



Bank of Russia

Monetary Policy

REVIEW



MONETARY POLICY REVIEW

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Please send your answers to the questions asked in the report, suggestions, and remarks thereto,
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SUMMARY

1. The primary objective of the Bank of Russia's monetary policy has been maintaining price stability. This strategy means aiming for a low and stable inflation, which at the same time provides an environment for balanced and sustainable economic growth.
2. Since 2015, the Bank of Russia has implemented inflation targeting in its monetary policy. The transition to this approach occurred gradually over several years. In 2015, the Bank of Russia set a quantitative target of its monetary policy to reduce annual inflation to 4% by the end of 2017 (significantly lower than its rates in all previous years) and to sustain inflation at this level going forward.
3. In 2021, to measure the efficiency of the chosen strategy and the alignment of current monetary policy parameters with evolving realities, the Bank of Russia initiated a comprehensive analysis of its monetary policy during the inflation targeting period – the Monetary Policy Review (hereinafter referred to as the MPR). This paper summarises the findings of the analysis conducted by Bank of Russia staff and internal discussions and invites readers to share their opinions on the most significant issues related to the monetary policy strategy. The complete texts of the authors' research papers are available on the Bank of Russia website in the MPR section.
4. The MPR revealed that the Bank of Russia successfully maintained price stability in periods with no unforeseen negative factors and managed to bring inflation down to the target when influenced by such factors. In doing so, the Bank of Russia provided the necessary environment for the Russian economic growth. Annual inflation dropped to 4% in 2017, it averaged 4.2% between 2017 and 2021. Following a spike in early 2022, inflation quickly retreated. It is expected to get back to the target in 2024. An extended period of low and stable inflation led to a reduction in the risk premium related to macroeconomic uncertainty. Consequently, availability of credit for companies and households increased, promoting lending growth. Overall, the Russian economy's resilience to external shocks has improved during the past period. The combination of inflation targeting strategy (with a floating exchange rate) and the fiscal rule largely accounted for the smaller scale of the Russian economy's decline during crisis periods (2020, 2022) compared to past crisis episodes, before the introduction of inflation targeting and the fiscal rule. According to the research, the monetary policy in 2015–2021 can generally be described as close to optimal in terms of maximising public welfare. Coupled with the fiscal rule, it contributed to reducing output volatility and inflation, consequently increasing economic welfare.
5. The Bank of Russia work experienced in 2014–2022 shows that the developed approach to conducting monetary policy and financial stability mitigates emerging financial risks and prevents their accumulation, maintaining the sustainable functioning of the financial system. Under normal circumstances, the Bank of Russia adheres to separate goal setting for monetary policy and financial stability policy. Monetary policy instruments, such as the key rate, are used to ensure price stability, while the stability of the financial sector is maintained through micro- and macroprudential instruments. However, if there is a significant increase in the likelihood of systemic risk materialisation, the Bank of Russia may utilise monetary policy instruments, including the key rate, to stabilise the financial markets and support the overall stability of the financial sector. The Bank of Russia's operations demonstrate the adequacy of monetary policy instruments for the role of a lender of last resort. The development of prudential measures is still underway. This process continues and takes place, among other things, in response to changes in the financial market environment. The Bank of Russia will keep on taking their impact into account when conducting monetary policy.

6. Throughout the years of inflation targeting, the transparency of the Bank of Russia's monetary policy has significantly improved. This improvement resulted from a systematic increase in the information disclosed by the Bank of Russia regarding monetary policy issues. In turn, increased transparency contributed to the growing trust in the Bank of Russia policy. At the same time, there is still room for improvement in communication on monetary policy. According to the research, the predictability of decisions on the key rate is still low. One of the reasons behind is the information advantage¹ of the Bank of Russia. The publication of more information by the central bank in terms of the model and analytical apparatus can help increase the decision predictability. In particular, the expansion of the number of published macroeconomic forecast indicators and the publication of the code of the models used may be considered. The publication of more detailed information from the meetings of the Bank of Russia Board of Directors on the key rate, which reflects the discussion details, including the alternative option under consideration and the arguments in favour of them, may improve transparency of key rate decisions. To build more trust in the Bank of Russia, it is necessary to go on improving financial literacy and the availability of Bank of Russia materials, including through 'multi-layered' communications².
7. Under its way to inflation targeting, the Bank of Russia set a quantitative inflation target at close to 4% consistently. The inflation target is set for the annual growth rate of consumer prices, calculated based on the consumer price index (CPI, Rosstat). The research and analysis, carried out as part of the MPR, lead to the following findings on the appropriateness of maintaining or adjusting the main parameters of the inflation target type set by the Bank of Russia.
- Considering the model estimates for the Russian economy at the end of 2021 and the analysis of factors influencing the choice of inflation target level (including globally), there is potential for lowering the inflation target in the future. However, events of 2022, high uncertainty of external environment, and the start of economic structural transformation may require more significant shifts in relative prices over the medium term, which makes a material adjustment to the assessment of the possibility of a lower target at this stage. Therefore, further analysis and comprehensive discussion of potential timeframes for lowering the inflation target are justified.
 - The arguments for using a point as the inflation target type remain valid on the transition to inflation targeting, and target types with a band do not show unambiguous advantages. In light of persistent elevated inflation expectations among the households and business, and their high sensitivity to price fluctuations for specific goods, a point is a justified target type that provides the clearest signal to society about the monetary policy objective. The assessment of how closely actual inflation aligns with the target can potentially be improved by formalising a combined criterion for inflation deviation from the target, taking into account its duration and the tolerance band.
 - Using the CPI as an indicator for inflation targeting is in line with the widely accepted practice of central banks and is the best available (though not perfect) indicator. It most closely matches the basic criteria important for building confidence in the indicator. While the CPI's drawback is its volatility and susceptibility to one-time factors, the use of sustainable inflation indicators in the analysis of inflation dynamics minimises this issue. The Bank of Russia adheres to this approach in its implementation of monetary policy. However, the more frequent use of various sustainable inflation indicators in communication could be a direction for further enhancement of the Bank of Russia's practice.
 - The inflation target type entails having an action or achievement horizon, which is essential for reinforcing monetary policy credibility. The word 'consistently' used by the Bank of Russia, when setting the level and type of target, can be perceived as an overly strict commitment

¹ An information advantage implies that, according to professional market participants, the Bank of Russia has considerable expertise in factors influencing inflation and precise models to forecast them.

² 'Multi-layered' communications entail presenting the same material with different levels of detail, adapting it for the target audience.

without further explanation. At the same time, any change in the wording of the horizon must retain an explicit reference to the obligation to return inflation to the target, considering the lags in the transmission mechanism of monetary policy.

8. The Bank of Russia monetary policy operational framework aligns with global practices and accounts for special characteristics of the Russian economy, banking sector, and money market. The analysis revealed that the Bank of Russia's operational framework effectively allowed for the achievement of the monetary policy's operational goal. The RUONIA rate, serving as the operational benchmark for monetary policy, is brought by the Bank of Russia close to the key rate. Its average spread to the key rate is below the standard monetary policy step (25 bps). By controlling the RUONIA rate, the Bank of Russia can hold other rates within the economy under control. A sudden shift in liquidity supply due to fiscal flows and cash in circulation may lead to an increased RUONIA spread to the key rate, but this effect is limited in duration and scope. The Bank of Russia will continue to refine its monetary policy operational framework in response to developments in the payment infrastructure and Russia's banking and financial sector at large, taking into account the best practices of major central banks.
9. Trends that have emerged in the global economy in recent years, such as de-globalisation, decarbonisation, demographic change, and others, could complicate the monetary policy conduct in future. Additional factors impacting the Russian economy include sanctions and the process of structural transformation. Taken together, this may lead to supply shocks occurring more frequently than in recent history. Inflation and output fluctuations and the amplitude of their changes can be larger, while the deviations from the equilibrium level – higher. In economies with unanchored inflation expectations, supply shocks may require a more active monetary policy response. At the same time, there will be changes on the demand side. Demographic shifts, transition to a 'green' economy, financial sector development, and other processes will lead to changes in households' consumer, savings, and investment behaviour. This will subsequently determine the varying responses to economic shocks and monetary policy decisions, influencing the transmission mechanism. Research indicates the inflation targeting regime's ability to cope with various shocks, including supply shocks. Monetary policy focused on maintaining low and stable inflation, coupled with responsible fiscal policy, can significantly reduce potential macroeconomic volatility, and foster progressive economic growth. To fully leverage the benefits of the inflation targeting regime in Russia onwards, it is important to continue implement measures which help to anchor inflation expectations at a low level.

INTRODUCTION

Maintaining price stability has been the primary objective of the Bank of Russia's monetary policy, that means a low and stable inflation, providing an environment for balanced and sustainable economic growth.

To this end, the Bank of Russia has maintained an inflation targeting regime since 2015. Currently, this strategy is followed de jure and de facto by 47 countries, which account for about 70% of world GDP¹. And their number is growing every year. The inflation targeting strategy has proven to be more effective than alternative strategies in its more than 30-year history of use around the world. Its advantages include the ability to absorb external and internal shocks effectively and greater flexibility of monetary policy. By aiming for low and stable inflation, monetary policy minimises the scope for cyclical output fluctuations, contributes to a more predictable economic environment and thereby creates the conditions for balanced economic growth.

After quite a while, with the transition to the inflation targeting strategy in place, like many other central banks, the Bank of Russia came up with a comprehensive analysis of the results of its monetary policy in order to identify possible areas for improving its parameters, without questioning the commitment to the chosen strategy. To this end, the Bank of Russia launched the MPR, which includes analytical work in the following areas (work streams):

- Inflation target format.
- The operational framework of monetary policy.
- Retrospective assessment of the effectiveness of monetary policy.
- Communication as a monetary policy instrument.
- Monetary policy and financial stability.
- New challenges to monetary policy.

The shift to an inflation targeting strategy was not instantaneous; it was preceded by an extensive preparation period. Back in 2006, the Bank of Russia first announced its intention to transition to an inflation targeting strategy in the medium term. The need for transition was largely justified by imperfections of the existing monetary policy regime, and the negative impact of historically high and volatile inflation in Russia on wellbeing of households and the prospects for the Russian economy further development.

Between 2006 and 2014, the Bank of Russia established a macroeconomic forecasting and decision-making system, as well as an operational framework for monetary policy. An important milestone in preparing for the transition to an inflation targeting strategy was the introduction of a floating ruble exchange rate. A floating exchange rate enables monetary policy to effectively maintain low and stable inflation, allowing the economy to better adapt to changing conditions and reducing the extent of economic overheating or downturns. The Bank of Russia switched to a floating exchange rate in late 2014.

Model apparatus is a set of quantitative models used by the Bank of Russia in developing [macroeconomic forecasts](#). Models facilitate tasks such as analysing current economic conditions, generating short-term forecasts, and calculating medium-term forecasts under various assumptions and scenario variations.

¹ For more details, see Appendix 8 to Monetary Policy Guidelines for 2023–2025.

In the following years, the Bank of Russia refined its monetary policy operational framework and enhanced its model apparatus. The Bank of Russia devoted significant attention to the development of its information policy: enhancing the timeliness and comprehensiveness of information disclosed, working on expanding communication coverage, and increasing its targeting.

In transitioning to inflation targeting strategy, the Bank of Russia aimed to lower annual inflation to 4% and keep it close to this level in the future. This was expected to reduce inflation expectations, macroeconomic risk premium in interest rates, volatility in inflation and output, ultimately leading to a more predictable economic environment, extended planning horizon for households and business, expand opportunities for long-term financing, and improve long-term economic growth prospects.

In this paper, the Bank of Russia consolidates the results of studies conducted within the MPR framework and invites discussion on the findings. The dialogue with society will involve communication with representatives from the business community, public organisations, state authorities, expert, and scientific communities across all regions of the country.

Please send your answers to the questions asked in the report, suggestions, and remarks thereto, by 30 June 2023 inclusive, to odkp@cbr.ru. The feedback will be summarised and taken into account in preparing the Guidelines for the Single State Monetary Policy for 2024 and for the period of 2025 and 2026.



RETROSPECTIVE ANALYSIS OF MONETARY POLICY

The implementation of monetary policy since the transition to inflation targeting has been extremely challenging for the country. Besides internal pro-inflationary factors, external shocks significantly influenced price dynamics: the imposition of initial sanctions and the oil prices decline in 2014–early 2015, a new wave of oil prices drop in late 2015–early 2016, the coronavirus pandemic in 2020–2021 and measures to mitigate its consequences, and the sanctions crisis of 2022. All of these events, to varying degrees, created risks to price and financial stability, have led to an increase in household inflation expectations and macroeconomic risk premiums, and increased uncertainty in the economy. Nevertheless, even under these conditions, by implementing monetary and credit policy as part of its inflation targeting strategy, the Bank of Russia has managed to contribute to creating the necessary environment for the development of the Russian economy.

By the end of 2014, inflation in Russia rose significantly due to falling global oil prices and escalating geopolitical tensions worldwide, resulting in a substantial weakening of the ruble and an increase in inflation expectations. A sharp increase in the key rate at the end of 2014 and the implementation of a tight monetary policy in 2015–2016 allowed the Bank of Russia to implement disinflation. By the end of 2016, the current growth rate of consumer prices steadily decreased to levels close to 4%, and annual inflation fell to the target level by mid-2017.

The period of 2017–2021 can be generally described as a period of low and stable inflation in Russia. Annual inflation averaged 4.2% during this period. At the same time, inflation deviations from 4% were short-lived and were not of a systemic nature. This was facilitated, among other things, by the monetary policy pursued by the Bank of Russia. Inflation volatility decreased significantly during this period. The dynamics of prices for the main components of the consumer basket has become noticeably more homogeneous: the range of fluctuations in the growth of prices for food and non-food items and services narrowed. Finally, regional inflation differentiation decreased: inflation in various Russian regions primarily formed near the target level.

By the end of 2021, annual inflation rose to 8.4%. Price growth acceleration occurred both in Russia and globally, driven by faster demand growth compared to output expansion. Production growth was hindered by labour shortages in many economic sectors and disruptions in logistics and supply chains amid the coronavirus pandemic. Amid high demand, companies were able to pass on increased costs related to high global raw material prices and rising transportation expenses. To return inflation to its target, the Bank of Russia increased the key rate.

In early 2022, a significant inflation spike occurred due to the implementation of large-scale sanctions. Through timely measures, including raising the Bank of Russia's key rate to 20.0% per annum, risks to price and financial stability were promptly addressed. In April, the current pace of price growth noticeably slowed down. Following the peak in April, annual inflation started to go up gradually. As per the Bank of Russia's forecast, considering the ongoing monetary policy, annual inflation is expected to return to 4% by 2024 in the baseline scenario. The extended period for inflation to return to its target is due to the magnitude of economic changes and the necessity to adjust relative prices across a wide array of goods and services.

Therefore, implementing monetary policy within the inflation targeting strategy enabled the Bank of Russia to keep inflation close to its target during periods without unexpected negative factors and to bring inflation back to the target when influenced by such factors.

The relatively long period of maintaining inflation near 4%, the consistent implementation of monetary policy, and the increased transparency of the Bank of Russia during the past period have contributed to the growth of confidence in the Bank of Russia. This is primarily demonstrated by the dynamics of inflation expectations among professional market participants. These expectations have

Anchoring of inflation expectations – inflation expectations are considered anchored when they are not affected by short-term price fluctuations for goods and services and remain consistently in line with inflation targets. While short-term inflation expectations (up to 1–1.5 years) may vary in response to one-time pro- or disinflationary shocks, an anchored state implies that these fluctuations do not result in an increase in longer-term inflation expectations (more than 1–1.5 years). With anchored inflation expectations, economic agents recognise that inflation fluctuations are temporary, and the central bank can bring inflation back to its target if it deviates within the monetary policy influence horizon (1–1.5 years) and ensure its stabilisation on target thereafter.

been firmly established at the Bank of Russia's target since 2017, with little reaction to temporary fluctuations in observed inflation. Between 2015 and 2020, there was a significant reduction in the inflation expectations of households. However, their adaptive nature persisted: in response to even temporary increases in inflation and under the influence of negative news, the inflation expectations of households rose considerably. Inflation expectations within the business sector also remained unanchored. Companies largely factored in past price dynamics when estimating expected inflation in their business plans. Meanwhile, their inflation expectations were generally not as significantly above the inflation target as those of the households. The unanchored inflation expectations of households and businesses increased the probability of secondary effects on inflation in response to various shocks, which the Bank of Russia considered when implementing its monetary policy.

During the period of slowing inflation and stabilisation on target (2015 – mid-2021), nominal loan rates fell and were formed at levels considerably lower than prior to the shift to inflation targeting. This was facilitated both by a lower key rate and a reduced risk premium associated with macroeconomic uncertainties. Consequently, availability of credit for companies and households increased, promoting lending growth. Throughout the inflation targeting period, lending to the overall economy continued to expand at a faster pace than nominal GDP growth. In 2020–2021, lending growth accelerated, partly due to the Bank of Russia's soft monetary policy in response to the COVID-19 pandemic crisis¹.

Dedollarisation refers to the reduction in the share of foreign currency balances on accounts of individuals and legal entities, on financial institutions' balance sheets, and the decreased use of foreign currencies in financial transactions.

The higher predictability of macroeconomic conditions, including price stability, contributed to a reduction of the dollarisation of bank balances. From 2017 to 2021, the share of ruble loans in the corporate loan portfolio increased, and the share of foreign currency loans to households reached historic lows. Dollarisation of deposits in the non-financial sector also went down. This demonstrates the growth of confidence of economic agents in the Russian ruble as a means of saving over the inflation targeting period, as well as the adaptation of the households and businesses to the floating exchange rate regime.

