



November 2022

## MONETARY CONDITIONS AND MONETARY POLICY TRANSMISSION MECHANISM

Information and analytical commentary

# MONETARY CONDITIONS AND MONETARY POLICY TRANSMISSION MECHANISM (NOVEMBER 2022)

- According to the Bank of Russia, monetary conditions remained neutral overall in November.
   Monetary conditions slightly softened across some market segments, first of all due to reduced volatility in the Russian financial market caused by a certain easing in geopolitical tensions. According to recent data, interest rates on loans and deposits were stable in November.
- The average RUONIA spread over the November averaging period (AP) was -26 bp (in the October AP: 6 bp). The inflow of budgetary funds and lower demand for liquidity from the largest borrowing banks produced downward pressure on money market interest rates.
- In November, the level of money market and debt market curves was almost unchanged, with the exception of a slight drop in up to five-year OFZ yields. Long-term OFZ yields, after picking up in September, continue to reflect the premium for uncertainty.
- Corporate lending and mortgages maintained robust growth in October, despite some delayed increase in lending interest rates amid higher bank funding costs.
- Money supply in the national definition grew in October due to lending to the economy, the budgetary factor and the flow of funds from foreign currency accounts and deposits to ruble deposits, and the annual increase in money supply was 24.4%.

### MONETARY POLICY TRANSMISSION

The monetary policy transmission mechanism (or 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; and 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 (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 trends are influenced by many other factors which are taken into account by the Bank of Russia when making its key rate decisions.

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

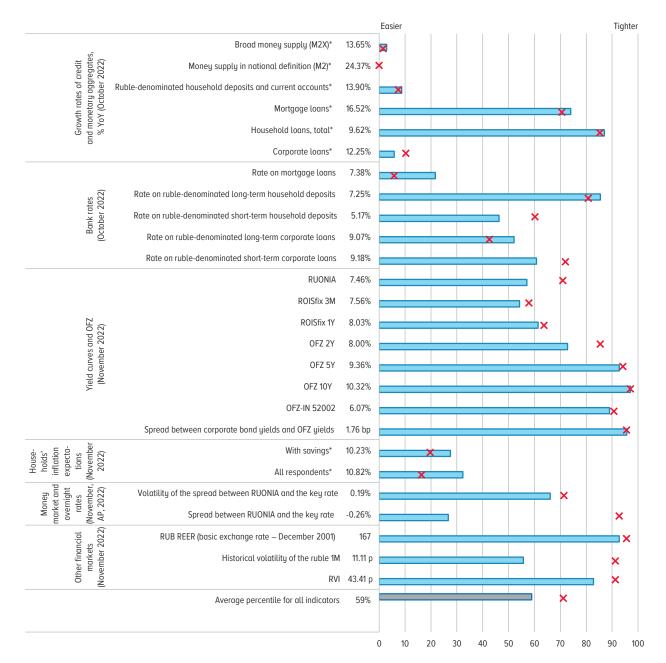
<sup>&</sup>lt;sup>1</sup> See <u>Appendix 1 to Monetary Policy Guidelines for 2023–</u> 2025.

### MONETARY CONDITIONS

As of the end of November, monetary conditions generally remained in the neutral range. The easing in some segments is mainly due to lower volatility in the Russian stock and foreign exchange markets amid reduced geopolitical tensions (Chart 1). At the same time, after price conditions somewhat tightened in the corporate and mortgage lending segments in October, lending and deposit rates were stable in November, according to recent data. Meanwhile, the October decision taken by the Bank of Russia Board of Directors to maintain the key rate at 7.5% did not have a significant impact on monetary policy, as it was expected by the market.

#### MONETARY CONDITIONS EASED IN NOVEMBER

Chart 1



<sup>\*</sup> 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

#### 1. Key rate

According to financial market indicators as of the end of November 2022, market participants expected the key rate to maintain its current level until the end of 2022 (Table 1). 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.

IN NOVEMBER, ANALYSTS RETAINED KEY RATE EXPECTATIONS FOR THE END OF 2022

Table 1

Key rate expectations based on market indicators (instrument)	December 2022	June 2023
ROISfix	7.5 (7.5)	7.5 (7.5)
RUSFAR	7.5 (7.5)	-
Analysts' key rate expectations*	2022 average	2023 average
Survey by the Bank of Russia	10.6 (10.6)	7.3 (7.1)

<sup>\*</sup> 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 November required reserve (RR) averaging period (AP), the spread between RUONIA¹ (the Bank of Russia's operational benchmark) and the Bank of Russia key rate² was **-26 bp** (in the October AP: 6 bp; year to date: -18 bp) (Chart 4). The spread volatility dropped to 19 bp (in the October AP: 21 bp; year to date: 36 bp).

The structural liquidity surplus averaged **1.2 trillion rubles** over the November AP (in the October AP: 1.1 trillion rubles). As of the beginning of December, the structural liquidity surplus expanded to 1.2 trillion rubles (Table 2).

In the November AP, the spread between RUONIA and the key rate returned to negative territory. Funds provided by the Bank of Russia at long-term repo auctions in early November and the inflow of budgetary funds somewhat reduced demand for liquidity among borrowing banks and increased liquidity surplus at lending banks. Moreover, some lending banks showed less demand for Bank of Russia standing deposit facilities and built up the volume of deposits in the IBL segment (RUONIA). As a result, turnover in this segment reached historic highs. In order to absorb liquidity surplus, the Bank of Russia raised the limits at its weekly deposit auctions. However, banks' supply at some auctions was less than the limits. This was putting downward pressure on money market rates. After banks holding excess liquidity increased their placements at Bank of Russia weekly deposit auctions, the spread between RUONIA and the key rate narrowed.

A budget deficit occurred in November.<sup>3</sup> Budget expenditure was up compared to November of the previous year. It was in part financed by the National Wealth Fund (NWF). Budget revenue also increased compared to last November, though to a lesser extent than expenditure. Higher revenue

<sup>&</sup>lt;sup>1</sup> RUONIA (Ruble Overnight Index Average) is the weighted interest rate of overnight interbank loans (deposits) in rubles that reflects the estimated cost of unsecured overnight borrowing.

