



TALKING TRENDS Economy and markets

Research and Forecasting Department Bulletin

CONTENTS

Executive summary			
1. Inflation	4		
1.1. Consumer price inflation rises above 4% in annualised terms			
2. Economic activity	9		
2.1. Elevated rate of economic growth in the face of increasing constraints	10		
2.2. Buoyant lending growth in May	14		

The Research and Forecasting Department prepared this bulletin based on data as of 07.07.2023.

The views and recommendations expressed in the bulletin do not necessarily reflect the official position of the Bank of Russia. Please send your comments and suggestions to dip1@cbr.ru

Cover photo: shutterstock.com/FOTODOM Address: 12 Neglinnaya Street, Moscow, 107016

Bank of Russia website: www.cbr.ru

© Central Bank of the Russian Federation 2023

Executive summary

Monthly summary

- The Russian economy has been demonstrating a considerable increase. As before, industries focused on the public sector are ramping up output most actively. A faster expansion of retail lending is an additional contributor to domestic demand growth, alongside a further improvement in consumer sentiment and rising wages. The increase in the stable components of prices is accelerating gradually, although prices in some food and non-food segments continue to go down. Besides, the economy is still facing serious resource constraints, specifically in the labour market, production capacities and technologies. There are still factors that might intensify price pressure.
 - According to high-frequency indicators and survey results, aggregate demand in the economy continues to expand amid high business and consumer confidence. Rising credit activity is accelerating the expansion of demand driven by government expenditures. The growth rate of the credit market (and credit-driven demand) remains close to its all-time high. Households are gradually shifting from savings towards higher consumption, thus also contributing to the rise in the demand for goods and services. Amid the soaring demand, the supply of investment goods and investment activity, specifically among small and medium-sized businesses, are rising as well.
 - The seasonally adjusted growth rate of consumer prices is becoming increasingly more persistent, stabilising above 4% in annualised terms. Manufacturers and service providers incur higher costs, including due to the existing barriers to imports. However, they admit that they are unable to quickly meet surging demand because of production, labour and other constraints. As a result, inflationary pressure is intensifying. Considering macroeconomic inertia, this process will still be unfolding in the next few months. Its neutralisation will require a reduction in the fiscal and/or credit impulse. A possible rise in inflation expectations following the ruble weakening might become another proinflationary factor.
 - The yield curve of federal government bonds (OFZ) is flattening, with the gap between yields on long-term bonds and short- and medium-term bonds becoming narrower. Yields on one- to three-year bonds were up amid rising expectations about monetary policy tightening. Nevertheless, as market participants are concerned that the budget deficit and the amount of borrowings will remain elevated in the medium term, the positive spread between long- and short-term OFZ yields remains significant.

1. Inflation

The current consumer price uptrend which took shape in Q4 2022, continued into Q1 2022, strengthening further in May–June. Price rises started to exceed an intra-annual trajectory corresponding to an inflation rate of 4%. That said, the role of stable price rise components, which are key drivers of the inflationary trend, has increased. Their growth has either come close to the 4% level in seasonally adjusted terms or has exceeded it.

It is of no little importance that the mounting of inflationary pressure was chiefly driven by the factors of demand. We estimate that domestic demand has already surpassed a high reached in Q1 2021, having fully recovered after its plunge. The supply of goods and services has positively reacted to demand. Indeed, manufacturing output hit an all-time high in May, consumer goods imports have fully recovered (not for all items and brands, however). Nevertheless, this was not enough to contain the pro-inflationary trend, which is driven by a rise in demand beyond the economy's potential for meeting it.

Under these circumstances, for the inflation target to be achieved towards the end of 2024, it is essential that the current pace of inflation in seasonally adjusted terms should slow to get in line with the 4% trajectory as early as the end of 2023. It will, however, take time for the ongoing pro-inflationary trend to be turned around, with its inertia overcome. The transmission mechanism of monetary policy operates via a variety of channels, which directly or indirectly influence demand in the economy with different time lags. Notably, monetary policy decisions only have a full effect on price rises in three to six quarters.

