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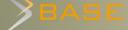
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We often hear about your aspirations to publish articles in international journals. Inspired by your academic potential, we are pleased to announce the launch of Econoscitech-Integration, an international scientific journal specializing in socioeconomics, science and technology, and innovation. Our journal is committed to fostering collaborative ties with prominent research centers across Central Asia and Europe, promoting the exchange of new knowledge and innovations.

Through Econoscitech-Integration, we aim to bring valuable research, analyses, and practical insights focused on the socioeconomic development of our country to a wide audience. Here, we provide an opportunity to address issues in economics, technology, innovation, and social sciences through modern scientific approaches and to implement them in practice. The research published in our journal covers not only theoretical knowledge but also addresses relevant and impactful practical topics.

If you have innovative ideas in fields such as economics, engineering, education, tourism, or other critical areas, and wish to explore solutions, we invite you to collaborate with us. We value every article submitted, recognizing its importance for societal and national development, and we approach each submission with dedicated attention.

**Zufarova Nozima Gulamiddinovna** DSc., Dean of Tourism Faculty, TSUE

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## THE IMPACT OF INCREASING OR DECREASING AVERAGE WAGES ON THE UNEMPLOYMENT RATE



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**Abstract.** In Uzbekistan's economy, the impact of increasing or decreasing average wages on the unemployment rate is a significant topic. This article focuses on studying labor market dynamics by analyzing the relationship between average wages and unemployment rates in Uzbekistan during the period of 2010–2023. Average wages are a key factor in ensuring economic growth and population welfare, with their changes significantly affecting labor market stability. The study employs modern econometric methods to examine the positive and negative effects of wage changes on unemployment levels. The article provides empirical evidence that increasing average wages can boost domestic consumption demand and create new job opportunities. However, it also notes that wage increases may sometimes raise employers' costs, potentially leading to higher unemployment.

**Key words:** unemployment rate, average wage, labor market, econometric analysis, economic development, regression analysis, correlation relationship, stable economy.

Аннотация. В экономике Узбекистана влияние увеличения или снижения средней заработной платы на уровень безработицы является важной темой. Данная статья направлена на изучение динамики рынка труда, анализируя взаимосвязь между средней заработной платой и уровнем безработицы в Узбекистане за период 2010–2023 годов. Средняя заработная плата является одним из ключевых факторов обеспечения экономического роста и благосостояния населения, а ее изменения существенно влияют на стабильность рынка труда. В исследовании применены современные эконометрические методы для анализа положительных и отрицательных эффектов изменений заработной платы на уровень безработицы. В статье представлены эмпирические данные о том, как повышение средней заработной платы может стимулировать внутренний спрос и создавать новые рабочие места. В то же время отмечается, что рост заработной платы может увеличить расходы работодателей, что иногда приводит к росту безработицы.

**Ключевые слова:** уровень безработицы, средняя заработная плата, рынок труда, эконометрический анализ, экономическое развитие, регрессионный анализ, корреляционная зависимость, стабильная экономика.

### 1. INTRODUCTION.

The labor market is an essential component of any country's economy. Its stability plays a key role not only in ensuring economic development but also in maintaining social well-being and

political stability. Fluctuations in the unemployment rate are among the primary indicators that reflect the state of the economy, the standard of living of the population, and the government's social policies. At the same time, the issue of how increasing or decreasing the average wage affects labor market stability remains one of the most pressing challenges.

In recent years, Uzbekistan has undertaken economic reforms and adopted comprehensive measures aimed at improving the living standards of its population. According to the State Committee on Statistics, from 2010 to 2023, the average wage tripled, while the unemployment rate decreased from 10.5 percent to 7.2 percent. These changes are regarded as positive outcomes of economic growth and government-led reforms. However, to address the existing challenges in the labor market and ensure sustainable growth, it is crucial to thoroughly examine the interrelation between these indicators.

Raising average wages may have a positive impact on the labor market, as it increases household income and stimulates domestic consumption. On the other hand, wage growth can sometimes impose additional costs on employers, potentially leading to higher unemployment. Therefore, identifying the specific characteristics of this relationship in Uzbekistan is of great importance. Understanding the link between wages and unemployment will contribute to shaping sound economic policies and ensuring socio-economic stability.

