small (-0.2 pp) as of the end of the year. Although monetary conditions eased in foreign countries, most of them continued to pursue tight monetary policies. Due to a slower rise in global demand for oil, its price dropped more significantly compared to the assumptions of the model. As a result, the contribution of crude price shocks to inflation was negative (-0.6 pp).

Labour market. As regards **labour supply**,[1] it also had a decelerating effect on the price growth rate (-0.3 pp). The number of the employed was growing further as Russian citizens, who had not been active in the labour market before, entered the market. In 2024 H2, labour market tightness started to ease, the number of job adverts declined, and the demand for labour began to weaken. The model assumed that, given the structural transformation of the economy, workforce engagement should have been higher than it actually was in 2024. As a result, despite higher staff recruitment and labour costs, increased labour intensity offset their potential proinflationary impact.

Macroeconomic policy. The shocks of macroeconomic policy had a proinflationary effect (+0.7 pp). The major factor was the continuing increase in budget expenditures, which supported demand in the economy at a high level, while the key rate rise in 2024 H1 proved to be insufficient to rein in high inflation. Therefore, the Bank of Russia started to tighten its monetary policy in 2024 H2, which slowed down price growth as early as 2025 H1.

Decomposition of average annual GDP growth into shocks

In **2024**, the Russian economy continued to adapt to the sanctions and was developing in the conditions of the structural transformation. Russia's GDP (the output approach) was up by 4.3%.

Domestic demand. The shocks of domestic demand were the major driver of GDP growth (+1.3 pp). Domestic demand was fuelled by expansionary fiscal policy and a rise in consumption and investment.

[1] Labour demand was taken into account in the estimation of the impact of domestic demand.

The increase in demand amid limited supply was a major factor for elevated inflationary pressures in late 2024.

Aggregate supply. The shocks of aggregate supply also had a positive effect (+0.8 pp) on the growth rate of domestic output, which might suggest a more significant increase in the economy's potential. The scenario assuming supply expansion as a result of growth in investment and total factor productivity is considered in both MPG 2025–2027 and MPG 2026–2028.

FX market. In 2024, the nominal exchange rate of the ruble was weakening, while the real exchange rate, given inflation, generally remained close to the levels of 2023. The positive contribution to output growth (+0.8 pp) was primarily associated with the time-lagged effect of the faster-than-expected ruble depreciation in 2023.

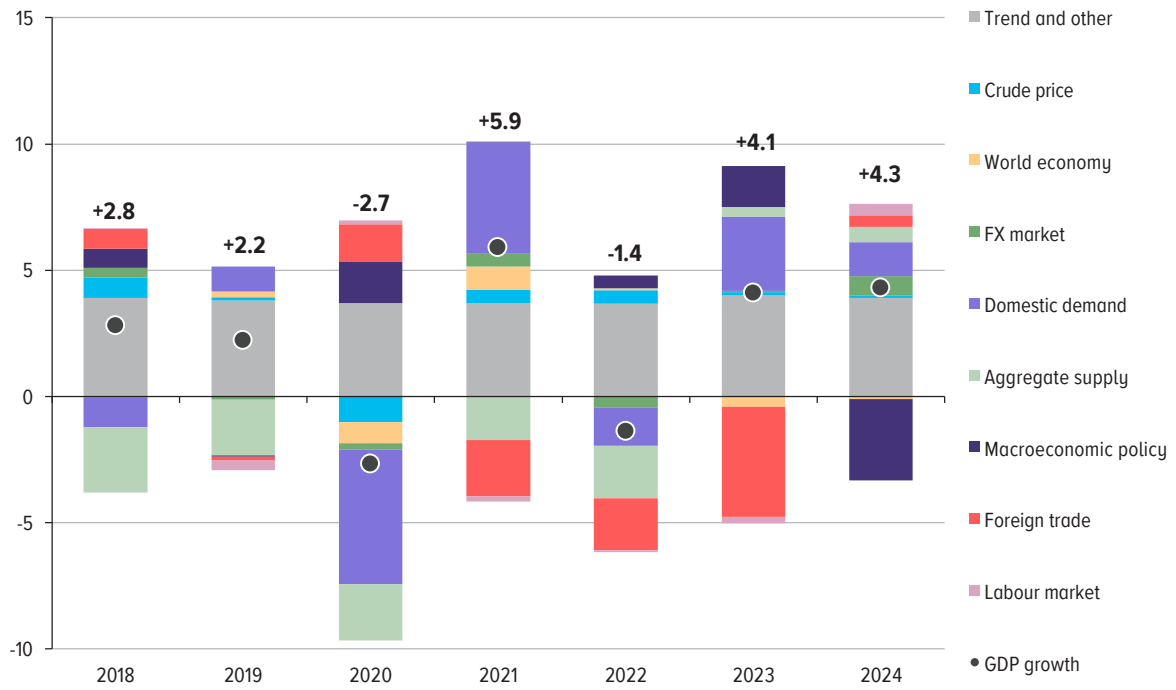
Foreign trade. The shocks of foreign trade had a positive effect on GDP growth (+0.4 pp). Russia's foreign trade proved to be more resilient to the enacted sanctions and the decline in global demand, than assumed by the model.

Labour market. Labour supply[2] had a positive effect on GDP growth (+0.5 pp) in 2024. The unemployment rate was low, while the demand for workforce was high. The model assumed that, given the structural transformation of the economy, workforce engagement should have been higher than it actually was in 2024.

Macroeconomic policy. The shocks of macroeconomic policy had a negative impact (-3.2 pp) on the growth rate of the economy in 2024, which was associated with the considerable increase in the key

DECOMPOSITION OF GDP DYNAMICS INTO SHOCKS
(PP ON AVERAGE OVER YEAR)

Chart A-20



Source: Bank of Russia calculations.

[2] Labour demand was taken into account in the estimation of the impact of domestic demand.

rate as compared to 2023. This was needed to mitigate the consequences of the significant expansion of budget expenditures in 2023–2024, as well as the shocks that were shifting the GDP dynamics upwards from a balanced growth path, thus inducing inflationary pressures in the economy.

Overall, the understanding of the nature of the processes in the economy has changed only slightly. Nevertheless, the opportunity to scrutinise the decomposition of not only inflation but also GDP dynamics into shocks and factors enables more comprehensive and granular analysis and forecasting of macroeconomic processes in the course of preparation of monetary policy decisions.

Appendix 4. One-off supply-side inflation factors

Implementing its monetary policy, the Bank of Russia takes into account one-off inflation factors as, with no monetary policy response, they might affect inflation expectations and cause a persistent deviation of inflation from the target

What are one-off factors? Inflation, or a change in the overall level of prices in the economy is a complex process resulting from the combined dynamics of aggregate demand and aggregate supply. The main factor of underlying inflation is changes in aggregate demand, including those caused by monetary policy decisions. Long-term changes in aggregate supply are smoother and depend on structural factors, the labour force size, the level of staff competencies, and technological developments.

Nevertheless, these long-term dynamics might be accompanied by changes triggered by one-off supply-side factors associated with specific products and services. These factors may vary in terms of their nature (e.g. harvest fluctuations from year to year, disruptions in supply chains, imposition of foreign trade barriers and restrictions, and changes in tax treatment impacting the economy of particular industries) and duration.

Such factors of price movements are often referred to as non-monetary factors of inflation since the price fluctuations that stem from them are associated with supply-side changes rather than demand dynamics. The central bank's monetary policy cannot influence the reasons causing such price changes directly. However, this does not mean that, making its monetary policy decisions, the central bank should ignore the part of price changes provoked by such one-off factors. First of all, underlying inflation also influenced the dynamics of prices for the goods that were strongly affected by one-off factors. Secondly, if the impact of a one-off factor persists for a considerable period and/or if one-off factors have a simultaneous and codirectional effect on a significant proportion of the consumer basket, their impact on the overall level of prices might also affect inflation expectations and, through them, entail secondary effects on underlying inflation.

In practice, differentiation between the underlying component of inflation and price movements caused by one-off factors is not a trivial task as both steady and one-off factors influence prices simultaneously. Nevertheless, analysing the economic situation and measuring underlying inflation, the central bank seeks to assess the role of one-off factors in overall price dynamics, as well as the nature and duration of their impact.

One-off factors became more important in 2020–2021 due to significant disruptions in production and logistics chains during the pandemic period. In 2022–2025, inflation both in Russia and worldwide was notably influenced by the shocks induced by the sanctions and considerable changes in foreign trade tariffs.

Fruit and vegetables. Prices for fruit and vegetables are highly volatile due to significant seasonal fluctuations. The adverse weather conditions in May–August 2024 entailed a decrease in the harvest of fruit and vegetables as well as other crops in annualised terms, which produced a proinflationary effect on food prices. Cucumber and tomato prices surged in January–February 2025 because of the cold winter in a number of Russian regions, which temporarily increased greenhouse heating costs. The decline in the total yield of potatoes in 2024 also pushed up prices in 2025 H1. Another factor was a reduction in potato imports. Specifically, after its record harvest in 2023, Egypt redirected its

exports to Europe. The new harvest and the fading of the effect of these one-off factors will ensure disinflationary dynamics.

Fish and fish products. The growth of prices for fish and fish products accelerated in September 2024–March 2025, which was attributed to one-off supply-side factors. Thus, due to the adverse weather conditions and the biological cycle of reproduction, salmon output contracted, pushing up prices for fish and fish products.

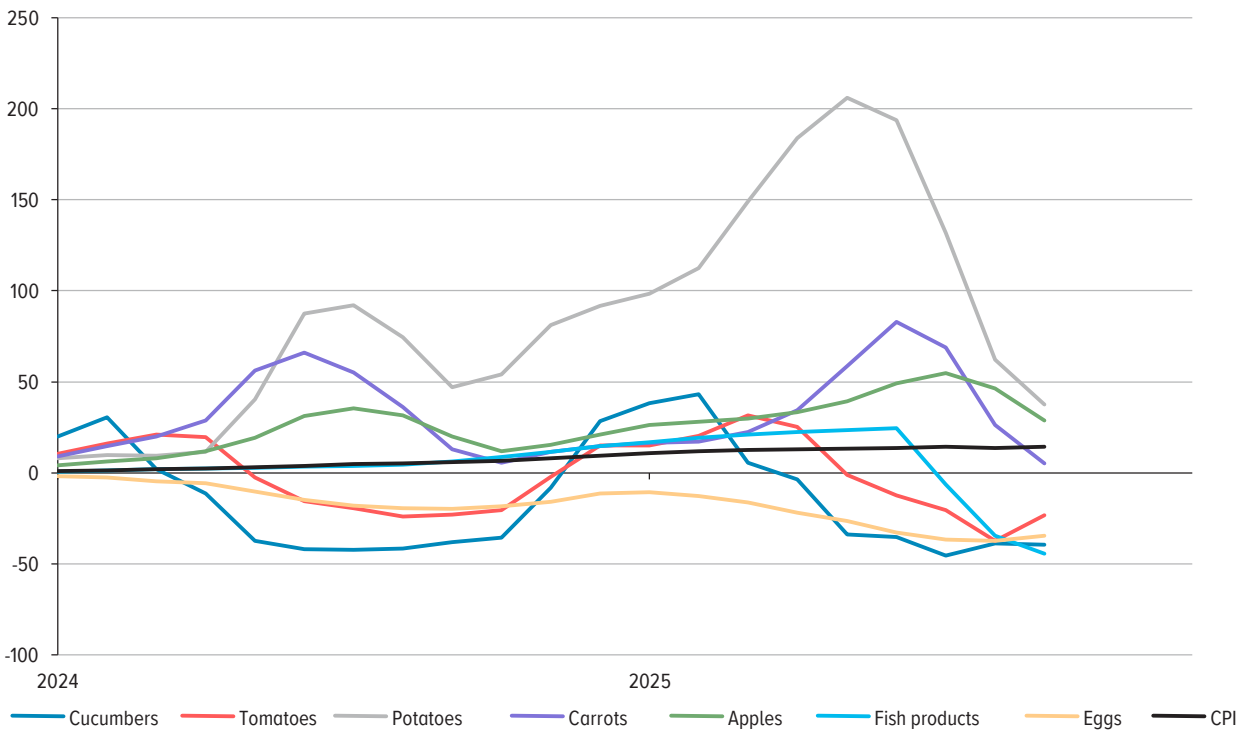
Difficulties in imports. The risk of secondary sanctions exacerbates problems with international settlements and logistics, which is yet another proinflationary factor in certain industries. In contrast to 2022 when the enactment of the sanctions (in March–April) provoked a surge in prices, the consequences of the sanctions imposed in 2024–2025 have been much less significant, but their effects have become more extended over time. As import chains fully adapt to the new conditions, this will have a disinflationary effect in the industries affected by the sanctions.

Tourism services. As a result of the existing restrictions on international flights, the reduced number of foreign visas issued to Russians, and the difficulties in using Russian payment instruments abroad, foreign tourism has become less accessible. The refocusing on domestic destinations is accompanied by high occupancy rates in hotels and a deficit of the hotel infrastructure. Another one-off factor was the spill of heavy fuel oil in the Kerch Strait, which considerably reduced the demand for beach tours and pushed up prices for alternative destinations (Crimea, Dagestan).

Moreover, tightening of transport restrictions accelerated prices for air and rail transportation in 2025 H1. Air transportation prices have been rising due to a shortage of aircraft and difficulties with maintenance of foreign aircraft associated with the sanctions, while railway transportation prices

PRICES FOR CERTAIN FOOD PRODUCTS (CUMULATIVE)
(% ON DECEMBER 2023)

Chart A-21



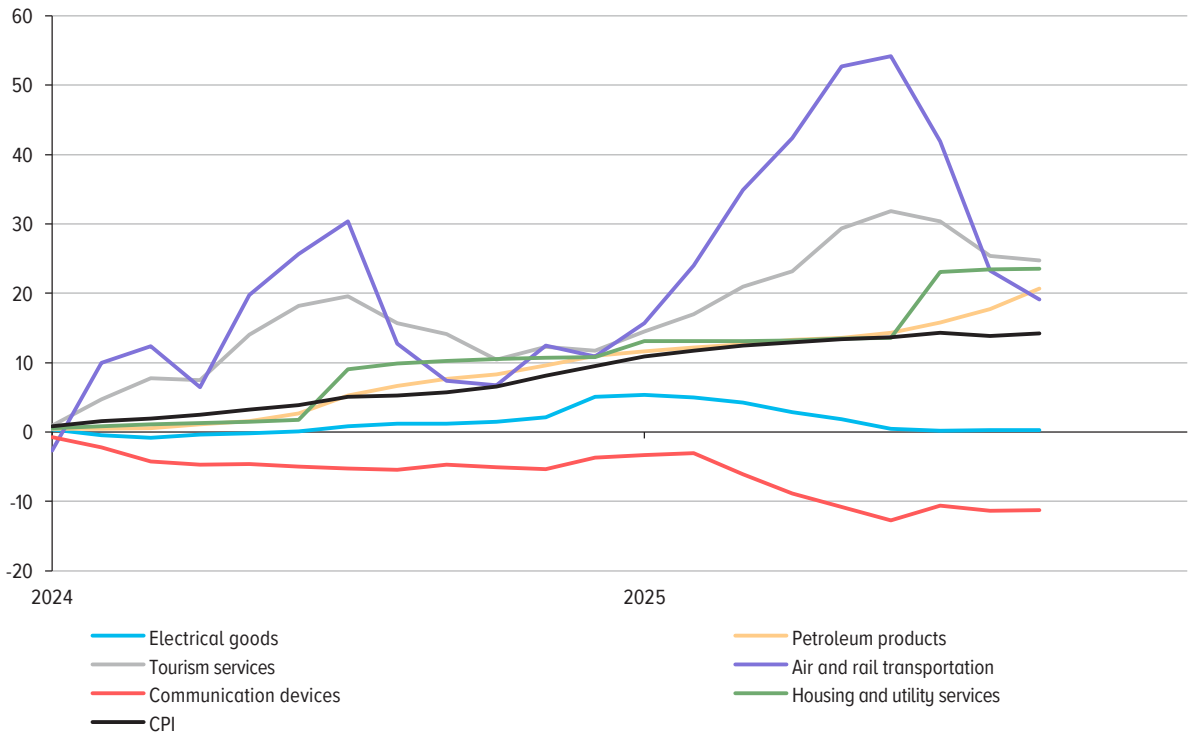
Sources: Rosstat, Bank of Russia calculations.

have been pushed up by a shortage of rolling stock and limited railway capacity, especially at popular southern destinations where, in addition to that, many airports remain closed. Therefore, the factors associated with the supply of tourism services still have a significant effect on inflation.

Administered tariffs. The indexation of tariffs by natural monopolies, as well as changes in tariffs and subsidies for products and services are an important supply-side factor of price dynamics. The indexation of utility rates is normally done over the same period and its impact on achieving the inflation target should be taken into account in the assessments of seasonally adjusted price growth, but the indexation is not an independent one-off supply-side factor in normal conditions. In case of an additional indexation during a year, a change in the percentage of the indexation or the period when these tariffs are raised, the indexation is interpreted as a one-off supply-side factor. Specifically, from April 2020 to July 2024, the level of the indexation of utility rates was 1.7% p.a. below current inflation on average. Consequently, given the necessity to implement investment programmes and projects aimed at upgrading the housing and utility infrastructure, the indexation in 2024–2025 was more significant, and accordingly, the contribution of utility rates to inflation increased. Another example of the effect of one-off factors is the rises in the recycling fee from 1 October 2024 and 1 January 2025, which became a key factor behind the growth of new car prices.

Disinflationary dynamics of certain items. The influence of one-off factors on prices for certain goods and services is transitory. At first, prices for the items impacted by one-off factors considerably increase, but later on the growth rates of prices for such goods and services return to the range which is close to the average of the headline CPI. Specifically, in 2023, Russia faced a reduction in the supply of eggs and a surge in egg prices, which was mainly caused by higher costs, including because of more expensive imported feeds and an outbreak of avian influenza. In response, in 2024–2025, the Government increased the support for poultry farming through subsidies and subsidised loans to farms

PRICES FOR CERTAIN NON-FOOD GOODS AND SERVICES (CUMULATIVE) *Chart A-22*
(% ON DECEMBER 2023)



Sources: Rosstat, Bank of Russia calculations.

and introduced a temporary quota on duty-free egg imports. Concurrently, agricultural enterprises ramped up production, offsetting the shortage of eggs. As a result, as early as mid-2024, the market stabilised, and prices started to go down.

Similarly, the surge in prices for electronic devices and household appliances in 2022, provoked by the sanctions, exchange rate volatility, and logistics problems, faded as the demand and supply balance restored. In 2024–2025, the situation stabilised owing to an increase in domestic output and imports from Asian countries. Furthermore, the reduction in exchange rate volatility and the adaptation of supply chains decreased costs. As a result, prices for electronics stopped growing and even started to go down in certain categories (computers, smartphones).

Government regulation measures. In order to mitigate the impact of one-off supply-side factors and stabilise prices in the domestic market, the Government of the Russian Federation jointly with executive authorities is implementing a package of customs regulation measures and administers prices for socially important products and services.

The grain damper remained in effect in the food segment. In 2025 H1, the market was subject to quotas on cereal exports and a temporary ban on sugar exports beyond the EAEU. Exports of vegetable (sunflower, rapeseed, soybean) oils and beans were regulated through a variable duty. To moderate prices for certain products (potatoes, carrots, and apples), the duties on imports from friendly states were reduced to zero. From January 2025, the non-food segment is subject to the petrol export ban for companies that do not manufacture petroleum products. Moreover, in August 2025, the ban was expanded to manufactures of petroleum products as well.

In addition, from March 2025, the Government of the Russian Federation adopted the resolution allowing the authorities of the constituent territories of the Russian Federation to conclude temporary price stabilisation agreements with food and non-food manufactures and retailers. This measure enables the authorities not only to establish the maximum allowable retail prices for socially important basic food products, but also to limit retail margins.

The measures implemented help decrease short-term price volatility and price dependence on one-off supply-side factors. Nevertheless, risks to price dynamics persist and may have a significant proinflationary effect. In particular, non-market regulation of prices discourages companies from expanding production in an industry, which is adversely affecting competition. If the supply of a product is insufficient to meet the demand for it, the administrative limit on prices for this product will not rectify the situation but might even aggravate it. The main negative consequence of restrictions on market-based pricing is persistent imbalances between demand and supply. Price limits reduce manufacturers' profit, and therefore, they might keep products at warehouses or decrease output waiting for the cancellation of the restrictions. This causes a shortage of a product, as well as forms and increases unsatisfied demand for it, which might be a reason for its reselling at higher prices.

Long-term price stability is maintained owing to the Bank of Russia's monetary policy, taking into account all the factors, including one-off supply-side factors.

Appendix 5. Economic agents' inflation expectations

Inflation expectations remain high and unanchored, which requires a higher level of the key rate. To change this, inflation should be maintained close to 4% for a long time

Inflation expectations imply future price changes expected by economic agents (e.g. households, companies, and banks). In the course of monetary policy implementation, it is critical to analyse economic agents' inflation expectations as they influence how efficiently the Bank of Russia's monetary policy will be able to control inflation. This is because companies, credit institutions and households make their decisions on consumption, savings and investment, price products, and set loan and deposit rates, being guided by their expectations about future inflation, among other factors.

The performance of the Bank of Russia's monetary policy in turn impacts inflation expectations. Achieving the inflation target and maintaining inflation at a steadily low level help anchor inflation expectations. When inflation expectations are stable and anchored to the inflation target, consumption does not change in response to a short-term acceleration of price growth since people are confident that inflation is to slow down and return to the target. They neither raise additional loans nor rush to use their savings as their expectations about a longer-run real interest rate remain unchanged.

Where inflation expectations are not anchored, the situation might be the opposite. In response to a rise in inflation triggered by short-term factors, households might increase the demand for goods, expecting that prices can soon go up. This process might affect both the goods that have already become more expensive and other products, including basic ones. Households might use their savings assuming that their purchasing power will decrease. Expecting higher inflation and, accordingly, lower real interest rates in the future, households might opt to raise new loans to pay for current purchases. In this environment, manufacturers can decide to significantly increase prices for a wider range of goods and services. Inflationary pressures will be amplified, and the deviation of inflation from the target will become more persistent. Consequently, the situation might require monetary policy measures. Moreover, to bring inflation back to the target, the Bank of Russia might need a stronger monetary policy response than where inflation expectations are low and anchored.

The above example demonstrates that a monetary policy stance should take into account real rather than nominal interest rates, including those calculated using the indicators of expected inflation. In practice, real interest rates are normally calculated by subtracting either realised or expected inflation from nominal interest rates. In addition to economic agents' surveys, expected inflation is usually calculated using a model-based inflation forecast, an indicator combining the model-based forecast rate and actual inflation, as well as expectations from financial market indicators.

When inflation expectations are unanchored, their dynamics largely depend on changes in actual inflation. This is an additional factor explaining why the analysis of current price growth is so important for monetary policy.

Estimates of inflation expectations and observed inflation based on household surveys in Russia and abroad almost always exceed actual inflation rates. This difference is ascribed to certain perception patterns: people tend to notice and actively respond to price growth, whereas declining or stable prices usually attract less attention. Therefore, people estimate inflation, being guided primarily by those product prices that have increased most significantly. In addition, people generally focus on the items they purchase frequently, e.g. every day. These can be food, petrol, and non-food basics.

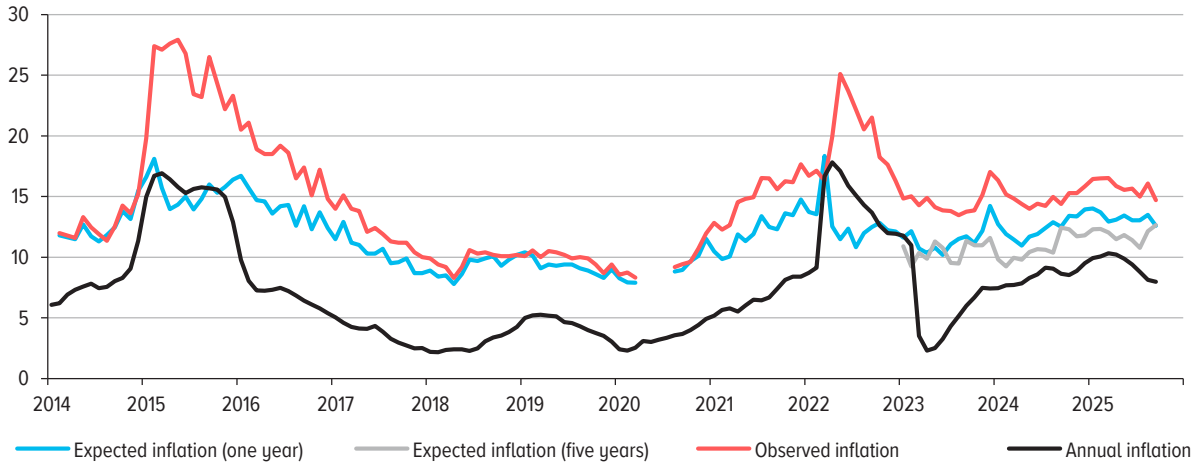
Despite this systematic bias in the absolute values of inflation expectations, their change and relative level compared to the historical range are essential indicators showing possible changes in households' economic behaviour. These changes in turn influence future underlying inflation.

The Bank of Russia's analysis takes into account the entire array of information about inflation expectations of different economic agents, including household surveys by InFOM (commissioned by the Bank of Russia), the Bank of Russia's monitoring of businesses,[1] analysts' inflation forecasts, and estimates of breakeven inflation derived from OFZ-IN prices.[2]

According to InFOM's survey, **households' inflation expectations** remained elevated in July 2024–September 2025. They notably increased in 2024 H2 amid the acceleration of current price growth. By January 2025, inflation expectations peaked at 14.0%. From February 2025, they started to go down, but this decline was unstable. In March–September 2025, inflation expectations hovered in the range of 12.6–13.5%. The dynamics of inflation expectations were driven mostly by current price growth rates, specifically their rise in 2024 Q3–Q4 and subsequent decline from 2025 Q1. This is evidence that inflation expectations are unanchored.[3]

The changes in **inflation observed by households** over July 2024–September 2025 were generally consistent with the dynamics of current price growth rates. After the considerable rise in July–December 2024, observed inflation stabilised at a high level of 16.5% in 2025 Q1. From April 2025, it started to go down, decelerating to 14.7% in September 2025. The actual price dynamics translated into households' estimates of current and future inflation predominantly through changes in prices for frequently purchased goods. In 2024 H2, respondents became more concerned about rising prices for the majority of goods and services bought most often. By September 2025, respondents predominantly complained about rising prices for food (meat, poultry, fish, seafood, milk and dairy products) as well as for housing and utility services. In addition, respondents were more concerned about higher prices for these products than in July 2024.

INFLATION OBSERVED AND EXPECTED BY HOUSEHOLDS (MEDIAN ESTIMATE) *Chart A-23*
(%)



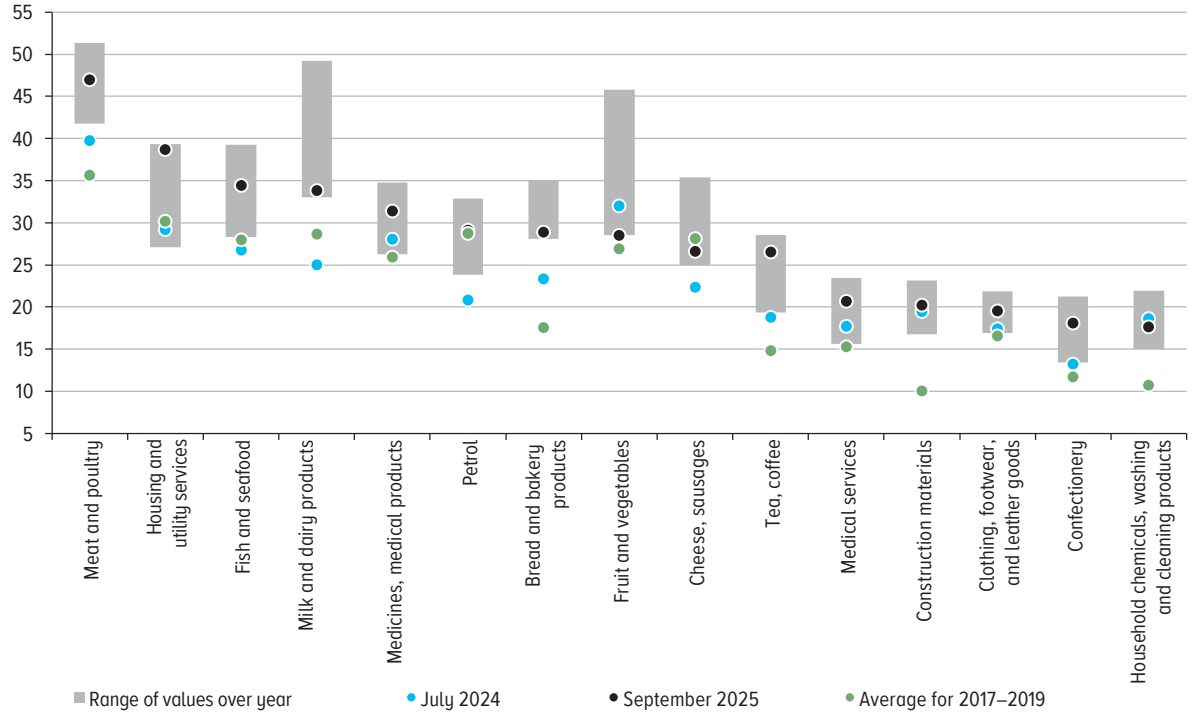
Sources: InFOM, Rosstat, Bank of Russia calculations.

1 The results of the monitoring of companies are presented in the monthly information and analytical commentary Monitoring of Businesses: Assessments, Expectations and Comments.

2 Various economic agents' inflation expectations are analysed in the monthly information and analytical commentary Inflation Expectations and Consumer Sentiment.

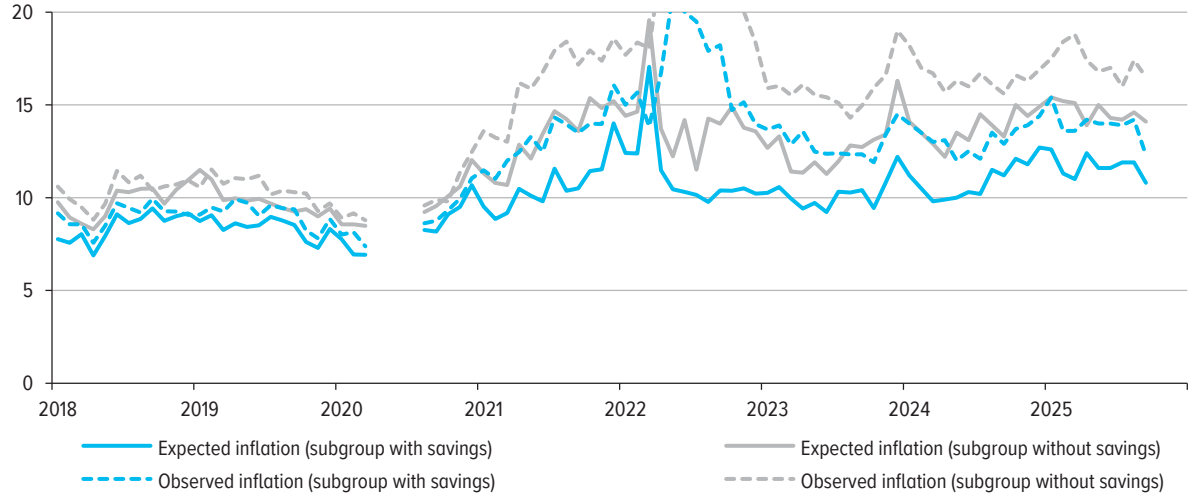
3 For the assessment of the anchoring of inflation expectations, refer to Grishchenko, V., Kadreeva, O., Porshakov, A., and Chernyadyev, D. (July 2022). Assessment of the Anchoring of Inflation Expectations for Russia. Analytical note. Bank of Russia.

DISTRIBUTION OF RESPONSES TO QUESTION 'WHAT MAIN PRODUCTS AND SERVICES SHOWED VERY HIGH GROWTH RATES OVER PAST MONTH?' *Chart A-24*
(% OF ALL RESPONDENTS)



Source: InFOM.

EXPECTED AND OBSERVED INFLATION, BY RESPONDENT SUBGROUP (MEDIAN ESTIMATE) *Chart A-25*
(%)



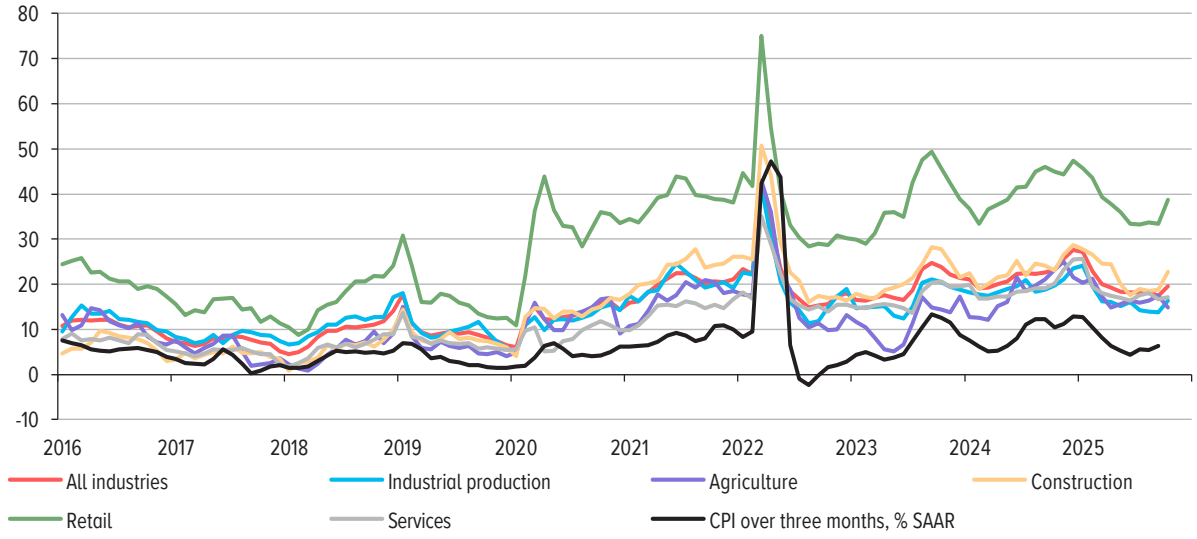
Source: InFOM.

