



December 2022

MONETARY CONDITIONS AND MONETARY POLICY TRANSMISSION MECHANISM

Information and analytical commentary

Moscow 2023

MONETARY CONDITIONS AND MONETARY POLICY TRANSMISSION MECHANISM (DECEMBER 2022)

- In general, monetary conditions did not change in December, remaining neutral. Diverse movements of indicators reflecting the foreign exchange and credit and deposit market conditions offset each other.
- The average spread between RUONIA and the key rate for the December averaging period (AP) was -27 bp (for the November AP: -26 bp). Despite a large inflow of budget funds in late 2022, the average spread remained actually unchanged. The Bank of Russia promptly absorbed excess liquidity, including through 'fine-tuning' deposit auctions. The liquidity surplus in late 2022 amounted to 2.8 trillion rubles, which is consistent with the Bank of Russia's forecast.
- In December, money market rates remained almost unchanged: the decision of the Bank of Russia Board of Directors at the December meeting was in line with market participants' expectations. OFZ yields over one year slightly increased (10–15 bp), remaining at lower levels compared to the end of September (9–11%).
- In November, lending activity in the corporate segment slightly decelerated, but remained high. In the retail segment, the growth of outstanding amounts accelerated mainly due to mortgages after a pause in October.
- The growth rate of broad money supply continued to decline in November. The money supply in the national definition in November continued to grow at high rates, including as a result of dedollarisation. The annual change in the money supply was 23.4%.

MONETARY POLICY TRANSMISSION

The monetary policy transmission mechanism (monetary policy transmission) is a sequence of links in the economy through which monetary policy influences demand and, accordingly, inflation. This mechanism is based on rates and yields in the key market segments, influencing each other (the key rate directly influences short-term money market rates; short-term rates influence long-term rates and OFZ yields; OFZ yields influence corporate bond yields; bond yields and long-term money market rates influence credit and deposit rates). Rates, in turn, influence the attractiveness of savings, consumption, and investment (interest rate channel of the transmission mechanism), the ability of borrowers to provide high quality collateral, and of banks - to expand lending (credit and balance-sheet channels), as well as the wealth of investors (*welfare channel*), and the ruble exchange rate stability (*foreign exchange channel*).¹

Acting through any of these channels, higher market rates constrain demand and inflation, while lower ones stimulate them. In addition to monetary policy and demand, inflation and financial market conditions are influenced by many other factors taken into account by the Bank of Russia when deciding on the key rate.

This material briefly describes the monetary policy transmission and the conditions of its functioning.

¹ For details, refer to <u>Appendix 1 to the Monetary Policy</u> <u>Guidelines for 2023–2025.</u>

MONETARY CONDITIONS

As of the end of December, monetary conditions did not change on average. Higher volatility in the foreign exchange market helped tighten monetary conditions owing to the increased demand for foreign currency among households before the holidays and relatively low sales by exporters. Some reduction in mortgage interest rates in November had a cushion effect (Chart 1). The decision taken by the Bank of Russia Board of Directors in December to keep the key rate at 7.5% per annum was expected by the market and neutral for monetary conditions.



* The indicators were used to calculate the inverse percentile (higher values are shown on the left). Note. The chart shows the current level of the indicator (in percentiles) relative to the distribution of values since January 2017. The red marker shows the indicator's level (in percentiles) as of the previous date. A shift of the indicator to the left relative to the previous date indicates the easing of monetary conditions, a shift to the right – their tightening. Source: Bank of Russia calculations.

INTEREST RATE CHANNEL OF MONETARY POLICY TRANSMISSION MECHANISM (MPTM)

1. Key rate

As at the previous meeting on 28 October 2022, at its meeting held on 16 December 2022, the Bank of Russia Board of Directors maintained the key rate at 7.5% per annum. According to financial market indicators as of the end of December 2022, market participants expected the key rate to maintain its current level until the end of 2023 H1 (Table 1).

IN DECEMBER, ANALYSTS RETAINED KEY RATE EXPECTATIONS AS OF MID-2023

Table 1

Key rate expectations based on market indicators (instrument)	April 2023	June 2023
ROISfix	7.5 (7.5)	7.5 (7.5)
RUSFAR	-	-
Analysts' key rate expectations*	2023 average	2024 average
Survey by the Bank of Russia	7.3 (7.1)	-

* Survey dates: 30 November–6 December 2022. Brackets are used to show the results of the survey conducted in October 2022. Sources: Bank of Russia calculations, NFA.

2. Money market and overnight rates (RUONIA)

In the December required reserve (RR) averaging period (AP), the spread between RUONIA² (the Bank of Russia's operational benchmark) and the Bank of Russia³ key rate was **-27 bp** (for the November AP: -26 bp; for 2022: -18 bp) (Chart 4). The spread volatility increased to 21 bp (for the November AP: 19 bp; for 2022: 35 bp).

