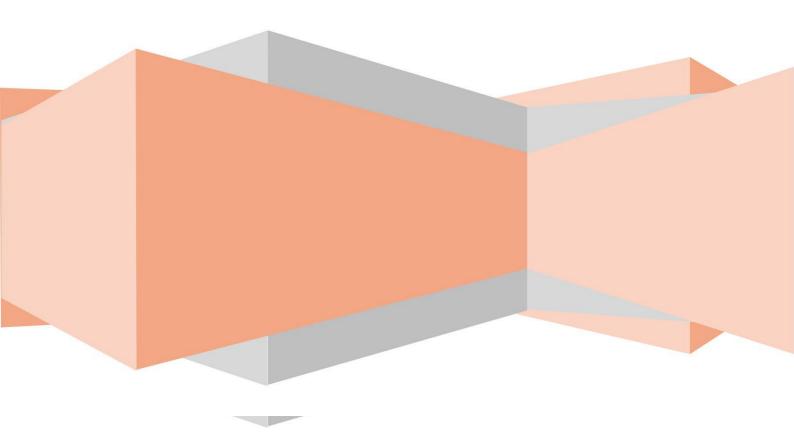


INFLATIONARY EXPECTATIONS OF POPULATION AND COMPANIES OF THE REPUBLIC OF UZBEKISTAN

First half year of 2018



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INFORMATION ON INFLATIONARY EXPECTATIONS IN THE ECONOMY

In the first half of 2018, according to the results of the survey on inflationary expectations, the tendency on reducing inflation in the economy at the perceived and expected levels has been witnessed by the population and economic entities.

Moreover, the price growth for some goods and services (tariffs) administratively regulated by the state in the second quarter of this year, as well as the price growth for some consumer goods such as meat and rice reduced the rate of perceived inflation during this period compared to the same indicators within the period between January and March.

In turn, a significant reduction of the inflation rate has also made an impact on the formation of future inflation expectations of individuals and legal entities.

Although in the short-term perspective (1 month) reduction of the inflationary expectations index continued in June, but in the long-term perspective (12 months), inflationary expectations in the economy remained nearly constant during the second quarter.

According to the opinion of respondents, long-term inflationary expectations remain relatively high due to such factors as an increase in the aggregate demand and growth of prices regulated by the state as a result of raising salaries over the next 12 months.

In addition, the majority of the surveyed experts¹ have noted that long-term inflationary expectations in the economy remain rather high.

Perceived inflation

Short-term inflation index², perceived by the population due to the sharp growth of prices for food supplies at the end of 2017 was high in January and February this year and reached 692 and 619 (Figure 1). Thus, a balanced average value of the respondents' answers illustrated that perceived inflation during these months was respectively at the level of the previous months.

The inflation index in March reduced sharply (by 25 %) in comparison with the previous month.

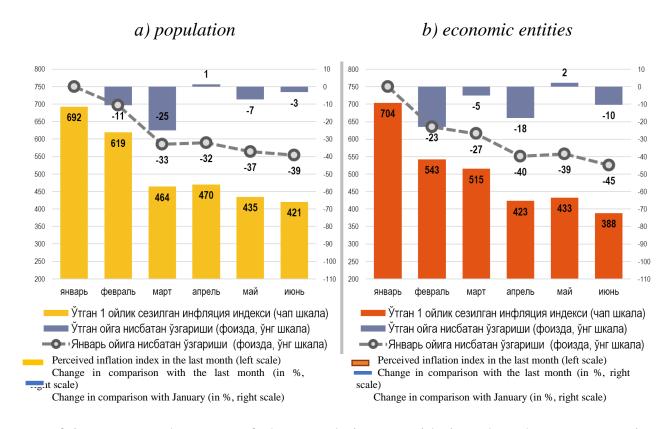
The growth of prices for electricity and natural gas in the second quarter of this year has made a negative impact on the perceived inflation which has resulted in the slight increase in the index and a slowdown in the following months. In March-June,

¹ With the aim of studying economic processes and reforms in the country, in particular, monetary authorities, the Central Bank created a group of experts consisting of the representatives of the research, higher education, entrepreneurship and consulting, and in the second quarter of this year, the first stage of studying their opinions through a survey and questionnaire has been carried out.

² 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.

their balanced indicators demonstrated a considerable increase in prices for the population during previous months.