<sup>&</sup>lt;sup>2</sup> 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.

<sup>&</sup>lt;sup>3</sup> According to the Bank of Russia Payment System.

was conditioned on the payment of an increased mineral extraction tax (MET),<sup>4</sup> as well as the transfer of part of PJSC Gazprom's dividends for the first half of 2022 to the budget. The Russian Ministry of Finance expanded its borrowings through OFZs. This led to liquidity outflow from banks. However, as the Federal Treasury (FT) increased its placements with banks, budget operations had markedly less influence on liquidity.

In November, demand for cash was around its seasonal levels and led to the outflow of liquidity in the amount of 0.1 trillion rubles.

The structural liquidity surplus for the end of 2022 was lowered by 0.7 trillion rubles and is estimated in the range from 2.6 trillion to 3.2 trillion rubles. This is due to an increase in the 2022 forecast for cash in circulation by 0.3 trillion rubles to 1.7–1.9 trillion rubles. Despite the fact that cash movements returned to seasonal patterns, the cumulative cash outflows from banks since the end of September were generally above the level conditioned on macroeconomic factors. Moreover, the forecast inflow of funds to banks through budget and other operations was also revised downwards by 0.4 trillion rubles. Active market borrowing conducted by the Ministry of Finance in November–December will help reduce the use of NWF resources to finance part of budget expenditure in 2022.

### 3. Money and debt market yield curves

Money market curves. In November, ROISfix curve<sup>5</sup> remained unchanged. Rates for maturities of up to six months edged down by 0–2 bp, and one-year indicator was up by 4 bp (Chart 6). Concurrently, RUSFAR 3M grew to 7.89% (+14 bp). The dynamics of money market curves were associated with the continued expectations of market participants regarding the key rate's path. Though the market still expects the key rate to remain close to its current level in the medium term, it assesses the risks of proinflationary factors materialisation and monetary policy tightening as elevated.

**OFZ yield curve.** At the end of November, zero-coupon yield curve continued to edge down along short- and mid-term maturities (up to 5Y) by 10–30 bp on average, remaining virtually unchanged for long-term maturities (shifting by less than 5 bp) (Chart 9): OFZ 1Y – 7.46% (-26 bp); OFZ 2Y – 7.95% (-25 bp); OFZ 5Y – 9.24% (-13 bp); and OFZ 10Y – 10.2% (+2 bp). Yields for short-term maturities declined due to their greater dependence on the key rate and money market curves compared to yields for long-term ones. In September, the OFZ–ROISfix spread widened considerably due to rising yields for short-term maturities and, in November, spreads again trended close to the median (Chart 6). Additional effect was also produced by the redemption of the OFZ-PK worth 212.4 billion rubles. At the same time, upward pressure on OFZ yields was exerted by active placements by the Russian Ministry of Finance, which raised around 1.65 trillion rubles since the beginning of the quarter in order to bridge the budget deficit. The news that the federal budget for the first ten months of 2022 was executed with a surplus of 128 billion rubles was a positive signal for the debt market, which reduces the need for additional borrowings by the Russian government. The spread between OFZ 10Y and OFZ 2Y yields continued to expand and reached 225 bp (+27 bp) by the end of the month due to a more moderate downward shift of the short end of the curve.

In November, the debt markets of the advanced economies produced a certain influence on the Russian OFZ market. Yields on US Treasury bonds dropped by 10-40 bp in anticipation of a smaller US federal funds rate increase despite high inflation (7.7% in October; 8.2% in September) and strong labour market data, including non-farm payroll (actual data: +263,000 new jobs; expectation: +200,000 new jobs): 2Y - 4.38% (-13 bp) and 10Y - 3.68% (-42 bp).

<sup>&</sup>lt;sup>4</sup> A one-off increase in the MET by 0.4 trillion rubles from October to December 2022 in each of these months in accordance with Federal Law No. 323-FZ, dated 14 July 2022, 'On Amending Part Two of the Tax Code of the Russian Federation'.

<sup>&</sup>lt;sup>5</sup> The OIS (ROISfix) curve represents indicative rates (fixing) on RUONIA IR swaps.

In November, the average daily turnover edged up to 14 billion rubles (vs 13.1 billion rubles in October), with systemically important credit institutions continuing to be net sellers in the secondary OFZ market.

**Primary OFZ market.** In November, the Russian Ministry of Finance increased its issuance activity in the primary debt market by placing OFZs worth 1.4 trillion rubles. During the first auction week (2 November), the ministry raised 167 billion rubles by offering OFZ-PD (2036), OFZ-PK (2030), and OFZ-IN (2032), with demand standing at 326 billion rubles. Discount on the secondary market price for OFZ-PK was -1.96 pp; and premium on the secondary market yields for OFZ-PD was around +84 bp. On 16 November, the Ministry of Finance again offered all three types of securities, i.e. OFZ-PD (2032), OFZ-PK (2033), and OFZ-IN (2032), thus raising a record of 823 billion rubles, with 750 billion rubles raised for the OFZ-PK issue, which was fully placed at a single auction. The ministry gave an insignificant premium on the secondary market yield (+4 bp) for OFZ-PD. In the last two weeks of the month, the raised amounts were 167 billion and 220 billion rubles, with demand standing at 670 billion and 492 billion rubles, respectively. Investors were most interested in OFZ-PD. The November auctions were characterised by greater diversification, i.e. fewer non-competitive and highly concentrated bids.

**Implied inflation.** At the end of November, <u>implied inflation</u> for OFZ-IN 52002 (2028) decreased slightly to 6.1% (vs 6.4% a month earlier), hitting a record low since this September.

### 4. Corporate bond market

**Secondary market.** As of the end of November, the average yield of corporate bonds grew by 10 bp to 9.5% (vs 9.4% in October). Over the month, the spread between the yields on corporate and government bonds predominantly widened, reaching 197 bp (+47 bp), the level of late September – early October. The expansion of the spread is driven among other things by expectations of higher sanctions pressure from the EU and the US in the near future, as well as a deterioration of the oil and gas sector's operational performance due to earlier imposed restrictions (embargo on Russian oil supplies by sea starting from 5 December 2022, and on oil products starting from 5 February 2023).

