



UNEMPLOYMENT: THEORETICAL FOUNDATIONS, MEASUREMENT, AND ECONOMIC IMPACT

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ABSTRACT

This article provides a comprehensive overview of the concept of unemployment, the theoretical foundations of the unemployment rate, and practical methods for its measurement. Unemployment is defined as the state where the economically active population is unable to utilize their skills and labor. The main forms of unemployment (frictional, structural, cyclical, seasonal, and hidden) and their causes are examined. Furthermore, the article explains the unemployment rate and its various measurement criteria, which are widely used in assessing the labor market. In the context of Uzbekistan, based on legal-normative organizations, reports from the Bureau of Labor Statistics, and recommendations from international organizations, political and economic instruments are recommended to ensure labor market stability. Through its practical section, the article analyzes youth unemployment, seasonal work, skill matching, and the impact of economic policy on unemployment. The research methodology indicates the use of theoretical concepts, official statistics, and case studies.

Introduction

The unemployment rate is a key indicator of labor market activity, representing the percentage of the labor force that is unemployed but actively seeking work. This indicator is widely used to describe the state of the labor market.

In Uzbekistan, the concept and level of unemployment are defined within the framework of the Constitution and relevant laws. Specifically, the concept of unemployment is articulated within the norms governing labor relations. The "Law on Employment of the Population," for instance, regulates the relationships between job seekers and employers.

Official definitions classify unemployment as the state of the economically active population that is unable to find suitable work or utilize their skills. The causes of unemployment vary and include factors such as a decrease in labor demand, increased labor productivity due to technological advancements, or a mismatch in the skills market.

Labor market monitoring is conducted by the Bureau of Labor Statistics, which calculates the unemployment rate using various methods. The most common statistical

indicator is U-3, which represents the general unemployment rate, while broader criteria like U-6 are also used to provide a more comprehensive view of labor market distress from a disadvantage perspective. The unemployment rate can show significant variations due to economic growth or decline, shifts in the industrial sector's weight, or notable changes among youth or inexperienced workers.

Okun's Law: Developed by economist Arthur Okun, this macroeconomic law describes the relationship between the unemployment rate and economic growth. According to this law, for every 1% increase in the unemployment rate above its natural rate, a country's Gross Domestic Product (GDP) decreases by approximately 2.5-3%. Conversely, if the GDP volume grows by 3%, the unemployment rate decreases by 1%.

The Theory of Natural Unemployment: This theory explains the level of unemployment that persistently exists in a healthy labor market. According to this theory, the natural rate of unemployment is the sum of frictional unemployment (temporary unemployment due to transitions between jobs or relocation) and structural unemployment (caused by a mismatch in skills or changes in the production structure). When the natural rate of unemployment is present, an equilibrium is reached where the number of job seekers equals the number of job vacancies.

A certain level of natural unemployment is considered economically acceptable because it allows time for individuals to find new jobs or learn new professions. Therefore, if the actual unemployment rate is higher than the natural rate, the economy fails to reach its potential production level.

Economic Consequences of Unemployment

High unemployment has numerous negative economic consequences. When the unemployment rate is high, the country's GDP falls short of its economic potential. This gap is explained by Okun's Law: if the unemployment rate rises 1% above the natural rate, a 2.5% decrease in GDP volume is observed. Thus, unemployment slows or reduces economic growth, causing the national economy to decline instead of develop.

Furthermore, unemployment creates many socio-economic problems: it leads to a decrease in the population's net income, an increase in poverty levels, and reduced social activity, all of which impact people's standard of living. The unemployed may face a loss of skills, a decline in social status, and psychological stress. This, in turn, leads to social instability and other problems, hindering the country's sustainable development.

Measuring the Unemployment Rate. The unemployment rate is one of the most important economic indicators that quantifies the amount of unemployment in an economy.

1. The Formula for the Unemployment Rate. The unemployment rate is calculated using the following formula:

$$\text{Unemployment Rate (\%)} = (\text{Number of Unemployed} / \text{Total Labor Force}) \times 100\%$$

Where:

- **Number of Unemployed:** As defined above, this is the number of able-bodied individuals who are actively seeking work.

- **Labor Force:** This is the sum of the employed (employed persons) and the unemployed.

$$\text{Labor Force} = \text{Number of Employed} + \text{Number of Unemployed}$$

Example: If a country has a labor force of 50 million people, and 3 million of them are unemployed, the unemployment rate would be: $\text{Unemployment Rate} = (3 \text{ million} / 50 \text{ million}) \times 100\% = 6\%$

2. Data Collection Methods. The following methods are used to obtain data on unemployment:

- **Population Census:** A general count conducted at a specific time (usually every 10 years). This method is the most accurate but is also very expensive and time-consuming, so it is not used frequently.

- **Sample Surveys:** The most common method. Statistical agencies conduct surveys of randomly selected households across the country, collecting information about the employment status and job-seeking activity of their members. In Uzbekistan, this work is primarily carried out by the Ministry of Employment and Labor Relations of the Republic of Uzbekistan and the State Statistics Committee.

3. Limitations in Measuring Unemployment. The unemployment rate does not always fully reflect the actual situation. There are several reasons for this:

- **Illegal Employment (Informal Sector):** Individuals engaged in unregistered, "under-the-table" work are not included in official statistics. This is a significant issue, especially for developing countries.