The dynamics of inflation expectations and observed inflation in the subgroups of respondents with and without savings were generally similar in July 2024–September 2025. Over the period under review, inflation expectations among respondents with savings ranged from 10.2% in July 2024 to 12.7% in December 2024. In September 2025, they were at 10.8%. Inflation expectations among respondents without savings ranged from 13.3% in September 2024 to 15.4% in January 2025. In September 2025, they equalled 14.1%. Inflation expectations of respondents with savings may be considered to be more rational. They are generally lower and less volatile than expectations of

respondents without savings. Households with savings tend to have higher incomes on average and, seeking to preserve their savings, track the economic situation more attentively.

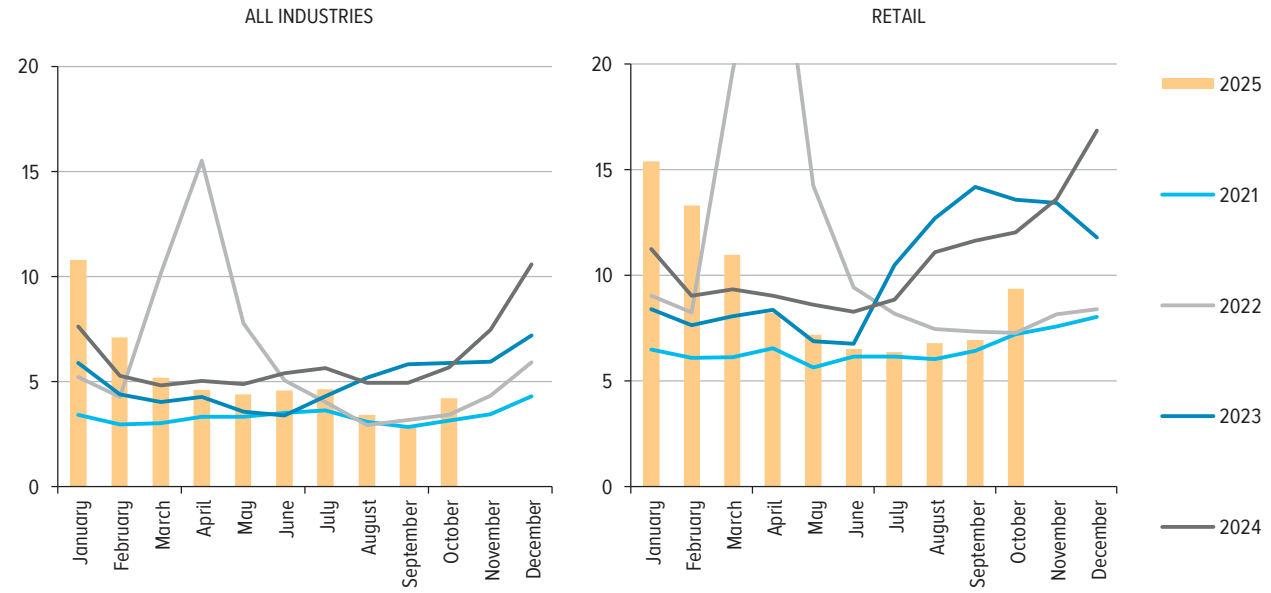
According to the Bank of Russia's monitoring of businesses, **companies' price expectations** (the balance of responses) for the next three months remained elevated in July 2024–October 2025. The average price growth rate expected in the next three months (in annualised terms) quantifying companies' price expectations varied in a broad range from 2.9% in September 2025 to 10.8% in January 2025. Businesses' price expectations were rising throughout 2024 H2 as the growth of costs was accelerating. In January–May 2025, price expectations went down. From May through

COMPANIES' PRICE EXPECTATIONS, BY KEY INDUSTRY *Chart A-26*
(BALANCE OF RESPONSES, P, SA)



Sources: Bank of Russia, Rosstat.

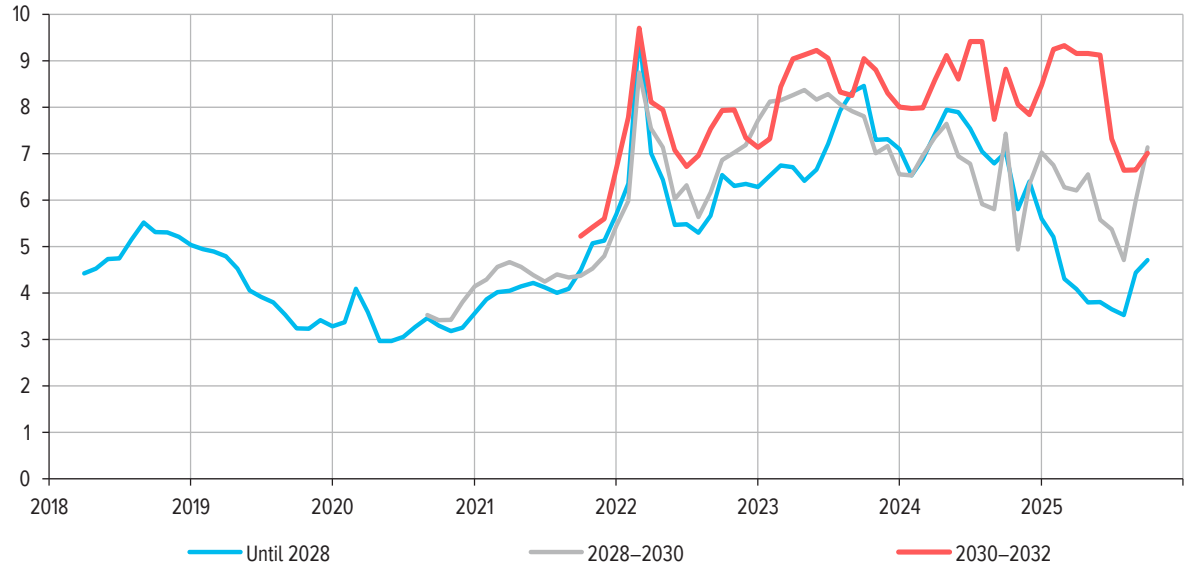
AVERAGE PRICE GROWTH EXPECTED BY COMPANIES IN NEXT THREE MONTHS (IN ANNUALISED TERMS) *Chart A-27*
(%)



Source: Bank of Russia.

BREAKEVEN INFLATION FROM OFZ-IN
(%)

Chart A-28

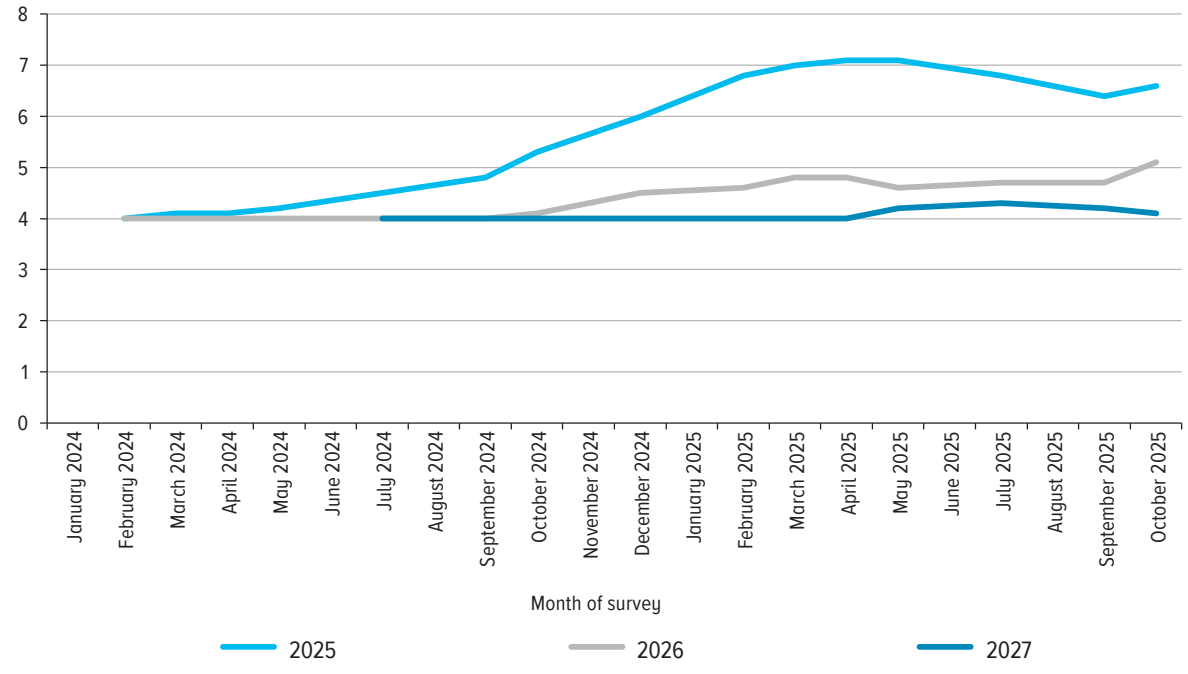


Sources: Moscow Exchange, Rosstat, Bank of Russia calculations.

September 2025, they barely changed, while staying elevated. In October 2025, price expectations rose again. The level of price expectations was the highest in retail. Over July 2024–October 2025, the average price growth rate expected by retailers in the next three months (in annualised terms) ranged between 6.4% in July 2025 and 16.8% in December 2024.

RESULTS OF BANK OF RUSSIA'S MACROECONOMIC SURVEY. INFLATION FORECAST
(% IN DECEMBER YOY)

Chart A-29



Source: Bank of Russia.

As assessed by the Bank of Russia,[4] average **breakeven inflation derived from OFZ-IN** for the period until February 2028 was mostly declining over July 2024–August 2025. In September–October 2025, it rose again. Its rate over the first half of October 2025 averaged 4.7%. Breakeven inflation for longer maturities was more volatile, exceeding 4%. In the first half of October 2025, breakeven inflation for 2028–2030 and 2030–2032 equalled 7.1% and 7.0%, respectively.

Analysts' inflation forecasts for 2025 increased in July 2024–May 2025, edged down in June–September 2025, and then rose again in October 2025. According to the survey conducted in October 2025, analysts expected inflation to equal 6.6% in 2025 (vs 4.5% expected in July 2024). In September 2025, the forecast for 2026 was 5.1% (vs 4.0% in July 2024) and the forecast for 2027 was 4.1% (vs 4.0% in July 2024).

In July 2024–October 2025, the indicators of inflation expectations stayed elevated for the most part, which remains an important factor taken into account to make monetary policy decisions. Higher inflation expectations, all else being equal, mean that the key rate should be kept at a higher level as well. Furthermore, when unanchored and responsive to one-off spikes in prices or fluctuations of the ruble exchange rate, inflation expectations create risks of second-round effects. To mitigate them, the regulator might need additional monetary policy measures. Stabilisation of inflation close to the 4% target for a long period will help decrease and anchor inflation expectations.

[4] The estimates are based on the comparison of expected yields on OFZ-IN and nominal OFZ (OFZ-PD), taking into account the lag in the nominal value indexation and seasonally adjusted inflation. Calculation method.

Appendix 6. The Bank of Russia's communication on monetary policy issues

The Bank of Russia enhances its dialogue with the academic community and society

Communication is an important instrument of monetary policy. To efficiently control inflation, the Bank of Russia seeks to strengthen confidence in its monetary policy, reduce inflation expectations and anchor them at a low level, as well as ensure the predictability of interest rates in the economy.

In 2025, the Bank of Russia has continued to enhance its monetary policy communication with the professional community and general public. By publishing the codes of its forecast models, the Bank of Russia has improved the transparency of its communication with experts and analysts. The Bank of Russia has renewed the formats of its interaction with the academic community and significantly increased the number of events held jointly with universities. The audience of the Bank of Russia in social media has considerably expanded, including because of open communication with people.

Nevertheless, there is still room for improvement in this area in order to enhance the level of education and expand the direct open dialogue with society, businesses, and representatives of authorities. This is why the Bank of Russia openly communicates with the audience in social media, is engaged in an honest dialogue with regional businesses at regular in-person meetings, and gives prompt answers to the questions causing people's concerns in all regions of the Russian Federation. By using advanced sociology methods, the Bank of Russia will be able to better tailor its communication to the needs of particular audiences.

Communication with analysts has become more transparent: the Bank of Russia has published the codes of its forecast models and increased the number of regular meetings

In 2025, the index of the Bank of Russia's transparency for the professional audience, which was developed by Al-Mashat, has risen to 11.9 points out of the maximum 20 points. The Bank of Russia's total score is higher than the average across foreign central banks. The position of the Bank of Russia in the ranking based on the Al-Mashat index is between the Reserve Bank of New Zealand and the National Bank of Poland. Over the past two years, the transparency has improved by two points as a result of the disclosure of the codes of the main forecast models that the Bank of Russia employs when preparing its key rate decisions, the start of the publication of the Summary of the Key Rate Discussion, and the implementation of the Monetary Policy Review project.

The codes of the forecast models were published in April 2025. They supplemented the description of the Monetary Policy Department's Quarterly Projection Model for Russia with the Labour Market Component and the Research and Forecasting Department's Quarterly Projection Model.[1] The publication of the codes of the forecast models is an important stage of a more mature approach to communication with the professional community. These codes are the basis for the Bank of Russia's macroeconomic forecasts, and the findings of the models are the first link in the chain of the discussion of key rate decisions.

[1] For details, see Box 3 'Model-based approaches and their evolution' and the Forecasting and models / Important materials subsection on the Bank of Russia website.

The professional community and businesses earlier suggested expanding the list of parameters published in the Bank of Russia's macroeconomic forecast. By the moment, the Bank of Russia has not changed the set of the indicators of its medium-term forecast, but plans to revisit this issue in the course of the next Monetary Policy Review.

In 2025, the Bank of Russia's executives have been giving prompt comments on urgent issues related to monetary policy. The information on how the Board of Directors assesses released statistics and current developments enables the regulator to communicate its view to the professional community. Furthermore, the Bank of Russia has continued to hold in-person meetings with analysts and conference calls with Russian and foreign investors after each key rate meeting. Thus, analysts and investors can better comprehend the rationale for the Bank of Russia's decisions and get answers to questions of interest to the professional community.

Focus on communication with the academic community

A key area of the development of the Bank of Russia's communication is a dialogue with universities, especially in the Russian regions. Universities are a venue where the Bank of Russia can hold professional discussions of economic issues with the academic community, exchange the results of advanced economic research, and engage students and professors in joint projects. Furthermore, the Bank of Russia shares the practical experience of implementing monetary policy in Russian conditions.

In addition, the Bank of Russia communicates not only with economic universities, but also gives enough attention to communication with non-economic universities and vocational schools. This is needed because universities and vocational schools train future workforce for the domestic economy, and therefore, it is critical for young people to have access to relevant basic knowledge about the modern theory and practice of macroeconomics and monetary policy. Specifically, these topics were part of the spring cycle of FinTrack webinars for students.

In 2025, the Bank of Russia has significantly intensified its communication with the academic community. Thus, over 2024, the regulator carried out approximately 560 events on monetary policy at universities, most of which were overview lectures about the theory of monetary policy for students. In 2025, the Bank of Russia plans to hold over 740 events at educational institutions. Over January–September 2025, the regulator carried out more than 470 events.

From 2025, the Bank of Russia uses a new format – open lectures for students and academic staff of universities to discuss key rate decisions. In 2025, the regulator plans to deliver nearly 70 such lectures in various regions. Open lectures are frequently followed by panel discussions with academic staff where representatives of the Bank of Russia share their professional opinions about the Russian economy. The Bank of Russia organises topic-based intellectual games between universities in a number of regions. Furthermore, from 2024, the Bank of Russia holds training workshops for professors. One of the objectives is to provide professors with educational materials containing relevant information on monetary policy. The Bank of Russia plans to hold 38 such workshops in 2025. Representatives of the Bank of Russia have also expanded the practice of giving onsite topic-based lectures about various aspects of monetary policy at regional universities.

By exchanging the experience, the Bank of Russia's economists and the academic community will enrich each other's knowledge and navigate the interconnection between theory and practice.

Communication with the general public: being closer and clearer

In 2024, the Bank of Russia developed its own system to assess the regulator's transparency to the general public.[2] According to this study, the Bank of Russia's transparency to society is at a high level. Moreover, it is the leader among the reviewed banks in terms of training of the audience. To enhance the dialogue with society, the Bank of Russia focuses on the following areas.

1. More communication with businesses

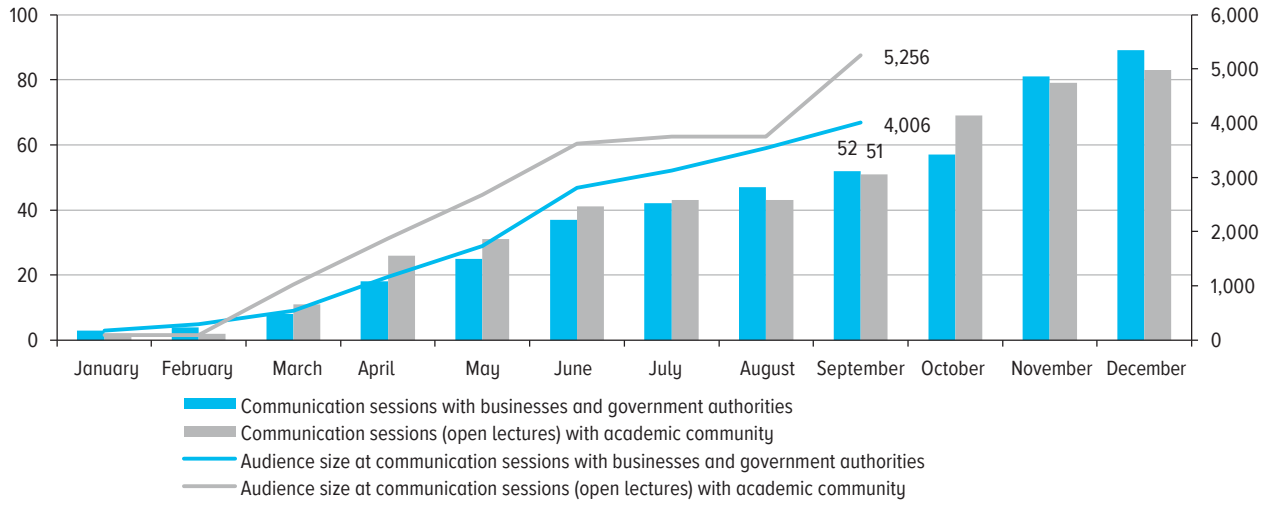
Communication with businesses remains a key area for development. In 2025, the Bank of Russia has been holding communication sessions with businesses in every Russian region, while paying more attention to individual meetings with companies' representatives. Over January–September 2025, the Bank of Russia held 300 such meetings in Russian regions with both large companies and SMEs. Furthermore, a number of meetings were organised as sectoral panel discussions with agricultural, trade, forestry, and construction enterprises. Such meetings enable the regulator and businesses to openly share their views of the economic situation in the country and a specific region, inflation, and monetary policy goals and decisions.

In the future, the Bank of Russia plans to pay more attention to communication with SMEs. To this end, the regulator will tailor its materials on monetary policy to SMEs' needs. This will help improve businesses' understanding of the Bank of Russia's actions and confidence in its forecasts, which will enhance the efficiency of the transmission of key rate decisions in the economy.

2. Regular communication with authorities

Many constituent territories of the Russian Federation have developed the practice of regular communication between regional executives of the Bank of Russia and representatives of local

COMMUNICATION WITH BUSINESSES, GOVERNMENT AUTHORITIES, AND ACADEMIC COMMUNITY ON MONETARY POLICY IN RUSSIAN REGIONS IN 2025 *Chart A-30*



Note. The left-hand scale is the number of events, and the right-hand scale is the size of the audience (the number of participants: representatives of businesses, regional government authorities, business associations, professors, and students). Before 1 October 2025 – actual numbers, from 1 October 2025 – targets, cumulative.
Source: Bank of Russia calculations.

[2] Evstigneeva, A. and Shchadilova, Yu. (October 2024). Broader Audience Transparency Index for Central Banks. Bank of Russia Working Papers, No. 136.

authorities. These working groups hold meetings to discuss the Bank of Russia's key rate decisions and their effects on the situation in particular regions. Representatives of authorities also attend communication sessions for businesses held in the Russian regions.

The Bank of Russia will continue to expand its communication with regional and federal authorities on monetary policy issues. The formats of communication will include working meetings with executives of ministries whose work is not directly related to the macroeconomy and representatives of regional authorities, regional events on economic issues, and meetings with specialists. Detailed information and explanations on monetary policy are essential for representatives of authorities to better comprehend and take into account the rationale for the Bank of Russia's decisions and its forecasts.

3. Direct communication with households and interaction with opinion leaders

A key to efficient communication today is a direct dialogue with the audience in social media, which allows the Bank of Russia to promptly communicate its view without intermediaries, establish an emotional connection and trust-based relations with people, and help them in challenging situations.

The audience of the accounts of the Bank of Russia and the educational project Financial Culture in the social media VK, OK, Yandex.Zen, and Telegram, as well as on video hosting platforms is constantly growing. By the end of September 2025, the number of subscribers to these accounts exceeded 674,000. Such topics as inflation, the macroeconomic situation in the country, and key rate decisions are traditionally the most popular ones among users giving rise to ongoing discussions in comments. In its Telegram channel, the Bank of Russia started a new topical column #BoRanswers where the regulator publishes its answers to the most interesting questions received from individuals. Furthermore, to inspire a discussion of latest news, urgent topics, and responses to questions, the Bank of Russia opens a chat in its Telegram channel once a week with over 7,000 participants.

In addition, the Bank of Russia communicates with society in other accounts as well. By collaborating with popular bloggers and opinion leaders, the Bank of Russia can efficiently communicate important information to a large number of people and expand the audience by engaging people interested in economics and monetary policy.

One of the new meaningful projects launched by the Bank of Russia in social media is the video podcast What BoR is Doing where a popular blogger discusses topics of public concern with the Bank of Russia's executives and other guests – bloggers.

The Bank of Russia believes that the development of active communication with residents of the Russian regions creates great opportunities. Already now, economists from the Bank of Russia's regional branches give interviews on topics that are relevant for locals, implement joint projects with bloggers and opinion leaders, and hold meetings with certain groups of the population, e.g. new mothers, pensioners, and schoolchildren. This approach makes it possible to discuss topics of public concern in the simplest form possible and in a trust-based environment, as well as learn people's view of the economic situation and monetary authorities' actions.

In 2025, the Bank of Russia Main Branches created their accounts in the social network VK. The information they publish there takes into account the regional specifics.

4. Advanced sociology methods for an efficient dialogue with society

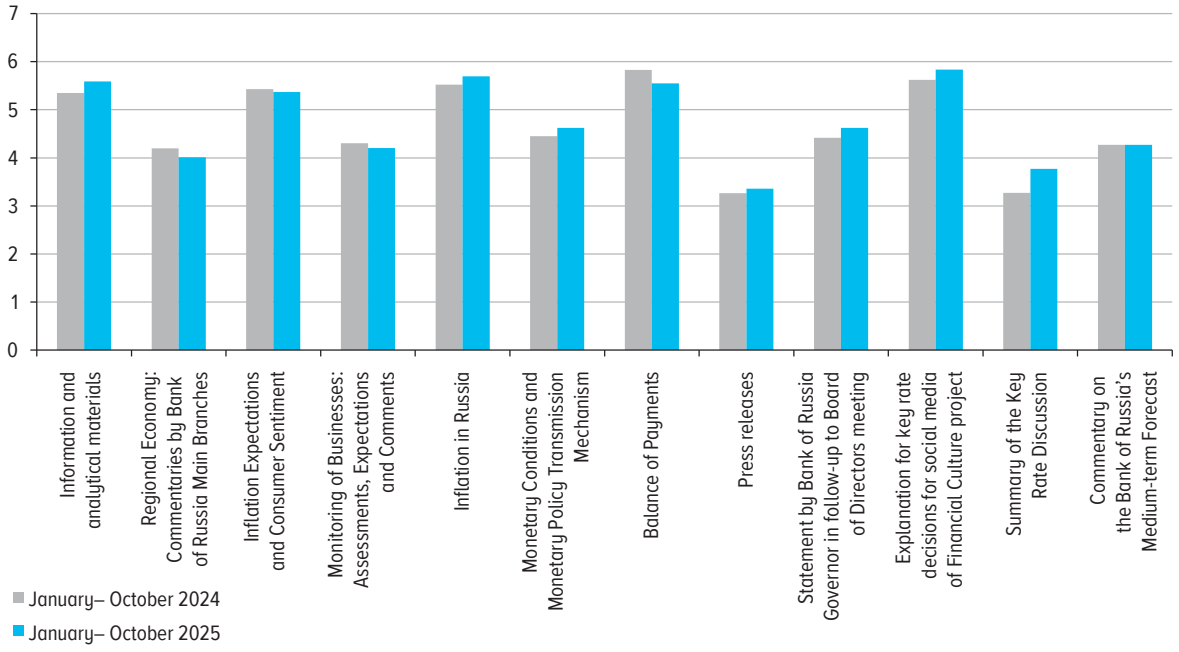
By using advanced sociology methods, the Bank of Russia is able to more efficiently tailor its communication to the needs of particular audiences. Transparency and emotional engagement strengthen confidence and reduce inflation expectations even among people who are not interested in economics. Advanced sociology methods help mitigate the negative impact of inflation spikes and may be especially useful to countries with high and unanchored inflation expectations. The Bank of Russia carries out research in this area so as to develop a flexible system of communication in the future, adapted to behaviours of various audiences.

5. Enhancing the comprehensibility of materials

The Bank of Russia continues to improve the content of its materials. To this end, the regulator uses neural network models: one of them scores the comprehensibility based on a 10-level scale,[3] and the other one simplifies complicated economic texts in the pilot mode.

The clarity of the main publications on monetary policy has generally improved in 2025, most significantly in the monthly information and analytical materials on inflation in Russian regions released by the Bank of Russia's regional branches. From April 2025, these materials are published in a new, more convenient format in terms of both content and visualisation. Regional publications on inflation are becoming increasingly popular: in 2024, readers viewed these materials on the Bank of Russia website nearly 1.3 million times, which is twice as much as in the previous year.

CLARITY OF MATERIALS ON MONETARY POLICY* *Chart A-31*



* *The figures for information and analytical materials are given for the periods from April to September 2024 and from April to September 2025 (to compare the clarity of the materials of the previous and new formats).*
Source: Bank of Russia calculations.

[3] Evstigneeva A. and Sidorovskiy M. (2021). Assessment of Clarity of Bank of Russia Monetary Policy Communication by Neural Network Approach. Russian Journal of Money and Finance, 80 (3), pp. 3–33. doi: 10.31477/rjmf. 202103.03.

The Bank of Russia publishes its explanations of the rationale for key rate decisions, adapted to the general public, in the accounts of the popular project Financial Culture in social media. This is in line with the world's best practices of multi-layered communication when one and the same material is prepared in different styles and with different degrees of detail. In this case, a simplified version is prepared based on the press release on the key rate and the Bank of Russia Governor's statement regarding the Board of Directors' decision. This helps explain the information, originally meant for the professional community, to the general public.

Appendix 7. Neutral interest rate and its estimate

According to the updated estimate, the longer-run nominal neutral rate for Russia remains at 7.5–8.5%. The Bank of Russia considers the neutral rate as the benchmark for the level of interest rates in the economy over a long period

Macroeconomists have always been looking for a way to identify a certain **equilibrium** level of interest rates to be the reference point determining whether current interest rates are restraining or stimulating economic activity. The concept of an overall macroeconomic equilibrium is detailed in Box 10 'The concept of a long-term economic equilibrium and deviations of key macroeconomic variables from it'.

The term 'neutral interest rate' has been used in the macroeconomic literature for over a century[1] already, but the modern view of this concept has gained momentum in recent decades.[2] Today, the most widespread concepts in both the economic literature and global regulators' communications are the **neutral** or **natural** rate of interest. The neutral rate is defined as an interest rate that neither decelerates nor accelerates inflation.[3] Concurrently, the natural rate is defined as an interest rate level that would have prevailed in an economy if there were no nominal rigidities (that is, if prices were absolutely flexible).

Furthermore, there are **short-** and **long-term** values of both equilibrium interest rates. Driven by **cyclical factors**, shorter-run rates hover around their long-term peers, the values of which are determined by **structural factors**. Estimated longer-run equilibrium rates correlate with a situation where the economy is on a sustainable long-term growth path, inflation is at the target, and inflation expectations are anchored – in this case, with the key rate kept at a level of the longer-run neutral rate, the economy will be expanding at its potential pace while inflation will remain at the target. When discussing the current monetary policy stance, it is the shorter-run neutral rate that should be referred to. Due to high uncertainty and a broad range of its estimates,[4] **similarly to other central banks, the Bank of Russia releases estimates[5] of only the long-term neutral rate** and considers it as a benchmark for the level of interest rates in the economy over long periods (normally, the key rate at the end of the forecast horizon is in line with the current estimates of the neutral interest rate). Nevertheless, it should be noted that, making its monetary policy decisions, the Bank of Russia factors in the direction and extent of the current deviation of the short-term neutral rate from the longer-run rate and the future dynamics of the former.

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1 The concept of the neutral rate of interest was originated by the Swedish economist Knut Wicksell in 1898. He defined the neutral rate as a level of the real interest rate ensuring equal demand for and supply of capital. In other words, this is an interest rate equalling the marginal productivity of capital. Wicksell also argued that a change in current interest rates in the economy relative to their neutral level could influence price growth rates. Nearly 100 years after Wicksell's publication, as increasingly more countries switched to inflation targeting, his concept of the neutral rate of interest has taken a central place in economic discussion.

2 Obstfeld, M. (2023). Natural and Neutral Real Interest Rates: Past and Future, NBER Working Papers.

3 It should be noted that we are referring exactly to the idiosyncratic effect of monetary policy, that is, inflation may notably change due to other factors (e.g. fiscal policy, the situation in international commodity markets, or inflation expectations), even if the key rate is at a neutral level.

4 Quantification of the shorter-run neutral rate is quite complicated, even in economies with a much longer inflation targeting history than in Russia. Moreover, central banks do not announce the results of such quantifications (refer to, for example, Brainard, L. (2018). What Do We Mean by Neutral and What Role Does It Play in Monetary Policy? / Remarks delivered at the Detroit Economic Club. Detroit, Michigan; Ruch, F. U. (June 2021). Neutral Real Interest Rates in Inflation Targeting Emerging and Developing Economies. Policy Research Working Paper 9711. World Bank).

5 The nominal neutral rate is the total of the real neutral rate and expected inflation. In the case on long-term neutral rates, the Bank of Russia's inflation target of 4% is taken as the level of expectations.

The real neutral rate is determined by the economy's structure, the ratio between the demand for investment and the supply of savings, fiscal policy parameters, demographic trends, the level of inequality, the parameters of the economy's openness, the level of risks associated with investment in financial and non-financial assets, and economic agents' risk appetite. The following factors are critical, among others:

1. Total factor productivity growth. The faster is the increase in total factor productivity, the higher is the neutral rate, as high productivity of capital encourages businesses to make larger investments and, accordingly, pay more for raising additional capital.

2. Demographics. The structure of the population and changes in its size, both in general and of individual age groups, influence both economic growth rates (and, consequently, investment activity) and the saving ratio. Thus, if the proportion of middle age groups characterised by a higher saving ratio increases in the population structure, the neutral rate will go down.

3. Fiscal policy. Equilibrium interest rates in the economy are influenced by fiscal policy through several channels simultaneously. When the ratio of government debt (or the budget deficit in general) to GDP rises, the demand for borrowings goes up, making investment in the economy more expensive[6] and increasing equilibrium rates. Furthermore, when the debt burden in the national economy is high, the risk premium for international investment in the country's economy rises, especially when foreign currency borrowings make up a large share. In addition to government debt, there are also various tax rates set by the government. These tax rates can impact households' decisions to save and businesses' demand for capital, which shifts the equilibrium in the capital market and, accordingly, determines new equilibrium interest rates. Thus, an increase in investment income tax for individuals will squeeze the supply of capital in the economy and cause a rise in equilibrium interest rates.

4. Financial sector maturity and regulation. When the banking sector and capital markets are more mature, they contribute to the growth of the saving ratio in the economy and, accordingly, help reduce the neutral rate. This effect is also facilitated by economic agents when they extend their planning horizon, thus prioritising future rather than present consumption, which encourages savings owing to an increase in the supply of financial capital.