The structural liquidity surplus over the December AP averaged **2.3 trillion rubles.** (for the November AP: 1.2 trillion rubles). In December, the surplus increased by 1.6 trillion rubles and amounted to **2.8 trillion rubles** at the end of 2022 (Table 2), which complies with the Bank of Russia's forecast: 2.6–3.2 trillion rubles. However, the dynamics of certain individual components of this forecast demonstrated some peculiarities. Operations in budget accounts led to a larger inflow of funds to banks than expected. A significant part of the costs was financed from the NWF. In addition, the Federal Treasury (FT), counter to its practice, increased the amount of funds placed as bank deposits at the end of the year. This led to an additional inflow of liquidity. This inflow was partly offset by rising demand for cash, which was above its seasonal levels. Furthermore, the balances of correspondent accounts of banks in early January were higher than the level required by them for averaging RRs.

In the first half of the December AP, some banks increased their demand for liquidity and the spread narrowed. Despite the fact that FT operations in the banking sector as a whole led to inflows of funds, some banks occasionally formed outflows under these operations. Also, the amount of customer payments increased in December, which required maintaining higher balances in correspondent accounts to make these payments. Eventually, some participants increased their borrowings in the money market. In the second half of the AP, the spread widened. At the end of

² RUONIA (Ruble Overnight Index Average) is the weighted average interest rate on overnight interbank ruble loans (deposits) reflecting the cost of unsecured overnight borrowing.

³ The operational objective of the Bank of Russia's monetary policy within the inflation targeting strategy is to maintain rates in the unsecured overnight segment of the interbank money market close to the Bank of Russia key rate.

December, banks received seasonally high budget expenditures. This exerted downward pressure on money market rates. The Bank of Russia additionally absorbed excess liquidity at 'fine-tuning' deposit auctions in late December and early January in order to keep the RUONIA rate close to the key rate.

By the end of 2022, the liquidity surplus increased. However, some banks still need to raise funds from the Bank of Russia. This was due to the continuing high volatility of budget operations and the uncertainty with the redistribution of these funds throughout the banking sector in January. In such conditions, in January, the Bank of Russia decided to keep limits on 1-month and 1-year repo auctions at the level of the previous month in order to maintain the money market rates close to the key rate. Demand at the auctions exceeded the limit and totalled 2 trillion rubles. The amount of funds raised on a net basis increased by 0.6 trillion rubles. Demand for long-term repo auctions of the Bank of Russia is expected to drop off as the volatility of budget operations decreases.

The forecast of the structural liquidity surplus for the end of 2023 will be refined based on the updated macroeconomic forecast in the February release of the Monetary Policy Report.

3. Money and debt market yield curves

Money market curves. In December, the ROISfix⁴ curve and the RUSFAR 3M rate showed no marked changes (Chart 6). This is due to the fact that the market still expects the key rate to remain close to the current level until at least mid-2023.

OFZ yield curve. In December, the short-term end of the curve (up to 2Y) continued to decline: OFZ 1Y – 7.25% (-21 bp); OFZ 2Y – 7.95% (unchanged), while long-term yields (from 5Y) grew on average by 10–14 bp: OFZ 5Y – 9.37% (+13 bp); OFZ 10Y – 10.31% (+11 bp) (Chart 9). The movements of the far end of the curve are associated with the remaining high risk premiums and active borrowings by the Russian Ministry of Finance. The premiums provided by the Ministry at the December auctions amounted to +9 bp to the yield of the secondary market for OFZ-PD and +15–35 bp to RUONIA for OFZ-PK. There were no significant changes in the structure of market participants: SICIs still remained net sellers in the secondary OFZ market, while non-bank credit institutions and collective investors were net buyers. Due to the diverse movement of the short and long ends of the zero-coupon curve, the spread between 10-year and 2-year OFZ yields continued to expand, having reached 271 bp in mid-December (the highest level over the past five years), but it narrowed to 236 bp by the end of the month (+11 bp MoM).

In December, the global situation in the debt market of advanced economies did not have a significant impact on the dynamics of the Russian OFZ market. The yield of US Treasury bonds slightly decreased (no more than 10 bp) amid expectations of a slowdown in the growth of the US Fed rate, including due to the first signs of the labour market cooling (wage trends: 0.3% MoM and 4.6% YoY in December; 0.4% MoM and 4.8% YoY in November) and declining inflation (6.46% (at the end of December; 7.11% at the end of November).

Primary OFZ market. In December, the Russian Ministry of Finance continued to place a large OFZ volume (in December: 1.5 trillion rubles; in November: 1.4 trillion rubles). These were mostly OFZ-PK. The December auctions were characterised by greater diversification, i.e. fewer non-competitive and highly concentrated bids (no more than 60% for five bids). The aggregate demand for securities was supported by matured OFZ-PD 26220 for 350 billion rubles. At the end of the year, the Russian Ministry of Finance placed OFZ for a total amount of 3.28 trillion rubles, which, together with other sources of financing, made it possible to cover the budget deficit in 2022 and accumulate ruble balances in bank accounts to be used in 2023.

