

## THE IMPACT OF THE GAP BETWEEN HEADLINE AND FELT INFLATION ON THE EFFECTIVENESS OF INFLATION TARGETING IN UZBEKISTAN

**Bazarov Murodullo Ishburievich**

Lecturer and Head of Subject Area (Economics),  
Westminster International University in Tashkent

Email: [m.bazarov@wiut.uz](mailto:m.bazarov@wiut.uz)

<https://doi.org/10.5281/zenodo.20175872>

**Abstract.** This thesis analyzes the economic implications of the gap between official headline inflation indicators and the “felt inflation” actually experienced by households under the inflation targeting regime in Uzbekistan. The study demonstrates that low-income households experience a higher actual inflation rate than the aggregate Consumer Price Index (CPI) because food products constitute a significantly larger share of their consumption basket. In the case of Uzbekistan, the high volatility of food inflation and the fact that food expenditures account for up to 69 percent of the minimum consumption basket are identified as the main factors intensifying the felt inflation gap. The findings suggest that inflation targeting policies should take into account inflation indicators differentiated by income groups. Furthermore, the study develops scientific and practical recommendations aimed at improving central bank communication, constructing separate inflation indices for different income groups, and strengthening coordination between monetary and fiscal policy.

**Keywords:** inflation targeting, felt inflation, CPI, food inflation, monetary policy, Uzbekistan.

### Introduction

In recent years, Uzbekistan has implemented significant institutional reforms in monetary policy as part of broader economic liberalization and market-oriented transformation processes. In particular, beginning in 2020, the Central Bank of the Republic of Uzbekistan introduced an inflation targeting regime, establishing price stability and reducing inflation to a long-term target level of 5 percent as its primary objective. Although headline inflation has shown a gradual downward trend in recent years, inflation perceptions among the population and the actual pressure of rising living costs remain relatively high.

In practice, a considerable discrepancy exists between official inflation indicators and the price increases experienced by households in everyday life. This discrepancy is especially pronounced among low-income households, which allocate a large proportion of their expenditures to food products and essential goods. As a result, the actual inflation pressure faced by these groups tends to exceed the inflation rate reflected in the aggregate consumer price index. In this regard, the concept of “felt inflation” — the inflation actually perceived by households across different income groups — has become increasingly important for evaluating the effectiveness of monetary policy.

The relevance of this thesis lies in the fact that although inflation targeting policy in Uzbekistan is primarily conducted based on aggregate CPI indicators, the distributional consequences of inflation across different social groups have not yet been sufficiently studied. The high volatility of food prices, the gradual liberalization of energy tariffs, and external economic shocks may significantly intensify the felt inflation gap for low-income households. This situation affects not only household welfare but also the effectiveness of the central bank’s management of inflation expectations.

The main objective of this thesis is to analyze theoretically and empirically the gap between headline inflation and felt inflation in Uzbekistan, evaluate its impact on the welfare of low-income households, and develop scientific recommendations for improving inflation targeting policy.

To achieve this objective, the following tasks were established:

- to examine the theoretical foundations of inflation targeting policy;
- to analyze the economic essence of heterogeneous inflation and felt inflation concepts;
- to evaluate food inflation and the structure of the consumption basket in Uzbekistan;
- to identify the gap between headline and felt inflation;
- to assess the distributional effects of monetary policy;
- to develop recommendations for improving central bank communication and coordination between monetary and fiscal policy.

The object of the study is the inflation targeting policy in Uzbekistan and its impact on household welfare, while the subject of the study consists of the economic relationships between headline inflation and felt inflation.

The research employs economic-statistical analysis, comparative analysis, generalization, graphical methods, and analytical approaches. The information base includes data from the Central Bank of the Republic of Uzbekistan, the Statistics Agency under the President of the Republic of Uzbekistan, the World Bank, and various international scientific sources.

### **Main Part**

#### **Main Factors Behind the Formation of Felt Inflation in Uzbekistan**

Although the introduction of inflation targeting in Uzbekistan has contributed to a decline in overall inflation, differences in inflation perceptions among various social groups remain substantial. The primary reason for this situation is the significant variation in consumption basket structures across income groups. In particular, low-income households spend a considerable share of their income on food products, making food price increases especially harmful to their purchasing power.

According to the concept of felt inflation, the actual inflation experienced by a household depends on the composition of its consumption basket. If food prices rise faster than aggregate inflation, households with higher food expenditure shares will experience inflation rates above headline inflation. This phenomenon is clearly observable in Uzbekistan.

**Table 1**

#### **Share of Food Expenditures in Central Asian Countries**

<b>Household Group / Country</b>	<b>Share of Food Expenditures (%)</b>	<b>Source</b>
Uzbekistan, low-income households	69	Statistics Agency / World Bank
Uzbekistan, average household	~30	Numbeo aggregates
Tajikistan, average household	37	CIS Statistics Committee
Kyrgyzstan, average household	42	CIS Statistics Committee
Kazakhstan, average household	51	Finprom.kz

The table demonstrates that food products account for 69 percent of the minimum consumption basket in Uzbekistan. Therefore, during periods of elevated food inflation, inflationary pressure on low-income households intensifies significantly. At the same time, the

food expenditure share for average households is approximately 30 percent, indicating substantial inflation differentials across income groups.

