



Bank of Russia



# INFLATION EXPECTATIONS AND CONSUMER SENTIMENT

No. 12 (36) • December 2019

Information and analytical commentary

26 December 2019

## Inflation expectations and consumer sentiment (December 2019)

In December 2019, economic agents' inflation expectations changed diversely. The median estimates of inflation observed over the past year and expected next year by households increased after declining during the previous four months. That said, as evidenced by less volatile estimates of a potential reversal of inflation, households' inflation expectations were stable in the last months. Businesses' short-term price expectations rose, while remaining at a low level. In November, analysts reviewed their 2019 and 2020 forecasts downwards. In addition, analysts' longer-term expectations remain anchored at 4%. Four-year implied inflation for inflation-indexed federal government bonds (OFZ-IN) stabilised at a low level; the estimate of implied future inflation returned to 4% after its drop in October–November. The Bank of Russia forecasts that, given the monetary policy pursued, annual inflation will equal 3.5–4.0% as of the end of 2020 and will stay close to 4% further on. Moreover, annual inflation will be below 3% in 2020 Q1, when the effect of the VAT rate increase is factored out of the calculation of annual inflation.

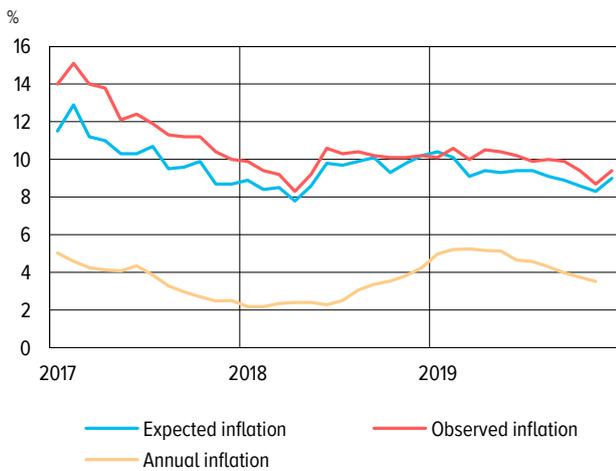
### INFLATION EXPECTATION INDICATORS

Table 1

|  | Expectation horizon | December 2017 | December 2018 | October 2019 | November 2019 | December 2019 |
|--|---------------------|---------------|---------------|--------------|---------------|---------------|
| <b>Inflation, %</b>                                  |                     | <b>2.5</b>    | <b>4.3</b>    | <b>3.8</b>   | <b>3.5</b>    | <b>...</b>    |
| <b>Inflation observed by households, %</b>           |                     |               |               |              |               |               |
| Public Opinion Foundation (median)                   | past 12 months      | 10.0          | 10.2          | 9.4          | 8.7           | 9.4           |
| Public Opinion Foundation (subgroup with savings)    | past 12 months      | 9.8           | 9.2           | 8.2          | 7.6           | 8.7           |
| Public Opinion Foundation (subgroup without savings) | past 12 months      | 10.2          | 10.8          | 10.2         | 9.2           | 9.6           |
| <b>Households' inflation expectations, %</b>         |                     |               |               |              |               |               |
| Public Opinion Foundation (median)                   | next 12 months      | 8.7           | 10.2          | 8.6          | 8.3           | 9.0           |
| Public Opinion Foundation (subgroup with savings)    | next 12 months      | 8.3           | 9.1           | 7.6          | 7.3           | 8.3           |
| Public Opinion Foundation (subgroup without savings) | next 12 months      | 9.0           | 10.8          | 9.5          | 8.9           | 9.4           |
| <b>Companies' price expectations</b>                 |                     |               |               |              |               |               |
| Companies, balance of responses                      | next 3 months       | 7.4           | 16.5          | 8.3          | 8.4           | 8.7           |
| PMI Manufacturing input prices, diffusion index      | current month       | 57.1          | 62.5          | 55.1         | 53.2          |               |
| PMI Manufacturing output prices, diffusion index     | current month       | 51.5          | 52.5          | 51.3         | 50.7          |               |
| PMI Services input prices, diffusion index           | current month       | 54.7          | 60.4          | 54.7         | 54.1          |               |
| PMI Services output prices, diffusion index          | current month       | 51.5          | 53.0          | 52.7         | 52.5          |               |
| <b>Analysts, %</b>                                   |                     |               |               |              |               |               |
| Bloomberg  | 2019                |               | 4.5           | 3.7          | 3.5           | 3.3           |
| Interfax   | 2019                |               | 4.7           | 3.4          | 3.2           |               |
| Reuters  | 2019                |               | 5.0           | 3.5          | 3.3           |               |
| Bloomberg  | 2020                |               | 4.0           | 3.8          | 3.8           | 3.7           |
| Interfax   | 2020                |               |               | 3.7          | 3.7           |               |
| Reuters  | 2020                |               |               | 3.8          | 3.7           |               |
| Bloomberg  | 2021                |               |               | 4.0          | 4.0           | 4.0           |
| <b>Implied inflation for OFZ-IN, %</b>               |                     |               |               |              |               |               |
| OFZ-IN 52001, August 2023                            | next 4-year average | 3.9           | 5.1           | 3.0          | 2.8           | 2.9           |
| OFZ-IN 52002, February 2028                          | next 9-year average |               | 5.2           | 3.2          | 3.2           | 3.4           |
| OFZ-IN   | 2023–2028 average   |               | 5.3           | 3.4          | 3.5           | 3.9           |