Overall, the Russian economy's resilience to external shocks has improved during the past period. The Bank of Russia's monetary policy and the Russian Government fiscal policy have both contributed to this increase in resilience. The combination of an inflation targeting strategy (with a floating exchange rate) and a fiscal rule largely contributed to the smaller scale of the decline in the Russian economy during distress episodes. In 2020 particularly, the decrease in GDP due to

¹ Since 2014, the Bank of Russia has employed specialised refinance instruments for credit institutions as non-standard temporary measures, aimed at supporting and stimulating lending to specific segments of the economy during periods of sharp monetary tightening. The highest demand for these instruments came during external shocks, accompanied by a reduction in the access to borrowed funds (specifically, during the crises of 2014–2015 and 2020). The permanent use of specialised instruments is only possible within limited boundaries, which do not significantly impact the formation of monetary conditions across the entire economy.

the COVID-19 pandemic was considerably less than during the global financial crisis. Meanwhile, the Bank of Russia was able to implement a countercyclical monetary policy for the first time, aimed at alleviating the pandemic impact on the economy. In 2022, the Russian economy showcased high flexibility and adaptability. Amid unprecedented sanctions, the GDP decline proved to be significantly lower than anticipated.

Output refers to the value of goods and services resulting from the production activities of economic residents during a given period. Gross domestic product (GDP) is one of the indicators of output. GDP represents the value of goods and services produced within a country across all economic sectors, intended for final consumption, accumulation, and export (less imports).

Research conducted within the MPR ([Zmanovsky, 2023](#)) demonstrated that the monetary policy from 2015 to 2021 can be generally characterised as close to optimal in terms of maximising public welfare². The Bank of Russia promptly reacted to economic changes, aiming to reduce the negative impact on public welfare from the volatility of the macroeconomic environment (inflation, output, and interest rate fluctuations). However, the absence of up-to-date statistical data, particularly on output, at the time of decision-making was one of the factors complicating the implementation of monetary policy. The balanced approach of the Bank of Russia Board of Directors to decision-making, using macroeconomic forecasts and regularly adjusting them based on incoming information, prevented declines in public welfare due to insufficient statistical data. From the perspective of welfare losses, the outcome of the actual monetary policy was even better compared to the recommended monetary policy under conditions of full knowledge about real GDP dynamics.

The assessments also showed that the monetary policy in combination with the fiscal rule in 2017–2021 led to public welfare improvement. The monetary policy implemented as part of the inflation targeting strategy had a stabilising effect on price dynamics. The fiscal rule limited the impact of the commodity cycle on the economy. It allowed countercyclical fiscal policy to have a stabilising effect on aggregate demand. In turn, in the context of more stable aggregate demand, inflation volatility decreased. As a result of the application of the fiscal rule and the monetary policy aimed at ensuring price stability, a synergistic effect was achieved: there was a greater decrease in the volatility of output and inflation, and, as a result, the public welfare enhanced.

Discussion questions:

1. Do you agree with the assessment that in 2017–2021 the Bank of Russia has generally managed to ensure price stability and annual inflation at about 4%?
2. What effects have you experienced from the fall in inflation during that period (for example, lower interest rates on loans, more predictable economic conditions)?
3. To what extent has the inflation slowdown made it possible to anticipate a comparable price growth to be maintained in the coming years?
4. What impact has made the inflation increase in 2022 on you (your company)? Do you think that the inflationary surge in 2022 was short-lived? How has this affected your inflation expectations?

² In the context of assessing the efficiency of countercyclical policies, public welfare is determined by the social cost through inflation and output (or employment) fluctuations. With other things being equal, public welfare maximisation is achieved by minimising fluctuations in inflation and output. For more details, see Zmanovsky, 2003.



MONETARY POLICY AND FINANCIAL STABILITY

Under the law, the Bank of Russia is responsible for several aspects of economic policy, including monetary policy and policies aimed at maintaining the stability of the financial sector and the financial system. These aspects are interconnected. On one hand, financial stability is a necessary condition for the effective transmission of monetary policy decisions to the economy. Measures for the resilience of financial institutions and financial stability can affect monetary conditions. On the other hand, monetary policy decisions influence the financial sector, including their potency to control accumulation of risks for financial stability and to contain negative effects of these risks in case of realization. Therefore, it is essential to consider the impact of decisions of one policy when making decisions on another policy. The interaction between monetary policy and financial stability policy differs in normal conditions and under stress.

In normal conditions, the Bank of Russia adheres to separate goal-setting for monetary policy and policy for financial stability, meaning a distinction between the objectives and instruments of these policies. Monetary policy instruments, such as key rate, are employed to maintain price stability, while financial sector stability is ensured through mechanisms as microprudential regulation, supervision, financial resolution, and macroprudential policy. The Bank of Russia considers the interaction between monetary policy measures and financial stability policies, acknowledging that their impact on economic processes varies in terms of time horizon. Monetary policy, for instance, influences the economy and price dynamics in the medium-term perspective. In opposite, microprudential regulatory measures possess a long-term character. These measures are implemented continuously, irrespective of the prevailing economic conditions, and impact the structural aspects of financial institutions' activity. These measures are generally not much affect monetary policy. Where such influence does exist, the Bank of Russia takes it into account when implementing monetary policy. Macroprudential measures, in contrast, are significantly tied to economic and financial market fluctuations and tend to be more medium-term in nature. Therefore, when making decisions, the Bank of Russia considers the potential mutual impact of macroprudential and monetary policy measures.

Contrary to normal conditions, during systemic risk realization ie crisis episodes, the Bank of Russia's primary objective is to ensure the continual and orderly functioning of the financial system. Maintaining the ability to make payments between economic agents plays a crucial role in this process. To achieve this, it is necessary for the system to have adequate liquidity. As a result, the Bank of Russia can employ its monetary policy tools to act as the lender of last resort, supplying the demanded liquidity. In addition, the Bank of Russia may hike the key rate for financial stability purposes to preserve the demand for ruble nominated assets and prevent bank runs. Through this, the Bank of Russia takes into consideration the effects of financial stability decisions on the economy.

Analysis of the Bank of Russia's experience from 2014 to 2022 ([Asriev, Miroshnichenko, 2023](#)) demonstrates that the outlined approach to monetary policy and financial stability policy effectively mitigates emerging financial risks and prevents their accumulation, ensuring the stable functioning of the financial system.

The Bank of Russia had used monetary policy tools for financial stability during previous crisis episodes: providing liquidity to the banking sector as a lender of last resort; lowering required reserves to free up credit institutions' funds; implementing a countercyclical approach to managing

collateral in its operations¹; and the key rate change. In emergency situations, the established system of monetary policy instruments has proven efficient, flexible, and adequate. In 2014, the structural liquidity deficit neared 10% of the banking sector's total assets. In 2022, within less than a month, the structural liquidity balance shifted from ₺1–2 trillion surplus to ₺7 trillion deficit at its peak. In both episodes, the Bank of Russia promptly supplied banks with the funds needed backed by high-quality collateral. Although activity in money market segments decreased, the overall market continued to operate. As a result, periods of tension in the money market were short-lived and did not impact its future functioning, contributing to the stability of the banking sector.

The Bank of Russia had increased the key rate due to financial stability reasons in late 2014 and in 2022. Raising the key rate led to an increased propensity for households to save in rubles and limited the outflow of funds from the banking sector. With the situation stabilising, the Bank of Russia progressively lowered the key rate. In 2022, the key rate reduction was more rapid than in 2015, considering the evolving economic situation. It worked out, in part, due to the accumulated confidence in the Bank of Russia's policies from financial markets and economic agents. At the onset of the coronavirus pandemic in March 2020, the Bank of Russia halted its monetary policy easing cycle, maintaining the key rate at a constant level. This decision was made amid growing uncertainty and trends in financial markets with financial stability risks overseen.

The achieved stability of the banking system played a crucial role in stabilising the situation during crisis periods. This is largely due to the macro- and microprudential regulatory measures adopted and the financial resolution actions implemented. Between 2015 and 2020, the Bank of Russia tightened prudential regulation by introducing Basel III microprudential standards for credit institutions and actively developing macroprudential regulation that influenced capital adequacy and lending structure. Overall, the analysis ([Asriev, Miroshnichenko, 2023](#)) demonstrates that these measures have not significantly affect overall macroeconomic indicators and did not require adjustments to monetary policy. Meanwhile, regulatory easing during the crises of 2020 and 2022 helped to ease the effects of the crisis throughout the banking system. Banks managed to transition to further lending expansion in a relatively short period of time.

The influence of specific banking regulatory response on banks' demand for Bank of Russia operations to provide or absorb liquidity was considered when setting limits for the Bank of Russia operations. Consequently, they did not exert a noticeable prolonged impact on the dynamics of banking operations or tightness of monetary conditions. In contrast, the financial resolution of several banks between 2017 and 2019 significantly impacted the liquidity situation in the banking sector and short-term money market rates. The substantial inflow of liquidity into the banking sector due to financial resolution operations in the latter half of 2017 and early 2018 resulted in an increased spread of the RUONIA rate to the key rate, reaching (-40) – (-50) bps. This was taken into account by the Bank of Russia when making monetary policy decisions. Later on, financial resolution operations had no impact on the Bank of Russia's achievement of its monetary policy operational target due to their reduced scale.

The development of prudential regulation is going. These amendments are also a response to changes in the financial market situation. The Bank of Russia will keep on taking its' impact into account when conducting monetary policy.

¹ The countercyclical approach implies that in favourable liquidity situations, collateral requirements are tightened. If a structural liquidity deficit is anticipated or there is an outflow from the banking sector, the Bank of Russia eases collateral requirements: incorporating securities into the Lombard List, decreasing discounts, increasing adjustment coefficients, and fixing the value of securities for monetary policy operations if needed.

Discussion questions:

1. How much do you agree with the Bank of Russia's approach, which, under 'normal' circumstances, involves the distinct use of monetary policy tools (such as key rate) and financial stability instruments (like macroprudential measures) for preemptive limit price and financial stability risks respectively?
2. What is your assessment of the Bank of Russia's efforts in addressing actual financial stability risks from 2014 to 2022, specifically the temporary use of monetary policy tools (including the key rate) to maintain the financial system stability? Should the Bank of Russia maintain similar approaches in the future?
3. In your opinion, can the objectives of maintaining financial stability impose restrictions on the implementation of monetary policy?



COMMUNICATION AS A MONETARY POLICY INSTRUMENT

The better a society understands its monetary policy, the higher is its trust in it, which enhances the efficiency of the impact of monetary policy on the economy and inflation. Understanding the policy of the central bank and having trust in it, economic agents more quickly and correctly take into account its information signals when making decisions on borrowings, savings, consumption, and when indexing wages and prices. As a result, the necessary scale of monetary policy response to ensure price stability is reduced, and opportunities for countercyclical monetary policy arise.

Both stable achievement of the inflation target and active communication with public on monetary policy matters are essential for understanding and trust. Following the shift to inflation targeting, the Bank of Russia steadily enhanced its information transparency. The Bank of Russia progressively broadened its published documents on monetary policy and economic matters (such as comments on inflation, inflation expectations, economic research, etc.); increased the amount of disclosed information, including macroeconomic forecasts (regarding the list of published indicators and model apparatus information); and augmented its presence at public events and on social media. The expansion of communication occurred not only at the federal level but also at the regional level (including the publication of regional profiles on the Bank of Russia website, the paper 'Regional Economy: Commentaries by Bank of Russia Main Branches', informational and analytical materials on regional inflation, regular meetings explaining key rate decisions, etc.). Meanwhile, the Bank of Russia focused on enhancing the targeting of its communication: striving to consider the audience level of awareness when selecting formats, channels, and tools for information delivery.

As a result, the transparency of the Bank of Russia's monetary policy¹ has significantly increased over the years of inflation targeting. This is evidenced by estimates of the transparency index ([Evstigneeva, 2023](#)). In 2022, the transparency of the Bank of Russia's monetary policy was assessed as above average among the central banks under review.

Communication played a crucial role in stabilising the financial markets during periods of shocks and significant volatility increases in 2014, 2020, and 2022. The Bank of Russia intensified its communication during crisis periods. The analysis ([Pavlenko et al., 2023](#)) revealed that personalised communication and the presence of decision-makers in monetary policy in the information field made the greatest contribution to stabilising the situation. Clear communication regarding specific timeframes for achieving inflation targets and reaffirming commitment to these targets during crises helped reduce the volatility of federal government bonds (OFZ) yields.

In developing communication on monetary policy issues, the Bank of Russia aimed to lower inflation expectations and promote their anchoring to the target. In this direction, success was primarily achieved in terms of inflation expectations of professional market participants. They have been anchored to inflation targets since 2017. Inflation expectations of the general public and businesses remain above the target. Meanwhile, the news background significantly influences the households' perception of inflation ([Evstigneeva, Karpov, 2023](#)). A negative news background on a wide range of economy-related topics can lead to a rise in inflation expectations. However, the intensity of the Bank of Russia's presence in the media has not yet significantly impacted the households' perception of inflation.

Besides anchoring inflation expectations, the predictability of key rate decisions is an indicator of the Bank of Russia's communication effectiveness regarding monetary policy issues. According to the research ([Evstigneeva et al., 2022](#)), the frequency of monetary policy surprises by the Bank

¹ Transparency refers to the extent to which a central bank discloses information about its decisions and the rationale behind them. It is believed that the more information a central bank discloses, the more transparent its communication is.

of Russia from 2015 to 2021 was approximately 32%². The high occurrence of surprises is likely due to Russia encountering numerous external shocks during the period of 2015 to 2021. This required a rapid refinement of estimates and adjustment of monetary policy, which could reduce its predictability. Research conducted herewith also suggests that the primary reason for lower predictability of monetary policy decisions is the so-called information advantage of the Bank of Russia. This implies that, according to professional market participants, the Bank of Russia possesses additional information regarding factors influencing inflation and/or has more precise models/expertise for forecasting it. To mitigate this factor's impact and enhance decision predictability, the central bank could publish more information concerning its modeling and analytical tools. Currently, the Bank of Russia publishes 24 indicators as part of its forecast, which aligns with the world average. Meanwhile, other central banks also incorporate forecasts of labour market indicators, exchange rates, budget, household incomes, and savings in various compositions.

The publication of code and assessments of internal model parameters (e.g., coefficients in the central bank's response function) can enhance decision predictability and address the issue of information advantage. Publishing codes for multiple forecasting models enables analysts and experts to replicate the Bank of Russia's forecasts, while reducing the risk of interpreting model results as the Bank's obligations, as different models produce varying outcomes. Increased transparency of the Bank of Russia can also be achieved through more frequent publication of decompositions explaining deviations of inflation from the target and/or forecast.

In-depth interviews with analysts and experts conducted by the Bank of Russia in January 2023 also indicated a demand for publishing the minutes of the Bank of Russia Board of Directors' meetings on the key rate. However, there is no consensus among analysts and experts regarding this matter. On one hand, publishing the minutes significantly enhances the transparency of decision-making. On the other hand, the 'one voice' principle adopted by the Bank of Russia in its communication may impose considerable limitations on the information disclosed in the minutes. Considering the unanchored inflation expectations of the household and businesses, as well as insufficient public awareness on monetary policy issues, transitioning from a 'one voice' principle to multiple voices could have negative consequences. In particular, the risks of a 'noisy' information signal when the minutes are published, and the predictability of key rate decisions could increase. A possible compromise option could be the publication of more comprehensive information from the Bank of Russia Board of Directors meetings on the key rate, detailing the decision discussions, including alternative solutions considered and their supporting arguments.

Analysts and experts surveyed by the Bank of Russia also highlighted the overly late publication of some monetary policy materials by the Bank of Russia. They believe that the informational value of the material diminishes as it gets further away from the moment new information arises, such as the release of statistical data or a key rate decision. Specifically, analysts and experts emphasise the need to reschedule the Monetary Policy Report's publication closer to the key rate decision.

Besides measures aimed at enhancing the predictability of key rate decisions, the Bank of Russia should continue working on improving the understanding of monetary policy. Based on assessments, information about the Bank of Russia's monetary policy in the key rate press release, the Statement by Governor, and the Monetary Policy Report is only clear to those with a higher economic education ([Evstigneeva, Sidorovskiy, 2021](#)). The limited comprehensibility of monetary policy information for a broad audience is a relatively widespread issue among central banks. In particular, information on the monetary policy of central banks such as the Bank of England and the US Federal Reserve is comprehensible to only 3% and 5–10% of the households, respectively. Meanwhile, when comparing the English versions of press releases and statements by the Bank of Russia Governor on the key rate with similar materials from other central banks, the Bank of Russia's

² From a Bloomberg survey, 32% of analysts were unable to accurately predict key rate decisions between 2015 and 2021.

materials prove to be more comprehensible. To enhance the understanding of these texts for a broader audience, ongoing efforts to improve their comprehensibility are required.

The Bank of Russia aims to develop its information policy with consideration for the unique characteristics of various target audiences and their level of engagement with economic matters. Specifically, to reach a wider audience, the Bank of Russia produces informative videos, expands its presence on social media, and participates in media interviews. However, the primary materials published on the Bank of Russia's official website (e.g. press releases on the key rate, Monetary Policy Reports) are largely aimed at a professional audience. To enhance the accessibility of these materials, a 'multi-layered' communication approach is employed. 'Multi-layered' communications entail presenting the same material with different levels of detail, adapting it for the target audience. The Bank of Russia already publishes many materials in different formats by target audience. Brief versions of these documents, adapted for a wide audience, have been published on the Bank of Russia website for the Monetary Policy Guidelines, Annual Report, Monetary Policy Report, comments on inflation and inflation expectations, and other analytical papers. This practice may be expanded in the future.