**Primary market.** In November, corporate borrowers increased their activity in the debt market compared with the previous month. Total market and non-market placements amounted to 754 billion rubles (vs 618 billion rubles earlier), with more than a half of the placements, totalling 404.1 billion rubles, offered to a wide range of investors (vs 304 billion rubles in October). Issuers predominantly issued permanent coupon-income bonds amid macroeconomic uncertainty and expectations of stronger proinflationary trends in the medium term. There were no significant changes in the borrower structure. The main debt issuers remained investment grade (minimum 'A-') banks and companies in the real sector, primarily oil and gas, transport and gold mining. Russian companies continued to ramp up funds raised in Chinese yuan. The issuers of substitute bonds that made it possible to recover Eurobond payments were commodity exporters.

### 5. Credit and deposit market

**Deposit rates.** In October, ruble deposit rates continued to grow in the long-term<sup>6</sup> segment on the back of elevated competition among banks for borrowers because of the outflow of household funds in September and persistent uncertainty over the long-term horizon. Conversely, in the segment of up-to-one-year deposits, the weighted average rate decreased over the month, taking into account the decline in OFZ yields (more appreciably – on the short end of the curve) and the key rate remaining unchanged in October. As a result, the average market rate on long-term deposits stood at 7.3% p.a. and on short-term ones – at 5.2% p.a. (Chart 11).

<sup>&</sup>lt;sup>6</sup> Short-term deposits are deposits with any maturities of up to one year, excluding demand deposits; long-term deposits are deposits with any maturities of over one year.

According to recent monitoring data, in November, certain large banks operating in the retail deposit market continued to increase deposit rates: the FRG100 profitability index gained another 13 bp, reaching 6.6%, but this growth was weaker than a month earlier (Chart 12). In the short term, average market deposit rates can be expected to remain around current levels or to edge up. Competition for sustainable funding amid banks' traditional end-of-year promotional deposit programmes may push up interest rates. At the same time, the continued expectation of an unchanged key rate at the next meetings could limit possible interest rate hikes.

**Deposit operations.** The September outflow of household funds<sup>7</sup> from banks reversed to their inflow in October: the positive dynamics of long-term ruble deposits and current accounts continued, while up-to-one-year deposits were persistently declining, though less markedly than a month earlier. The reduction in the share of households' foreign currency deposits and accounts continued, but at a slower pace: in October, foreign currency-denominated funds of households contracted by 6.0%, vs 10.4% a month earlier. As of the end of October, the annual increase<sup>8</sup> in household funds with banks was 3.4% vs 4.4% a month earlier, with the share of foreign currency funds hitting a record low of 10.5% for the second consecutive month (Chart 13). Individuals continued to spend part of their savings to purchase real estate: in October, funds in escrow accounts grew by 60 billion rubles, less than in September, due to lower activity in the primary segment of the mortgage market and the gradual release of funds from escrow accounts as residential projects were commissioned.

According to recent data, November saw an inflow of ruble funds to banks, both into current accounts and time deposits, due to growing attractiveness of ruble saving instruments, first of all long-term ones, as a result of higher deposit rates. Moreover, the November funds inflow to deposits was in part due to one-off payments to military servicemen. In the near term, households' interest in ruble time deposits may continue to recover. The overall downward trend in foreign currency savings is also expected to continue. However, the deposit market continues to gradually develop yuan-denominated products, which is largely conditioned on households' demand for foreign currency for the convenience of payments.

**Credit rates.** In October, ruble credit rates changed diversely, despite falling rates in the financial markets. The reaction of banks in October could be explained by a lag in the monetary transmission mechanism – the increase in credit rates occurred in the middle of October, when OFZ yields and the cost of bank funding had not yet decreased. Moreover, the increase in credit rates could reflect banks' elevated assessments of credit risk.

Rates on short-term loans to non-financial organisations went down by 0.28 pp to 9.18%, and went up by 0.28 pp to 9.07% on long-term ones (Chart 11). The increase in corporate credit rates in October could be associated with overall elevated uncertainty, as well as with possible risks of a reduction in demand. In October, average weighted rate on short-term retail loans dropped by 0.37 pp to 17.98% p.a., while average weighted rate on long-term retail loans grew by 0.26 pp to 12.1%. The October increase in average weighted rate on long-term retail loans could be in part linked to the rise in the cost of mortgage loans, which make up a considerable portion of new household loans (Chart 11). Average weighted rate on ruble housing mortgage loans grew by 0.67 pp to 7.4% compared with September. The increase of average weighted rate on mortgage loans was due to a reduction in the share of transactions in the primary segment conducted at reduced rates

<sup>&</sup>lt;sup>7</sup> 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.

<sup>&</sup>lt;sup>8</sup> 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.

<sup>&</sup>lt;sup>9</sup> See Subsection 'Money and debt market yield curves'.

within subsidised lending programmes.<sup>10</sup> Moreover, in October, average weighted mortgage rate in the primary market edged up, amounting to 3.7% vs 3.5% a month earlier. Credit rates in the secondary market, where market-based lending standards prevail, changed negligibly.

Recent monitoring data suggest that credit rates stabilised in November (Chart 12). Given a certain improvement in expectations for the economy as a whole, the November credit rates could return to the downward path in some segments.

Further out, credit rates may be subject to preliminary adjustment given monetary policy communications, as market participants do not express expectations regarding key rate changes. All else equal, the termination of subsidised corporate lending programmes may lead to some increase in corporate credit rates. Macroprudential limits set for 2023 Q1 for unsecured consumer loans, given unchanged risk premiums, could technically drag down on average rates for new loans.

**Corporate lending.** October saw an expansion in corporate lending. The annual growth of corporate loan portfolio<sup>11</sup> sped up by 0.7 pp, reaching 12.2% (Chart 14). The increase in corporate lending occurred on account of the ruble segment. The share of foreign currency-denominated loan portfolio continued to squeeze. In October, the annual growth of ruble corporate lending sped up to 22.2% vs 19.9% in the previous month, and lending in foreign currency contracted by 23.9% in annualised terms vs 18% in September.

