



STATISTICAL ANALYSIS OF ECONOMIC STATE OF POPULATION EMPLOYMENT AND CHANGES IN IT

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Abstract

In order to further improve the field of statistics in Uzbekistan, it is necessary to form a system that comprehensively reflects the state and development of the country's economy at the macro, meso and micro levels of employment by types of economic activity, combines statistical indicators obtained from various sources into meaningfully coherent groups, increases the reliability and validity of their intercomparison, and makes decisions on the development of regions based on the data of this system.

Keywords: New Uzbekistan, National Statistical System, improvement, labor, employment, population welfare, standard of living, poverty, economy.

Introduction

Successful management of employment at the national and regional levels requires the development of statistical criteria that allow revealing the quantitative patterns of labor market indicators. Their use in making informed decisions on employment issues by type of economic activity and by region will serve to increase the efficiency of labor market activity. Based on the above, it is urgent to conduct a comprehensive statistical analysis of population employment at all levels by type of economic activity and to develop a system of indicators for the distribution of the number of employed people in regions (districts and cities), to create econometric models, and to determine promising directions.

In the global economy, population employment is closely related to economic development and sustainable development, and the assessment of the extent to which economic growth satisfies the need to increase the number of jobs and increase labor productivity is the subject of analysis of economic development from



the point of view of employment. World experience shows that the employment rate is 64.7% in the People's Republic of China, 64.1% in Switzerland, 61.9% in Australia, 61.0% in South Korea and Canada, 60.2% in Great Britain, 60.0% in Japan. Also, the unemployment rate is 3.0% in Japan, 4.1% in South Korea, 4.3% in Germany, 4.3% in Great Britain, and 5.7% in the Russian Federation.¹

In recent years, in our country, strengthening social protection of citizens and reducing poverty have been identified as a priority direction of state policy in terms of reforming the national economy, and providing the population with new jobs and a guaranteed source of income, qualified medical and educational services, and decent living conditions have reached a qualitatively new level. As a result of the reforms carried out over the past five years, the necessary political, legal, socio-economic, and scientific and educational foundations for building a New Uzbekistan have been created in our country. “With a deep analysis of the complex processes in the world and the results of the development our country has undergone, in recent years, priority directions of reforms have been identified aimed at further increasing the well-being of our people, transforming economic sectors and rapidly developing entrepreneurship, unconditionally ensuring human rights and interests, and forming an active civil society.

Decrees of the President of the Republic of Uzbekistan dated January 28, 2022 “On the Development Strategy of New Uzbekistan for 2022-2026” No. PF-60 and “On measures to further improve state policy in the field of employment and radically increase the efficiency of labor bodies” No. PF-5052 dated May 24, 2017, Decree of the President of the Republic of Uzbekistan dated December 21, 2022 No. PF-269 of the Ministry of Employment and Labor Relations of the Republic of Uzbekistan Decrees of the Ministry of Poverty Reduction and Employment of the Republic of Uzbekistan, “On measures to reduce the share of informal employment and form the balance of labor resources based on modern approaches” No. PP-366 dated August 3, 2020 “On measures to further improve and develop the national statistical system of the Republic of Uzbekistan” Resolutions No. PP-4796 and No. PP-3856 of July 14, 2017 “On measures to improve and increase the efficiency of work to ensure employment of the population”, Resolution No. 1011 of the Cabinet of Ministers of the Republic of Uzbekistan of December 22, 2017 “On determining the number of people in need of employment, including conducting surveys on

¹ <https://nonews.co/directory/lists/countries/unemployment>.



household employment issues, as well as improving the methodology for forming a balance of labor resources, employment and employment of the population” and other regulatory legal acts related to this area serve to a certain extent in implementing the tasks set forth in them.

Literature Review

A number of scientific research works have been carried out in foreign countries regarding the essence of population employment, employment models, the influence of factors on employment, improvement of employment indicators and its modeling based on statistical and econometric research. In particular, the scientific works of foreign scientists such as E. Toffler, O. Williamson, R. Dornbush, S. Fisher, G. Menkiw are of special importance.

Theoretical aspects of regulation and management of employment processes in the labor market of the Commonwealth of Independent States (CIS) M.B. Genkin, A. Ya. Kibanov, V. A. Weisburd, E. G. Julina, A. I. Rofe, Yu. D. Odegov, L. A. Kostin, S. A. Aronova, K. V. Zaitseva, I. Chernyshev, It was thoroughly studied by scientists such as A.V. Tsygankova, S.G. Rezinkina.

