



# INFLATION EXPECTATIONS AND CONSUMER SENTIMENT

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Information and analytical commentary

# INFLATION EXPECTATIONS AND CONSUMER SENTIMENT (DECEMBER 2023)

Households' inflation expectations increased in December. As shown by InFOM's survey, the median estimate of inflation expected by households in the coming 12 months rose to 14.2% in December (+2.0 pp vs November). The median of five-year ahead inflation expectations went up to 11.6% (+0.6 pp vs November). Companies' price expectations increased after a decline in the previous month to stay close to their maximum values since April 2022 and above the 2023 Q3 average. Implied inflation for inflation-indexed federal government bonds (OFZ-IN) almost remained unchanged at 7.4% for the next four years. Analysts raised their forecasts for the end of 2023 (7.6%, +0.6 pp) but did not change those for the end of 2024 (5.1%). Their medium-term expectations remained anchored to the inflation target. According to the Bank of Russia's forecast, annual inflation will come closer to the upper bound of 7.0–7.5% in 2023. Given the monetary policy pursued, annual inflation will decline to 4.0–4.5% in 2024 and stay close to 4% further on.

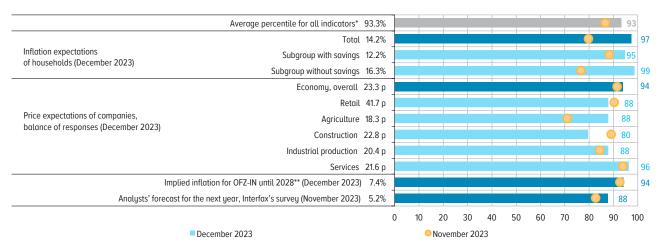
#### INFLATION EXPECTATION INDICATORS

	Expectation horizon	2020 average	2021 average	2022 average	2023 Q2 average	2023 Q3 average	October 2023	November 2023	December 2023	The average for the past three months
Inflation, %		3.4	6.7	13.8	2.7	5.2	6.7	7.5		
Inflation observed by households, Public Opinion Foundation, %										
Median	previous 12 months	9.6	15.1	19.6	14.3	13.7	13.9	15.1	17.0	15.3
Subgroup with savings	previous 12 months	8.9	13.2	16.8	12.8	12.4	11.9	13.4	14.5	13.3
Subgroup without savings	previous 12 months	10.0	16.3	22.0	15.7	14.8	15.9	16.6	19.0	17.2
Households' inflation expectations, Public Opinion Foundation, %										
Median	next 12 months	9.1	12.1	12.9	10.5	11.4	11.2	12.2	14.2	12.5
Subgroup with savings	next 12 months	8.4	10.6	11.3	9.5	10.3	9.4	10.8	12.2	10.8
Subgroup without savings	next 12 months	9.6	13.3	14.2	11.5	12.5	13.1	13.4	16.3	14.3
Median of five-year inflation expectations	next 5 years				10.7	10.1	11.0	11.0	11.6	11.2
Companies' price expectations, balance of responses										
Companies, total	next 3 months	13.3	20.1	21.7	16.3	21.4	24.0	22.8	23.3	23.4
Retail	next 3 months	31.7	38.8	38.9	35.3	46.2	46.5	43.1	41.7	43.8
Implied inflation for OFZ-IN (monthly average), %										
OFZ-IN 52002, February 2028	next 4-year average	3.3	4.2	6.3	6.6	7.8	8.5	7.3	7.4	7.7
OFZ-IN 52003, July 2030	next 7-year average	3.3	4.3	6.5	7.2	7.9	8.2	7.2	7.3	7.6
OFZ-IN 52004, March 2032	next 8-year average			6.7	7.6	8.0	8.4	7.5	7.6	7.8
OFZ-IN	2028–2030 average	3.5	4.4	6.7	8.3	8.1	7.8	7.0	7.3	7.4
OFZ-IN	2030–2032 average			7.6	9.1	8.5	9.0	8.8	8.4	8.8
Analysts, %										
Survey by the Bank of Russia	2023		4.0	6.3	5.7	6.0	7.0		7.6	7.3
Interfax	2023			6.5	5.8	6.3	7.2	7.7		
Survey by the Bank of Russia	2024			4.4	4.1	4.4	5.1		5.1	5.1
Interfax	2024				4.7	4.9	5.1	5.2		
Survey by the Bank of Russia	2025			4.0	4.0	4.0	4.0		4.0	4.0