- **Discouraged Workers:** Individuals who have stopped looking for work are not officially counted as unemployed, even though they are able and willing to work. This leads to an understatement of the true unemployment rate.

- **Part-time Employment (Underemployment):** Individuals seeking full-time work but who have only found part-time jobs are recorded as "employed" in statistics. This indicates that their true labor potential is not being fully utilized.

This statistical data illustrates the concepts discussed in the previous article—such as types of unemployment, measurement methods, and their economic impact—with practical examples relevant to the context of Uzbekistan.

1. Overall Unemployment Rate in Uzbekistan (According to World Bank Data)

The following table shows the dynamics of the official unemployment rate in Uzbekistan in recent years.

Year	Unemployment Rate (%)	Commentary
2018	9.1%	Beginning of economic reforms, active labor market policy
2019	9.0%	Stability, programs for creating new jobs
2020	9.4%	Negative impact of the COVID-19 pandemic (global trend)
2021	8.8%	Economic recovery, easing of restrictions
2022	8.2%	Acceleration of economic growth, development of small business and the private sector

Year	Unemployment Rate (%)	Commentary
2023	7.8%	According to data from the Ministry of Employment and Labor Relations of the Republic of Uzbekistan, the unemployment rate was 7.8%.

Source: The World Bank, Ministry of Employment and Labor Relations of the Republic of Uzbekistan.

Analysis: As can be seen from the table, the official unemployment rate in Uzbekistan has shown a steady downward trend over the past few years. In 2020, a slight increase in the unemployment rate was observed due to the global economic slowdown caused by the pandemic. Starting from 2021, the rate began to decline again as a result of economic recovery and an active employment policy.

2. The Relationship Between Unemployment and GDP Growth (An Example of Okun's Law)

This table demonstrates the inverse relationship between the change in the unemployment rate and the real Gross Domestic Product (GDP) growth rate (Okun's Law).

Year	Real GDP Growth Rate (%)	Change in Unemployment Rate
2019	5.7%	-0.1%
2020	1.9%	+0.4%
2021	7.4%	-0.6%
2022	5.7%	-0.6%

Source: The World Bank.

Analysis: 2020: As the GDP growth rate sharply slowed to 1.9%, the unemployment rate increased (+0.4%). This confirms the validity of Okun's Law. **2021:** As the economy recovered and GDP growth reached 7.4%, the unemployment rate decreased significantly (-0.6%). This highlights the role of high economic growth in creating new jobs.

3. Youth Unemployment (Ages 15-24)

Youth unemployment is a significant problem for many countries, and Uzbekistan is no exception. This rate is consistently higher than the overall unemployment rate.

Indicator	Value (2022, estimate)
Overall Unemployment Rate	8.2%
Youth Unemployment Rate (Ages 15-24)	16.5%

Source: Calculated based on data from the International Labour Organization (ILO).

Analysis: The unemployment rate among youth is nearly **twice as high** as the overall rate. **Causes:** Lack of experience, a mismatch between skills and market demands (structural unemployment), and difficulties in finding a first job (frictional unemployment).

4. Unemployment Rate by Region of the Republic of Uzbekistan (2023)

Due to uneven economic development within the country, the unemployment rate varies by region.

Region	Unemployment Rate (%)
Republic of Karakalpakstan	10.5%
Syrdarya Region	9.8%
Jizzakh Region	9.2%
Andijan Region	8.9%
Fergana Region	8.5%
Samarkand Region	8.0%
National Average	7.8%
Tashkent City	6.2%

Source: Ministry of Employment and Labor Relations of the Republic of Uzbekistan (approximate data).

Analysis: Lowest Unemployment: Observed in Tashkent City, due to high economic activity, a large number of enterprises and organizations, and its role as the country's economic hub. **Highest Unemployment:** Observed in the Republic of Karakalpakstan and Syrdarya Region. Factors include lower economic potential, fewer industrial enterprises, and a high dependence on agriculture. This is a clear example of **structural unemployment**.

5. Labor Force Composition (Structure of Employment)

The distribution of the population across economic sectors reflects the structure and development level of the economy.

Share of Employed Population by Sector (2022)
Services Sector - 45%
Agriculture Sector - 28%
Industry Sector - 27%

Source: The State Statistics Committee of the Republic of Uzbekistan.

Analysis: The **Services sector** (trade, transport, education, tourism) is the largest sector, indicating that the country's economy is transitioning towards a service-based economy. A significant portion of the population is still employed in **Agriculture**, which

highlights the need to increase the efficiency of this sector and redirect surplus labor resources to other areas. As the **Industry** sector's share grows, the introduction of automation and technological advancements in both industry and agriculture could create a risk of **structural unemployment**. This, in turn, underscores the need to upskill and reskill the workforce.

Conclusion. Unemployment is an integral part of any economy and is a key indicator that reflects the state of the labor market, the level of economic stability, and the well-being of the population. The existence of unemployment signifies an underutilization of economic resources and directly affects the country's GDP. Therefore, understanding the causes and types of unemployment and developing effective policy measures to combat it are priorities for economic policy. By determining the unemployment rate, assessing its natural level, and studying labor market trends, it is possible to foster economic growth, expand employment, and strengthen the social protection of the population.

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