

## Article

# Inflation and Employment Problems in the Economic Development of Uzbekistan

Nabiyeva Nargizakhon Nuriddin qizi\*<sup>1</sup>

1. PhD student of the Department of "Macroeconomic Analysis and Forecasting" of the Tashkent State University of Economics

\* Correspondence: [nargizamadinova10@gmail.com](mailto:nargizamadinova10@gmail.com)

**Abstract:** This study explores the relationship between unemployment, inflation, and economic development in Uzbekistan, focusing on their impacts on GDP. Theoretical frameworks such as the Phillips curve, Okun's law, and monetarism are employed to examine how these macroeconomic variables interact. A detailed analysis is conducted using statistical data from 2015 to 2025, revealing how inflation and unemployment have affected Uzbekistan's GDP growth. The study also draws comparisons with the experiences of other nations to understand potential strategies for Uzbekistan. Key findings highlight that low unemployment and moderate inflation are crucial for sustaining economic growth. The research underscores the importance of stable macroeconomic policies, such as inflation targeting and labor market reforms, in achieving long-term economic stability. Despite challenges like external shocks and demographic pressures, Uzbekistan's government initiatives aimed at reducing inflation and promoting employment have shown positive results. The study emphasizes that continued policy adaptation to global economic trends is vital for ensuring future growth and stability in the country's labor market and economy. The study's findings indicate that stable economic growth is mostly dependent on low unemployment, moderate inflation, and the development of an efficient labor market.

**Citation:** Nuriddin qizi. N. N. Inflation and Employment Problems in the Economic Development of Uzbekistan. American Journal of Economics and Business Management 2025, 8(10), 4971-4977.

Received: 13<sup>th</sup> Sept 2025

Revised: 20<sup>th</sup> Sept 2025

Accepted: 04<sup>th</sup> Oct 2025

Published: 15<sup>th</sup> Oct 2025

**Keywords:** Gross Domestic Product, Inflation, Unemployment, Economic Growth, Okuns Law, Phillips Curve



**Copyright:** © 2025 by the authors. Submitted for open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>)

## 1. Introduction

A nation's economic growth plans heavily rely on its employment and inflation rates. A theoretically and politically significant topic of macroeconomics is their link to GDP growth. Production and investment can be stimulated by moderate inflation; on the other hand, consumption and investment capacity would decrease if prices are unstable. High employment rates are a sign of labor market inefficiencies and underutilization of economic resources.

Two major topics in macroeconomic theory are employment and inflation. The Keynesian approach states that by boosting demand, it is feasible to boost employment and quicken economic development, although this frequently results in higher inflation [1]. The basic cause of inflation, according to monetarism theory, is the unchecked growth of the money supply. The short-term inverse link between unemployment and inflation is explained by the Phillips curve, which states that as unemployment declines, inflation rises and vice versa, when unemployment is high, prices level off [2]. However, as the economy

stabilizes around the "natural rate of unemployment" (NAIRU), the correlation between inflation and unemployment eventually deteriorates.

Okun's law states that a 1% rise in unemployment causes the GDP to drop by 2% to 3%. Thus, the primary goal of economic policy is to balance employment and inflation.

It is crucial to consider both current statistics trends and macroeconomic theory when examining how employment and inflation affect GDP. Over the past five years, Uzbekistan has seen notable swings in unemployment and inflation as a result of outside influences including climate change, reliance on imports for energy and food, and worldwide price shocks [3].

For instance, a 20 percent rise in the global food price index in 2022 caused Uzbekistan's import prices to rise, which raised domestic food inflation by 30 percent over 2021 [4]. Due to shortages and decreased spending, particularly among low-income households, this rise caused the GDP's consumption sector to shrink.

The Statistics Committee reports that by the end of 2023, manufacturing employment in the food, textile, and agricultural sectors had grown by 7–12%, while youth employment in the 18–25 age range had climbed by over 10% (DavStatUz) [5]. With employment in service-related businesses rising by 8% in 2022–2023, the service sector particularly tourism and transportation is also rebounding from the pandemic (World Bank) [6].