⁴ The OIS (ROISfix) curve represents indicative rates (fixing) on RUONIA IR swaps.

Implied inflation. As of the end of December, implied inflation for OFZ-IN-52002 (2028) slightly increased to 6.3% (against 6.1% a month earlier).⁵ For 2022, the change was +1.3% (vs 5% at the end of 2021).

4. Corporate bond market

Secondary market. According to IFX-Cbonds index, the average yield of corporate bonds in December rose significantly to 9.72% (+22 bp). The spread between corporate and government bond yields increased in the short run in the first half of the month (peak: 252 bp as of 15–16 December); it slightly adjusted by the end of December to 218 bp (197 bp in November), still exceeding the median level of 2022 (170 bp). In general, in 2022, the spread widened by 165 bp due to sanctions and geopolitical events, as well as worsening economic growth prospects.

Primary market. In December, the activity of corporate borrowers significantly intensified. The total amount of market and non-market placements reached 1.3 trillion rubles, which is the highest since December 2020. More than half of the placements – 0.9 trillion rubles – were available to a wide range of investors. Concurrently, the number of issuers of market bonds more than doubled compared to the previous month – to 65 (31 in November), which indicates continued recovery of the corporate debt market. The main borrowers were construction (about 200 billion rubles) and electric power (63 billion rubles) companies. Russian companies, mainly in the real sector, continued to ramp up funds raised in Chinese yuan. The issuers of substitute bonds, which make it possible to restore Eurobond payments in US dollars and euros, were financial institutions (211 billion rubles in December). During 2022, the amount of market placements totalled 2.6 trillion rubles, which is comparable to 2.6 trillion rubles in 2021. Concurrently, the share of substitute bonds was about 300 billion rubles.

5. Credit and deposit market

Deposit rates. Deposit rates in rubles changed insignificantly in November. Certain upward adjustment of short-term⁶ deposits showed the deposit market specifics: some customers still preferred to keep their money in savings accounts and shortest-term deposits, and banks continued to compete in these segments. The rates did not change in the long-term deposit segment, including taking into account the low volatility in financial markets in November and unchanged expectations for the key rate.⁷ As a result, the average interest rate on short-term deposits increased by 0.2 pp to 5.4% per annum, while on long-term deposits it remained close to 7.3% (Chart 11).

According to recent data, deposit rates grew in December. Thus, the deposit index FRG100 added 0.1 pp, reaching 6.7% (Chart 12). The upward impact on deposit rates may decrease in 2023 Q1 due to liquidity inflows into the banking sector in December 2022, as well as due to a seasonal intraannual decline in households' spending.

Deposit operations. Households' ruble funds⁸ with banks increased in November, the annual change⁹ amounted to 14.7% (13.9% in October). The flow from short-term deposits to current accounts, including savings accounts, and long-term deposits continued. The redistribution of households'

⁵ The methodology for calculating the indicator is described in the methodological note <u>'Estimates of Implied Inflation from</u> <u>Prices of Inflation-Indexed Bonds</u>.

⁶ Short-term deposits imply deposits with any maturities of up to one year, excluding demand deposits; long-term deposits are deposits with any maturities of over one year.

⁷ See details in Subsection 'Money and debt market yield curves'.

⁸ Hereinafter, household funds with banks include balances in time deposits, demand deposits, and current accounts, but exclude balances in escrow accounts under equity construction agreements.

⁹ Hereinafter, increases in banks' balance sheet indicators are calculated based on the reporting data of operating credit institutions recorded in the State Register as of the relevant reporting date. Increases in foreign currency claims and liabilities are calculated in US dollar terms. Where increases in the indicators comprising foreign currency and ruble components are calculated herein, the growth of the foreign currency component is converted into rubles using the period average exchange rate.

savings in banks occurs, among other things, as the slope of the yield curve on deposits returns to normal. Dedollarisation of individuals' deposits slowed down: in November, foreign currency savings of households with banks decreased by 1.2%, in October – by 6%. The share of foreign currencies in households' deposits dropped to its new historical low of 10.2% (Chart 13). Funds on escrow accounts in November decreased by 25 billion rubles, despite the expansion of mortgage lending,¹⁰ owing to a faster release of funds from escrow accounts and active completion of housing projects.

According to recent data, the inflow of ruble funds to banks gained seasonal pace in December and was faster than during the same period in 2021. Movements of households' funds in banks may be less volatile in 2023 compared to 2022, given the gradual stabilisation of macroeconomic indicators and rates in financial markets and in the banking sector.