Sources: Rosstat, InFOM, Bank of Russia, Interfax, Moscow Exchange.

#### INFLATION EXPECTATION INDICATORS IN PERCENTILES RELATIVE TO THE DISTRIBUTION OF VALUES SINCE 2017

Chart 1



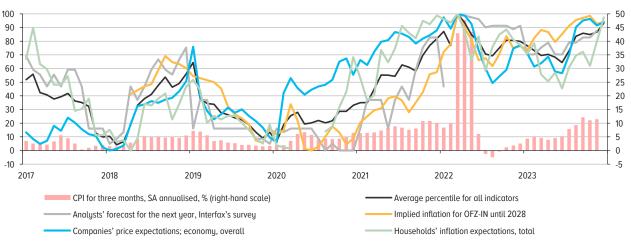
<sup>\*</sup> The average of the percentiles of households' inflation expectations (total), companies' price expectations (the economy, overall); implied inflation for OFZ-IN until 2028, and analysts' forecast for the next year.

Note. The chart shows the percentiles of inflation expectation indicators for the current and previous months in the distribution observed since January 2017. The percentiles as of the previous date are highlighted in yellow, and the percentiles as of the current date are shown in grey, blue and cyan. A shift in the indicator to the left relative to the previous date means lower inflation expectations, and its shift to the right – higher inflation expectations.

Sources: InFOM, Bank of Russia, Interfax, Moscow Exchange.

#### PERCENTILES OF INFLATION EXPECTATION INDICATORS RELATIVE TO THE DISTRIBUTION OF VALUES SINCE 2017

Chart 2



Sources: InFOM, Rosstat, Bank of Russia, Interfax, Moscow Exchange.

<sup>\*\*</sup> Percentiles for implied inflation are specified relative to the distribution of values since April 2018.

#### Monetary policy and inflation expectations

Inflation expectations of economic agents influence how effectively monetary policy will be able to control inflation.¹ This is because companies, credit institutions and households make their decisions on consumption, savings and investment, price products, and set credit and deposit rates, being guided by their expectations for future inflation, among other factors. The performance of the Bank of Russia's monetary policy in turn impacts inflation expectations. Achieving the inflation target and maintaining inflation at a consistently low level help anchor inflation expectations and reduce their volatility and sensitivity to one-off and short-term spikes in prices for some products or services.

Estimates of inflation expectations and observed inflation based on household surveys almost always exceed actual inflation rates both in Russia and abroad. This difference is ascribed to the peculiarities of perception: people tend to notice and actively respond to price growth, whereas declining or stable prices usually attract less attention. Therefore, people estimate inflation guided primarily by those product prices that have increased most significantly. Despite this systematic shift in the absolute values of inflation expectations, their change and relative level compared to the historical range are essential indicators showing possible changes in households' economic behaviour. These changes in turn influence future steady inflation.

Unlike households' inflation expectations, companies' price expectations are measured as the balance of responses to the question about the expected change in output prices in the next three months rather than the median of the expected price growth in the next 12 months. Rising price expectations mean that a higher percentage of companies plan to raise prices compared to the previous month. However, the extent of the increase cannot be estimated based on the change in the balance of responses.

<sup>&</sup>lt;sup>1</sup> The monetary policy transmission mechanism is detailed in Appendix 1 to the Monetary Policy Guidelines for 2024–2026.