The IMF predicts that headline inflation in Uzbekistan would drop to 8.7 percent by the end of 2024, in part because of the stability of oil and air costs worldwide, according to updated statistical predictions (IMF, 2024) [7]. Thanks to increased youth employment initiatives, private sector investment, and small company assistance programs, the unemployment rate is predicted to stay between 4.8 and 5.2 percent (Asian Development Bank) [8].

**Table 1.** Key Economic Indicators (2019–2023).

Year	GDP growth (%)	Inflation (%)	Unemployment (%)
2019	5.7	14.5	9.3
2020	1.6	11.1	10.5
2021	7.4	10.9	9.6
2022	5.7	11.5	9.0
2023	5.5	9.2	8.5

Theoretically, these statistical patterns align with the new-Phillipsian phases (Blanchard & Johnson) and Okun's rule, which states that economic expansion and a rise in the consumer supply sector boost employment and enable inflation management [9]. Meanwhile, indicators of foreign debt, democracy, and institutional stability all seem to have a significant role in forecasting employment and inflation trends (World Bank), see Table 1.

The underreporting of employment in the informal sector is one area that has received less attention in earlier research. International study suggests that Uzbekistan may have a 25–30% informal sector employment rate, which might cause official unemployment numbers to be underestimated (ILO). In addition to low pay and minimal social safety, the informal sector is heavily reliant on consumer items that are vulnerable to inflation, which has a significant effect on GDP.

Furthermore, there are notable geographical differences within the nation: price rises are more noticeable in urban low-income groups, and the employment and inflation rates in Tashkent and the seismic regions deviate more from the national average. The regional imbalance in the GDP's consumption sector is made worse by this discrepancy.

## Analysis of Prior Research

According to Nabiyeva N "NAIRU in Uzbekistan," the natural unemployment rate, or NAIRU, is around 6% based on quarterly data from 2016 to 2021 [10][11]. Although there is a short-term inverse link with inflation, the long-term relationship is unstable.

The Phillips curve is supported by real-world instances in Mahmudov and Nabiyeva's "Inflation and Unemployment: Evidence from Uzbekistan," but it also highlights the need for further econometric models to fully explain its effect on GDP [12].

According to Abdurakhmonov Q "Modern Trends in the Development of the Economy of Uzbekistan," unemployment and inflation are the most crucial public policy concerns, particularly in light of the drastic changes brought on by the pandemic [13].

Reports from the IMF and World Bank (2018–2024) point out that whereas unemployment is mostly caused by structural issues in the labor market, inflation in Uzbekistan is mostly impacted by monetary and external variables.