Therefore, monetary policy should be toughened *before* inflation gathers momentum. Otherwise, a much sterner monetary policy stance would have to be required – the cooling effect on demand and prices is achieved by hiking the *real* (adjusted for inflation) interest rate. With an elevated pace of price rises, the *nominal* interest rate would have to be raised much higher than if inflation were to be moderate. The rationale for this is both a faster pace of price rises itself and a likely increase in inflation expectations in the wake of price rises. In this situation, there should be an additional increase in the *real* interest rate capable of bringing inflation back to the target.

1.1. Consumer price inflation rises above 4% in annualised terms

- Consumer price rises accelerated to 4.7% MoM SAAR in May, notwithstanding a significant negative contribution from fruit and vegetables whose decline outpaced the normal seasonal pattern. Annual inflation started to accelerate, rising to 2.5%. It appears from real-time data that June will also see price rises exceed 4% in annualised terms. Annual inflation is set to continue accelerating in the coming months, given the recent trends and tempered price growth in the second half of 2022.
- Price rise acceleration was registered in goods which show stable price movements and are little exposed to fluctuations and frequent changes: the mean of modified core inflation indicators came close to the 4% level in annualised terms.

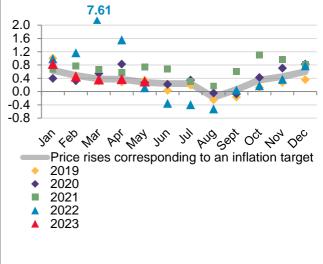
• The pro-inflationary effect comes from several factors. Pressure from producer price rises mounts under the impact of cost increases, driven by, among other things, ruble weakening and shortages in the labour market. Labour income growth outpaces a rise in productivity. Consumers are gradually giving up their pro-savings behaviour model, and against this background producers are more readily translating rising costs into prices. Ruble weakening may also ramp up inflation expectations.

Annual inflation made a U-turn in May, starting to rise, up 2.5% from 2.3% in April (Table 1, Figure 2). Weekly estimates indicate its acceleration in June. Overall, this trend will continue in the coming months as the low inflation readings posted in the summer of 2022 exit the calculation base. Seasonally adjusted consumer price growth accelerated to 4.7% MoM SAAR in May from 3.7% MoM SAAR in April (Figure 3).

Table 1. Inflation and its components

Figure 1. Price rises corresponding to an inflation rate of 4%, % MoM

	May	May	Mar.	Apr.	May
	2021	2022	2023		
% YoY					
All goods and services	6.0	17.1	3.5	2.3	2.5
Core inflation	6.0	19.9	3.7	2.0	2.1
Food	7.4	20.1	2.6	0.0	-0.9
Non-food goods	6.7	19.2	0.1	-0.3	0.2
Service	3.3	10.0	9.7	9.4	11.0
% MoM SAAR					
All goods and services	10.3	2.5	3.5	3.7	4.7
Core inflation	9.7	4.4	3.0	3.7	5.7
Food	14.3	9.7	-0.3	1.0	-1.3
 net of fruit and vegetables 	11.4	16.0	1.0	1.1	5.1
Non-food goods	9.7	-0.6	1.3	1.9	4.6
- net of refined					
petroleum products	9.9	-0.7	1.0	1.7	2.7
and tobacco					
Services	5.6	-3.3	11.7	10.1	13.8
 net of housing and communal services 	6.2	-7.8	16.2	12.9	19.1



Sources: Rosstat, R&F Department estimates.

Sources: Rosstat, R&F Department estimates.

Food price growth was contained by fruit and vegetable prices falling at a faster pace than seasonally normal. Because of it, prices declined an average 1.3% MoM SAAR. Net of fruit and vegetables, food price rises accelerated to 5.1% MoM SAAR. A rise in meat product prices came as the key driver: producers put this down to export expansion concurrent with export expansion concurrent with export expansion concurrent with export expansion concurrent with export expansion concurrent with export expansion concurrent with export expansion concurrent with export expansion concurrent with export expansion concurrent with export expansion concurrent with export expansion concurrent with export expansion concurrent with export expansion concurrent with export expansion concurrent with export expansion concurrent with export expansion concurrent with export expansion concurrent with export expa

In the non-food segment, price growth accelerated to 4.6% MoM SAAR from 1.9% MoM SAAR a month earlier. The heftiest contribution to it came fuel price hikes on the back of depressed supply in the period of <u>planned maintenance in refineries</u> amid domestic demand growth, as well as an expected reduction in payments under the damping mechanism. Net of

refined petroleum products, rises in the prices of non-food goods also gained pace – to 2.9% MoM SAAR from 2.0% MoM SAAR.