Based on high-frequency data, in November, the annual growth of corporate lending retained momentum, but the number of new corporate loans under subsidised programmes declined. The influence of subsidised programmes aimed at supporting corporate lending is gradually decreasing, and further on, the dynamics of corporate lending will be shaped by the specifics of economic transformation in Russia.

**Retail lending.** In October, due to the decline in demand for residential real estate, coupled with the toughening of banks' loan approval approach amid general uncertainty, the volume of new mortgage loans decreased, but remained close to the elevated levels of 2020–2021. In October, banks issued new mortgage loans worth 448 billion rubles vs 518 billion rubles in September. The annual growth of housing mortgage loan portfolio<sup>12</sup> stood at 16.5%, with the share of mortgage lending in the growth of outstanding retail loans exceeding 80% (Chart 15). In October, the share of subsidised lending in new loans edged down.

The slowdown in the growth of unsecured consumer loans continued: in October, the portfolio grew by 0.3% vs 0.9% in September. A slowdown in unsecured consumer lending growth may be associated with lower demand for large-value purchases amid elevated uncertainty, a slight contraction in the number of potential borrowers, as well as a tightening of non-price lending parameters by banks. According to recent assessments, November saw a slight pickup in retail lending given improved consumer sentiment.<sup>13</sup>

The dynamics of unsecured consumer lending may remain moderate in the future, due in part to cautious consumer behaviour patterns, as well as to the establishment of macroprudential limits for 2023 Q1. Mortgage lending offered by developers at reduced rates may considerably slow down starting from 2023, if the Bank of Russia adopts measures to limit the risks of this product.

<sup>&</sup>lt;sup>10</sup> See Subsection 'Retail lending'.

<sup>&</sup>lt;sup>11</sup> Hereinafter, the growth of lending to non-financial organisations, financial institutions, and individual entrepreneurs excludes claims acquired by banks.

<sup>&</sup>lt;sup>12</sup> Housing mortgage loans, net of claims on such loans acquired by banks.

<sup>&</sup>lt;sup>13</sup> See Inflation Expectations and Consumer Sentiment, No. 11 (71), November 2022.

### OTHER FINANCIAL MARKET SEGMENTS

### 1. Exchange rate (foreign exchange channel)

In November, the ruble fluctuated in the range from 60.35 to 62.10 rubles per US dollar, appreciating slightly by the end of the month to 60.99 rubles per US dollar (+0.8%). Monthly average exchange rate also suggests ruble appreciation from 61.58 rubles per US dollar in October to 60.88 rubles per US dollar in November.

Monthly realised exchange rate volatility returned to the level of September 2022 amounting to 11.1% (vs 27.3% in October) – the median level since 2017. The month-on-month change in ruble volatility is mainly associated with higher or lower geopolitical risks.

The real effective exchange rate of the ruble (hereinafter, the REER), calculated against the currencies of the main foreign trade partners, depreciated by 1.1% in October (vs +2.6% in September). The REER movements are conditional on the October depreciation of the ruble against the currencies of China and the EU, Russia's main external trade partners. All else being equal, a weaker REER led to the easing of monetary conditions.

### 2. Capital market (welfare channel)

In November, the Moscow Exchange index remained at the level as of the end of October, edging up by 0.4% (vs -42.6% year to date; -43.9% YoY). The stock volatility range narrowed and the Russian Volatility Index (RVI) also declined to 43 p (-4 p MoM; +8 p YoY).

In November, trends in the Russian equity market were shaped by several factors: due to the lack of meaningful news and both external and internal market drivers, the recovery trend observed in October slowed down. Slight pressure was also produced by lower prices in the world oil market and by the anticipated introduction of the price cap on Russian oil exporters at the end of the month. Positive dynamics were observed in the metallurgical and financial sectors of the Russian market as a result of higher gold prices and new dividend recommendations of companies' board of directors.

According to the Moscow Exchange, in November, the total volume of transactions across all segments demonstrated a 4.2% increase on the previous month (-17.8% YoY), while the volume of trades in shares, depositary receipts and investment fund units dropped to 859 billion rubles (vs 1,008.3 billion rubles in October).

#### Foreign markets

In November, several global central banks continued the cycle of monetary policy tightening and policy rate increasing amid persistent inflationary pressures. The average policy rate in advanced economies reached 2.79% (+42 bp MoM; +278 bp YTD), 11.38% in Latin America (+26 bp, +497 bp), 5.40% in South and Southeast Asia (+19 bp, +195 bp), 9.12% in Central and Eastern Europe and Central Asia (+12 bp, +558 bp), and 9.73% in African countries (+85 bp, +403 bp).

Some emerging market economies, such as Indonesia, Mexico, South Africa, South Korea, and Peru, raised their policy rates, while India and Brazil kept theirs unchanged. In November, the Central Bank of the Republic of Turkey cut its policy rate by 150 bp to 9%, while, according to the Turkish Statistical Institute, the pace of consumer price growth slowed for the first time in 18 months (+2.88% MoM in November; +3.54% in the previous month).

Stock indices in national currencies of emerging market economies were mostly growing (Chart 20). Stock indices of Brazil showed negative trends (-3.10%). Markets in the Asian-Pacific region posted growth after falling a month earlier as investors' concerns about restrictions associated with the coronavirus pandemic eased. Government bond yields in emerging market economies mostly declined, with the exception of China and Brazil.

The rhetoric of the monetary authorities of key advanced economies softened, though remaining tough. Along with geopolitical risks, this continued to make the world economic outlook uncertain. However, stock markets trended upwards (S&P 500: +5.33%, Stoxx 600: +6.75%, Nikkei 225: +1.42%) (Chart 20). Such

trends were related to the adjusted expectations of market participants regarding the tightness of the US Fed's and ECB's monetary policies (in November, inflation in the euro area slowed for the first time in 17 months) in the coming months, as well as the impact of multidirectional factors in commodity markets.

### **MONEY SUPPLY**

In October, the growth in claims on organisations picked up again (from 10.9% to 11.6% YoY), which contributed to an increase in annual growth rate of banking system's claims on the economy. Conversely, the annual growth of claims in the retail segment continued to slow down, amounting to 9.4% compared to 10.2% in the previous month. As a result, claims on the economy remained the key source of money supply growth, accounting for 9.5 trillion rubles of the annual money supply growth.