INFLATION OBSERVED AND EXPECTED  
BY HOUSEHOLDS (MEDIAN ESTIMATE)

Chart 1



Sources: InFOM, Rosstat.

## Households' inflation expectations

According to the Bank of Russia-commissioned InFOM survey, in December 2019 the median estimate of inflation observed by households over the last 12 months rose to the level recorded this October, reaching 9.4% (+0.7 pp, Table 1, Chart 1). The median estimate of inflation expected in the next 12 months was also up, after declining during the previous four months (+0.7 pp to 9.0%, Chart 1). Although the estimates of observed and expected inflation increased, they are still below the 2019 averages. Such notable fluctuations had been also recorded before, e.g., in February 2017.

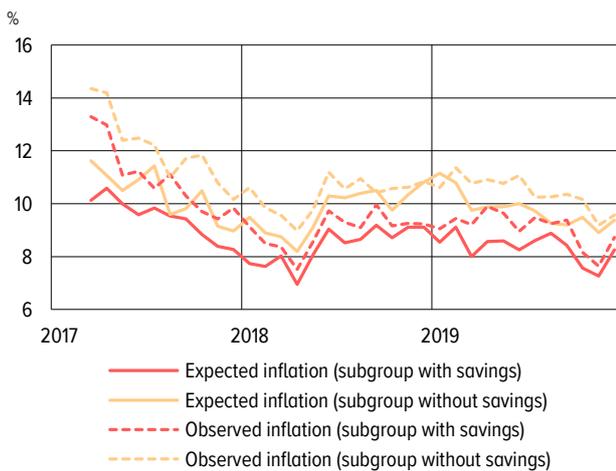
The estimates of observed and expected inflation went up more significantly among respondents with savings – by 1.1 pp and 1.0 pp, respectively (Chart 2).<sup>1</sup>

Median estimates are based on which numerical interval is specified by respondents for current or future inflation. Yet, about one-third of respondents find it challenging to estimate inflation numerically, while a relative estimate of potential changes in current and future inflation trends is simpler for them: the distributions of responses regarding price movements are less volatile (Charts 4 and 5 of the [InFOM Analytical Report on the Twelfth Survey in 2019](#); hereinafter, the Report). The trends in the balances of responses show that, beginning from mid-2019, households have been noting a gradual slowdown in the current price growth. The balance of responses about next-year inflation remains stable (Chart 3). Inflation expectations for 2019 and the three years ahead (Charts 8 and 9 of the Report) also changed only slightly, staying within the range typical for this year. The indicators observed suggest generally stable trends in inflation expectations in recent months.

The estimates of monthly price growth in December remained almost unchanged compared to November. In December, respondents generally more often mentioned

EXPECTED AND OBSERVED INFLATION BY  
RESPONDENT SUBGROUP (MEDIAN ESTIMATE)

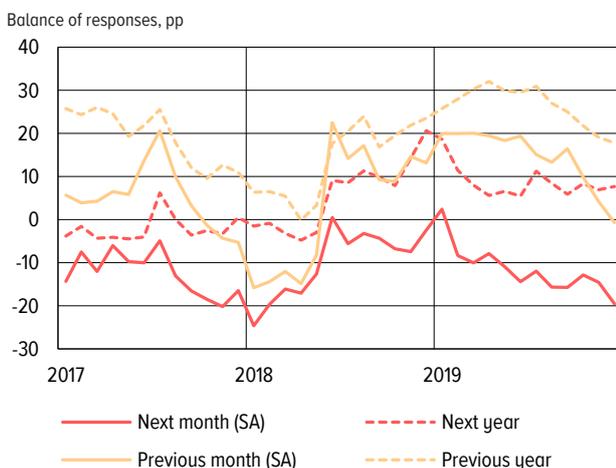
Chart 2



Sources: InFOM, Bank of Russia calculations.