At the same time, a number of studies note that the simplification of communication has negative aspects ([Blinder et al., 2022](#)). In particular, simplification can create a sense of unambiguity of what is happening in the economy and the accuracy of forecasts of its future development. If the situation suddenly develops along a different path, it will mislead the audience and may even reduce trust in the central bank.

One of the most important areas of work that can contribute to an increase in public understanding of the Bank of Russia's actions is to improve the financial literacy of the public in the field of economics and monetary policy. The Bank of Russia and the Ministry of Finance of Russia elaborate Strategy for Improving Financial Literacy and Developing Financial Culture Until 2030. Besides actively participating in the implementation of financial literacy education in schools and universities, the Bank of Russia continues to develop its own educational resource at website Financial Culture (fincult.info). It is also important to promote the expansion of knowledge and awareness among media and bloggers in this subject area. The general public is less inclined to independently use materials on the Bank of Russia website regarding monetary policy issues compared to a professional audience. Primarily, people obtain this information from media sources and social networks. The Bank of Russia aims to provide the information they seek as promptly and comprehensively as possible, clarifying its actions during press conferences, interviews, and in operational comments. Furthermore, the Bank of Russia regularly conducts training seminars for media and bloggers, including those in regional areas. All these efforts will help increase the public understanding of the implemented monetary policy.

Discussion questions:

1. Is there, in your view, a need for changes in the Bank of Russia communication regarding monetary policy? If 'Yes', which ones?
2. How can the Bank of Russia enhance its analytical publications on monetary policy (Monetary Policy Report, materials published between key rate decisions)?
3. Do you believe that publishing more information about the details of discussions at the Bank of Russia Board of Directors meetings on the key rate, specifically information on considered alternative decisions, policy signals, and supporting arguments, can improve the understanding of the implemented monetary policy?
4. To what extent can the inclusion of additional economic indicators in the Bank of Russia's forecast improve understanding of the logic behind key rate decisions? What additional indicators might serve this purpose best?
5. Do you think that 'multi-layered' communication will increase the comprehensibility of Bank of Russia materials to a wider audience?



INFLATION TARGET FORMAT

The Bank of Russia monetary policy is aimed at maintaining price stability, i.e. low and stable inflation. However, such a general definition is not sufficient for the practical implementation of monetary policy. It is necessary to define the target parameters more precisely to reflect the state of price stability, i.e. to determine the inflation target format. The concept of the inflation target format includes its level, presentation type, targeted indicator, including the horizon for achieving the target. In theory and practice, there are different approaches to defining the target format, and no consensus on this issue has been reached.

Starting the transition to inflation targeting in 2015, the Bank of Russia decided that the target of monetary policy would be to maintain consistent annual inflation at close to 4%. The inflation target is set for the annual growth rate of consumer prices, calculated based on the consumer price index (CPI, Rosstat). Based on the studies carried out within the framework of the MPR, the following main conclusions can be drawn regarding the main elements of the Bank of Russia inflation target format.

Inflation target level

The choice of 4% as the target for inflation rate in Russia was determined by the specifics of the economy and the structure of inflation. In particular, the inflation target was chosen in such a way as, on the one hand, to eliminate the threat of transition to the high inflation area, and on the other hand, not to create deflation risks in the markets of certain goods. In addition, when choosing 4%, the high level of inflation expectations and their lack of anchorage (adaptability), the low degree of development of market mechanisms and sectoral diversification of the economy, as well as the level of inflation in Russia's trading partner countries were taken into consideration¹.

Research and analysis conducted as part of the MPR indicate that, given the accumulated experience of inflation targeting at the end of 2021, there is a potential for lowering the level of the inflation target in the future. However, the events of 2022, heightened uncertainty in external factors, and the onset of structural economic transformation may necessitate more substantial shifts in relative prices over the medium term, significantly altering the evaluation of the potential for lowering the target at this stage. Therefore, *further analysis and comprehensive discussion of potential timeframes for lowering the inflation target are justified*.

Among the evaluations and features of economic processes obtained through analysis and research, which suggest the potential for lowering the inflation target in the future, the following can be highlighted.

1. Model estimates point to the existence of space for lowering the inflation target level.

On one hand, estimates using data up to 2022 indicate that an inflation target at around 1% is optimal for the Russian economy (Glazova, 2023). This level minimises social costs due to price fluctuations and enables monetary policy to contribute to achieving maximum public welfare. On the other hand, besides the optimality criterion, central banks typically consider other factors when determining the inflation target level.

¹ The rationale for the inflation target is given in Section 1 of MPG 2017–2019, Appendix 4 of MPG 2018–2020, Box 1 of MPG 2021–2023, MPG 2022–2024.

These factors include monetary policy credibility, accumulated experience in inflation targeting, price volatility, inflation in trade partner countries, economic complexity, and others. An analysis of these factors revealed that with growing confidence in the Bank of Russia monetary policy, increased experience in inflation targeting, and a general decrease in inflation by 2021, conditions were established for lowering the inflation target to 3% ([Meshcheryakov et al., 2023](#)).

2. Inflation expectations in Russia do not hinder the lowering of the inflation target level.

According to international experience ([Meshcheryakov et al., 2023](#)), the households' inflation expectations are higher than the inflation target in most inflation-targeting countries, even those with a lengthy and successful history of inflation targeting. Similar to Russia, in these countries, the households tend to assess overall inflation based on the prominent price dynamics of specific goods and largely relies on past inflation trends (adaptive behaviour). Central banks usually track the households' inflation expectations dynamics to promptly detect changes in consumer behaviour that could influence price movements. Nevertheless, the households' level of inflation expectations is not a determining factor for achieving the target.

Numerous central banks targeting inflation highlight the significance of anchoring the professional community's inflation expectations. The professional community has a greater interest in accurate inflation forecasts, possesses the required expertise, and ultimately impacts financial markets. Inflation expectations of the professional community in Russia have been anchored to the target since 2017.

When choosing the inflation target level, it is important that it corresponds to the 'comfortable' level in the opinion of economic agents, that is, the level at which price fluctuations cease to have a significant impact on the economic decisions of individuals and businesses. Studies² show that inflation expectations are better anchored to the inflation target if the target corresponds to the perception of price stability by economic agents, and price dynamics can be characterised as low. In Russia, as shown by surveys³, inflation at the level of 4% or less corresponds to the feeling of a 'comfortable' level in the perception of households and business. This means that a change in the level of the inflation target in the future is possible only in the downward direction .

3. For the Russian economy, the problem of achieving the effective lower bound (ELB) and the zero lower bound (ZLB) in modern conditions is not significant when choosing the inflation target level.

The Effective Lower Bound (ELB) is the minimum threshold for the key rate, beyond which further reductions do not yield the desired outcome due to a decrease in the efficiency of the monetary policy transmission mechanism. The ELB level can fluctuate based on economic conditions. A specific instance of this is Zero Lower Bound (ZLB).

The key rate is the primary tool of monetary policy. Central banks can adjust the rigidity or flexibility of monetary conditions using the key rate. However, the potential for easing monetary conditions through lowering the key rate is constrained by the ELB. When the key rate approaches the ELB, further easing of monetary conditions in response to observed disinflationary or deflationary trends becomes unattainable through key rate reductions. This situation may pose risks to financial stability and, in cases of significant deterioration in the economy's financial sector, result in tightened monetary conditions.

² For more details, see [Borio et al., 2023](#).

³ Population survey by InFOM LLC and monitoring of businesses by the Bank of Russia.

Disinflation – a reduction in the rate of price growth for goods and services from high levels, a slowing down of inflation.

Deflation – a decline in the overall price level for goods and services in the economy over a period of at least 12 months, negative annual growth rates of the general consumer price index.

In advanced economies, the ELB level is near zero⁴. In emerging markets, the ELB may be above zero due to lower confidence of economic agents in the financial system, unstable and heightened inflation expectations, and the issue of dollarisation of the economy. Meanwhile, ELB is an unobservable variable and does not seem to be an exogenous and constant value over time. As credibility accumulates and the stability of emerging market economies improves, the ELB level can go down to near-zero values (e.g. the experiences of Chile, Poland, and Hungary).

In Russia, the lowest key rate level of 4.25% per annum was achieved during the monetary policy easing cycle amid the coronavirus pandemic in 2020. Although a further reduction in the key rate was not necessary, it was anticipated by the professional community. The financial sector overall showed resilience to crisis events, partly due to the consistent dedollarisation of the Russian economy after 2015. Considering that Russia has historically encountered more inflationary than disinflationary factors, the issue of ELB in the context of selecting an inflation target level in contemporary conditions is not significant for Russia. Estimates also indicated ([Glazova, 2023](#)) that the empirical likelihood of reaching ZLB in the Russian economy during the examined period was very low.

4. There was no need identified to maintain a special reserve at the target level to prevent sustained negative price dynamics across a broad range of goods and services.

No distinct deflationary tendencies were observed in the Russian economy during the past period. Moreover, an analysis of inflation dynamics in Russia revealed that as inflation slows down, there is a reduction in price dispersion, or the range of price increases for goods and services ([Meshcheryakov et al., 2023](#)), meaning that the likelihood of price reductions across a wide range of goods and services does not necessarily increase with a decline in overall inflation. Furthermore, while a persistent decline in prices for a broad range of goods and services is indeed detrimental to the economy, price reductions for specific goods and services are inevitable, reflecting objective processes such as changes in consumer habits, the emergence of substitute products, market fluctuations, and the implementation of new technologies in the production process of certain types of products, among others.

5. The complexity of the Russian economy does not hinder the establishment of a lower inflation target.

Studies have demonstrated that the complexity of the economy does not exert an upward influence on Russia's inflation target level ([Meshcheryakov et al., 2023](#)). Regarding structural characteristics and the extent of sectoral diversification, Russia is only slightly different from countries with lower inflation target levels. In the long run, changes in the Russian economy due to structural transformation may require additional assessment of this factor.

6. Inflation in Russia's trading partner countries was below 4% (until 2022), and with the increasing share of emerging markets among Russia's trading partners, this trend is expected to persist, considering their inflation targets.

When determining the inflation target in an open economy, it is essential to consider the inflation levels in trading partner countries. If a country's inflation rate is higher than that of its trading

⁴ Coincides with ZLB, which is a specific instance of ELB.

partners, it will, all else being equal, promote a decline in the nominal exchange rate (while keeping the real exchange rate constant). During the period of inflation targeting (until 2022), the inflation rate in Russia's trading partner countries remained below 4%. Due to structural changes, Russia's main trading partners will likely be countries with emerging market economy. In recent years, a trend of decreasing inflation targets has been observed (Brazil – 3%, Indonesia – 2.5% starting from 2024). The average target level in emerging market economies that adhere to an inflation targeting regime is below 4%. China's inflation target is 3%, which is also significant to take into account considering the probable increase in China's share of Russia's foreign trade in the upcoming years.

7. Long-term positive impacts on the Russian economy from a lower target level may partially or even fully counterbalance short-term expenses.

Estimations show that short-term output losses during the transition to a new inflation target level in Russia are relatively low compared to advanced economies (eurozone, USA, UK) ([Glazova, 2023](#)). Lowering the inflation target by actually reducing inflation will help decrease the households' inflation expectations and long-term rates. This, in turn, will promote the growth of accessible debt financing, including the financing of long-term investments.

Despite the potential for lowering the inflation target in the future, it is currently important to keep in mind the ongoing heightened uncertainty in the development of both the Russian and global economies when making decisions. The materialisation of global crisis risks or heightened geopolitical tensions could increase inflationary pressure in the upcoming years. From an inflation dynamics perspective, additional risks for Russia may stem from the structural transformation of the economy. Specifically, more substantial changes in relative prices might be needed, along with a shift in the timeline for normalising fiscal policy due to economic conditions. The materialisation of these risks will pose challenges in aligning actual inflation with the new target level and will demand significant economic costs. As demonstrated by global experience ([Kuzmina et al., 2023](#)), the success of lowering the inflation target will largely rely on timely informing the public about the new target level, maintaining consistent monetary policy, and coordinating actions with the Russian Government. This implies that, upon making the relevant decision, it is essential to announce the new target level several years before transitioning, discuss the transition process with the Russian Government, including aspects related to regulated tariffs, administered prices, and legislative adaptation. Hence, further analysis and discussion regarding the potential timeline for lowering the inflation target are justified.

Inflation target type

The following types of inflation targets can be found in international practice:

- *point* (e.g. near 4%, 4%, close to 4%): a target type where the central bank aims to maintain inflation at or close to a specific chosen level;
- *target band* (e.g. 3–4%, 2–6%): a target type where the central bank generally identifies a set of equivalent inflation values, each of which can be considered in line with the target;
- *point with a tolerance of allowable deviations* (e.g. $4\% \pm 1$ pp): a target type where the central bank targets a specific point, but also quantifies inflation values around that point which are generally not considered deviations from the target, highlighting the natural fluctuations of inflation.

The following criteria can be used to guide the selection of an optimal inflation target type. Firstly, the target type should reinforce public confidence and help anchor inflation expectations. Secondly, it should offer monetary policy flexibility, not requiring a reaction to all price fluctuations and allowing for economic stabilisation in the face of shocks. An analysis of international practices reveals that there are no clear-cut arguments or research supporting the choice of a specific inflation target type ([Magzhanov, Meshcheryakov, 2023](#)). Nonetheless, central bank representatives tend to

believe in practice that a point-based target is more effective in anchoring inflation expectations, as it provides the clearest and most comprehensible signal to society. Moreover, a point with a range is the most prevalent format globally. A benefit of the point type with a range could be a more easily understood quantitative criterion for determining inflation on target.

In adopting inflation targeting, the Bank of Russia opted for a point-based inflation target⁵. Amid persistent high inflation expectations and their significant sensitivity to price fluctuations of individual goods, it was crucial to choose an inflation target type that would offer the clearest signal to society regarding the monetary policy objective. The Bank of Russia emphasised that a point is the optimal target format for addressing this issue. The Bank of Russia highlighted that when selecting a point with an allowable deviation range and a band as target formats, there was still a risk of perceiving the upper bound of the range as a compromise target and anchoring inflation expectations to the upper bound. This was particularly relevant for Russia, considering the absence of long-term experience in sustaining low inflation levels and the unestablished monetary policy credibility. Moreover, inflation surpassing the allowable deviation range could result in anticipating compulsory actions from the Bank of Russia. Simultaneously, inflation could exceed limits due to short-term factors without triggering secondary effects, which would not require a response from monetary policy.

Despite the amassed experience in inflation targeting and some success in reinforcing confidence in the implemented monetary policy, the Bank of Russia's earlier arguments supporting a point as the inflation target type remain valid. Additionally, the analysis indicates that amid increasing inflation volatility and uncertainty, transitioning from a point to a target type with a range is imprudent ([Magzhanov, Meshcheryakov, 2023](#)), as it may pose risks to credibility. When inflation expectations are unanchored, introducing a range may be interpreted as establishing 'compromise' targets. A band-based target type can also diminish fiscal policy discipline.

Simultaneously, in a point format, the issue of insufficient clarity of the inflation value space around the target point can potentially be addressed by formalising a flexible criterion for inflation deviation from the target, encompassing both the magnitude and duration of allowable deviation. Having such a criterion in Russia may slightly decrease monetary policy flexibility, but it can also enhance public comprehension of monetary policy decisions.

Indicator employed for inflation targeting

The Bank of Russia's inflation target is set for the yearly growth rate of consumer prices, meaning the changes in the overall price level of goods and services purchased by household over the last 12 months. Consumer price growth rate is determined based on the consumer price index (CPI). Rosstat calculates the CPI.

The analysis indicates that selecting the CPI as an indicator for inflation targeting aligns with the widely accepted practice of central banks ([Kuzmina et al., 2023](#)). CPI is the best possible (though not ideal) indicator. It meets the main criteria that indicate the formation of confidence in the indicator to the greatest extent:

- with a calculation methodology that is clear and transparent to the general public;
- relevant when making decisions on consumption, savings, investment;
- reliable, without doubt in terms of the accuracy of calculations at all stages;
- calculated by an institution independent of the central bank;
- promptly published;
- with a low probability of subsequent revision;
- with a lengthy calculation history;
- adhering to widely recognised international standards.

⁵ For more details, see Appendix 12 of Monetary Policy Guidelines 2018–2020.

Alternative indicators, which could theoretically serve as benchmarks for inflation targeting, conform less to the specified criteria. Examples of such indicators are the nominal wage growth rate, the GDP deflator, and the core CPI.

The drawback of the CPI is its susceptibility to volatility and the influence of one-off factors. This indicator somewhat 'obscures' the evaluation of persistent inflationary pressure in the economy. At the same time, when making decisions on monetary policy, it is necessary to understand whether the observed trends in inflation dynamics are sustainable. If the inflation dynamics are caused by one-time factors, the influence of which is exhausted over a short horizon, then the monetary policy response to price fluctuations may not be required. Therefore, in practice, central banks, including the Bank of Russia, use additional price indicators reflecting sustainable price pressure in their analysis to develop a decision on the key rate⁶.

The direction for further improvement of the Bank of Russia's practice may be the regular use, along with the CPI, of sustainable inflation indicators in communications. In particular, the Bank of Russia may define a narrower, permanent range of indicators that will be regularly commented on in all the main information products of the Bank of Russia (including in the press release on the key rate, statements of the Bank of Russia Governor, and the Monetary Policy Report).

Description of the horizon for achieving the target

The Bank of Russia strives to sustain inflation rate close to 4% on a continuous basis. This reflects the maximum focus of the Bank of Russia on ensuring price stability and achieving the target inflation level, which is favourable for increasing confidence in the monetary policy pursued. At the same time, 'consistently' does not imply that in case of inflation deviating from the target, the Bank of Russia will attempt to return it to the target level in record time without considering the reasons behind and the consequences of its decisions. When deciding on the key rate, the Bank of Russia considers the duration of factors causing inflation to deviate from the target and analyzes the potential length of the deviation. The Bank of Russia also chooses the speed at which inflation returns to the target, taking into account the effect of key rate changes on the economy and financial sector.