Credit rates. Ruble rates in certain lending market segments were rising in November, which was associated with increased credit risk assessments by banks in October and higher funding costs. Thus, the weighted average rate on short-term loans to non-financial organisations edged up by 0.2 pp to 9.3% p.a., and edged down by 0.5 pp to 8.6% on long-term ones (Chart 11). In the retail segment, in November, the weighted average rate on ruble loans for up to 1 year grew by 1.1 pp, remaining below the average for the first two quarters of 2022. As to household loans for a period of more than one year, the average rate was close to the level of the previous month, being under the diverse impact of rate movements in the mortgage and consumer lending segments. The rate on ruble-denominated mortgage loans in November decreased by 0.3 pp to 7.4% p.a. due to fluctuations in the structure of transactions. The share of the primary segment, characterised by low mortgage rates due to the subsidised lending programme and discounts offered by developers, recovered after a decline in October. Concurrently, the rate in the finished housing segment continued to grow. The average rate on other consumer loans also increased. According to recent monitoring data, in December, banks were slightly raising the interest rates on market-based mortgage loans, while keeping rates under subsidised mortgage programmes unchanged. However, the decision taken in mid-December to increase the subsidised new housing mortgage loan rate by 1 pp will put upward pressure on the average cost of long-term household loans from the beginning of 2023.

In the short run, the decision made at the December meeting of the Bank of Russia Board of Directors to keep the key rate unchanged will contain the growth of average lending rates. Concurrently, heterogeneity in interest rate movements in various segments of the lending market can remain due to fluctuations in the balance of subsidised and market-based loans in the issued volumes and risk premium assessments.

Corporate lending. The growth rate of corporate lending slowed down in November due to the tightening of non-price criteria for borrowers in October, but still remained high. As of the end of November, the annual growth in the corporate loan portfolio¹¹ was close to the level of the previous month at 12.3% (Chart 14). The trend towards replacing loans in foreign currency with those in rubles remained. According to preliminary data, lending activity in the corporate segment was still high in December.

In 2023, the growth pace of outstanding corporate loans will depend on the continuing adaptation to new conditions – in particular, a substitution of external debt for domestic funding, as well as on external factors, including foreign trade conditions.

Retail lending. Retail customers' demand for borrowings recovered in November after its slacking in the previous month due to the stabilisation of consumer sentiment. As of the end of November, the annual growth in retail lending¹² increased by 0.3 pp to 9.9%. This was 85% due to the mortgage portfolio movements (Chart 15).

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¹⁰ See Subsection 'Retail lending' for details.

¹¹ Hereinafter, the growth of lending to non-financial organisations, financial institutions, and individual entrepreneurs excludes claims acquired by banks.

¹² Hereinafter, growth in retail lending does not include claims acquired by banks.

The mortgage lending growth was driven by the primary segment. This was supported by the expectation of completion of the subsidised new housing mortgage programme by the end of the year and low rates under developers' programmes. In November, the amount of issued ruble-denominated mortgage loans totalled 471 billion rubles (of which only the share of subsidised mortgage lending for housing under construction was 30%) vs 448 billion rubles in October. Thus, as of the end of November, the annual growth in the portfolio of mortgage housing loans¹³ sped up by 1.6 pp and reached 18.1%.

The unsecured consumer lending segment also showed signs of recovery: the portfolio growth accelerated again, reaching 1.0% over the month vs 0.3% in October.

According to the preliminary data, retail lending continued to grow in December. This was mainly driven by the long-term segment due to ongoing high demand for mortgage loans and influenced by expectations that the subsidised mortgage programme for new housing would be terminated. Concurrently, in December, both developers and banks tended to gradually refuse to grant mortgages at reduced interest rates. In the short term, this may cause some increase in lending rates in the primary market. Along with the decision taken in mid-December to extend the subsidised mortgage programme for new housing until 1 July 2024, a higher interest rate on such mortgage by 1 pp and expanding family mortgage parameters could help stabilise or partially reduce the demand for mortgage lending secured by ECAs. However, effective demand can be partially redistributed in favour of the extended family mortgage programme, thereby maintaining high lending activity in the mortgage segment.

In the coming months, we may expect moderate trends for other outstanding consumer loans, taking into account the increased propensity of households to save¹⁴ and the introduction of macroprudential limits on certain high-risk transactions in the unsecured consumer lending segment starting from 2023.

OTHER FINANCIAL MARKET SEGMENTS

1. Exchange rate (foreign exchange channel)

In December, the US dollar/ruble exchange rate was in the range from 61.22 to 73.75 rubles per US dollar. By the end of the month, the ruble weakened significantly (by 20.7% to 73.63 rubles per US dollar. The average monthly rate demonstrated similar movements: 66.48 rubles per US dollar in December; 61.10 rubles per US dollar in November. The movements of the ruble exchange rate were mainly associated with relatively low sales of foreign currency by exporters amid lower prices for Russian oil and smaller export quantities, as well as people's growing demand for foreign currency before the New Year holidays. Monthly realised exchange rate volatility increased slightly (15% in December; 11.1% in November), remaining close to 2022 lows. The ruble exchange rate remained almost unchanged at the end of the year (+0.5%), despite increased volatility amid sanctions and geopolitical events.