5. Neutral rate levels in other economies. The neutral rate in an economy with a high level of financial account openness will be comparable with the neutral rate in the global financial market (the external interest rate), adjusted for the country risk premium and the inflation volatility premium. The country premium characterises differences in economic agents' perception of sovereign credit risks and the predictability of economic conditions in a particular country as compared to the environment in the key economies determining the level of the global neutral rate.

That said, **the neutral rate is a non-observed value that cannot be measured directly, but can only be approximated on the basis of a range of observed economic indicators and their dynamics**.

[6] Rachel, L. and Summers, L. H. (spring 2019). On Falling Neutral Rates, Fiscal Policy, and the Risk of Secular Stagnation. Brookings Papers on Economic Activity.

Broadly, the methods applied by economists to estimate the neutral rate may be divided into three groups:

- **Structural** models provide for a clearer (micro-based) structure of an economy – mechanisms of decision-making by economic agents and the rules for their interactions. The main structural models are dynamic stochastic general equilibrium (DSGE) models and overlapping generations (OLG) models. The latter also incorporate demographic trends.
- **Semi-structural** models became widespread beginning from the publication by Laubach and Williams (2003).[7] Similarly to non-structural models, they enable estimates relying primarily on available data, while taking into account certain theoretical macroeconomic interrelations, that is, remaining quite close to the logic of micro-based structural models. The model developed by Laubach and Williams (2003) was then modified several times for it to incorporate the pandemic shocks and the case of a small open economy.[8]
- **Non-structural** models let the data speak for themselves with no content restrictions on macroeconomic or financial variables used to make estimates. This group encompasses a fairly wide range of methods, including filtration of a historical time series of ex-post real interest rates to identify a trend in them,[9] as well as building a long-horizon forecast from reduced-form econometric models,[10] while assuming that the variables will converge towards their equilibrium values over a longer-term horizon. The approach based on adjustment of the yield curve for the term premium and isolation of market expectations regarding the long-term path of risk-free interest rates[11] stands out from other non-structural approaches. It is noteworthy that non-structural models are to a greater extent applicable to estimate neutral rates in advanced economies. As to developing economies with short and volatile time series of main macroeconomic indicators, it is rather complicated to make neutral rate estimates of this type.

In 2025, the Bank of Russia published a paper[12] on methods used to estimate the neutral rate and potential output. The paper analyses the estimates based on a variety of structural, semi-structural, and non-structural methods. The median estimate of the nominal neutral rate as of the end of 2024 equals 8–9%, but the authors identify procyclicality in some of the models employed, which causes an overstatement of the current estimate of the neutral rate.

The range of the resulting estimates of the longer-run neutral rate may be very wide. Furthermore, the confidence intervals in EMEs are wider than those in advanced economies due to both lower availability of extended data series and higher volatility of the internal macroeconomic environment

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7 Laubach, T. and Williams, J. C. (November 2003). Measuring the Natural Rate of Interest. The Review of Economics and Statistics, MIT Press, Vol. 85 (4), pp. 1063–1070.

8 Refer to, for example, Holston, K., Laubach, T., and Williams, J. C. (2023). Measuring the Natural Rate of Interest After COVID-19. Staff Reports 1063, Federal Reserve Bank of New York; Grafe, C., Grut, S., and Rigon, L. (2018). Neutral Interest Rates in CEEMEA – Moving in Tandem with Global Factors. Russian Journal of Money and Finance, 77 (1), pp. 6–25.

9 Del Negro, M., Giannone, D., Giannoni, M. P., and Tambalotti, A. (2019). Global Trends in Interest Rates. Journal of International Economics, Elsevier, Vol. 118 (C), pp. 248–262.

10 Lubik, T. and Matthes, C. (2015). Calculating the Natural Rate of Interest: A Comparison of Two Alternative Approaches. Richmond Fed Economic Brief.

11 Analysts most often prefer regularly published estimates based on the models developed by Adrian, T., Crump, R. K., and Moench, E. (2013). Pricing the Term Structure with Linear Regressions. Journal of Financial Economics, Elsevier, Vol. 110 (1), pp. 110–138, and by Kim, D. H. and Wright, J. H. (2005). An Arbitrage-Free Three-Factor Term Structure Model and the Recent Behavior of Long-Term Yields and Distant-Horizon Forward Rates. Finance and Economics Discussion Series 200533, Board of Governors of the Federal Reserve System (U.S.).

12 Ermakov, S. et al. (2025). Estimating Unobserved Variables in Russia: Putting Bars and Stars on R and Y. Bank of Russia.

and country risk premiums. Ruch (2021)[13] demonstrates that the uncertainty about the level of the neutral rate in EMEs is twice as large, on average, as the rate of uncertainty seen for estimates in advanced economies (the estimates of the standard deviation are as large as 1.4 pp in EMEs, compared to 0.6 pp in advanced economies). The author also notes that the uncertainty surrounding the estimates for commodity exporting EMEs is more than 40% higher than that for commodity importing EMEs.

Central banks of a number of advanced economies and EMEs use a certain combination of the above approaches to estimate the neutral rate r*. The methodologies applied by the Bank of Japan,[14] the ECB,[15] the Norges Bank,[16] the Bank of Canada,[17] and the Central Bank of Chile[18] include the widest set of approaches to estimating r*. For details, see the Table 'Reference appendix: international experience'. This table provides a good illustration of the thesis about high heterogeneity of neutral rate estimates, which is related to both structural factors inside countries and differences in the methods they prefer.

Overall, it is possible to talk of decreases in estimated neutral rates in many advanced economies over 2000–2020 and in a number of EMEs over 2009–2020 (after the shock of the 2008 crisis). That occurred as a result of a slowdown in trend growth, among other factors, and could be due to multiple reasons, including (1) lower labour productivity; (2) a reduction in the economically active population (population ageing); (3) rising income inequality; and (4) fiscal policy specifics (lower budget expenditures on social and infrastructure projects). Furthermore, as stated by Bernanke, another important reason for a decline in the US neutral rate could be (5) the so-called global savings glut and the inflow of these savings into the USA. The savings glut had formed predominantly in Southeast Asia after the 1998 crisis, entailing a contraction of investment, and in commodity exporting economies (mostly the Gulf States). This excess demand for risk-free assets expanded after the 2008 crisis, supported by, among others, US banks after the tightening of the US banking regulation. The changes (decline) in the US rate had a notable impact on the dynamics of other countries' estimated neutral rates.

However, the estimates of a longer-run neutral rate increased during the post-pandemic period, including because of a considerable expansion of fiscal stimuli over the pandemic period and a temporary yet significant rise in budget deficits. Advanced economies and some East European economies (that are integrated with the euro area's economy quite deeply, although to different extents) generally have lower estimates of the real neutral rate of around 1%, whereas a number of EMEs, including the five leading BRICS economies – higher estimates of about 2–4%. Given that the inflation targets in inflation targeting EMEs are significantly higher than in advanced economies, the estimates of the nominal neutral rate in most advanced and East European economies approximate 2–4%, while those in EMEs and BRICS are about 5–8%.

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[13] Ruch, U. F. (June 2021). Neutral Real Interest Rates in Inflation Targeting Emerging and Developing Economies. Policy Research Working Paper 9711. World Bank.

[14] Nakano, S., Sugioka, Y., and Yamamoto, H. (2024). Recent Developments in Measuring the Natural Rate of Interest, Bank of Japan Working Paper Series 24E-12.

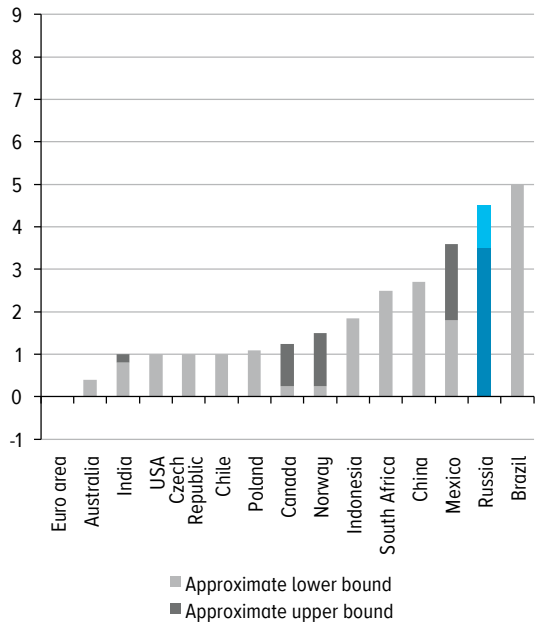
[15] Brand, C., Lisack, N., and Mazelis, F. (2025). Natural Rate Estimates for the Euro Area: Insights, Uncertainties and Shortcomings. Economic Bulletin Boxes, European Central Bank, Vol. 1.

[16] Bank of Chile, Monetary Policy Report, Box II. 2 (December 2022).

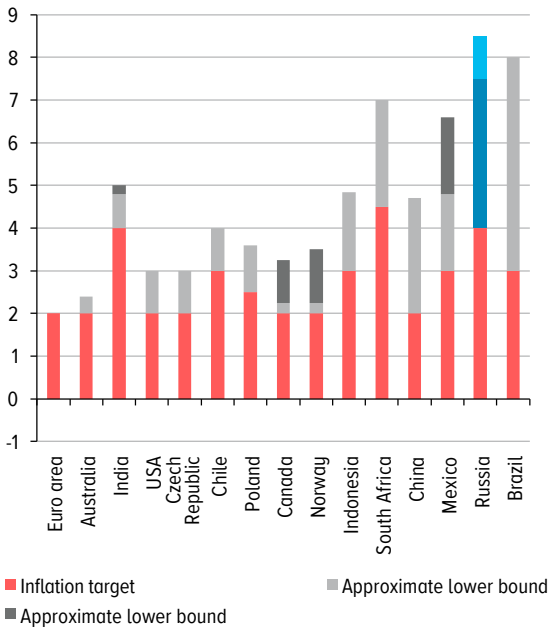
[17] Adjalala, F., Alves, F., Beaudoin, W., Desgagnes, H., Dong, W., Krohn, I., and Schneider, J. D. (2025). Assessing the US and Canadian Neutral Rates: 2025 Update. Staff Analytical Notes 2025–16, Bank of Canada.

[18] Almlid, E. and Asshoff, S. (2025). Estimating the Neutral Real Rate of Interest in Norway. Staff Memo, No. 8, Bank of Norway.

ESTIMATE OF REAL NEUTRAL RATE (R*) *Chart A-32*
(%)



ESTIMATE OF NOMINAL NEUTRAL RATE (I*) *Chart A-33*
(%)



Note. The light grey area of the bars in the diagram shows the approximate lower bound of the estimated range of the neutral rate (or the estimate of the neutral rate if it is determined not as a range but as a point), and the dark grey area shows the approximate upper bound of the estimate.
The right-hand diagram ('Estimate of nominal neutral rate (i)') lists the countries by the level of real r* and shows their inflation targets. For the USA – the estimate from the US Fed's dot plot.*
Sources: publications by representatives of respective countries' central banks and international organisations.

According to most research papers published before 2022, the quantitative estimates of the longer-run real neutral rate for Russia were close to the range from 1% to 3%. For example, Kreptsev et al. (2016)[19] forecast 1.0–3.2% (various models), the IMF (2019)[20] – 1–3% (various models), and Isakov (2019)[21] – 1.5–2.5% (various parameters). Drobyshevsky et al. (2021)[22] conclude that the neutral rate of interest for Russia had been continuously decreasing from 5% in 2016 and reached the level of 1% in 2020. Porshakov and Sinyakov (2019)[23] determine the range of neutral rate estimates in the Russian economy using a complex of approaches to estimation based on both structural and econometric methods. The findings suggest that, according to strict definitions, the equilibrium real rate estimates in Russia all have wide confidence intervals and are highly sensitive to various model parameters (the derived values are given in a range from negative to positive ones). As for recent research papers, we can highlight the one by Grishchenko and Sinyakov (2024).[24] The authors estimate the impact of demographics on the long-run equilibrium interest rate and note that, over a multi-decade horizon, it will be trending downwards due to demographics just as worldwide.

[19] Kreptsev, D., Porshakov, A., Seleznev, S., and Sinyakov, A. (2016). The Equilibrium Interest Rate: Estimates for Russia. Bank of Russia Working Papers, No. 13.

[20] International Monetary Fund. Russian Federation – Staff Report for the 2019 Article IV Consultation.

[21] Isakov, A. and Latypov, R. (15 July 2019). The Ibsen Manoeuvre: Yet Another R* Estimate. VTB Capital Research Alert, (Very) Technical Brief series.

[22] Drobyshevsky, S., Trunin, P., Sinelnikova-Muryleva, E., Makeeva, N., and Grebenkina, A. (2021). Estimating a Neutral Real Interest Rate in Russia During Inflation Targeting. Voprosy Ekonomiki, No. 9.

[23] Porshakov, A. and Sinyakov, A. (2019). Estimates of the Equilibrium Interest Rate for Russia: Is 'Navigating by the Stars' Useful? Russian Journal of Money and Finance, No. 78 (4), pp. 3–47.

[24] Grishchenko, V. and Sinyakov, A. (2024). Demographics and Equilibrium Interest Rates: Competing Approaches and Evidence from Russia. Journal of the New Economic Association, No. 1 (62), pp. 229–339.

In the new conditions, it has become more difficult since 2022 to estimate the neutral rate of interest relying on the previous models and approaches due to the changed interrelationships between the Russian economy and the external world, including the foreign sanctions enacted against the financial sector and the capital controls introduced by Russia in response to offset the impact of the sanctions. Global factors have become less important in the estimates of the neutral rate, whereas the potential growth rate – which depends on the pace of the accumulation of factors of production, the increase in their productivity, and the pace of technological progress – is playing a greater role.

The data array for 2019–2025 enables a new view of the main factors influencing the long-term level of the real neutral rate in the Russian economy. First of all, as compared to 2017–2019, the Government has notably revised is fiscal policy: the increase in the base prices for hydrocarbons within the framework of the fiscal rule assumes that a larger amount of cyclical OGR will be allocated to cover expenditures. Furthermore, during the six years of 2020–2025, the structural primary deficit has been positive, with both planned and actual expenditures surpassing the maximum level provided for by the fiscal rule. In addition, over 2020–2025, considerable resources from the NWF have been invested inside the Russian economy, significantly exceeding the highest annual averages on record, which suggests an additional expansionary effect exerted by fiscal policy. Overall, fiscal policy has been one of the main factors having an upward effect on the neutral rate in recent years. Secondly, with the enactment of the restrictions on international trade pushing up import costs and the consistent expansion of government demand, the need to ramp up domestic production and, accordingly, capital has risen. Concurrently, the utilisation rate of the available capacities has been growing, which is increasing the capital retirement rate and, combined with the demand for new capital, is shifting the neutral rate upwards. Thirdly, the persistence of external inflation, coupled with higher monetary policy rate paths in advanced economies, suggests a higher external neutral rate compared to the pre-pandemic period, which has a certain upward effect on Russia's neutral rate as well. Fourthly, changes in external conditions – the sanctions imposed, limited participation of the Russian economy in global capital markets, and rising uncertainty about the prospects of business projects compared to the period before 2022 – have caused an increase in the risk premium for international investment in Russia, on the one hand, and made Russia's domestic indicators less sensitive to cross-border capital flows, on the other hand. The alteration of the external environment generally exerts upward pressure on the neutral rate in Russia. Considering the above factors, the updated estimate of the **longer-run real neutral rate** for the Russian economy is **3.5–4.5%** p.a., which corresponds to the **nominal neutral rate** of **7.5–8.5%** p.a. with the inflation target of close to 4%.

It should be noted that this range is also part of a wider confidence interval of neutral rate estimates. The Bank of Russia will assess the overall effect of these factors as it accumulates relevant information.

REFERENCE APPENDIX: INTERNATIONAL EXPERIENCE (ESTIMATES BY CENTRAL BANKS, EXCEPT FOR PEOPLE'S BANK OF CHINA, BANK INDONESIA, CZECH NATIONAL BANK, AND NATIONAL BANK OF POLAND) *Table A-1*

	Year of neutral rate estimates	Nominal neutral rate, %	Inflation target, %	Approaches to estimating neutral rates
Canada	2024	2.25–3.25	2.0 +/-1	(1) Interest rate parity; (2) yield curve decomposition into expectations and the premium; and (3) OLG model. The estimate has been raised due to a higher estimate of r* for the main trading partner (USA) following an increase in the estimate of potential economic growth rates. Internal factors have had a neutral effect as a rise in labour productivity has been offset by a reduction in capital productivity.
Norway	2025	2.25–3.5	2.0	(1) Yield curve decomposition; (2) semi-structural models (LW); (3) non-structural models (BVAR); and (4) structural models.
Australia	2025	2.9	2.0–3.0	(1) Yield curve decomposition; (2) semi-structural models (LW); and (3) non-structural models (the Kalman filter, vector autoregressive models (Lubik–Matthews).
Czech Republic	2024	3.0	2.0 +/-1	Semi-structural model (LW) with rational expectations and a forward-looking interest rate rule. Both the trend growth of GDP and the strengthening / weakening of the equilibrium real exchange rate are taken into account.
Poland	2023	3.6	2.5 +/-1	(1) Time series assessments for decomposition into trend and stationary components (VAR); (2) semi-structural models (HLW); and (3) structural models (Brzoza–Brzezina). It is noted that the overall downward trend was associated with a reduction in r* in the euro area.
Chile	2024	4.0	3.0 +/-1	(1) VAR with a number of variables; (2) yield curve decomposition into expectations and the term premium; (3) semi-structural approaches according to the logic of the Euler equation, Phillips curve, and Taylor rule; (4) interest rate parity; and (5) a sustainable consumption behaviour model.
Indonesia	2023	4.34	2.5 +/-1	IMF estimates through semi-structural (HLW) and non-structural models (the Hodrick–Prescott filter) and through yield curve decomposition.
China	2024	4.7	2.0	OLG model-based estimates.
India	2022	4.8–5.0	4.0 +/-2	Semi-structural models (LW) and non-structural models (the Kalman filter). It is noted that food price shocks in India are among the factors complicating the estimate of r*.
Mexico	2024	4.8–6.6	3.0 +/-1	(1) Modified Taylor rule incorporating the factor of the US Fed's monetary policy; (2) a business cycle model for a small open economy; and (3) term premium and yield curve decomposition into expectations and the term / risk premium.
South Africa	2024	7.0	3.0–6.0	Adaptation of the LW model to a small open economy. After the global crisis of 2008, the estimates of South Africa's trend growth were decreased, which entailed a downward revision in r*: the South African Reserve Bank reduced the estimate of r* from 4.4% in 2000–2006 to 1.9% in 2017. The estimate was then raised to 2.5% in 2022–2023.
Russia	2025	7.5–8.5	4.0	The median of estimates of several models: (1) neoclassical growth theory; (2) the UIP approach; (3) the semi-structural model developed by Holston, Laubach, and Williams (2020); (4) the interest rate term structure model ACM; (5) TVP-SV-BVAR based on Lubik and Matthes (2015); and (6) BVAR with a common stochastic trend developed by Del Negro et al. (2017)
Brazil	2024	8.0	3.0 +/-1.5	(1) Estimates based on a LW model variation; (2) the estimate based on Treasury Inflation Protected Securities (TIPS), the risk premium and the CDS / EMBI spread; (3) SAMBA model based on a two- or five-year rate; (4) low-frequency models: Beveridge–Nelson gap, Band–Pass gap, and semi-structural model gap; and (5) calculation of the real market rate discounted by (adjusted for) the term premium depending on the period of 5–10–20 years (yield curve decomposition).

Appendix 8. Financial market development

The Bank of Russia actively participates in the development and implementation of the policy on financial market advancement, which is essential to ensure successful structural transformation and balanced growth of the domestic economy and enhance the efficiency of monetary policy

Currently, the structural transformation of the Russian economy progresses further. Its financing requires a considerable amount of long-term funds. Given the existing sanctions, these funds can only be received from domestic sources, including household savings. It is the financial market where savings transform into investments, and therefore, its maturity level is a factor influencing the pace of the economy's structural transformation and development.

Jointly with the Government of the Russian Federation, the Bank of Russia elaborates and implements financial market advancement policy. Its medium-term objectives are described in the Russian Financial Market Development Programme[1] and have been generally attained as planned.

In the first place, it is worth highlighting the complex of measures aimed at advancing the capital market. By now, a range of instruments for retail investors has already been developed to meet various objectives and needs. The work is now carried out to expand and enhance this range of instruments. In particular, in early 2025, the Russian market offered a new option for long-term investment – unit-linked life insurance.[2] To launch it, a legal framework[3] was developed to guarantee the rights of policy holders, the insured, and beneficiaries under voluntary life insurance policies. The mechanism providing for compensations for the value of assets recorded in type 3 individual investment accounts in case of bankruptcy of the entity keeping the records will be launched from January 2026.[4] The pool of bonds accessible to non-qualified investors has been expanded,[5] and they do not need to pass the test to purchase corporate bonds with the credit rating 'A+' or higher.[6] Qualified investors will have access to derivatives, securities, and digital financial assets, whose returns are linked to the value of digital currency.[7] The key condition is that such instruments must provide for physical delivery of digital currencies. The regulation of unit investment funds for qualified investors was enhanced as well.[8] The Bank of Russia detailed the legal requirements for individuals and legal entities to be recognised as qualified investors, established the procedure for recognising a person as a qualified investor, and the procedure for keeping the register of qualified investors.[9] In particular, to increase the role of

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1 Russian Financial Market Development Programme.

2 Federal Law No. 631-FZ, dated 25 December 2023, 'On Amending Certain Laws of the Russian Federation'.

3 Federal Law No. 477-FZ, dated 26 December 2024, 'On Guaranteeing Rights Under Life Insurance Contracts' and Federal Law No. 478-FZ, dated 26 December 2024, 'On Amending Certain Laws of the Russian Federation'.

4 Federal Law No. 331-FZ, dated 31 July 2025, 'On Amending Certain Laws of the Russian Federation and on the System for Refunding the Value of Assets Recorded in Individual Investment Accounts'.

5 Decision of the Bank of Russia Board of Directors, dated 14 February 2025.

6 Except for bonds secured by monetary claims, including mortgage-backed bonds, structured income bonds, and bonds convertible into other securities. Previously, non-qualified investors were only allowed to purchase corporate bonds with the credit rating 'AAA'.

7 Bank of Russia Information Letter No. IN-018–52/86, dated 28 May 2025, 'On Transactions with Certain Types of Financial Instruments and Digital Financial Assets'. For some instruments, legislative amendments will be needed.

8 Federal Law No. 532-FZ, dated 28 December 2024, 'On Amending the Federal Law 'On Investment Funds' and Certain Laws of the Russian Federation'.

9 Bank of Russia Ordinance No. 7060-U, dated 21 May 2025, 'On the Requirements for a Person to be Recognised as a Qualified Investor, the Procedure for Recognising a Person as a Qualified Investor, and the Procedure for Maintaining the Register of Persons Recognised as Qualified Investors'.

experience and knowledge for receiving the qualified investor status, the Bank of Russia raised the required level of assets, introduced a combination of the asset criterion with other criteria (advanced testing, graduate or post-graduate degree).

Furthermore, SMEs, including small technology companies, are eligible for subsidies to make share offerings on the exchange and investment platforms.[10] This mechanism allows them to partly compensate for the funds used to organise an IPO and pre-IPO. Issuers that are just planning an IPO will be entitled to be compensated for part of bond issue costs.

Making equity financing of business operations more attractive compared to conventional lending is critical for the development of the capital market and the structural transformation of the economy. Growing competition between the equity and bond markets and the bank loan market as a source of funding for organisations will accelerate the impact of monetary policy impulses on bank loan rates, thus enhancing the efficiency of the interest rate channel of the transmission mechanism.

Jointly with Moscow Exchange, the Bank of Russia developed and launched the shareholder value creation programme[11] for current issuers, which will enhance their interaction with shareholders and investment appeal. Ultimately, the programme is to form an index of companies having the high-quality status for investors and being a benchmark for other issuers. This index will be the basis for creating collective investment funds, which will become an attractive long-term investment instrument. Furthermore, the Bank of Russia developed recommendations for implementing ethical principles by financial institutions[12] and updated the principles of responsible investment[13] for institutional investors. Adherence to the recommendations of the Code of Responsible Investment will foster long-term relationships between institutional investors and issuers, as well as closer cooperation as part of corporate governance.

As regards further development of the financial market infrastructure, the Bank of Russia transitioned to the electronic document flow[14] with issuers in the course of state registration of securities issues. Furthermore, the lawmakers established the legal requirements for administrators of financial and commodity indices, which will help create a national system of such indicators.[15] As for commodity trading systems, they are to comply with simplified requirements, which is expected to increase the number of licensed platforms for organised commodity trading.[16]

Jointly with the Government of the Russian Federation, the Bank of Russia will continue to implement financial market development policy in the following areas.

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[10] Decision of the Ministry of Economic Development of the Russian Federation No. 25-60405-02102-R, dated 28 April 2025, 'On the Procedure for Providing Government Subsidies to Support Russian Small and Medium-sized Enterprises by Partially Compensating for the Costs of Securities Offering on the Exchange and Investment Platforms'.

[11] Bank of Russia Information Letter No. IN-02-28/68, dated 13 January 2025, 'On the Recommendations for Developing the Shareholder Value Strategy'.

[12] Bank of Russia Methodological Recommendations No. 1-MR, dated 20 January 2025, for applying the main principles of ethical behaviour in the financial market.

[13] Bank of Russia Information Letter No. IN-02-28/90, dated 7 July 2025, 'On the Code of Responsible Investment'.

[14] Federal Law No. 124-FZ, dated 23 May 2025, 'On Amending Certain Laws of the Russian Federation'. To become effective on 1 March 2026.

[15] Federal Law No. 452-FZ, dated 13 December 2024, 'On Administrators of Financial and Commodity Indices' and Federal Law No. 453-FZ, dated 13 December 2024, 'On Amending Article 76.9-5 of the Federal Law 'On the Central Bank of the Russian Federation (Bank of Russia)' and the Federal Law 'On Organised Trading' (hereinafter, Federal Law No. 453-FZ).

[16] Federal Law No. 453-FZ.

1. Enabling a stronger role of the financial market in financing the transformation of the economy while maintaining the stability of the financial sector

For the economy to have a balanced set of financing sources, it is essential to promote the role of the capital market and non-bank financial intermediaries, ensure active participation of various groups of investors and issuers in the market, develop long-term saving and investment instruments, and strengthen confidence in the financial market. Measures implemented in these areas will help strengthen the role of the financial market in funding the transformation of the national economy and may also enhance the efficiency of the transmission of key rate decisions to the economy through the channels related to the financial market, namely the balance sheet and narrow credit channels.

Important measures include the efforts to focus government support mechanisms on long-term saving and investment instruments, specifically aiming to expand tax benefits for long-term savings to voluntary life insurance policies. Furthermore, to make the Long-term Savings Programme (LSP) more attractive, it is essential to engage employers. It is planned to expand the benefits for employers in the non-governmental pension system to the LSP as well, in particular to allow employers to recognise contributions to the non-governmental pension system in payroll expenses for corporate profit tax payments and exempt such contributions from insurance premiums.[17] In addition, jointly with the Government of the Russian Federation, the Bank of Russia is exploring the issue of creating a family savings instrument.

To increase the number of institutional investors in the securities market, last year, the Bank of Russia eased the requirements for NPFs' participation in IPOs in the course of organised trading.[18] Furthermore, work is carried out to cancel part of the requirements for the composition and structure of NPFs' investment portfolios, while limiting investment risks through tighter requirements for NPFs' stress testing. These changes will expand investment opportunities for NPFs and ensure more flexible management of the pension reserve portfolio, while maintaining financial resilience.

It is also essential to make the capital market more attractive as a source of financing for businesses. Companies raising capital on their own should be incentivised. To this end, it is reasonable to refocus the system of government subsidies from bank lending on support measures for issuers. Given that financial resources are limited, it is crucial to focus government support on top-priority areas and projects, in the first place providing aid to companies doing business in promising and priority sectors, including hi-tech production, import substitution, non-commodity exports, and the creation of the necessary infrastructure. Furthermore, to achieve a substantial effect, government measures aimed at supporting issuers should be comprehensive. In view of this, it would be reasonable to explore the possibility of introducing tax incentives for companies raising capital on their own. Another possible measure to encourage equity financing is to make issuers eligible for priority access to government support measures and incentivise state-owned companies to go public.

Enhancement of corporate governance practices, including protection of minority investors and predictability of dividend payments, is essential for developing equity financing. Furthermore, the accessibility of high-quality and reliable information is crucial to build an environment of trust. It is therefore important for issuers to make such disclosures.

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[17] Draft Federal Law No. 919131-8 'On Amending Article 126.2 of Part One and Part Two of the Tax Code of the Russian Federation and Part Three of the Federal Law 'On Amending Articles 102 and 126.2 of Part One and Part Two of the Tax Code of the Russian Federation' was adopted by the State Duma in the first reading.

[18] The minimum amount of an IPO for NPFs to be allowed to participate was reduced from ₽50 billion to ₽3 billion.

To support the stable functioning of the economy, it is critical for the financial market infrastructure to be resilient because it ensures transparency, efficiency, and confidence in the financial market and helps foster investment and economic growth. Promoting dynamic development of the financial market infrastructure is a priority task for the Bank of Russia. Specifically, the national rating industry plays a big role in ensuring the economic sovereignty. It continues to evolve, and it is planned to establish a legal institute of non-public credit ratings. The register of national administrators of financial and commodity indices is being formed.

The Bank of Russia makes efforts to tighten the requirements for concentration ratios by setting higher thresholds in order to mitigate potential systemic risks in the financial market. Furthermore, the mechanism for fast securities transfers between professional securities market participants, which will reduce their costs, is being implemented.

The Bank of Russia will also continue to improve the regulation of platform services.

2. Financial consumer and investor protection, increasing financial inclusion for households and businesses

Ensuring protection of financial consumers and investors and improving their financial and investment literacy are important areas of the Bank of Russia's work. In the near term, it is essential to enhance investors' protection further, including by actively advancing technologies and remote service channels.

The Bank of Russia continues to implement the package of measures aimed at protecting retail investors and improving approaches to their admission to the capital market.

Another priority for the Bank of Russia is to increase the accessibility, quality, and range of financial services for people and businesses, especially for vulnerable groups of consumers, namely residents of remote, sparsely populated, and hard-to-reach areas, people with disabilities, elderly and physically challenged persons, and SMEs.

As part of comprehensive protection of financial consumers' rights, it is critical to develop the key elements of financial culture among Russian people (values, behaviour patterns, and practices) that would improve their financial well-being and increase their welfare, including by forming financial literacy competencies, developing financial market and social institutions, and influencing people's values through creative industries' products. When people make mindful choices, comprehend the purpose of financial transactions, are able to reduce risks and more actively use various financial instruments, this helps develop the financial market, which enhances the efficiency of the monetary policy transmission mechanism. Furthermore, in view of the digitalisation of the financial market, it is crucial to improve people's digital financial literacy and address the problems of cybercrime and cyberfraud.

Measures aiming to protect financial consumers and investors help build an environment of trust in the Russian financial market. As a result, they will respond more reasonably to changes in the economic situation in general and the financial market in particular. This response will help enhance the efficiency of the expectations channel in the national economy. These measures as well as the measures increasing financial inclusion for people and businesses will expand the range of users of financial services whose economic behaviour is directly influenced by monetary policy. Accordingly, the overall efficiency of the monetary policy transmission mechanism will be improving.

3. Digitalisation of the financial market and development of the payment infrastructure

Promoting digitalisation of the financial market remains a strategic priority for the Bank of Russia. The regulator will continue to advance the national digital infrastructure as part of the projects aimed at developing digital identification, digital data exchange, and digital payments.

In order to develop digital identification services, the Bank of Russia will continue to advance the Digital Profile and the UBS, which will help reduce financial market participants' costs.

There are plans to continue the development of financial and non-financial services provided using the UBS. In particular, the Bank of Russia will be further developing biometric payments for purchases. Pilot transactions have already been conducted by the moment. It is planned to launch a full-scale solution and expand the use of biometric payments. People will thus be able to make payments based on their biometric personal data.

The Bank of Russia will continue to develop digital data exchange in the market, which will expand the potential for providing financial services in the digital form.

Jointly with the competent federal executive authorities and financial market participants, the Bank of Russia has been implementing measures aimed at expanding the list of services that financial institutions provide to individuals and legal entities through the Digital Profile. Moreover, it is planned to display new data in the Digital Profile and increase the number of organisations connected to it.

An essential stage will be the introduction of the regulation of Open APIs in the financial market. Simultaneously, it is planned to work out approaches to organising information exchange through Open APIs for the non-financial market.

Creating a commercial consent platform will provide a convenient and easy-to-understand mechanism for centralised management of clients' consents as part of Open API-based information exchange.

Ensuring the independence of the Russian economy in terms of the functioning of the financial market is primarily about the development of the required independent payment and settlement infrastructure. The development of products and services based on innovative digital solutions will be continued within the National Payment Card System and the Mir payment system. It is also planned to increase the set of the functions of the Faster Payments System. The Bank of Russia plans to change the schedule of the functioning of its payment system to ensure its 24/7 operation, which will make business payments accessible at any time in 11 time zones and expand the opportunities to earn extra revenues, including in the financial market.

Digital ruble transactions will become the most important innovation in the area of cash circulation, payments, and settlements. This option will become available to all clients of the largest banks[19] from 1 September 2026 and to clients of banks with a universal licence and other credit institutions later on.

To develop innovative instruments in the financial market, the Bank of Russia has been enhancing the regulation of digital rights and advancing this segment of the financial market.