Food prices are among the most volatile components of inflation in Uzbekistan. In particular, fluctuations in the prices of meat, vegetable oil, rice, and vegetables directly affect daily household expenditures. The continuous increase in the “Plov Index” also confirms the persistence of food inflation.

### **Mechanism for Calculating Felt Inflation**

Felt inflation can be calculated using the following formula:

$$\pi_t^h = \sum_k \omega_k^h \cdot \pi(k,t)$$

Where:

- ❖  $\omega_k^h$ — the expenditure share of a specific category in the consumption basket of a particular income group;
- ❖  $\pi(k,t)$ — the inflation rate for a specific product or service category.

This approach makes it possible to calculate separate inflation rates for different household groups.

**Table 2**

### **Illustrative Calculation of the Felt Inflation Gap in Uzbekistan**

<b>Household Group</b>	<b>Food Share (%)</b>	<b>Non-food Share (%)</b>	<b>Felt Inflation (%)</b>
Average household	30	70	7.80
Low-income household	69	31	10.14
Felt inflation gap	—	—	+2.34

**Note:** The calculations are based on a scenario where food inflation equals 12 percent and non-food inflation equals 6 percent.

The results indicate that the inflation rate experienced by low-income households is approximately 2.34 percentage points higher than that experienced by average households. This suggests that headline inflation indicators announced by the central bank do not have the same economic meaning for all social groups.

### **Monetary Policy and Distributional Effects**

The distributional consequences of monetary policy emerge through several channels:

- the consumption basket channel;
- the income channel;
- the wealth and indebtedness channel.

In the context of Uzbekistan, the consumption basket channel appears to be the strongest mechanism. This is mainly due to significant income disparities and the high share of food expenditures among low-income households, which create substantial differences in actual inflation experiences across groups. Consequently, a reduction in headline inflation does not necessarily imply improved welfare for all segments of the population.

To enhance the effectiveness of the inflation targeting regime, the following measures are necessary:

- developing separate CPI indices for different income groups;
- strengthening monitoring systems for food and energy prices;
- improving coordination between monetary and fiscal policy;
- adapting social protection mechanisms to inflation-related risks.

In addition, introducing targeted compensatory payments and inflation-indexed social assistance programs for low-income households could help mitigate the negative effects of felt inflation.

### **Conclusion**

This thesis analyzed the economic nature of the gap between headline inflation and the felt inflation experienced by households under the inflation targeting framework in Uzbekistan. The findings reveal that official CPI indicators do not reflect equal inflationary pressure for all population groups. In particular, low-income households experience substantially higher inflation because food products occupy a significantly larger share of their consumption basket.

The analysis demonstrated that approximately 69 percent of the minimum consumption basket in Uzbekistan consists of food products, while food inflation exhibits greater volatility than overall inflation. Consequently, increases in food prices exert a strong negative impact on the purchasing power of low-income households. Illustrative calculations suggest that the felt inflation gap may reach 2–3 percentage points during certain periods.

The results also indicate the importance of incorporating distributional effects into monetary policy evaluation. If inflation targeting focuses solely on reducing aggregate headline inflation, some social groups may continue to experience high real inflationary pressure. This may negatively affect the central bank’s ability to manage inflation expectations effectively.

Accordingly, the study proposes the following scientific and practical recommendations:

- constructing separate inflation indices for different income groups;
- strengthening food and energy inflation monitoring systems;
- incorporating the concept of felt inflation into central bank communication strategies;
- improving coordination between monetary and fiscal policy;
- indexing social protection systems in line with food inflation.

Overall, the concept of felt inflation provides deeper insight into the effectiveness of monetary policy in Uzbekistan. This approach may contribute not only to improving inflation targeting policy but also to enhancing household welfare and reducing social inequality. Future research should focus on developing separate CPI indices based on Household Budget Survey microdata and empirically evaluating their dynamics across income groups.

### **Adabiyotlar, References, Литературы:**

1. Central Bank of the Republic of Uzbekistan (2024). Statistical Bulletin of the Central Bank, various issues. Tashkent.
2. Central Bank of the Republic of Uzbekistan. Inflation Expectations of Households and Enterprises: Survey Results.
3. Argente, David & Lee, Munseob (2021). “Cost of Living Inequality during the Great Recession.” *Journal of the European Economic Association*, 19(2), 913–952.
4. Auclert, Adrien (2019). “Monetary Policy and the Redistribution Channel.” *American Economic Review*, 109(6), 2333–2367.
5. Bobokhujaev, Shukhrat & Filimonova, Natalia (2022). Uzbekistan’s Transition to Inflation Targeting. IMF Working Paper No. 22/229.
6. International Monetary Fund (2022). Washington, D.C.

7. Coibion, Olivier & Gorodnichenko, Yuriy (2015). “Information Rigidity and the Expectations Formation Process: A Simple Framework and New Facts.” *American Economic Review*, 105(8), 2644–2678.
8. Doepke, Matthias & Schneider, Martin (2006). “Inflation and the Redistribution of Nominal Wealth.” *Journal of Political Economy*, 114(6), 1069–1097.
9. Engel, Ernst (1857). “Die Productions- und Consumtionsverhältnisse des Königreichs Sachsen.”
10. Gali, Jordi (2015). *Monetary Policy, Inflation, and the Business Cycle*. Princeton University Press.