Development of the labor market in our country, provision of effective employment of the population, characteristics and forms of employment and types, employment models, the influence of factors on employment indicators, issues of modeling employment processes by scientists of our country such as S.S. Ghulomov, K.Kh. Abdurakhmonov, B.A. Begalov, T.Sh. Shodiev, B.K. Goyibnazarov, M.M. Mirzakarimova, H.T. Mukhitdinov, M.A. Umarova, D.B. Bakhramova, Kh.N. Shadmanov reflected in his studies.

Research Methodology

The article used scientific observation, a systematic approach, and research methods such as induction and deduction. Based on the analysis of existing methods and approaches in the world, the development of the regional labor market was econometrically assessed, and a forecast of the dynamics of future changes in labor resources in the Tashkent region was made, and proposals and recommendations were developed on the problems and shortcomings in its development.

Analysis and Results

The introduction of the IFUT-2 classifier in our country made it possible to assess the current inter-sectoral relations, as well as to determine the scale of new types of economic activity that have recently appeared on the market, but are actively developing. The main difference between the XXTYT and IFUT-2 classifiers lies in their names, while the XXTYT system aggregates enterprises producing similar products, while IFUT-2 takes the type of economic activity as the object of classification, that is, a certain enterprise can be engaged in different types of activity at the same time, which corresponds to reality.

Today, data on employment and its structure by types of economic activity in our country are collected from several sources that differ significantly in purpose, scope, reporting period and deadlines. Each source of information has its own advantages and disadvantages and is aimed at compiling certain indicators that broadly reflect the participation of the population in the labor process (Figure 1).

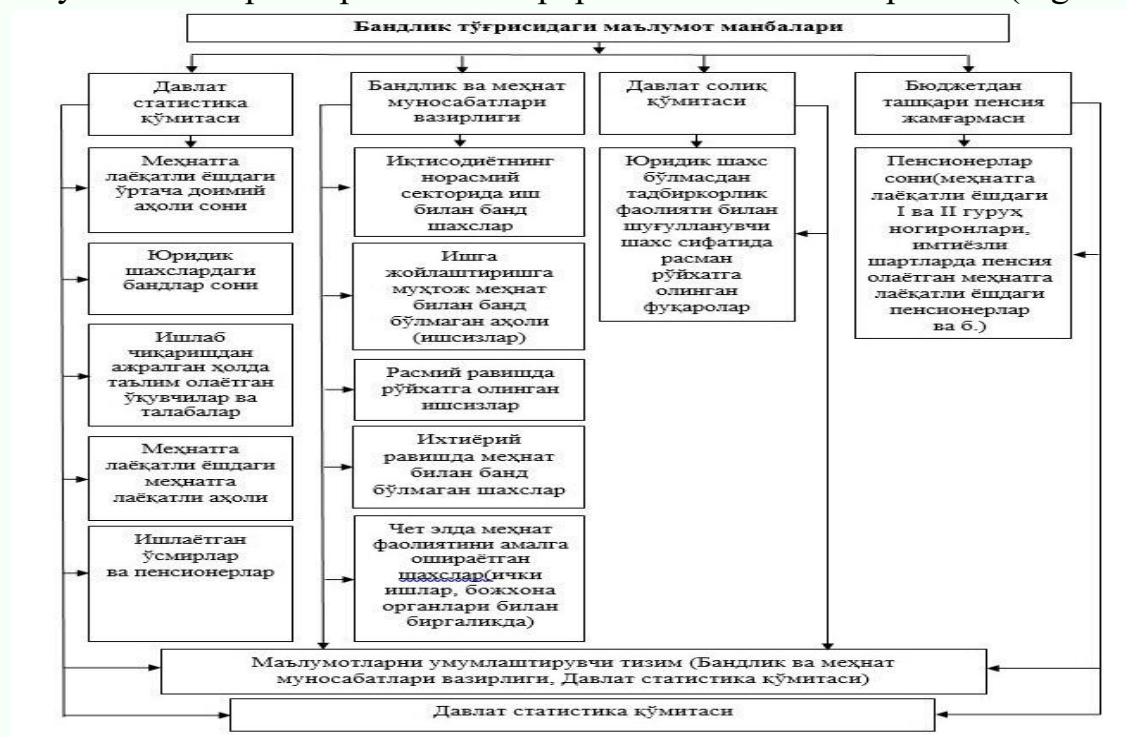


Figure 1. Information about employment and its structure primary sources²

² Z.T. Yuldoshev. Abstract of the dissertation written for the degree of Doctor of Philosophy (PhD) in Economics on the topic of statistical research of population employment in the Republic of Uzbekistan. Tashkent, 2022. -56 pages.

