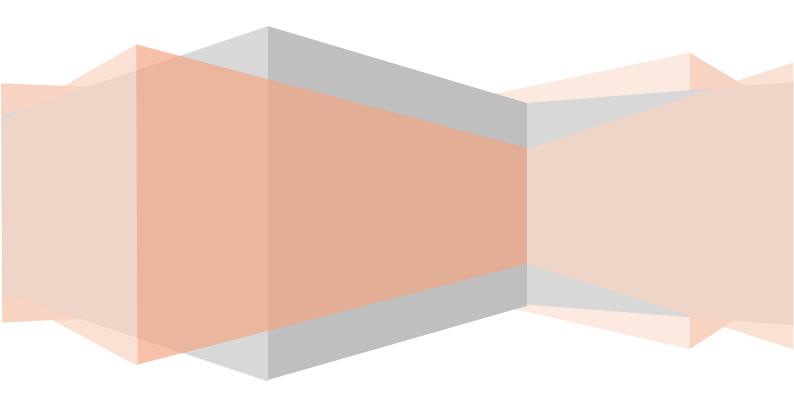


CENTRAL BANK OF THE REPUBLIC OF UZBEKISTAN

INFLATION EXPECTATIONS OF POPULATION AND COMPANIES OF THE REPUBLIC OF UZBEKISTAN

2018 Q3



Tashkent - 2018

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INFORMATION ON INFLATION EXPECTATIONS IN THE ECONOMY

In pursuance of the surveys' results conducted on inflation expectations in 2018 Q3, significant changes in the degree of perceptibility and inflationary expectations among the population and business entities were observed. In particular, after a reduction in 2018 H1, these indicators have set on rising gradually since July.

In particular, during the third quarter the growth of inflation expectations has been affected by the increase in respondents' confidence in the rise in wages and prices for agricultural products and tariffs for public utilities. Meanwhile, depreciation of the national currency during the last months has been reflected in the expectations of September.

In addition, planned liberalization of administratively regulated prices can result in further increase in inflationary expectations and preservation of high degree of inflationary expectations due to the simultaneous negative impact of several factors on prices.

Perceived inflation

In July-September 2018, a significant rise was observed in the index of short-term inflation perceived by the population. In particular, while the index¹ increased by 29 percent in July and reached 505 points, it remained almost unchanged in August, showing a tendency of the growth reached 580 points in September. However, the inflation index perceived by legal entities increased by 31 percent in September in relation to June and accounted for 508 points (Figure 1).

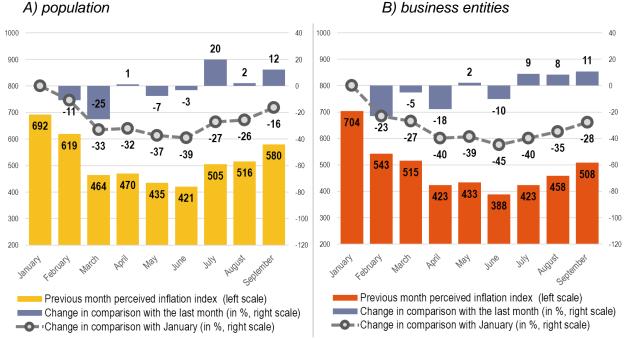
The reason for the growth of the perceived inflation index during the third quarter in relation to the previous quarter was the reduction in the share of respondents' replies such as prices "have reduced" or "didn't change" and the increase of the share of respondents emphasizing the price growth (Figures 5 and 9). It should be noted that majority of the replies that have resulted in the index rise constituted the answers "increased slightly".

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¹ Perceived inflation index is an aggregate indicator of all responses given by the respondents to the question about determination of the perceived inflation rate. The range of indices varies from 0 to 1000.

Moreover, despite the fact that the current perceived inflation index is relatively low in reference to this indicator at the beginning of the year, its growing tendency is still going on, which, in turn, may have a negative impact on further inflationary expectations.

Figure 1



Dynamics of the perceived inflation index during January-September of 2018

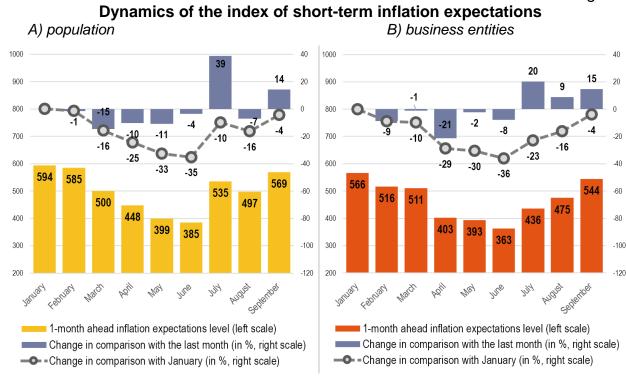
The individuals, who participated in the survey in September, answering the question "Prices for which goods and services have increased significantly" mainly indicated such food stuff as tomatoes, beef, rice and mutton. In addition, unlike previous months, in September the share of respondents who indicated the price growth for potatoes, wheat flour, bread, chicken, carrots increased considerably (Figure 11).