Figure 2. Inflation and its components, % YoY

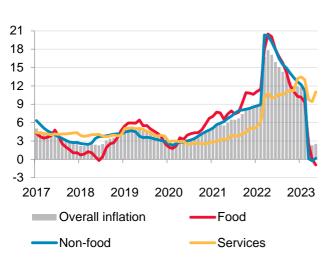
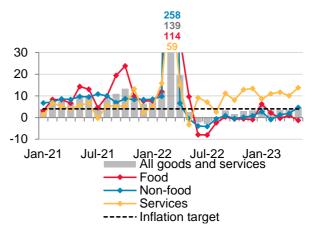


Figure 3. Seasonally adjusted price growth, % MoM SAAR



Sources: Rosstat.

Sources: Rosstat, R&F Department estimates.

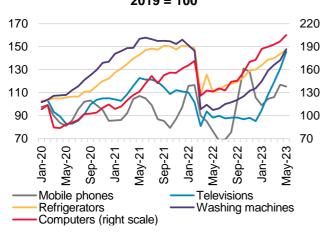
Accelerated price growth is also registered in some non-food goods categories. Thus, <u>amid demand recovery</u> and significant production constraints, there has been a price rise acceleration in domestically produced cars. Car dealerships are also <u>reporting</u> planned hikes in the prices of imported cars on the back of ruble weakening and depletion of car stocks built up as the ruble was stronger in 2022. Smartphones went up in price for the first time since March 2022. Price movements in other durable, especially electronic, goods, remained subdued in May.

Price movements in this segment may be restrained by sizeable stocks of goods, which have mostly recovered to the February 2022 levels (Figure 4). The steepest price reductions which in this segment hit televisions (down 12.7% from December), were, according to retailers, due to their eagerness to sell off the models whose attractiveness was rapidly waning as demand continued to switch to less expensive Chinese and domestically produced televisions.

In services, price rises accelerated to 13.8% MoM SAAR from 10.1% MoM SAAR in April, driven chiefly by the tourist sector, including domestic air travel. Price increases in domestic tourism at the start of the summer vacation season were this year more pronounced than earlier. This is, in particular, owed to limited capabilities and price increases in the foreign tourism segment, while the adjustment of supply in the domestic market is falling behind. Net of tourism and air transport, services price rises slowed to 5.2% MoM SAAR from 7.7% MoM SAAR in April.

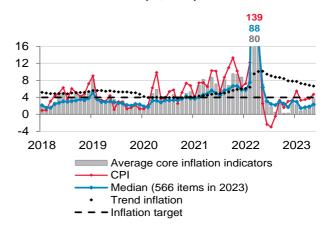
The indicators of sustainable price movements, distribution median and the mean of modified core inflation indicators went up in May. The last of these indicators came close to the 4% level in annualised terms. This suggests mounting pro-inflationary pressure from goods with stable prices and strengthening overall inflationary trend (Figure 5).

Figure 4. Change in the stocks of electronic goods and household appliances, SA, December 2019 = 100



Sources: Rosstat, R&F Department estimates.

Figure 5. Modified core inflation indicators* (% in annual terms) and trend inflation estimate (%, YoY)

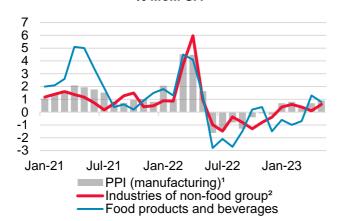


* The indicators are computed using the method of excluding the most volatile components and the truncation method.

Sources: Rosstat, R&F Department estimates.

Pro-inflationary pressure from producer prices also gained strength (Figure 6). Price rises continued in the manufacture of food products and industries manufacturing non-food goods. The pass-through of ruble weakening to consumer prices is still limited (Figure 7). But <u>survey-based indicators</u> suggest a rise in producer costs on the back of ruble weakening in June. This rise may translate into wholesale and retail prices, given an increase in demand. The producer cost growth may gradually spread to a broader list of goods, where a lid was earlier put on the pass-through of costs to end prices in order to attract consumers amid an elevated pro-savings sentiment. According to <u>survey-based data</u>, consumers' adaptation to new brands as income rises will lead to a further consumer sentiment improvement. Based on the latest <u>inFOM poll</u>, inflation expectations somewhat declined in June (Figure 8), but ruble weakening over recent weeks may ramp them up in the months to come, additionally shifting the balance of risks towards pro-inflationary factors.