One of the main sources of information on population employment is the study of organizations - legal entities. The system of indicators is provided by the state statistical offices' monitoring of organizations. It is formed monthly for organizations that are not included in small business entities, and every three months through selective monitoring of small enterprises. It should be noted that data on each group of enterprises are compiled regardless of the type of activity, region of the country and their size. The advantages of this information source include: sufficiently accurate classification of the employed population by type of economic activity; the correspondence of the reporting period for which organizations are studied to the reporting period for indicators of production activity assessment. However, this data source does not allow taking into account the category of employees of formal sector enterprises and organizations with which labor relations are not formalized, those engaged in entrepreneurial activities without registering as legal entities, as well as employees of individual entrepreneurs and citizens employed in households.

The analysis of the stability of employment changes in the cross-section of types of activity is carried out in two directions: first, fluctuations in the number of employed people are assessed relative to the trend line; second, the stability of these trends is studied.

When assessing the degree of fluctuation of dynamic series ($I_{\bar{y}}$) characterizing employment in the cross-section of types of economic activity, the stability coefficient is used, which is calculated based on the average value of the indicators of favorable periods of time (\bar{y}_{comf}) relative to unfavorable periods (\bar{y}_{uncomf}):

$$I_{\bar{y}} = \bar{y}_{comf} / \bar{y}_{uncomf} \quad (1.1)$$

The situations above the linear trend in the case of population approximation were considered favorable moments of time (\bar{y}_{comf}), and those below the trend were considered unfavorable moments (\bar{y}_{uncomf}).

The scale of values of this coefficient is used to analyze the degree of oscillation of time series³:

$$\begin{aligned} I_{\bar{y}} < 1,1 & - \text{high stability;} \\ 1,1 \leq I_{\bar{y}} < 1,2 & - \text{moderate stability;} \end{aligned}$$

³ Botasheva L.S. Otsenka ustoichivosti razvitiya otrasley regiona / L.S. Botasheva // Audit and financial analysis. - 2009. - #1. - S. 1-4.

$I_y \geq 1,2$ – poor stability.

Within the framework of the relative growth model, the dynamics of the average number of people employed in economic activities was compared with the dynamics of the country's economic indicators. For this purpose, the Spearman coefficient was modified⁴:

$$r = 1 - \frac{b \sum (d_w - d_c)^2}{n} \quad (1.2)$$

where, d_w is the annual average dynamic level of employment in the national economy;

d_c – annual average dynamic level of those employed in a particular type of activity;

n – number of periods.

Changes in the mass value of structural displacements are calculated using the following formula⁵:

$$M_{t,j} = D_{t,j} - D_{n,j} \quad (1.3)$$

where, $D_{t,j}$ is the number of items in the j th type of economic activity in the t th year (%);

$D_{n,j}$ – the number of items in the j th type of economic activity in the n th year (%).

Analysis of existing traditions in the dynamics of the employment structure of the population shows that the population prefers those areas of economic activity that have invested a large amount of money, ensure the competitiveness of their products and services in domestic and foreign markets, and, of course, pay high wages to their employees. The location of enterprises and organizations by region satisfies the desire of the population to be engaged in social production. The lack of work that matches their specialization, qualifications and interests often leads to a long-term exit of the population from the labor force.

⁴ Mkhitarian V.S. Statisticheskoe issledovanie razvitiya ekonomiki regiona / S. Mkhitarian, O. A. Khokhlova // Voprosy statistiki. - 2008. - #8. - S. 53-59.

⁵ Divilov S.I. Chislennost i struktura zanyatyx v narodnom hozyaystve: (metodika perspektivnyx raschetov) // S.I. Divilov - M.: Ekonomika, 1976.112 p.

Currently, the results of the reforms being carried out in all areas of our country are also reflected in official statistical data. In particular, the easing of the tax burden on the population and entrepreneurs is reflected in the transition of informally operating persons to official activities, which is also reflected in the increasing number of jobs in the formal sector.

The distribution of the number of employed people in our country by formal and informal sectors can be seen from the data presented below (Figure 2).