It should be noted that even though no changes were observed in prices for meat and rice during the previous months, in July-September the population noticed a price growth for these products. This factor demonstrates that the level of the population's sensitivity to the growth of prices for some consumer goods is high and this sensitivity will be preserved for some time, even if prices change slightly.

Answering the question "Which factors have made the biggest impact on the increase of the prime-cost of goods manufactured and services rendered?" business entities have highlighted the prices for raw materials, costs for transportation and labor force. In addition, the Uzbek sum's depreciation in September has become a crucial factor in the increase of prime-cost of products in this month (Figure 13).

Inflation expectations

During 2018 Q3 there was the trend of increasing inflation expectations of the population and business entities.



In particular, while the index² of short-term inflation expectations of individuals (for the next month) in relation to the second quarter increased by 48 percent, in September and constituted 569 points, but the index of inflation expectations of business entities increased by 50 percent and amounted to 544 points (Figure 2).

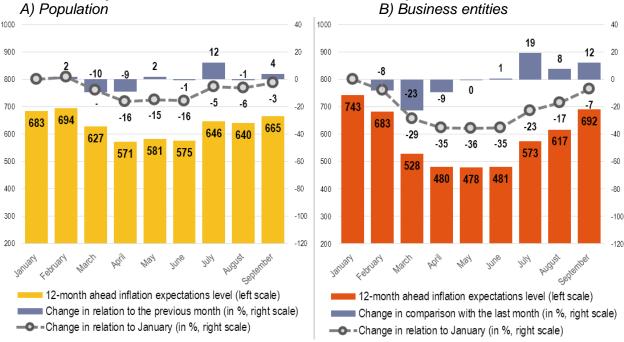
In the third quarter with reference to the previous quarter, the reason for the rise of the index of short-term inflationary expectations has become the decline of the share of such answers given by respondents as "will decrease" and "will not change". Regarding individuals, this indicator decreased from 44 percent to 22 percent, and as for legal entities, it fell from 52 percent to 32 percent. In addition, the share of individuals expecting a price growth increased from 48 percent to 71 percent, and the share of legal entities rose from 47 percent to 68 percent (Figures 14 and 18).

In July-September this year, a negative trend in the long-term inflation expectations of the population and business entities were observed for the

² Index of inflationary expectations is an aggregate indicator of all responses on the balancing method noted by the respondents to the question about determination of the next perceived inflation. The range of indices varies from 0 to 1000.

<u>further 12 months.</u> The index of expectations that has remained almost constant during the previous quarter began to go up on the monthly basis in the third quarter and by the end of the quarter the indices of individuals and legal entities reached 665 and 692 points correspondingly (Figure 3).

Figure 3



Dynamics of 12-month ahead inflation expectations index *Population B)* Business entities

In the replies of respondents who participated in the survey on the change of prices during the next 12 months, the share of the respondents who expected a price growth in relation to the previous quarter rose considerably. In particular, the share of respondents who expected a price growth increased by 9 percent and accounted for 80 percent among individuals and 90 percent of legal entities noted a price growth during the next 12 months in relation to the prices at this moment (Figures 16 and 19).

It should be noted that if the long-term expectations of legal entities were more positive in comparison with the population at the beginning of the third quarter, by September their expectations about the price growth have become higher than the population's expectations. This fact, in turn, demonstrates that concerns of business entities about the prices for the further period have significantly increased.

From respondents' point of view, the following factors served as the main reason for the inflation expectation's growth: unlike previous years insufficient harvest occurred as a result of the water shortage in spring and summer, as well as the launch of works on warehousing of fruit and vegetables, price liberalization of the first-grade wheat flour and bread, increase in utility tariffs, wages and exchange rate depreciation.

In addition, the price growth of basic consumer goods or services may serve as an additional reason for the growth of inflation expectations in future.

Expectations in the economy

In addition, high economic activity and price growth in the country make an impact on the incomes of the population.

Moreover, the results of the study of the purchasing power of the population illustrate that incomes of the population slightly increased in 2018 Q3. In particular, while the share of respondents that noticed that in the previous 12 months the income of the population grew in relation to the second quarter by 7 percentage points and accounted for 63 percent, the share of those respondents which specified the opposite tendency has decreased by 6 percentage points and amounted to 33 percent (Figure 21). Furthermore, the share of the respondents who mentioned a low growth of income in relation to prices has remained almost unchanged at the point of 66 percent (Figure 22).