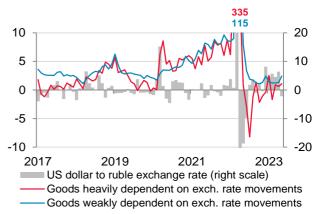
Figure 6. Producer price index in manufacturing,
% MoM SA



¹ Excluding manufacture of basic metals, coke and refined petroleum products.

Sources: Rosstat, R&F Department estimates.

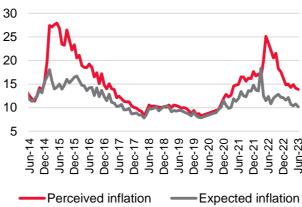
Figure 7. US dollar to ruble exchange rate (%) and median CPI (% MoM SAAR)



Sources: Bank of Russia, Rosstat, R&F Department estimates.

² Manufacture of textiles, rubber, and plastic products.

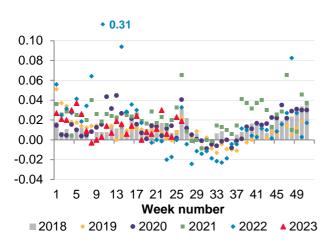
Figure 8. Direct estimates of annual inflation, median values, %



Source: inFOM.

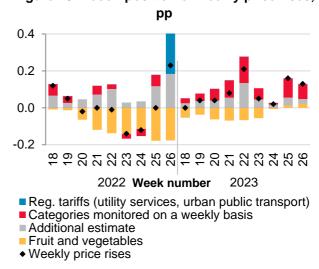
Weekly estimates indicate that month-on-month price growth in June rose above the trajectory corresponding to an inflation rate of 4% in annualised terms. That said, weekly price moves show high volatility (Figure 9). The first week's surge brought about by some components, such as passenger cars, airline tickets, and domestic tourism, was followed by a weekly price rise slowdown to near-zero readings and then by resumed acceleration but already across a wider range of items.

Figure 9. Average daily price growth, %



Sources: Rosstat, R&F Department estimates.

Figure 10. Decomposition of weekly price rises,

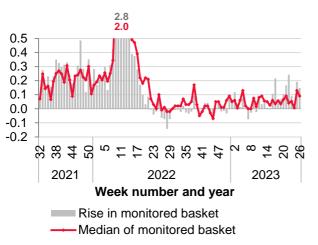


Sources: Rosstat, R&F Department estimates.

Price moves across components remained similar to those in May. The food segment saw meat product and sugar prices continue to rise at an accelerated pace, whereas declining prices of pasta, grain and dairy products had a restraining effect on price growth. The non-food goods segment posted continued price rise acceleration in fuel, motor vehicles, and construction materials. The last two weeks, however, saw electronic goods joining this list. Market participants expect further accelerated price rises in this category going forward on the back of ruble weakening.

Despite the continuing volatility of weekly price rises, pro-inflationary risks are mounting. The share and weight in the consumer basket of goods whose prices rose at an accelerated rate (above 4% in annualised terms), notably increased in late June (Figure 12). The basket of goods and services (net of fruit and vegetables and regulated services) monitored on a weekly basis was rising in price at a fast rate (Figure 11).

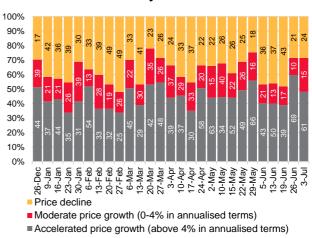
Figure 11. Price growth and median distribution of weekly price increases, %



Note: The calculation is based on an enlarged list of goods and services net of fruit and vegetables and regulated tariffs.

Sources: Rosstat, R&F Department estimates.

Figure 12. Distribution of price indices for categories of goods and services monitored on a weekly basis*



* Columns stand for the share of items (net of fruit and vegetables and regulated services, a total of 85 categories). The numbers denote their weight in the weekly CPI estimate.