## 2. Materials and Methods

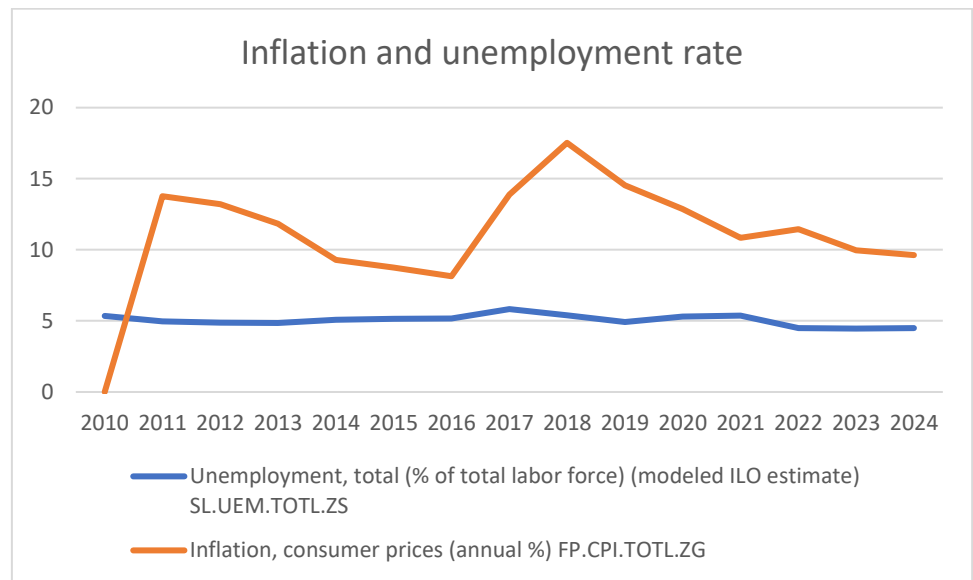
The Uzbek economy saw comparatively steady growth rates from 2015 to 2017. The gross domestic product increased by 5–7% annually on average throughout this time. The establishment of administrative price management by the state may have contributed to the real rate of inflation being frequently greater than the statistical indicators, even if the inflation rate was regulated between 8 and 12 percent. Official data at the time showed that the unemployment rate was between 5 and 6 percent [14]. That is, the stability of the nation's output volume was guaranteed by economic growth and comparatively low unemployment.

The phase of economic liberalization has been underway since the end of 2017. The progressive overhaul of the tax and customs system, along with the introduction of unrestricted convertibility of the national currency, caused the price level to rise sharply in 2018 and 2019. Inflation thus increased to 14–16 percent. This procedure slowed the growth rate of the gross domestic product, which had a somewhat detrimental effect on economic growth. A little increase in unemployment resulted from a decline in domestic demand brought on by the population's declining real earnings.

As with the rest of the globe, Uzbekistan's economy was severely impacted by the COVID-19 pandemic in 2020. During this time, the service sector virtually shut down, output volumes dropped, and foreign trade transactions dropped as a result of restrictions. Consequently, the GDP growth rate dropped to 1.6%. The unemployment rate was among the highest in the nation for the past ten years, at almost ten percent. The average inflation rate was 11%. The circumstances during this time period validated Okun's law's practical application, which states that a rise in unemployment causes a notable decline in GDP.

## 3. Results

Throughout 2021–2024, the Uzbek economy has been clearly on the road to recovery: Despite reaching between 11 and 12 percent in 2022, inflation steadied at approximately 9 percent in 2024, while GDP growth reached nearly 8 percent in 2021 but dropped to 5 to 6 percent in 2023 [15]. The unemployment rate dropped to around 5% in 2024 after reaching 10% in 2020 as a result of the epidemic, see Figure 1.



**Figure 1.** Comparison of inflation and unemployment rate.

Economic activity started to progressively improve in 2021–2023. Economic development resumed in the post-pandemic era, with GDP expanding by about 5–6% annually. The Central Bank’s monetary policy actions caused the inflation rate to stabilize at about 11–12 percent, despite the fact that it was still high [16]. The unemployment rate likewise steadily dropped throughout this time, stabilizing at about 5%. This was made possible in large part by the employment initiatives "Every Family is an Entrepreneur," "Youth is Our Future," and others.

Forecasts for 2024–2025 indicate that the inflation rate will be between 8 and 9 percent. This in turn suggests that the economy is progressively ensuring price stability. It is anticipated that the unemployment rate will be about 4.5 percent, a sign of the country’s growing labor market and job growth. GDP growth rates are anticipated to be between 5.5 and 6 percent at the same period, see Figure 2).



**Figure 2.** GDP growth rate of Uzbekistan.

Overall, the examination of the years 2015–2025 demonstrates that Uzbekistan’s economic growth has been significantly impacted by the dynamics of unemployment and

inflation. GDP growth rates have slowed during times of high inflation, and rising unemployment has reduced the capacity for output. In recent years, macroeconomic policy has been followed with the goals of lowering the unemployment rate, guaranteeing steady economic growth, and containing inflation [17]. The outcomes of these efforts are progressively improving.