Internationally, it is more common to speak about 'medium-term goals'. This wording best illustrates the inability to influence inflation in the short term through monetary policy measures. However, a drawback of this approach may be perceiving the inflation target as unattainable and consistently being pushed into the future, which could negatively impact monetary policy credibility.

Less frequently used but still employed are wordings such as 'consistently', 'over time', 'on the horizon of monetary policy influence', 'on a given horizon', 'most of the time', and 'as early as possible'.

The word 'consistently' used by the Bank of Russia, when setting the level and type of target, can be perceived as an overly strict commitment without further explanation. At the same time, any change in the wording of the horizon must retain an explicit reference to the obligation to return inflation to the target, considering the lags in the transmission mechanism of monetary policy. This is significant, among other factors, due to the unanchored inflation expectations of households and businesses in Russia.

⁶ For more information on the inflation indicators utilised by the Bank of Russia, refer to Appendix 3 of MPG for 2021–2023, Appendix 2 of MPG for 2022–2024, and Appendix 2 of MPG for 2023–2025.

Discussion questions:

1. Do you find it appropriate to alter the inflation target level in the future (over a three-year horizon)?
2. What level of inflation seems acceptable to you?
3. Do you support the choice of a point format for the inflation target?
4. Do you agree to keep the CPI as inflation target?
5. Should the Bank of Russia choose a set of stable inflation indicators alongside the CPI for regular communication?



THE OPERATIONAL FRAMEWORK OF MONETARY POLICY

As part of its inflation targeting strategy, the Bank of Russia influences economic activity and price developments mainly through the interest rate channel. For the key rate change to effectively transmit into the economy, it is crucial at the first stage of transmission that overnight money market rates remain close to the key rate. This is the operational target of monetary policy. To ensure the achievement of this target, the Bank of Russia reformed the monetary policy operational framework at the end of 2013 – the system of monetary policy instruments and approaches to their use. In the following years, the Bank of Russia consistently expanded its toolkit and refined existing approaches.

The operational framework employed by the Bank of Russia is in line with global practice. At the same time, it considers the specific features of the Russian economy, banking sector, and money market.

The liquidity situation in the banking sector determines the choice of a symmetric interest rate corridor as an operating framework. In Russia, several key liquidity factors exhibit high volatility. This specifically pertains to budgetary funds and the demand for cash. These factors can cause substantial and abrupt shifts in the banking sector's liquidity balance at different times. Under such circumstances, the interest rate corridor is the most suitable form of operational framework. The Bank of Russia employs a symmetric interest rate corridor relative to the key rate, with a width of 200 basis points (+/- 100 basis points to the Bank of Russia's key rate). This allows for the formation of equal opportunity costs when credit institutions resort to the Bank of Russia liquidity providing or liquidity absorbing operations. The existence of the standing facilities constrains the volatility of short-term money market rates within the interest rate corridor, promoting credit institutions' activity in the money market and maintaining room for money market rates to be shaped by market conditions.

In order to manage rates within the interest rate corridor, the Bank of Russia, like many other central banks, conducts either weekly repo auctions or deposit auctions, depending on liquidity conditions. These operations ensure that liquidity deficit/surplus over 1 week horizon is close to zero and, therefore, central bank's interventions in the overnight money market are limited. If the Bank of Russia perceives risks of a widening spread between money market rates and the key rate due to short-term liquidity imbalances, it carries out 'fine-tuning' auctions with terms ranging from 1 to 6 days.

Amid a significant structural liquidity deficit (surplus), the Bank of Russia additionally performs operations with longer maturities. This helps to alleviate the pressure on primary operations and reduce the volatility of money market rates.

Given the specific features of the Russian money market, the Bank of Russia has selected the RUONIA interest rate, the overnight rate for the unsecured segment of the money market, as the operational target of the monetary policy. In the overnight segment, credit institutions conduct the largest volume of transactions, and interest rates do not incorporate a term premium. Only credit institutions participate in the interbank lending (IBL) market, and there is no collateral involved (the cost and availability of collateral do not affect interest rate levels). Thus, by injecting or withdrawing liquidity, the Bank of Russia can exert the most effective influence on interest rates within this segment.

Funds transfer pricing curve is a set of internal uniform transfer interest rates for operations of various terms set by a commercial bank. It serves as the core of the intrabank system of banking product pricing that enables banks to determine a coherent range of prices for operations in various market segments and, when needed, to flexibly adjust the structure of their balance sheets by choosing among between various sources of funding and investments.

One-day IBL rates act as a starting point for the formation of most economic rates. RUONIA serves as a base rate for financial derivatives and floating-rate financial products. This enables the Bank of Russia to influence the entire yield curve with a time lag, ensuring efficient transmission of monetary policy decisions into the economy. Meanwhile, the Bank of Russia aims to minimise its impact on the financial market. Interest rates beyond the overnight lending segment are market driven. The monetary policy's operational framework is structured to encourage market participants to manage their liquidity primarily through market operations.

Similar to other central banks managing money market interest rates, the Bank of Russia employs required reserves as an instrument to ensure credit institutions' stable and predictable demand for liquidity. Banks are allowed to fulfil reserve requirements on an average basis by keeping correspondent account balances lower or higher than the RR ratio over a span of 4-5 weeks resulting in an average funds level equal to RR ratio.. This enables banks to react flexibly to liquidity level changes and offset the current liquidity deficit/surplus on their own, which ultimately helps stabilise market rates. Required reserves create a liquidity buffer, allowing the Bank of Russia to lower ratios and swiftly provide necessary funds to banks when needed. The Bank of Russia also implements differentiated required reserve ratios for credit institutions' liabilities in national and foreign currencies. This forms a different opportunity cost of raising liabilities. In this context, the Bank of Russia employs required reserves as an instrument to dedollarise credit institutions' balance sheets.

The monetary policy operations of the Bank of Russia serve as a connecting link between its decisions on the monetary policy, the financial sector, and subsequently the entire economy. The success in achieving the inflation target relies on the speed and precision with which monetary policy decisions are reflected in financial market interest rates. The analysis carried out within the MPR ([Yatsyk et al., 2023](#)) demonstrated that the Bank of Russia operational framework allows for managing IBL rates in any liquidity situation and efficiently attaining the operational target. Amid a sharp shift from a structural deficit to a structural liquidity surplus in 2022, the Bank of Russia maintained its ability to control short-term money market rates. During the previous period, the RUONIA rate immediately adjusted in response to changes in the Bank of Russia key rate.

Under normal circumstances, the RUONIA rate stays within the interest rate corridor. Since 2016, its average spread to the key rate has been less than the standard monetary policy step (25 bps). The banking sector's liquidity situation (structural liquidity deficit or surplus) influenced the RUONIA rate within the interest rate corridor: a positive RUONIA spread to the Bank of Russia key rate formed in case of a liquidity deficit, and a negative one in case of a liquidity surplus. However, the magnitude of the structural deficit or surplus did not impact the spread size. A substantial shift in the structural deficit or surplus could result in a temporary rise in money market rate volatility, but the banking sector adapted swiftly (within 1–2 averaging periods) to the changing liquidity situation. Overall, the magnitude of the RUONIA spread to the key rate was predictable and was taken into account in key rate decisions. Changes in the RUONIA rate were efficiently transmitted to other money market rates through the interest rate channel of the transmission mechanism.

Nevertheless, several factors limit the efficiency of the Bank of Russia operational framework. These include the segmentation and high concentration of the banking sector, which dictate the specific distribution of funds in the money market and their cost. The lack of synchronisation between averaging period schedules and meetings of the Bank of Russia Board of Directors on the key rate

(Yatsyk et al., 2023) also contributes to some increase in rate volatility. Considering this, starting from 2023, the Bank of Russia has made these schedules as close as possible. Full synchronisation is not necessary, as the increase in rate volatility while awaiting the Board of Directors meeting is temporary. Overall, the identified factors are not critical and do not hinder the liquidity management of the banking sector.

The MPR looked at the parameters of required reserves. As their primary function is to assist in liquidity management of the banking sector, credit institutions maintain required reserves as balances on their accounts with the Bank of Russia. Generally, the formation process of required reserves aligns with the goals of this instrument and global practice. The conducted analysis (Yatsyk et al., 2023) indicates that the volume of required reserves is sufficient for seamless payments in the Bank of Russia payment system and for compensating liquidity shocks. However, currently, a small portion of required reserves (around 10%) is supposed to be locked in special required reserve accounts. Considering the functions of required reserves, it is reasonable to keep the entire amount of the reserve in the banks' correspondent accounts with the Bank of Russia, allowing banks to use these funds for making payments.

The Bank of Russia does not pay interest on required reserves. Unlike other central banks that employ required reserves to generate arbitrage opportunities in the money market, the remuneration of required reserves is not an essential component of the Bank of Russia's operational framework. Meanwhile, non-remunerated required reserves enable the Bank of Russia to utilise differentiated reserve requirements as a means of dedollarisation of bank balance sheets.

With the development of payment infrastructure, changes in the structure of Russian banking and financial sector at large, the Bank of Russia strives to maintain its implementation framework up to date with the developments in the financial sector by adopting best practices from its global peers. At present, the Bank of Russia is [transforming](#) its standard liquidity provision mechanism into main and additional liquidity facilities. Liquidity provision operations will be segregated based on their purposes: establishing the upper boundary of the interest rate corridor and fulfilling the Bank of Russia's role as the lender of last resort. These tools will be distinguished by their rates, durations, and accepted collateral. The purpose of separating operations is to prevent credit institutions from excessively relying on the Bank of Russia's ongoing operations in stable conditions, while also allowing them to quickly attract necessary liquidity during a stress-induced outflow situation.

Discussion questions:

1. Do you share the Bank of Russia's view that the interest rate corridor system has proven its flexibility and efficiency in achieving the operational objective of monetary policy, and that there is no need to revise it?
2. How do you assess reform proposed by the Bank of Russia on the liquidity provision mechanism, which comprises the main liquidity facility (with a more liquid collateral pool and a smaller spread to the key rate for liquidity regulation in normal conditions) and the additional one (with a broader range of collateral and a wider spread to be used in case of significant liquidity outflows)?
3. Do you find it feasible to synchronise the required reserves averaging periods with the effective dates of the key rate decisions by the Bank of Russia Board of Directors?



NEW CHALLENGES TO MONETARY POLICY

Over the past few years the global economy has evolved in a challenging environment. Trade disputes and protectionist measures, the pandemic, and restrictions on customary activities, heightened geopolitical tensions and market fragmentation have all significantly influenced economic dynamics and inflation.

At the same time, long-term trends related to the progressive development of society continued to develop. The diversification of the financial sector and the growth in the number of consumers of financial and investment services, global warming and increasing environmental awareness, population ageing and decline, income and opportunity differentiation among various population groups are all occurring simultaneously in many countries, although their manifestations vary due to economic, institutional, and sociocultural contexts.

All these processes are reflected in the Russian economy and will directly or indirectly impact it in the future. Additionally, in 2022, the Russian economy encountered a significant shift in external factors due to the introduction of unprecedented sanctions against the Russian real and financial sectors. This gave rise to the process of structural transformation of the Russian economy, which is to be the central challenge for the Russian economy in the coming years.

Many of these processes pose challenges beyond the influence of monetary policy. Nevertheless, as the analysis shows ([Smirnova, 2023](#)), they can complicate the implementation of monetary policy.

This is primarily due to the likely increase in the frequency of supply shocks. As opposed to demand shocks, supply shocks drive prices and output in different directions. As a result, monetary policy cannot stabilise inflation and output at once. An increase in the frequency and duration of supply shocks may also complicate the task of determining which phase of the cycle the economy is in and, accordingly, the required response of monetary policy. For an economy with non-anchored inflation expectations, as in Russia, an assessment of the duration of the shock and the risks of secondary effects of inflation expectations will be of key importance for determining the required response of the monetary policy. There may be less space for 'wait and see' approach than in an economy with anchored inflation expectations, and the response of monetary policy to emerging deviations in price dynamics may be more active. In this regard, the communication of the decisions is of additional importance.

At the same time, there will be changes on the demand side. Demographic shifts, transition to a 'green' economy, financial development, and other processes will lead to changes in households' consumer, savings, and investment behaviour. This will consequently determine the variation in reactions to economic shocks and monetary policy decisions, influencing the transmission mechanism.

The long-term trends mentioned above have the potential to significantly impact government-financed tasks and priorities, as well as tax revenues. It is true of both Russia and other countries. Macroeconomic stability is essential for a successful structural transformation and establishing the groundwork for a higher potential growth rate in the economy. Preserving a responsible fiscal policy is crucial for enabling monetary policy to efficiently address the task of maintaining price stability, as well as providing conditions for balanced and sustainable economic growth.

The structural transformation of the Russian economy

The Russian economy is about to face large-scale transformation processes. Some enterprises will substantially alter their production focus and shift to different types of products, while others

will have to exit the market, being replaced by new enterprises in emerging niches. The relative sizes of industries in the economy will change.

The primary adaptation of the economy to new conditions is mostly finished. Moving forward, the structural transformation of the Russian economy will rely on the accessibility of production factors and their productivity. In turn, factors such as sanctions, global trade reconfiguration, increased market fragmentation, climate policy, and heightened global competition for labour will impact the availability of capital and labour.

Limitations on technological imports render inaccessible a portion of capital, previously engaged in production processes. Simultaneously, the current demographic structure points to a gradual decline in Russia's labour force over the long term. Limited access to capital and labour shortages can lead to wave-like productivity shocks. In the next few years, negative productivity shocks are likely to prevail. Inflationary pressure may increase. At the same time, high inflation negatively affects productivity. In addition, the process of technological improvement requires a significant amount of financing, the availability of which often depends on the rates. Therefore, a monetary policy aimed at keeping inflation close to the target and lowering inflation expectations will improve the prospects for productivity growth and the returning the economy to a sustainable growth path.

For the implementation of monetary policy, it is also important to consider the impact that imposed restrictions and structural transformation have and will have on the transmission mechanism and the neutral real interest rate. Sanctions and countermeasures have significantly changed the operation of the currency channel of the monetary policy transmission mechanism. Previously, the key rate decision directly affected the cost of financial instruments and the exchange rate. Currently it primarily influences the demand for imported goods through the interest rate channel and only then the exchange rate. The transmission of monetary policy via the exchange rate channel has become more mediated. The effects of external constraints and structural economic transformation on the neutral real rate are not clear-cut. Factors that promote its increase prevail, at least in the short-term horizon. These factors include additional expenses in the financial sector, increased investment needs, potential growth of the structural budget deficit, and a rise in risk premiums.

The evolution of financial architecture

Financial architecture evolves with the expansion of technological capabilities. In the last 5–10 years quick access to financial markets and technological advancement have boosted the number of retail investors worldwide. This trend has also been true for Russia. Transition to the IT regime and the stabilisation of inflation has been an important factor as well. The growth of the number of retail investors leads to an increase in market liquidity, an improvement in the transmission of monetary policy, and a more efficient allocation of capital in the economy. At the same time, it is important to expand financial literacy programs and take measures to protect the rights of investors to limit the risks associated with emotional or insufficiently informed actions of investors. The Bank of Russia will continue to work in this direction.

In recent years, digital currencies have received close attention. The Bank of Russia pioneered in the developing its own digital currency. The digital ruble is the third form of money. Digital accounts will be accessed through the banking sector, with no interest accrued on the digital ruble. The ratio between various forms of money will be influenced by a number of factors, including usability, transaction costs and ease of conversion of funds from one form of money to another, as well as the level of interest rates on bank deposits. The introduction of the digital ruble does not imply any significant changes in the transmission mechanism of monetary policy. The Bank of Russia will set a limit on the amount of funds transferred from bank accounts to the digital ruble to reduce the risks for credit institutions associated with the outflow of customer funds and to facilitate the adaptation of banks to the emergence of the digital ruble.

The infrastructure of the cross-border payments is also changing under the influence of new technologies. The options under consideration include digital currencies, alternative systems for transferring financial messages, unification of payment systems, integration of fast payment systems, and others. A significant trend in cross-border payments is the transition to settlements in national currencies. In Russia's foreign trade settlements, the currency structure is shifting in favour of the currencies of friendly countries. At the same time, some settlements will inevitably remain in traditional reserve currencies. As a result, bilateral trade flows are becoming less balanced, which affects the dynamics of the ruble exchange rate against different currencies. It is necessary to develop currency arbitrage instruments, hedging instruments for foreign trade and financial transactions, and develop a market for financial derivatives to smooth out possible currency imbalances..

Decarbonisation and global warming

Climate change is a slow process, but its consequences for the economy can be significant. If the pace of global warming does not slow down, its consequences may become irreversible in a few decades, and some ecosystems will cease to exist. Climate change also amplifies extreme weather events and natural disasters, which has been growing steadily since the second half of the 20th century.

There are two types of risks associated with climate change: physical and transition. Physical risks result from extreme weather events. They cause a reduction in output and inflation spikes. The more frequent destructive natural events occur, the more the economy has to operate in recovery mode rather than development.

Transition risks stem from moving to a low-carbon economy, including government and regulatory measures aimed at preventing climate change (e.g. implementing domestic or cross-border carbon regulation). Climate policy can limit temperature rise, but coordinating a unified international approach is challenging due to varying financial and natural resources and technological capabilities among countries. Consequently, the global economy's adjustment to a new equilibrium in energy markets may be long and turbulent. Disorderly climate policy will lead to increased energy product costs, resulting in volatile and sustained inflationary pressure and potentially significant growth in inflation expectations. Economic output may decline both due to the need for reshaping production processes and the step-wise termination of carbon-intensive technologies.