Sources: Rosstat, R&F Department estimates.

Despite a sizeable input of some categories to inflation acceleration, an increase in inflationary pressure is also recorded in the stable consumer basket components This may ramp up inflation expectations. An inFOM poll has shown further growth in the household propensity to consume and an improvement in perceptions of whether it is a good time for major purchases. A substantial input to price rises may come from ruble weakening. Given lavish budget spending and lending expansion, as well as a petering out impact of factors restraining price rises (including increased stocks of goods and an elevated household savings ratio), inflationary risks are mounting.

2. Economic activity

The Russian economy has come close to its previous cyclical peak, with domestic demand surpassing it.

A significant fiscal impulse coupled with a buoyant rise in credit impulse has produced a situation where demand in the economy has surpassed its equilibrium level. The supply of goods and services is increasingly lagging demand despite the former's fast growth. This is

aggravating the shortage of production factors, such as labour resources and manufacturing facilities, provoking an elevated pace of their price growth.

From a perspective of structural transformation, "a bird's eye view" of the current situation in the Russian economy looks as follows. Overall, transformation has affected export and import geography more than its physical volume. The key factor behind this is a strong adaptivity of many companies, which have showed an ability to promptly restructure production processes and logistics chains, even if it often involves higher costs. That said, the processes of import substitution with domestic production are not that fast.

Structurally there is more depth and contrast to this picture at the level of individual industries, companies, and production facilities. For instance, automotive, timber, and airline industries are far from recovery. By contrast, the performance of industries oriented towards government purchases, manufacturing at large, and the domestic tourism industry, has hit record highs.

In majority of cases problems of maintaining current output levels are being dealt with in some way or other. That said, there are delays and cost increases in the implementation of complex projects, which adversely affects their cost effectiveness. Therefore, the key structural shifts in the part of the economy oriented to domestic demand are yet to materialise. The technological challenge has not so far become more imperative but will be gaining relevance with time. The risks of disrupting the operation of restructured transborder supply chains, including technological ones, due to secondary sanctions, come as another challenge to the economy.

2.1. Elevated rate of economic growth in the face of increasing constraints

- The second quarter saw GDP growth continue at the same elevated rate as in Q1 (up 0.7% QoQ SA¹) thanks to further expansion in private domestic demand and the maintenance of lavish fiscal injections into the economy. This is also evidenced by the statistics of incoming payments in the Bank of Russia's payment system (Figure 13) and core industries' output (Figure 14). Aggregated output came close to the 2021 levels.
- Growth in domestic, including government, demand for the manufacturing sector's products was a key positive factor of economic performance in Q2. The largest input to growth came from the groups of investment² and consumer goods industries (Figure 17). Output stabilised in mining and quarrying (Figure 16). Given the extension of voluntary oil extraction cut by 0.5 million bbl/d until the end of 2024, this industry's further medium-term performance will to a greater extent depend on the demand for other commodities (coal, metals). Aside from that, an additional voluntary reduction in oil supplies to external markets by another 0.5 million bbl/d will provide a temporary negative contribution to output in late summer.

_

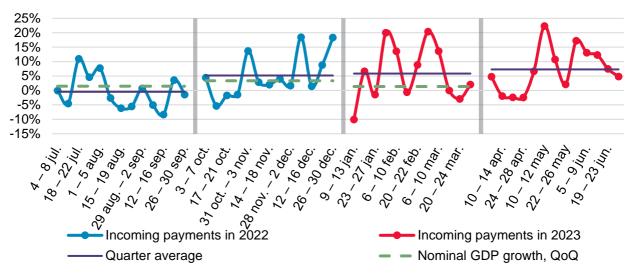
¹ A seasonally adjusted R&F Department estimate based on the first estimate of Q1 GDP from Rosstat (down 1.8% YoY).

² Net of "the heaviest industries" (manufacture of fabricated metal products, except machinery and equipment; and manufacture of other transport equipment), growth remained on a comparable level.

• Improvement in consumer sentiment and economic activity expansion in recent months has underpinned confident consumption growth (Figure 18) and a behaviour strategy shift towards a greater variety of goods purchased by households and gradual departure from the austerity mode. This is evidenced by a faster increase in the sales of private label goods in the premium and middle range segments (Figure 20), as well as a rise in the share of respondents who believe that now is a good time for buying expensive goods.³ As a result, sustainable growth is registered for both daily consumption (Figure 19) and spending on durable goods demand for which was pent up in 2022.