The optimistic views of the population has been observed towards the expectations of further changes of income. While the share of respondents who have expected the income growth during the next 12 months constituted 68 percent, the share of those respondents who have noticed the opposite tendency fell to 21 percent. However, the majority of the respondents expecting an increase in income have specified that the price growth will be relatively low (Figure 23).

Meanwhile, the issue of the increase in wages in future has become more precise. In particular, 52 percent of business entities that participated in the survey mentioned further wage growth "from 10 percent to 20 percent." Whereas the share of respondents who have mentioned wage growth during the previous quarter "up to 10 percent" and "over 20 percent" has become almost equal, in the third quarter the share of the respondents mentioning wage growth "up to 10 percent" increased up to 30 percent, and the share of those who have chosen "over 20 percent" decreased to 11 percent (Figure 30).

This, in turn, implies that <u>wage push inflation will not be higher than</u> <u>previous years.</u>

It is also worth noting that no significant changes in the savings sentiment of the population were observed in 2018 Q3. The majority of respondents have noted that they would spend their savings on entrepreneurship (47 percent) and 31 percent of the respondents would partially use their savings. The share of respondents who would preserve their savings amounted to 9 percent (Figure 24).

In particular, the share of the respondents who prefer keeping their savings with the banks in the third quarter has increased by 7 percentage points and accounted for 57 percent, while the share of those who prefer keeping cash has decreased by 6 percentage points and amounted to 20 percent. Moreover, if the majority of respondents (47 percent) prefer keeping their savings in the national currency, one third of the respondents has chosen foreign currency (Figure 25). This fact illustrates that <u>during the third quarter the confidence in the Uzbek sum as a savings instrument was maintained.</u>

Depreciation of the Uzbek sum during the recent months was reflected in the USD/UZS exchange rate expectations of individuals and legal entities participating in the survey. Regarding this point, the expectations of individuals and legal entities having become almost equal, sharply increased during the third quarter on the monthly basis. According to the results of the last survey, by the end of September, 1 USD was expected to cost around 8 180 UZS, and by the end of December 1 USD was expected to be 8 300 (Figure 31).

This situation <u>demonstrates that the population and business entities</u> <u>have concerns about the exchange rate and this, in turn, may affect their</u> <u>inflation expectations.</u>

In addition, the survey has studied the attitude of the population towards loans. According to the results obtained, 60 percent of respondents currently have loans. Herewith, basically common availability of consumer loans (22 percent of respondents), mortgages (11 percent) and loans to buy a car (9 percent) has been observed (Figure 26).

The expectations of respondents regarding 12-month ahead interest rates on loans extended by commercial banks in the third quarter rose slightly against the previous quarter. In particular, whereas the share of those respondents who expected interest rate of bank loans at the rate of "up to 20 percent" has been reduced by 15 percent and constituted 56 percent, the share of respondents who have expected interest rates of bank loans to be "over 20 percent" reached 44 percent (Figure 27).

Despite the fact that expectations on interest rates of bank loans are rather high, the respondents have indicated high demand for loans. Namely, in September, only 16 percent of the population surveyed indicated that they did not need a loan, and 30 percent intended to get a loan (Figure 28). The question "What kind of loan would you like to use?" was replied in the following way: 23 percent of respondents have said that they would take out a loan to buy a car, 20 percent – a consumer loan, 17 percent – a mortgage (Figure 29).

<u>A high demand for available types of loans may result in the growth of</u> <u>consumer demand, and this, in turn, may exert an additional pressure on</u> <u>prices.</u>

RESULTS OF SURVEY ON INFLATION EXPECTATIONS

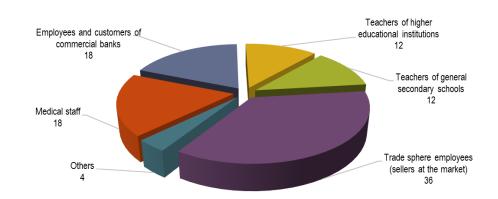
Method	Standardized individual surveys among the population and legal entities in Uzbekistan
Participants, total (monthly)	750 individuals and 300 legal entities from the Republic of Karakalpakstan, regions and Tashkent city
Periodicity	Monthly
Survey period	January-September 2018

I. Structure of the survey respondents

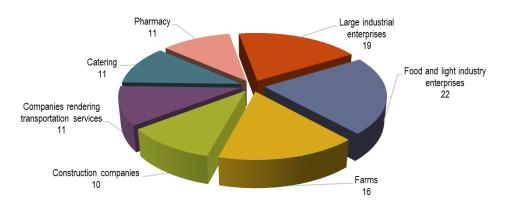
Figure 4

Area of respondents' activity (in %)