For the Russian economy, the emergence of effects comparable to the materialisation of transition risks made actual start in 2022. Moving forward, transition risks will be linked to the ongoing decline in global demand for high-carbon footprint goods, stricter ESG reporting requirements from trading partners, and the implementation of cross-border carbon regulation (mainly in Asia). Russia is also likely to introduce a proportional domestic carbon tax, including for the purpose of making tax credit in cross-border settlements. Meanwhile, distancing from the international climate agenda will result in a growing technological gap (including due to restrictions on importing high-tech equipment), potentially increasing the costs of energy efficiency projects.

Climate change and decarbonisation efforts will lead to both demand and supply shocks occurring more frequently and becoming harder to distinguish from one another. This intertwining of shocks complicates evaluation of the output gap, a crucial parameter in monetary policy decision-making, and intensifies the dilemma between stabilising inflation and stabilising output. Moreover, more frequent commodity market shocks may hinder inflation forecasting. The range of uncertainty regarding the most suitable monetary policy response to economic conditions may increasingly widen. Inflation targeting remains most appropriate monetary policy regime for the economy amid climate change, yet the importance of communication significantly increases, particularly during times when the central bank does not react to inflationary shocks related to climate change or transition policies.

Socio-demographic challenges

One of the most substantial socio-demographic challenges is population ageing. This is observed in most large countries, and in many cases, it goes together with depopulation. In Russia, demographic processes involve both depopulation and ageing. This implies a reduction in the labour force and its productivity, which may consequently lead to a decline in potential output.

Demographic shifts affect both demand and supply sides, making it challenging to draw a clear conclusion about their impact on inflation. When older individuals spend less and supply does not adapt, deflationary pressure might be observed. If, conversely, people save more during the active working period and tend to spend more at its closing, an increase in the share of senior people may lead to inflationary pressure. Simultaneously, both the shrinking workforce and the rise in government spending on social and pension welfare due to population ageing are linked to increased inflationary pressure.

Demographic shifts exert downward pressure on the neutral interest rate. The primary reason is that increased life expectancy encourages greater saving, leading to a higher overall level of savings in the economy. Meanwhile, a declining population results in reduced capital returns and lower investment demand, collectively causing a decrease in the neutral interest rate.

The influence of the monetary policy transmission mechanism on total demand may slightly diminish. Senior people tend to use loans less frequently, show less interest in purchasing housing, durable goods, and risky assets. Nonetheless, research indicates that an inflation targeting regime is generally optimal for economies with a high proportion of older age groups.

The issue of inequality is another essential socio-demographic challenge. Inequality, in one form or another, is present in every country worldwide. It is evident in disparities of income, consumption, assets, and opportunities, and develops under the impact of numerous factors over an extended period. In recent years, inequality in Russia has been decreasing. Monetary policy focused on maintaining low and stable inflation indirectly aids in reducing inequality. Most of the funds for low-income households are in cash or current accounts, which are not protected against inflation. High and volatile inflation significantly diminishes the purchasing power of nominal incomes. Low inflation allows for more predictable expenses for low-income groups, enables budget planning, fosters savings formation, and curbs inequality growth. Additionally, the monetary policy executed within the IT framework does not let inequality exacerbate. This becomes more pronounced in a slump – low-income population groups usually suffer first, as they often possess the lowest qualifications and are primarily subject to layoffs. A monetary policy focused on bringing the economy back to its potential allows for a quicker increase in the income of these population groups.

Significant inequality can impact the efficiency of monetary policy decision transmission. More affluent population segments only slightly adjust their consumption in response to monetary policy rate changes; thus, if economic inequality is substantial, the central bank must alter rates more sharply when stimulating or cooling the economy is needed. This can result in output volatility and hinder the achievement of the inflation target. In Russia, the present level of inequality does not impede the functioning of the interest rate channel of the monetary policy transmission mechanism, which exhibits high efficiency.

Adherence to responsible fiscal policy

The long-term trends examined above have the potential to significantly impact the tasks and priorities requiring government expenditure. Simultaneously, they may also influence the tax revenues of the budgetary system. This is true of both Russia and other nations.

Moreover, the structural transformation of the Russian economy, related to adapting to altered external conditions, sanction pressures, and shifts in production and logistical chains, serves as an additional factor capable of significantly affecting fiscal policy.

Macroeconomic stability is a necessary condition for successful structural transformation and establishing the groundwork for higher potential growth rates in the economy. Considering new challenges, its importance is even increasing. For instance, the long-term configuration of fiscal policy, specifically the size of the structural deficit within the overall budget system, is an essential component of economic resilience against future shocks.

From a monetary policy perspective, as in any other environment, the fiscal policy predictability and medium-term stability of its parameters are essential for a more precise evaluation of the contribution of fiscal sector operations to aggregate demand in the economy. This helps to identify a timely and proportionate monetary policy response to risks for price stability and a steady deviation of inflation from the target.

Higher values of structural deficit, higher contribution of the fiscal sector to aggregate demand, and a growth of monetary aggregates, other things being equal, mean there is less room for expanding credit to the economy, businesses, and households in order to maintain price stability and keep the economy on a sustainable and balanced growth path.

The confidence of household and business in fiscal sustainability, in balanced structural deficit against and debt growth, and the future capacity of the economy directly influence the macroeconomic risk premium embedded in interest rates and capital costs. Fiscal policy predictability and confidence in macroeconomic policy, resulting from this predictability and reflected in anchored inflation expectations, provide greater flexibility for implementing countercyclical monetary policy. Conversely, a lack of confidence in fiscal policy, stated structural budget parameters, and the government's willingness to uphold them even under changing conditions may necessitate a more stringent response from the central bank. Since this lack of confidence often upriser inflation expectations, the central bank will be forced to tighten monetary policy to prevent the inflationary spiral from unfolding.

Furthermore, sustaining a high structural budget deficit results in a continuous growth of public debt not only in absolute terms but also relative to GDP and budget revenues. This can lead to the so-called fiscal dominance – a situation where the efficiency of monetary policy in maintaining price stability declines. An extreme case of fiscal dominance occurs when, due to the accumulated debt and significantly unanchored inflation expectations, the impact of rising interest rates on budget interest expenses, the pace of further public debt growth, and its contribution to the dynamics of the money supply start to outweigh the effect of central bank rate changes on credit growth in the economy. That is, the interest rate increase is incapable to slow down the growth of the money supply because of imbalance in government finance. This is the kind of situation that was observed in one form or another in many emerging market countries in the 1980s and 1990s, and in some of them is still in place. Exiting these episodes of extremely high inflation is only possible through radical fiscal consolidation.

Due to the conservative fiscal policy over the past years, discussing fiscal dominance in the current context of the Russian economy is not appropriate. Monetary policy was able to decisively react to the inflation shock of 2022 and swiftly restore price stability.

However, it is crucial not to overlook this risk, as its materialisation could have painful consequences for the overall economy, businesses, and households alike. In this regard, maintaining the fiscal rule to ensure a predictable and moderate level of structural budget deficit, along with confidence in the state's adherence to this rule, pave the way for both moderate interest rates in the economy and the ability of monetary policy to effectively bring inflation back to target while keeping the economy on a balanced and sustainable growth path.

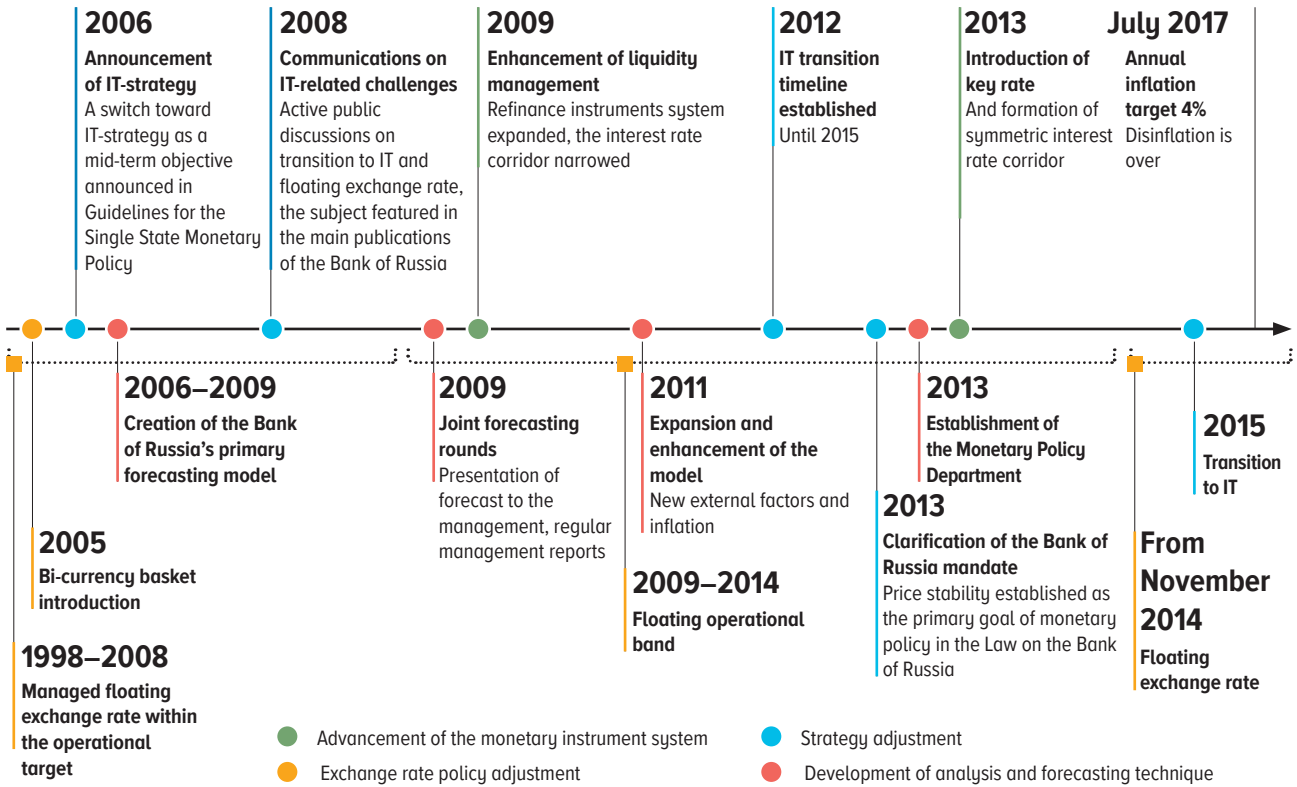
Discussion questions:

1. Which of the long-term trends in the global economy considered above are most likely to have a significant impact on the development of the Russian economy?
2. What do you see as the main long-term impact on the Russian economy from the 2022 restrictions, as well as the ongoing reconfiguration of global trade and increased market fragmentation? Can these factors significantly influence the ability of the Bank of Russia monetary policy to achieve price stability?
3. How substantial, in your view, could the combined impact of all examined trends and factors be on the long-term neutral real key rate for the Russian economy? In other words, will the Bank of Russia need, in your opinion, to maintain a higher or lower, on average, key rate to ensure price stability and foster balanced, sustainable economic growth over the coming years, as these trends develop?

APPENDIX

IMPLEMENTATION OF INFLATION TARGETING (IT) STRATEGY BY BANK OF RUSSIA

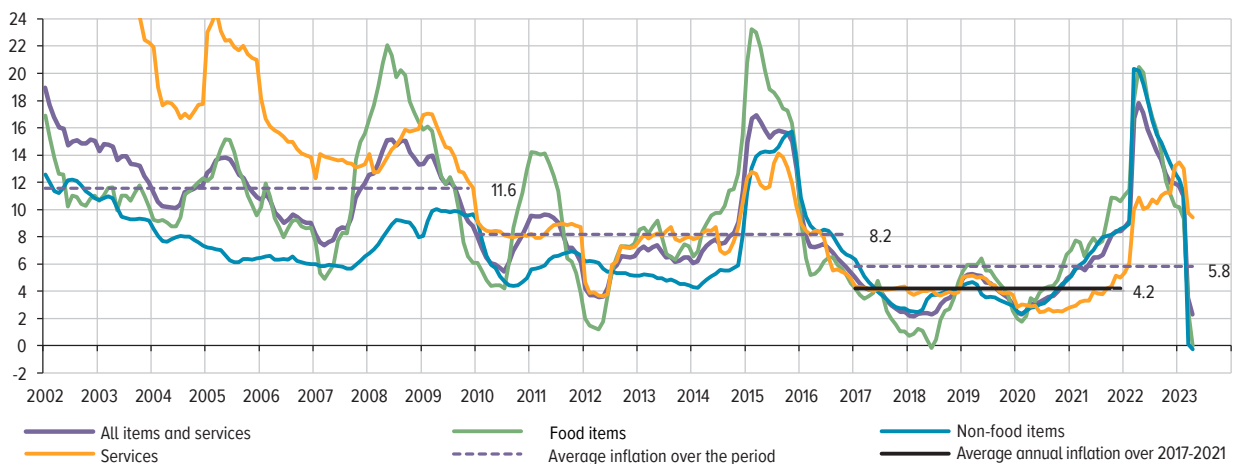
Chart 1



Source: Bank of Russia.

INFLATION
(% YOY)

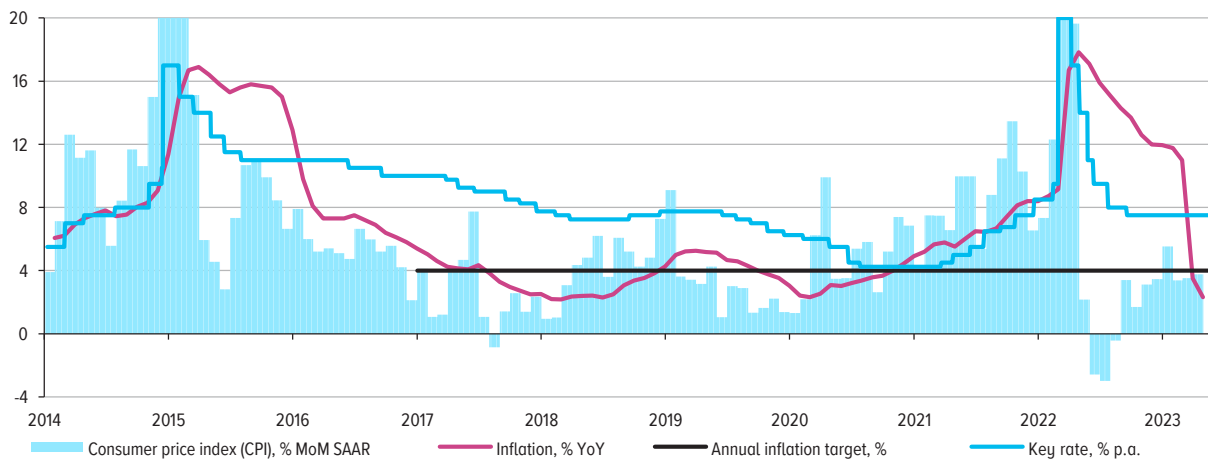
Chart 2



Sources: Rosstat, Bank of Russia calculations.

BANK OF RUSSIA KEY RATE AND INFLATION

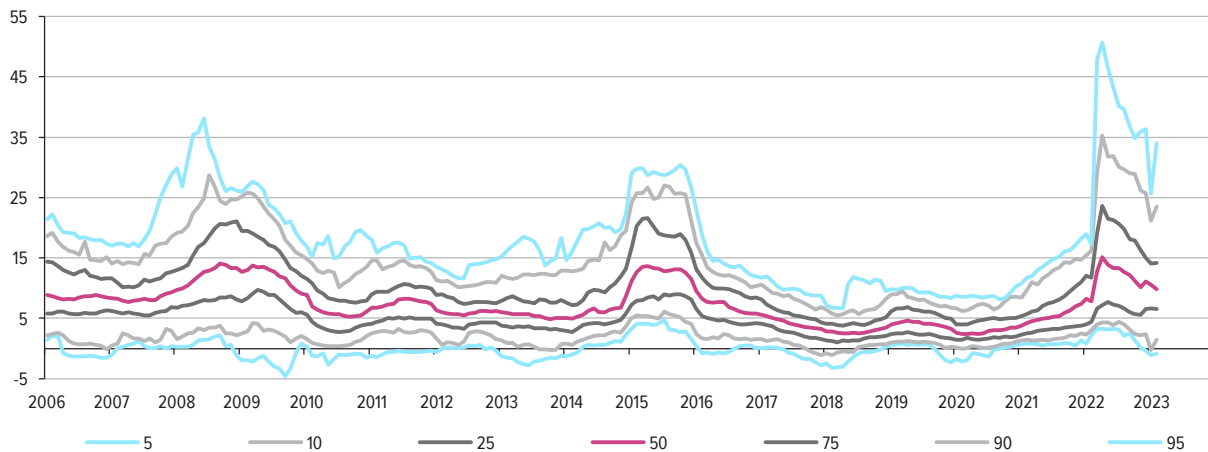
Chart 3



Sources: Rosstat, Bank of Russia.