<u>The real effective exchange rate of the ruble (the REER)</u>, calculated against the currencies of main foreign trade partner countries, decreased by 2.4% (-1.0% in November). All else being equal, a weaker REER is an important factor for easing monetary conditions.

2. Capital market (welfare channel)

The Russian stock market weakly consolidated in December, similar to the previous month, due to a lack of significant news and market drivers, both foreign and domestic. The Moscow Exchange index fluctuated in the range of 2,100–2,200 bp, showing a slight decrease of 0.9% (-43.1% YTD,

¹³ Housing mortgage loans, net of claims on such loans acquired by banks.

¹⁴ See Inflation Expectations and Consumer Sentiment No. 12 (72), December 2022.

-42.4% YoY). The situation with the export of Russian energy commodities did not significantly affect the prices. Concurrently, the stock volatility range continued to narrow, and the Russian Volatility Index (RVI) also declined to 39 p (-4 p MoM; +8 p YoY).

According to the Moscow Exchange, the volume of trades in shares, depositary receipts and investment fund units dropped to 17.6 trillion rubles (30 trillion rubles in 2021).

Most of the Moscow Exchange sectoral indices declined in 2022, except for the chemical and petrochemical industry (+4% YoY). The most significant decrease was recorded in the information technology sector, as well as in the financial sector (-58% and 48% YoY, respectively).

Foreign markets

In December, several global central banks continued their cycle of policy rate hikes amid persistent inflationary pressures. The average policy rate in advanced economies reached 3.20% (+41 bp MoM; +320 bp YTD), 11.62% in Latin America (+24 bp, +522 bp), 5.70% in South and Southeast Asia (+30 bp, +225 bp), 9.27% in Central and Eastern Europe and Central Asia (+10 bp, +568 bp); 9.73% in African countries (+0 bp, +403 bp).

Some emerging market economies, such as Indonesia, Mexico, India, Kazakhstan, South Korea, and Peru, raised their policy rates, while South Africa and Brazil kept theirs unchanged. Most advanced economies also raised their policy rates at December meetings in line with expectations of market participants. Nevertheless, the rhetoric of the monetary authorities of key advanced economies slightly softened, though remaining tough. Along with geopolitical risks, this continued to make the world economic outlook uncertain.

In December, stock indices in national currencies of emerging market economies were mostly decreasing (MSCI EM: -1.6%; Bovespa: -2.4%; IPC Mexico: -6.2%; SSE Composite: -2.0%)(Chart 20). As of the end of the year, the MSCI EM Index dropped by 22.4%. The main factor that influenced the movements of stock indices in emerging market economies in 2022 was the outflow of investors from higher risk assets due to geopolitical tensions, the appreciation of the US dollar, and the policy rate hike cycle in advanced economies. Markets were also influenced by the restrictive policies associated with the coronavirus pandemic in China, as well as by the crisis in the real estate sector, and problems with producing semiconductors. Emerging market government bond yields continued to decline in December, but remain 7–205 bp higher than a year ago.

The stock markets of advanced economies also demonstrated negative trends in December in contrast to expectations of growth in American markets typical for the end of the year (S&P 500: -5.9%; Stoxx 600: -3.44%; Nikkei 225: -6.23%) (Chart 20). In 2022, EM stock indices mostly fell significantly (S&P 500: -19.4%; Stoxx 600: -12.9%; Nikkei 225: -9.3%). The Nasdaq Composite index dropped for the first time in all four quarters and lost 33.1% as of the end of the year. The market trends in advanced economies were driven by record inflation in 2022, corresponding monetary tightening, as well as the energy crisis and geopolitical risks.

MONEY SUPPLY

The growth in banking system's claims on the economy did not change in November (11% YoY), nor did the annual growth in outstanding loans (11.6%).¹⁵ Retail lending sped up in annualised terms to 9.8% in November (vs 9.4% in October). Claims on the economy remained the main source of money supply expansion, and the annual increase in November totalled 9.7 trillion rubles, which was 0.3 trillion rubles higher than in October.

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¹⁵ The banking system's claims on the economy mean all claims of the banking system on non-financial organisations, financial institutions, and households in Russian rubles, foreign currency, and precious metals, which include loans extended (including overdue loans), overdue interest on loans, credit institutions' investment in debt and equity securities and promissory notes, as well as other forms of participation in equity of non-financial organisations and financial institutions, and other receivables under settlement operations with non-financial organisations, financial institutions, and households.