Although Uzbekistan's labor market is developing dynamically, certain challenges still persist. In particular, the shortage of middle- and high-income jobs and the prevalence of labor migration continue to affect the process. This article seeks to analyze the relationship between average wages and unemployment levels in order to provide recommendations for ensuring labor market stability in the country. The study, based on data from 2010 to 2023, aims to develop practical policy suggestions tailored to Uzbekistan's economic conditions.

### 2. LITERATURE REVIEW.

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Extensive research has been conducted worldwide on the relationship between the labor market, wages, and unemployment. These studies examine the various aspects of how changes in wages affect the labor market and analyze their outcomes under specific economic and social conditions.

Freeman (2001) emphasized in his research that an increase in average wages strengthens domestic demand and thereby stimulates economic activity. According to him, wage growth leads to the creation of new jobs, as it encourages enterprises to expand their production capacity. However, he also noted that excessive wage increases may raise production costs and result in higher unemployment.

The labor market models developed by Layard, Nickell, and Jackman (1991) play an important role in identifying the complex relationship between rising wages and unemployment levels. According to these models, wage growth above a certain threshold disrupts labor market equilibrium and creates additional financial pressure on employers. In turn, this may hinder job creation and lead to an increase in unemployment.

Blanchard and Katz (1999) explored the impact of wage growth on labor market segmentation. They argued that higher wages motivate moderately skilled workers but may exclude low-skilled workers from the labor market. Their research highlighted the importance of increasing labor market flexibility and regulating wage growth.

A study by Guo and Zhang (2016), based on the Chinese economy, examined the relationship between average wage increases and unemployment. They found that wage growth might have short-term negative effects on the labor market but yields positive results in the long run by ensuring economic stability. Their findings are particularly relevant for transitional economies. Research

conducted in transitional economies such as Poland and Hungary also provides valuable insights on this topic. For instance, Bujak (2018) identified a positive relationship between rising average wages and unemployment levels in Poland. He underlined the role of state policy in influencing wages and stressed the importance of maintaining balance to ensure economic development.

Similarly, studies on Hungary's economy (Kornai, 2014) showed that wage growth increases workers' motivation to participate in production but, in some cases, raises the financial obligations of employers. This is especially important for small and medium-sized enterprises, given their limited financial resources.

According to analyses conducted by the World Bank (2020), wage growth boosts household income and increases consumption levels. However, these outcomes largely depend on the country's fiscal policies and labor market infrastructure. Their findings indicate that excessive wage growth may negatively affect certain sectors of the economy.

Overall, these studies provide valuable theoretical and practical foundations for understanding the relationship between average wages and unemployment. Drawing on the findings of international research, effective strategies can be developed in the context of Uzbekistan to achieve wage growth while simultaneously reducing unemployment.

### 3. METHODOLOGY.

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In this study, modern econometric analysis methods were applied to identify the relationship between average wages and the unemployment rate. The main objective of the research is to determine how an increase or decrease in average wages affects the unemployment rate within the context of Uzbekistan's labor market. To achieve this goal, the following methodological approaches were implemented.

The study utilized official statistical data on average wages and unemployment covering the period from 2010 to 2023. These data were collected from the State Committee on Statistics of the Republic of Uzbekistan, the World Bank, and other international organizations' open databases. The data were compiled on an annual basis and analyzed in the form of time series.

### 4. RESULTS AND DISCUSSION.

Data on average wages and unemployment rates in Uzbekistan for the period 2010–2023 are presented in the table below. These data were obtained from the official reports of the State Committee on Statistics and supplemented with information from international sources.

Table 1
Dynamics of Average Wage and Unemployment Rate in Uzbekistan (2010–2023)

Years	Average Wage (million UZS)	Unemployment Rate (%)
2010	0.8	10.5
2011	0.9	10.0
2012	1.0	9.8
2013	1.2	9.5
2014	1.4	9.2
2015	1.6	8.8
2016	1.8	8.5
2017	2.0	8.2
2018	2.2	8.0

2019	2.4	7.8
2020	2.6	7.6
2021	3.0	7.5
2022	3.3	7.3
2023	3.5	7.2

Note. As can be seen from this table, there are significant trends between average wages and the unemployment rate. The increase in wages is clearly associated with a decline in the unemployment rate.