[19] List of Systemically Important Credit Institutions; Register of Credit Institutions Recognised by the Bank of Russia as Important in the Payment Services Market.

Overall, the efforts in the area of digitalisation of the financial market and advancement of the payment infrastructure will make payments and settlements faster and reduce related costs, thus accelerating the impact of changes associated with monetary policy decisions on transactions in the commodity and financial markets. This will enhance the efficiency of the transmission mechanism.

4. Development of the system of foreign trade payments and settlements

In the conditions of the geopolitical pressure from unfriendly countries, the Bank of Russia continues the work to arrange new channels for international settlements. The Bank of Russia has been developing correspondent relationships among credit institutions with a focus on settlements in national currencies and expanding financial messaging channels, other than the SWIFT.

To increase the range of options for international settlements, efforts were made to develop alternative mechanisms. In particular, as long as digital rights had been allowed to be used as consideration in foreign trade transactions,[20] the system for recording and controlling FX transactions was expanded to embrace transactions conducted to transfer (receive) digital rights.[21]

As the barriers in foreign trade transactions associated with the geopolitical pressure are removed, the influence of the ruble exchange rate on foreign trade amounts will become less distorted, thus partially restoring the role of the foreign exchange channel of the transmission mechanism.

5. Ensuring financial stability

The Bank of Russia's priority is to maintain financial stability and depositors' and investors' confidence in the Russian financial system. Only a stable financial sector is able to support smooth processing of payments and transformation of savings into investment. Therefore, measures implemented in this area will ensure the efficient transmission of monetary policy decisions.

While implementing the measures aimed at advancing the financial market, the Bank of Russia will evaluate their influence on the effectiveness of the transmission mechanism and monetary policy.

[20] Federal Law No. 45-FZ, dated 11 March 2024, 'On Amending Certain Laws of the Russian Federation'.

[21] Bank of Russia Instruction No. 181-I, dated 16 August 2017, 'On the Procedure for Residents and Non-residents to Submit Documents and Information Confirming Foreign Exchange Transactions to Authorised Banks, on Single Accounting and Reporting Forms Related to Foreign Exchange Transactions, and the Procedure and Timeframes for Their Submission'.

Appendix 9. Monetary programme

The main goal of the Bank of Russia's monetary policy is to maintain inflation close to 4%, and its operational objective is to keep interest rates in the unsecured overnight segment of the interbank money market close to the key rate. This strategy does not provide for setting and delivering on quantitative targets for any other economic indicators, including monetary ones. The monetary programme indicators are calculated by the Bank of Russia in addition to the banking sector liquidity forecast and supplement the forecast indicators that the Bank of Russia takes into account when elaborating and implementing its monetary policy.

FORECAST OF KEY INDICATORS FOR MONETARY AUTHORITIES' ACCOUNTS (MONETARY PROGRAMME INDICATORS)[1] *Table A-2*
(AS OF PERIOD END, ₽ TN, UNLESS INDICATED OTHERWISE)

	2024 (actual)	Baseline			
		2025	2026	2027	2028
1. Monetary base (narrow definition)	**18.9**	**19.3**	**20.1**	**21.2**	**22.2**
1.1. Cash in circulation (outside Bank of Russia)	18.5	18.8	19.6	20.6	21.6
1.2. Required reserves[2]	0.4	0.5	0.5	0.5	0.6
2. Net international reserves	**59.1**	**56.7**	**55.3**	**55.4**	**55.7**
– $ bn[3]	582	558	544	545	548
3. Net domestic assets	**-40.3**	**-37.5**	**-35.2**	**-34.3**	**-33.5**
3.1. Net credit to general government	-6.9	-6.0	-5.2	-5.1	-5.1
3.2. Net credit to banks	-4.2	-4.1	-2.4	-1.0	0.5
3.1.2. Gross credit to banks	4.7	4.3	6.5	8.4	10.5
3.2.1.1. Claims on refinancing operations[4]	4.4	3.9	6.1	8.0	10.2
2.2.3. Credit institutions' correspondent accounts with Bank of Russia	-4.7	-5.4	-5.8	-6.4	-7.0
3.2.3 Credit institutions' deposits with Bank of Russia, coupon OBR, and reverse FX swap	-4.2	-3.0	-3.0	-3.0	-3.0
3.3. Other net non-classified assets[5]	-29.1	-27.3	-27.6	-28.2	-28.9

[1] *The monetary programme indicators calculated at a fixed exchange rate are based on the official exchange rate of the ruble as of the end of 2024, which was 101.7 rubles per US dollar, and at fixed cross exchange rates of the US dollar against foreign currencies as of the end of 2024.*
[2] *Credit institutions' required reserves deposited with the Bank of Russia in ruble-denominated accounts (do not include funds in credit institutions' correspondent accounts with the Bank of Russia taken into account within the required reserve averaging procedure).*
[3] *The forecast change in net international reserve takes into account operations of the Ministry of Finance to buy (sell) foreign currency in the domestic FX market, as well as a reduction in banks' liabilities on the Bank of Russia's refinancing operations in foreign currency, operations of the Bank of Russia to buy monetary gold, and settlements within FX swaps to sell foreign currency for rubles.*
[4] *Include claims on refinancing operations in rubles, including secured loans, repos and the Bank of Russia's FX swaps to buy foreign currency for rubles.*
[5] *Include operations with the use of the money of the State Corporation Deposit Insurance Agency and the Fund of Banking Sector Consolidation, the Bank of Russia's net interest expenses, operations of the Ministry of Finance to invest the NWF's resources, the growth of required reserves for foreign currency liabilities held in special accounts, and foreign currency revaluation of assets.*

Source: Bank of Russia.

Entry 1 'Monetary base (narrow definition)'

Changes in the monetary base in 2025–2028 will depend on the dynamics of the amount of cash in circulation. The Bank of Russia's baseline forecast assumes a slight increase in the amount of cash in circulation as of the end of 2025. This is because the demand for cash has generally normalised and deposit rates remained attractive for the most part of the year. However, in 2026–2028, the demand for cash is expected to rebound, gradually returning to the path which is related to economic growth and payment amounts. Nevertheless, further expansion of the practice of cashless payments will limit the rise in this indicator.

The growth in the amount of the required reserves for ruble liabilities held in special accounts with the Bank of Russia in 2025 is associated with the increase in bank deposits and, consequently, reservable liabilities over 2024–2025. As a result of the annual recalculation, the total amount of the required reserves was redistributed based on the following factors: 0.9 to be averaged by banks in correspondent accounts with the Bank of Russia, and 0.1 to be credited to special required reserve accounts. Further growth in this indicator during the period under review is explained by the overall expansion of money supply. The change in the required reserves for foreign currency liabilities, also held in special accounts with the Bank of Russia, is given in Entry 3.3 'Other net non-classified assets'.

Entry 2 'Net international reserves'

Changes in Entry 2 'Net international reserves' take into account regular fiscal rule-based operations to buy and sell foreign currency, the Bank of Russia's operations to mirror transactions with the NWF's resources beyond the framework of the fiscal rule, and operations to mirror transactions with the NWF's resources to invest them in permitted financial assets inside the Russian economy.

Entry 3 'Net domestic assets'

Entry 3.1 'Net credit to general government'

Entry 3.1 'Net credit to general government' takes into account the assumption about returning to expenditure budgeting in accordance with the long-term parameters of the fiscal rule from 2025.

Entry 3.2 'Net credit to banks'

The value in Entry 3.2 'Net credit to banks' will be declining in absolute terms over the period in question and become positive by the end of 2028.

Entry 3.2.1.1 'Claims on refinancing operations' includes banks' operations to raise funds for longer terms, including through the use of specialised refinancing instruments. This entry will be a balancing component of the monetary programme if the banking sector shifts towards a liquidity deficit and one-week liquidity providing auctions become the main operations to manage liquidity. As a result of changes in other items of the monetary programme, claims on the Bank of Russia's refinancing operations will increase in the baseline scenario.

The forecast for the value in Entry 3.2.2 'Credit institutions' correspondent accounts with the Bank of Russia' implies a uniform trajectory of required reserve averaging by credit institutions. The forecast takes into account the rise in this indicator over the period under review due to the overall expansion of money supply.

Entry 3.2.3 ‘Credit institutions’ deposits with the Bank of Russia and coupon OBR reflects the actual situation of 2025 and possibly high balances that might remain in the Bank of Russia’s standing deposit facilities throughout the forecast period.

Entry 3.3 ‘Other net non-classified assets’

The changes in Entry 3.3 over the forecast horizon take into account the payment of interest by the Bank of Russia on standard liquidity absorbing operations and the receipt of interest on refinancing operations, as well as the transactions of the Ministry of Finance to invest the NWF’s resources, foreign currency revaluation of assets, and the growth of the required reserves for foreign currency liabilities held in special accounts.

Appendix 10. Inflation targeting: cross-country comparisons

Inflation targeting economies account for nearly 70% of global GDP. This regime helps maintain price stability more efficiently and improves economic growth prospects

Benefits of the inflation targeting regime and its use around the globe

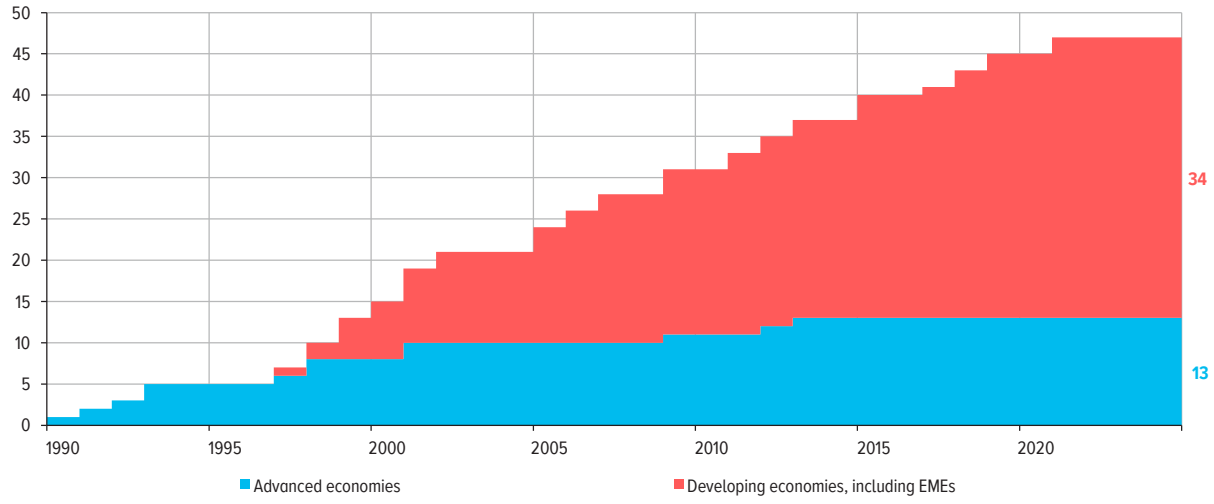
The role of inflation targeting countries in the world economy

In today's world, price stability, that is, low and steady inflation, is the key objective of central banks' monetary policies. In practice, central banks address this objective through the inflation targeting regime increasingly frequently. Clear stipulation of the responsibility of central banks and an increase in their accountability to society, coupled with clear goal setting, are the reasons why inflation targeting has been widely used globally since the 1990s.

According to the IMF's Annual Report on Exchange Arrangements and Exchange Restrictions,[1] 47 countries and integration associations[2] conduct monetary policies within the framework of inflation targeting, whether de jure or de facto. Assessments as of 2024 show that these countries account for approximately 70% of global GDP. Nearly all of them are classified by the World Bank as high- or middle-income economies.

INFLATION TARGETING ECONOMIES
(NUMBER OF COUNTRIES AND INTEGRATION ASSOCIATIONS)

Chart A-34



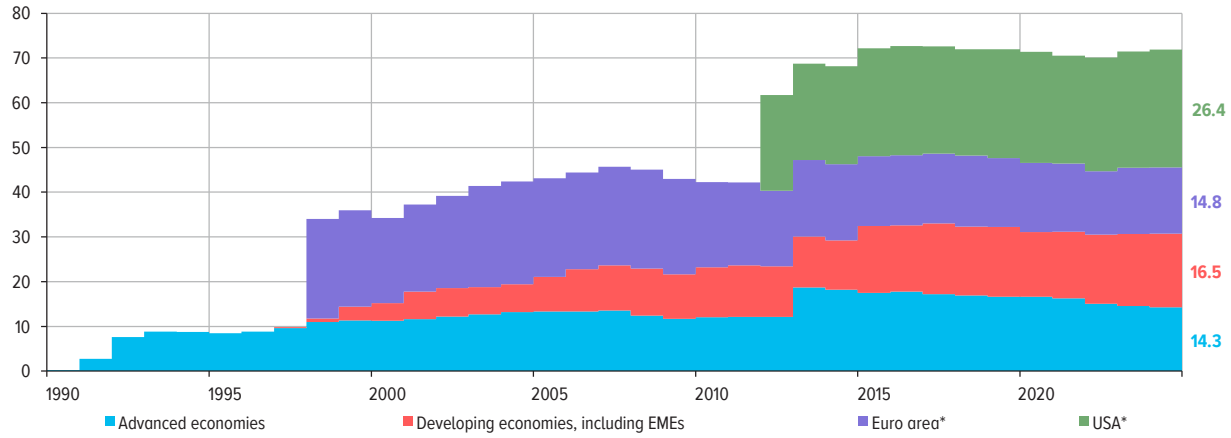
Source: Annual Report on Exchange Arrangements and Exchange Restrictions (2023).

[1] The most complete classification of the countries by the regime followed by their central banks is published by the IMF in its Annual Report on Exchange Arrangements and Exchange Restrictions. Its most recent version was released at the end of 2024. It describes monetary policy regimes as of the end of 2023.

[2] The only integration association among the inflation targeting economies is the Economic and Monetary Union of the European Union (euro area) including 20 member states. Mongolia and Mauritius switched to inflation targeting in 2023, whereas Ukraine and Seychelles are no longer on the list of inflation targeting countries.

The Reserve Bank of New Zealand became the inflation targeting pioneer in 1990. By the beginning of the 2000s, nearly all advanced[3] economies switched to inflation targeting. As regards developing economies, the Czech National Bank[4] was the first one to transition to inflation targeting in 1997. The Bank of Russia switched to inflation targeting in 2015. As to the BRICS member states, in addition to the Bank of Russia, the inflation targeting regime is officially used by the Reserve Bank of India, the Central Bank of Brazil, the South African Reserve Bank, and Bank Indonesia. The People's Bank of China (PBC), although it cannot be considered an inflation targeter, has significantly adjusted its approaches to pursuing monetary policy in recent decades, predominantly at the level of instruments, aligning them somewhat with the approaches applied as part of inflation targeting, and continues its development in this area.[5] As of 2023, central banks of 34 EMEs were inflation targeters.

SHARE OF INFLATION TARGETING ECONOMIES IN GLOBAL GDP *Chart A-35*
(%)



** The USA established its inflation target in 2012, and the euro area – in 1998.*
Note. The calculations are based on GDP in current prices (according to the IMF).
Sources: IMF, Bank of Russia calculations.

[3] In practice, the USA and the European Economic and Monetary Union (euro area) are also classified as regions where central banks are inflation targeters. Although the USA and the euro area have not declared themselves as inflation targeters, the US Fed and the ECB have all key elements of inflation targeting, including publicly announced targets, floating exchange rates, policy rates, and communication as the main instruments of their monetary policies.

[4] The IMF started to classify the Czech Republic as an advanced economy as late as 2009 (World Economic Outlook, October 2009).

[5] A specific feature of monetary policy of the PBC is its multiple objectives, intermediate benchmarks, and policy instruments. Such a complex structure is largely the legacy of the planned economy, reflects the specifics of the (rapid yet uneven) development of the markets, and the institutional environment. Over recent decades (particularly after 2015), amid China's progressive transition to a market economy, the PBC has made a leap forward in enhancing the efficiency of the transmission mechanism of its monetary policy. In the first place, this is related to the development of the system of liquidity management instruments to manage money market rates (a sort of the interest rate corridor) and the overall simplification of the interest rate system of monetary policy. In addition, the state authorities have decreased their direct participation in the pricing of banking products in the economy, including through interventions in banks' transfer pricing. Finally, the PBC has gradually reduced the significance of the required reserve ratio in the course of the monetary policy implementation and has enhanced communication transparency to promote market participants' confidence. Despite the already achieved success, many experts believe that there is still sufficient room for enhancement, which is also noted by the PBC itself. In particular, making their official statements, PBC representatives emphasise their commitment to further develop interest rate policy based on market mechanisms and increase transparency. It is also worth noting that, in the conditions of the multiplicity of its objectives, the PBC also has an effective inflation target that is established by the State Council of the People's Republic of China and announced by the country's premier each spring. In 2025, the PBC reduced the inflation target from 3% to 2%, which is associated with the fact that, currently, inflation in the country is about 2%, according to official assessments, which is more in line with a balanced growth path of China's economy (refer to the Report on the Work of the Government delivered at the third session of the 14th National People's Congress of the People's Republic of China on 5 March 2025).

Benefits of inflation targeting compared to other monetary policy regimes

There are multiple research papers analysing the effectiveness of inflation targeting over the more than 30-year period of its use, including studies comparing the effectiveness of this regime and the targeting of other macroeconomic indicators (e.g. monetary aggregates or national currency exchange rates). Most papers prove the benefits of inflation targeting not only for maintaining price stability but also for improving economic growth prospects.[6]

Institutional transformations in the conditions of inflation targeting (growing independence and accountability of the central bank and enhancement of its communication on monetary policy decisions) help increase society's confidence in the central bank's activity and improve the predictability of the macroeconomic environment.[7] This reduces the weight of the adaptive (backward-looking) component of economic agents' inflation expectations, enabling central banks to achieve their inflation targets more efficiently and making their monetary policies more flexible.

The flexibility of monetary policy within the framework of inflation targeting and of a floating exchange rate of the national currency strengthens the countercyclical[8] role of monetary policy in the economy. In other words, the national economy can better absorb external and internal economic shocks in the conditions of inflation targeting than when it targets any other macroeconomic indicators.[9]

Furthermore, in the long run, successful implementation of inflation targeting not only makes economic growth steadier[10] but also accelerates it.[11] However, in contrast to advanced economies, a positive effect on developing economies' growth rates might become evident at later stages of inflation targeting. An essential condition for this effect is long-term confidence in the central bank's monetary policy as a result of maintaining inflation at sustainably low levels. Furthermore, inflation targeting in developing economies reduces volatility of interest rates and real exchange rates.[12] Studies on developing economies also show that inflation targeting fosters growth in direct foreign investment and, by making the macroeconomic environment more predictable, indirectly enhances the banking sector's resilience.[13]

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6 Refer to, for example, the meta-analysis of 113 studies investigating the performance of inflation targeting: Balima, H. W., Kilama, E. G., and Tapsoba, R. (2020). Inflation Targeting: Genuine Effects or Publication Selection Bias? European Economic Review, Vol. 128.

7 Blinder (2000); Gürkaynak et al. (2006); Ötker and Freedman (2009); Kartaev (2015); Shmidt-Hebbel and Carrasco (2016).

8 This benefit is especially relevant to developing economies where central banks were often forced to tighten rather than ease monetary policies in times of crises, which exacerbated the scale of economic downturns.

9 Fratzscher et al. (2017).

10 Mishkin (2004); Walsh (2009); Ball (2010); Svensson (2010); Miller et al. (2012); Fratzscher et al. (2017); Balima et al. (2020); Ravenna and Ingholt (2021).

11 Hale and Philippov (2015) or Kartaev (2015).

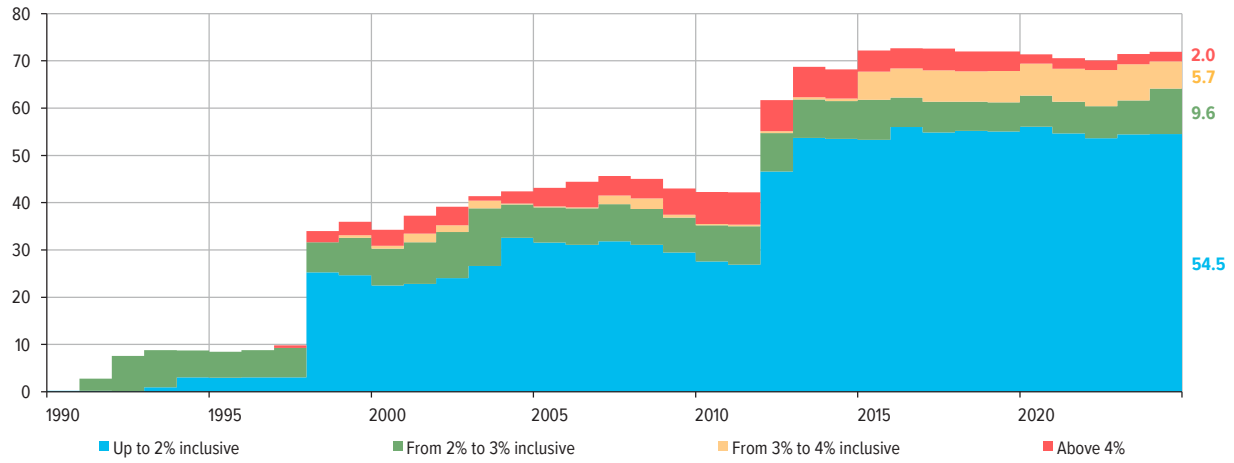
12 Bambe (2023).

13 Mishra and Dubey (2022).

Setting inflation targets and their achievement after transitioning to inflation targeting

The formats of medium-term inflation targets[14] used by central banks worldwide significantly vary in terms of both levels and types. Advanced economies (except for Iceland and Australia) normally set their inflation targets close to 2%. Target levels in developing economies, traditionally characterised by higher volatility of the macroeconomic environment, vary more notably, namely from 2% to 8%. Nevertheless, EMEs mostly set their inflation targets in the range from 3% to 4%. As of 2024, economies whose inflation targets exceeded 4% accounted for 2% of global GDP in current prices and no more than 4% of PPP-based global GDP.

SHARE OF INFLATION TARGETING ECONOMIES IN GLOBAL GDP, BY TARGET LEVEL *Chart A-36*
(%)



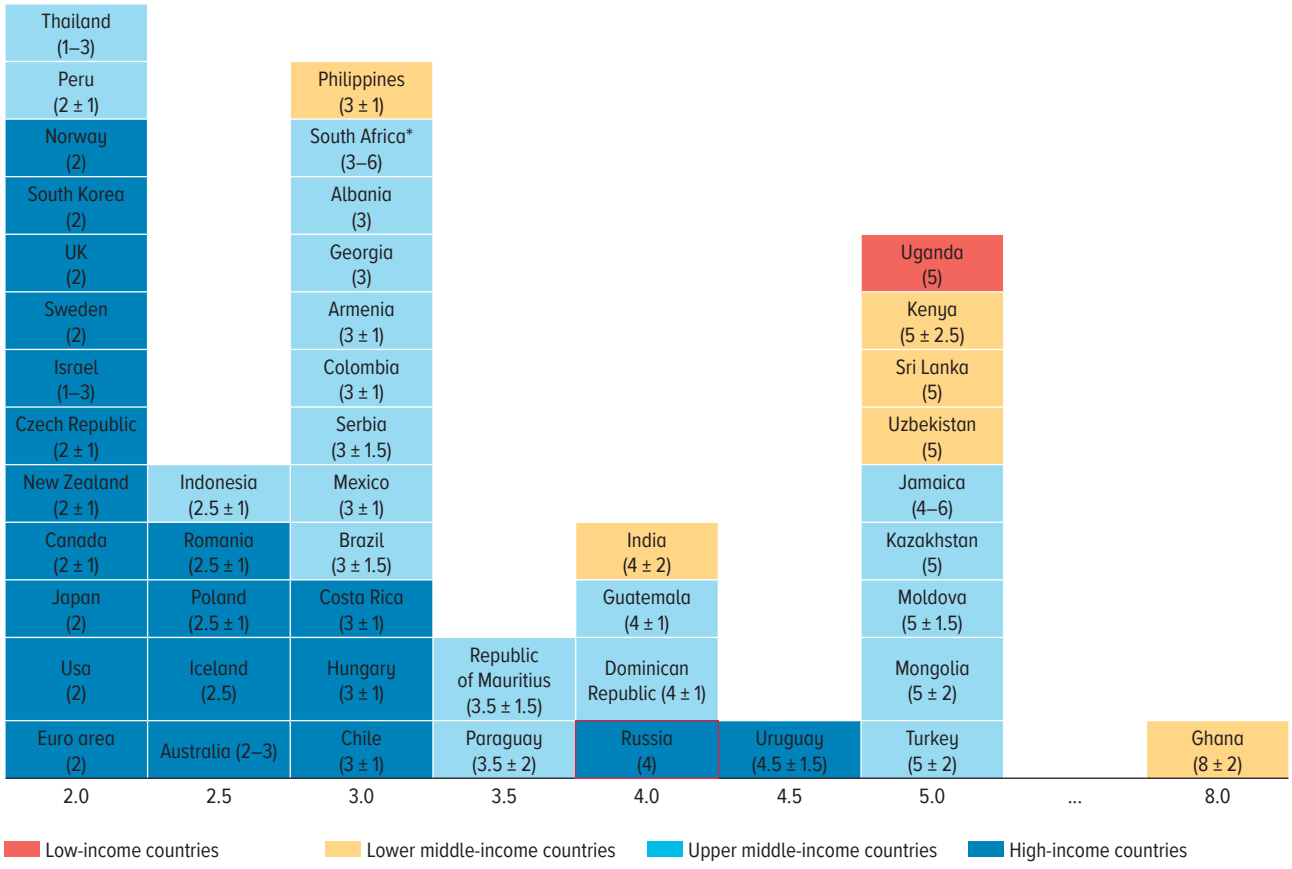
Note. The calculations are based on GDP in current prices (according to the IMF) and take into account historical changes in the levels of inflation targets.
Sources: IMF, Bank of Russia calculations.

There has been a clear trend in the past decade towards lower inflation targets in developing economies as they accumulate experience in inflation targeting.[15] Thus, in 2025, Armenia reduced its target from 4% to 3%. The Central Bank of Armenia set this value back in 2005 as a long-term reference point. According to official assessments, the target of 3% is currently more in line with the definition of price stability, considerably decreasing inflation-related costs for households and businesses. Paraguay reduced its target from 4% to 3.5% to strengthen confidence in monetary policy, improve the quality of the business environment, and protect people's real incomes. Although the South African Reserve Bank maintains the target range of 3–6%, from July 2025, it has been seeking to stabilise inflation close to its lower bound. This decision was made to enhance confidence in monetary policy and better anchor inflation expectations at low levels.

[14] Inflation targets staying effective during a long period when they remain unchanged. Normally, central banks switch to medium-term inflation targeting after the end of several-year disinflation periods (this is especially relevant to developing economies). In the conditions of disinflation that might happen both before the official transition to inflation targeting or in the first few years after switching to this regime, central banks might use intermediate annual inflation targets.

[15] Specifically, Brazil reduced its inflation target stage by stage from 4.5% ± 1.5 pp in 2018 to 3% ± 1.5 pp from 2024, Georgia – from 6% in 2014 to 3% from 2018, Paraguay – from 5% ± 2 pp in 2014 to 3.5% ± 2 pp from 2025, Indonesia – from 4.5% ± 1 pp in 2014 to 2.5% ± 1 pp from 2024, and Kazakhstan – from 6–8% in 2017 to 5% from 2023. The Philippines decreased the inflation target from 4% ± 1 pp to 3% ± 1 pp in 2015, the Dominican Republic – from 4.5% ± 1 pp to 4% ± 1 pp in 2015, Serbia – from 4% ± 1.5 pp to 3% ± 1.5 pp in 2017, Thailand– from 2.5% ± 1.5 pp to 1–3% in 2020, Uruguay – from 3–7% to 4.5% ± 1.5 pp in 2020, Mongolia – from 6% ± 2 pp to 5% ± 2 pp in 2025, and Armenia – from 4% ± 1.5 pp to 3% ± 1 pp in 2025.

INFLATION TARGETS IN INFLATION TARGETING COUNTRIES, GROUPED ACCORDING TO WORLD BANK *Chart A-37*
(%)



* *From July 2025, the South African Reserve Bank has been seeking to stabilise inflation close to the lower bound of its target range of 3–6%.*
Note. The diagram is based on the World Bank's classification relying on the estimates of gross national income per capita for 2024.
Sources: central banks' websites, Annual Report on Exchange Arrangements and Exchange Restrictions (2023), World Bank.

As to the types of inflation targets, a point with a range of deviations is the most widely used one globally, especially in developing economies. Nevertheless, many central banks, although officially choosing this type of the target, rather focus only on a point to make the monetary policy signal more precise. Advanced economies use a point more often. A target range is the rarest type. Besides, target ranges are wider on average in developing economies than in advanced ones.

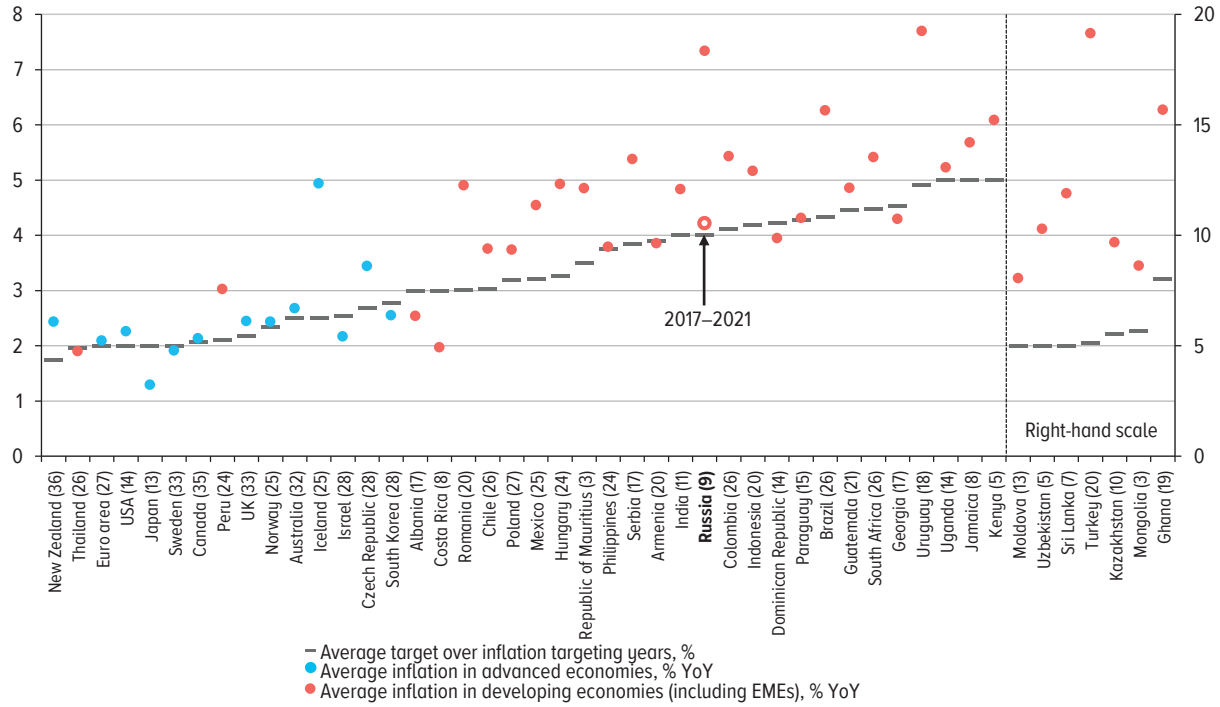
In practice, when choosing medium-term inflation targets (levels and types), central banks consider a broad range of factors.[16] On the one hand, these are multiple theoretical[17] optimality criteria of a target format. On the other hand, these are factors reflecting actual peculiarities of the conditions where monetary policy is implemented: overall stability of the macroeconomic environment, including the level of confidence in macroeconomic policy and institutions; the maturity level[18] of the inflation

[16] Meshcheryakov, A., Sukhomlinov, A., and Kolosov, A. (May 2023) Factors Determining the Choice of Inflation Target Levels: Theory and Global Practice. Working paper. Bank of Russia; Magzhanov, T. and Meshcheryakov, A. (May 2023). What Determines the Choice of Inflation Target 'Width'?. Working paper. Bank of Russia.

[17] Central banks can factor in the impact of price fluctuations on public welfare when choosing target levels. This impact is associated with, among other factors, problems of nominal rigidities in the economy in the medium term (especially in the labour market) and risks of reaching the ELB of policy rates in case of disinflationary shocks in the economy. As regards inflation target types, it is essential to effectively anchor inflation expectations, while simultaneously ensuring sufficient flexibility of monetary policy if the economy has to address proinflationary or disinflationary shocks.

[18] The average inflation targeting period is 27 years in advanced countries and 17 years in EMEs.