INDICATORS OF PRICE MOVEMENTS

Chart 3

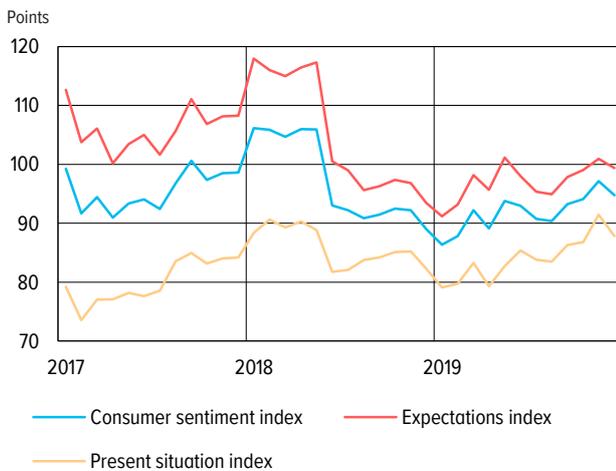


Sources: InFOM, Bank of Russia calculations.

<sup>1</sup> Refer to *Monetary Policy Report No. 2 (26), June 2019* (box 'Survey microdata-based assessment of the relationship between inflation expectations and household saving behaviour').

## CONSUMER SENTIMENT INDEX

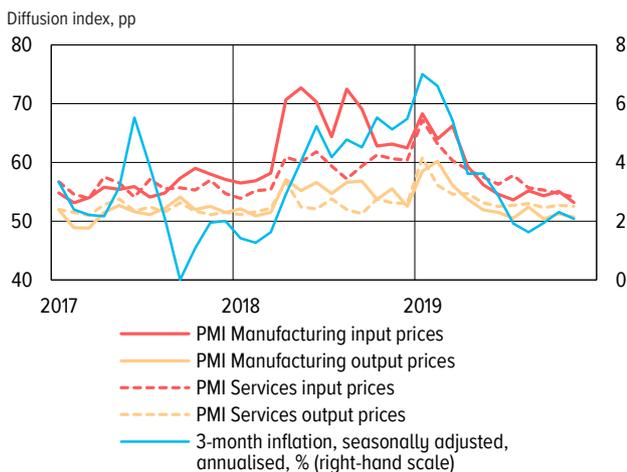
Chart 4



Source: InFOM.

## CHANGES IN COMPANIES' PRICES (MARKIT PMI)

Chart 5



Sources: IHS Markit PMI, Rosstat.

a substantial rise in the prices of the most frequently purchased goods and services, including dairy products, medicines, utilities, fish, petrol, eggs, cheese, sausages, fruit and vegetables (Chart 3 of the Report). Yet, the frequency of mentioning most of these items increased only slightly.

## Households' consumer sentiment

In December, the consumer sentiment index dropped by 2 pp to 95 points, which is approximately the same as this October (Chart 4). Among its components, the estimates of the country's development prospects for the coming year and the favourableness of the current period for large purchases deteriorated most significantly (Chart 12 of the Report). Respondents' attitude to large purchases returned to the level recorded in October, remaining more positive as compared to early 2019 (Chart 17 of the Report).

## Companies' price expectations

According to IHS Markit PMI surveys,<sup>2</sup> the diffusion indices of manufacturing and service companies' input and output prices slightly decreased in November 2019, remaining close to or even at the low levels observed since mid-2018 (Chart 5). In general, the estimates of price movements evidence steadily low price dynamics over the last 6 months, which is in line with Rosstat's statistics.<sup>3</sup> As in the previous months, business representatives noted that weak demand and high competition were the major drags on price growth.

According to the survey of businesses carried out by the Bank of Russia<sup>4</sup> in December 2019, businesses' short-term price expectations increased, while remaining low (Chart 6). The trends in price expectations were diverse

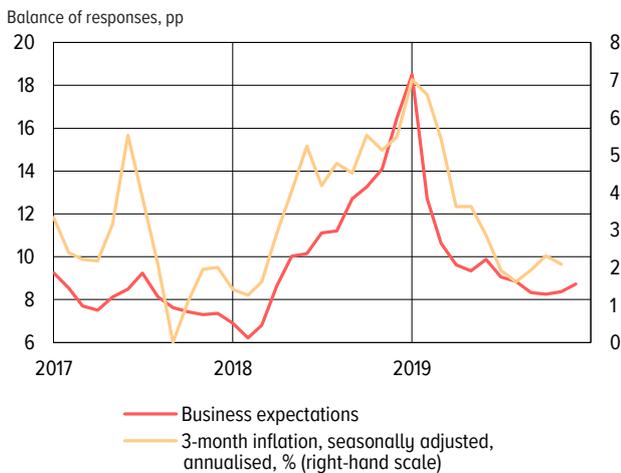
<sup>2</sup> For more details refer to [www.markiteconomics.com/public](http://www.markiteconomics.com/public).

<sup>3</sup> Refer to the information and analytical commentary *Consumer Price Dynamics*, No 11 (47), November 2019.