Figure 1. Dynamics of the perceived inflation index which has been witnessed in the I-st quarter of 2018



If in January that part of the population considering that the average price increase was above 26% during the last 12 months constituted 48% then their share was monthly deceasing and in June reduced in comparison to the previous month and amounted to 28%. On the other hand, that part of the population, believing that the average price growth was below 16%, reached 29% in January and rose up to 44% in June (Figure 8).

Meanwhile, if in the first quarter individuals participating in the survey answering the question "Prices for which goods and services have increased significantly" indicated food products such as beef, mutton, apple, tomatoes and cucumbers, and in the second quarter they mentioned such food products as beef, mutton and rice and non-food products - cement, tariffs for services - electricity and natural gas (Figure 11).

In addition, short-term monthly inflation rate that was observed by economic entities as a result of the growth of prices for gasoline and construction materials and introduction of new tariffs for electricity and gas for certain categories of producers in January was not much higher than that of the population and accounted for 704.

In the second quarter of this year there was observed adaptation of producers to higher prices in the economy.

In particular, in June the balanced index of legal entities' responses declined almost twofold in comparison with the beginning of the year and amounted to 388 units in June, which justifies the fact that prices did not change in the previous month.

If the share of economic entities which considered that in the last 12 months the price growth on average was higher than 26% and in January accounted for 44%, and in June their share declined by 18%. Meanwhile, the share of those respondents who believed that the average price growth was below 16%, constituted 30% in June, and in June it amounted to 56% (Figure 10).

This implies that there has been developed the trend of a gradual reduction of the annual inflation rate in the economy for economic entities compared to the corresponding period of the last year.

Within the framework of the survey, the question "Factors affecting the growth of the prime-cost of goods and services rendered" was answered by legal entities that in the first quarter the growth occurred mainly due to the growth of prices for gasoline, natural gas and raw materials, as well as a change in the exchange rate of the previous year. In the second legal entities mentioned such factors as the growth of prices for electricity, raw materials, prices for natural gas and transportation, a sharp decrease of the impact of the exchange rate (Figure 13).

Meanwhile, despite the fact that 73% of the questioned experts said that last month the prices were moderate, and 91% of them noted that the annual level of perceived inflation was higher than 17%.

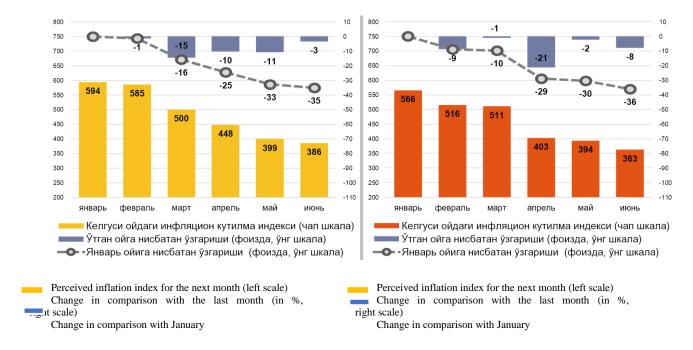
Inflationary expectations

During the first half year of 2018 there was the trend of reducing the index³ of dynamics of the following inflationary expectations of the population and economic entities.

Figure 2.

Dynamics of the index of short-term inflationary expectationsa) populationb)economic entities

³ 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.



It should be noted that this year in January and February inflationary expectations of the population and legal entities were relatively high and were gradually declining in March-June.

In particular, at the beginning of the year the index of short-term inflationary expectations of the population and legal entities constituted 594 and 566 respectively, while as of June this indicator correspondingly accounted for 386 and 363 (Figure 2).

This fact justifies that this year in the second quarter, short-term inflationary expectations of the population and economic entities were positive and many expected prices to remain stable.

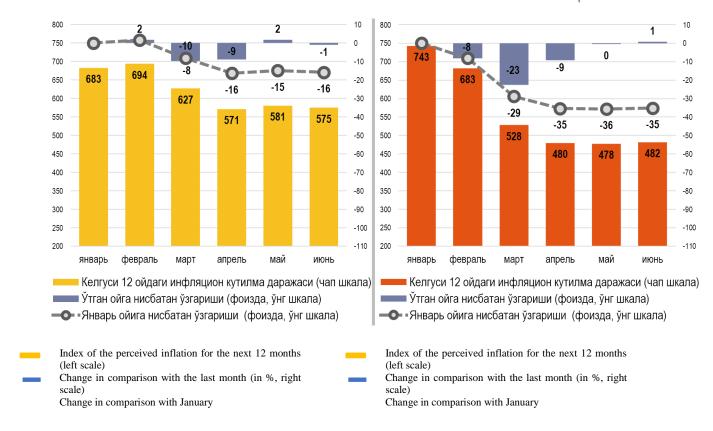
However, in spite of the reduction of short-term inflationary expectations, the expectations remain relatively high during the next 12 months. The expectations of the population on this issue are significantly higher than those of the economic entities.