#### Households' inflation expectations continued to rise

Based on InFOM's survey, in December 2023, the median estimate of households' inflation expectations for the next 12 months was 14.2% (+2.0 pp vs November, +2.8 pp vs the 2023 Q3 average) (Annex, Chart 1). This was the highest reading since March 2022. There was an increase in inflation expectations among respondents both with and without savings, with the latter showing a greater rise (Annex, Chart 3). The median of inflation expectations of the respondents with savings was 12.2% in December (+1.4 pp vs November).

Inflation observed by households also soared in December. Its median equalled 17.0% (+1.9 pp vs November). Estimates of observed inflation went up among both subgroups of respondents, with those without savings showing a more significant increase.

When answering the question about growth in prices for certain goods and services,<sup>2</sup> in December, respondents primarily mentioned higher prices for eggs, poultry and meat (Annex, Chart 2). In December, the survey participants' concern about rising prices for these goods was highest compared with previous months of 2023. Contrastingly, respondents complained about increases in prices for petrol, medicines, milk, and household chemicals less frequently compared to November.

Qualitative estimates of expected inflation for one month and one year ahead also increased in December.<sup>3</sup> Estimates of actual inflation over the past month and year were up as well<sup>4</sup> (Annex, Chart 4).

Five-year ahead inflation expectations<sup>5</sup> increased in December to 11.6% (+0.6 pp vs November). Concurrently, such expectations were higher among respondents both with savings (up to 10.7%; +0.7 pp vs November) and without savings (up to 12.6%; +0.7 pp vs November). The percentage of respondents believing that the price growth rate would notably surpass 4% in three years continued to grow for the third consecutive month and reached 51% (vs 49% in November) (Annex, Chart 5).

#### Consumer sentiment deteriorated

The consumer sentiment index (CSI) edged down in December (Annex, Chart 6). It equalled 101.8 points (-0.5 points vs November). The decline was due to a deterioration in estimates of the present situation, while the expectations of respondents improved.

The present situation index equalled 86.5 points in December (-2.4 points vs November). Among its components, estimates of actual changes in personal financial standing over the year were down, while those of the suitability of the current period for large purchases remained unchanged.

The expectations index equalled 112.0 points in December (+0.8 points vs November). Among its components, expectations for the country's economic prospects for one year and five years ahead improved, while the one-year ahead estimates of personal financial standing prospects were down.

The percentage of respondents opting to purchase expensive goods rather than save went down to 27.1% (-3.5 pp vs November) (Annex, Chart 7). The percentage of those who preferred to save went up to 51.8% (+0.5 pp vs November). In December, respondents gave actually the same answers to the question about preferred forms of their savings as in the previous month. The number of respondents who preferred to keep savings in bank accounts edged down (39% of respondents vs 41% in November), while the number of those preferring cash edged up (31% of respondents vs 30% in November)

<sup>&</sup>lt;sup>2</sup> For details on inflation in November, refer to the information and analytical commentary <u>Consumer Price Dynamics</u> No. 11 (95), November 2023.

<sup>&</sup>lt;sup>3</sup> That is, a larger percentage of respondents, as compared to the previous month, answered that prices would rise dramatically and would be rising faster than now.

<sup>&</sup>lt;sup>4</sup> That is, a higher percentage of respondents, as compared to the previous month, said that prices had risen dramatically and were rising faster than before.

<sup>&</sup>lt;sup>5</sup> The question 'Could you even roughly estimate inflation, price growth in Russia in <u>five years</u>?'. The proportion of respondents who gave a meaningful answer to this question (excluding the answers such as 'I have no idea what will happen to prices in Russia in five years' and 'It is hard to say') totalled 51% in December (vs 52% in November).

#### Companies' price expectations increased

According to the monitoring of businesses carried out by the Bank of Russia in December 2023, companies' price expectations (balance of responses) for the next three months increased after a decline in the previous month (Annex, Chart 8). They stayed close to their maximum readings since April 2022. In December 2023, the survey covered 13,400 enterprises (for more details, see the information and analytical commentary Monitoring of Businesses: Assessments, Expectations and Comments).