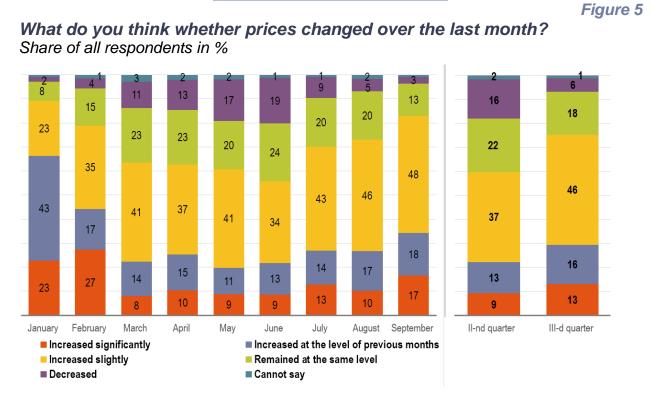
A) individuals



B) legal entities



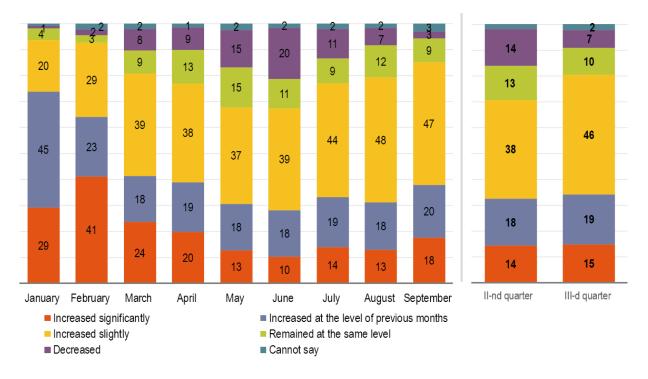
II. Results of studying inflation perceived over the past period



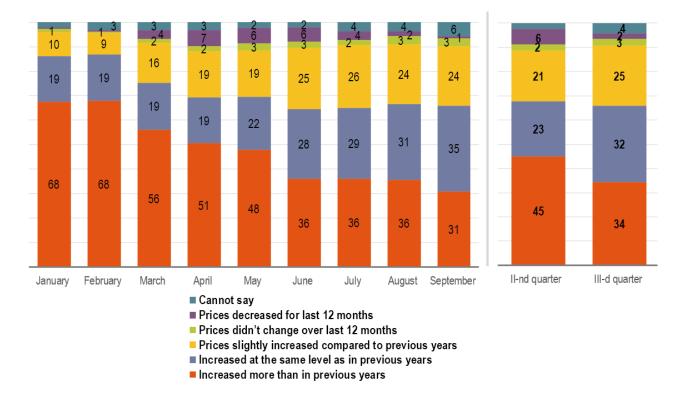
Results of individuals' surveys

Figure 6

What do you think whether prices have changed over the last 3 months? Share of all respondents in %



What do you think whether the prices have changed over the last 12 months?



Share of all respondents in %

Figure 8

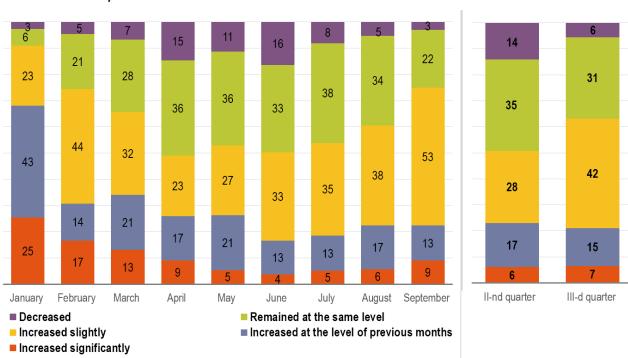
12

In your opinion, how much have prices increased over the past 12 months? Share of all respondents in %



Results of legal entities' survey

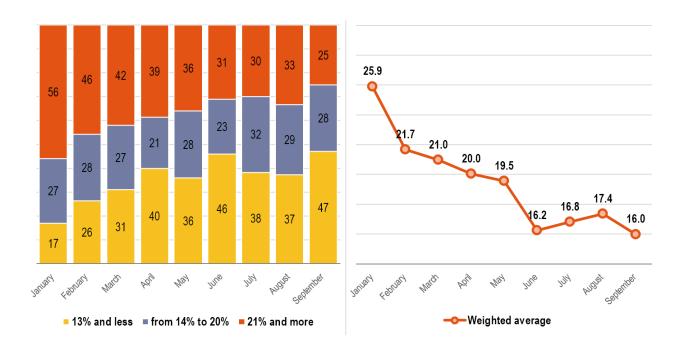
Figure 9



What do you think whether prices have changed over the last month? Share of all respondents in %