If the index of expected inflation for the next 12-month period for individuals in the first half of this year declined by almost 10% and 9% in March and April, but then kept constant in the following months (Figure 3).

Figure 3. **Dynamics of the inflationary expectations index for the next 12 months**

a) population

b) economic entities



Moreover, it should be noted that the 12-month index of inflationary expectations of legal entities was high at the beginning of the year, and a balanced average of responses demonstrated that prices would rise over the next 12 months.

However, in the second quarter of the year there was a considerable reduction of expectations, and the index of expectations amounted to approximately 480. This, in turn, illustrates that in future entrepreneurs expect prices to increase slightly in comparison with the previous 12 months.

If the share of the population that expects the price growth to be 26% higher, answering the question "How much will prices rise over the next 12 months" in January accounted for 26%, while in June their share constituted 14%.

And if the part of the population expecting the average annual growth rate of prices to be lower by 16%, in January accounted for 43%, but in June this indicator constituted 55% (Figure 17).

The number of legal entities that suppose that the price growth will be above 26% over the next 12 months, from 22% in January decreased to 9% in June. The proportion of those who expect the price growth to be below 16% increased from 49% in January to 72%. This, in turn, implies that <u>long-term inflationary expectations</u> of legal entities are lower than inflationary expectations of individuals.

Meanwhile, the opinion of experts on short-term expectations was also in compliance with the opinions of the population and economic entities. However, many experts expressing their opinions on long-term expectations have noted that the rate of price growth will be at the level of the previous 12 months or higher.

As the main reasons affecting the inflation growth of in future <u>experts</u> indicate such factors such as the high probability of problems arising on the issues of rapid increase in the volume of concessional loans and their repayment, the expectation of

the government to increase the cost of goods and services administratively regulated by the state in autumn, relatively slow reforms to introduce market mechanisms in the agriculture and a high level of monopoly on commodity markets.

Economic expectations

According to the research of the purchasing power of the population in the first half of 2018, there was no significant change in the proportionality between their incomes and prices. During the analyzed period, the majority (about 65%) of respondents have noted that during previous 12 months the rate of price growth was higher than income (Figure 20).

In addition, there were also disappointments in the correlation between expected incomes and price changes over the next 12 months, with almost half of respondents expecting income growth to be lower than price growth (Figure 21).

Analysis of the expectations of legal entities on raising salaries over the next 12 months illustrate that the majority of them indicated a salary increase between 10 and 20%. The share of entrepreneurs who mentioned an increase of over 20% in January accounted for 29%, and in June it decreased to 22%. The share of those who indicated a salary increase of less than 10% increased from 20% in January to 23% in June (Figure 24).

Measures to improve the business environment make an impact on the nature of savings of the population. Over 50% of individuals who participated in the survey have said that they would like to use savings in the business (Figure 22).

During the research it has been revealed that the measures aimed at enhancing attractiveness of the national currency made a positive impact on the nature of savings the population.

In particular, at the beginning of the year the share of those people who preferred to keep their savings in UZS <u>amounted to 44%</u>, but by the end of the second quarter their share <u>increased by 53%</u>, and the share of those people who preferred to keep the savings in the USD decreased from 33% in January to 22% in June (Figure 23).

In addition, the decrease of the exchange rate of the national currency against the USD over the past few months has motivated respondents to enhance their confidence in strengthening UZS next month.

In particular, the share of the population expecting the rate of the national currency to be below <u>7800 UZS</u> at the end of the third quarter of this year accounted for 48%, and the share of economic entities constituted 52%.

Among surveyed respondents, 29% of individuals and 38% of legal entities have said that they expect an exchange rate to be 7800-8000 UZS at the end of September (Figure 26).

In addition, the share of the population expecting the exchange rate of the national currency to be below 7800 UZS at the end of this year amounted to 52%, and the share of economic entities constituted 63%. 19% of individuals and 13% of legal entities that participated in the survey admitted that the exchange rate will constitute over 8000 UZS at the end of the year (Figure 26).