A noticeable positive contribution of net claims on general government to the annual change in money supply remained in place (about 2.5 trillion rubles), slightly increasing compared to September because of the budget system surplus formed in October. The outflow of funds from foreign currency deposits and accounts of the non-financial sector into the ruble segment continued, which, in combination with the inflow of money into the economy via credit and fiscal channels supported high rates of money supply growth in the national definition (M2). As of the end of October, the annual growth of M2 came in at 24.4% vs 23.9% in September (Chart 17). Conversely, the growth of broad money supply (M2X) slowed down by 0.7 pp to 13.6% (as adjusted for foreign currency revaluation, it sped up from 10.0% to 11.2%). The growth of the M0 aggregate continued in October, but was not as pronounced as a month earlier.

<sup>&</sup>lt;sup>14</sup> 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.

<sup>&</sup>lt;sup>15</sup> See Monetary Conditions and Monetary Policy Transmission Mechanism, No. 4, October 2022.

### **CHARTS AND TABLES**

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

Table 2

	01.01.2019	01.01.2020	01.01.2021	01.01.2022	01.04.2022	01.07.2022	01.10.2022	01.11.2022	01.12.2022
Structural liquidity deficit (+) / surplus (-)	-3,016	-2,761	-204	-1,691	-280	-2,384	-1,132	-564	-1,240
Bank of Russia claims on credit institutions	21	18	976	909	2,484	280	1,479	1,570	2,045
Auction-based facilities	_	_	847	116	2,298	171	166	372	1,777
- repos and FX swaps	-	_	847	116	2,298	171	166	372	1,777
Fixed interest rate facilities	21	18	129	793	186	109	1,312	1,198	268
<ul> <li>repos and FX swaps</li> </ul>	8	13	118	3	92	10	10	1	1
- secured loans	13	5	10	790	94	99	1,303	1,196	268
Credit institution claims on the Bank of Russia	3,293	2,983	1,796	2,804	3,108	3,180	2,955	2,458	3,630
Deposits	1,902	1,026	1,221	2,804	3,108	3,180	2,955	2,458	3,630
<ul><li>auction-based</li></ul>	1,478	697	844	1,626	-	1,838	1,664	1,070	2,539
<ul> <li>fixed interest rate</li> </ul>	424	330	377	1,178	3,108	1,341	1,291	1,388	1,090
Coupon OBRs	1,391	1,956	575	-	_	_	-	_	_
Standing reverse facilities, other than standard monetary policy instruments of the Bank of Russia*	256	204	616	204	343	516	344	324	345

<sup>\*</sup> This type of transactions includes Bank of Russia specialised refinancing instruments, loans provided 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 FORECAST FOR THE END OF 2022 WAS LOWERED BY 0.7 TRILLION RUBLES AND IS ESTIMATED IN THE RANGE FROM 2.6 TRILLION AND 3.2 TRILLION RUBLES (TRILLIONS OF RUBLES)

Table 3

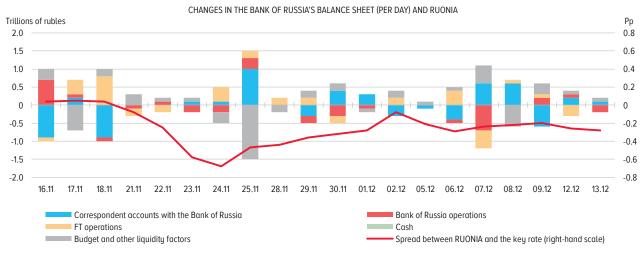
(TRILLIONS OF RUBLES)				
	2021 (actual)	January – November 2022	November 2022	2022 (forecast)
1. Liquidity factors	1.6	-1.0	0.0	[0.8; 1.2]
<ul> <li>change in the balances of funds in general government accounts with the Bank of Russia, and other operations*</li> </ul>	2.3	-0.1	0.1	[2.1; 2.3]
- change in the amount of cash in circulation	-0.7	-1.5	-0.1	[-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)	0.1	-0.6	-0.7	[-0.4; -0.2]
3. Change in banks' claims on deposits with the Bank of Russia and BoR coupon bonds	1.0	0.8	1.2	[1.7; 2.3]
4. Change in outstanding amounts on Bank of Russia refinancing operations	-0.5	1.3	0.5	0.8
Structural liquidity deficit (+) / surplus (-)	-1.7	-1.2		[-3.2; -2.6]

 $<sup>{}^*\</sup>textit{Including fiscal rule-based operations to buy (sell) foreign currency in the domestic FX \textit{market and other operations.}}$ 

<sup>\*\*</sup> 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 NOVEMBER, FISCAL OPERATIONS LED TO AN INFLOW OF LIQUIDITY TO THE BANKING SECTOR

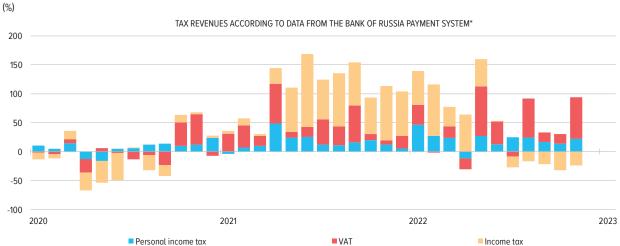
Chart 2



Source: Bank of Russia calculations.

### IN NOVEMBER 2022, GROWTH IN PIT AND VAT REVENUES SPED UP, WHILE REDUCTION IN INCOME TAX REVENUES SLOWED DOWN

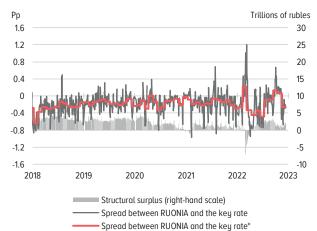
Chart 3

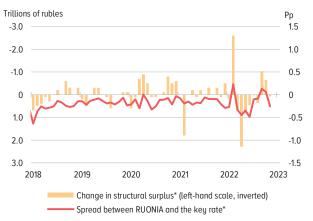


\* Funds transfers from credit institutions' accounts to the fiscal system's accounts with budget classification codes corresponding to the above taxes. Source: Bank of Russia calculations.