As demonstrated by the case of Uzbekistan, unemployment and inflation have a substantial effect on GDP. High inflation has been associated with slower rates of economic development and lower production due to more unemployment.

The following is a mathematical expression for the link among GDP, inflation, and unemployment:

$$\Delta Y_t = \alpha - \beta U_t - \gamma \pi_t + \varepsilon_t$$

There:

- $\Delta Y_t$  – real GDP
- $U_t$  – unemployment growth
- $\pi_t$  – inflation growth
- $\alpha, \beta, \gamma$  – parameters
- $\varepsilon_t$  – error term.

Between 2015 and 2025, Uzbekistan's economy underwent substantial macroeconomic transformation. Three stages can be distinguished within this time frame:

*Stage 1: Sustainable growth (2015–2017)*

GDP growth: 7.5% on average

8–9% inflation

5–6% unemployment

The economy was primarily centered on exports and public investment throughout this time, and inflation was kept to a minimum.

*Stage 2 (2018–2020) [18]: Pandemic shocks and liberalization*

Prices rose sharply in 2018 as a result of the national currency's unrestricted exchange.

In 2018–2019, inflation increased to 14–16%.

Growth in GDP decreased to 5.5–6%.

The epidemic caused unemployment to reach 10% in 2020, despite GDP growing by just 1.6%.

*Stage 3 (2021–2025): Recovery and stabilization*

In 2021, GDP growth was 7.4%.

Inflation stabilized at around 11–12% in 2022–2023.

Unemployment fell to 5.2% in 2023.

According to the IMF forecast, GDP grew by 6.5% in 2024, while inflation fell to 9%.

Forecast for 2025: GDP growth of 5.7%, inflation of 8.5%, unemployment of 5%.

*According to scientific study:*

1. High inflation has a detrimental effect on GDP, but moderate inflation might spur economic growth.
2. Underutilization of economic resources results from increased unemployment, which also lowers output potential.
3. The experience of other nations demonstrates that a strict monetary policy, labor market changes, and a shift to an inventive economy are required to reduce unemployment and inflation.

4. Despite the fact that Uzbekistan's strategy papers and presidential decrees are intended to maintain macroeconomic stability, their efficient execution requires reinforcement.

#### 4. Discussion

Numerous theoretical and practical facets are highlighted by the examination of inflation and employment concerns in Uzbekistan's economic development. First, the Phillips curve (Phillips, 1958) explains why there is a short-term inverse relationship between unemployment and inflation in economic theory. But under Uzbekistan's circumstances, this link is drastically altered by international economic variables, governmental regulations, and labor market demographic shifts. For instance, during the pandemic in 2020, inflation was 11.1 percent, even though the unemployment rate was 10 percent (State Statistics Committee of the Republic of Uzbekistan, 2021). This scenario defies conventional wisdom and highlights how vulnerable the economy is to outside shocks.

Statistics show that between 2017 and 2024, unemployment decreased from 10% to 5% and inflation decreased from 16% to 9% (Central Bank). The GDP grew by 5–6% on average over this time. This suggests that economic growth is benefiting from initiatives meant to lower inflation and boost employment [19]. Price stability has been largely ensured by the inflation targeting strategy that has been in place since 2020 (IMF).

Uzbekistan continues to have a comparatively strong economy when compared to other countries. For instance, in wealthy nations, unemployment is controlled between 4 and 6 percent and inflation between 2 and 3 percent (OECD). The fact that Uzbekistan's GDP growth rates are greater than those of many Central Asian nations, however, suggests that the economy of the nation is undergoing change.

Scientific studies have also extensively examined how unemployment and inflation affect economic growth. According to Friedman, there is no long-term, consistent correlation between unemployment and inflation [20]. However, local academics stress that employment growth strategies are crucial to maintaining the population's well-being given Uzbekistan's circumstances (Karimov).