Figure 10

In your opinion, how much have prices increased over the past 12 months? Share of all respondents in %



III. Results of studying reasons of inflation

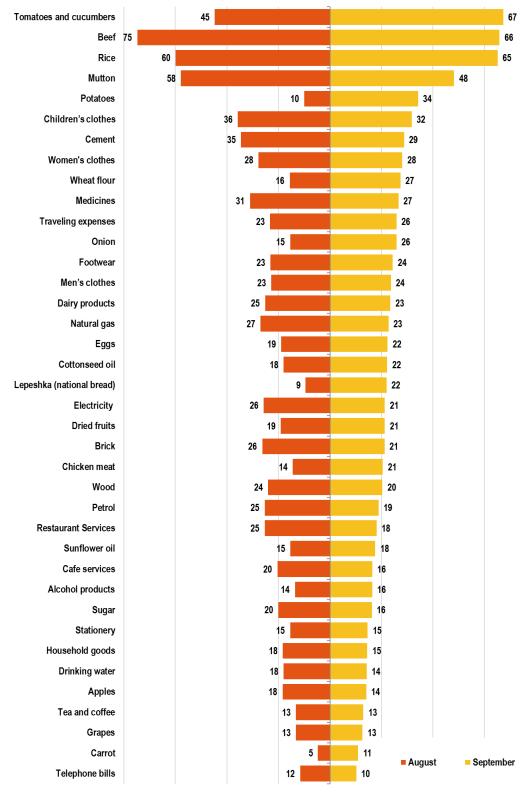
Results of individuals' survey

Figure 11

14

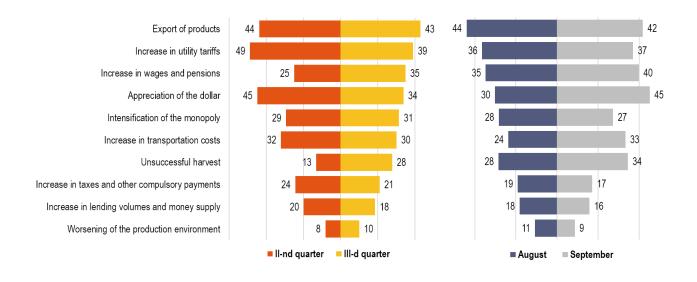
According to your observations, prices for what basic goods and services have increased dramatically over the last month?

In this question respondents have the opportunity to choose several products



In your opinion, what has contributed to a sharp rise in prices over the past 12 months?

In this question respondents have the opportunity to choose several factors

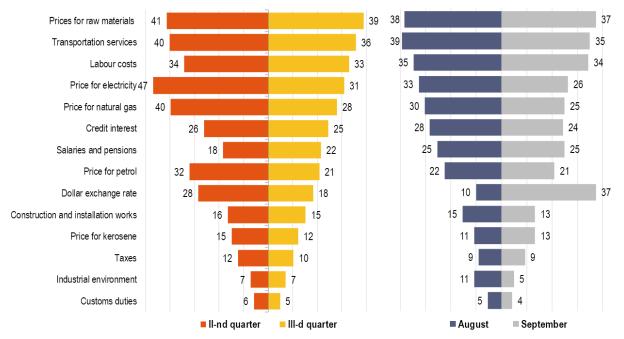


Results of legal entities' survey

Figure 13

According to your observations which factors that make a significant impact on the growth of the prime-cost of your products (services) have considerably increased for the last month?

In this question respondents have the opportunity to choose several factors



IV. Results of studying inflationary expectations

Results of individuals' survey

Figure 14

What do you think how the prices will change next month?

Share of all respondents in %

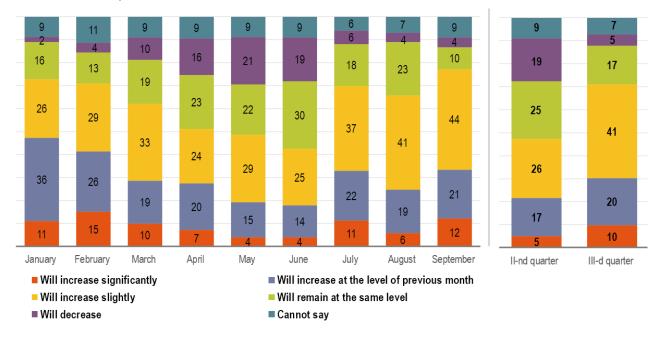
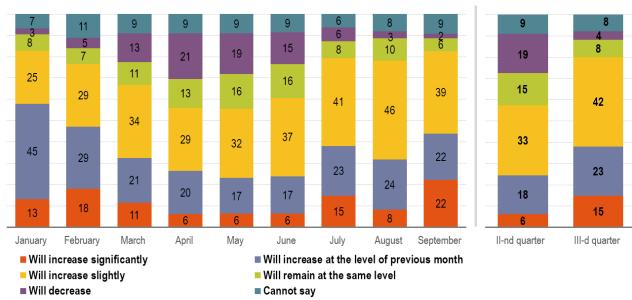


