THEORETICAL-METHODOLOGICAL FOUNDATIONS OF THE STATISTICAL STUDY OF DEMOGRAPHIC PROCESSES OF THE POPULATION

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ABSTRACT

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The article analyzes the concept of employment of the population as an economic category. The models of regulation of employment and labor market in industrialized countries are studied. The possibilities of using the experience of these states to reduce unemployment in the country and increase the socially necessary employment of the population are highlighted. Thus, the article analyzes by statistical methods the improvement of the labor market in the Republic of Uzbekistan in the conditions of economic stabilization, the provision of employment based on the actual supply and demand for labor and the factors affecting it. At the same time, the article presents scientific proposals and recommendations based on the results obtained, analyzing the system of population growth dynamics and indicators affecting it using various methods of statistical analysis, such as statistical tables and graphs, induction and deduction, statistical grouping, expert evaluation, scientific abstraction, analysis and synthesis, dynamic series and economic indexes.

KEY WORDS: *macroeconomics, demographic studies, demographic changes, statistical studies, the system of national accounts, retrospective studies, natural growth, GDP per capita, GNP, income and expenditure of the population*

INTRODUCTION

During the years of independence, great work was done to increase the employment and income of the population. Our state and government have to perform complex tasks related to increasing the per capita income of the population due to the large demographic tasks that are emerging.

Today, it is impossible to plan the country's budget without taking into account the number of the country's population and other demographic processes. One of the important elements of increasing employment is the statistical study of demographic processes.

Population development is a complex socio-economic and demographic process that describes the dynamics of the country's population and its main sources, changes in natural population growth, dynamics of urbanization and migration, national and social structure, and the employment of its labor resources.

In the years of independence, a new demographic situation has arisen in Uzbekistan, which differs in many features from the period of the former union. This was achieved as a result of successful structural changes in the economy, stable high growth rates.

Information on labor resources, employment and unemployment statistics is necessary for the state to develop a strategy for the development of population employment and the labor market and to determine its perspective. Also, in order to solve the issues of compatibility of the labor force with required (educational and qualification) characteristics for potential investors in the regions of the republic or enterprises , to form the professional structure of training specialists who meet the market requirements

in qualified educational institutions, to develop a personnel policy for enterprises, from the workforce Demographic information is necessary for the search and analysis of reserves (reserves) for improvement of use, as well as for quick and effective finding of a new job for individuals, rational implementation and organization of self-retraining and upskilling.

Today, the problem of ensuring the employment of the population is one of the most important macro-economic features of the socio-economic development of the society and is of special importance in the economy.

In the development strategy of New Uzbekistan for 202-2026 [1] the activities of district (city) mayor's assistants and youth leaders on the issues of entrepreneurship development, employment provision and poverty reduction, which were introduced as a new institution in the neighborhoods, were defined. In particular, within the framework of the "State program on creation of new jobs and assistance to the employment of the population" it is determined to place citizens who have returned from abroad to work, retrain them through vocational training, and involve them in entrepreneurial activities.

The urgency of researching the problems of ensuring employment of the population in the process of structural changes in the economy requires, first of all, researching the evolutionary views and conceptual approaches of this concept. The content of socio-economic relations of this concept is expressed through various district forms

ANALYSIS OF LITERATURE ON THE SUBJECT

Within the scope of the topic, S.Altorjai on labor force migration, the conditions that should be created for them (rights to live and work) and the effect of short, medium and long-term contracts, length of service, staff turnover on production [2] can be seen in a study by KX Abdurakhmanov researched the fact that the most important criterion of the quality of the labor market is the level of development of its infra-structure, the socio-economic nature of the labor market infrastructure, the elements of its components, the main tasks and functions. Academician KX Abdurahmanov defines that "Employment is the activity of citizens that is related to meeting their personal and social needs, which does not contradict the laws, and which brings them wages and income" [3].

The main directions of formation and development of employment services Sh.R. Kholmo'minov, NU It is reflected in the studies of Arabov [4].

According to AO'lmasov and A.Vahobov, one of our economists, "Employment is the employment of people who have the ability to work and have the desire to work, and engage in useful work" [5].