PERCENTILES OF ANNUAL GROWTH RATES OF CONSUMER PRICES (%)

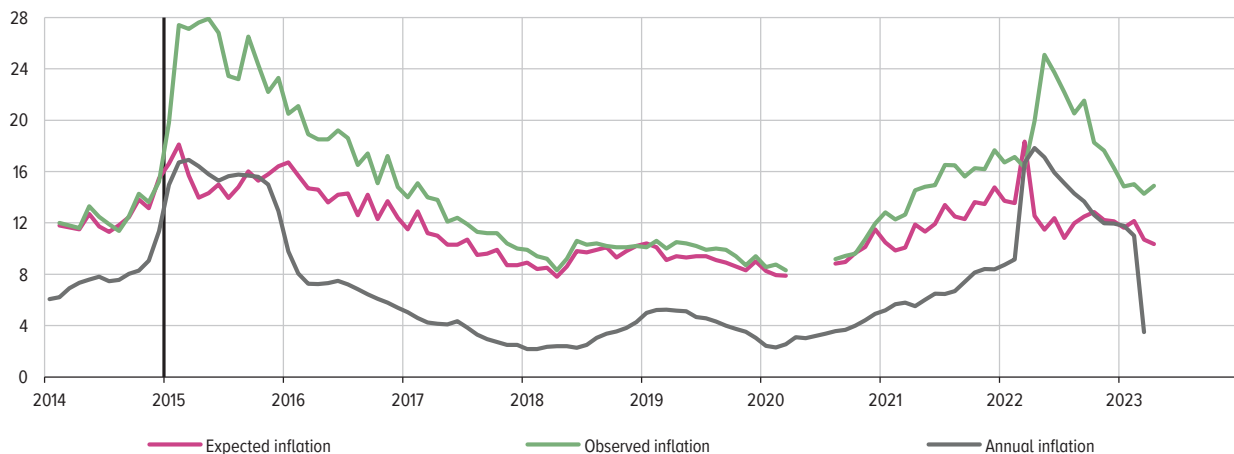
Chart 4



Note. The distribution of price growth is not adjusted to price volatility of specific food items, international tourism and air travel.
Sources: Rosstat, Bank of Russia calculations.

INFLATION OBSERVED AND EXPECTED BY HOUSEHOLDS FOR THE YEAR AHEAD, MEDIAN ESTIMATE (%)

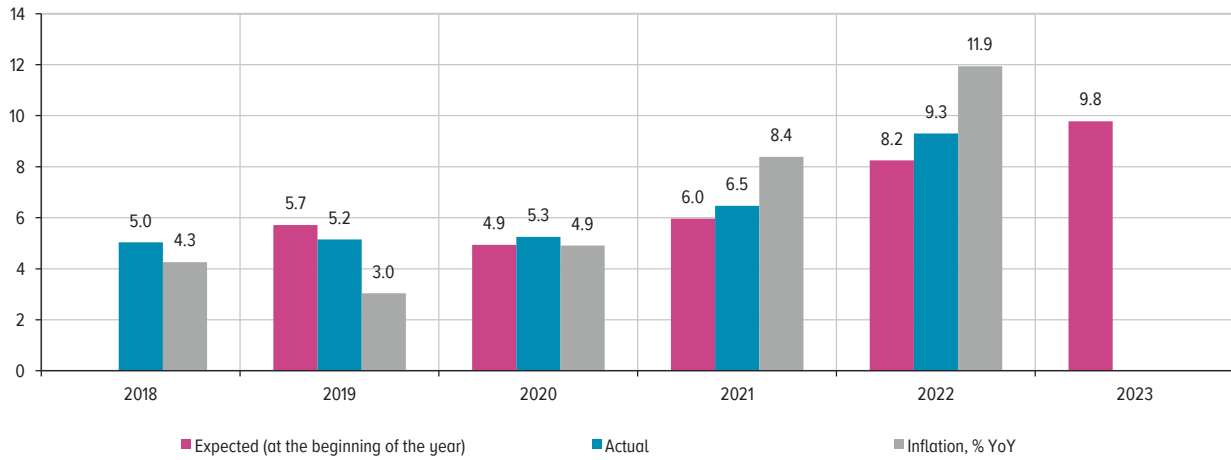
Chart 5



Sources: Rosstat, Bank of Russia calculations.

AVERAGE INFLATION LEVEL ACCOUNTED FOR IN BUSINESS PLANS (%)

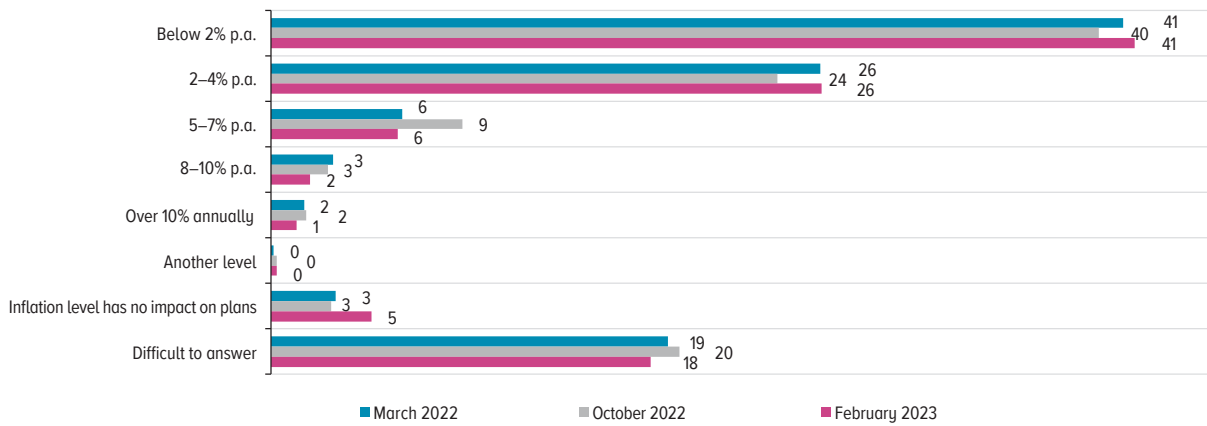
Chart 6



Sources: Bank of Russia, Rosstat.

LEVEL OF INFLATION ACCEPTABLE FOR HOUSEHOLDS (% OF RESPONDENTS)

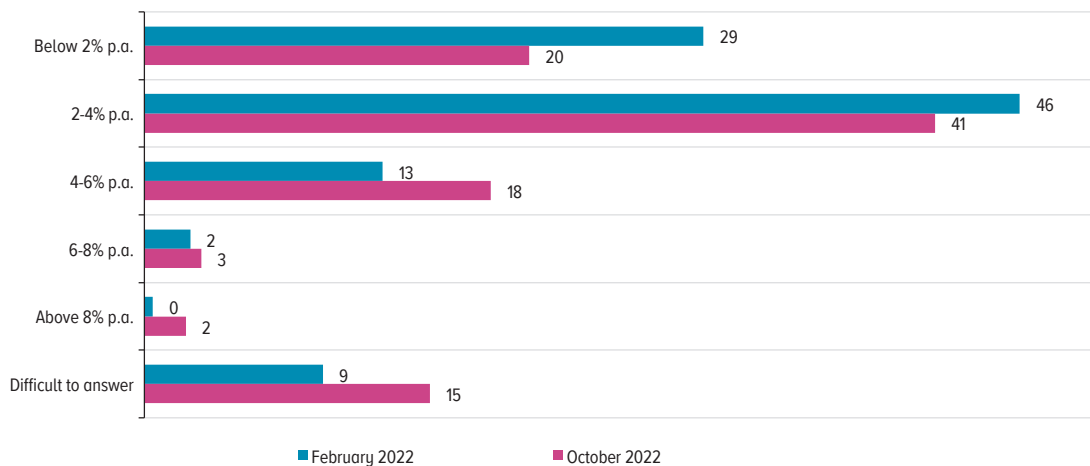
Chart 7



Note. Answer to the question: «What level of inflation do you consider acceptable? – that is, one that allows you to create a long-term financial plan and make sound financial decisions on your purchases, loans, and savings without feeling anxious about rising prices?».
Source: InFOM.

COMFORTABLE INFLATION RATE FOR BUSINESS (% OF RESPONSES)

Chart 8



Note. Answer to the question: «What level of inflation do you find comfortable for conducting business?».
Source: Bank of Russia's business monitoring.

COMFORTABLE INFLATION LEVEL FOR BUSINESS ACROSS INDUSTRIES
(% OF RESPONSES)

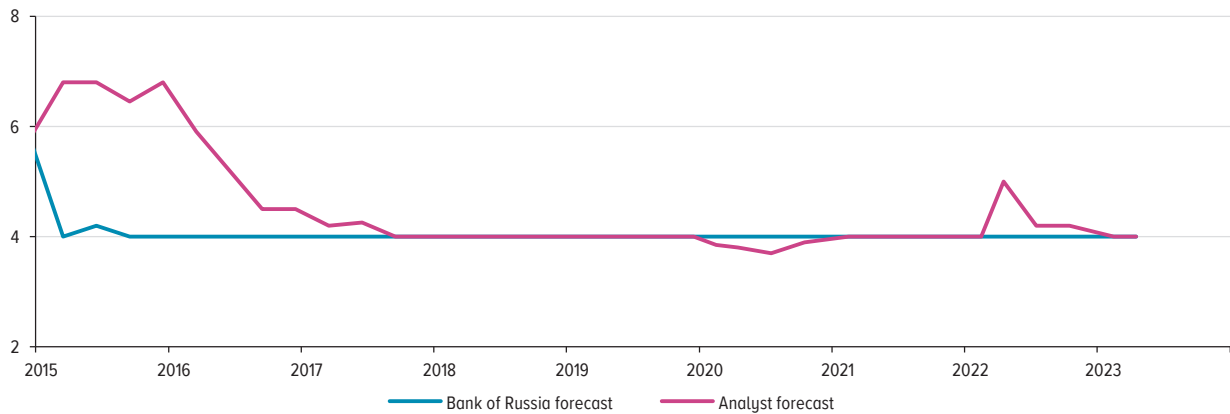
Chart 9



Note. The number of responding companies is indicated in brackets, with the median inflation level considered comfortable by industry representatives shown in the right column.
Source: Bank of Russia business monitoring (October 2022).

BANK OF RUSSIA FORECASTS AND PROFESSIONAL ANALYSTS' EXPECTATIONS FOR TWO-YEAR AHEAD INFLATION
(% YOY)

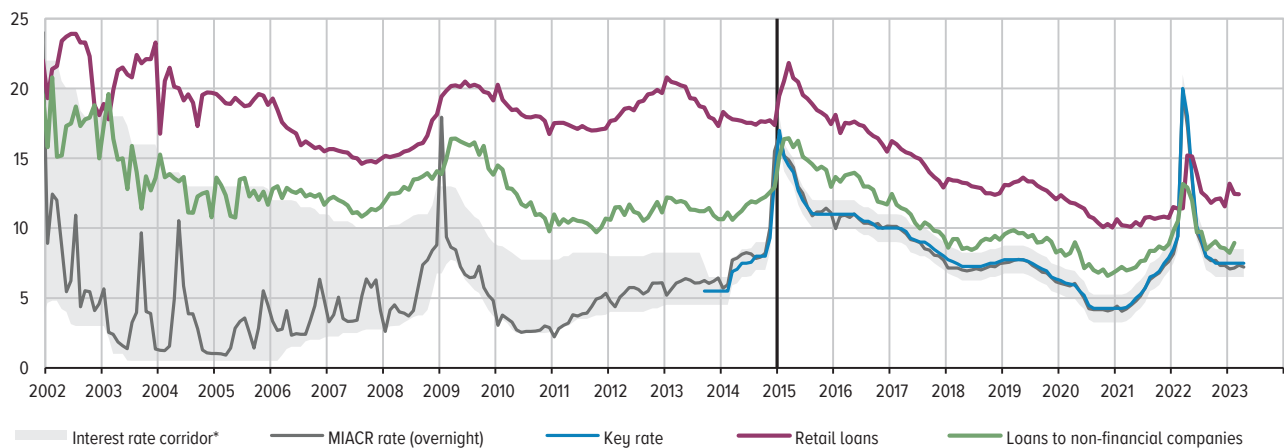
Chart 10



Note. The horizontal axis displays the forecast publication dates. The source of analyst forecasts until July 2021 is the Bloomberg consensus, followed by the macroeconomic survey of the Bank of Russia.
Sources: Bank of Russia, Bloomberg.

DYNAMICS OF LOAN RATES FOR TERMS OVER ONE YEAR
(% P.A.)

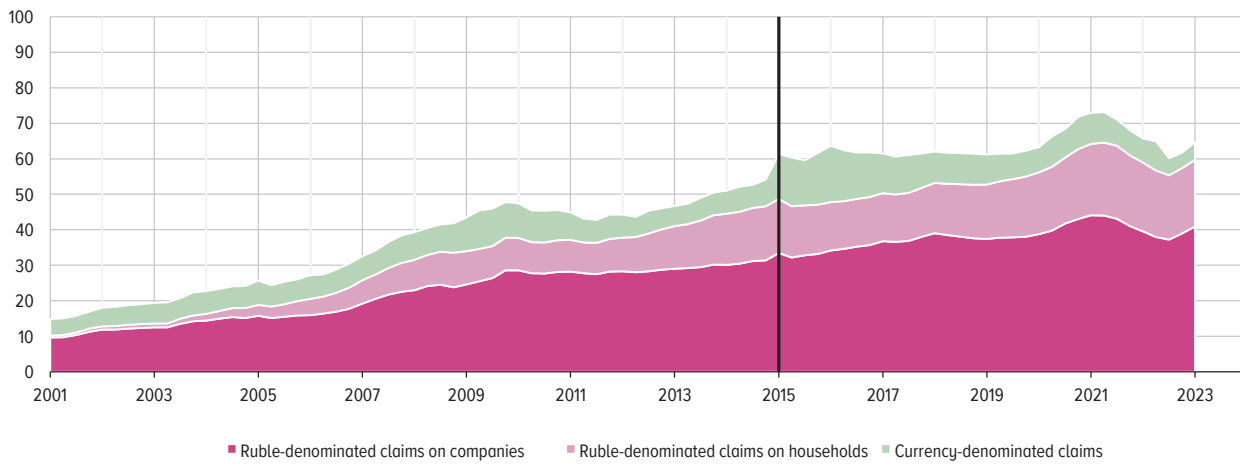
Chart 11



* Lower limit – rate on standing deposits, upper limit – on overnight loans.
Note. Monthly average values are provided. Loan rates – in rubles weighted average.
Source: Bank of Russia.

DYNAMICS OF BANKING SECTOR CLAIMS ON HOUSEHOLDS AND NON-BANKING COMPANIES (% GDP)

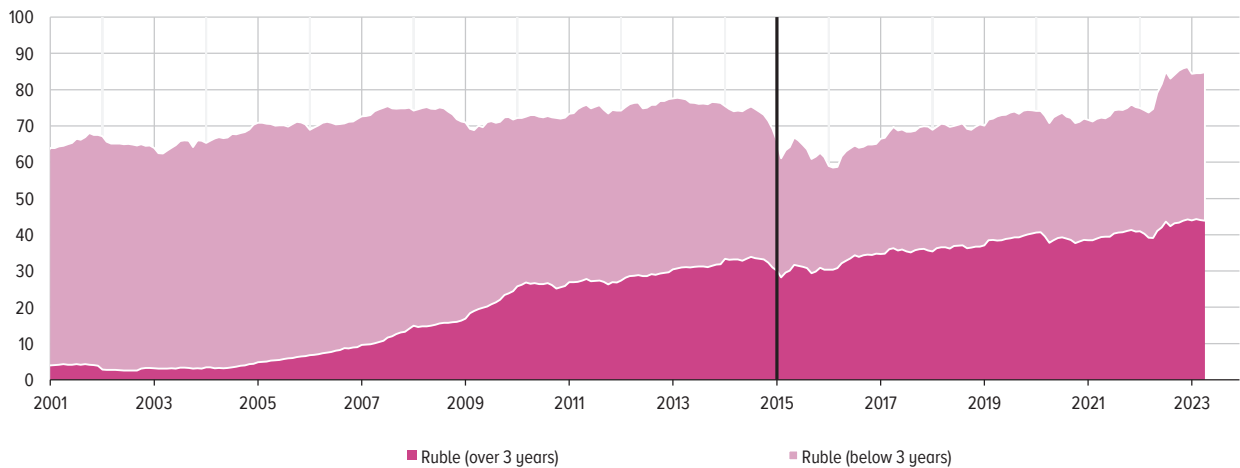
Chart 12



Source: Bank of Russia.