### THE SPREAD BETWEEN RUONIA AND THE BANK OF RUSSIA KEY RATE SHIFTED TO NEGATIVE TERRITORY AND EXPANDED

Chart 4





<sup>\*</sup> Average for averaging periods. Source: Bank of Russia calculations.

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

% of the limit 1.0 0.5 180 0 120 -0.560 -1.0 09.08 16.08 23.08 30.08 06.09 13.09 20.09 27.09 04.10 11.10 18.10 25.10 01.11 08.11 15.11 22.11 29.11 06.12 Utilisation of limits at deposit auctions (right-hand scale) Supply of funds at deposit auctions (right-hand scale) Spread between RUONIA and the key rate

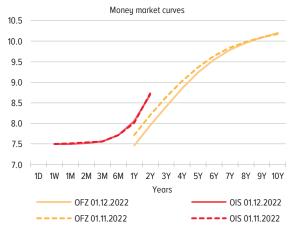
Note. The data are provided on deposit, fine-tuning repo and one-week auctions. Trading weeks are marked by dates of regular weekly auctions. Fine-tuning auctions are taken into account together with the one-week auction, the settlements under which were made during the corresponding trading week.

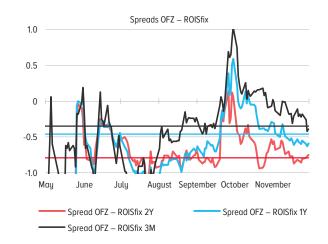
Source: Bank of Russia calculations.

### IN NOVEMBER, MONEY MARKET RATES INCREASED FOR LONG MATURITIES $(\!\%\,\text{P.A.})$

Chart 6

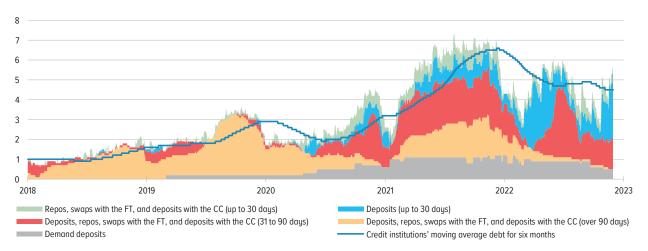
Chart 5





### IN NOVEMBER 2022, CREDIT INSTITUTIONS' DEBT TO THE FT ROSE BY 0.8 TRILLION RUBLES (TRILLIONS OF RUBLES)

Chart 7

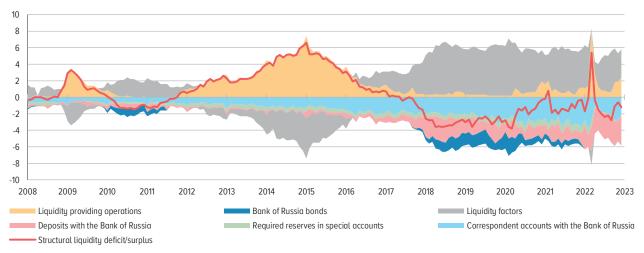


Sources: Federal Treasury, Bank of Russia calculations.

<sup>\*</sup> Horizontal lines on the right-hand chart represent medians since 2017. Sources: Moscow Exchange, NFA.

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

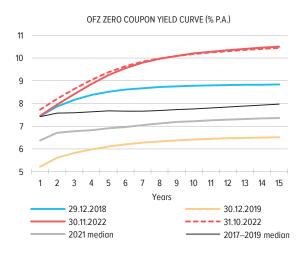
Chart 8

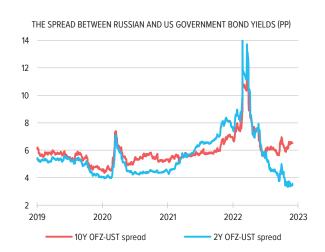


Source: Bank of Russia calculations.

#### OFZ YIELDS FOR MEDIUM-TERM MATURITIES SLIGHTLY DECLINED

Chart 9

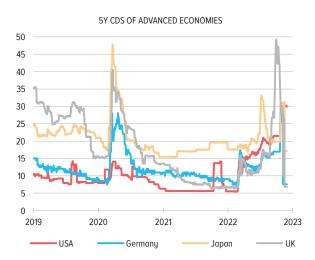




Sources: Moscow Exchange, Cbonds, Bank of Russia calculations.

### CDS SPREADS MOSTLY DECLINED IN BOTH ADVANCED AND EMERGING MARKET ECONOMIES (BP)

Chart 10





Sources: Chonds, Bank of Russia calculations.