Figure 15

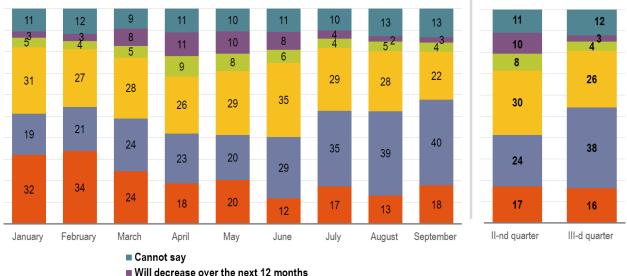
What changes do you expect in prices over the next 3 months?



Share of all respondents in %

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Figure 16
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According to your expectations whether the prices will change over the next 12 months?



Share of all respondents in %

Will decrease over the next 12 months

Will remain at the same level over the next 12 months

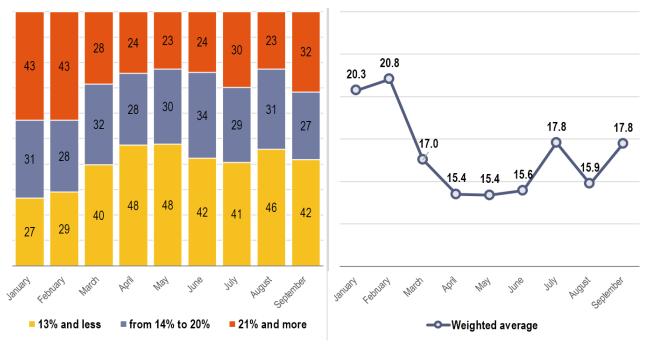
Will increase slightly in comparison with previous 12 months

Will increase at the level of previous 12 months

Will increase significantly in comparison with previous 12 months

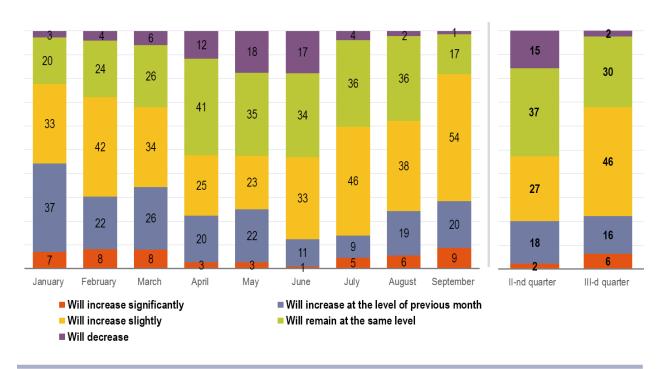
Figure 17

According to your opinion, how much will prices increase over the next 12 months?



Results of legal entities' survey

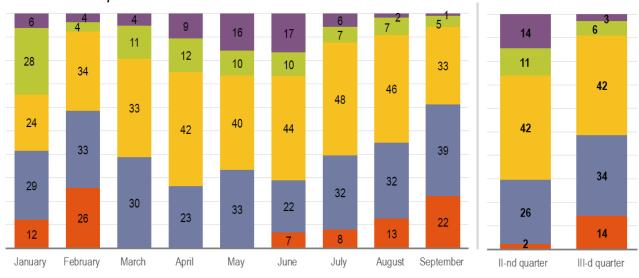
Figure 18



What do you think, how prices will change over the next month? Share of all respondents in %

Figure 19

What do you think, how prices will change over the next 12 months? Share of all respondents in %



