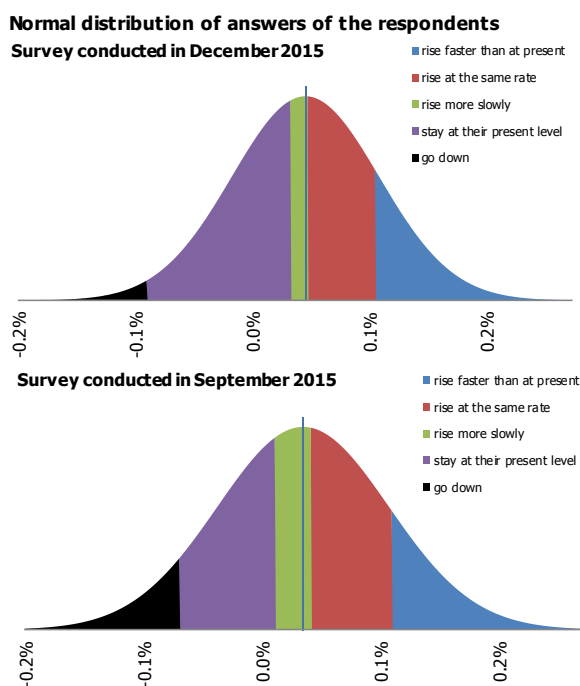


Survey on Inflation Expectations ¹

Inflation Expectations Survey includes three groups of respondents: economic analysts, companies and financial institutions. The questionnaire contains two questions to measure inflation expectations, one qualitative and one quantitative in nature. For the first question on inflation expectations, the respondents indicate the direction and extent of price changes compared with the change in the previous 12 months². Carlson and Parkin (1975) probability approach has been used for quantification of qualitative answers, which assumes that amid a sufficiently large number of respondents, the expected change in prices is normally distributed among the population. The second question requires from the respondent to quantify precisely the expected average rate of change of prices in the next two years³. The overall expected rate is calculated as a simple average of the responses of all participants. The resulting indicator is useful for obtaining indications for the direction of the respondents' expectations.



The Inflation Expectations Survey was conducted in December 2015⁴. Same as in the previous survey cycle, **the average inflation rate for the previous 12-month period remained in the negative zone⁵. The results of the survey indicate unchanged inflation expectations relative to the previous survey, i.e. as in September, respondents expect inflation to be around 0% in the next 12-month period. Expectations for the inflation rate of around 0% are common for all three groups of respondents (economic analysts, enterprises and financial institutions).**

In terms of the quantitative question on the expected rate of inflation for 2016, little changes compared to the expectations in the previous survey round are registered. Namely, in the period between the two surveys, the respondents' expectations for inflation for 2016 decreased by 0.5 percentage points, on average. Respondents

expect the inflation to accelerate in 2017 compared to 2016. According to respondents, **the factors that explain inflation expectations in December** are the geopolitical instability and import prices of energy and food products.

¹ In order to improve the survey measure of inflation expectations, in 2013, the Monetary Policy and Research Department of the National Bank of the Republic of Macedonia started an in-depth analysis of the experiences of other central banks associated with conducting surveys. On that basis, the existing survey was redesigned and starting from October 2013, data were collected for the new survey, thus ensuring greater approximation to the European practice.

² The qualitative question of expectations reads as follows: "Compared with the past 12 months, how do you expect consumer prices to change in the next 12 months? a) will have a faster growth; b) will grow at the current pace; c) will grow at a slower pace; d) will remain almost unchanged; e) will decrease; f) it is difficult to determine"

³ The quantitative question reads as follows: "What are your expectations/forecasts for the average inflation rate for 2016 and 2017?"

⁴ Refers to the period December 2014 to November 2015. The percentage of responsiveness to the Survey conducted in December was 33.7%, which compared to the previous quarter, represents a decrease of responsiveness. Analyzed by groups of respondents, the financial institutions' responsiveness is 61.1%, followed by economic analysts with 42.0% and companies with 23.3%.

⁵ In circumstances of a negative price growth, the interpretation of the results of the survey can be blurred, and therefore, it is necessary to change the method of calculation of the indicator for inflation expectations. Thus, in the procedure for quantification, the negative rate is replaced with the last positive growth rate. This is the way to avoid the contradictory responses from the survey that assume a positive price growth. Taking into account that changes in the method are of a purely technical nature, the quantification of qualitative answers for the expected rate of inflation in periods of negative inflation should be taken with caution, while the indicator for inflation expectations as approximate.