<sup>4</sup> Final indicator – balance of responses (the difference between the proportions of price rise and fall responses). For survey details, refer to [www.cbr.ru/Content/Document/File/62829/analysis\\_18-12.pdf](http://www.cbr.ru/Content/Document/File/62829/analysis_18-12.pdf).

COMPANIES' PRICE EXPECTATIONS  
(BANK OF RUSSIA)

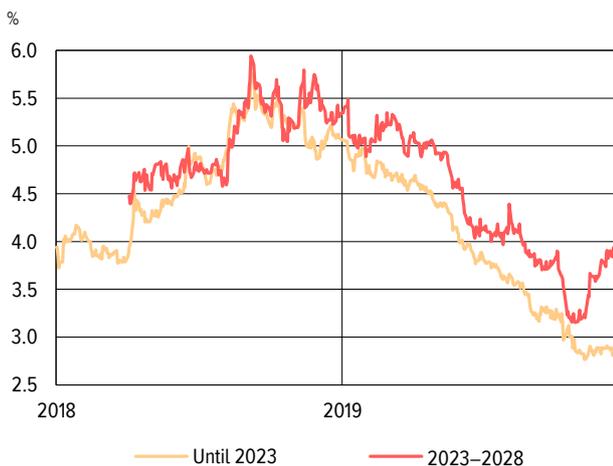
Chart 6



Sources: Bank of Russia, Rosstat.

## IMPLIED INFLATION FOR OFZ-IN

Chart 7



Sources: Bloomberg, Rosstat, Bank of Russia calculations.

across different industries. Trading and service companies, as well as manufacturing enterprises raised their price expectations. In addition to sectoral factors, many businesses referred to the forecast demand growth as the main driver of future inflation.

Contrastingly, price expectations in agriculture, transportation, storage, mining and construction went down.

## Implied inflation for OFZ-IN

As assessed by the Bank of Russia,<sup>5</sup> four-year annual implied inflation for inflation-indexed federal government bonds (OFZ-IN) stayed steadily close to its minimum over the entire history of trading of these bonds (2.9% compared to 3.2% in September, Chart 7). The average annual implied inflation (from August 2023 to February 2028) continued to rise in December, going back to approximately 4% (vs 3.2% in the second half of October – early November). The decrease in implied inflation in September–October was caused by a material decline in returns on nominal bonds, with OFZ-IN yields remaining relatively stable.

## Analysts' inflation forecast

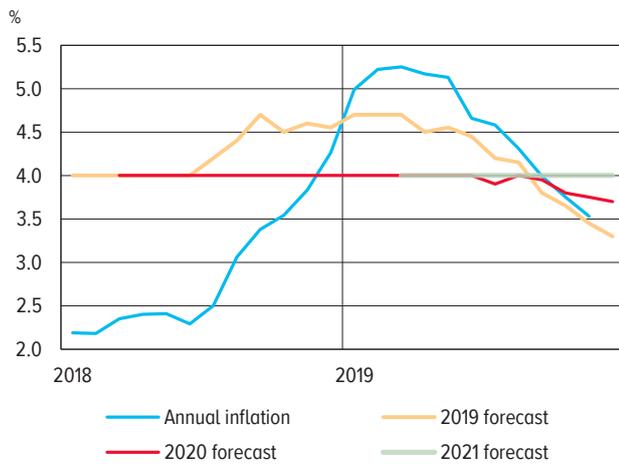
In November, the range of analysts' 2019 inflation forecasts<sup>6</sup> continued to shrink, reaching 3.2–3.5% (Table 1). Inflation expectations for 2020 were also down by 0.1 pp to 3.7%. Analysts' mid-term inflation expectations remain anchored to the Bank of Russia's targets (Chart 8).

<sup>5</sup> The assessments are based on the comparison of the expected returns on OFZ-IN and nominal OFZ, taking into account the lag in the indexation of nominal values and the seasonality of inflation.

<sup>6</sup> Surveys by Interfax, Bloomberg and Thomson Reuters.

## ANALYSTS' CONSENSUS FORECAST

Chart 8



Sources: Bloomberg, Rosstat.

## Bank of Russia forecast

The Bank of Russia forecasts that, given the monetary policy pursued, annual inflation will equal 3.5–4.0% as of the end of 2020 and will stay close to 4% further on. Moreover, annual inflation will be below 3% in 2020 Q1 when the effect of the VAT rate increase is factored out of the calculation of annual inflation.

Data cut-off date – 20.12.2019.

A soft copy of the information and analytical commentary is available on the Bank of Russia website (<http://www.cbr.ru/DKP/>).

Please send your comments and suggestions to [svc\\_analysis@cbr.ru](mailto:svc_analysis@cbr.ru).

This commentary was prepared by the Monetary Policy Department.

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