



NATIONAL BANK OF SERBIA

**REPORT ON THE RESULTS OF
THE INFLATION EXPECTATIONS SURVEY**

July 2015

Belgrade, September 2015

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Introductory note

Indicators of inflation expectations of economic agents are an important factor to be relied on in the process of decision-making on monetary policy measures in an inflation targeting regime. The effectiveness of the inflation targeting strategy is measured by the degree of stability of inflation expectations and the extent to which such expectations are anchored within the target tolerance band. Stable and well-anchored inflation expectations contribute to greater credibility of the monetary policy framework. Consistent with the best international practice, after introducing the inflation targeting regime in January 2009, the NBS began monitoring and analysing inflation expectations of economic agents. The source of data drawn on for these purposes is the inflation expectations survey, conducted for the NBS by Ninamedia since December 2014. Survey participants are classified into four institutional sectors (financial sector, corporate sector, trade unions and households) and asked to state their one-year ahead price growth expectations, and since March 2014, also their medium-term, i.e. two-year ahead expectations for the y-o-y price growth.

Overview

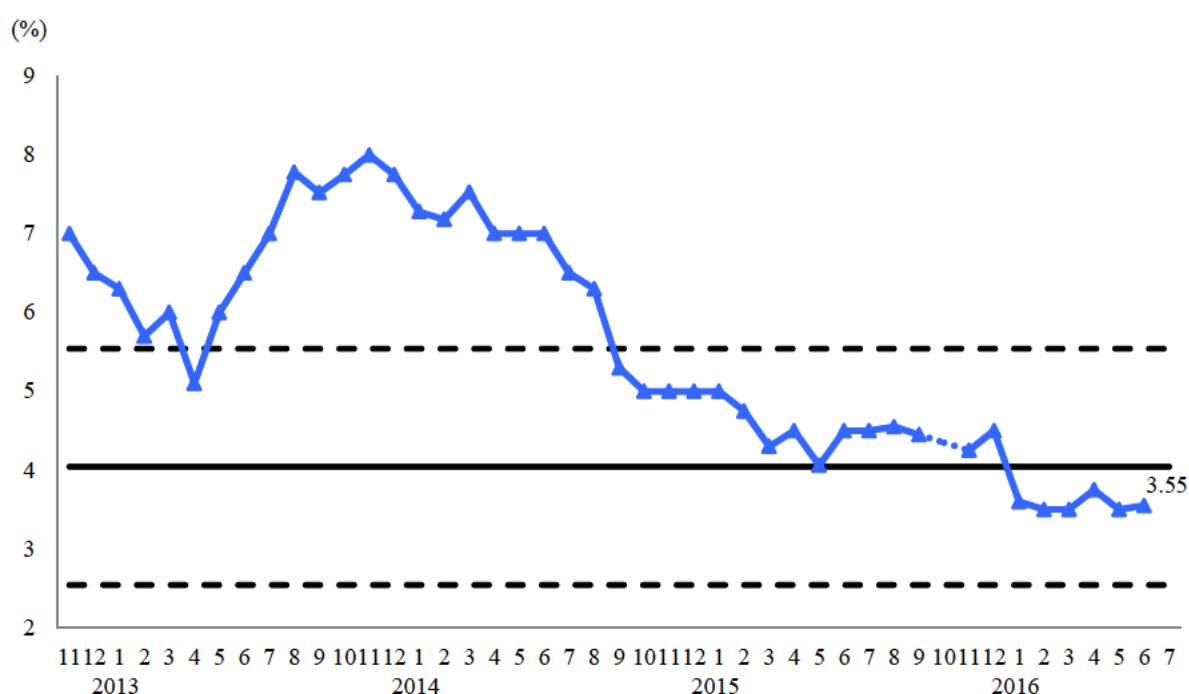
One-year ahead inflation expectations of the financial sector, corporates and trade unions remain within the NBS target tolerance band ($4\pm 1.5\%$), while those of households climbed to 8%. Medium-term inflation expectations of all institutional sectors continued within the target band for the fifth consecutive month. One-year ahead inflation expectations of the financial sector are well anchored for more than a year and a half (twenty-two months) and those of corporates for a year and a half. Inflation expectations of trade unions also remained within the target tolerance band over the past several months, while household expectations climbed beyond due to the rise in electricity prices. Stable inflation expectations are a key prerequisite to inflation stabilisation and increased effectiveness of monetary policy measures. Well-anchored inflation expectations, particularly in the medium run, are a measure of the monetary policy credibility and indicate the absence of inflationary and disinflationary pressures.

Inflation expectations of the financial sector

Inflation expectations of the financial sector are stable and well-anchored. One-year ahead inflation expectations of the financial sector stayed within the target tolerance band for the twenty-second consecutive month, edging from 3.5% in June to 3.4% in July. Based on the August Bloomberg survey, one-year ahead inflation expectations of the financial sector have been on target (4%) for more than half a year (i.e. seven months) and within the target tolerance band for nearly two years (since October 2013).