- The prerequisites for further consumer demand expansion will remain in place in the short term. A continued rise in labour demand registered by surveys as the unemployment rate hits all-time lows (Fig 23) suggests further buoyant real wage growth (Figure 22). With financial optimism on the rise (Figure 24) and banks willing to vigorously expand consumer lending, this will help ramp up spending and push the savings ratio down from its elevated levels, thanks to, above all, massive assets built up in a highly liquid form (Figure 25).
- Although the leading indicators (Figure 15) show that most companies retain their optimism,⁴ their plans for future output are being revised down as the pace of demand growth declines. The level of current sales remains satisfactory, but potential for further output expansion at an elevated rate looks problematic, given labour shortages (Figure 21) and the capacity utilisation ratio close to the limit.

Figure 13. Incoming payments growth⁵ relative to the previous quarter average weighted by industries' shares in gross value added, seasonally adjusted, %



Sources: Bank of Russia, Monitoring of individual industries' financial flows.

³ To the 2021 level.

⁴ The RSBI for SME declined to 53.7 in May from 54.1 in April. The Institute for Economic Policy Industrial Optimism Index shed 2 points in June, the Industrial Forecasts Index fell 3 points, the Russian Union of Industrialists and Entrepreneurs Business Environment Index declined 0.6 points. The Investment Activity Index from the Centre for Macroeconomic Analysis and Short-term Forecasting stabilised in April after its hike in March.

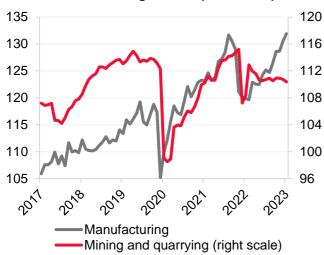
⁵ Growth means a percentage change in the sought for value: $g = \frac{(x_1 - x_0)}{x_0} * 100$.

Figure 14. Output in core economic activities, SA, jan.21 = 1



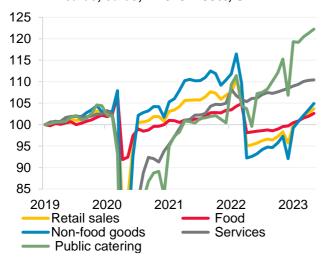
Sources: Rosstat, R&F Department estimates.

Figure 16. Mining and quarrying and manufacturing indices (2014 = 100)



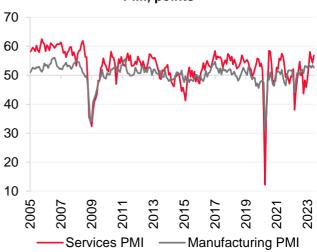
Sources: Rosstat, R&F Department estimates.

Figure 18. Retail, catering and services sector sales, sales, 1.2019=100%, SA



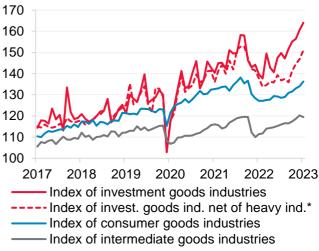
Sources: Bank of Russia, Rosstat, R&F Department estimates.

Figure 15. Russia's Manufacturing and Services PMI, points



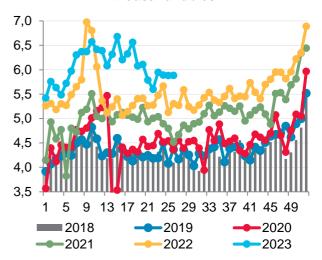
Source: S&P Global.

Figure 17. Output in groups of manufacturing industries, SA, 01.2016=100%



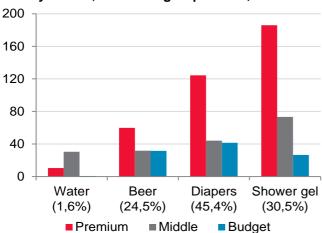
Sources: Rosstat, R&F Department estimates.

Figure 19. Nominal weekly spending on FMCG, thousand rubles



Source: Romir.