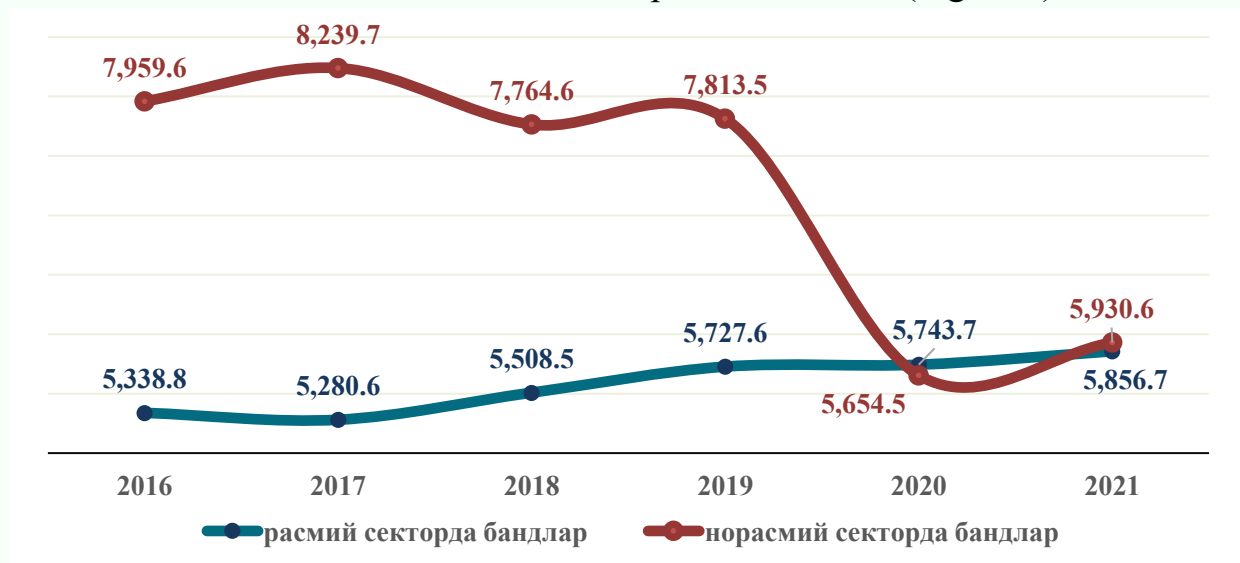


Figure 2. Distribution of the employed population in the Republic of Uzbekistan by formal and informal sectors, in % ⁶

From the above data, it can be seen that the share of people employed in the informal sector in our country was 59.9% (7,959.6 thousand people) in 2016, while by 2021 this figure will have decreased significantly to 50.3% (5,930.6 thousand people).

In order to ensure social protection for citizens engaged in informal activities in our country, the direction of self-employment was introduced in order to support their official activities. As a result of our scientific research, we made proposals to consider as officially employed persons who are officially registered with tax authorities as self-employed and who have paid social contributions. As a result,

⁶ Ўзбекистон Республикаси Давлат статистика қўмитаси маълумотлари асосида муаллиф томонидан тайёрланди.



the existing methodology for calculating the balance of labor resources has been improved.

In the organization of new forms of economic management, there have been significant quantitative and qualitative changes in the dynamics of employment of the population in sectors and areas of the economy. It is worth noting that the following trends were observed as a result of these changes:

firstly, due to the sharp reduction of state-owned objects, there was a legal redistribution of jobs and employees by form of ownership;

secondly, there was a steady and increasing redistribution of the labor force from tangible production sectors to non-productive sectors. Suffice it to say that the number of legal entities in intangible production sectors exceeds those in industry and agriculture combined;

thirdly, due to market changes, the decrease in production rates and the shutdown of a large number of capacities have led to a breakdown in the balance between the number of available jobs and the number of employees corresponding to their profession, experience and qualification level.

Conclusion and Results

1. The number of people employed in the formal sector of the economy is determined based on statistical reports, tax records of state social insurance premium payers, and departmental data of the Ministry of Poverty Reduction and Employment of the Republic of Uzbekistan.

2. In the process of organizing new forms of economic management, there have been significant quantitative and qualitative changes in the employment of the population in various sectors and areas of the economy. It is worth noting that as a result of these changes, the following trends have been observed:

- legal redistribution of employees by form of ownership due to a sharp reduction in state-owned objects;

- a steady and increasing redistribution of the labor force from tangible production sectors to non-production sectors has taken place. Suffice it to say that the number of legal entities in intangible production sectors exceeds those in industry and agriculture combined;

- due to the slowdown in production rates and the shutdown of a large number of capacities under the influence of market changes, the balance between the number



of available jobs and the number of employees corresponding to their profession, experience and qualifications has been disrupted.

3. The process of mismatch in the professional and qualification system of the workforce, discrimination against citizens seeking work persists, and the quality of the workforce has also deteriorated. The practically unequal opportunities for assistance in finding a job, as well as significant differences in the situation in the labor market, have led to significant differences in the social tension in the labor market between regions, cities and districts.

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