91% of the surveyed experts have noted that the exchange rate of the national currency will be below 8000 UZS at the end of the third quarter.

During this period, opinions of the survey participants about changes in the economy over the next 12 months have improved.

In particular, if at the beginning of the year 72% of respondents expected improvement in the national economy over the next 12 months, their share in the first half of the year amounted to 86% (Figure 27).

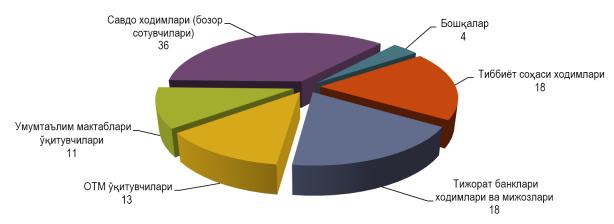
In addition, many experts have also said that they expect the national economy to improve within the next 12 months.

RESULTS OF SURVEYS ON INFLATIONARY EXPECTATIONS

Method	Standardized individual surveys among the population and legal entities in Uzbekistan.
All participants	By the Republic of Karakalpakstan, regions and Tashkent city Totally 750 individuals and 300 legal entities
Periodicity	Once a month
Survey period	January – June 2018

I. Structure of the survey respondents

Area of respondents' activity (in %) a) individuals



Trade sphere employees – 36

School teachers – 11

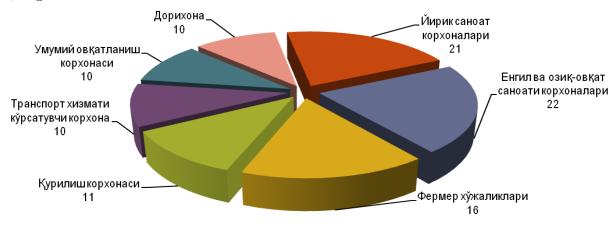
Teachers of higher educational institutions – 13

Officials and customers of commercial banks – 18

Medical staff - 18

Others - 4

b) legal entities



Drug stores - 10

Catering – 10

Companies rendering transportation services- 10

Construction companies – 11

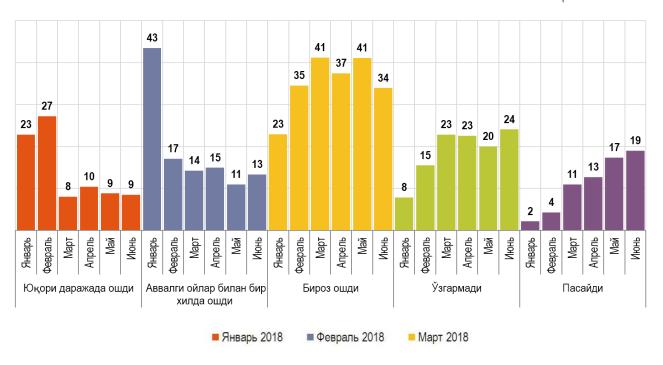
Farms – 16

Food and light industry enterprises – 22

Large industrial enterprises - 21

II. Results of the researches of the perceived inflation for the past period Results of individuals' survey

Figure 5 What do you think whether prices changed over the last month?



Increased significantly

Increased at the level of previous months

Increased slightly

Remained at the same level

Decreased

January - январь

February - февраль

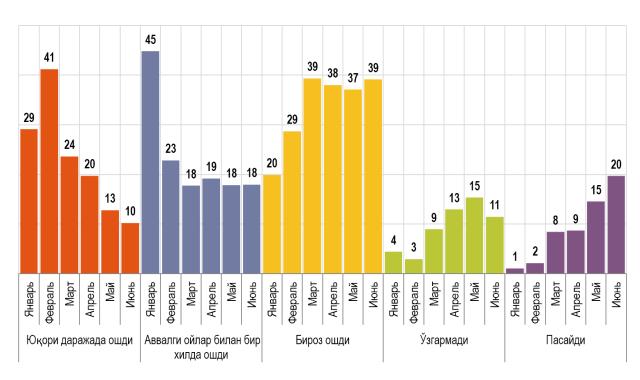
March – март

April- апрель May – май

June - июнь

Figure 6 What do you think whether prices have changed over the last 3 months?