EFFECTIVENESS OF INFLATION TARGETING ACROSS COUNTRIES: AVERAGE TARGETS AND AVERAGE INFLATION OVER ENTIRE PERIOD OF INFLATION TARGETING (AS OF SEPTEMBER 2025) *Chart A-38*

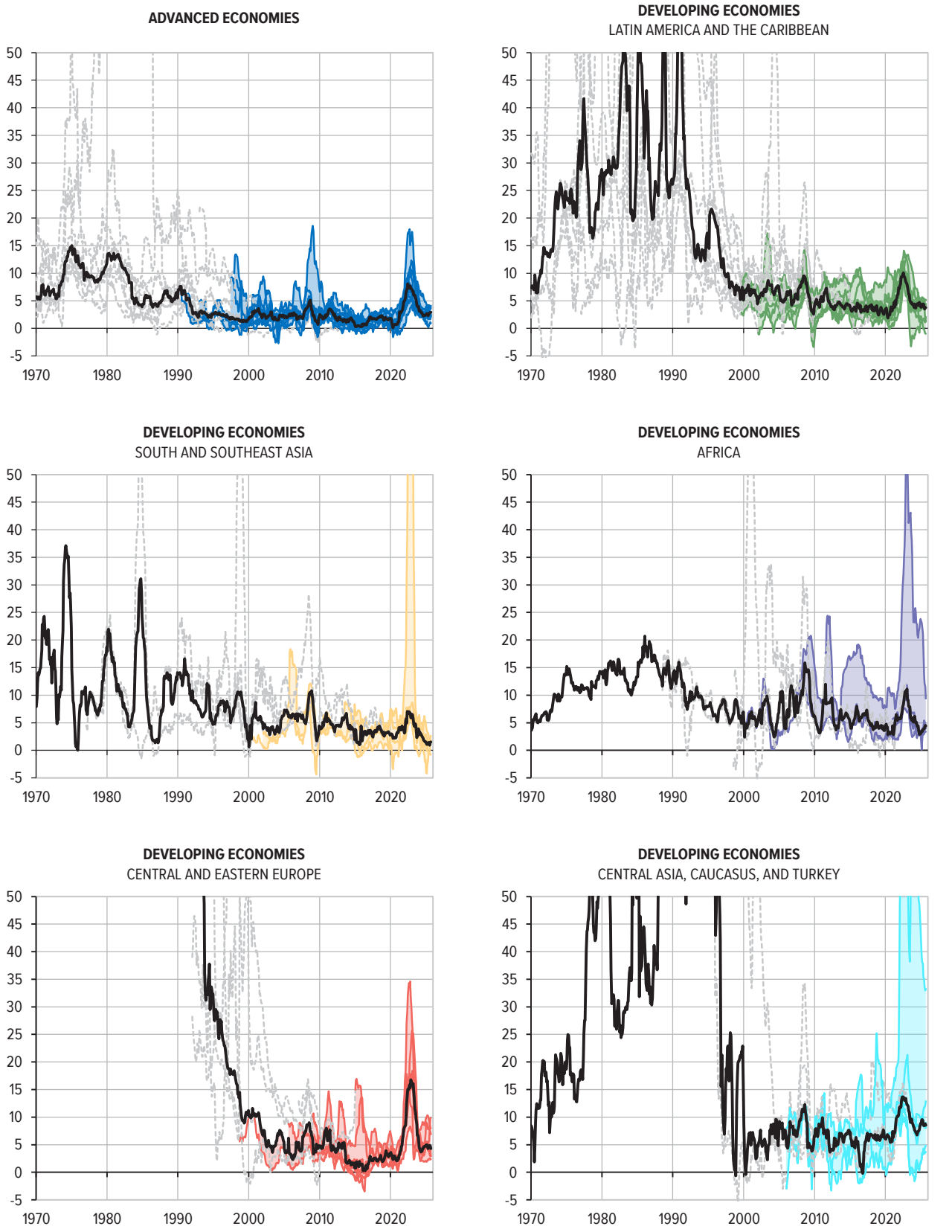


Note. Average inflation was calculated for the period from the transition to inflation targeting through September 2025. Respective inflation measures were applied for each of the countries: the headline PCE – for the USA, the CPIF – for Sweden, and the core CPI – for Uganda. The period of inflation targeting in years is given in the brackets after the name of the country along the horizontal axis. The countries were graded by the average of their inflation targets. The average inflation target takes into account, among other things, historical changes in the target levels. If a country has been using a point with a range of deviations as its inflation target, the calculation of the target average is based on the point within this range. If an economy has been using a target range without any fixed point, the calculation relies on the middle of the range.
Sources: Cbonds, IMF, central banks' and statistical agencies' websites, Bank of Russia calculations.

targeting regime and efficiency of monetary policy in maintaining low and steady inflation; the difference between the country's inflation target and the targets set by main trading partners and economies that are similar in terms of the development level; and other structural specifics of the national economy. Furthermore, types of inflation targets are chosen depending on such institutional specifics of the conditions where monetary policy is implemented as the government's role in selecting the inflation target and the transparency of the central bank's communication on the rationale behind its monetary policy decisions, among other things.

In practice, inflation might significantly deviate from the target during certain periods, but most central banks targeting inflation ultimately manage to successfully maintain inflation close to the targets. Over the entire inflation targeting period, inflation has deviated from the target (a point or the middle of a range) by no more than 2 pp on average in most advanced economies and by no more than 4 pp – in most EMEs. The experience of inflation targeting is essential as well: in the absolute majority of countries targeting inflation for more than 20 years, inflation stays within the target values on average. In countries with a shorter experience of inflation targeting, the variance is somewhat larger.

INFLATION IN INFLATION TARGETING ECONOMIES BEFORE AND AFTER TRANSITION TO INFLATION TARGETING *Chart A-39*
(% YOY)



Note. The calculations were made for inflation targeting countries as of 2023 (the list of countries by group is given in Table 2 'Information on inflation targeting economies (as of September 2025)). The black lines are the medians of inflation rates in the group of countries, the grey lines are inflation rates in countries before the transition to inflation targeting, and the coloured lines are their inflation rates after the transition. The shaded ranges correspond to the variance between the highest and the lowest inflation rates among the countries of the region targeting inflation at a particular moment of time.
Sources: Cbonds, Bank of Russia calculations.

Inflation targeting practice: retrospective view

The start of inflation targeting in the 1990s and 2000s

By the middle of the 1990s after two decades of high and volatile inflation provoked by several severe oil price shocks, among other factors, price growth rates in advanced economies went down stabilising close to 2% as a result of the central banks' consistent disinflation policies. The transition to inflation targeting that advanced economies' central banks started in the 1990s helped improve the predictability of macroeconomic conditions in the economies of this group of countries. This shift enabled them to keep inflation at a moderately low level for a long period, until the GFC of 2007–2008, despite a number of crisis episodes (e.g. the dotcom crash in the early 2000s).

Contrastingly, developing economies were trying to temper high and volatile inflation for a longer time. Many of them were experiencing a transformational crisis moving from a centrally planned economy to a market-based one. In 1997–1998, they faced a capital outflow and depreciation of their national currencies triggered by the Asian financial crisis. Overall, the largest developing economies were able to stabilise inflation at multi-decade lows as late as the end of the 1990s. Many developing economies began structural reforms primarily aimed at liberalising international trade and enhancing fiscal discipline. Later on, this transformation helped them create conditions for gradual transition to inflation targeting.

Reasons for steadily low inflation worldwide after the 2007–2008 global financial crisis

The decade after the GFC was a period of steadily low inflation at the level of the world economy. Although inflation trends in developing economies varied across countries and regions, an important contributor consolidating the overall trend towards lower inflation in this group of countries was rising confidence in the macroeconomic policy pursued, considering, among other factors, a growing number of inflation targeting central banks in developing economies. The weakening of inflationary pressures in advanced economies was especially notable. In many of them, inflation stayed even below the targets during a long period after the GFC despite considerable monetary policy easing by these countries' central banks.

Inflation in advanced economies was affected by both cyclical and structural factors. Specifically, the recovery of the largest advanced economies after the GFC was slow. This could be largely attributed to the following: the launch of the global banking regulation reform[19] aimed at enhancing the resilience of banking systems to financial crises; a significant decrease in risk appetite among various economic agents (households, businesses, and others);[20] and gradual phasing-out of fiscal stimulus measures[21] after the completion of the acute stage of the GFC and amid aggravation of problems with sovereign debt burden, especially after the European debt crisis of 2009–2010.[22] Furthermore, downward pressure on prices was put by the strengthening of global competition in retail in the conditions of rapid development of online retail (the so-called Amazon effect).[23] In addition, a slower increase in total

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[19] Boar, C., Gambacorta, L., Lombardo, G., and Pereira da Silva, L. What are the Effects of Macroprudential Policies on Macroeconomic Performance? BIS Quarterly Review (September 2017).

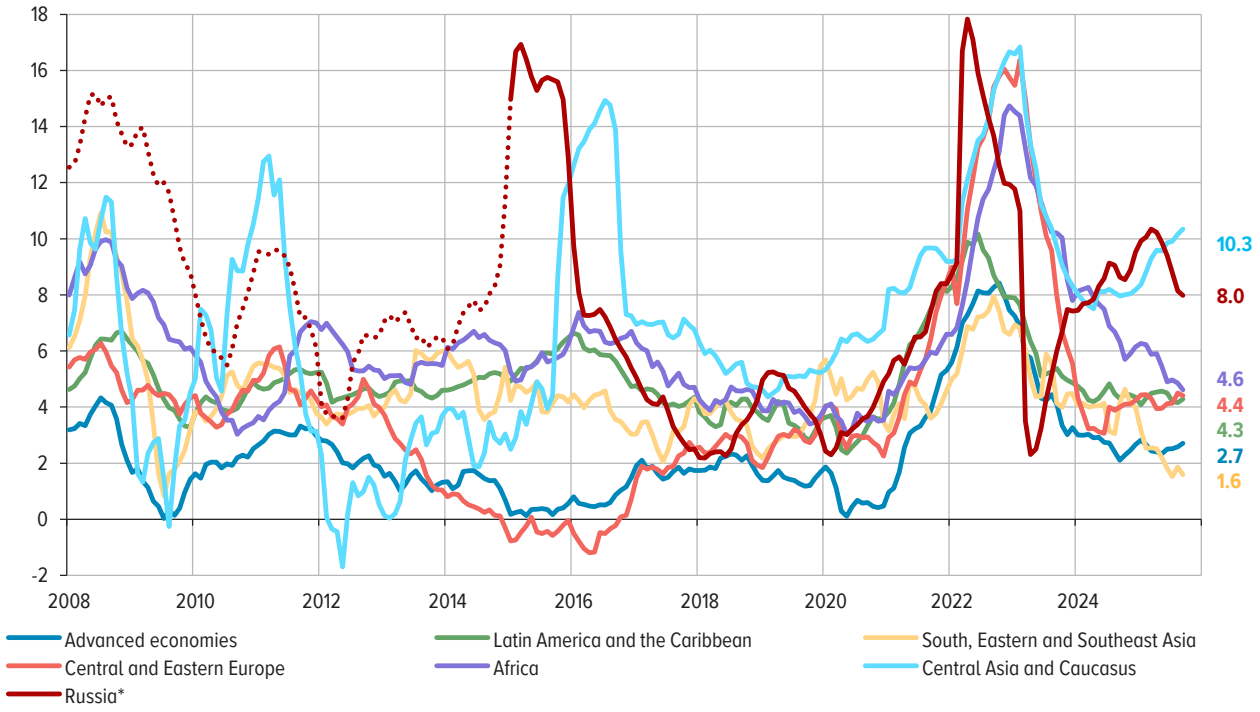
[20] Refer to, for example, Jones, B. (2021). Uncertainty and Risk Aversion – Before and After the Pandemic. Reserve Bank of Australia.

[21] Fiscal Consolidation Targets, Plans and Measures in OECD Countries. Restoring Public Finances (2012).

[22] Nelson, R. M., Belkin, P., Mix, D. E., and Weiss, M. A. (2012). The Eurozone Crisis: Overview and Issues for Congress. Congressional Research Service.

[23] Refer to the speech by Chair of the US Fed's Board of Governors Janet Yellen at the conference Prospects for Growth: Reassessing the Fundamentals (2017).

WEIGHTED AVERAGE INFLATION IN INFLATION TARGETING ECONOMIES *Chart A-40*
(% YOY)



* *The dashed line reflects inflation in Russia before the transition to inflation targeting and the solid line – inflation after the transition.*
Note. The calculations were made using the average annual CPI change weighted by PPP-based GDP (according to the World Bank) within each group from January 2008 through September 2025. The calculations were made for the updated list of inflation targeting countries given in Table 2 'Information on inflation targeting economies (as of September 2025)' (except for Turkey). The calculations also take into account historical changes in the list of inflation targeting economies.
Sources: Cbonds, World Bank, Bank of Russia calculations.

factor productivity[24] and low risk appetite among economic agents, together, caused a substantial reduction in neutral interest rates of monetary policies in this group of countries.[25] This means that monetary policies of advanced economies' central banks that cut their policy rates after the start of the GFC to near-zero levels actually did not have sufficient accommodative influence to offset the effects of a broad range of disinflationary factors. Aiming to increase monetary stimuli to support the recovery of the economies and prevent steady deflation, the central banks of the largest advanced economies turned to unconventional monetary policy instruments, first of all, the expansion of balance sheets through asset purchase programmes. However, even considering the combined effect of conventional and unconventional monetary stimuli, the growth of money supply and inflationary pressures in major advanced economies remained low until the outbreak of the coronavirus pandemic.

Inflation acceleration worldwide after the coronavirus pandemic and central banks' response

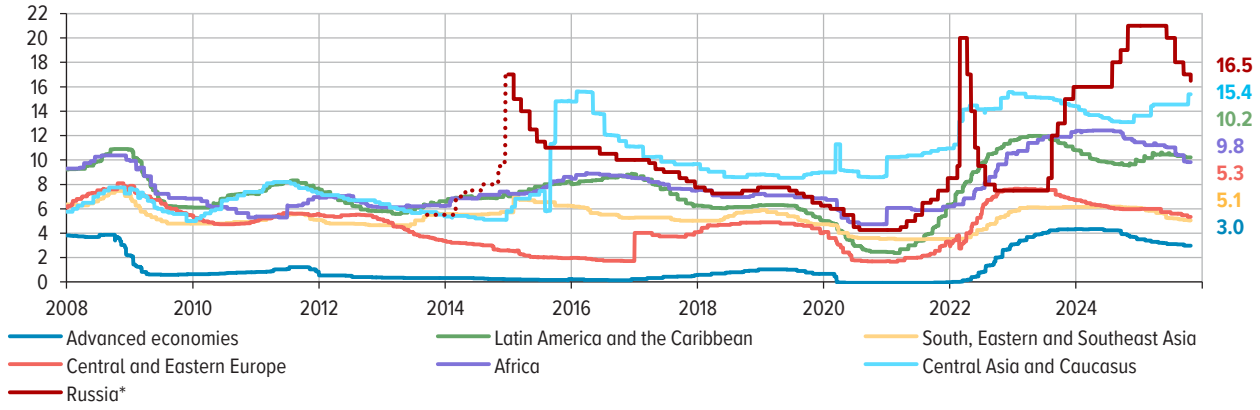
A long period of very low inflation after the GFC strengthened the conviction of advanced economies' central banks about steady decreases in neutral interest rates and the flattening of the Phillips curve.[26] Amid low inflation expectations, this flattening implied, in particular, that any acceleration of economic activity growth was not translating into inflation dynamics to the same extent as had been estimated before the GFC. This view of the conditions of the implementation of macroeconomic policy

[24] Dieppe, A. (2021). Global Productivity. Trends, Drivers, and Policies. Washington, DC. World Bank.

[25] Holston, K., Laubach, T., and Williams, J. C. (2017). Measuring the Natural Rate of Interest: International Trends and Determinants. Journal of International Economics, 108.

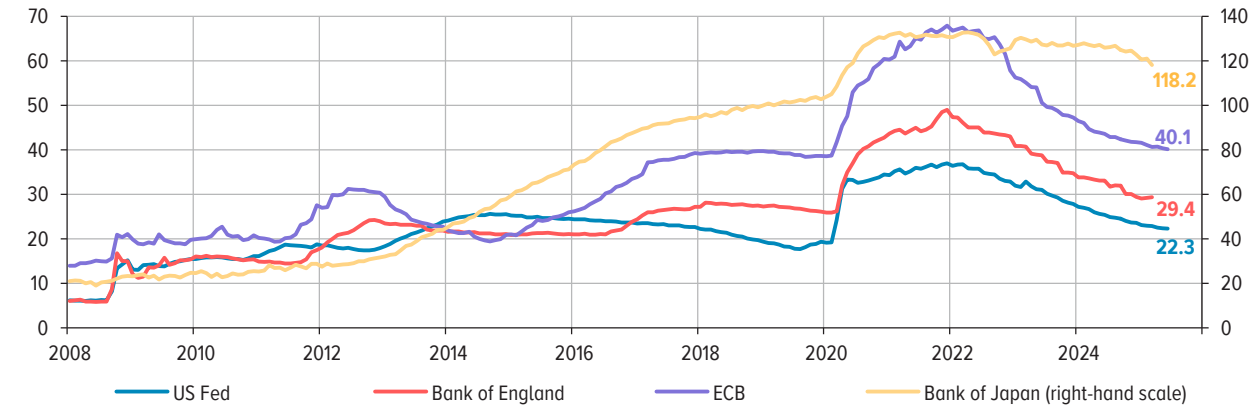
[26] Refer to the speech by the Bank of England's Chief Economist Andrew G. Haldane at the National Science and Media Museum. Bradford (2017).

WEIGHTED AVERAGE POLICY RATES IN INFLATION TARGETING ECONOMIES *Chart A-41*
(% P.A.)



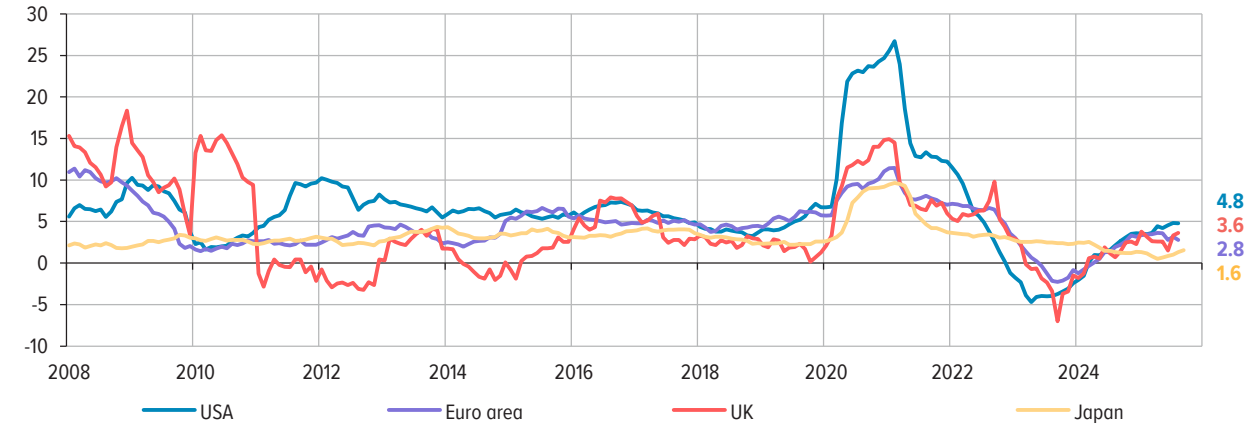
* *The dashed line reflects the key rate in Russia before the transition to inflation targeting and the solid line – after the transition.*
Note. The calculations were made using the average of the central banks' policy rates weighted by PPP-based GDP (according to the World Bank) within each group from 1 January 2008 through 27 October 2025.
The calculations were made for the updated list of inflation targeting countries given in Table 2 'Information on inflation targeting economies (as of September 2025)' (except for Turkey).
The calculations also take into account historical changes in the list of inflation targeting economies.
Sources: Cbonds, World Bank, central banks' websites, Bank of Russia calculations.

G4 CENTRAL BANKS' BALANCE SHEETS *Chart A-42*
(% OF GDP)



Note. The chart shows the ratio of the central bank's balance sheet size (on a monthly basis) to four-quarter GDP in current prices (SA).
Sources: Cbonds, FRED, Bank of Russia calculations.

MONEY SUPPLY (M2 AGGREGATE) IN G4 ECONOMIES *Chart A-43*
(% YOY)



Sources: Cbonds, Bank of Russia calculations.

largely predetermined the response of advanced economies' central banks and governments to the crisis provoked by the outbreak of the coronavirus pandemic in 2020. In response to the pandemic, monetary and fiscal policies were eased in the majority of both developing and advanced economies. However, advanced economies took unprecedentedly large-scale stimulus measures, reflecting expectations of a considerable and long-lasting deviation of the economies downwards from their potential and of inflation – downwards from the targets.

In practice, as the epidemic situation in the world changed, it became clear that the magnitude of disinflationary pressures expected at the initial stage was overestimated. The coronavirus pandemic caused demand and supply gaps globally. Disruptions in production and logistics chains entailed persistent supply-side bottlenecks. However, fiscal and monetary support measures ensured a quick rebound of demand. Coupled with changes in the structure of consumption (from services towards goods), this provoked a fast increase in inflationary pressures worldwide beginning from late 2020.[27]

Despite some common trends, inflation dynamics after the outbreak of the pandemic varied across the globe. Inflation sped up most considerably in CEE and Latin America. Concurrently, although the pressure on prices was rising in South and Southeast Asia, it stayed moderate for a longer period amid the slump in economic activity and a slower recovery of demand due to anti-pandemic restrictions.[28] As for major advanced economies, their price growth rates peaked at 40-year highs in 2022.

The unprecedented acceleration of inflation worldwide was the reason why many countries decided to tighten their monetary policies, but the time when economies started this tightening differed. The largest EMEs began monetary policy normalisation already in March 2021 (Brazil and Russia). The countries started to raise their policy rates amid a steady rebound of demand and a faster increase in inflation and inflation expectations than in other economies. Asia continued accommodative monetary policy for longer. The recovery of the Asian region's economies was negatively affected by China's zero-COVID policy pursued through 2022, among other things.

At the early stages of the inflation acceleration, advanced economies' central banks believed that excessive inflationary pressures would fade in the short term without any monetary policy response[29] while underlying inflationary pressures would remain low. However, inflation was speeding up to hit new highs amid increasing prices for energy commodities and persistent demand and supply gaps.[30] As more signs of sticky inflationary pressures emerged, advanced economies' central banks started to adjust their signals regarding the time of monetary policy normalisation and, then, scale back their asset purchase programmes launched or expanded during the pandemic and switch to the cycle of policy rate increases.[31]

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27 BIS Annual Economic Report (2022).

28 Asian Development Outlook (2021): Financing a Green and Inclusive Recovery.

29 Refer to the speech by Chair of the US Fed's Board of Governors Jerome Powell at the symposium Reassessing the Effectiveness and Transmission of Monetary Policy. Jackson Hole. Wyoming (2024).

30 World Economic Outlook: Recovery During a Pandemic – Health Concerns, Supply Disruptions, Price Pressures (October 2021). International Monetary Fund.

31 In 2021, the Central Bank of Iceland, the Czech National Bank, the Bank of Korea, and the Norges Bank were the first among advanced economies' central banks to begin raising their policy rates (in May, June, August, and September, respectively) as they had not been implementing QE programmes during the pandemic period. Unconventional measures implemented by advanced economies' central banks involved certain restrictions on them. When unconventional measures are used, policy normalisation usually starts from their phasing-out before an increase in short-term interest rates. The Bank of Canada was the first one among advanced economies to start rolling back its QE programme in April 2021, while the Reserve Bank of New Zealand was the first one to terminate its QE programme in July 2021. The G4 economies continued their stimulating asset purchase programmes, but accelerated their phasing-out in 2022–2023 as inflation risks increased (except for Japan).

Due to the considerable and long-lasting price growth fuelled by both demand and supply shocks, it became more complicated for central banks to find a trade-off between inflation stabilisation and economic activity: a too fast increase in policy rates to rein in inflation could provoke a recession and higher volatility of output, whereas accommodative monetary policies pursued for too long could entail an uncontrollable rise in prices, lower confidence in monetary policy,[32] and consequently, persistent growth and unanchoring of inflation expectations. Moreover, it was difficult to make any decisions due to extremely high uncertainty of the estimates of a further spread of the pandemic and its impact on economic potential. In this situation, central banks were striving to maintain a flexible approach to implementing their monetary policies, thoroughly assessing all incoming data. Hence, at the first stage, many countries were normalising their monetary policies slowly, seeking to find a well-balanced path for returning inflation to the targets. As central banks (especially in advanced economies) had underestimated the persistence of proinflationary factors, the inflation forecast paths sharply moved upwards and the period needed to return inflation to the targets became longer.[33]

In early 2022, inflationary pressures continued to intensify, while the dramatic escalation of geopolitical tensions exacerbated the supply shocks that had occurred during the pandemic. Nevertheless, the proinflationary impact of some factors that had triggered the inflation acceleration worldwide started to weaken beginning from mid-2022. Specifically, global prices for most commodities and food items were going down. As the structure of consumer demand returned to that existing before the pandemic (the proportion of goods in consumption declined, whereas that of services was up), this normalisation decreased the pressure of transport and logistics costs on prices.[34] Furthermore, governments in a number of countries were implementing fiscal measures, including energy subsidies,[35] to contain the growth of retail prices for goods and services. Combined with the earlier monetary policy tightening, this started to gradually decelerate annual inflation in most countries compared to the multi-year peaks reached in 2022.

The disinflationary effects of monetary tightening had been intensifying during 2023–2024. By mid-2024, inflation in most inflation targeting economies either slowed down to or even decreased below the targets. Concurrently, the growth rate of the world economy generally stayed resilient to high interest rates, which meant that the soft landing was achieved. This implied more sustainable demand dynamics, resulting in a certain inertia of disinflation. In particular, moderate growth rates of prices for goods were accompanied by persistently high growth rates of prices for services in many countries. Compared to goods manufacturing, the services sector is characterised by a much larger proportion of labour costs in companies' overall expenses. In recent years, elevated growth rates of nominal and real wages, caused by overheating in the labour markets of many countries, have been passed through by businesses to output prices for services to a greater extent.[36]

As inflation was gradually returning to the targets, although unevenly across the components, this was creating preconditions for starting the cycle of monetary policy easing worldwide. Central banks in a number of developing economies (especially in Latin America) were able to begin policy normalisation as early as mid-2023, whereas central banks in the largest advanced economies switched to a gradual

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[32] Refer to, for example, the speech by Catherine L. Mann, an external member of the Monetary Policy Council of the Bank of England, at the Market News International Connect event (2022).

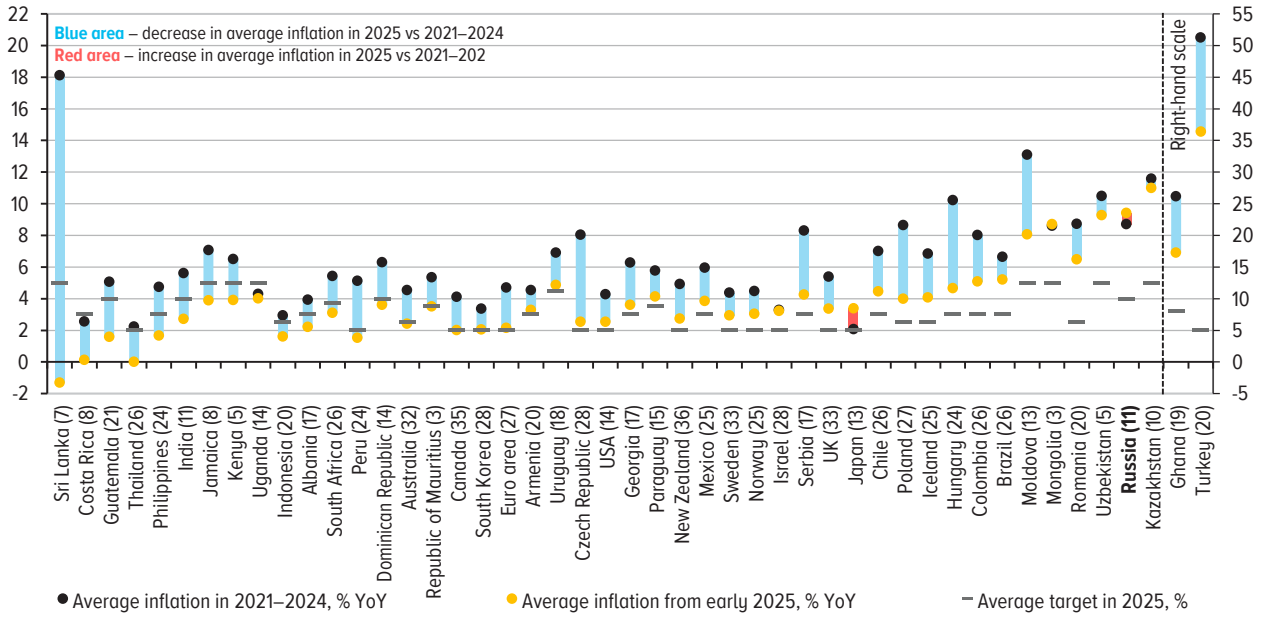
[33] Refer to Chart A-6-11 'Period to bring inflation back to targets over the forecast horizon across groups of countries' in MPG 2024–2026.

[34] Global Economic Prospects (June 2023). World Bank.

[35] E.g. the Energy Price Guarantee programme in the UK.

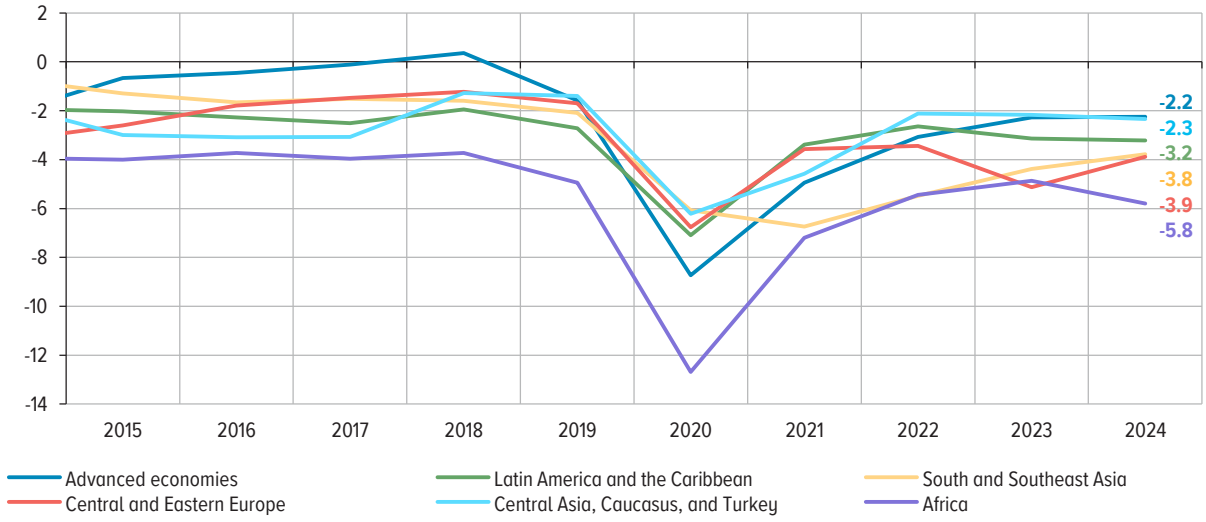
[36] Ampudia, M. et al. (2024). The Wage-Price Pass-Through Across Sectors: Evidence from the Euro Area. BIS Working Paper, No. 1192.

TARGETS AND AVERAGE INFLATION IN INFLATION TARGETING ECONOMIES IN 2021–2025 *Chart A-44*



Note. Average inflation rates were calculated based on monthly data for the period from January 2021 through September 2025. The calculations use the inflation measures targeted by the central banks of respective countries. The period of inflation targeting in years is given in the brackets after the name of the country along the horizontal axis. The countries are included in the calculations from the moment of their transition to inflation targeting. The countries are grouped by the extent and direction of the actual deviation of inflation from the target in 2025. The average target in 2025 takes into account the pointwise values of the inflation target or the middle of the target range, as well as the revisions of the targets in 2025.
Sources: Cbonds, IMF, central banks' and statistical agencies' websites, Bank of Russia calculations.

BUDGET BALANCE IN INFLATION TARGETING ECONOMIES IN 2015–2024 *Chart A-45*
(% OF GDP)



Note. The calculations are based on the median within each group. The calculations were made for the updated list of inflation targeting countries given in Table 2 'Information on inflation targeting economies (as of September 2025)'. The calculations also take into account historical changes in the list of inflation targeting economies.
Sources: International Monetary Fund Fiscal Monitor (October 2025), Bank of Russia calculations..

reduction in their policy rates only in summer–autumn 2024.[37] Moreover, taking into account persistently high proinflationary risks, central banks around the globe remained cautious when normalising their policies so as to avoid new spikes in inflation and stabilise inflation expectations.

[37] In June–August 2024, the ECB and the Bank of England became the first central banks in advanced economies to begin to gradually cut their policy rates. The US Fed started monetary policy normalisation from September 2024.

Monetary policy and inflation globally amid world economy fragmentation

At the end of 2024, inflation trends worldwide became more heterogeneous. Specifically, a number of countries saw the return of inflation to the targets or even its downward deviation from them (Canada, Sweden, South Korea, Indonesia, Thailand, and Peru), while others recorded a pause in disinflation or the resumption of acceleration (the USA, Japan, the UK, Chile, Brazil, and Kazakhstan). The pause in disinflation was caused primarily by steadily high demand (including because of elevated wage growth rates), the inertia of inflation expectations, rising global prices for a number of commodities, as well as budget deficits that had either decreased only slightly relative to the pandemic highs or started to expand again. In response, several central banks suspended or slowed down monetary policy normalisation, while some central banks even resumed policy tightening, seeking to mitigate price stability risks.