Will decrease

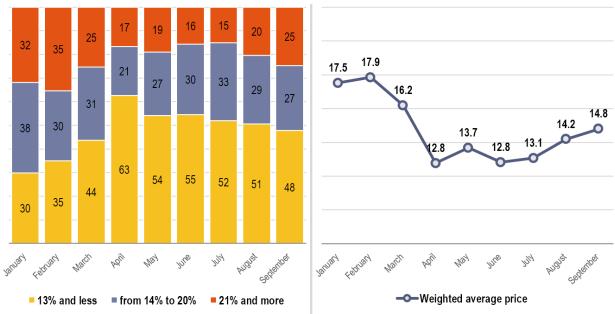
Will remain at the same level

Will increase slightly in relation to the current level

Will increase equally with the current level

Will increase significantly in relation to the current level





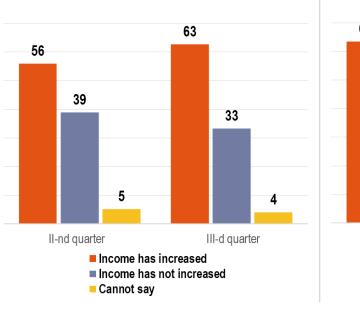
V. Results of studying purchasing power of the population

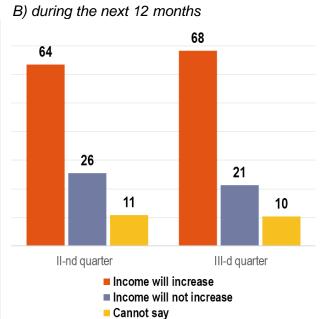
Figure 21

What do you think, if your income has changed (will change) over the last (next) 12 months?

Share of all respondents in %

A) during the last 12 months





Which factor most of all complies with the relationship between your income and price change over the last 12 months?

Share of all respondents in %

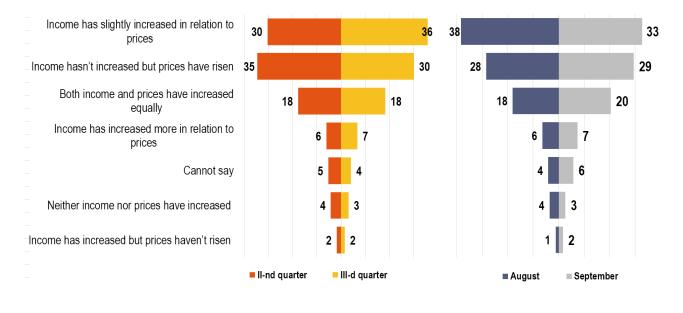
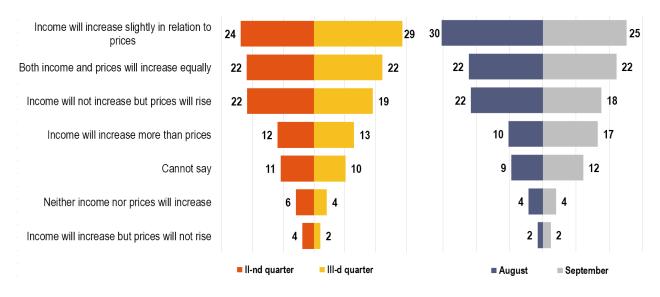


Figure 23

What do you think, how the ratio of your income and price level will change over the next 12 months?

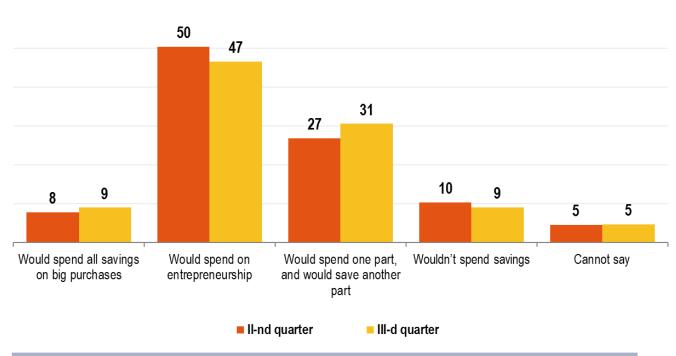
Share of all respondents in %



VI. Results of studying saving intentions of the population

Figure 24

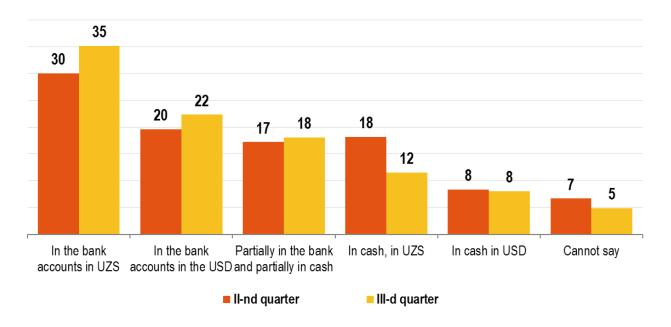
If you had (or have) savings how would you spend it?



Share of all respondents in %

Figure 25

What do you think, what is the best way of keeping saving at the present? Share of all respondents in %



VII. Results of studying the attitude towards a loan

Figure 26

At the present time do you have a current bank loan (which is not overdue)? If yes, what type of a loan (loans) do you have?