Figure 20. Share of Private Label goods in a category (in parentheses) and their sales dynamics, 12M through April 2023, % YoY



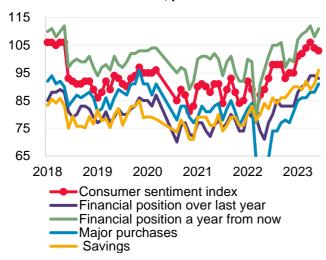
Source: NielsenIQ.

Figure 22. Wage Indices SA, jan.19 = 100



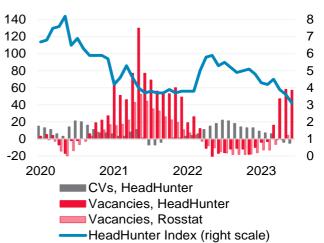
Sources: Rosstat, R&F Department estimates.

Figure 24. Consumer and financial sentiment indices, points



Source: inFOM.

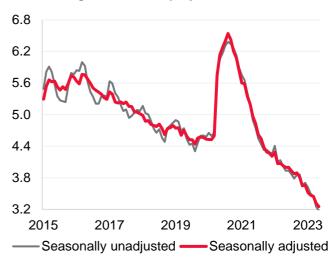
Figure 21. CVs, vacancies (% YoY) and HeadHunter index* (points)



*Ratio of active CVs to vacancies.

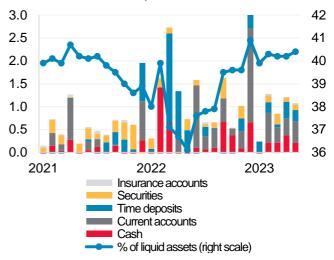
Sources: Rosstat, HeadHunter, R&F Department estimates.

Figure 23. Unemployment rate, %



Sources: Rosstat, R&F Department estimates.

Figure 25. Household transactions with financial assets, trillion rubles



Source: Bank of Russia, R&F Department estimates

2.2. Buoyant lending growth in May

 May saw fast growth continue in all of the retail lending segments amid a rise in consumer confidence, the easing of terms and conditions of bank loan provision, and subsidised lending programme implementation.

- Growth in ruble loans to non-financial organisations somewhat accelerated, likely due to, among other things, the rebound of business activity and investment demand.
- Banks post strong profitability: their overall financial result exceeded the level of the same period of 2021. This sets the stage for further lending expansion.

May's lending growth remained strong in all retail segments, matching the April number at 2.3% MoM SA (29.0% SAAR) for the retail loan portfolio. The average mortgage loan provision in the last three months substantially exceeded the previous years' levels amid the implementation of subsidised lending programmes and the continuation of solid household income growth numbers (Figure 28, Figure 30). Meanwhile, the Bank of Russia's regulatory measures to disincentivise the provision of "subsidised mortgage loans from developers" are sending a weighted average interest rate in the new housing market higher (Figure 31). Auto loan growth remained at an all-time high of 2.9% MoM SA (26.5% SAAR) in May. This largely reflects the realisation of pent-up demand thanks to market saturation with used cars and friendly countries' brands and a resumption of subsidised lending programmes. Moreover, banks extend loans to best-quality borrowers, thus restraining the building up of credit risks.

Expansion in unsecured consumer loans is still outstripping the fast pace of growth at the end of 2022 – the start of 2023, despite some slowdown in May (Figure 27) – to 1.6% MoM SA from 1.8 MoM SA (19.4% SAAR). Loan demand is rising amid consumer confidence growth. Banks are ramping up the rate of loan application approval as the overall economic situation improves, and are likely seeking to beef up the portfolio before macroprudential measures are toughened.

Corporate lending growth also remains strong. The portfolio of ruble loans to non-financial organisations expanded to 1.8% MoM SA in May from 1.5% MoM SA in April. Growth in the portfolio of loans to sole proprietorships stayed at 3.6% MoM SA. In annual terms, there was an acceleration in long-term ruble loan portfolio growth, with a medium-term portfolio increase slowing somewhat and short-term loan portfolio growth decelerating more notably. The acceleration of corporate lending growth is a consequence of business activity and investment demand growth. The continued strong growth in the portfolio of loans to financial organisations (2.3% MoM SA versus 3.6% MoM SA in April) may have been helped by the operations of leasing industry companies.