From early 2025, trade tensions globally have escalated as a result of the increase in the US import tariffs. In spring 2025, the trade uncertainty index soared to its record high, and only later on, edged down as the USA and its trade partners intensified the negotiations.[38] As of the end of August 2025, the effective US import tariff rate reached 19.5%, which is the highest level since 1933.[39] Generally, the increase in import tariffs is expected to have a negative impact on economic activity and business sentiment worldwide, but its effects on inflation remain unclear.[40]

The effects on inflation and output for the country imposing tariffs and for economies subject to these tariffs depend on retaliatory measures of the latter and may vary significantly. For the USA, raising the tariffs, this involves a one-off spike in import prices, which might translate into consumer prices over time. However, the persistence and scale of inflation acceleration in the USA will also depend on the availability and accessibility of tariff-free substitute products, the extent of substitution of reduced demand with government transfers financed by tariff revenues,[41] the size of second-round effects produced by inflation expectations, and a potential wage-price spiral.[42] As for the countries that are subject to higher US tariffs, the impact on inflation depends on how effectively they will be able to adapt to the new restrictions and how extensive their retaliatory measures will be. Thus, if trade tensions considerably escalate among all economies, this might induce a slump in global trade and loss of potential of the world economy as a whole, which might entail proinflationary consequences for a large number of countries. On the other hand, if countries decide not to escalate trade tensions in response, increased US tariffs might reduce external demand in most economies, while uncertainty might trigger a decline in consumption and investment, which, all else being equal, will ease inflationary pressures.[43]

As of October 2025, the rise in tariffs had not so far caused a significant increase in proinflationary pressures, whether in the USA or globally.[44] This was associated with the fact that most countries had decided not to escalate trade policy, while the USA itself suspended the tariffs and exempted some categories of imported products. Furthermore, the pass-through of higher tariffs to end prices could have been contained by the accumulation of stocks of imported products by US companies and the

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[38] BIS Annual Report 2024/2025.

[39] OECD Economic Outlook. Interim Report (September 2025).

[40] World Economic Outlook: Tenuous Resilience amid Persistent Uncertainty (July 2025). International Monetary Fund.

[41] Evaluating the Potential Impacts of US Tariffs (2025). Bank of Canada.

[42] Refer to the speech by Chair of the US Fed's Board of Governors Jerome Powell at the symposium Labor Markets in Transition: Demographics, Productivity, and Macroeconomic Policy. Jackson Hole. Wyoming (2025).

[43] Global Economic Prospects (June 2025). World Bank; What is a Tariff? (June 2025). Bank of Canada.

[44] World Economic Outlook: Global Economy in Flux, Prospects Remain Dim (October 2025). International Monetary Fund.

adaptation of supply chains. Nevertheless, further developments in trade will affect inflation dynamics and economic activity in the next few years.

The increasing fragmentation of the world economy (amid the persistent aftermath of the post-pandemic surge in inflation) exacerbates the uncertainty of future developments, due to which many central banks are now particularly cautious in pursuing their monetary policies. Another important aspect explaining this cautiousness is the re-estimation of neutral rate levels worldwide. Over recent years, central banks have become more convinced that the shocks that occurred in 2020–2024 have apparently entailed a steady rise in the global neutral rate of interest. As regards advanced economies influencing the global neutral rate to a greater extent, there are several factors pushing the neutral rate upwards.[45] On the one hand, these are considerably higher private and government investment expenditures related to the energy transition, digital transformation, and rearrangement of production and logistics chains due to geopolitical tensions in the world. On the other hand, these are larger government budget deficits in advanced economies, including as a result of government investment expenditures. Accordingly, in the long term, interest rates are unlikely to return to the levels observed after the GFC.

[45] Refer to, for example, the speech by Isabel Schnabel, a member of the ECB's Executive Board, R(ising) Star? Frankfurt. ECB (20 March 2024).

BOX 14. UNCONVENTIONAL MONETARY POLICY MEASURES

When the policy rate is already close to zero, unconventional monetary policy measures can help mitigate the risks of a downward deviation of inflation from the target. However, when these measures remain in place for a long time, they might have adverse implications for the economy

Policy rates are the main instrument used by central banks to attain their inflation targets as they seek to keep short-term money market rates close to their policy rates. The latter enable central banks to influence monetary conditions within a very wide range. However, the potential for easing monetary conditions through a lower policy rate is limited by the ELB. The ELB is the point at which further policy rate cuts no longer produce the desired effect due to lower efficiency of the monetary policy transmission mechanism. Thus, in the conditions of the ELB, deposit rates might stop decreasing following the policy rates, households tend to save cash, and the credit and foreign exchange channels of the transmission mechanism become less effective. The ELB varies depending on economic conditions and, in some cases, can be equal to zero (ZLB).

When the policy rate is close to the ZLB while the economy is exposed to persistently high disinflationary or even deflationary risks or inflation steadily deviates downwards from the target, central banks may resort to unconventional instruments to additionally ease monetary conditions. These instruments are as follows:

- **Asset purchases** (as part of QE programmes or YCC) – purchases of financial assets (e.g. government bonds) in the open market by the central bank within pre-set (in the case of QE) or unlimited (in the case of YCC) amounts. This mechanism helps reduce medium- and long-term interest rates.
- **Forward guidance (FG)** – a central bank's signal about its future monetary policy intentions. By using this instrument, a central bank seeks to influence economic agents' expectations and decisions, including to decrease uncertainty in the market that might cause a rise in interest rates or their volatility. In the conditions of unconventional monetary policy measures, the central bank uses a reinforced form of FG, signalling longer-term conditions or time for a possible start of policy rate increases or changes in the parameters of asset purchase programmes.

In the vast majority of cases, historically unconventional monetary policy instruments were employed by central banks in advanced economies (the USA, the UK, the euro area, etc.), many of which faced the problem of the ELB amid the risks of a steady deviation of inflation downwards from the targets after the GFC, as well as after the outbreak of the coronavirus pandemic in spring 2020. Asset purchases as part of QE programmes are the most frequently used instrument when the central bank has no room for conventional monetary policy to prop up aggregate demand and reduce deflation risks.[1] However, these instruments might involve certain risks to the economy and financial system.[2] In particular, the use of unconventional measures might significantly distort market pricing of financial instruments (particularly, government debt) and make financial (including FX) markets extremely sensitive to the central bank's actions. If unconventional measures are in place for a long time, this might also adversely affect the government's fiscal discipline. Moreover, if monetary conditions remain highly accommodative for an extended period, this increases risks to the stability of the balance sheets of the banks purchasing financial assets and issuing loans (especially, long-term ones) during the period of accommodative monetary policy. When the private sector gets used to such conditions and expects that unconventional policy measures will remain in place for a long time, in the first place, banks' interest rate risks grow. This makes the consequences of tapering off asset purchase programmes for financial markets and the economy in general more unpredictable if central banks have to normalise their monetary policies, particularly when this normalisation should progress quickly.

Over past years, the above risks materialised in a number of cases globally. Thus, the disorderly exit of the Reserve Bank of Australia (RBA) from the YCC programme in late 2021 was associated with higher volatility in the financial market and, as reported by the RBA itself, caused some reputational damage

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[1] Bailey, A. et al. (2020). The Central Bank Balance Sheet as a Policy Tool: Past, Present and Future. Bank of England Staff Working Paper.

[2] Refer to, for example, The Effects and Side Effects of Unconventional Monetary Policy (the summary of the First Workshop on the Review of Monetary Policy from a Broad Perspective). Bank of Japan Reports and Research Papers (2024).

to it.[3] Moreover, the US Fed's and the Bank of England's experience in 2022–2023 proves that a rapid worsening of banks' balance sheets might notably limit the opportunities for tightening monetary policies and, consequently, for ensuring price stability.[4] Furthermore, the current amount of unrealised losses on US banks' balance sheets caused by the revaluation of government and mortgage-backed bonds resulting from the rise in interest rates remains significant compared to historical levels.[5]

The Bank of Japan began to phase out unconventional measures in spring 2024, later than all other central banks worldwide. On the one hand, the delayed start (compared to other advanced economies) of monetary policy normalisation in Japan is explained by the country's long-term experience of low inflation during the 'lost decades'. Although inflation in Japan had stayed above the target of 2% over the past three years, the Bank of Japan concluded as late as March 2024 that it did see convincing evidence that inflation would steadily stabilise at the target in the medium term, having terminated its YCC programme and begun raising its short-term policy rate.[6] On the other hand, the 'distortions' accumulated in Japan's financial system over many decades[7] restrict the pace at which the Bank of Japan may roll back its unconventional measures. The delayed policy normalisation was apparently an essential factor causing the depreciation of the yen in 2022–2024 and forced Japan's Ministry of Finance to conduct FX interventions for the first time over several decades in order to smooth the exchange rate volatility.

In practice, unconventional monetary policy measures also affect **central banks' operational procedures**. Large and long-lasting asset purchases entail a sizeable structural surplus of liquidity in the banking system, which is difficult to absorb using standard instruments. This is why, after the GFC, many central banks of advanced economies switched to the so-called *floor system*, or *abundant reserves system*, which is an operational framework where the overnight money market rate is close to the lower bound of the interest rate corridor that is determined by the interest rate on liquidity absorbing instruments. However, the problem is that the money market rate in such a framework no longer reflects the result of the interaction between market participants, in the first place banks. As a result of a substantial liquidity surplus, the IBL market atrophies over time,[8] while banks lose incentives to redistribute reserves on market terms. Concurrently, the market becomes more responsive to sudden liquidity fluctuations,[9] which complicates the process of monetary policy normalisation.

In recent years, central banks of advanced economies have been gradually reconfiguring their operational procedures, adjusting them to the conditions of the rollback of unconventional measures and the increase in short-term rates. While adapting to the new conditions, central banks were also searching for a balance between maintaining the stability of systems having a surplus of reserves and restoring the incentives for market-based redistribution of reserves. Despite the measures taken, activity in the money market remains limited, which reflects long-term consequences of its functioning in the conditions of large-scale unconventional monetary policy measures.

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[3] Review of the Yield Target. Reserve Bank of Australia.

[4] Refer to, for example, Brunnermeier, M. K. (March 2023). Rethinking Monetary Policy in a Changing World. Finance and Development.

[5] Refer to data from the Federal Deposit Insurance Corporation, FDIC Quarterly, Vol. 19, No. 2.2.

[6] Refer to the Bank of Japan's monetary policy release Changes in the Monetary Policy Framework, dated 19 March 2024.

[7] The Bank of Japan, for example, is the holder of approximately 46% of the country's government debt (refer to Ministry of Finance's JGB Newsletter, dated July 2025).

[8] Refer to, for example, Borio, C. Getting Up From The Floor. BIS Working Paper, No. 1100 (May 2023); Mercatus Original Podcasts (Macro Musings), Bill Nelson on the Future of Central Bank Operating Systems (7 April 2025).

[9] Refer to, for example, Acharya and Rajan (2022).

BOX 15. INFLATION DYNAMICS FROM 2020 IN NON-INFLATION TARGETING COUNTRIES

After 2020, the return of inflation to low levels in non-inflation targeting countries was longer on average and less sustainable than in inflation targeting economies

The role of non-inflation targeting countries in the world economy

In 2024, non-inflation targeting countries accounted for approximately 28% of global GDP. This group of economies is rather diverse and includes nearly 110 countries.

Almost all **advanced economies** switched to inflation targeting, except for Singapore, Switzerland, Liechtenstein, and Denmark, which are small open economies with large foreign currency inflows owing to their unique position in global trade and mature financial sectors, but with a strong dependency on imported products and services. These countries also feature a very mature institutional environment, trust towards national currencies and financial markets, and very low barriers to international capital flows. Furthermore, Switzerland is the issuer of a reserve currency – the Swiss franc, which financial market participants traditionally use as a safe haven currency and which usually appreciates during periods of volatility in the world economy.[1]

Non-inflation targeting countries are mostly **developing economies**, which significantly vary in terms of maturity of their financial institutions, position in the world economy, and many other parameters. As for GDP, a considerable proportion in this group is accounted for by China, which is a very large and diversified economy that holds the strongest position in global trade. However, China still has some elements of a planned economy. Nevertheless, this group mostly comprises small open economies, including both microstates, which are highly dependent on the larger neighbours' economies (e.g. many Caribbean and Oceania states), and resource-rich countries whose exports substantially exceed their demand for imports (e.g. the Gulf states). On average, developing economies, which do not target inflation, generally have less mature financial institutions, a lower quality of macroeconomic policies, and an insufficient capacity and maturity level of domestic financial markets.

As in inflation targeting countries, monetary policies in most non-inflation targeting economies are aimed at maintaining price stability. However, due to the specifics of alternative regimes, non-inflation targeting central banks set intermediate targets for variables, the achievement of which should ultimately ensure low inflation and balanced economic growth. Many central banks implementing alternative regimes update their inflation targets, but setting an inflation target as such is not equivalent to inflation targeting if the target is not combined with other elements of this regime. The central bank needs to calibrate the functioning of the interest rate channel of the monetary policy transmission mechanism (to create a system of liquidity management instruments, among other things), ensure financial markets' confidence in the policy pursued and trust within the banking system, enhance communication transparency, arrange a system of forecasting tools, and switch to a floating exchange rate of the national currency.

Today, monetary policy regimes, other than inflation targeting, used globally, are as follows:

- *Monetary targeting* is a framework where the central bank sets the target growth rate of a monetary aggregate as the intermediate benchmark for ensuring low inflation. To regulate the amount of money supply, the central bank conducts securities transactions in the open market and manages interest rates and the required reserve ratio.
- *Exchange rate targeting* is a strategy where the central bank sets targets for the national currency exchange rate as the intermediate target for ensuring price stability. The main monetary policy tool is FX interventions that the central bank conducts when the exchange rate deviates from its target.[2]

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[1] Refer to the speech by Chairman of the Governing Board of the Swiss National Bank Thomas Jordan: Small Country – Big Challenges: Switzerland's Monetary Policy Response to the Coronavirus Pandemic (2020).

[2] The target exchange rate may be of different types: a fixed or crawling peg against foreign currency, a fixed or crawling band of fluctuations, etc.

- *Combined regimes* are frameworks combining features of several monetary policy regimes. The central bank may use multiple policy instruments simultaneously in order to achieve a variety of goals (e.g. targets set for inflation, lending growth, the exchange rate, and financial stability), while its targets for variables, other than inflation, serve as auxiliary benchmarks for achieving steadily low inflation and balanced economic growth.

All the above regimes have serious drawbacks. The effectiveness of monetary targeting is limited because of the unstable correlation between monetary aggregates and inflation when the latter is at steadily low levels.[3] When targeting the exchange rate, the central bank lacks flexibility in its possible response to internal and external shocks since a fixed exchange rate does not act as a 'built-in stabiliser' of the economy, due to which GDP growth rates become more volatile,[4] while the opportunities to maintain a managed exchange rate are limited by the amount of gold and foreign currency reserves. Combined regimes, to a greater or lesser extent, have drawbacks of monetary targeting and exchange rate targeting, but have a specific restriction as multiple targets may contradict each other and involve uncertainty for economic agents who might fail to comprehend which of the targets is the priority of monetary policy. Many central banks choosing alternative regimes note that inflation targeting has advantages and aim to unify the approaches of their policies with those of inflation targeting and to fully switch to this regime in the future.[5]

Main inflation trends in non-inflation targeting countries after the outbreak of the coronavirus pandemic

Just like inflation targeters, in 2020, countries pursuing alternative regimes faced a slump in demand, and from 2021, a rapid rebound in demand and rising inflationary pressures. In response, central banks and governments started implementing measures to stabilise the economic situation. The overall trends in this group of countries and in inflation targeting economies were similar, but the heterogeneity among non-inflation targeting countries was much stronger.

Advanced economies with alternative regimes (Singapore, Switzerland, Liechtenstein, and Denmark) were able to successfully cope with the post-pandemic acceleration of inflation. This was largely facilitated by economic agents' low inflation expectations, their low responsiveness to shocks owing to high confidence in macroeconomic policy, moderate budget deficits, and relative stability of the national currencies.[6] Furthermore, price levels in this group of economies are high compared to other countries, even advanced economies. As a result of all these factors, proinflationary shocks in these states could translate into end prices to a lesser extent than in countries with lower price levels.[7]

The group of developing economies not targeting inflation was characterised by an especially high heterogeneity.

As for **Latin America**, relatively low price growth rates in most small economies were accompanied by hyperinflation in Venezuela and Argentine, which was provoked by, among other things, debt monetisation to cover considerable budget deficits.[8] A structural feature of many countries in the region is still a high

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[3] When inflation is high, there is a significant positive correlation between the growth rates of prices and those of monetary aggregates (refer to Boreo, C., Hofmann, B., and Zakrajšek, E. (2023). Does Money Growth Help Explain the Recent Inflation Surge? BIS Bulletin, No. 67). This is why when an economy loses macroeconomic stability, many central banks seek to return control over money supply growth in the first place. However, as price stability restores, a weakening correlation between monetary aggregates and inflation limits the central bank's capacity to effectively maintain inflation at the target through the targets set for monetary aggregates.

[4] See Box 2 'Benefits of a floating exchange rate'.

[5] Annual Report on Exchange Arrangements and Exchange Restrictions (2023).

[6] The four countries – Singapore, Switzerland, Liechtenstein, and Denmark – have managed exchange rates, in one form or another (Liechtenstein uses the Swiss franc as the national currency), which implies that monetary policy rates in these economies largely have to follow the US and euro area policy rates and FX interventions play an important role in current decisions.

[7] Jensen, R. M. (2025). High Price Level Contributes to Lower Inflation in Denmark than in the Euro Area. Danmarks Nationalbank.

[8] Refer to, for example, International Monetary Fund, Argentina: Ex-post Evaluation of Exceptional Access Under the 2022 Extended Fund Facility Arrangement-Press Release; Staff Report; and Statement by the Executive Director for Argentina. Country Report, No. 25/3 (2025).

percentage of foreign currency in savings,[9] which, combined with insufficient confidence in monetary policy and a small fiscal space, was probably limiting the opportunity to reduce interest rates during the acute phase of the pandemic and moderating inflationary pressures over the course of the post-pandemic recovery.

Many countries in **Africa**, particularly in Sub-Saharan Africa, faced high and unstable inflation in 2021–2022, which was often attributable to fiscal indiscipline. Moreover, as food accounts for a high proportion in these countries' consumer baskets, shocks in global food markets and a poor harvest in Africa itself had a strong impact on inflation. In 2023–2024, inflation in many economies started to decelerate as global food prices were declining and a number of countries were normalising their fiscal policies while also tightening their monetary policies. In the conditions of low confidence in macroeconomic policy, small gold and foreign currency reserves, and a suboptimal policy aimed at maintaining the stability of the banking sector, a number of states were introducing cross-border capital controls, seeking to reduce exchange rate volatility and mitigate financial stability risks.[10]

Inflation in the **Middle East** was highly heterogeneous as well. The oil-rich Gulf states mostly link their national currencies to the US dollar, and therefore, interest rates in these economies closely follow the US Fed's rates.[11] Over many decades, huge quantities of energy commodity exports had allowed them to accumulate a large amount of gold and foreign currency reserves and assets in sovereign wealth funds. This safety cushion enabled them to finance the budget deficits[12] and support the stability of their exchange rates during the pandemic, as well as avoid a surge in prices over the course of the post-pandemic period. Concurrently, a number of other countries in the region have been facing elevated inflation in recent years, including due to military conflicts and political turmoil.

Most countries in **Southeast Asia and Oceania** managed to stabilise price growth rates. Although they are not inflation targeters, these states prioritise macroeconomic stability, especially taking into account the experience of the 1997 Asian financial crisis. Another disinflationary factor was moderate economic activity in China, including because of its zero-COVID policy.

The volatility of inflation in many countries with alternative regimes was elevated and, in 2022–2024, increased more than in inflation targeting economies (Chart 15.2). This could be because, unlike in inflation targeting economies, inflation expectations in countries with alternative regimes are more responsive to shocks as there is no nominal anchor in the form of an inflation target. Moreover, countries with managed exchange rates had limited opportunities to take independent measures to respond to internal inflation processes since the specifics of the regime forces them to 'import' interest rates from the countries – issuers of the peg currency.[13]

Although certain non-inflation targeting countries were quite successful, inflation targeting economies managed to address post-pandemic price growth more efficiently on average. They were able to return inflation to low levels more quickly and sustainably.

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[9] Refer to, for example, García-Escribano, M. and Sosa, S. (2014). What Is Driving Financial Dedollarization in Latin America? International Monetary Fund; Levy-Yeyati, E. (2021). Financial Dollarization and De-dollarization in the New Millennium. FLAR Working Paper. A number of Latin American countries (Panama, Ecuador, and El Salvador) abandoned their national currencies in favour of the US dollar. Some countries, e.g. Nicaragua, record a high share of foreign currency in the banking sector's statistics. A number of economies (e.g. Argentine) observe high 'unofficial' dollarisation, which is not recognised in statistics to the fullest extent. Regardless of the form, high dollarisation of savings and loans may limit the central bank's capacity to influence monetary conditions in the economy.

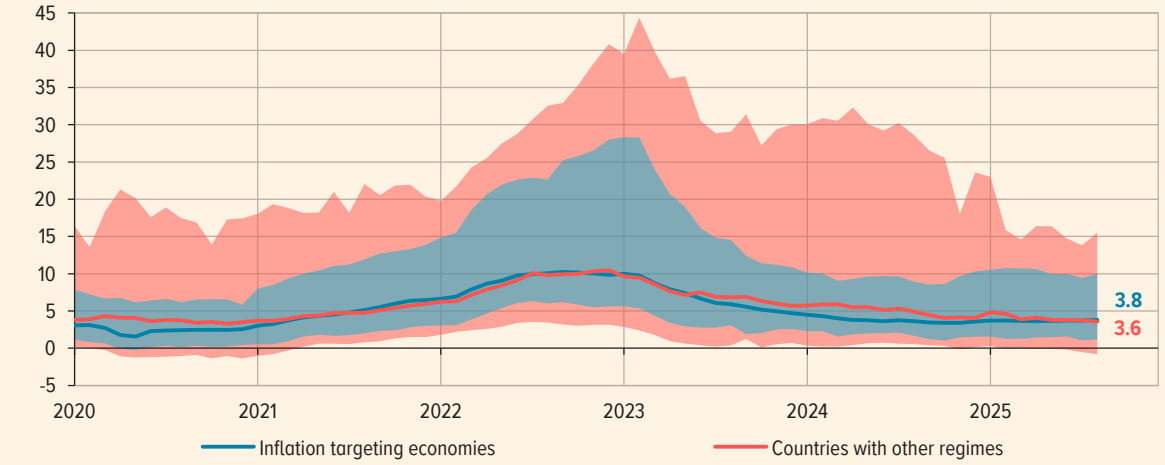
[10] Refer to, for example, International Monetary Fund, Nigeria: 2025 Article IV Consultation-Press Release, Staff Report; Statement by the Executive Director for Nigeria (2025); and Reserve Bank of Zimbabwe, Exchange Control Directive RV175/2020.

[11] Regional Economic Outlook: Middle East and Central Asia (2024). International Monetary Fund.

[12] Gulf Economic Update: COVID-19 Pandemic and the Road to Diversification (2021). World Bank.

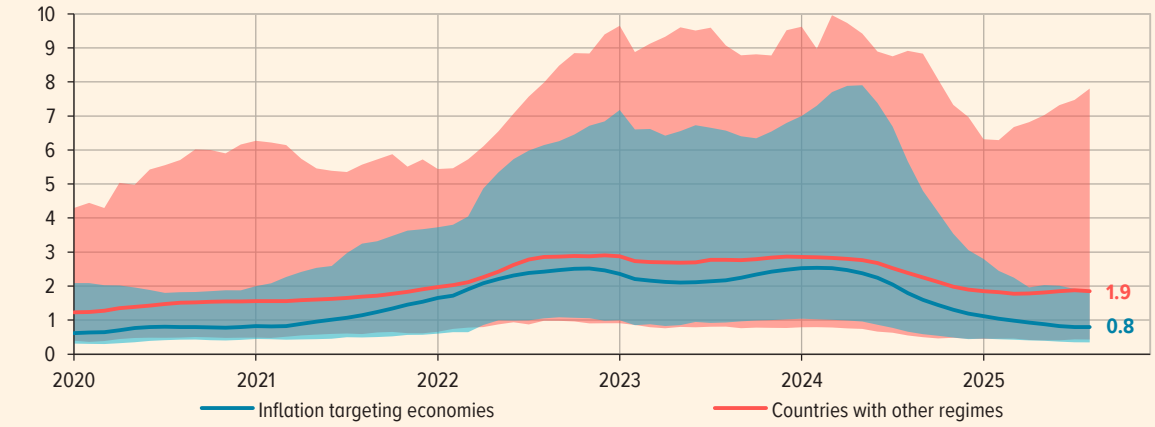
[13] El Hamiani Khatat, M. et al. (2020). Monetary Policy Under an Exchange Rate Anchor. Working Paper WP/20/180. International Monetary Fund.

AVERAGE INFLATION IN INFLATION TARGETING ECONOMIES AND COUNTRIES WITH OTHER REGIMES *Chart 15.1*
(% YOY)



Note. Average inflation across the samples excluding 10% of the highest rates and 10% of the lowest rates. The shaded blue area reflects the central tendency (10–90%) of inflation in inflation targeting economies, while the shaded red area – in countries with other monetary policy regimes. The updated list of inflation targeting economies is given in Table 2 'Information on inflation targeting economies (as of September 2025)'; countries implementing other regimes are listed in the note at the end of the box. The calculations also take into account historical changes in the list of inflation targeting economies.
Sources: Cbonds, Trading Economics, Bank of Russia calculations.

AVERAGE STANDARD DEVIATION OF INFLATION IN INFLATION TARGETING ECONOMIES AND COUNTRIES WITH OTHER REGIMES *Chart 15.2*
(PP)



Note. Average inflation across the samples excluding 10% of the highest rates and 10% of the lowest rates. The shaded blue area reflects the central tendency (10–90%) of inflation in inflation targeting economies, while the shaded red area – in countries with other monetary policy regimes. The updated list of inflation targeting economies is given in Table 2 'Information on inflation targeting economies (as of September 2025)'; countries implementing other regimes are listed in the note at the end of the box. The calculations also take into account historical changes in the list of inflation targeting economies.
Sources: Cbonds, Trading Economics, Bank of Russia calculations.

Note. Countries with other regimes:

- Advanced economies: Denmark, Liechtenstein, Singapore, and Switzerland.
- Developing economies: Afghanistan, Algeria, Angola, Argentina, Aruba, Azerbaijan, Bahamas, Bahrain, Bangladesh, Barbados, Belarus, Belize, Benin, Bhutan, Bolivia, Bosnia and Herzegovina, Botswana, Brunei Darussalam, Bulgaria, Burkina Faso, Burundi, Cabo Verde, Cambodia, Cameroon, Central African Republic, Chad, China, Comoros, Congo, Côte d'Ivoire, Cuba, Democratic Republic of the Congo, Djibouti, Ecuador, Egypt, El Salvador, Eswatini, Ethiopia, Fiji, Gabon, Gambia, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Iran, Iraq, Jordan, Kenya (until December 2020), Kuwait, Kyrgyzstan, Laos, Lebanon, Lesotho, Liberia, Libya, Madagascar, Malawi, Malaysia, Maldives, Mali, Mauritania, Mauritius (until December 2022), Mongolia (until December 2022), Montenegro, Morocco, Mozambique, Myanmar, Namibia, Nepal, Nicaragua, Niger, Nigeria, North Macedonia, Oman, Pakistan, Panama, Papua New Guinea, Qatar, Rwanda, Sao Tome and Principe, Saudi Arabia, Senegal, Seychelles (from January 2023), Sierra Leone, Solomon Islands, Somalia, South Sudan, Sudan, Suriname, Syria, Tajikistan, Tanzania, Timor-Leste, Togo, Trinidad and Tobago, Tunisia, Ukraine (from February 2022), United Arab Emirates, Vanuatu, Venezuela, Vietnam, Zambia, and Zimbabwe.

INFORMATION ON INFLATION TARGETING ECONOMIES (AS OF SEPTEMBER 2025) *Table 2*

No.	Country	Year of transition to inflation targeting	Target type	Target level[1]	Target range width	Average inflation after transition to inflation targeting, % YoY[2]	Standard deviation of inflation from target, pp[3]
Advanced economies							
Europe							
1	UK	1992	Point	2%		2.45	1.95
2	Euro area	–	Point	2%		2.09	1.78
3	Iceland	2001	Point	2.5%		4.94	4.08
4	Norway	2001	Point	2%		2.43	1.61
5	Czech Republic	1997	Point with range of deviations	2% ± 1 pp		3.44	3.58
6	Sweden	1993	Point	2%		1.91	1.55
South, Eastern and Southeast Asia							
7	South Korea	1998	Point	2%		2.55	1.39
8	Japan	2013	Point	2%		1.29	1.60
Australia and Oceania							
9	Australia	1993	Target range	2–3%	1 pp	2.68	1.52
10	New Zealand	1990	Point with range of deviations	2% ± 1 pp		2.43	1.84
North America							
11	Canada	1991	Point with range of deviations	2% ± 1 pp		2.14	1.38
12	USA	–	Point	2%		2.26	1.69
Middle East							
13	Israel	1997	Target range	1–3%	2 pp	2.17	2.10
Developing economies							
Central and Eastern Europe							
14	Albania	2009	Point	3%		2.54	1.59
15	Hungary	2001	Point with range of deviations	3% ± 1 pp		4.93	4.71
16	Moldova	2013	Point with range of deviations	5% ± 1.5 pp		8.06	8.04
17	Poland	1998	Point with range of deviations	2.5% ± 1 pp		3.74	3.61
18	Russia	2015	Point	4%		7.34	5.42
19	Romania	2005	Point with range of deviations	2.5% ± 1 pp		4.91	4.12
20	Serbia	2009	Point with range of deviations	3% ± 1.5 pp		5.38	4.47
Latin America and the Caribbean							
21	Brazil	1999	Point with range of deviations	3% ± 1.5 pp		6.26	3.40
22	Guatemala	2005	Point with range of deviations	4% ± 1 pp		4.86	2.50
23	Dominican Republic	2012	Point with range of deviations	4% ± 1 pp		3.95	2.41
24	Colombia	1999	Point with range of deviations	3% ± 1 pp		5.43	2.89
25	Costa Rica	2018	Point with range of deviations	3% ± 1 pp		1.98	3.23
26	Mexico	2001	Point with range of deviations	3% ± 1 pp		4.54	1.86
27	Paraguay	2011	Point with range of deviations	3.5% ± 2 pp		4.31	2.24
28	Peru	2002	Point with range of deviations	2% ± 1 pp		3.02	2.17
29	Uruguay	2007	Point with range of deviations	4.5% ± 1.5 pp		7.70	3.13
30	Chile	1999	Point with range of deviations	3% ± 1 pp		3.76	2.74
31	Jamaica	2018	Target range	4–6%	2 pp	5.68	2.38

No.	Country	Year of transition to inflation targeting	Target type	Target level[1]	Target range width	Average inflation after transition to inflation targeting, % YoY[2]	Standard deviation of inflation from target, pp[3]
South, Eastern and Southeast Asia							
32	India	2015	Point with range of deviations	4% ± 2 pp		4.83	1.71
33	Indonesia	2005	Point with range of deviations	2.5% ± 1 pp		5.17	2.78
34	Thailand	2000	Target range	1–3%	2 pp	1.90	2.28
35	Philippines	2002	Point with range of deviations	3% ± 1 pp		3.79	1.99
36	Sri Lanka	2019	Point	5%		11.91	19.85
Central Asia, Caucasus, and Turkey							
37	Armenia	2006	Point with range of deviations	3% ± 1 pp		3.86	3.38
38	Georgia	2009	Point	3%		4.30	4.78
39	Kazakhstan	2015	Point	5%		9.68	5.95
40	Mongolia	2023	Point with range of deviations	5% ± 2 pp		8.63	3.50
41	Turkey	2006	Point with range of deviations	5% ± 2 pp		19.14	24.35
42	Uzbekistan	2021	Point	5%		10.29	5.44
Africa							
43	Ghana	2007	Point with range of deviations	8% ± 2 pp		15.69	14.27
44	Kenya	2021	Point with range of deviations	5% ± 2.5 pp		6.09	2.15
45	Republic of Mauritius	2023	Point with range of deviations	3.5% ± 1.5 pp		4.85	2.90
46	Uganda	2011	Point	5%		5.23	4.27
47	South Africa	2000	Target range	3–6%	3 pp	5.42	2.40

[1] *The inflation target is usually set for the overall CPI in annualised terms. In rare cases, central banks use alternative measures but also in annualised terms. In particular, Uganda uses the core CPI, Sweden – the CPIF, and the USA – the headline PCE.*

[2] *Average annual inflation is calculated based on monthly data. The calculations for the USA and the euro area were made beginning from the date of the public announcement of their inflation targets (i.e. from 2012 and 1998, respectively).*

[3] *It shows the average deviation of inflation from the target in percentage points over the period of inflation targeting. For the countries that have changed the targets since their transition to inflation targeting, the calculation takes into account those targets that were effective during respective time periods. The point or the middle of the target range with a point announced by the central bank is taken as the inflation target. If the inflation target was set only as a range, the calculated middle of this range is used as the target (from July 2025, South Africa uses the lower bound of the 3–6% target range as its inflation target). The calculations for the USA and the euro area were made beginning from the date of the public announcement of their inflation targets (i.e. from 2012 and 1998, respectively).*

Sources: IMF, Cbonds, central banks' and statistical agencies' websites, Bank of Russia calculations.