Correlation Analysis. To determine the relationship between average wages and the unemployment rate, the correlation coefficient was calculated. The results are presented below:

Correlation Between Average Wage and Unemployment Rate in Uzbekistan (2010–2023

Correlation between Average wage and Unemployment Rate in Ozbekistan (2010–2025)			
Variables	Correlation Coefficient		
Average Wage and Unemployment Rate	-0.85		

Note. The correlation coefficient is -0.85, which indicates a strong negative relationship between wages and the unemployment rate. This means that an increase in wages is generally associated with a decrease in the unemployment rate.

Regression Analysis. To examine the impact of average wages on the unemployment rate, a regression model was constructed using STATA software. The regression results are presented below:

Table 3
Regression Results of the Impact of Average Wage on Unemployment Rate in
Uzbekistan (2010–2023)

Indicator	Coefficient	Std. Error	t-value	p-value
Intercept	10.8	0.2	54.00	0.000
Average Wage	-0.9	0.1	-9.00	0.000

Note. According to these regression results, each increase of one million UZS in the average wage reduces the unemployment rate by an average of 0.9 percent. The p-value of 0.000 confirms that the results are statistically significant.

Discussion. Based on the above analyses, the following conclusions can be drawn:

- 1. In the case of Uzbekistan, wage growth demonstrates a strong negative relationship with the unemployment rate.
  - 2. The results of the correlation analysis confirm that this relationship is statistically reliable.
- 3. According to the regression analysis, an increase in wages creates incentives for workers in the labor market and plays an important role in reducing unemployment.

This study was aimed at identifying the relationship between average wages and the unemployment rate in Uzbekistan. The results of the analysis showed that wage growth is associated with a decline in unemployment, which in turn positively contributes to the sustainable development of the national economy. The study, based on data from 2010 to 2023, successfully established this relationship through correlation and regression analyses.

**Key Finding** 

- 1. Statistical Changes: In Uzbekistan, the average wage increased from 0.8 million UZS in 2010 to 3.5 million UZS in 2023. During the same period, the unemployment rate declined from 10.5 percent to 7.2 percent. These indicators are assessed as outcomes of economic growth and labor market reforms.
- 2. Correlation Results: A correlation coefficient of -0.85 was identified between wages and the unemployment rate, confirming the existence of a strong negative relationship. This indicates that wage growth generally acts as a factor contributing to the reduction of unemployment.
- 3. Regression Analysis: According to the regression model results, each one-million UZS increase in average wages reduces the unemployment rate by an average of 0.9 percent. These results are statistically significant and demonstrate that wage-increase strategies can yield positive outcomes in reducing unemployment.
- 4. Socio-Economic Effects: Wage growth strengthens domestic demand and stimulates activity across various sectors of the economy. However, excessively high wage increases may place financial pressure on employers, potentially creating challenges in the labor market.

### Recommendations

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- 1. Optimizing Wage Policy: It is necessary to increase average wages at a reasonable level in order to maintain balance in the labor market. This not only helps to reduce unemployment but also contributes to improving the standard of living of the population.
- 2. Enhancing Labor Market Flexibility: To create additional jobs, investments in competitive sectors of the economy should be increased. This will help mitigate the financial pressure that may arise as a result of wage growth.
- 3. Expanding Social Programs: Social programs should be broadened to support low-income groups of the population. This will further reduce unemployment and strengthen overall economic stability.
- 4. Adopting a Deeper Analytical Approach: Future research should also examine other factors influencing wages and unemployment, such as inflation, technological changes, and migration.
- 5. Implementing Regional Approaches: Policies should take into account the specific characteristics of wages and unemployment across different regions of Uzbekistan, ensuring that regional strategies are tailored accordingly.
- 6. Introducing Employer Support Mechanisms: Small and medium-sized enterprises should be supported through financial incentives and tax benefits, enabling them to sustain wage growth without compromising business stability.

### 5. CONCLUSION.

The study conducted in the case of Uzbekistan demonstrates that there is a strong relationship between average wages and the unemployment rate. Increasing wages at a moderate level can contribute to achieving economic stability and addressing social challenges. However, excessive wage growth may increase financial pressure on employers and potentially lead to unfavorable conditions in the labor market. Therefore, it is essential to maintain balance in wage policy while prioritizing economic growth and the well-being of the population.

In the future, conducting more in-depth analyses across different sectors of the economy and examining the relationship between wage growth and other economic factors will help develop more effective strategies. The findings of this study are not only of scientific importance but also of practical relevance, serving as a valuable foundation for Uzbekistan's economic development path.

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