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ANALYSIS OF INFLATION FACTORS

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ABSTRACT

In this state, the causes of inflation are discussed in detail, including a comparative analysis, the dynamics of the level of inflation in the CIS countries, as well as the three main types of IPTs and the deflator VVP. The specified task, which must be realized in the monetary and credit policy and the inflation picture.

KEYWORDS: *inflation, monetary and credit policy, consumer price index (IPTs), gross domestic product (GDP), deflator of gross domestic product, Laspeyres index.*

INTRODUCTION

The term inflation is derived from the Latin word "inflation", which means "exaggeration", "increase". From an economic point of view, inflation represents the devaluation of money, as a result of which the level of prices (tariffs) of goods and services in the economy constantly increases, and the value of the national currency decreases compared to foreign currency.

Causes and Sources of Inflation

In a market economy, demand and supply determine the price level for each type of product. Classical theory researchers divide inflation into two types, supply and demand inflation. The emergence of any type of inflation ultimately stems from the monetary policy of the country. If we analyze the causes of inflation at the macro level, it is primarily explained by the creation of an excess money mass in the economy that is not covered by goods and services. An increase in the excess money supply that is not covered by goods and services in the country, in turn, leads to an increase in the high rates of money circulation. If the population of our country grows by an average of 1.1-1.2% per year, in order to improve the standard of living of the population, to ensure that it remains unchanged, the real volume of GDP is required to grow by an average of at least 1.1-1.2% per year. In another case, if the amount of products decreases, firstly, it leads to a decrease in the standard of living of the population, and secondly, to the emergence of a mass of money in the economy that is not covered by products (including services in a broad sense). This situation, in turn, increases the price level and causes inflation.

In developed countries, the rate of money circulation does not exceed 1.7-2.0 times per year. And in some countries (for example, in Japan) it does not rotate even once. This situation indicates the existence of a stable banking system in these countries. If public distrust in the banking system is high, the public will seek to withdraw their funds from commercial banks more quickly, resulting in increased money circulation and ultimately high inflation rates.

The rate of inflation in our country was 1281.4 percent in 1994, and it was 14.4 percent in 2017. This situation is mainly explained by the strict monetary and credit policy of the Central Bank and the fact that since 2003, the Central Bank has not allocated loans to cover the state budget deficit. In addition to the reasons we have listed above, there is another important factor that accelerates the inflation process, and the effect of this factor is observed more in developing countries, that is, in cases where the state intervention in the economy is high. An increase in relative prices for certain types of goods and services by the state ultimately leads to changes in general prices and the emergence of inflation.

A sudden increase in the prices of certain goods, especially energy resources, which are considered very important by the government, will necessarily lead to an increase in prices (including wages) in the entire economy. If the country does not have a tight monetary policy, a sudden increase in prices will lead to persistent inflation (such inflation is considered to be due to cost overruns). There are many examples of rising costs and then persistent

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inflation. As a clear example, in the 1990s, in the direction of reducing differences in relative prices, it is possible to cite the paralysis that occurred in connection with the transfer of oil and gas to world prices in countries transitioning to a market economy. In several countries, the attempt to offset the increase in the prices of energy resources by the increase in other prices and wages has led to a strong inflationary frenzy. During this period, some countries were able to control inflation as a result of strict fiscal policies and the understanding of the population about the decline in real income during the period of relative price adjustment.

ANALYSIS AND RESULTS

Comparative Analysis of Inflation

The International Monetary Fund publishes annual and monthly inflation rates in countries around the world. Below are the levels of inflation observed in recent years in the CIS countries (according to the consumer price index - INI).

Table 1

Dynamics of the inflation rate in the CIS countries in 2012-2017*

CIS countries	Changes in prices compared to December last year according to INI (times)						Price increase in 2012-2017 (times)
	2012 YEAR	2013 YEAR	2014 YEAR	2015 YEAR	2016 YEAR	2017 Year	
Azerbaijan	0.997	1,035	0.999	1,076	1,157	1,079	1,385
Armenia	1,032	1,056	1,046	0.999	0.989	1,026	1,156
Belarus	1,218	1,165	1,162	1,120	1,106	1,046	2,136
Kazakhstan	1,060	1,048	1,074	1,136	1,085	1,071	1,575
Kyrgyzstan	1,075	1,040	1,105	1,034	0.995	1,037	1,318
Moldova	1,041	1,052	1,047	1,136	1,024	1,073	1,431
Russia	1,066	1,065	1,114	1,129	1,054	1,025	1,543
Tajikistan	1,064	1,037	1,074	1,050	1,061	1,097	1,409
Uzbekistan	1,070	1,068	1,060	1,056	1,057	1,144	1,546
Ukraine	0.998	1,005	1,249	1,433	1,124	1,137	2,294

**) Tables 1 and 2 were prepared based on the data of the Statistics Committee of the CIS.*

In 2012-2017, the highest levels of inflation in the CIS countries were observed in Ukraine (229.4%), Belarus (213.6%), Kazakhstan (157.5%) and Uzbekistan (154.6%), while relatively low levels were observed in Armenia (115 .6%) and Kyrgyzstan (131.8%).

In 2020-2024, the highest levels of inflation in the Commonwealth of Nations were observed in Kazakhstan (162.0%), Moldova (162.1%) and Uzbekistan (157.4%), while relatively low levels were recorded in Armenia (118.6%).