CALENDARS AND TABLES

Calendar of key rate decisions for 2026

■	**13 February 2026**	**Bank of Russia Board of Directors' key rate meeting**
		Press release on the key rate
		Medium-term forecast
		Press conference by the Governor of the Bank of Russia
	26 February 2026	Summary of the Key Rate Discussion
		Commentary on the Medium-term Forecast
	20 March 2026	**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
	1 April 2026	Summary of the Key Rate Discussion
■	**24 April 2026**	**Bank of Russia Board of Directors' key rate meeting**
		Press release on the key rate
		Medium-term forecast
		Press conference by the Governor of the Bank of Russia
	7 May 2026	Summary of the Key Rate Discussion
		Commentary on the Medium-term Forecast
	19 June 2026	**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
	1 July 2026	Summary of the Key Rate Discussion
■	**24 July 2026**	**Bank of Russia Board of Directors' key rate meeting**
		Press release on the key rate
		Medium-term forecast
		Press conference by the Governor of the Bank of Russia
	5 August 2026	Summary of the Key Rate Discussion
		Commentary on the Medium-term Forecast
	11 September 2026	**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
	23 September 2026	Summary of the Key Rate Discussion
■	**23 October 2026**	**Bank of Russia Board of Directors' key rate meeting**
		Press release on the key rate
		Medium-term forecast
		Press conference by the Governor of the Bank of Russia
	5 November 2026	Summary of the Key Rate Discussion
		Commentary on the Medium-term Forecast
	18 December 2026	**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
	30 December 2026	Summary of the Key Rate Discussion

Schedule of Bank of Russia auctions in 2026

One-week repo and deposit auctions

In the situation of a structural liquidity deficit, the Bank of Russia plans to hold one-week auctions in the form of repo auctions. Should a one-week deposit auction be held instead of a repo auction, the Bank of Russia will publish relevant information on its website on the business day preceding the auction.

One-week repo auctions

Auction date	Date of liquidity provision by Bank of Russia	Date of liquidity return by credit institutions
13.01.2026	14.01.2026	21.01.2026
20.01.2026	21.01.2026	28.01.2026
27.01.2026	28.01.2026	04.02.2026
03.02.2026	04.02.2026	11.02.2026
10.02.2026	11.02.2026	18.02.2026
17.02.2026	18.02.2026	25.02.2026
24.02.2026	25.02.2026	04.03.2026
03.03.2026	04.03.2026	11.03.2026
10.03.2026	11.03.2026	18.03.2026
17.03.2026	18.03.2026	25.03.2026
24.03.2026	25.03.2026	01.04.2026
31.03.2026	01.04.2026	08.04.2026
07.04.2026	08.04.2026	15.04.2026
14.04.2026	15.04.2026	22.04.2026
21.04.2026	22.04.2026	29.04.2026
28.04.2026	29.04.2026	06.05.2026
05.05.2026	06.05.2026	13.05.2026
12.05.2026	13.05.2026	20.05.2026
19.05.2026	20.05.2026	27.05.2026
26.05.2026	27.05.2026	03.06.2026
02.06.2026	03.06.2026	10.06.2026
09.06.2026	10.06.2026	17.06.2026
16.06.2026	17.06.2026	24.06.2026
23.06.2026	24.06.2026	01.07.2026
30.06.2026	01.07.2026	08.07.2026
07.07.2026	08.07.2026	15.07.2026
14.07.2026	15.07.2026	22.07.2026
21.07.2026	22.07.2026	29.07.2026
28.07.2026	29.07.2026	05.08.2026
04.08.2026	05.08.2026	12.08.2026
11.08.2026	12.08.2026	19.08.2026
18.08.2026	19.08.2026	26.08.2026
25.08.2026	26.08.2026	02.09.2026
01.09.2026	02.09.2026	09.09.2026
08.09.2026	09.09.2026	16.09.2026

Auction date	Date of liquidity provision by Bank of Russia	Date of liquidity return by credit institutions
15.09.2026	16.09.2026	23.09.2026
22.09.2026	23.09.2026	30.09.2026
29.09.2026	30.09.2026	07.10.2026
06.10.2026	07.10.2026	14.10.2026
13.10.2026	14.10.2026	21.10.2026
20.10.2026	21.10.2026	28.10.2026
27.10.2026	28.10.2026	05.11.2026
03.11.2026	05.11.2026	11.11.2026
10.11.2026	11.11.2026	18.11.2026
17.11.2026	18.11.2026	25.11.2026
24.11.2026	25.11.2026	02.12.2026
01.12.2026	02.12.2026	09.12.2026
08.12.2026	09.12.2026	16.12.2026
15.12.2026	16.12.2026	23.12.2026
22.12.2026	23.12.2026	30.12.2026

Required reserve averaging periods in 2026

AP to calculate RR for corresponding reporting period	AP duration (days)	Memo item	
		Reporting period	RR regulation period
14.01.2026–10.02.2026	28	December 2025	27.01.2026–29.01.2026
11.02.2026–10.03.2026	28	January 2026	17.02.2026–19.02.2026
11.03.2026–14.04.2026	35	February 2026	18.03.2026–20.03.2026 (as recalculated)
15.04.2026–12.05.2026	28	March 2026	16.04.2026–20.04.2026
13.05.2026–09.06.2026	28	April 2026	20.05.2026–22.05.2026
10.06.2026–14.07.2026	35	May 2026	17.06.2026–19.06.2026
15.07.2026–11.08.2026	28	June 2026	16.07.2026–20.07.2026
12.08.2026–08.09.2026	28	July 2026	18.08.2026–20.08.2026
09.09.2026–13.10.2026	35	August 2026	16.09.2026–18.09.2026
14.10.2026–10.11.2026	28	September 2026	16.10.2026–20.10.2026
11.11.2026–08.12.2026	28	October 2026	18.11.2026–20.11.2026
09.12.2026–12.01.2027	35	November 2026	16.12.2026–18.12.2026

Required reserve averaging period with recalculation in 2026

The RR averaging period in 2026 for the annual recalculation of the RR deposited in the RR account: 18–20 March 2026.

Statistical tables

MACROECONOMIC INDICATORS IN 2004–2024
(% GROWTH YOY, UNLESS INDICATED OTHERWISE)

Table 1

Indicators	2004–2008 average	2009–2013 average	2016	2017	2018	2019	2020	2021	2022	2023	2024
Internal conditions											
Inflation, as of year-end											
CPI, all goods and services	11.4	7.3	5.4	2.5	4.3	3.0	4.9	8.4	11.9	7.4	9.5
of which: excluding fruit and vegetables, petroleum products, and housing and utility services	10.4	6.8	6.1	2.1	4.0	3.2	4.6	8.6	13.5	6.9	8.6
– food products	12.5	7.5	4.6	1.1	4.7	2.6	6.7	10.6	10.3	8.2	11.1
of which: fruit and vegetables	11.4	5.5	-6.8	1.2	4.9	-2.1	17.4	14.0	-2.0	24.2	22.1
food products excluding fruit and vegetables	12.6	7.6	6.0	1.0	4.6	3.1	5.4	10.2	12.0	6.1	9.5
– non-food goods	6.9	6.2	6.5	2.8	4.1	3.0	4.8	8.6	12.7	6.0	6.1
of which: non-food goods excluding petroleum products	6.5	6.0	6.8	2.3	3.3	3.1	5.1	8.5	14.5	5.7	5.3
– services	16.3	8.7	4.9	4.4	3.9	3.8	2.7	5.0	13.2	8.3	11.5
of which: services excluding housing and utility services	13.7	6.8	4.7	4.2	4.1	3.4	2.2	5.6	14.7	10.4	11.9
Core inflation	10.2	6.6	6.0	2.1	3.7	3.1	4.2	8.9	14.3	6.8	8.9
GDP											
GDP	7.1	1.2	0.2	1.8	2.8	2.2	-2.7	5.9	-1.4	4.1	4.3
Final consumption expenditure	9.6	2.9	-1.5	3.4	3.5	3.4	-3.9	7.8	0.1	6.5	5.2
– households	12.4	3.9	-2.6	3.7	4.3	3.8	-5.9	9.8	-0.6	7.5	5.4
– general government	2.4	0.3	1.4	2.5	1.3	2.4	1.9	2.9	2.0	3.8	4.8
Gross capital formation	14.3	-1.7	-0.6	6.4	-1.6	2.3	-4.3	15.1	1.4	19.8	2.1
– gross fixed capital formation	14.5	1.4	1.3	4.7	0.6	1.0	-4.0	9.3	7.4	7.8	6.0
Exports	6.4	1.6	3.2	5.0	5.6	0.7	-4.2	3.2	–	–	–
Imports	20.4	3.6	-3.7	17.3	2.7	3.1	-11.9	19.1	–	–	–
Consumer activity											
Turnover in retail	14.0	3.6	-4.8	1.3	2.8	1.9	-3.2	7.8	-6.5	8.0	7.7
– food products	11.4	2.5	-5.2	1.1	2.1	1.8	-1.6	2.7	-1.7	4.4	5.9
– non-food goods	16.2	4.6	-4.5	1.5	3.5	2.0	-4.6	12.7	-10.6	11.5	9.3
Turnover in public catering	13.1	1.2	-2.9	3.2	14.9	4.9	-22.4	26.8	7.6	13.9	11.9
Turnover in commercial services	7.0	1.2	-0.3	0.2	3.2	1.7	-14.6	17.2	5.0	6.9	4.3
Labour market											
Unemployment, %, yearly average	6.8	6.6	5.5	5.2	4.8	4.6	5.8	4.8	3.9	3.2	2.5
Real wages, % YoY, yearly average	13.0	3.5	0.7	2.9	8.5	4.8	3.8	4.5	0.3	8.2	9.7
Nominal wages, % YoY, yearly average	25.8	11.5	7.9	6.7	11.6	9.5	7.3	11.5	14.1	14.6	19.0
Monetary indicators, as of year-end											
Money supply in national definition (M2)	33.5	19.5	9.2	10.5	11.0	9.7	13.5	13.0	24.4	19.4	19.2
Broad money (M2X)*	33.1	17.7	4.0	8.6	7.9	7.6	12.6	11.1	14.0	15.4	15.0
Claims on the economy*	43.3	15.6	3.4	9.2	8.5	9.8	11.0	14.1	12.6	22.3	16.4
including on households*	72.8	21.0	1.4	12.1	21.8	19.0	12.9	22.0	9.4	23.0	9.7
on organisations*	38.4	14.0	4.0	8.3	4.6	6.7	10.2	11.1	14.0	22.0	19.0
Budget, % YoY											
Fiscal system expenditures	27.7	12.3	5.3	3.4	5.8	9.0	13.7	10.8	17.2	14.1	17.8
Federal budget expenditures	29.4	12.4	5.1	0.0	1.8	9.0	25.3	8.5	25.7	4.0	24.2
Fiscal system NOGR	22.8	9.5	10.8	7.4	12.9	11.6	4.4	18.5	6.2	21.1	19.0
Federal budget NOGR	19.6	6.9	10.5	5.8	14.5	17.5	9.9	20.4	0.0	25.0	26.0
OGR	28.8	11.8	-17.6	23.5	49.7	-10.8	-34.7	72.4	26.6	-24.8	28.2
Fiscal system revenues	23.6	9.8	4.6	10.2	20.0	6.2	-3.5	25.8	10.0	11.2	20.4
Federal budget revenues	21.9	8.9	-1.6	12.2	28.4	4.4	-7.7	34.9	9.5	4.5	26.7
Budget, % of GDP											
Fiscal system expenditures	30	35	37	35	33	34	39	35	35	36	37
Federal budget expenditures	16	20	19	18	16	17	21	18	20	18	20
Fiscal system NOGR	28	25	27	27	27	29	31	29	26	28	30
Federal budget NOGR	12	9	10	10	10	11	13	12	10	12	13
OGR	9	9	6	7	9	7	5	7	7	5	5
Fiscal system revenues	37	33	33	34	36	36	35	36	34	33	35
Federal budget revenues	22	18	16	16	19	18	17	19	18	16	18

* *Where increases in the indicators comprising foreign currency and ruble components are calculated herein, the growth of the foreign currency component is converted into rubles using the period average exchange rate.*

Sources: Rosstat, Bank of Russia.

MACROECONOMIC INDICATORS IN 2023–2025, BY QUARTER *Table 2*
(% GROWTH YOY)

Indicators	2023				2024				2025						
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	June	July	August	September
Internal conditions															
Inflation															
CPI, all goods and services	3.5	3.3	6.0	7.4	7.7	8.6	8.6	9.5	10.3	9.4	8.0	9.4	8.8	8.1	8.0
of which: excluding fruit and vegetables, petroleum products, and housing and utility services	3.7	2.6	4.5	6.9	7.8	8.6	8.1	8.6	9.6	8.7	7.6	8.7	8.3	7.9	7.6
– food products	2.6	0.2	4.9	8.2	8.1	9.8	9.2	11.1	12.4	11.9	9.5	11.9	10.8	9.8	9.5
of which: fruit and vegetables	-9.4	-1.9	25.9	24.2	13.0	19.1	14.0	22.1	18.8	15.3	1.2	15.3	7.3	0.5	1.2
food products excluding fruit and vegetables	4.4	0.4	2.7	6.1	7.4	8.5	8.5	9.5	11.5	11.4	10.5	11.4	11.3	11.0	10.5
– non-food goods	0.1	1.0	4.6	6.0	6.7	7.0	5.6	6.1	5.9	4.5	3.9	4.5	4.1	3.9	3.9
of which: non-food goods excluding petroleum products	0.1	0.6	3.6	5.7	6.5	6.9	5.6	5.3	5.0	3.4	2.5	3.4	3.1	2.8	2.5
– services	9.7	11.0	9.7	8.3	8.3	8.8	11.6	11.5	12.9	12.0	11.1	12.0	11.9	11.1	11.1
of which: services excluding housing and utility services	9.2	10.9	10.0	10.4	10.7	11.2	11.7	11.9	13.4	12.2	10.6	12.2	11.3	10.5	10.6
Core inflation	3.7	2.4	4.6	6.8	7.8	8.7	8.3	8.9	9.7	8.7	7.7	8.7	8.5	8.0	7.7
GDP															
GDP	-0.9	5.3	6.2	5.3	5.4	4.3	3.3	4.5	1.4	1.1	–	–	–	–	–
Final consumption expenditure	1.8	8.2	9.1	6.7	6.3	5.3	5.0	4.4	2.6	2.5	–	–	–	–	–
– households	0.2	10.2	11.2	8.3	7.0	5.3	5.1	4.3	3.0	3.2	–	–	–	–	–
– general government	6.5	3.0	3.2	2.4	4.6	5.3	4.8	4.5	1.4	0.6	–	–	–	–	–
Gross capital formation	21.5	29.8	9.8	21.9	-7.2	-1.5	8.7	3.4	1.9	0.1	–	–	–	–	–
– gross fixed capital formation	6.9	15.0	6.1	5.1	9.4	3.9	7.9	4.5	8.5	1.0	–	–	–	–	–
Exports	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Imports	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Consumer activity															
Turnover in retail	-5.5	11.2	14.0	11.7	11.5	8.5	6.3	5.1	2.6	1.6	–	1.2	2.0	2.8	–
– food products	-2.3	6.0	7.2	6.2	8.1	6.7	5.5	3.8	3.1	2.0	–	1.2	2.4	1.5	–
– non-food goods	-8.1	16.5	20.7	17.2	14.9	10.2	7.2	6.4	2.0	1.3	–	1.3	1.6	4.2	–
Turnover in public catering	13.9	19.9	12.4	10.5	10.7	11.2	13.4	12.0	7.1	9.1	–	7.4	7.2	9.0	–
Turnover in commercial services	5.2	7.7	7.9	6.8	5.0	5.0	3.4	3.9	2.3	2.4	–	2.7	2.0	2.1	–
Labour market															
Unemployment, SA	3.4	3.2	3.0	2.9	2.7	2.6	2.5	2.3	2.3	2.2	–	2.2	2.2	2.1	–
Real wages	1.9	11.4	8.7	8.5	11.0	7.8	8.1	9.0	3.4	4.6	–	5.1	6.6	–	–
Nominal wages	10.7	14.4	14.3	16.3	19.5	16.7	17.8	18.8	13.8	14.9	–	15.0	16.0	–	–
Monetary indicators															
Money supply in national definition (M2)	24.4	25.4	20.6	19.4	17.4	18.7	18.8	19.2	17.0	15.0	12.7	15.0	15.0	14.4	12.7
Broad money (M2X)*	15.9	16.6	15.1	15.4	14.2	15.9	15.4	15.0	13.8	12.8	12.2	12.8	12.7	12.9	12.2
Claims on the economy*	11.3	17.1	21.6	22.3	23.2	23.0	20.0	16.4	13.4	10.5	9.5	10.5	9.9	10.1	9.5
– including on households*	10.0	17.2	22.3	23.0	23.0	23.3	16.9	9.7	5.7	0.0	-1.1	0.0	-0.9	-1.2	-1.1
– on organisations*	11.9	17.0	21.3	22.0	23.3	22.8	21.3	19.0	16.4	14.8	13.6	14.8	14.3	14.6	13.6
Budget															
Fiscal system expenditures	27.6	11.2	8.6	12.4	16.5	18.0	14.8	20.3	-21.1	55.3	–	–	–	–	–
Federal budget expenditures	32.5	4.4	-7.8	-3.6	16.1	24.6	24.1	29.6	24.5	9.9	–	–	–	–	–
Fiscal system NOGR	-0.3	24.0	38.2	23.4	32.5	17.5	14.9	14.8	11.5	9.8	–	–	–	–	–
Federal budget NOGR	-3.5	43.6	43.6	22.7	43.3	3.8	10.6	45.4	10.7	25.1	–	–	–	–	–
OGR	-45.6	-45.7	3.8	0.9	75.9	52.7	19.0	-9.1	-9.6	-27.2	–	–	–	–	–
Fiscal system revenues	-10.3	5.4	31.4	19.4	38.3	22.4	15.5	11.2	7.9	3.4	–	–	–	–	–
Federal budget revenues	-20.5	-1.9	28.0	15.2	52.3	17.6	13.3	28.9	4.2	5.9	–	–	–	–	–
Budget, % of GDP															
Fiscal system expenditures	36	35	30	40	35	36	32	43	26	53	–	–	–	–	–
Federal budget expenditures	21	17	14	21	20	18	16	25	24	19	–	–	–	–	–
Fiscal system NOGR	27	30	28	28	30	30	29	29	31	32	–	–	–	–	–
Federal budget NOGR	11	12	11	12	13	11	11	15	13	13	–	–	–	–	–
OGR	4	5	5	5	6	6	6	4	5	4	–	–	–	–	–
Fiscal system revenues	31	35	33	34	36	37	35	33	36	36	–	–	–	–	–
Federal budget revenues	15	17	16	17	19	17	17	19	19	17	–	–	–	–	–

* *Where increases in the indicators comprising foreign currency and ruble components are calculated herein, the growth of the foreign currency component is converted into rubles using the period average exchange rate.*

Sources: Rosstat, Bank of Russia.

BALANCE OF PAYMENTS INDICATORS IN 2004–2024

Table 3

($ BN, UNLESS INDICATED OTHERWISE)

Indicators	2004–2008 average	2009–2013 average	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Current account	**82.3**	**64.0**	**57.5**	**67.8**	**24.5**	**32.2**	**115.7**	**65.7**	**35.4**	**125.0**	**237.7**	**49.4**	**63.4**
Balance of trade	127.0	165.9	188.9	148.4	90.2	114.6	195.1	165.8	93.4	193.1	315.6	121.7	132.1
Exports	305.6	450.9	496.8	341.4	281.7	352.9	443.9	419.7	333.5	494.2	592.1	424.7	433.6
Imports	178.6	285.0	307.9	193.0	191.5	238.4	248.9	253.9	240.1	301.0	276.5	303.1	301.5
Balance of services	-14.1	-36.4	-55.3	-37.2	-24.0	-31.3	-30.1	-36.5	-16.8	-20.3	-22.1	-36.1	-38.4
Exports	37.7	57.1	65.7	51.6	50.6	57.5	64.6	62.0	48.0	55.6	48.8	40.5	43.1
Imports	51.8	93.5	121.0	88.8	74.6	88.9	94.7	98.5	64.7	75.9	70.9	76.6	81.5
Balance of primary and secondary income	-30.6	-65.5	-76.1	-43.5	-41.8	-51.1	-49.3	-63.7	-41.3	-47.8	-55.8	-36.1	-30.3
Capital account	**-4.8**	**-3.6**	**-42.0**	**-0.3**	**-0.8**	**-0.2**	**-1.1**	**-0.3**	**-0.1**	**0.1**	**-4.6**	**-1.4**	**-0.3**
Current account balance and capital account balance	**77.5**	**60.4**	**15.5**	**67.5**	**23.7**	**32.0**	**114.6**	**65.4**	**35.3**	**125.1**	**233.2**	**48.0**	**63.1**
Financial account balance, net of reserves	**10.3**	**39.5**	**131.0**	**68.6**	**10.1**	**11.9**	**78.5**	**-3.1**	**52.8**	**60.5**	**234.3**	**48.7**	**56.8**
Net incurrence of liabilities	96.0	67.2	-49.7	-72.2	-5.4	2.9	-36.5	28.7	-39.5	43.9	-123.9	-7.3	9.0
Net acquisition of financial assets, net of reserves	106.3	106.7	81.3	-3.5	4.7	14.9	42.0	25.7	13.3	104.4	110.4	41.4	65.8
Net errors and omissions	**-2.4**	**-8.7**	**7.9**	**2.9**	**-5.4**	**2.6**	**2.1**	**-2.0**	**3.8**	**-1.0**	**-6.1**	**-9.3**	**-10.1**
Change in reserves	**64.8**	**12.1**	**-107.5**	**1.7**	**8.2**	**22.6**	**38.2**	**66.5**	**-13.8**	**63.5**	**-7.3**	**-10.0**	**-3.8**
Goods and services exports, % YoY	29.0	5.5	-5.0	-30.1	-15.4	23.5	23.9	-5.3	-20.8	44.1	16.6	-27.4	2.5
Goods and services imports, % YoY	29.5	7.8	-8.7	-34.3	-5.6	23.0	5.0	2.6	-13.5	23.6	-7.8	9.3	0.9
Memo item													
Brent crude price, $ per barrel, yearly average	66	95	99	52	44	54	71	64	42	70	100	83	81
Nominal exchange rate, RUB/USD, yearly average	26.9	30.8	38.0	60.7	66.9	58.3	62.5	64.7	71.9	73.6	67.5	84.7	92.4

Sources: Bank of Russia, World Bank.

EXTERNAL CONDITIONS IN 2004–2024

Table 4

Indicators	2004–2008 average	2009–2013 average	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
GDP, % YoY, period average													
USA	2.5	1.2	2.5	2.9	1.8	2.5	3.0	2.6	-2.1	6.2	2.5	2.9	2.8
Euro area	2.1	-0.4	1.5	2.0	1.8	2.7	1.7	1.6	-6.2	6.3	3.7	0.5	0.8
China	11.6	9.1	7.4	7.2	6.9	6.9	6.9	6.2	2.0	8.9	3.2	5.4	5.0
Inflation, % YoY, as of year-end													
USA (core PCE)	2.2	1.5	1.4	1.2	1.8	1.6	2.0	1.5	1.6	5.2	4.9	3.1	3.0
Euro area (core HICP)	1.7	1.3	0.8	1.1	0.9	0.9	0.9	1.3	0.2	2.7	5.2	3.4	2.7
China (core CPI)	–	1.1	0.8	1.5	2.0	2.1	1.7	1.4	0.4	1.0	0.5	0.6	0.2
Budget deficit, % of GDP, moving average as of Q4 of corresponding year													
USA	-2.5	-7.5	-2.8	-2.6	-3.1	-3.5	-3.9	-4.7	-15.7	-10.9	-5.5	-6.4	-7.0
Euro area	-2.0	-4.8	-2.5	-2.0	-1.5	-1.0	-0.5	-0.5	-7.1	-5.2	-3.5	-3.6	-3.1
China	-0.8	-1.4	-3.7	-3.4	-2.3	-3.6	-4.0	-4.8	-6.1	-3.7	-4.6	-4.5	-4.8
Policy rate, % p.a., period average													
USA (upper bound)	3.3	0.3	0.3	0.3	0.5	1.1	1.9	2.3	0.5	0.3	1.9	5.2	5.3
Euro area (deposit facility rate)	1.9	0.3	-0.1	-0.2	-0.4	-0.4	-0.4	-0.4	-0.5	-0.5	0.1	3.3	3.7
China	–	–	5.7	4.9	4.3	4.3	4.3	4.3	3.9	3.8	3.7	3.6	3.4

Sources: national statistical agencies, US Fed, ECB, IMF, Investing.com, Bank of Russia calculations.

BALANCE OF PAYMENTS INDICATORS IN 2022–2025, BY QUARTER

Table 5

($ BN, UNLESS INDICATED OTHERWISE)

Indicators	2022				2023				2024				2025		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Current account	**71.0**	**77.2**	**48.1**	**41.5**	**14.7**	**7.6**	**15.3**	**11.8**	**24.5**	**16.8**	**7.8**	**14.3**	**17.9**	**4.0**	
Balance of trade	84.8	95.1	72.8	62.8	29.6	26.3	33.4	32.3	34.8	35.2	30.5	31.6	30.3	25.1	
Exports	154.6	151.8	141.7	144.0	104.3	103.4	109.1	108.0	101.9	106.4	109.1	116.3	96.7	99.6	
Imports	69.8	56.7	68.8	81.2	74.6	77.2	75.7	75.6	67.0	71.2	78.6	84.7	66.4	74.6	
Balance of services	-3.5	-3.5	-6.8	-8.3	-7.7	-9.0	-10.6	-8.8	-6.8	-9.3	-12.4	-9.9	-7.7	-12.6	
Exports	13.9	11.1	11.4	12.4	9.7	10.3	9.4	11.0	10.7	10.0	10.9	11.4	10.2	11.9	
Imports	17.4	14.6	18.2	20.7	17.5	19.3	20.0	19.8	17.5	19.3	23.3	21.4	17.9	24.6	
Balance of primary and secondary income	-10.3	-14.4	-18.0	-13.0	-7.2	-9.6	-7.5	-11.8	-3.6	-9.1	-10.3	-7.3	-4.7	-8.4	
Capital account	**0.0**	**-1.1**	**-1.9**	**-1.5**	**-0.1**	**0.0**	**0.0**	**-1.3**	**0.0**	**-0.1**	**-0.1**	**0.0**	**-0.1**	**-0.1**	
Current account balance and capital account balance	**71.0**	**76.1**	**46.1**	**40.0**	**14.6**	**7.6**	**15.2**	**10.5**	**24.5**	**16.7**	**7.7**	**14.3**	**17.9**	**3.9**	
Financial account balance, net of reserves	**79.0**	**73.8**	**42.7**	**38.9**	**17.3**	**6.2**	**14.3**	**10.9**	**29.1**	**10.6**	**9.2**	**8.0**	**15.7**	**4.4**	
Net incurrence of liabilities	-31.8	-51.4	-15.2	-25.5	-11.7	4.8	8.2	-8.6	-4.3	2.7	1.2	9.4	3.2	0.5	
Net acquisition of financial assets, net of reserves	47.1	22.4	27.4	13.4	5.6	11.0	22.6	2.2	24.8	13.3	10.3	17.4	19.0	4.9	
Net errors and omissions	**-2.6**	**-1.1**	**-1.7**	**-0.7**	**-2.4**	**-2.8**	**-3.1**	**-0.9**	**-2.3**	**-7.4**	**-1.7**	**1.3**	**-8.0**	**-2.9**	
Change in reserves	**-10.6**	**1.2**	**1.8**	**0.4**	**-5.1**	**-1.4**	**-2.3**	**-1.2**	**-6.9**	**-1.3**	**-3.2**	**7.6**	**-5.9**	**-3.4**	
Goods and services exports, % YoY	60.8	27.7	4.7	-8.6	-32.3	-30.2	-22.6	-23.9	-1.2	2.4	1.3	7.3	-5.0	-4.2	
Goods and services imports, % YoY	12.6	-22.9	-11.8	-6.0	5.7	35.2	10.0	-6.3	-8.2	-6.2	6.5	11.1	-0.3	9.5	
Memo item															
Brent crude price, $ per barrel, quarterly average	99	113	99	88	81	78	87	84	83	85	80	75	76	68	69
Nominal exchange rate, RUB/USD, quarterly average	84.7	66.0	59.4	62.3	72.7	81.0	94.1	92.7	90.8	90.6	89.2	99.6	93.1	80.8	80.6

Sources: Bank of Russia, World Bank.

EXTERNAL CONDITIONS IN 2022–2025, BY QUARTER

Table 6

Indicators	2022				2023				2024				2025	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
GDP, % YoY, period average														
USA	4.0	2.5	2.3	1.3	2.3	2.8	3.2	3.2	2.9	3.0	2.7	2.5	2.0	2.0
Euro area	5.5	4.1	2.8	1.9	1.5	0.7	0.2	0.3	0.6	0.6	1.0	1.3	1.5	1.4
China	4.7	1.1	3.9	3.0	4.5	6.6	5.0	5.3	5.0	4.8	4.6	5.4	5.2	5.3
Inflation, % YoY, as of year-end														
USA (core PCE)	5.6	5.3	5.6	5.0	4.8	4.4	3.7	3.0	3.0	2.6	2.7	2.9	2.7	2.8
Euro area (core HICP)	3.0	3.7	4.8	5.2	5.7	5.5	4.5	3.4	2.9	2.8	2.6	2.7	2.4	2.4
China (core CPI)	0.9	0.8	0.5	0.5	0.5	0.3	0.8	0.6	0.6	0.5	-0.1	0.2	0.3	0.6
Budget deficit, % of GDP, period average														
USA	-7.1	-4.2	-5.4	-5.5	-6.8	-8.4	-6.2	-6.4	-5.9	-5.5	-6.3	-7.0	-7.0	-6.4
Euro area	-4.1	-3.1	-3.1	-3.5	-3.6	-3.9	-3.8	-3.6	-3.6	-3.5	-3.3	-3.1	-3.0	
China	-3.7	-5.2	-5.4	-4.6	-4.9	-3.8	-4.0	-4.5	-4.7	-4.8	-4.9	-4.8	-5.0	-5.1
Policy rate, % p.a., period average														
USA (upper bound)	0.29	0.95	2.37	3.84	4.69	5.16	5.43	5.50	5.5	5.5	4.9	4.5	4.5	4.5
Euro area (deposit facility rate)	-0.5	-0.5	0.0	1.3	2.3	3.2	3.7	4.0	4.0	3.9	3.7	3.3	2.8	2.2
China	3.7	3.7	3.7	3.7	3.7	3.6	3.5	3.5	3.5	3.5	3.4	3.2	3.1	3.0

Sources: national statistical agencies, US Fed, ECB, IMF, Investing.com, Bank of Russia calculations.