Composite measure of inflation expectations of the financial sector¹ remained practically unchanged, coming at 3.55% in July from 3.5% in June.

Chart 1. Composite measure of inflation expectations of the financial sector



Source: NBS, Ipsos, Ninamedia and Bloomberg.

¹ Calculated by weighting responses by the size of the respondent's share in total assets. The institutions participating in both surveys are assigned the arithmetic mean of the responses provided in each of the surveys. Hence banks with a larger market share are given greater scope of influence on the aggregate result, which corresponds to the real situation, given that they do have a somewhat stronger impact on the flow of economic activity.

Medium-term, i.e. two-year ahead inflation expectations of all sectors stayed within the target tolerance band for the fifth consecutive month. Two-year ahead inflation expectations of the financial sector fell from 4% in June to 3.9% in July, yet moving within the target tolerance band and close to the target midpoint since records began i.e. since March 2014.

Inflation expectations of the corporate sector

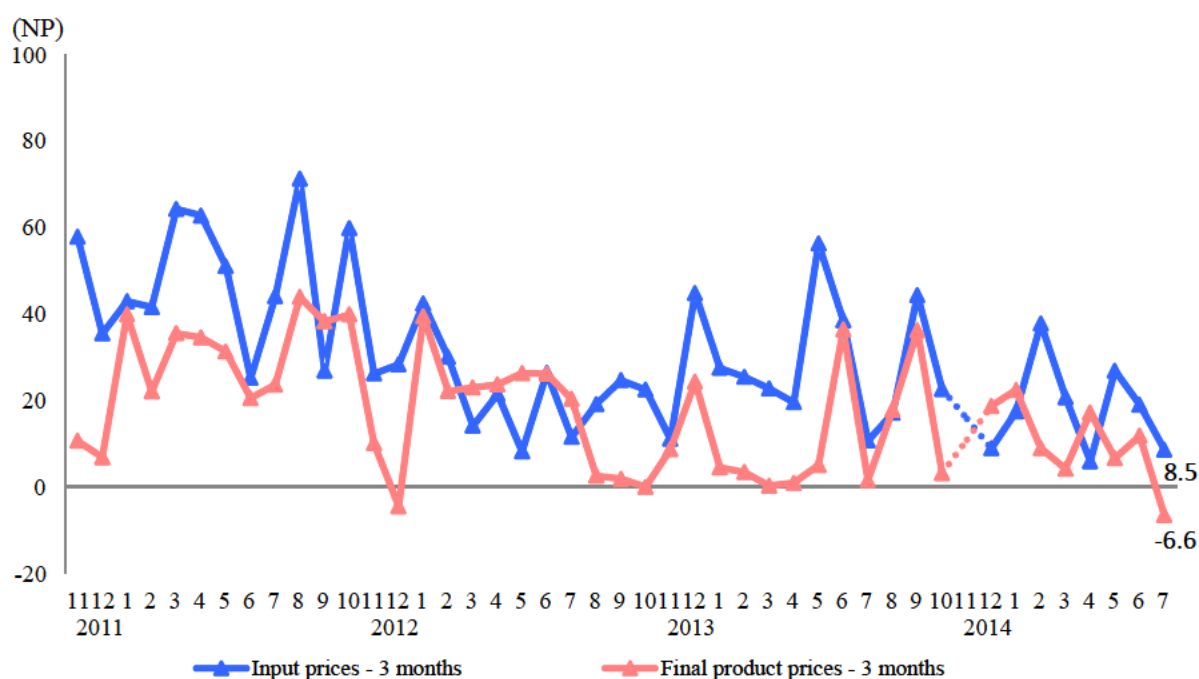
Inflation expectations of the corporate sector have been on a downfall since the beginning of the year – staying in July at their lowest value of 3%, first recorded in June. They have remained within the target tolerance band since February 2014.

Medium-term i.e. two-year ahead inflation expectations of the corporate sector have been well anchored since records began, remaining firmly within the target tolerance band since launching of the survey in all but one month. Since April, price expectations of this sector have stood at 4%.

Relative to the previous survey, the NP² of enterprises expecting an increase in prices of their inputs in the coming three months recorded a decline (from 18.9 pp in June to 8.5 pp in July). The NP of enterprises expecting an increase in prices of final products in the next three months also fell, posting negative results after a long while. This means that the share of enterprises expecting a fall in prices of their products is higher than of those expecting an increase (their NP fell from 11.8 pp to -6.6 pp). Such trends can be ascribed to the considerable weight of enterprises from the energy sector whose prices of final products have been declining. However, in terms of one-year ahead expectations, the NP of enterprises expecting an increase in input prices keeps rising (from NP of 11 pp to NP of 21 pp), whereas the NP of enterprises expecting an increase in the prices of own products has gone down (from NP of 18.9 pp in June to NP of 7.7 in July). The NP of enterprises expecting an increase in production/turnover in the next three months was 21.2 pp (vs 30.8 pp in June), while their NP equalled 27.9 pp (vs 32 pp in June) in terms of the two-year ahead period (July 2017).