The contribution of net claims on general government to the annual change in the money supply in November remained at the level of about 2.5 trillion rubles. The growth in the money supply in national definition (M2) generally remained increased, which was ensured, among other things, by the overflow of foreign currency funds of the non-financial sector to ruble deposits. The annual growth of money supply in national definition (M2) in November totalled 23.4% (vs 24.4% in October); broad money supply (M2X) slowed down to 12.9% (vs 13.6% in October) (Chart 17). The amount of ruble cash M0 grew in November. The annual change was 13.8% (vs 12.7% in October). However, the share in the M2 money supply remained below the levels of early 2022.

CHARTS AND TABLES

THE BANKING SECTOR'S STRUCTURAL LIQUIDITY SURPLUS INCREASED IN DECEMBER 2022 (START OF BUSINESS, BILLIONS OF RUBLES)

Table 2

	01.01.2021	01.01.2022	01.04.2022	01.07.2022	01.10.2022	01.12.2022	01.01.2023
Structural liquidity deficit (+) / surplus (-)	-204	-1,691	-280	-2,384	-1,132	-1,240	-2,810
Bank of Russia claims on credit institutions	976	909	2,484	280	1,479	2,045	1,808
Auction-based facilities	847	116	2,298	171	166	1,777	1,492
 repos and FX swaps 	847	116	2,298	171	166	1,777	1,492
Fixed interest rate facilities	129	793	186	109	1,312	268	317
 repos and FX swaps 	118	3	92	10	10	1	8
- secured loans	10	790	94	99	1,303	268	309
Credit institution claims on the Bank of Russia	1,796	2,804	3,108	3,180	2,955	3,630	4,949
Deposits	1,221	2,804	3,108	3,180	2,955	3,630	4,949
– auction-based	844	1,626	-	1,838	1,664	2,539	3,621
 fixed interest rate 	377	1,178	3,108	1,341	1,291	1,090	1,328
Coupon OBRs	575	-	-	-	-	-	-
Standing reverse facilities, other than standard monetary policy instruments of the Bank of Russia*	616	204	343	516	344	345	331

* These transactions include Bank of Russia specialised refinancing instruments, loans granted by the Bank of Russia within irrevocable credit lines, and USD/RUB and EUR/RUB sell/buy FX swaps.

, Source: Bank of Russia calculations.

THE STRUCTURAL LIQUIDITY SURPLUS AT THE END OF 2022 AMOUNTED TO 2.8 TRILLION RUBLES, WHICH IS CONSISTENT WITH THE BANK OF RUSSIA'S FORECAST (TRILLIONS OF RUBLES)

Table 3

	2021 (actual)	2022 (actual)	December 2022	2022 (forecast)
1. Liquidity factors	1.6	1.5	2.5	[0.8; 1.2]
 change in the balances of funds in general government accounts with the Bank of Russia, and other operations* 	2.3	3.2	3.3	[2.1; 2.3]
– change in the amount of cash in circulation	-0.7	-2.3	-0.8	[-1.9; -1.7]
– Bank of Russia interventions in the domestic FX market	-	-0.1	-	-0.1
 regulation of banks' required reserves with the Bank of Russia 	-0.1	0.7	0.0	0.7
2. Change in free bank reserves (correspondent accounts)** (demand)		0.3	0.9	[-0.4; -0.2]
3. Change in banks' claims on deposits with the Bank of Russia and BoR coupon bonds		2.1	1.3	[1.7; 2.3]
4. Change in outstanding amounts on Bank of Russia refinancing operations		1.0	-0.3	0.8
Structural liquidity deficit (+) / surplus (-)		-2	2.8	[-3.2; -2.6]

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

** The forecast for the end of the year implies the uniform averaging of required reserves by banks and correspondent account balances close to the required ratio. Source: Bank of Russia calculations.

IN DECEMBER, BUDGET OPERATIONS LED TO AN INFLOW OF LIQUIDITY TO THE BANKING SECTOR

Chart 2



IN DECEMBER, GROWTH IN PIT AND VAT REVENUES SLOWED DOWN, WHILE REDUCTION IN INCOME TAX REVENUES Chart 3 SPED UP (%)



Source: Bank of Russia calculations.

THE AVERAGE SPREAD BETWEEN RUONIA AND THE BANK OF RUSSIA KEY RATE REMAINED ACTUALLY UNCHANGED Chart 4





* Average for averaging periods.

Source: Bank of Russia calculations.

BANKS' SUPPLY AT BANK OF RUSSIA ONE-WEEK DEPOSIT AUCTIONS WAS BELOW THE ESTABLISHED LIMITS

Chart 5



Note. The data are provided on one-week fine-tuning deposit auctions. Trading weeks are those including the dates of regular one-week auctions. Fine-tuning auctions are taken into account together with the one-week auction, the settlements under which were made over the corresponding trading week. Source: Bank of Russia calculations.



Chart 6



Sources: Moscow Exchange, NFA.