Increased significantly

Increased at the level of previous months

Remained at the same level

Decreased

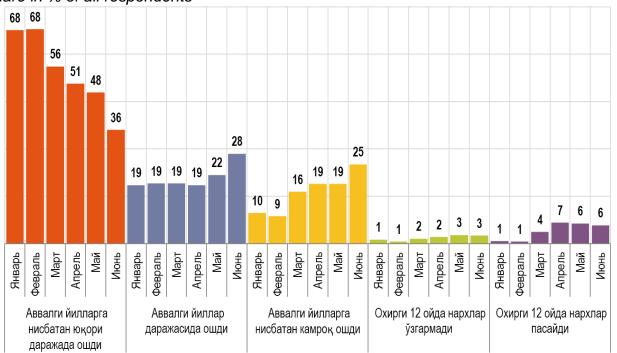
January - январь February - февраль March — март

April- апрель May – май June - июнь

Figure 7.

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

Share in % of all respondents



Increased more than in previous years

Increased at the same level as in previous years Increased less than in previous years

Prices have not changed compared to last year

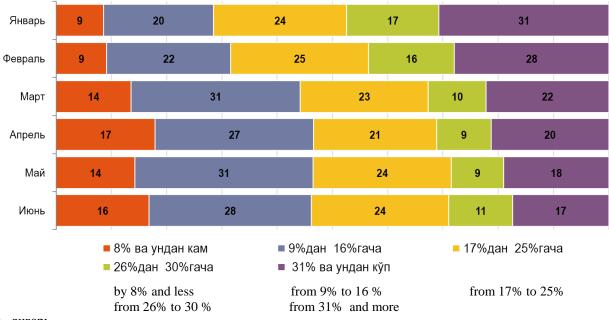
Prices decreased compared to last year

January - январь February - февраль March – март April- апрель

May – май June - июнь

Figure 8

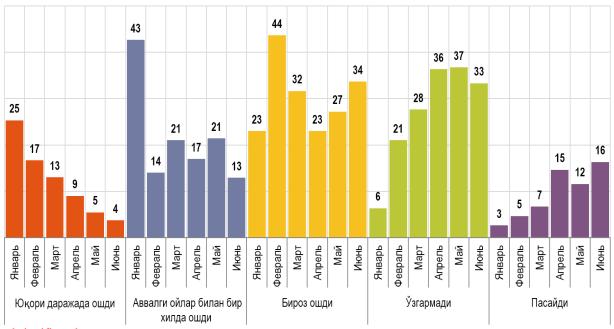
In your opinion, how much have prices increased over the past 12 months?



January - январь February - февраль March — март April- апрель May — май June - июнь

Results of legal entities' survey

Figure 9
What do you think whether prices changed over the last month?



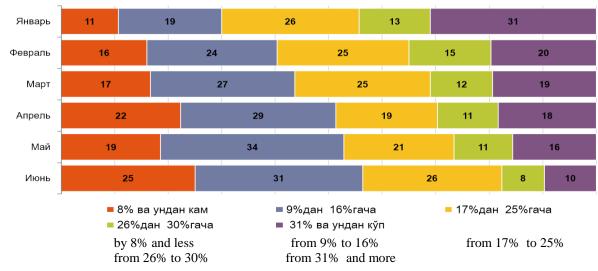
Increased significantly
Increased at the level of previous months
Increased slightly
Remained at the same level
Decreased - снизились

January - январь February - февраль March — март April- апрель May — май June - июнь

Figure 10

In your opinion, how much have prices increased over the past 12 months?

Share in % of all respondents



January - январь February - февраль March — март April- апрель May — май June - июнь

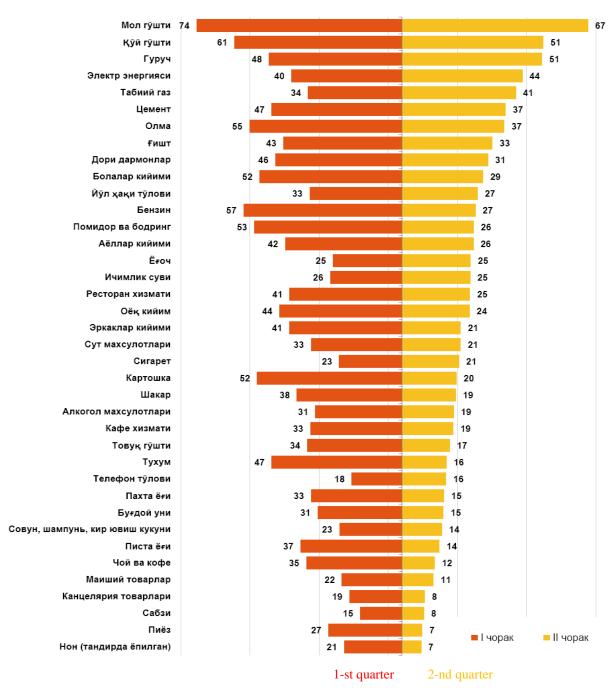
III. Results of studying reasons of inflation