Therefore, Uzbekistan's experience demonstrates that steady control of unemployment and inflation is a crucial need for economic expansion. However, while developing economic policy, it is always vital to consider foreign economic concerns, global price swings, and migratory movements.

#### 5. Conclusion

The study provides a comprehensive analysis of the intricate relationship between inflation, unemployment, and economic growth in Uzbekistan, revealing that stable economic growth is significantly influenced by low unemployment and moderate inflation. The findings demonstrate that while inflation has a detrimental effect on GDP when it exceeds moderate levels, employment growth contributes positively to the economy by increasing output capacity. The research highlights the effectiveness of Uzbekistan's macroeconomic policies, particularly inflation targeting and labor market reforms, in achieving stability. However, it also underscores the vulnerability of the economy to external shocks, such as global price fluctuations and pandemics, which disrupt the expected patterns of inflation and unemployment. The study suggests that further research is needed to explore the long-term effects of informal sector employment on GDP and the impact of international economic conditions on domestic inflation and unemployment dynamics. Additionally, future studies should examine the role of structural reforms and innovation in maintaining sustainable economic growth amidst fluctuating global economic conditions.

---

**REFERENCES**

- [1] J. M. Keynes, *The General Theory of Employment, Interest and Money*, London: Macmillan, 1936.
- [2] M. Friedman, *A Monetary History of the United States*, Princeton University Press, 1963.
- [3] A. Okun, *Potential GNP: Its Measurement and Significance*, American Statistical Association, 1962.
- [4] A. W. Phillips, "The Relation Between Unemployment and the Rate of Change of Money Wage Rates in the United Kingdom," *Economica*, vol. 25, no. 100, pp. 283–299, 1958.
- [5] O. Blanchard and D. Johnson, *Macroeconomics*, Pearson, 2017.
- [6] International Monetary Fund (IMF), *World Economic Outlook Reports (2015–2024)*, Washington, D.C.: IMF, 2015–2024.
- [7] World Bank, *Global Economic Prospects Reports (2015–2024)*, Washington, D.C., 2015–2024.
- [8] M. Friedman, "The Role of Monetary Policy," *American Economic Review*, vol. 58, no. 1, pp. 1–17, 1968.
- [9] IMF, *Republic of Uzbekistan: Staff Report for the 2022 Article IV Consultation*, International Monetary Fund, 2022.
- [10] B. Karimov, *Inflation and Employment Problems in the Economy of Uzbekistan*, Tashkent: Economics Publishing, 2020.
- [11] Central Bank, *Monetary Policy Review*, Tashkent: Central Bank of the Republic of Uzbekistan, 2024.
- [12] OECD, *OECD Economic Outlook 2023*, Paris: OECD Publishing, 2023.
- [13] State Statistics Committee of the Republic of Uzbekistan, *Labor Market and Inflation Indicators*, Tashkent, 2021.
- [14] A. W. Phillips, "The Relation Between Unemployment and the Rate of Change of Money Wage Rates in the United Kingdom, 1861–1957," *Economica*, vol. 25, no. 100, pp. 283–299, 1958.
- [15] State Statistics Committee of the Republic of Uzbekistan. Available: <https://stat.uz>.
- [16] Central Bank of the Republic of Uzbekistan. Available: <https://cbu.uz>.
- [17] Decree of the President of the Republic of Uzbekistan, "On the transition of monetary policy to an inflation targeting regime," No. PF-5877, Nov. 18, 2019.
- [18] Resolution of the President of the Republic of Uzbekistan, *New Uzbekistan Development Strategy for 2022–2026*.
- [19] Sh. Tohirov, *Macroeconomic Theory*, Tashkent: Economics, 2020.
- [20] K. Abdurakhmonov, *Modern Trends in the Development of the Economy of Uzbekistan*, Tashkent, 2021.