Share of all respondents in %

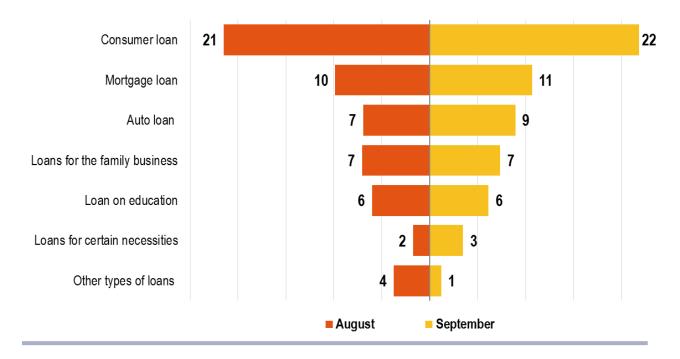
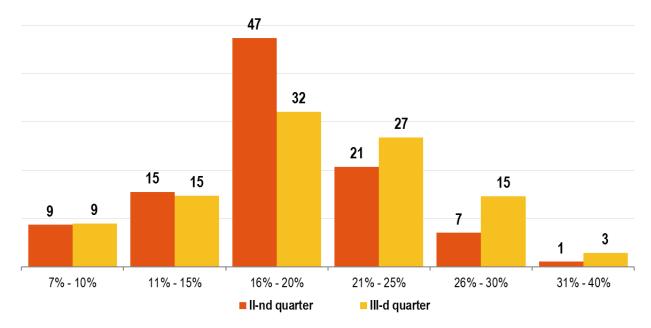


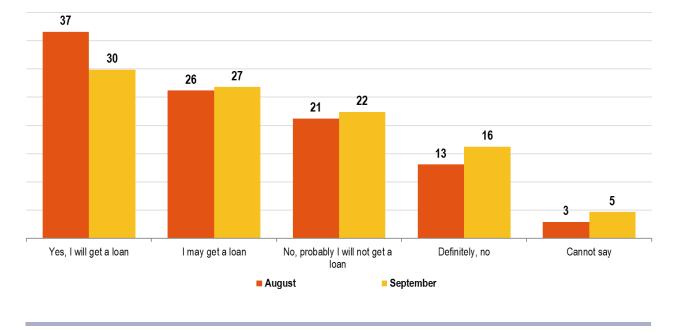
Figure 27

What do you think how interest rates on loans extended by commercial banks will change over the next 12 months?



Share of all respondents in %

Are you or members of your family going to buy stuff due to the loan or get a loan?

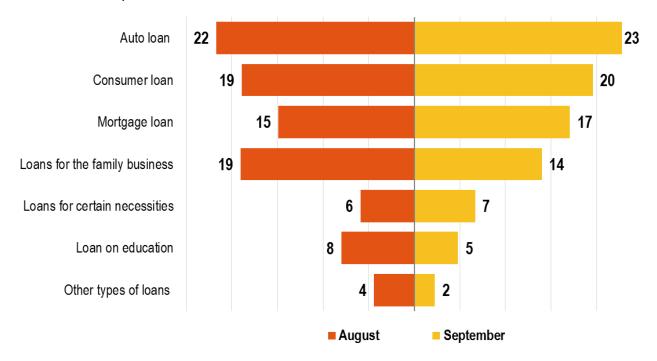


Share of all respondents in %

Figure 29

Which particular type (types) of a loan (loans) are you going to use during the next year?

Share of all respondents in %



VIII. Results of the questions on expected changes in the economy

Results of individuals' survey

Figure 30

According to your opinion, whether the salary will change over the next 12 months?

Share of all respondents in %

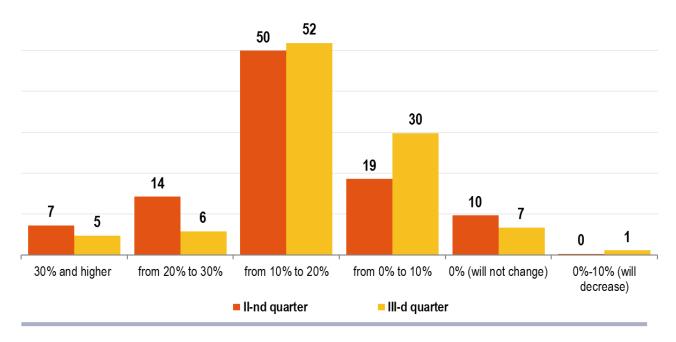


Figure 31

In your opinion, what will be the exchange rate of the UZS to the USD? Average weighted indicator of the responses given (in UZS)

- A) at the end of September this year
- B) in December this year