Table 2

Dynamics of the consumer price index in the CIS countries in 2020-2024

Countries	December of the current year compared to December of the previous year, times					In August 2024 compared to December 2019, times
	2020	2021	2022	2023	Aug. 2024	
Azerbaijan	1,026	1,120	1,144	1,021	1,025	1,376
Armenia	1,037	1,077	1,083	0.994	0.988	1,186
Belarus	1,074	1,100	1,128	1,058	1,034	1,457
Kazakhstan	1,075	1,084	1,203	1,098	1,053	1,620
Kyrgyzstan	1,097	1,112	1,147	1,073	1,020	1,532
Moldova	1,004	1,139	1,302	1,042	1,044	1,621
Russia	1,049	1,084	1,119	1,074	1,053	1,439
Tajikistan	1,094	1,080	1,042	1,038	1,026	1,314
Uzbekistan	1,111	1,100	1,123	1,088	1,055	1,574
Ukraine	1,050	1,100	1,266	...	...	...

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The inflation rate in Uzbekistan fell from 12.3 percent at the end of 2022 to 8.8 percent at the end of 2023, partly due to a relatively high real rate and lower food and energy prices.

In developed countries, the annual rate of inflation usually does not exceed 3 percent. Exceeding the 3 percent limit of inflation indicates that there are problems in the country's economy, especially in the monetary sector. In some developed countries, in particular New Zealand, if the annual inflation is higher than 3 percent for three consecutive years, according to the current legislation of the country, the chairman of the Central Bank and his team will resign. Therefore, the Central Bank is responsible for monetary and credit policy issues and the level of inflation.

Methods of Calculating Inflation

GDP deflator and consumer price index are used in practice to assess inflation processes and determine its level.

The consumer price index is required to be calculated based on the consumer basket, which includes at least 300 goods and services according to international standards. When calculating the consumer price index, each commodity and service included in the consumer basket is weighted according to its weight in the consumer basket in order to calculate the average level of price changes. This situation can cause a number of problems in practice, that is, in countries where market mechanisms are not fully formed and in transition, the demand of the population often changes due to various reasons, and this process creates a problem of weight in the calculation of the consumer price index.

When evaluating long-term (for example, annual) inflation, it is appropriate to use the Laspeyres index, because in this index, the consumption basket of the previous year is taken as a weight.

Laspeyres formula

$$\text{LTR}_{12} = \frac{\sum P_1}{\sum P_0} \cdot W_0 \cdot \left(\frac{\sum P_2}{\sum P_0} \cdot W_0 : \frac{\sum P_1}{\sum P_0} \cdot W_0\right) \cdot \left(\frac{\sum P_3}{\sum P_0} \cdot W_0 : \frac{\sum P_2}{\sum P_0} \cdot W_0\right) \cdot \ldots \cdot \left(\frac{\sum P_{12}}{\sum P_0} \cdot W_0 : \frac{\sum P_{11}}{\sum P_0} \cdot W_0\right)$$

here:

LTR12-price increase (decrease) in December of the current year compared to December of the previous year;

P0- prices of a product unit in December last year;

P1,2,3,...,12 prices of the product unit for January, February, March,...,December of the current year;

W0- weights of the product unit of the previous year.

Taking into account the high share of agriculture in the economy of Uzbekistan, it is natural that today the influence of seasonality in the markets of our country is considered strong. For example, in the conditions of our country, in July and August, the price of fruits and vegetables and dairy products is very low, and their weight in the consumer basket is high. As a result of the decrease in supply, the prices of these products will increase sharply in January and February.

In addition to the consumer price index, the GDP deflator is also used in statistical practice to estimate inflation levels. From the point of view of production, the GDP deflator can more accurately represent inflationary processes. According to international standards, the GDP deflator should be a single-digit number. The GDP deflator in the Republic of Uzbekistan was 1339.2% in 1994, and decreased to 9.2% in 2015 and 9.6% in 2016. However, in 2017, as a result of the liberalization of the exchange rate and prices for some products, its level increased to 20.8 percent, and in 2023 it was 12.2 percent, that is, it is still a double figure.

In countries with a developed market economy, there will not be a big difference between the consumer price index (INI) and the GDP deflator, which are indicators of inflation.

There are three main differences between the INI and the GDP deflator.

The first difference is that the indices cover various goods and services. If the INI covers only consumer goods and services purchased by the population, the GDP deflator covers all goods and services included in GDP. As a result, changes in the prices of goods and services purchased by firms and government agencies, such as raw

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materials, materials, machinery, equipment, technology, directly affect the GDP deflator, but do not affect the INI.

The second difference is that the GDP deflator expresses only the change in the price of domestically produced goods and services, and does not cover the price change of imported final products. Therefore, changes in the prices of imported products do not have a direct impact on the GDP deflator in the short term. However, since imported products are included in the basket of INI, changes in their prices directly affect INI.

The third difference is the use of weights in the index calculation method. The Laspeyres formula is used to calculate INI. According to it, constant weights of goods and services included in the consumer basket in the base period are used. The Pasche formula is used to calculate the GDP deflator. The weight (weight) of goods and services included in his basket may vary. In other words, if the amounts of the base period are taken as weights in the INI, the weights (amounts) of the current period are taken in the calculation of the GDP deflator. For example, if the crop of a certain agricultural crop dies as a result of a drought with low rainfall, its production will drop to zero, and its price will rise sharply. In this case, non-produced agricultural products are not included in the calculations of the GDP deflator, but are taken into account in the calculations of the INI, and as a result, the INI may be artificially inflated.

CONCLUSION

We consider it appropriate to implement the following in the monetary policy in order to reduce inflation.

1. Acceleration of privatization processes of large banks in order to improve the efficiency of repayment of loans and interest payments by economic entities.

2. Increase of prices (tariffs) for the products (services) of monopolistic enterprises by the state in proportion to the increase in the income of the population.

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