Chart 7



Sources: Federal Treasury, Bank of Russia calculations.

THE BANK OF RUSSIA'S BALANCE SHEET (TRILLIONS OF RUBLES)

Chart 8



LONG-TERM OFZ YIELDS SLIGHTLY INCREASED, REFLECTING THE HIGHER RISK PREMIUM

Chart 9

Chart 10

Turkey



THE SPREAD BETWEEN RUSSIAN AND US GOVERNMENT BOND YIELDS (PP)



Sources: Moscow Exchange, Cbonds, Bank of Russia calculations.

CDS SPREADS IN ADVANCED ECONOMIES REMAINED UNCHANGED (BP)





Mexico

China

Brazil



THE RUSSIAN STOCK AND FOREIGN CURRENCY MARKETS SHOWED MOSTLY NEGATIVE TRENDS

Table 4

	Indicator	30.12.2022	1M	3M	6M	YTD	1Y
Russian	financial market ('+' - positive trends, '-' - n	egative trends)					
RUB/USI	D exchange rate	73.63	-20.7	-28.7	-35.1	1.4	0.5
MOEX Index, bp		2,154	-0.9	10.3	-2.4	-43.1	-42.4
RTS Inde	ex, bp	971	-13.7	-9.5	-24.0	-39.2	-38.9
Governn	nent bond yields, %	9.61	5	-27	88	120	118
Corpora	te bond yields, %	9.72	23	-118	-62	87	79
Regiona	l bond yields, %	9.02	-8	-128	-55	39	20
RVI, p		39	-4	-34	-27	6	8
Exchang	ge rates (per US dollar, per cent change, $`+`-$	appreciation, '-' – depreciat	tion)				
	US Dollar Index	103.52	-2.3	-7.8	-1.5	8.2	7.9
۸ ۲*	Euro	1.07	2.9	9.1	2.7	-5.9	-5.7
AEs*	Japanese yen	131.26	-5.0	-9.2	-2.9	14.0	14.2
	Pound sterling	1.21	0.3	8.7	0.0	-10.6	-10.4
	Ruble	73.63	-20.7	-28.7	-35.1	1.4	0.5
	Brazilian real	5.29	-1.8	2.1	0.8	5.1	7.3
	Mexican peso	19.49	-1.0	3.3	3.8	4.9	5.3
EMEs	Chinese yuan	6.90	2.7	3.2	-2.9	-8.4	-8.3
	Turkish lira	18.71	-0.4	-1.1	-11.8	-40.3	-48.0
	South African rand	17.00	1.5	5.6	-4.0	-6.3	-6.7
10 year	bond yield (% p.a., change in bp, '+' – increa	se, '-' – decrease)				1	1
	USA	3.88	20	12	100	236	233
	Germany	2.57	65	36	134	275	276
AEs	Japan	0.41	17	17	20	34	35
	UK	3.66	57	-44	158	269	265
	Russia	10.31	11	-31	147	187	186
	Brazil	12.76	-21	51	-33	250	205
	Mexico	9.35	-31	-73	11	151	152
EMEs	China	2.88	-6	11	4	9	7
	Turkey	9.77	-114	-218	-965	-1,491	-1,506
	South Africa	10.19	-7	-81	-24	76	79
5Y CDS	spreads (bp, change in bp, '+' – increase , '-'	– decrease)				1	1
	USA	25	-5	4	7	13	13
	Germany	8	0	-9	-5	-1	0
AEs	Japan	17	0	-3	-9	0	0
	UK	7	0	-42	-5	-3	-3
	Brazil	240	3	-56	-40	45	44
	Mexico	124	1	-65	-43	38	36
EMEs	China	75	-3	-42	-9	34	34
	Turkey	489	-15	-270	-317	-56	-57
	South Africa	246	6	-99	-61	46	45
Stock in	dices (points, % change, '+' – increase, '-' – d						
	S&P 500	3,840	-5.9	5.5	0.4	-19.4	-19.9
	Stoxx 600	425	-3.4	11.0	4.4	-12.9	-12.9
AEs	Nikkei 225	26,102	-6.6	-1.3	0.6	-9.3	-9.7
	FTSE 100	7,452	-1.6	8.3	3.9	0.9	0.4
	MSCI EM	956	-1.6	9.5	-3.7	-22.4	-21.5
	Bovespa	109,735	-2.4	1.9	10.9	4.7	5.4
	IPC Mexico	48,464	-2.4	7.5	1.5	-9.0	-8.1
EMEs	SSE Composite	3,089	-0.2	1.6	-8.8	-15.1	-14.1
	BIST 100	5,509	10.7	75.1	125.4	196.6	190.7
		0.000	10.7	1 .1.	1 12J.†	1 130.0	130.7

* Advanced economies.

Sources: Moscow Exchange, Cbonds, Bank of Russia calculations.