² NP – net percentage calculated as the difference in the share of enterprises expecting price growth and those expecting a fall, weighted by operating income.

Chart 2. Expectations of the corporate sector regarding the change in input and final product prices



*Above zero indicates growth, and below zero decline..

Source: Ipsos / Ninamedia.

Inflation expectations of trade unions

Both short- and medium-term inflation expectations of trade unions rest within the bounds of the target tolerance band. Under the previous survey, trade unions expected one-year ahead inflation to be at the lower bound of the target tolerance band (2.5%), which is the all-time low posted by trade unions. The two-year ahead inflation (June 2017) was expected to be at the same level. However, in July, expectations of trade unions regarding the medium-term, i.e. two-year ahead inflation (July 2017) rose slightly from their all-time low of 2.75% to 3%.

Inflation expectations of trade unions are much lower than earlier and, since June, the lowest among all the sectors observed. It should however be borne in mind that inflation expectations of trade unions, just as those of the household sector, take the longest to respond to the “real” changes. The signing of the arrangement with the IMF and positive assessment after the first review, along with the consistent implementation of fiscal consolidation measures and good fiscal performance since the

beginning of the year give a positive signal to all institutional sectors in regard to the authorities' commitment to the implementation of structural reforms.

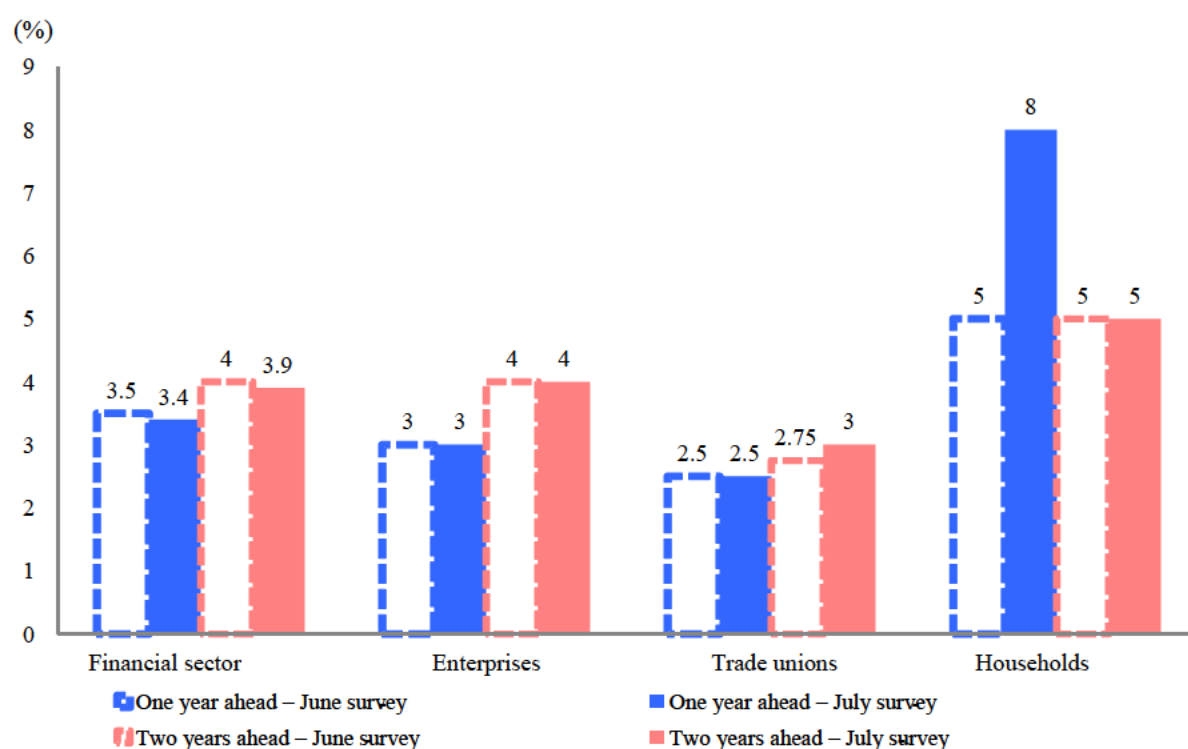
Inflation expectations of households

Quantitative inflation expectations of households

After staying within the target tolerance band for five months, inflation expectations of the household sector surged to 8% in July. This rise is attributable to the announced rise in electricity prices, introduction of new excise duties, as well as to the news of increase in cigarette, edible oil and sugar prices. Some responses in the survey also point out that a potential rise in wages and pension would trigger an increase in other prices.