### THE RUSSIAN STOCK AND FOREIGN CURRENCY MARKETS SHOWED POSITIVE TRENDS

Table 4

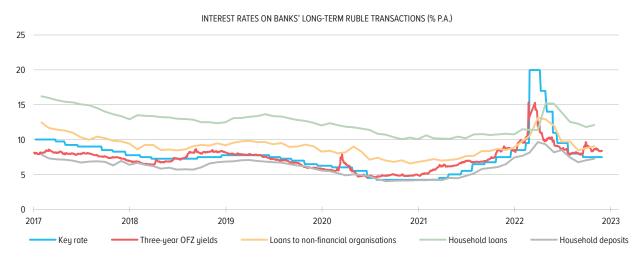
	Indicator	30.11.2022	1M	3M	6M	YTD	1Y
Russian	financial market ('+' – positive trends, '-' – nega	tive trends)					1
	D exchange rate	60.99	0.8	-1.8	0.5	18.3	18.3
MOEX Index, bp		2,175	0.4	-5.7	-8.4	-42.6	-43.9
RTS Index, bp		1,125	1.2	-7.2	-7.9	-29.5	-31.3
Government bond yields, %		9.56	5	86	-7	115	112
Corporate bond yields, %		9.49	11	29	-225	64	10
Regional bond yields, %		9.10	6	30	-165	47	-8
RVI, p		43	-4	-7	-25	10	8
	ge rates (per US dollar, per cent change, '+' – app	preciation, '-' – deprecia	tion)		1		
	USA	105.95	-5.0	-2.6	3.4	10.7	10.0
	Germany	1.04	5.3	3.9	-2.3	-8.5	-7.9
AEs*	Japan	138.11	-7.2	-0.5	6.1	20.0	21.4
	UK	1,21	5.1	3.4	-3.5	-10.9	-9.5
	Russia	60.99	0.8	-1.8	0.5	18.3	18.3
	Brazil	5.19	-0.3	-1.3	-7.8	6.8	7.3
	Mexico	19.29	2.6	4.4	2.0	5.9	11.0
EMEs	China	7.09	2.9	-2.6	-6.1	-11.5	-11.1
	Turkey	18.63	0.0	-2.5	-13.6	-39.7	-45.5
	South Africa	17.26	6.0	-1.7	-10.6	-7.9	-6.9
10-uear	bond yields (% p.a., change in bp, '-' – increase,						
<b>J</b>	USA	3.68	-42	57	74	216	216
	Germany	1.92	-22	42	73	210	224
AEs	Japan	0.25	1	2	2	18	18
	UK	3.09	-41	49	94	212	223
	Russia	10.20	2	113	96	176	188
	Brazil	12.97	90	68	43	270	142
	Mexico	9.67	-54	26	90	183	174
EMEs	China	2.93	28	28	12	14	6
	Turkey	10.90	-33	-250	-1 179	-1 377	-1 031
	South Africa	10.26	-60	-7	39	83	44
5V CDS	spreads (bp, change in bp, '+' – increase, '-' – de		-00	-7	33	00	77
31 CD3	USA	30	3	11	14	18	14
	Germany	8	-20	-8	-4	-1	-2
AEs	Japan	17	-13	-2	-3	0	-1
	UK	7	-23	-14	-4	-3	-4
	Brazil	237	-25	-11	24	41	-8
	Mexico	123	-32	-30	2	36	11
EMEs	China	78	-32	4	6	37	25
LIVILS	Turkey	505	-129	-240	-187	-41	19
	South Africa	241	-58	-36	6	40	2
Cha ale im	idices (points, % change, '+' – increase, '-' – decr		-30	-30	0	40	
Stock in	S&P 500		E 2	2.4	0.5	14.4	12.4
	Stoxx 600	4,080 440	5.3 6.8	2.4 4.8	-0.5 0.3	-14.4 -9.8	-12.4 -5.8
AEs	Nikkei 225			-0.8	1.9		-5.8 -1.2
		27,955	1.4			-2.9	
	FTSE 100	7,573	6.7	2.9	0.5	2.6	6.5
	MSCI EM	972	14.6	-2.1	-8.9	-21.1	-20.2
	Bovespa	112,486	-3.1	1.9	1.0	7.3	9.4
EMEs	IPC Mexico	51,685	3.5	12.5	0.3	-3.0	3.8
	SSE Composite	3,151	8.9	-2.4	-1.0	-13.4	-11.5
	BIST 100	4,978	25.1	57.3	93.8	168.0	175.2
	FTSE / JSE	74,828	12.2	10.2	5.6	1.5	6.9

<sup>\*</sup> Advanced economies.

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

### IN OCTOBER, RATES SLIGHTLY GREW IN THE CREDIT AND DEPOSIT MARKET IN RESPONSE TO THE SEPTEMBER INCREASE IN UNCERTAINTY

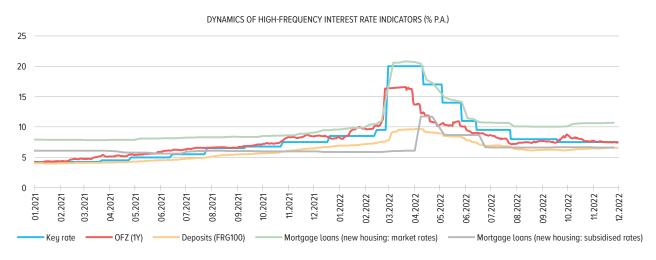
Chart 11



Source: Bank of Russia.

### HIGH-FREQUENCY INDICATORS SUGGEST THAT RATES ON CREDIT AND DEPOSIT OPERATIONS REMAINED CLOSE TO THEIR CURRENT LEVELS IN NOVEMBER

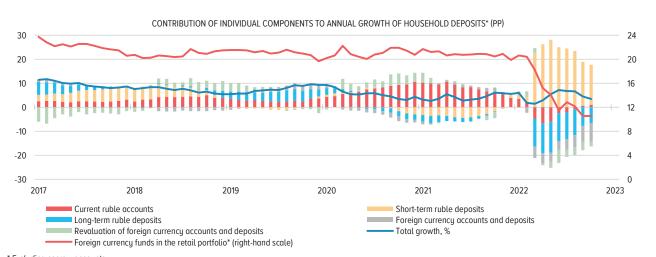
Chart 12



Sources: Bank of Russia, Frank RG, DOM.RF.

#### OCTOBER SAW A TREND TOWARDS RECOVERY IN THE INFLOW OF HOUSEHOLD RUBLE FUNDS TO BANKS

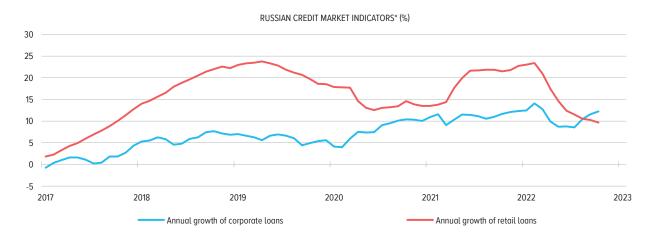
Chart 13



\* Excluding escrow accounts. Source: Bank of Russia calculations.