MACROECONOMIC INDICATORS, BY BANK OF RUSSIA MAIN BRANCH *Table 7*
(% GROWTH YOY, UNLESS INDICATED OTHERWISE)

Indicators	Regions	2004–2008 average	2009–2013 average	2017	2018	2019	2020	2021	2022	2023	2024	2025
												August*
Inflation (September 2025)	MB for Central FD	11.4	7.6	3.2	4.7	3.0	4.7	8.3	12.5	7.4	9.9	7.1
	North-Western MB	11.9	7.2	3.1	4.1	3.0	4.8	8.5	11.9	7.1	9.3	8.8
	Volga-Vyatka MB	11.7	7.2	2.0	4.3	2.8	5.5	8.6	12.4	7.1	9.6	9.0
	Southern MB	12.1	7.7	2.2	4.2	2.9	5.5	9.2	11.7	7.8	9.6	8.1
	Ural MB	11.5	7.4	2.1	3.6	3.1	4.4	7.7	11.0	6.7	9.0	8.2
	Siberian MB	10.8	7.1	2.0	4.3	3.7	4.9	9.3	12.7	8.2	9.5	8.4
	Far Eastern MB	11.3	7.3	2.1	3.8	3.8	5.0	6.7	11.9	8.0	8.5	8.2
	Russia	11.4	7.3	2.5	4.3	3.0	4.9	8.4	11.9	7.4	9.5	8.0
Industrial production	MB for Central FD	6.6	2.3	3.9	5.6	7.4	10.2	19.8	9.2	16.1	14.7	-3.0
	North-Western MB	7.7	2.1	3.0	2.9	3.4	-2.6	5.2	0.5	5.3	8.4	-1.9
	Volga-Vyatka MB	5.3	3.5	2.3	2.0	3.0	-2.0	8.7	3.0	8.9	8.3	1.3
	Southern MB	8.8	4.0	9.8	5.1	3.1	-0.2	5.2	5.3	4.3	3.8	0.3
	Ural MB	3.5	0.9	3.4	3.7	5.5	-2.2	4.2	0.0	2.8	1.9	-1.5
	Siberian MB	3.9	6.2	3.0	3.4	2.0	-3.7	3.0	1.2	0.9	2.2	-3.6
	Far Eastern MB	9.8	6.0	3.1	5.5	6.5	-4.5	3.0	-4.2	6.3	3.4	-4.2
	Russia	5.4	1.1	3.7	3.5	3.4	-2.1	6.3	0.7	4.3	5.6	0.5
Fixed capital investment (2025 H1)	MB for Central FD	14.1	2.4	8.4	11.7	15.0	1.2	14.5	1.9	8.2	4.1	6.3
	North-Western MB	13.8	0.9	5.0	15.5	-15.9	-1.6	3.6	-2.2	8.7	15.6	17.0
	Volga-Vyatka MB	16.0	4.8	0.6	-0.4	0.5	-1.5	5.5	4.7	17.9	6.2	7.6
	Southern MB	13.5	9.1	13.9	-3.9	-5.8	0.9	-0.3	8.7	11.4	7.8	5.2
	Ural MB	11.4	3.4	-1.1	4.3	-3.0	0.4	0.7	10.0	5.6	8.8	-8.6
	Siberian MB	19.1	4.4	2.3	4.5	7.4	1.0	11.4	8.1	6.9	4.7	9.6
	Far Eastern MB	16.1	2.2	10.8	7.8	8.2	-7.5	13.8	14.5	20.6	9.1	3.8
	Russia	15.0	2.2	4.8	5.4	2.1	-0.1	8.6	6.7	9.8	7.4	4.3
Construction**	MB for Central FD	7.2	-1.9	1.8	1.5	4.9	6.9	5.2	7.8	10.3	-2.1	2.3
	North-Western MB	11.3	-2.3	-14.1	4.9	-9.4	-6.0	3.7	-3.6	6.1	3.5	0.2
	Volga-Vyatka MB	14.6	4.8	-0.6	-7.0	3.5	-0.9	13.8	12.0	11.6	-1.7	3.4
	Southern MB	17.1	8.8	14.1	1.1	-2.5	-0.8	6.5	6.9	9.1	7.6	-19.6
	Ural MB	15.3	-2.7	-0.9	42.6	-5.3	10.0	7.3	-0.5	5.6	2.8	-3.3
	Siberian MB	9.0	2.0	-5.2	-13.1	6.7	0.9	14.0	18.5	2.7	-3.8	-0.2
	Far Eastern MB	2.1	-0.7	7.0	15.9	34.1	-7.6	-0.7	12.6	25.5	-3.8	-1.3
	Russia	15.6	-0.1	-1.1	6.3	2.1	2.1	7.0	7.5	9.0	2.1	0.1

Indicators	Regions	2004–2008 average	2009–2013 average	2017	2018	2019	2020	2021	2022	2023	2024	2025
												August*
Retail	MB for Central FD	11.7	4.0	2.3	4.2	2.3	-2.1	8.5	-10.5	6.7	6.8	0.9
	North-Western MB	15.0	3.2	2.8	3.7	2.0	0.2	11.7	-6.3	13.1	6.5	3.8
	Volga-Vyatka MB	15.6	4.4	2.0	4.0	1.1	-4.4	6.0	-3.6	9.8	8.1	2.7
	Southern MB	17.4	5.6	1.2	1.7	1.9	-3.4	11.6	-2.6	10.5	6.5	4.8
	Ural MB	19.7	2.7	0.6	3.4	1.5	-4.2	4.3	-5.1	9.0	10.7	3.7
	Siberian MB	14.7	2.6	1.5	2.8	2.7	-3.3	7.0	-2.8	8.7	9.6	3.9
	Far Eastern MB	11.5	4.0	2.0	4.0	3.9	-2.7	5.5	-0.7	3.9	8.2	4.8
	Russia	14.0	3.6	1.3	2.8	1.9	-3.2	7.8	-6.5	8.0	7.7	2.8
Commercial services	MB for Central FD	4.9	0.1	-1.1	3.0	4.4	-17.7	23.5	7.3	9.6	4.0	0.2
	North-Western MB	7.4	1.2	0.4	4.4	1.1	-15.4	19.2	4.8	10.2	2.4	1.7
	Volga-Vyatka MB	8.8	2.0	0.4	0.9	0.5	-10.6	10.9	3.6	4.5	5.5	8.2
	Southern MB	9.5	3.2	0.6	4.2	1.7	-9.3	15.1	5.3	3.2	5.4	4.9
	Ural MB	8.8	1.8	0.9	4.9	0.3	-15.6	14.7	2.7	5.8	6.3	3.1
	Siberian MB	7.0	1.9	2.2	2.4	0.5	-10.5	11.8	5.5	6.0	3.5	2.2
	Far Eastern MB	6.9	4.0	0.6	1.2	-2.3	-18.2	13.2	-0.9	1.7	1.3	-2.0
	Russia	7.0	1.2	0.2	3.2	1.7	-14.6	17.2	5.0	6.9	4.3	2.1
Nominal wage (July 2025)	MB for Central FD	28.7	11.9	5.8	12.5	11.1	7.5	12.6	13.0	13.4	19.1	18.1
	North-Western MB	25.9	10.9	8.2	12.1	8.6	5.6	11.1	14.1	12.4	16.4	12.8
	Volga-Vyatka MB	25.9	11.5	7.0	9.4	8.0	7.0	11.6	15.1	18.0	22.0	16.5
	Southern MB	26.0	12.9	6.5	11.3	7.7	7.0	10.0	12.7	14.9	19.1	15.2
	Ural MB	22.8	10.2	6.5	9.4	7.4	6.9	9.9	14.5	15.5	18.7	13.3
	Siberian MB	23.6	11.4	6.8	12.3	9.2	7.1	10.5	16.9	16.2	18.0	14.6
	Far Eastern MB	22.5	12.6	6.9	11.7	9.3	6.9	9.9	12.4	13.9	17.3	13.3
	Russia	25.8	11.5	6.7	11.6	9.5	7.3	11.5	14.1	14.6	19.0	16.0
Real money income (2025 Q2)	MB for Central FD	9.0	4.3	0.3	2.2	3.0	-1.3	5.4	3.1	7.9	10.5	8.1
	North-Western MB	9.3	4.1	0.9	3.0	0.8	0.2	5.8	3.2	5.4	8.7	5.3
	Volga-Vyatka MB	12.1	4.6	-2.3	0.0	1.3	-2.2	2.1	4.0	6.0	8.4	5.9
	Southern MB	13.2	5.6	0.0	1.2	1.0	-1.5	4.1	4.3	4.6	7.9	6.2
	Ural MB	12.6	1.7	-1.0	0.8	1.4	-2.9	1.0	4.1	7.1	8.4	3.8
	Siberian MB	11.8	1.6	0.0	0.9	0.8	-1.0	2.0	5.9	6.3	7.2	4.1
	Far Eastern MB	9.0	4.0	-0.6	3.3	2.0	-1.5	2.3	6.9	3.7	5.9	6.9
	Russia	10.8	3.9	-0.2	1.7	1.9	-1.4	3.9	4.0	6.5	8.4	5.6
Unemployment, % SA	MB for Central FD	3.9	4.2	3.3	2.9	2.9	3.9	3.5	3.0	2.5	1.8	1.4
	North-Western MB	5.1	5.2	4.2	3.9	3.5	5.0	3.9	3.2	2.7	2.2	2.0
	Volga-Vyatka MB	6.7	6.3	4.4	4.2	4.0	4.9	3.9	3.2	2.4	1.9	1.6
	Southern MB	11.8	10.1	7.8	7.4	7.4	8.9	7.8	6.4	5.3	4.6	4.1
	Ural MB	6.6	7.1	5.5	4.8	4.4	5.7	4.4	3.3	2.5	1.9	1.6
	Siberian MB	8.8	8.3	7.3	6.8	6.3	7.6	6.2	4.8	3.6	3.0	2.8
	Far Eastern MB	7.7	7.7	5.6	5.2	5.0	5.4	4.6	3.9	3.0	2.4	1.9
	Russia	6.8	6.6	5.2	4.8	4.6	5.8	4.8	3.9	3.2	2.5	2.1

* *Unless indicated otherwise in the brackets under the name of the indicator.*
** *The column '2004–2008 average' for construction gives 2006–2008 averages due to the lack of regional data until 2006.*
Sources: Rosstat, Bank of Russia calculations.

REQUIRED RESERVE RATIOS

Table 8

(%)

Effective date	Ruble liabilities		Foreign currency liabilities of banks, NCIs, and foreign banks' branches	
	banks with universal licence, NCIs, and foreign banks' branches	banks with a basic licence	friendly states' currencies	unfriendly states' currencies
01.06.2023	4.50	1.00	6.00	8.50

Liabilities to non-resident legal entities, liabilities to individuals, and other liabilities.
The effective date for foreign banks' branches is 1 August 2025.
For details, refer to the Required reserve ratios.
Source: Bank of Russia.

REQUIRED RESERVE AVERAGING RATIOS

Table 9

Effective date	Banks	NCIs and foreign banks' branches
03.03.2022	0.9	1.0

The effective date for foreign banks' branches is 1 August 2025.
Source: Bank of Russia.

INTEREST RATES OF BANK OF RUSSIA'S MONETARY POLICY[1] AND RUONIA FROM 2023

Table 10

(% P.A.)

Period	Key rate	Key rate change, pp	RUONIA (average)[2]	Standing overnight deposit facilities – lower bound of interest rate corridor	Main and fine-tuning auctions[3]	Standing liquidity providing operations[4]		Long-term auctions[5]		
						Operations within PM[6] – upper bound of interest rate corridor	Operations within SM[7]	Repo auctions		Loan auctions
				1 day	1 week and from 1 to 6 days	From 1 to 30 days[8]	From 1 to 180 days[9]	1 month	1 year	3 months
Rule: spread to key rate, pp				-1.00	0.00	+1.00	+1.75	+0.10	+0.25	
From 27.10.2025	16.50	-0.50		15.50	16.50	17.50	18.25	16.60	16.75	16.75
15.09.2025–26.10.2025	17.00	-1.00	16.70[10]	16.00	17.00	18.00	18.75	17.10	17.25	17.25
28.07.2025–14.09.2025	18.00	-2.00	17.74	17.00	18.00	19.00	19.75	18.10	18.25	18.25
09.06.2025–27.07.2025	20.00	-1.00	19.60	19.00	20.00	21.00	21.75	20.10	20.25	20.25
28.10.2024–08.06.2025	21.00	2.00	20.92	20.00	21.00	22.00	22.75	21.10	21.25	21.25
16.09.2024–27.10.2024	19.00	1.00	18.54	18.00	19.00	20.00	20.75	19.10	19.25	19.25
29.07.2024–15.09.2024	18.00	2.00	17.90	17.00	18.00	19.00	19.75	18.10	18.25	18.25
18.12.2023–28.07.2024	16.00	1.00	15.73	15.00	16.00	17.00	17.75	16.10	16.25	16.25
30.10.2023–17.12.2023	15.00	2.00	14.83	14.00	15.00	16.00	16.75	15.10	15.25	15.25
18.09.2023–29.10.2023	13.00	1.00	12.73	12.00	13.00	14.00	14.75	13.10	13.25	13.25
15.08.2023–17.09.2023	12.00	3.50	11.95	11.00	12.00	13.00	13.75	12.10	12.25	12.25
24.07.2023–14.08.2023	8.50	1.00	8.33	7.50	8.50	9.50	10.25	8.60	8.75	8.75
01.01.2023–23.07.2023	7.50	-0.50	7.26	6.50	7.50	8.50	9.25	7.60	7.75	7.75

[1] *Including also interest rates within the SM established by the Bank of Russia Board of Directors.*

[2] *The average over the period including all calendar days, based on the assumption that the interest rate on weekends was the same as on the business day preceding these weekends.*

[3] *This is the maximum possible interest rate in an application for deposit auctions and the minimum possible interest rate in an application for repo auctions. The decision on the type (deposit or repo) of an auction is made depending on the liquidity situation.*

[4] *Loans and repos for more than one day are provided at a variable interest rate linked to the Bank of Russia key rate.*

[5] *This is the minimum possible interest rate in an application. Based on the results of auctions, repos are conducted and loans are issued at a variable interest rate linked to the Bank of Russia key rate. For one-month repos, a variable interest rate is applied beginning from 9 January 2023 (earlier, a fixed rate was set). Long-term repo auctions were conducted weekly from 9 January 2023 to 11 December 2023, and one-month repo auctions – from 25 November 2024 to 3 March 2025. Loan auctions have not been held since April 2016.*

[6] *Before the introduction of the PM / SM – the interest rate on loans, repos and FX swaps for 1 day, as well as the interest rate on loans secured by non-marketable assets for 2 to 90 days, and the interest rate on Lombard loans for 2 to 90 days.*

[7] *Before the introduction of the PM / SM – the interest rate on loans secured by non-marketable assets for 91 to 549 days.*

[8] *Repos for 1 day and loans for 1 to 30 days.*

[9] *Repos for 1 to 180 days and loans secured by non-marketable assets for 1 to 180 days.*

[10] *For the period from 15 September 2025 to23 October 2025.*

Source: Bank of Russia.

USE OF MONETARY POLICY INSTRUMENTS[1] FROM 2023

Table 11

(₽ BN)

Start of business	Standing overnight deposit facilities	Repo auctions				Standing liquidity providing operations			
		Deposit auctions (main and fine-tuning auctions)	Repo auctions (main and fine-tuning auctions)	Long-term repo auctions		Overnight loans	Repos[2]	Lombard loans[2]	Loans secured by non-marketable assets[2]
	1 day	1 week and from 1 to 6 days	1 week and from 1 to 6 days	1 month	1 year	1 day	From 1 to 180 days	From 1 to 30 days	From 1 to 180 days
01.10.2025	3,255.5	0.0	1,306.3	0.0	0.0	0.0	4.5	66.0	1,302.5
01.07.2025	3,082.3	0.0	1,094.2	0.0	0.0	0.0	0.0	69.3	642.3
01.04.2025	2,857.9	320.0	0.0	0.0	0.0	0.1	48.6	109.4	2,120.0
01.01.2025	1,579.7	2,646.5	0.0	1,405.3	0.0	0.0	9.9	152.5	2,494.0
01.10.2024	1,511.9	3,368.3	0.0	0.0	0.0	0.0	392.3	11.2	5,118.2
01.07.2024	1,245.5	2,303.7	0.0	0.0	113.6	0.0	30.0	11.2	1,584.8
01.04.2024	1,081.3	2,123.4	0.0	0.0	451.3	0.0	56.8	29.3	2,198.0
01.01.2024	1,038.4	2,341.3	0.0	101.5	783.0	0.1	11.2	34.3	2,229.4
01.10.2023	914.1	1,975.6	0.0	101.0	1,101.7	0.0	0.3	24.1	880.4
01.07.2023	1,007.8	1,746.6	0.0	301.7	1,076.5	0.0	1.5	25.4	521.3
01.04.2023	1,094.3	2,450.0	0.0	1,005.8	759.8	0.1	7.6	32.2	266.4
01.01.2023	1,328.2	3,621.2	0.0	1,007.3	484.3	0.0	7.9	95.9	213.1

[1] *The Bank of Russia's claims on liquidity providing instruments and liabilities on liquidity absorbing instruments.*

[2] *Including liquidity providing operations of both the PM and SM. Until 16 October 2023 – repos for 1 day, Lombard loans for 1 to 90 days, and loans secured by non-marketable assets for 1 to 549 days.*

Source: Bank of Russia.

INTEREST RATES ON BANK OF RUSSIA'S SPECIAL FACILITIES[1] FROM 2023

Table 12

(% P.A.)

Period	Support for economic activities (loans secured by insurance contracts of JSC Russian Agency for Export Credit and Investment Insurance)[2]	Support for large investment projects	Support for investment projects in certain constituent territories of Russia	Support for SMEs against sureties from JSC Russian Small and Medium Business Corporation or backed by OFZ[3]	Support for SMEs against sureties from JSC Russian Small and Medium Business Corporation in certain constituent territories of Russia[4]
	Up to 3 years	Up to 3 years	Up to 1 year	Up to 3 years	Up to 1 year
Rule:	Key rate reduced by 1.50 pp[5]	The lower of: 9.00% p.a. or key rate reduced by 1.00 pp	Key rate increased by 0.25 pp	Key rate reduced by 1.50 pp	The higher of: 8.00% p.a. or key rate reduced by 4.00 pp
From 27.10.2025	15.00	9.00	16.75	15.00	12.50
15.09.2025–26.10.2025	15.50	9.00	17.25	15.50	13.00
28.07.2025–14.09.2025	16.50	9.00	18.25	16.50	14.00
09.06.2025–27.07.2025	18.50	9.00	20.25	18.50	16.00
28.10.2024–08.06.2025	19.50	9.00	21.25	19.50	17.00
16.09.2024–27.10.2024	17.50	9.00	19.25	17.50	15.00
29.07.2024–15.09.2024	16.50	9.00	18.25	16.50	14.00
13.05.2024–28.07.2024	14.50	9.00	16.25	14.50	–
18.12.2023–12.05.2024	–	9.00	16.25	14.50	–
30.10.2023–17.12.2023	–	9.00	15.25	13.50	–
18.09.2023–29.10.2023	–	9.00	13.25	11.50	–
17.08.2023–17.09.2023	–	9.00	12.25	10.50	–
15.08.2023–16.08.2023	6.50	9.00	12.25	10.50	–
24.07.2023–14.08.2023	6.50	7.50	8.75	7.00	–
01.01.2023–23.07.2023	6.50	6.50	7.75	6.00	–

[1] *Liquidity providing facilities aimed at encouraging bank lending to certain industries the development of which is limited by structural factors. Within the framework of these facilities, the Bank of Russia provides funds to credit institutions for longer periods and at relatively lower interest rates, compared to the PM and SM operations. Interest rates on new loans issued over the specified period that were approved by the Bank of Russia Board of Directors.*

[2] *No new loans were issued from 17 August 2023 to 12 May 2024.*

[3] *Loans issued from 20 June 2023 and secured by OFZ.*

[4] *Loans are issued from 30 August 2024 to 31 August 2026.*

[5] *The rule for determining the interest rate changed from 1 March 2023; previously, the lower of the two interest rates was applied: 6.5% p.a. or the key rate.*

Source: Bank of Russia.

USE OF BANK OF RUSSIA'S SPECIAL FACILITIES[1] FROM 2023

Table 13

(₽ BN)

Start of business	Bank of Russia claims on credit institutions, total	Support for economic activities (loans secured by insurance contracts of JSC Russian Agency for Export Credit and Investment Insurance[2]	Support for large investment projects	Support for investment projects in certain constituent territories of Russia	Support for SMEs against sureties from JSC Russian Small and Medium Business Corporation or backed by OFZ[3]	Support for SMEs through JSC SME Bank[4]	Support for SMEs in industries hardest hit by coronavirus infection[5]	Support for SMEs in 2022[6]
		Up to 3 years	Up to 3 years	Up to 1 year	Up to 3 years	Up to 3 years	Up to 1.5 years	Up to 1 year
Limit as of 01.10.2025		75.0	150.0	100.0	320.0			–
01.10.2025	246.2	66.7	13.9	21.7	143.9	0.0	0.0	0.0
01.07.2025	257.2	63.8	16.0	20.1	157.3	0.0	0.0	0.0
01.04.2025	293.9	72.4	17.2	30.8	173.5	0.0	0.0	0.0
01.01.2025	300.5	74.7	17.6	23.8	184.4	0.0	0.0	0.0
01.10.2024	282.4	52.9	18.2	14.6	196.7	0.0	0.0	0.0
01.07.2024	296.2	58.4	19.1	0.0	218.7	0.0	0.0	0.0
01.04.2024	294.3	34.5	21.0	2.0	236.8	0.0	0.0	0.0
01.01.2024	325.4	47.5	23.9	2.0	252.0	0.0	0.0	0.0
01.10.2023	344.2	66.7	26.2	12.0	236.7	0.2	2.4	0.0
01.07.2023	331.7	52.4	29.6	2.0	230.0	0.4	14.9	2.4
01.04.2023	354.5	47.1	32.7	0.0	202.4	0.7	32.0	39.6
01.01.2023	329.5	45.4	37.3	0.0	139.0	0.9	39.8	67.1

[1] *Liquidity providing facilities aimed at encouraging bank lending to certain industries the development of which is limited by structural factors. Within the framework of these facilities, the Bank of Russia provides funds to credit institutions for longer periods and at relatively lower interest rates, compared to the PM and SM operations.*

[2] *No new loans were issued from 17 August 2023 to 12 May 2024.*

[3] *Loans issued from 20 June 2023 and secured by OFZ; loans issued in certain constituent territories of the Russian Federation from 30 August 2024 to 31 August 2026.*

[4] *The issue of loans ended from 23 August 2021; claims on loans issued by JSC SME Bank to its partner banks and microfinance organisations under the SME Financial Support Programme for lending to SMEs and its partner leasing companies for property leasing to SMEs.*

[5] *Loans issued from 1 November 2021 to 30 December 2021 and from 24 January 2022 to 1 May 2022.*

[6] *Loans issued from 11 March 2022 to 30 December 2022.*

Source: Bank of Russia.

GLOSSARY

AUTONOMOUS LIQUIDITY FACTORS

These factors are not related to the central bank's liquidity management operations and interest rates in the overnight segment of the money market. They include changes in the amount of cash in circulation, changes in the balances of general government accounts with the Bank of Russia, regulation of the required reserves, and the Bank of Russia's operations in the domestic FX market.

BALANCE OF PAYMENTS OF THE RUSSIAN FEDERATION

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

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 Payment System and for fulfilling the reserve requirements.

BANK OF RUSSIA KEY RATE

The principal instrument of the Bank of Russia's monetary policy. This is the interest rate that the Bank of Russia applies when conducting short-term liquidity providing or absorbing transactions with commercial banks in order to form such monetary conditions in the economy that would help keep inflation at the target. A change in the key rate influences other interest rates in the economy and, through them, savings, consumption, investment, and ultimately, aggregate demand in the economy and inflation. 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. The key rate is set by the Bank of Russia Board of Directors.

BASIC OIL AND GAS REVENUES

The amount of oil and gas revenues earned with the Urals crude price at an equilibrium level and used to calculate the maximum amount of federal budget expenditures within the framework of the fiscal rule.

BUSINESS CLIMATE INDEX (BCI) OF THE BANK OF RUSSIA

An analytical measure calculated monthly based on the estimates of companies participating in the Bank of Russia's monitoring. The BCI is built similarly to the method of Germany's ifo economic institute and shows both actual and expected changes in output and demand.

CLAIMS OF THE BANKING SYSTEM ON THE ECONOMY

The banking system's claims on the economy mean all claims of the banking system on non-financial and financial organisations and households in 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 participation in non-financial and financial organisations' equity, and other receivables on settlements with non-financial and financial organisations and households.

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. The CPI 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

The measure of inflation characterising its underlying component. Core inflation is quantified based on the core CPI. The difference between the core CPI and the CPI is that the former is calculated excluding changes in prices for certain products and services that are influenced by administrative and seasonal factors (certain categories of fruit and vegetables, passenger transport services, communications, housing and utility services, motor fuels, etc.).

CREDIT DEFAULT SWAP (CDS)

A financial instrument enabling a buyer to insure against a certain credit event (e.g. a default) related to a third party's financial liabilities in exchange for regular payments of premiums (a CDS spread) to the CDS seller. The higher is the premium paid, the riskier are the liabilities that are the subject of a CDS.

DEFLATION

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

DISINFLATION

A slowdown in the growth of the overall level of product and service prices in the economy.

DOLLARISATION OF BANK DEPOSITS (LOANS)

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

ECONOMIC GROWTH

An increase in the output of products and services in an economic system (a country, a region, the world). The key measures of economic growth are an increase in total real GDP or GDP per capita.

FEDERAL GOVERNMENT BONDS

Domestic government securities issued by the Ministry of Finance of the Russian Federation as part of 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 both internal and 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. Nevertheless, 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 case of any threats to financial stability.

INFLATION

A steady rise in the overall level of prices for goods and services in the economy. Inflation is generally associated with changes over time in the price of the consumer basket, that is, a set of food and non-food products and services consumed by an average household (see also 'Consumer Price Index (CPI)'). The Bank of Russia sets the inflation target for the annual growth rate of consumer prices in Russia, that is, for the change in prices for goods and services purchased by households over the past 12 months (calculated based on the CPI).

INFLATION EXPECTATIONS

Economic agents' expectations about price growth in the future. Inflation expectations are formed by businesses, households, financial markets, and analysts. Economic agents make their economic decisions and plans for the future (including those related to consumption, savings, 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 and forecast of a wide range of macroeconomic indicators; the central bank seeks to provide clear reference points for households and businesses, including through enhancing communication transparency.

INTEREST RATE CORRIDOR

This instrument is used to manage interest rates in the overnight segment of the money market. The structure of the interest rate corridor is as follows: the Bank of Russia key rate is the centre of the corridor, while interest rates on overnight standing facilities (liquidity providing operations and deposit operations) determine the upper and the lower bounds of the corridor symmetrically to the key rate.

INTEREST RATE RISK

Risk of financial losses, including lost profit, due to unfavourable changes in interest rates.

INTEREST RATE SWAP (IRS)

A financial contract between two parties who agree to regularly pay interest in a certain currency at specified periods on the notional principal amount being the subject of the swap. One of the parties pays interest at a fixed rate set when the transaction is concluded, and the other party pays interest at a variable rate (a market rate which can be either an interbank lending rate or a variable coupon bond rate).

LIQUIDITY ABSORBING OPERATIONS

Operations to either raise deposits or offer Bank of Russia bonds on a repayable basis.

MIRRORING OPERATIONS

The Bank of Russia's operations to buy (sell) foreign currency in the domestic FX market conducted in connection with the operations of the Ministry of Finance to replenish or use the NWF's assets, including within the framework of the fiscal rule. Mirroring means that the Bank of Russia conducts its operations in the same amount but in the opposite direction relative to the direct conversion transactions of the Ministry of Finance with the Bank of Russia. These operations are aimed at reducing the impact of the external environment and fiscal flows on the ruble exchange rage, aggregate demand, and inflation.

MONETARY BASE

The amount of cash outside the Bank of Russia and credit institutions' funds in accounts and in 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 in Bank of Russia bonds.

MONETARY CONDITIONS

The state of the financial sector affecting economic agents' decisions on consumption, investment, savings, and borrowings. The extent of monetary tightness is characterised by interest rates, credit spreads, inflation expectations, the indices of changes in bank lending conditions, the growth rates of credit and deposit aggregates, and the growth rates of the monetary aggregates.

MONEY SUPPLY

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

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) organisations and individuals) in settlement, current and other demand accounts (including in bank card accounts), time deposits, and other raised fixed-term funds in the banking system denominated in Russian rubles, as well as interest accrued on them.

NEUTRAL RATE OF INTEREST

The level of the interest rate (in particular, of the central bank's key rate and overnight interbank interest rates forming close to the key rate) that sustainably supports the economy at full employment (when output is at its potential and unemployment is at its 'natural' level) and maintains inflation steadily at the target. When the key rate is neutral, monetary policy neither accelerates nor decelerates inflation.

OUTPUT

The total value of goods and services generated by residents of the economy over a period under review. GDP is one of the measures of output. GDP characterises the total value of goods and services produced in the economy by all industries and intended for final consumption, accumulation, and exports (excluding imports).

OUTPUT GAP

This is a non-observed variable showing how much actual output has deviated from potential output. When the actual growth rate of output exceeds its potential due to cyclical factors, this forms a positive (proinflationary) output gap in the economy and price growth exceeds the inflation target. Contrastingly, when the actual increase in output is below the potential pace, the output gap is negative (disinflationary), and price growth is slower as compared to the inflation target.

PARALLEL IMPORTS

The import of original foreign-made goods into the country not authorised by trademark owners.

POTENTIAL OUTPUT

The overall level of output that the economy is capable to generate with the full utilisation of production factors – labour, capital, and technologies – under the existing resource, technological and institutional constraints. The growth rate of potential output is a steady path of the economy in a long-term equilibrium. When the economy is in a long-term equilibrium, its growth rate is equal to its potential, inflation is at the target, and unemployment is at its 'natural' level.

REQUIRED RESERVES

The funds that credit institutions must hold in their required reserve accounts and correspondent accounts opened with the Bank of Russia. They are calculated by applying the required reserve ratios (which may range from 0% to 20%) to a credit institution's reservable liabilities. Over an averaging period, the funds to be held by a credit institution in its correspondent account must average the amount calculated by applying the averaging ratio to the required reserves. The required ratios, the averaging ratio, and the averaging periods are established by the Bank of Russia Board of Directors.

RUONIA (RUBLE OVERNIGHT INDEX AVERAGE)

Ruble Overnight Index Average is the weighted average interest rate on overnight interbank ruble loans (deposits) reflecting the cost of unsecured overnight borrowing. The Bank of Russia is in charge of the RUONIA methodology, compilation of the list of the panel banks, data collection, and calculation and publication of this benchmark.

STANDING FACILITIES

Liquidity providing and absorbing operations conducted at credit institutions' request at any time during almost the entire operation day of the Bank of Russia PS to fully meet all applications at pre-announced interest rates (provided that credit institutions comply with the established requirements).

STANDING LIQUIDITY PROVIDING OPERATIONS

The Bank of Russia's operations in the form of loans, repos, or FX swaps.

STRUCTURAL BALANCE OF THE BUDGET

The difference between the total of basic oil and gas revenues and non-oil and gas revenues and budget expenditures. It is the indicator of the federal budget execution under the fiscal rule. The structural balance of the budget may be either positive, which is a structural surplus, or negative, which is a structural deficit.

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 surplus of liquidity and the Bank of Russia needs to conduct liquidity absorbing operations. The estimated level of a structural liquidity deficit / surplus is the difference between the Bank of Russia's claims on credit institutions on liquidity providing operations and the Bank of Russia's liabilities to them on liquidity absorbing operations, taking into account the gap between the balances in banks' correspondent accounts and the averaged amount of required reserves. Taking into account the gap between the balances in banks' correspondent accounts and the averaged amount of required reserves helps adjust the indicator for the effect of transactions associated with banks' strategies for required reserve averaging.

STRUCTURAL PRIMARY BALANCE OF THE BUDGET

The difference between the total of basic oil and gas revenues and non-oil and gas revenues and primary federal budget expenditures (non-interest expenses, that is, net of expenditures on public debt servicing). It is the indicator of the federal budget execution under the fiscal rule, as well as the indicator of the fiscal policy stance. Structural means that it is adjusted for the cyclical component. In accordance with the logic of the Russian fiscal rule, the cyclical component is an increase / decrease in oil and gas revenues, i.e. the difference between actual and basic oil and gas revenues resulting from the deviation of the oil price from the baseline level. The total of oil and gas revenues and non-oil and gas revenues is therefore frequently referred to as structural revenues. The structural primary balance of the budget may be either positive, which is a structural primary surplus, or negative, which is a structural primary deficit.

TRANSMISSION MECHANISM

The mechanism of the influence of a key rate change and the signal about its future path on inflation through various financial market segments, savings, consumption, investment, and aggregate demand. A change in the key rate is translated into the economy through multiple channels (interest rate, credit, foreign exchange, balance sheet, inflation expectations channels, etc.). The key rate does not influence the economy instantaneously. It takes 12 to 18 months for the key rate to fully transmit to the economy.

ABBREVIATIONS

AP – averaging period

API – application programming interface ensuring communication between information systems

Bank of Russia PS – Bank of Russia Payment System

BCI – Business Climate Index of the Bank of Russia

bp – basis point (0.01 percentage points)

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

CEE – Central and Eastern Europe

CMTPLI – compulsory motor third party liability insurance

Coupon OBR – Bank of Russia coupon bonds

CPI – Consumer Price Index

CPIF – Consumer Price Index with Fixed Interest Rate

EAEU – Eurasian Economic Union

ECB – European Central Bank

ELB – effective lower bound

EME – emerging market economy

FG – forward guidance (a central bank's signal regarding its monetary policy)

FX – foreign exchange

GDP – gross domestic product

GFC – the global financial crisis of 2007–2008

HICP – Harmonised Index of Consumer Prices

IBL – interbank lending

ICL – irrevocable credit line

IMF – International Monetary Fund

InFOM – Institute of the Public Opinion Foundation

IPO – initial public offering

IRS – interest rate swap

JSC Russian Small and Medium Business Corporation – Joint-stock company Russian Small and Medium Business Corporation

JSC SME Bank – JSC Russian Bank for Small and Medium Enterprises Support

LCR – liquidity coverage ratio

Ministry of Economic Development – the Ministry of Economic Development of the Russian Federation

Ministry of Finance – the Ministry of Finance of the Russian Federation

MPG 2018–2020 – Monetary Policy Guidelines for 2018–2020

MPG 2023–2025 – Monetary Policy Guidelines for 2023–2025

MPG 2024–2026 – Monetary Policy Guidelines for 2024–2026

MPG 2025–2027 – Monetary Policy Guidelines for 2025–2027

MPG 2026–2028 – Monetary Policy Guidelines for 2026–2028

NCI – non-bank credit institution

NOGR – non-oil and gas revenues

NPF – non-governmental pension fund

NWF – National Wealth Fund

OFZ – federal government bonds

OFZ-IN – inflation-indexed federal government bonds

OFZ-PD – fixed coupon federal government bonds

OGR – oil and gas revenues

PCE – Personal Consumption Expenditures Price Index

PM – primary mechanism for providing liquidity

pp – percentage point

PPP – purchasing power parity

QE – quantitative easing

QPM – quarterly projection model

Rosstat – Federal State Statistics Service

RR – required reserves

RUONIA – Ruble Overnight Index Average (weighted average interest rate on overnight interbank ruble loans (deposits))

SA – seasonally adjusted

SAAR – seasonally adjusted annualised rate

SM – supplementary mechanism for providing liquidity

SMEs – small and medium-sized enterprises

UBS – Unified Biometric System

US Fed – US Federal Reserve System

VAT – value added tax

YCC – yield curve control

ZLB – zero lower bound