SHARE OF RUBLE-DENOMINATED LOANS IN THE TOTAL LOAN PORTFOLIO OF NON-FINANCIAL COMPANIES (%)

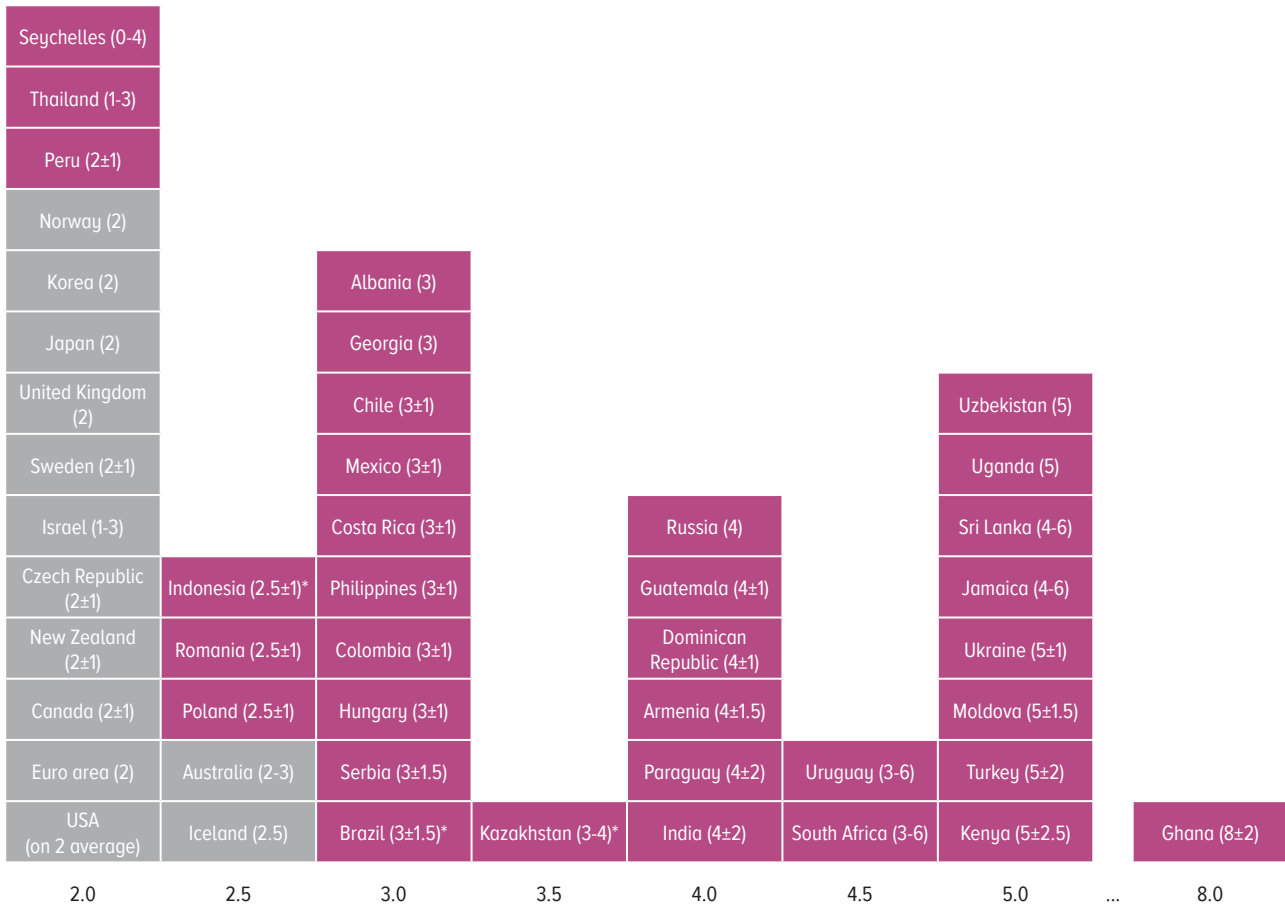
Chart 13



Source: Bank of Russia.

INFLATION TARGETS IN COUNTRIES WITH INFLATION TARGETING (%)

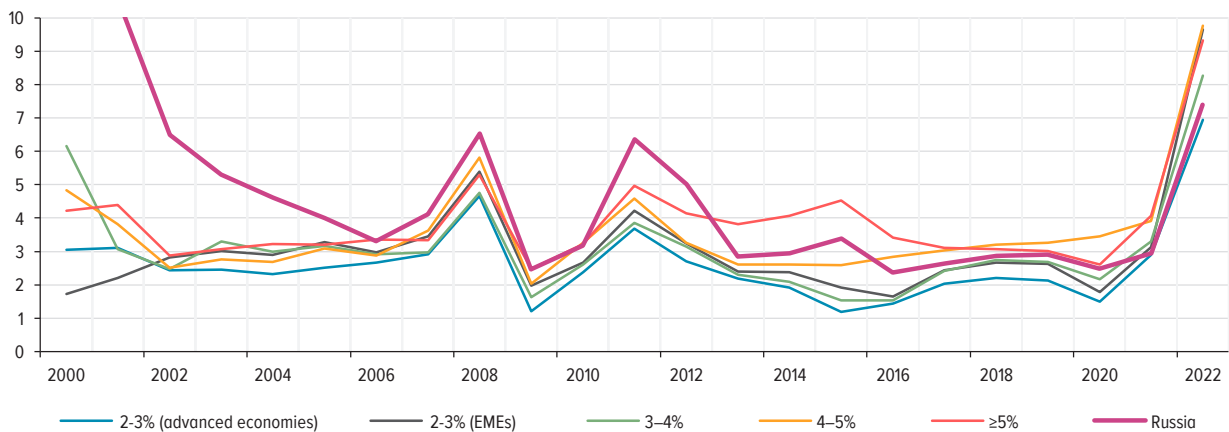
Chart 14



* Bank of Indonesia's goal in 2024 (in 2023, the target corridor is 3%±1 pp); Central Bank of Brazil goal in 2024 (in 2023 inflation target is 3.25%±1.5 pp); National Bank of Kazakhstan's goal in 2025 (in 2023–2024, a target band of 4–5%).
 Note. EMs targeting inflation are highlighted in purple, while advanced economies are highlighted in grey.
 Sources: Monetary policy Guidelines for 2023–2025 (Appendix 8 'Inflation and Monetary Policy: Cross-Country Comparisons'), central banks websites, and the IMF Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER).

INFLATION OF TRADING PARTNERS BY GROUPS OF COUNTRIES TARGETING INFLATION WITH VARYING TARGET RATES (%)

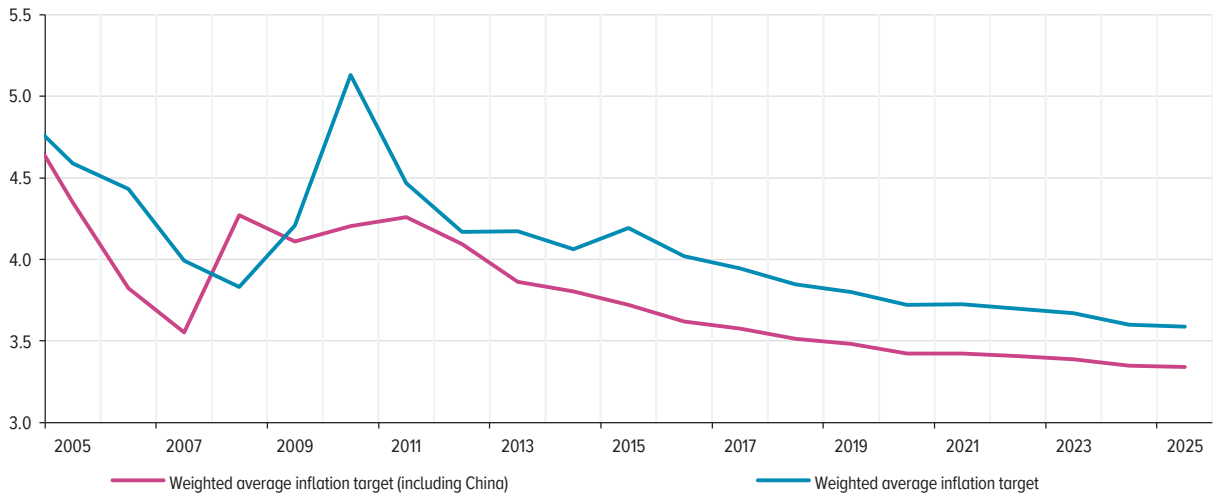
Chart 15



Note. The figure displays the median values of the weighted average inflation rate of trading partners within groups of countries targeting inflation with varying target rates, as well as the weighted average level of actual inflation for Russia's trading partners. The grouping considers historical revisions of target rates in countries targeting inflation where such revisions occurred. The inflation target is set as a point, including when using a point within a deviation range as the target. If the inflation target is set solely as a target band, the midpoint of the band is used as the target. The inflation rate of trade partners is calculated by weighting the inflation rate of partner countries (including those not targeting inflation) based on their share in the total import volume of goods to a specific inflation-targeting country for the respective year.
 Sources: Meshcheryakov et al., 2023; IMF; World Bank's World Integrated Trade Solution (WITS), Statistics websites of the countries in question, central banks websites.

INFLATION TARGET IN EMES (%)

Chart 16



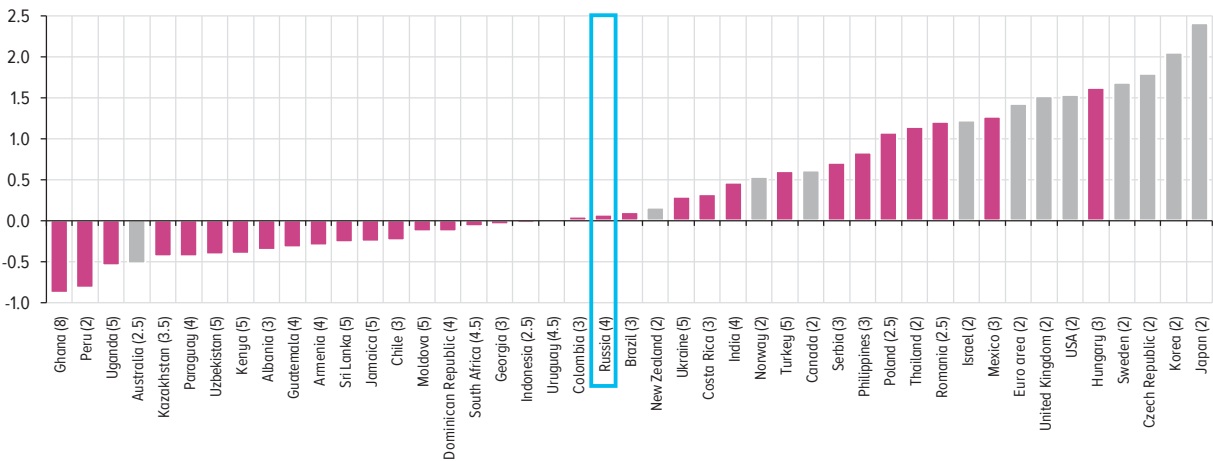
Note. To calculate the weighted average inflation target, we used weights determined by a country's gross domestic product (GDP) based on purchasing power parity (PPP) for the relative year. Weights are calculated among inflation-targeting countries, considering changes in their number historically, and for 2023–2025, GDP forecasts at PPP were taken from the World Economic Outlook. China is separately added to the sample of inflation-targeting countries among EMES to its economic size and for illustrative purposes only. Officially, the People's Bank of China does not implement monetary policy within the framework of inflation targeting; however, the Chinese Government annual report establishes a target for the then-current calendar year. Since 2015, this target has been set at around 3% for the year.

The list of emerging market economies (EME) targeting inflation includes: Mexico, Colombia, Peru, Brazil, Chile, Dominican Republic, Jamaica, Costa Rica, Guatemala, Paraguay, Uruguay, Thailand, Indonesia, India, Philippines, Sri Lanka, Poland, Hungary, Romania, Serbia, Albania, Moldova, Kazakhstan, Armenia, Georgia, Uzbekistan, Turkey, Ukraine, Russia, South Africa, Seychelles, Ghana, Uganda, and Kenya.

Sources: Meshcheryakov et al., 2023; central banks websites, World Economic Outlook (October 2022), AREAER (2021), annual reports on the work of the Government of China (2005–2023).

AVERAGE ECONOMIC COMPLEXITY INDEX FOR INFLATION TARGETING COUNTRIES (P.)

Chart 17

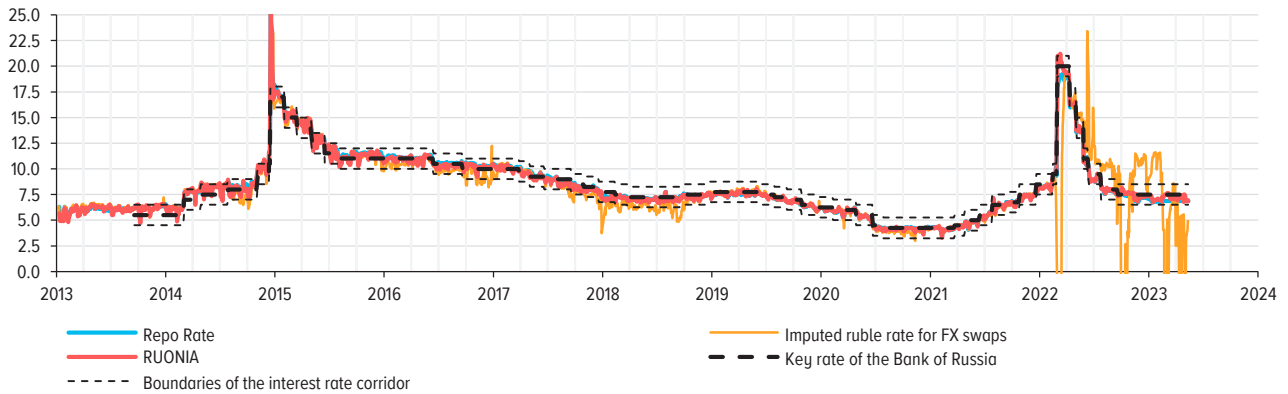


Note. The ECI is averaged over 2018–2020. Developed countries are highlighted in grey and EMES are highlighted in purple. Inflation target levels for each country (region) are shown in brackets.

Sources: Meshcheryakov et al., 2023; Atlas of Economic Complexity (the Growth Lab at Harvard University).

OVERNIGHT MONEY MARKET RATES IN 2013-2022*
(% P.A.)

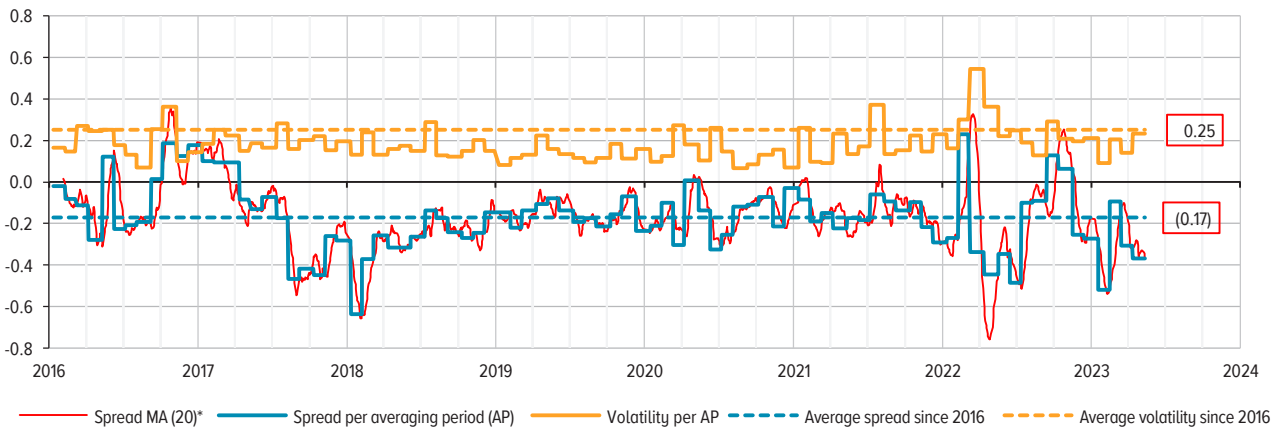
Chart 18



* The imputed ruble rate for currency swap operations in 2013–2021 is based on exchange and over-the-counter transactions in USD/RUB and EUR/RUB currency pairs; in 2022, it is based on deals concluded at the Moscow Exchange in the anonymous order execution mode for USD/RUB currency pair. The repo rate is calculated using repo transactions on the Moscow Exchange and over-the-counter repo transactions. All calculations exclude transactions of the Bank of Russia and the Federal Treasury.
Data cut-off date: 12 May 2023.
Sources: Moscow Exchange, Bank of Russia.

SPREAD AND SPREAD VOLATILITY SINCE 2016
(PPS)

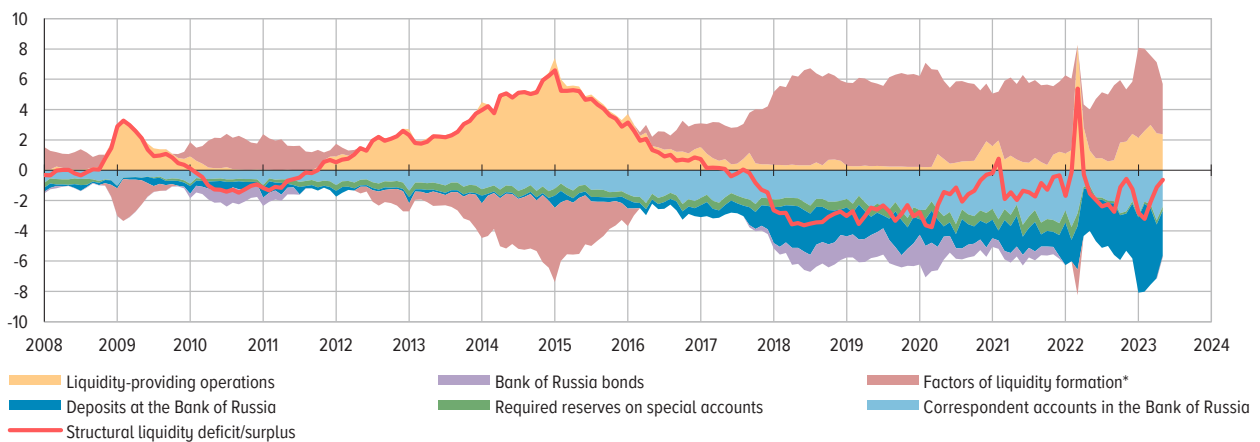
Chart 19



* MA (20) – the 20-day moving average.
Data cut-off date: 12 May 2023.
Source: Bank of Russia.