The quantitative indicator of companies' inflation expectations – the average price growth rate expected in the next three months<sup>6</sup> – was 7.2% in annualised terms in December (vs 5.9% in November), which was noticeably higher than the inflation target.

The increase in price expectations was accompanied by improved estimates of actual and expected demand. Price expectations were diverse across industries (Annex, Chart 9). Price expectations rose in agriculture, mining and quarrying, transportation and storage, as well as in services; however, they declined in trade, construction, manufacturing, electricity and water supply.

Price expectations rose most noticeably in agriculture, where estimates of current and future demand significantly improved. Services demonstrated a similar trend. Higher price expectations of transportation and storage companies were fuelled by the December indexation of railway transportation rates. In mining and quarrying, the rise in price expectations was accompanied by faster cost growth.

On the contrary, manufacturing, construction, electricity and water supply companies reported a slowdown in cost growth, which made price expectations lower.

In trade, price expectations were falling over the last three months amid deteriorating estimates of current and future demand and slower cost growth. In December, the average price growth rate expected by retail trade enterprises in the next three months was 12.2% in annualised terms (Annex, Chart 10).

# Implied inflation of 7.4% for the next four years

According to the Bank of Russia's estimates, implied inflation for the next four years up to February 2028, calculated on the basis of the ratio between yields on OFZ-PD and OFZ-IN bonds with the same maturity dates, remained almost unchanged and averaged 7.4% in December (+0.1 pp vs November) (Annex, Chart 11). Implied inflation for the period of 2028–2030 grew to 7.3% (+0.3 pp vs November), while implied inflation for 2030–2032 edged down to 8.4% (-0.4 pp vs November).

# Analysts raised forecasts

In November–December 2023, analysts raised inflation forecasts again. According to the findings of the Bank of Russia's macroeconomic survey carried out in December, analysts' inflation forecast for the end of 2023 was 7.6% (+0.6 pp vs October, no survey was conducted in November). Analysts' expectations for the end of 2024 did not change, their median equalled 5.1% as in October (Annex, Chart 12). Analysts surveyed by the Bank of Russia expected inflation to be 4.0% in 2025 and further on. According to the survey carried out by Interfax, in November, analysts' consensus forecast of inflation was 7.7% for the end of 2023 (+0.5 pp vs October) and 5.2% for the end of 2024 (+0.1 pp vs October).

<sup>&</sup>lt;sup>6</sup> Seasonally adjusted data.

<sup>&</sup>lt;sup>7</sup> The estimates are based on the comparison of expected yields on OFZ-IN and nominal OFZ (OFZ-PD) bonds, with account of the lag in the nominal value indexation and seasonally adjusted inflation. <u>Calculation method</u>.

# The Bank of Russia forecasts that annual inflation will drop to 4.0-4.5% in 2024

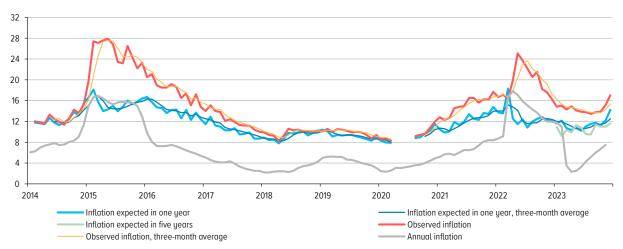
According to the Bank of Russia's forecast, annual inflation will come closer to the upper bound of 7.0-7.5% in 2023. Given the monetary policy pursued, annual inflation will decline to 4.0-4.5% in 2024 and stay close to 4% further on.