AG Gryaznov calls employment a set of economic relations related to employment and participation in economic activities. According to him, employment describes the economically active population concerned with the production of material factors. In employment, the main productive and consuming forces of the society are manifested. Because the relationship to the objective conditions of production in it serves as a means of obtaining funds for the living of workers, which are considered to be the conditions of reproduction of the total population [6].

According to the definition of VA Pivlenkov, population employment is citizens who have reached the legal age and are currently engaged in activities that bring income in the form of material or money [7]. A different definition is given by ERSarukhanov. Employment is a socio-economic relationship in which employees participate, that is, they perform human activities in the production and improvement of material goods [8]. LA . Based on Kostin's opinion, employment is a universal economic category characteristic of all economic formations. Employment is a social relationship of workers in mutual cooperation [9].

Population employment - as a complex socio-economic phenomenon that occurs as an important component of social production, as a social relationship that provides the population with a place of work and at the same time with the necessary funds for a person's life, ensures the formation of the main productive forces of society. [10].

Here, the need used by the author is a tool, work is not the only goal of a person, but it is understood that he needs things to live comfortably. Man works hard to get the blessings he needs.

In the 16th century (1530-1596), the French political writer J. Boden also developed demographic knowledge somewhat. In 1577, J. Boden's work entitled "Six Books of the Republic" was published in England, and in its separate chapter, it was noted that it is necessary for any country to regularly calculate the statistics of the population and its income. Italian political writer D. Botero, a contemporary of J. Boden, also pays special attention to population statistics in his works. He is one of the first scientists to think about population movement. Although D. Botero lived and conducted research in the 16th century, his work is highly appreciated by Russian scientists in the 20th century. They recognized D. Botero as the founders of population theory. D. Botero emphasizes the nature of rapid population growth and points to various efforts to stop it, famine, epidemics and wars as a factor [11].

In the 18th and 19th centuries, studies were conducted in France on the statistical study of the population. The processes of population regeneration were also studied in these studies. "Elements of human statistics or comparative demography" by A. Guiyar in Paris in 1855, and "Statistics of the character of the French population" [12] written by Jean Bertillon in 1881 are dedicated to the statistical study of the population.

In addition to "Statistical journal" on population studies, other scientific works can be shown. For example, the results of statistical research on the population of Russia are given in the scientific work of KF German called "On population studies". In his work, the author provides a lot of information and tables, in particular, the table on the death rate of the population is used for the first time in Russia. In 1811, the statistical court of the ministry was established in Russia [11].

Researchers distinguish several models of employment promotion policies in industrialized countries based on the interrelationship between economic growth, employment and labor productivity. In particular, researchers have identified five types of employment and labor market regulation: the American model (USA), the Scandinavian model (Sweden, Finland, Denmark, Norway), the Anglo-Saxon model (Great Britain, Canada, Ireland), the continental or German model (Germany, Austria , Belgium, the Netherlands, Switzerland, partly France) and Japanese models. But some researchers group countries differently, for example, instead of dividing the American model into parts, they add it to the Anglo-Saxon model [13].

RESEARCH METHODOLOGY

The research methodology is based on the results of the scientific work of our country and foreign scientists on the theory of employment of the population, as well as the decrees and decisions of the President of the Republic of Uzbekistan on the provision of employment of the population and improvement of living conditions. At the same time, studying the specific features of the models of employment provision in developed foreign countries can be a great motivation to implement their useful aspects in the policy of employment provision in Uzbekistan. From this point of view, the methodological aspect of this study is to justify ways of implementing innovative development ideas in our country.

ANALYSIS AND RESULTS

Demographic processes are very contradictory and are influenced by many factors: socio-economic, political, national, natural, etc. . These processes are based on the socio-economic situation in the country. It should be noted that all demographic processes affect the employment of the population to one degree or another.

Uzbekistan as of January 1, 2018 is 32 656.7 thousand people, 12 compared to 1991 049 thousand people, i.e. increased by 58.5% (Table 1).