Expansion in household ruble deposits accelerated to 2.1% MoM SA in May from 0.9% MoM SA in April. Deposit growth is likely owed to lavish budget spending. In annual terms, we saw an acceleration in demand deposits and deposits with a duration of up to 30 days, as well as long- and medium-term deposits, which may have been partly due to the low base effect. Household foreign exchange deposit contraction slowed to 2.4% MoM SA from 4.2% MoM SA

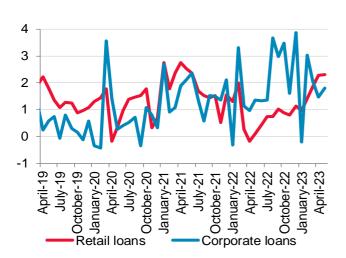
as the appeal of deposits denominated in currencies, such as yuan, dirham, tenge, and lira, increased.

Corporate ruble deposit expansion accelerated to 1.6% MoM SA from 1.5% MoM SA. Corporate customers' foreign exchange accounts declined by 1.4% MoM SA in April and 3.9% MoM SA in May, with annual contraction accelerating to 2.3% YoY from 0.9% YoY.

Strong deposit growth, buoyed by credit activity and budget spending, contributed to continued fast pace of broad money supply expansion (Figure 32, Figure 33).

The banking sector earned a net profit of 273 billion rubles in May and 1,378 billion rubles from the start of the year, up significantly from the 2021 numbers. The banking sector's profitability helps strong lending expansion going forward.

Figure 26. Ruble loans portfolio growth, % MoM SA



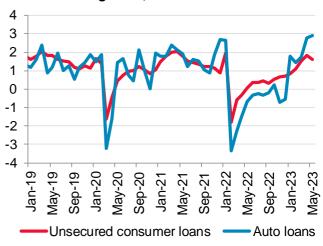
Sources: Bank of Russia, R&F Department estimates.

Figure 28. Number of mortgage loans issued, million units



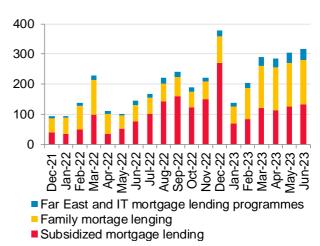
Sources: Bank of Russia, R&F Department estimates.

Figure 27. Retail loans, % м/м SA portfolio growth, % MoM SA



Sources: Bank of Russia, R&F Department estimates.

Figure 29. Loan issuance under subsidies mortgage loan programmes, billion rubles



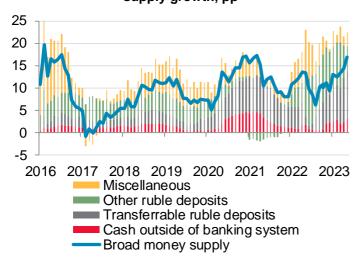
Note. June 2023 is an estimate of 29.06. Sources: DOM.rf, R&F Department estimates.

Figure 30. Share of subsidized mortgage loans in total mortgage lending, %



Sources: Bank of Russia, R&F Department estimates.

Figure 32. Input of cash and deposits to broad money supply growth, pp



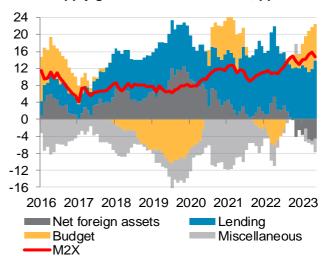
Sources: Bank of Russia, R&F Department estimates.

Figure 31. Weighted average mortgage loan rates, pp



Sources: Bank of Russia, R&F Department estimates.

Figure 33. Decomposition of broad money supply growth on the asset side, pp



Sources: Bank of Russia, R&F Department estimates.

Alexander Morozov, Director

Artur Akhmetov

Yana Chernysheva

Dmitry Chernyadyev

Maria Kharlamova

Anastasia Khazhgerieva

Irina Kryachko

Tatyana Kuzmina

Alexandra Moskaleva

Sofia Myakisheva

Maxim Nevalenny

Yekaterina Petreneva

Svetlana Popova

Alexey Porshakov

Bella Rabinovich

Arina Sapova

Marina Starodubtseva

Anna Tsvetkova

Yulia Ushakova

Kristina Virovets

Sergey Vlasov