### **ANNEX**

# **Analytical charts**

# INFLATION OBSERVED AND EXPECTED BY HOUSEHOLDS (MEDIAN ESTIMATE)

Chart 1

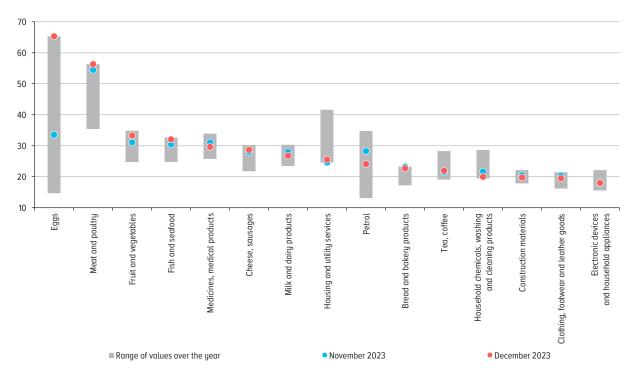


Sources: InFOM, Rosstat, Bank of Russia calculations.

# DISTRIBUTION OF RESPONSES TO THE QUESTION 'WHAT MAIN PRODUCTS AND SERVICES SHOWED VERY HIGH PRICE GROWTH OVER THE PAST MONTH?'

Chart 2

(% OF ALL RESPONDENTS)



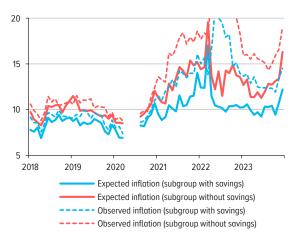
Sources: InFOM, Bank of Russia calculations.

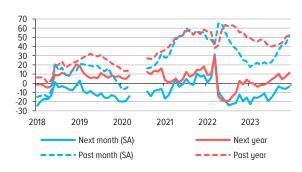
#### EXPECTED AND OBSERVED INFLATION BY RESPONDENT SUBGROUP (MEDIAN ESTIMATE)

Chart 3

#### INDICATORS OF PRICE MOVEMENTS\* (BALANCE OF RESPONSES, PP)

Chart 4





 $^{st}$  Balance of responses to the questions 'How were prices changing overall over the past 12 months (year), in your opinion?', 'How will prices be changing overall in the next 12 months (year), in your opinion?', 'How did prices for food products, non-food goods and services change overall over the past month, in your opinion?', 'How will prices for food products, non-food goods and services change overall next month, in your opinion?'. For the last two questions – seasonally adjusted prices.

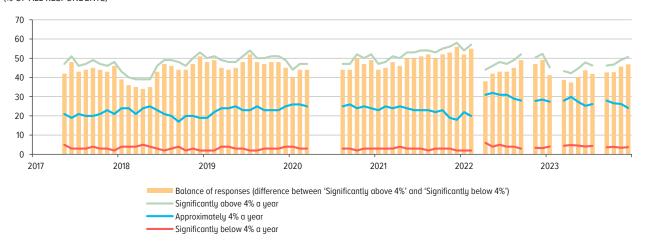
Sources: InFOM, Bank of Russia calculations.

Sources: InFOM, Bank of Russia calculations.

#### DISTRIBUTION OF ANSWERS TO THE QUESTION: 'WILL ANNUAL PRICE GROWTH BE ABOVE OR BELOW 4% IN THREE YEARS, IN YOUR OPINION?'

Chart 5

(% OF ALL RESPONDENTS)



Sources: InFOM, Bank of Russia calculations.

#### **CONSUMER SENTIMENT INDEX** (POINTS)

Chart 6

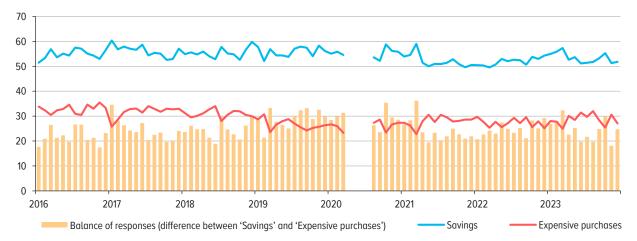


Source: InFOM.