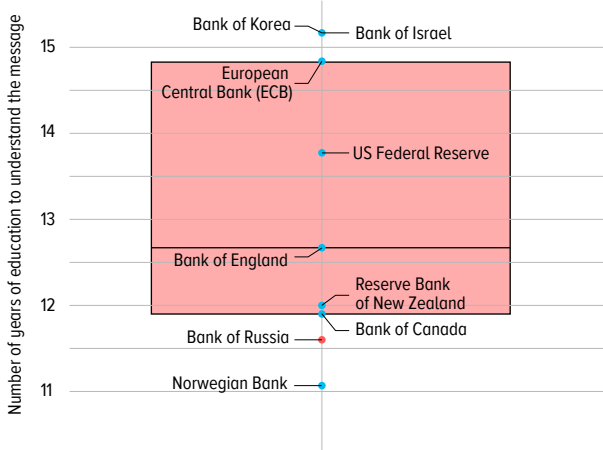
THE BANKING SECTOR STRUCTURAL LIQUIDITY DEFICIT/SURPLUS
(P TRILLION)

Chart 20

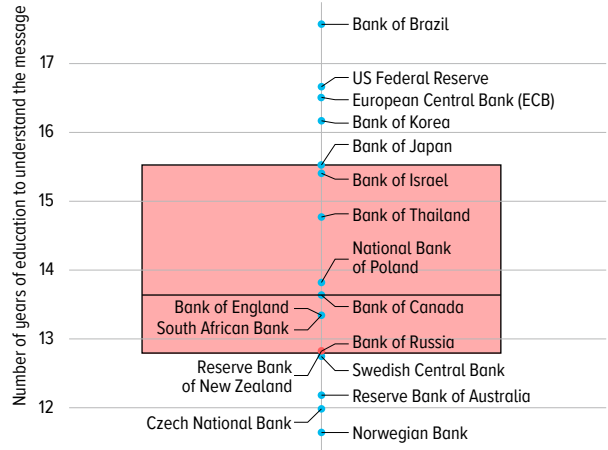


* This balance sheet item is a balancing one and includes changes in all other, not separately identified items of the balance sheet of the Bank of Russia.
Data cut-off date: 1 May 2023.
Source: Bank of Russia.

CONCISENESS OF ORAL STATEMENTS ON DECISIONS *Chart 21*
(ANALOGUE OF THE STATEMENT OF BANK OF RUSSIA GOVERNOR IN FOLLOW-UP TO BOARD OF DIRECTORS MEETING ON KEY RATE) ACCORDING TO THE FLESCH-KINCAID GRADE LEVEL



CONCISENESS OF COMMUNICATIONS ON DECISIONS *Chart 22*
(ANALOGUE OF PRESS RELEASE ON THE BANK OF RUSSIA BOARD OF DIRECTORS KEY RATE DECISION) BASED ON THE FLESCH-KINCAID GRADE LEVEL



GLOSSARY

Absorbing operations are the Bank of Russia actions to attract liquidity from credit institutions on a repayable basis. They can take the form of raising funds on deposit or placing Bank of Russia bonds.

Anchoring of inflation expectations – inflation expectations are considered anchored when they are not affected by short-term price fluctuations for goods and services and remain consistently in line with inflation targets. While short-term inflation expectations (up to 1–1.5 years) may vary in response to one-off pro- or disinflationary shocks, the state of anchoring implies that such fluctuations do not result in the growth of longer-term inflation expectations (beyond 1–1.5 years). Under anchored inflation expectations, economic agents recognise that inflation fluctuations are temporary, and the central bank will be capable of bringing inflation back to its target (in case of deviation) within the monetary policy influence horizon (1–1.5 years) and ensuring its stabilisation on target thereafter.

Bank of Russia key rate serves as the primary instrument for its monetary policy. The Bank of Russia Board of Directors sets the rate eight times a year. Changes in the key rate influence lending and economic activity, ultimately enabling the achievement of the primary goal of monetary policy. It corresponds to the minimum interest rate at Bank of Russia one-week repo auctions and the maximum interest rate at Bank of Russia one-week deposit auctions.

Banking sector liquidity refers to the funds held by credit institutions in correspondent accounts with the Bank of Russia in the Russian currency, primarily for making payments through the Bank of Russia payment system and meeting reserve requirements.

Consumer price index (CPI) is the ratio of the current cost of a fixed basket of goods and services to its base-period cost. It is calculated by the Federal State Statistics Service. The CPI reflects changes over time in the general price level of goods and services purchased by the households for consumption. The CPI is determined based on actual consumer spending patterns and thus serves as the primary indicator of the households cost of living. In addition, the CPI possesses several features that make it suitable for widespread use: the simplicity and comprehensibility of its construction methodology, monthly calculation frequency, and timely publication.

Core CPI is a consumer price index (CPI) that is stripped of components with price dynamics that have an administrative, event-driven, or seasonal nature.

Dedollarisation refers to the reduction in the share of foreign currency balances on accounts of individuals and legal entities, on financial institutions' balance sheets, and the decreased use of foreign currencies in financial transactions.

Deflation is the general decline in the price level of goods and services in the economy over a period of at least 12 months, with negative annual consumer price growth rates.

Disinflation is a decline in the rate of price growth for goods and services from high levels.

Effective Lower Bound (ELB) is the lower limit for the key rate, at which further reduction does not yield the desired result due to decreased efficiency of the monetary policy transmission mechanism. The ELB level can fluctuate based on economic conditions. A specific instance of this is Zero Lower Bound (ZLB).

Financial stability is such a state of the financial system which hinders systemic risks, that can pose negative effects on the transformation of savings into investments and on the real sector of the economy, if materialised. In a financially stable situation, the economy is more resilient to external shocks.

Floating exchange rate regime is an exchange rate regime in which the central bank does not set benchmarks, including operational ones, for the exchange rate level or changes, allowing the exchange rate to be influenced by market factors. However, the central bank reserves the right to purchase foreign currency to replenish international reserves or sell it in the event of threats to financial stability.

Inflation expectations refer to the anticipated price growth in the future by economic agents. The inflation expectations of companies, households, financial markets, and professional analysts are distinguished. Based on these expectations, economic entities make decisions and formulate future plans, including consumption, savings, borrowing, investments, and interest rates on loans and deposits. Inflation expectations influence inflation and are therefore a crucial indicator when determining monetary policy decisions.

Inflation is defined as a persistent rise in the general price level of goods and services within an economy. In discussions of inflation, the focus is typically on the change in the value of the consumer basket over time, which consists of food, non-food items, and services consumed by an average household (see the article 'Consumer Price Index').

Inflation targeting is a monetary policy strategy with the following principles: price stability is the main objective of monetary policy; the inflation target is clearly defined and declared; under a floating exchange rate regime, the primary impact of monetary policy on the economy occurs through interest rates; monetary policy decisions are made on the basis of analysis of a wide range of macroeconomic indicators and their forecasts, while the Bank of Russia aims to establish clear benchmarks for households and businesses, including by enhancing information transparency.

Reserve requirements are the ratios ranging from 0 to 20%, applied to a credit institution's reserve liabilities to determine the standard amount of required reserves. Established by the Bank of Russia Board of Directors.

Micro- and macroprudential policy. Financial stability is attained through a mix of microprudential regulation, oversight of individual financial organisations, and macroprudential and anti-crisis policies. The anti-crisis policy aims to preserve financial stability when a stress scenario has already occurred. Macroprudential policy reduces the probability and softens the impact of future financial crises. Macroprudential tools are employed to restrict or decrease vulnerabilities in the financial system and to build capital and liquidity buffers within the financial system, enhancing the resilience of financial institutions during shocks and supporting activities such as lending amid financial market turbulence. Microprudential policy regulates the sustainability of individual institutions. Microprudential measures are implemented continuously and encompass reserve requirements for managing capital, liquidity, interest rate, and foreign exchange risk in financial organisations. Compliance with these measures is overseen by banking and financial supervisory bodies. Microprudential regulation impacts the long-term aspects of financial organisation operations.

Model apparatus is a set of quantitative models used by the Bank of Russia in developing [macroeconomic forecasts](#). Models facilitate tasks such as analysing current economic conditions, generating short-term forecasts, and calculating medium-term forecasts under various assumptions and scenario variations.

Neutral rate is a level of the key rate at which monetary policy neither promotes nor hinders inflation.

Output refers to the value of goods and services resulting from the production activities of an economy's residents during a reporting period. Gross domestic product (GDP) is one of the indicators of output. GDP represents the value of goods and services produced within a country across all economic sectors, intended for final consumption, accumulation, and export (less imports).

Refinancing operations are the Bank of Russia actions to supply liquidity to credit institutions on a repayable basis. They can take the form of loan, repo, or currency swap.

Relative price is the price of a product or service compared to another one, expressed as a ratio between the prices of two. Relative price can be expressed as the ratio between any two products' prices or the ratio of a product's price to a basket of goods' prices.

Ruble Overnight Index Average (RUONIA) is a weighted interest rate for overnight interbank loans (deposits) in rubles, reflecting the estimated cost of unsecured overnight borrowing.

Structural liquidity deficit / surplus in the banking sector. *Structural deficit* refers to a condition in the banking sector characterised by a consistent demand for credit institutions to attract liquidity from the Bank of Russia. *Structural surplus* is characterised by the formation of a stable excess of liquidity in credit institutions and the necessity for the Bank of Russia to conduct operations to absorb it. The estimated level of structural liquidity deficit/surplus represents the difference between debt on refinancing and absorbing operations for excess liquidity of the Bank of Russia.

Systemic risk is the risk of failure in the provision of financial services caused by the disruption of the functioning of part or the entire financial system and having significant negative consequences for the real economy.

The GDP deflator is an index calculated based on the value of a basket containing all final goods and services produced within an economy during a year. In contrast to the CPI, the deflator calculation uses current-year weights and takes into account all goods and services produced by the national economy.

Transfer curve is a set of internal uniform transfer interest rates for operations of various terms set by a commercial bank. It is the central component of the intrabank transfer pricing system, allowing a credit institution to create a coordinated pricing structure for operations across different market segments and, if necessary, flexibly adjust its balance sheet structure by choosing between various sources of funding and placement of funds.

Transmission mechanism is the mechanism of influence of monetary policy decisions on the overall economy and price dynamics specifically; the process of gradual dissemination of the central bank's signal to maintain or change the key rate and its future trajectory from financial market segments to the real sector of the economy and ultimately to inflation. Changes in the key rate level are transmitted to the economy through various channels (interest rate, credit, foreign exchange, balance sheet, inflation expectations, and others).

BIBLIOGRAPHY

Work stream 1. Inflation target format

1. Мещеряков А., Сухомлинов А., Глазова А. [Meshcheryakov, A., Sukhomlinov, A., Glazova A.] Формат цели по инфляции/ Банк России: Обобщающая аналитическая записка. 2023. [Inflation Target Format/ Bank of Russia: Comprehensive Analytical Note. 2023 – in Russian].

2. Глазова А. [Glazova, A.] Оптимальный уровень цели по инфляции, ZLB и равновесная реальная процентная ставка/ Банк России: Исследовательский доклад. 2023. [Optimal Level of Inflation Target, ZLB, and Equilibrium Real Interest Rate / Bank of Russia: Working Paper. 2023 – in Russian].

3. Мещеряков А., Сухомлинов А., Колосов А. [Meshcheryakov, A., Sukhomlinov, A., Kolosov, A.] Факторы выбора уровня цели по инфляции: теория и практика в мире/ Банк России: Исследовательский доклад. 2023. [Factors Determining the Choice of Inflation Target Levels: Theory and Global Practice / Bank of Russia: Working Paper. 2023 – in Russian].

4. Кузьмина З., Мещеряков А., Колосов А. [Kuzmina, Z., Meshcheryakov, A., Kolosov, A.] Мировой опыт снижения уровней среднесрочных целей по инфляции/ Банк России: Аналитическая записка. 2023. [Global Experience in Lowering Medium-Term Inflation Target Levels / Bank of Russia: Analytical Note. 2023 – in Russian].

5. Магжанов Т., Мещеряков А. [Magzhanov, T., Meshcheryakov, A.] Что определяет выбор «ширины» цели по инфляции? / Банк России: Исследовательский доклад. 2023. [What Determines the Choice of Inflation Target 'Width'? / Bank of Russia: Working Paper. 2023 – in Russian].

6. Кузьмина З., Плущевская Ю., Жемков М., Мещеряков А., Колосов А., Шемякина К. [Kuzmina, Z., Plushchetskaya, Yu., Zhetkov, M., Meshcheryakov, A., Kolosov, A., Shemyakina, K.] Выбор показателя для таргетирования инфляции/ Банк России: Аналитическая записка. 2023. [Choice of Indicator for Inflation Targeting / Bank of Russia: Analytical Note. 2023 – in Russian].

7. Мелихова М., Резепина Е., Шарафутдинов А. [Melikhova, M., Rezepina, E., Sharafutdinov, A.] Альтернативные стратегии ДКП: преимущества и недостатки/ Банк России: Исследовательский доклад. 2023. [Alternative Monetary Policy Strategies: Pros and Cons / Bank of Russia: Working Paper. 2023 – in Russian].

Work stream 2. The operational framework of monetary policy

1. Яцык О., Киюцевская А., Клепацкий Д. Обязательные резервы в Банке России/ Банк России: Аналитическая записка. 2023. [Yatsyk, O., Kiyutsevskaya, A., Klepatsky, D. Required Reserves in the Bank of Russia / Bank of Russia: Analytical Note. 2023 – in Russian].

2. Яцык О., Киюцевская А., Клепацкий Д., Ахмед Абу Бакр Ф. [Yatsyk, O., Kiyutsevskaya, A., Klepatsky, D., Akhmed Abu Bakr, F.] Операционная процедура ДКП Банка России/ Банк России: Аналитическая записка. 2023. [Bank of Russia's Monetary Policy Operating Procedure / Bank of Russia: Analytical Note. 2023 – in Russian].

Work stream 3. Retrospective assessment of the effectiveness of monetary policy

Змановский А. [Zmanovsky, A.] Ретроспективная оценка оптимальности ДКП / Банк России: Исследовательский доклад. 2023. [Retrospective assessment of the optimality of monetary policy / Bank of Russia: Working Paper. 2023 – in Russian].

Work stream 4. Communication as a monetary policy instrument

1. Евстигнеева А. [Evstigneeva, A.] Коммуникация как инструмент ДКП/ Банк России: Обобщающая аналитическая записка. 2023. [Communication as a Monetary Policy Instrument / Bank of Russia: Comprehensive Analytical Note. 2023 – in Russian].

2. Евстигнеева А., Карпов Д. [Evstigneeva, A., Karпов, D.] Влияние негативных новостей на восприятие инфляции населением/ Банк России: Серия докладов об экономических исследованиях. 2023. № 111. [The Impact of Negative News on Public Perception of Inflation / Bank of Russia: Working Paper Series. 2023. No. 111 – in Russian].

3. Евстигнеева А., Сидоровский М. [Evstigneeva, A., Sidorovskiy, M.] Оценка ясности коммуникации Банка России по денежно-кредитной политике с помощью нейронных сетей // Деньги и кредит. 2021. № 3. [Assessment of Clarity of Bank of Russia Monetary Policy Communication by Neural Network Approach // Money and Credit. 2021. No. 3 – in Russian].

4. Евстигнеева А., Щадилова Ю., Сидоровский М. [Evstigneeva, A., Shchadilova, Yu., Sidorovskiy, M.] Роль коммуникации и информационных факторов в возникновении сюрпризов денежно-кредитной политики Банка России/ Банк России: Серия докладов об экономических исследованиях. 2022. № 99. [The Role of Communication and Information Factors in the Emergence of Surprises in Bank of Russia Monetary Policy / Bank of Russia: Working Paper Series. 2022. No. 99 – in Russian].

5. Павленко М., Горбатова Т., Евстигнеева А. [Pavlenko, M., Gorbatova, T., Evstigneeva, A.] Уроки кризисов для совершенствования коммуникации Банка России с финрынками/ Банк России. 2023. [Lessons from Crises to Improve the Communication between the Bank of Russia and Financial Markets / Bank of Russia. 2023].

6. Щадилова Ю., Евстигнеева А. [Shchadilova, Yu., Evstigneeva, A.] Международный опыт коммуникации о решениях по денежно-кредитной политике и макроэкономических прогнозах/ Банк России: Аналитическая записка. 2023. [Communication on Monetary Policy Decisions and Macroeconomic Forecasts: International Experience / Bank of Russia: Analytical Note. 2023 – in Russian].

Work stream 5. Monetary policy and financial stability

Асриев М., Мирошниченко Д. [Asriev, M., Miroshnichenko, D.] Денежно-кредитная политика и финансовая стабильность/ Банк России: Исследовательский доклад. 2023. [Monetary Policy and Financial Stability / Bank of Russia: Working Paper. 2023 – in Russian].

Work stream 6. New challenges to monetary policy

Смирнова Ж. [Smirnova, Zh.] Новые вызовы для денежно-кредитной политики/ Банк России: Аналитическая записка. 2023. [New Challenges to Monetary Policy: Bank of Russia Analytical Note, 2023 – in Russian].

LIST OF ABBREVIATIONS

CPI – consumer price index

ECB – European Central Bank

ELB – effective lower bound

GDP – gross domestic product

IBL – interbank loans

IT – inflation targeting

MPG 2017–2019 – Monetary Policy Guidelines for 2017 and the Period of 2018 and 2019

MPG 2018–2020 – Monetary Policy Guidelines for 2018 and the Period of 2019 and 2020

MPG 2021–2023 – Monetary Policy Guidelines for 2021 and the Period of 2022 and 2023

MPG 2022–2024 – Monetary Policy Guidelines for 2022 and the Period of 2023 and 2024

MPG 2023–2025 – Monetary Policy Guidelines for 2023 and the Period of 2024 and 2025

RUONIA – Ruble Overnight Index Average (weighted interest rate for one-day interbank loans (deposits) in rubles)

US Fed – the Federal Reserve System of the USA

ZLB – zero lower bound