Results of individuals' survey

Figure 11

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



Beef

Mutton

Rice

Electricity

Cement

Apple

Brick

Medicines

Children's clothes

Transport fare

Tomatoes and Cucumbers

Women's Clothes

Wood

Drinking water

Restaurant services

Shoes

Men's clothes

Dairy products

Cigarettes

Potatoes

Sugar

Alcohol beverages

Cafe services

Chicken

Eggs

Phone charges

Cottonseed oil

Wheat flour

Soap, shampoo, washing powder

Sunflower oil

Tea and coffee

Household goods

Stationery

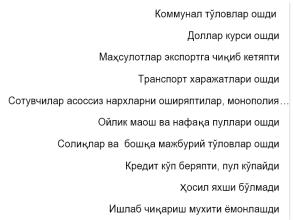
Carrot

Onion

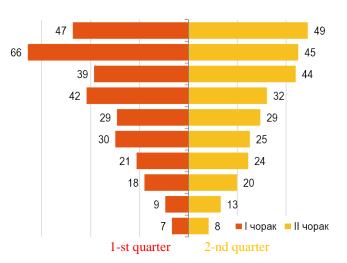
Lepeshka (national bread)

What do you think has contributed to a sharp rise in prices over the past 12 months?

In this question respondents have the opportunity to choose several factors



Increase of utility bills
Appreciation of the dollar
Export of products
Sellers unreasonably raise prices, monopolization
Increase of salaries and pensions
Increase of taxes and other compulsory payments
Increase in lending volumes and money supply
Unsuccessful harvest
Worsening of the working environment

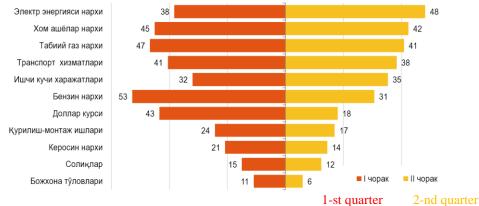


Results of legal entities' survey

Figure 13

According to your observations which factor has significantly influenced the increase of the prime-cost of your products (services) for the last month?

In this question respondents have the opportunity to choose several factors

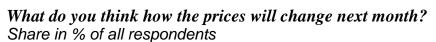


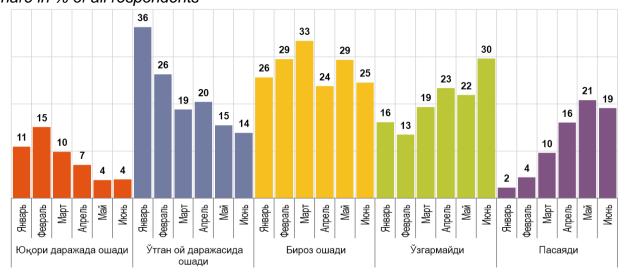
Price for electricity
Prices for raw materials
Payment for natural gas
Payment for transport services
Labour costs
Price for petrol
Dollar exchange rate
Construction and installation works
Prices for kerosene
Taxes
Customs duties

IV. Results of studying inflationary expectations

Results of individuals' survey

Figure 14



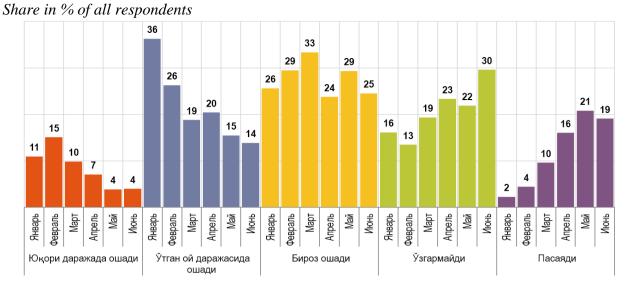


Will increase significantly

Will increase at the level of the previous month Will increase slightly
Will remain at the same level
Will decrease