Households anticipate that inflation will stabilise within the target tolerance band, as their mid-term expectations are also within those bounds. For over half a year, medium-term i.e. two-year ahead inflation expectations of the household sector have stayed at the level of 5%. Hence, medium-term inflation expectations of all institutional sectors stayed within the target tolerance band for the fifth consecutive month.

Chart 3. Expected y-o-y inflation one and two years ahead



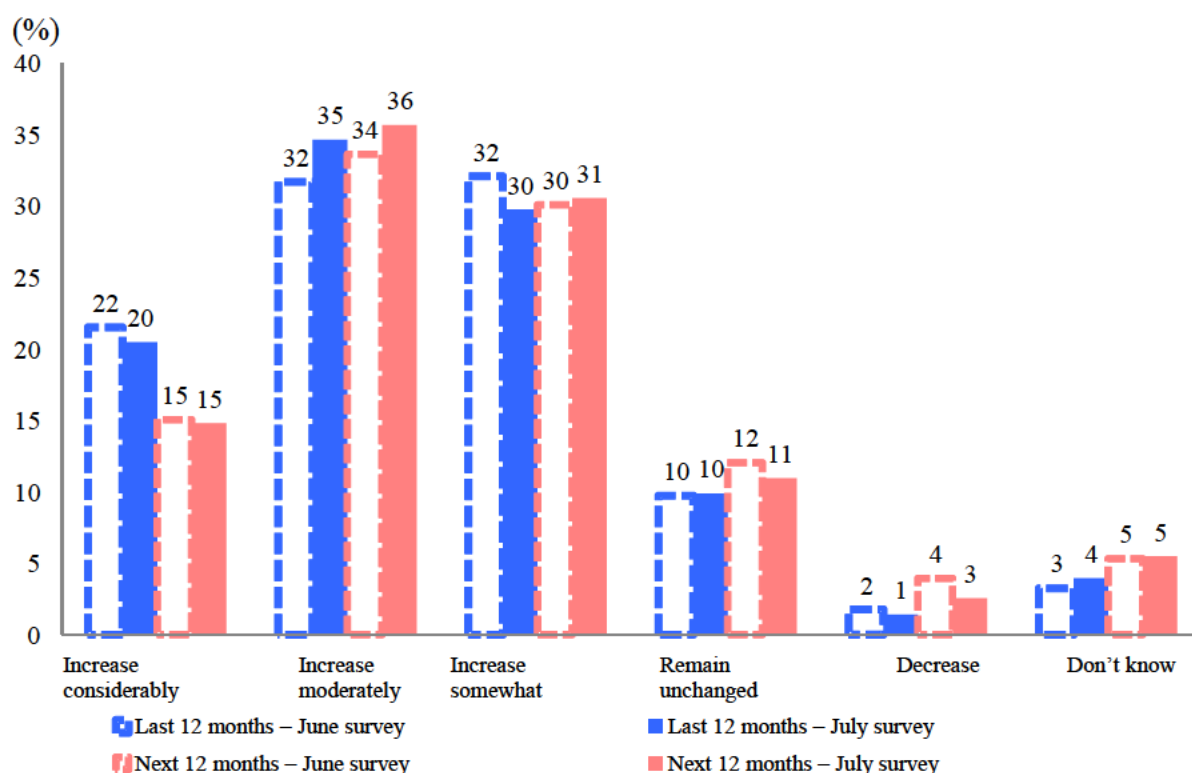
Source: Ninamedia.

Qualitative inflation expectations of households

Descriptive (qualitative) expectations of households regarding rise in prices³ remain relatively favourable, given that two thirds of respondents anticipate prices to increase moderately or somewhat in the year ahead. Considerable change in prices is expected by 15% of respondents (making the total share of respondents expecting an increase in prices rise to 81%), stagnation by 11%, and fall by 3%, whereas 5% of them said they did not know.

Over the previous year, the number of respondents anticipating considerable increase in prices has declined, while the number of respondents anticipating prices to rise moderately, increase somewhat or remain unchanged, has picked up.

Chart 4. Distribution of household responses by perceived (recorded) and expected inflation



Source: Ninamedia.

³ Consistent with the practice of other central banks, from March 2014 onwards no information is presented to respondents regarding current inflation. A qualitative question has been introduced instead and respondents are asked whether they think prices in the last 12 months: 1) increased considerably; 2) increased moderately; 3) increased somewhat; 4) remained unchanged; or 5) decreased. In addition, respondents are required to give their assessment whether prices in the next 12 months are likely to: 1) increase considerably; 2) increase moderately; 3) increase somewhat; 4) remain unchanged; or 5) decrease.