Table 1 [1]

Dynamics of permanent population in Uzbekistan, thousand people

Years _	Total population		City population		The population of the village	
	a thousand people	Growth compared to 2001, %	a thousand people	Growth compared to 2001, %	a thousand people	Growth compared to 2001, %
2001	24813.1	100.0	9225.3	100.0	15587.8	100.0
2002	25115.8	101.2	9286.9	100.7	15828.9	101.5
2003	25427.9	102.5	9340.7	101.3	16087.2	103.2
2004	25707.4	103.6	9381.3	101.7	16326.1	104.7
2005	26021.3	104.9	9441.9	102.3	16579.4	106.4
2006	26312.7	106.0	9495.1	102.9	16817.6	107.9
2007	26663.8	107.5	9584.6	103.9	17079.2	109.6
2008	27072.2	109.1	9698.2	105.1	17374	111.5
2009	27533.4	111.0	14236	154.3	13297.4	85.3
2010	28001.4	112.8	14425.9	156.4	13575.5	87.1
2011	29123.4	117.4	14897.4	161.5	14226	91.3
2012	29555.4	119.1	15143.2	164.1	14412.2	92.5
2013	29993.5	120.9	15370.1	166.6	14623.4	93.8
2014	30492.8	122.9	15555.2	168.6	14937.6	95.8
2015	31025.5	125.0	15748	170.7	15274.5	98.0
2016	31575.3	127.2	15963.9	173,0 _	15611.4	100.1
2017	32120.5	129.4	16250.8	176.2	15869.7	101.8
2018	32656.7	131.6	16532.7	179.2	16124	103.4
2019	33255.5	134.0	16806.7	182.2	16448.8	105.5
2020	33905.2	136.6	17144.1	185.8	16761.1	107.5
2021	34558.9	139.3	17510.4	189.8	17048.5	109.4

[1] It was developed by the author based on the information of the State Statistics Committee .

seen from Table 1 above , in 2001, 37.2 percent of the total population of Uzbekistan was urban and 62.8 percent were rural, compared to 2001, the total population increased by 139.3 percent , urban we can observe that the population increased by 189.8 percent and the rural population by 109.4 percent.

As can be seen from the table above, the population density increases over the years, while the area does not change, the increase in the population leads to an increase in the density.

As can be seen from the data of Figure 2 , the number of births (905.2 thousand people) to the number of deaths (174,400 people) caused natural growth. Divorces (increased from 15,600 to 39,300 people) are one of the indicators of significant growth.

Every year, a number of reforms are implemented in our country to ensure the employment of the population, as well as the mechanisms of employment for vacant and quota jobs are being improved, and effective measures are taken to develop effective forms of self-employment. is going The above indicators are definitely the result of these measures.

Table 2
Employment level of the population in the cross-section of regions, in percent

Areas	2000	2006	2011	2016	2021
Uzbekistan	69.4	67.7	66.2	68.7	67.0
Karakalpakstan	60.6	58.3	57.0	58.1	61.1
Andijan	70.9	70.0	68.6	72.3	68.2
Bukhara	75.8	74.5	73.5	72.9	67.2
Jizzakh	60.2	58.1	56.0	59.1	67.5
Kashkadarya	67.7	62.6	61.1	64.3	62.2
Navoi	75.3	77.9	74.6	72.8	68.3
Namangan	60.8	58.4	56.6	61.9	65.5
Samarkand	68.2	65.3	64.0	68.7	63.7
Surkhandarya	67.7	62.7	62.2	65.4	64.5
Syr Darya	73.7	71.3	72.1	71.7	64.5
Tashkent	70.2	69.9	71.8	75.4	72.4
Ferghana	72.5	71.3	67.9	69.6	66.2
Khorezm	65.5	62.8	63.3	66.3	64.0
Tashkent city	78.7	83.5	80.7	81.0	81.3

Employed citizens:

- employed persons, including citizens who perform work part-time or at home for a salary, as well as those who have other paid work, including temporary work;

- citizens who are not temporarily at work due to illness, vacation, retraining, training, production stoppage, as well as in other cases reserved for temporarily absent employees in accordance with legislation;

- citizens elected or appointed to paid positions;