CREDIT AND DEPOSIT MARKET RATES SLIGHTLY INCREASED IN NOVEMBER



HIGH-FREQUENCY INDICATORS SHOW THE GROWTH OF RATES ON CREDIT AND DEPOSIT OPERATIONS IN DECEMBER

Chart 12

Chart 11



IN NOVEMBER, THE INFLOW OF HOUSEHOLD FUNDS TO BANKS INCREASED





Source: Bank of Russia calculations.

GROWTH IN CORPORATE LENDING DECLINED IN NOVEMBER, BUT REMAINED HIGH



* Since 1 February 2021, the portfolio of corporate and retail loans includes acquired claims. The portfolio growth was calculated net of acquired claims. Source: Bank of Russia calculations.

THE MORTGAGE SEGMENT'S CONTRIBUTION TO RETAIL LOAN PORTFOLIO GROWTH CONTINUED TO OUTPACE CONSUMER LENDING IN NOVEMBER

Chart 15

Chart 14



BANKS EXPECT SOME TIGHTENING OF LENDING CONDITIONS BY THE END OF 2023 Q1

Chart 16



* The dotted lines signify respondent banks' expectations regarding changes in lending conditions and demand for loans in 2022 G Source: Bank of Russia.

MONEY SUPPLY GROWTH SLOWED DOWN IN NOVEMBER



* Adjusted for foreign currency revaluation. Source: Bank of Russia calculations.

CREDIT AND DEPOSIT MARKET INDICATORS

		August 2022	September 2022	October 2022	November 2022
Interest rates on banks' long-term ruble transaction	15				
household deposits	% p.a.	6.8	7.1	7.3	7.3
household loans	% p.a.	12.3	11.8	12.1	12.1
corporate loans	% p.a.	8.5	8.8	9.1	8.6
Household funds*	% Yoy, AFCR	6.6	4.4	3.4	4.2
in rubles*	% YoY	14.8	14.0	13.9	14.7
in foreign currency	% YoY	-26.9	-35.6	-40.1	-39.2
share of foreign currency*	%	12.1	10.5	10.5	10.2
Corporate loans**	% Yoy, AFCR	10.4	11.6	12.2	12.3
short-term (up to 1 year)	% Yoy, AFCR	9.0	10.1	9.6	7.4
long-term (more than 1 year)	% Yoy, AFCR	11.8	13.1	14.1	15.4
Household loans**	% Yoy, AFCR	10.5	10.2	9.6	9.9
housing mortgage loans	% Yoy, AFCR	16.7	16.8	16.5	18.1
unsecured consumer loans	% YoY	5.8	5.0	3.9	3.2
Banking system's claims on the economy	% Yoy, AFCR	11.3	10.7	11.0	11.0
on businesses	% Yoy, AFCR	11.6	10.9	11.6	11.6
on households	% Yoy, AFCR	10.3	10.2	9.4	9.8
Money supply (monetary aggregate M2)	% YoY	22.6	23.9	24.4	23.4
Broad money	% YoY, AFCR	14.6	14.3	13.6	12.9

* Excluding escrow accounts. ** Since 1 February 2021, the corporate and household loan portfolio includes acquired claims. The portfolio growth was calculated net of acquired claims.

Note. YoY - year-on-year; AFCR - adjusted for foreign currency revaluation. The Marshall-Edgeworth decomposition is used to make the adjustment for foreign currency revaluation. Source: Bank of Russia calculations.

Chart 17

Table 5

IN DECEMBER, THE US DOLLAR SLIGHTLY DEPRECIATED (02.01.2019 = 100)



* Against the US dollar. Reverse exchange rates. Sources: Cbonds, Bank of Russia calculations.

BY THE END OF DECEMBER, THE RUBLE DEPRECIATED AGAINST CURRENCIES OF THE MAIN TRADING PARTNER COUNTRIES *Chart 19* (02.01.2019 = 100)



STOCK INDICES OF MOST COUNTRIES, EXCEPT TURKEY, DECREASED (02.01.2019 = 100)







Sources: Chonds, Bank of Russia calculations.



Chart 20

Data cut-off dates:

- 'Money market and overnight rates (RUONIA)' section 17 January 2023 (reserve requirements are an important part of Bank of Russia instruments to manage banking sector liquidity and money market rates. Therefore, the analysis of the effectiveness of the Bank of Russia's monetary policy operational procedure should take into account required reserves averaging periods. In December 2022–January 2023, this period is from 14 December 2022 to 17 January 2023);
- 'Money and debt market yield curves' and 'Other financial market segments' sections 30 December 2022;
- 'Credit and deposit market' section 1 December 2022.

The electronic version of the information and analytical commentary is available on the Bank of Russia website.

Please send your comments and suggestions to svc_analysis@cbr.ru.

This commentary was prepared by the Monetary Policy Department.

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