#### IN OCTOBER, GROWTH IN CORPORATE LENDING REMAINED COMPARABLE TO THE PREVIOUS MONTH

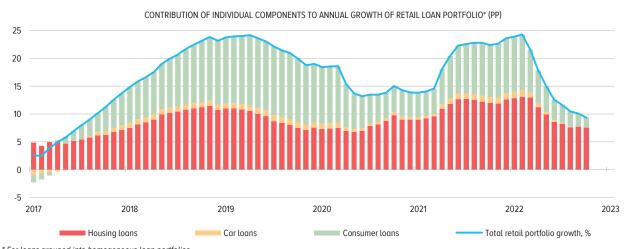
Chart 14



<sup>\*</sup> Since 1 February 2021, the corporate and household loan portfolio 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 INCREASED IN OCTOBER

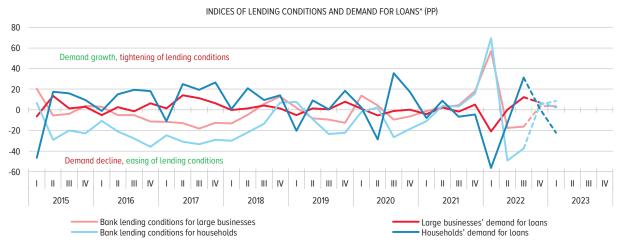
Chart 15



\* For loans grouped into homogeneous loan portfolios. Source: Bank of Russia calculations.

#### IN 2022 Q3, LENDING CONDITIONS EASED FOR ALL CATEGORIES OF BORROWERS

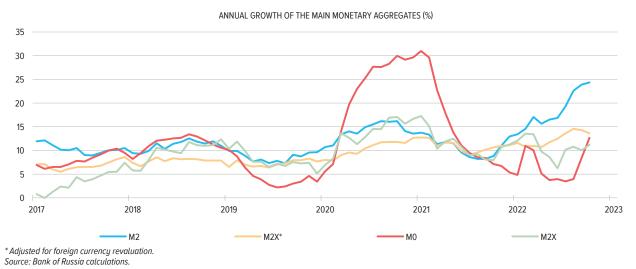
Chart 16



<sup>\*</sup> The dotted lines signify respondent banks' expectations regarding changes in lending conditions and demand for loans in 2022 Q3. Source: Bank of Russia.

#### GROWTH IN MONEY SUPPLY IN NATIONAL DEFINITION IS MARKEDLY AHEAD OF GROWTH IN BROAD MONEY SUPPLY DUE TO THE ONGOING DEDOLLARISATION PROCESS

Chart 17



CREDIT AND DEPOSIT MARKET INDICATORS

Table 5

		July 2022	August 2022	September 2022	October 2022
Interest rates on banks' long-term ruble transaction	ons				
household deposits	% p.a.	7.4	6.8	7.1	7.3
household loans	% p.a.	12.6	12.3	11.8	12.1
corporate loans	% p.a.	9.8	8.5	8.8	9.1
Household funds*	% YoY, AFCR	6.7	6.6	4.4	3.4
in rubles*	% YoY	14.1	14.8	14.0	13.9
in foreign currency	% YoY	-23.6	-26.9	-35.6	-40.1
share of foreign currency*	%	12.8	12.1	10.5	10.5
Corporate loans**	% YoY, AFCR	8.5	10.4	11.6	12.2
short-term (up to 1 year)	% YoY, AFCR	5.6	9.0	10.1	9.6
long-term (more than 1 year)	% YoY, AFCR	10.2	11.8	13.1	14.1
Household loans**	% YoY, AFCR	11.5	10.5	10.2	9.6
housing mortgage loans	% YoY, AFCR	17.6	16.7	16.8	16.5
unsecured consumer loans	% YoY	6.6	5.8	5.0	3.9
Banking system's claims on the economy	% YoY, AFCR	10.9	11.3	10.7	11.0
on businesses	% YoY, AFCR	10.8	11.6	10.9	11.6
on households	% YoY, AFCR	11.3	10.3	10.2	9.4
Money supply (monetary aggregate M2)	% YoY	19.3	22.6	23.9	24.4
Broad money	% YoY, AFCR	13.6	14.6	14.3	13.6

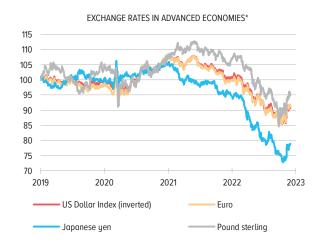
<sup>\*</sup> Excluding escrow accounts.

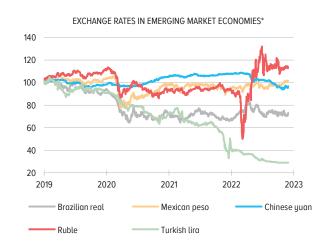
Source: Bank of Russia calculations.

<sup>\*\*</sup> 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.

### IN NOVEMBER 2022, THE US DOLLAR WEAKENED AGAINST MOST CURRENCIES (02.01.2019 = 100)

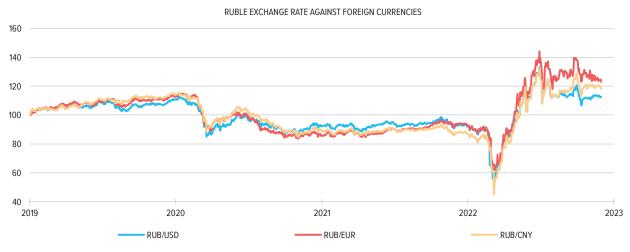
Chart 18





### BY LATE NOVEMBER, THE RUBLE SLIGHTLY STRENGTHENED AGAINST THE US DOLLAR (02.01.2019 = 100)

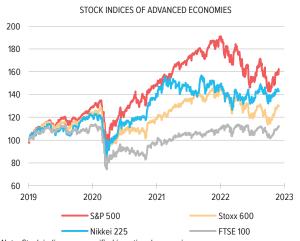
Chart 19



Sources: Chonds, Bank of Russia calculations.

### STOCK INDICES OF MOST COUNTRIES, EXCEPT INDIA, SHOWED POSITIVE TRENDS (02.01.2019 = 100)

Chart 20





STOCK INDICES OF EMERGING MARKET ECONOMIES

Note. Stock indices are specified in national currencies. Sources: Chonds, Bank of Russia calculations.

<sup>\*</sup> Against the US dollar. Reverse exchange rates. Sources: Cbonds, Bank of Russia calculations.

#### Data cut-off dates:

- 'Money market and overnight rates (RUONIA)' section 13 December 2022 (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 November–December 2022, this period is from 16 November 2022 to 13 December 2022);
- 'Money and debt market yield curves' and 'Other financial market segments' sections 30 November 2022;
- 'Credit and deposit market' section 1 November 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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