- self-employed citizens, including entrepreneurs, craftspeople, members of farms, production cooperatives, farmers and other types of activities stipulated by law;

- Citizens serving in the Armed Forces of the Republic of Uzbekistan, including the Ministry of Internal Affairs, the Ministry of Emergency Situations, the State Security Service, as well as alternative service, etc.;

- employees in non-governmental non-profit organizations, including religious organizations that are performing their activities in accordance with the law. Unemployed population in need of employment (unemployed) - persons who are officially registered as unemployed in accordance with the law, as well as those who do not have a paid job or income-generating activity, who are independently looking for work and temporary unemployed persons of working age who are ready for employment if such work is offered. Information about them is presented in Table 2.

As can be seen from the data in the above table, the employment level has different k ' indicators under the influence of various factors due to the creation of new jobs in our economy with the increase in the number of the population. For example, in 2016, the employment rate in the city of Tashkent was 75.4 percent, but by 2021, due to changes in the system of permanent registration in the city of Tashkent, the number of the city's population has increased, and due to this, there are unemployed people in its composition. we can see that the number has also increased.

Thanks to the effective functioning of the conditions and support mechanisms created for the development of small business in the country, the population's business ability is expanding, and the entrepreneurial initiative of young people is increasing. These aspects, in turn, pave the way for timely promotion of promising proposals and initiatives. As a result, the majority of the employed population works in the small business sector, and the sector's share in the GDP is increasing. Paving the way for the development of KBXT has become an

important factor in the increase of employment and income of the population, and has become one of the means of ensuring the stability of the society, which consistently develops the economy.

CONCLUSIONS AND SUGGESTIONS

It is necessary to develop reporting and forecast balances of labor resources, employment and population employment for the following purposes:

1. job creation to ensure the employment, first of all, of young people and those who have reached the working age and are entering the labor market for the first time.

2. Assessment of the imbalance in the balance and structure of labor market supply and demand.

3. Determination of the prospects of the labor market, taking into account the socio-economic aspects of the regions and the strategy of development of economic sectors.

4. Determining the amount of personnel training by educational institutions.

Model structure of labor resources, employment and employment balance of the Republic of Uzbekistan to fulfill the above tasks. In order to eliminate possible difficulties in determining the future, the name of the indicators, their calculation algorithm, the reporting balance, the estimate (current year) and the forecast balance (next year) should be reflected in this sample structure.

Also, in the lines of the model structure: the number of labor resources, that is, the number of economically active and economically inactive population by types; by types of labor supply and demand and the difference between them (balance (+) or (-)); there should be a level of employment of the population in the section of categories.

Second, the scheme of providing information for the formation of the balance of labor resources, employment and employment of the population. In this scheme, it is appropriate to clearly indicate the content (name) of the information, the name of the ministry and office providing the information, the period of providing the information, and where it is being provided.

Third, the organizational scheme for developing the balance of labor resources, employment and employment of the population. The scheme should include the name of the measures, implementation stages and deadlines, and organizations responsible for implementation, in the following four areas:

formation of a database;
development of the balance sheet;
development of forecast balance;
their application in practice.

After the above-mentioned model structures and schemes are developed and approved, the competent ministries and agencies of the republic should develop a report balance of labor resources, employment and employment of the population in the

Republic of Uzbekistan on the basis of these structures and schemes.

Also, in addition to the reporting balance, it is necessary to develop a forecast balance for the next year of total and regional labor resources, employment and employment of the population by official ministries and agencies:

population forecast indicators (demographic forecast);

reporting balance of labor resources, employment and population employment;

forecast parameters of socio-economic, economic network development of the republic and regions;

forecast indicators of graduates of educational institutions entering the labor market;

information on the assessment of personnel needs in the networks of state and economic management bodies is used.

In conclusion, it can be said that through the development of the above-mentioned methodology and its implementation, a comprehensive, qualitative and objective analysis of labor resources, employment and employment of the population, young people entering the labor market for the first time, employment ground is created for raising the level. This allows to increase the efficiency in practice and use in the development of the projects of the program for the creation of jobs and the provision of population employment, according to tradition.

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