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

Figure 15



Will increase significantly

Will increase at the level of the previous month

Will increase slightly

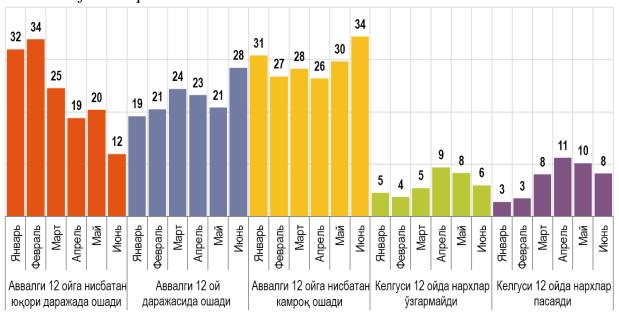
Will remain at the same level

Will decrease

Figure 16

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

Share in % of all respondents



Will increase significantly in comparison with previous 12 months

Will increase at the level of previous 12 months

Will increase insignificantly in comparison with previous 12 months

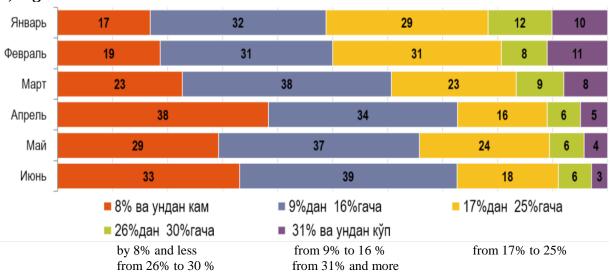
Will remain at the same level over the next 12 months

Will decrease over the next 12 months

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

a) individuals

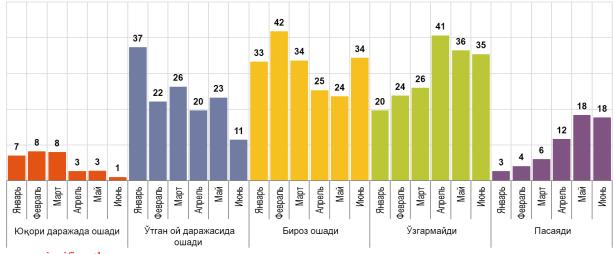
b) legal entities



Results of legal entities' survey

Figure 18

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



Will increase significantly

Will increase at the level of the previous month

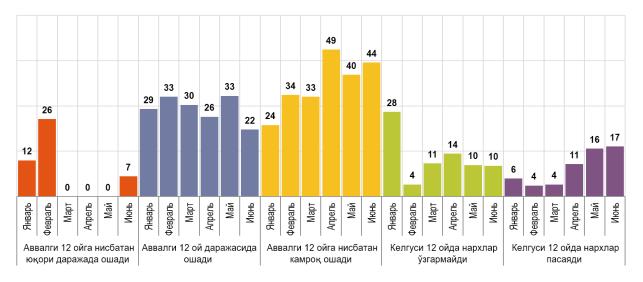
Will increase slightly

Will remain at the same level

Will decrease

Figure 19

What do you think, how prices will change over the next 12 months?



Will increase significantly in comparison with previous 12 months

Will increase at the level of previous 12 months

Will increase insignificantly in comparison with previous 12 months Will remain at the same level over the next 12 months

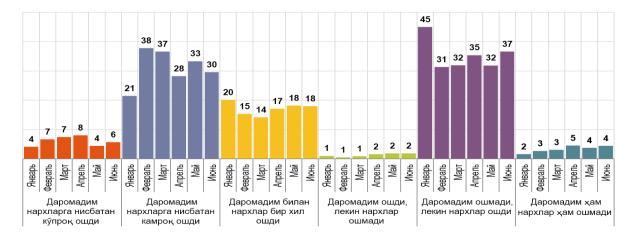
Will decrease over the next 12 months

V. Results of studying purchasing power of the population

Figure 20

Which option best describes the change in the ratio of your income and price level for the past 12 months?