DISTRIBUTION OF ANSWERS TO THE QUESTION 'WHAT IS YOUR OPINION ABOUT THE BEST WAY TO USE AVAILABLE MONEY: MAKE SAVINGS OR PURCHASE EXPENSIVE GOODS?'

Chart 7

(% OF ALL RESPONDENTS)



Sources: InFOM, Bank of Russia calculations.

#### COMPANIES' PRICE EXPECTATIONS

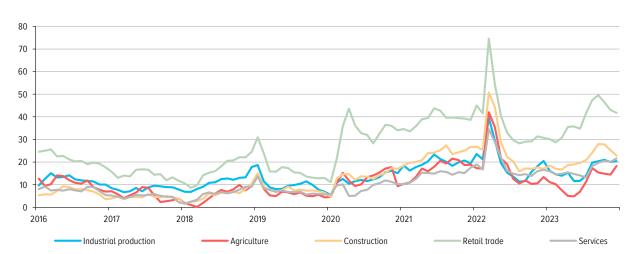
Chart 8



Sources: Bank of Russia, Rosstat.

# COMPANIES' PRICE EXPECTATIONS, BY KEY INDUSTRY (BALANCE OF RESPONSES, SA, POINTS)

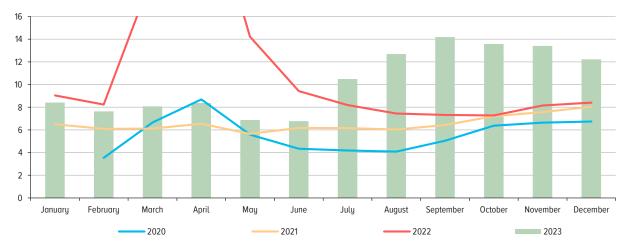
Chart 9



Source: Bank of Russia.

AVERAGE PRICE GROWTH EXPECTED BY RETAILERS IN THE NEXT THREE MONTHS (IN ANNUALISED TERMS)  $^{(6)}$ 

Chart 10

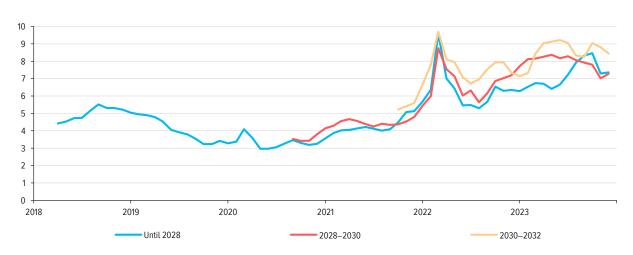


Source: Bank of Russia.

#### IMPLIED INFLATION FOR OFZ-IN

Chart 11

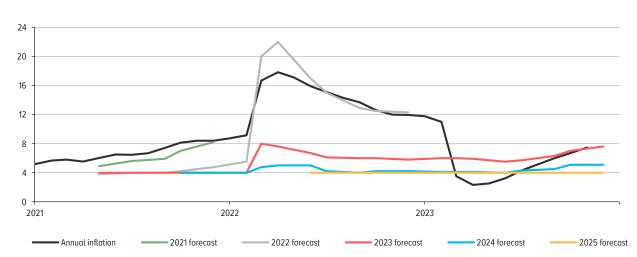
(%)



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

# RESULTS OF THE BANK OF RUSSIA'S MACROECONOMIC SURVEY (%)

Chart 12



Sources: Bank of Russia, Rosstat.

The data cut-off date - 21.12.2023.

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

Please send your comments and suggestions to <a href="mailto:svc\_analysis@cbr.ru">svc\_analysis@cbr.ru</a>.

This commentary was prepared by the Monetary Policy Department jointly with the Irkutsk Regional Division of the Siberian Main Branch of the Central Bank of the Russian Federation.

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