Share in % of all respondents



Income increased more than prices

Income increased less than prices

Both income and prices increased equally

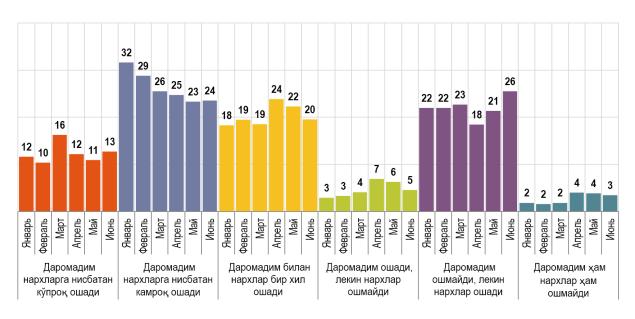
Income rose but prices didn't increase

Income hasn't increased but prices rose

Neither income nor prices rose

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

Share in % of all respondents



Income will increase more than prices

Income will increase less than prices

Both income and prices will increase equally

Income will increase but prices will not

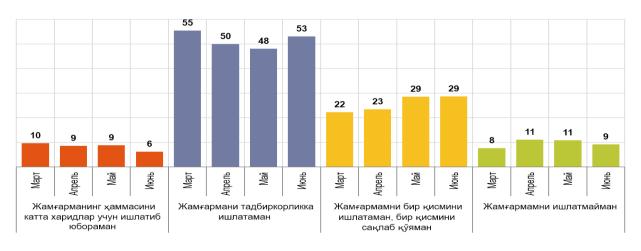
Income will increase but prices will not

Neither income nor prices will increase

VI. Results of study of the peculiarities of savings of the population

Figure 22

If you had savings how would you spend it?



Would spend all savings on big purchases

Would spend on business

Would spend a part, and would save another part

Wouldn't use savings

Figure 23

What do you think, what is the best way of keeping savings nowadays? Share in % of all respondents



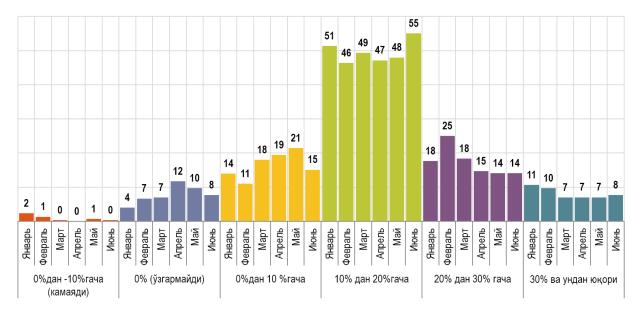
In the bank accounts in UZS
In the bank accounts in the USD
Partially in the bank and partially in cash
In cash, in UZS
In cash in USD

VII. Results of assessing expected changes in the economy

Results of legal entities' survey

Figure 24

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



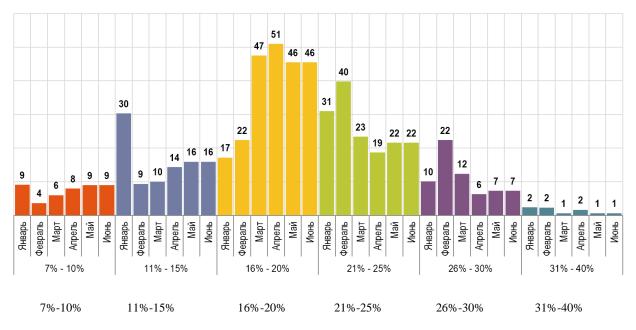
from 0% to 10% (will decrease) 0% (will not change) from 0% to 10% from 10% to 20% from 20% to 30% from 30% and higher

January February March April May June

Figure 25

According to your opinion, whether the bank loan rates will change over the next 12 months?

Share in % of all respondents



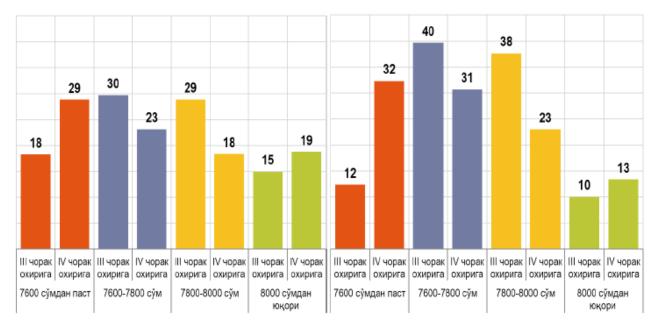
January February March April May June

Figure 26

According to your opinion, what will the exchange rate of the UZS to the USD be at the end of the next quarter (at the end of September 2018)?

a) individuals

b) legal entities



Lower than 7600 UZS 7600-7800 UZS 7800-8000 UZS Over 8000 UZS Lower than 7600 UZS 7600-7800 UZS 7800-8000 UZS Over 8000 UZS

Figure 27

According to your opinion, whether the country's economy will improve or worsen over the next 12 months?

Share in % of all respondents



Will improve

Will probably improve but slightly

Will neither improve nor worsen Will probably worsen but slightly

Will worsen

January February March April May June