

Population Income in Uzbekistan and an Examination of Influencing Factors

M.L. Tursunxodzhaev
Proff. of Afraganus University

Abstract: This article examines metrics that measure Uzbekistan's population's quality of life, as well as elements that raise the population's income and impact it. The population's income was determined by a variety of factors, including predicted years of schooling, the number of people in employment, and state budgetary expenditures allotted to the social sector. The significance and effect of these elements were examined using regression analysis and the correlation coefficient. The econometric model's findings are used to draw conclusions and make recommendations.

Keywords: Population income, real income, nominal income, expected years of education, employed population.

INTRODUCTION

One of the important indicators representing the level of well-being of the population of the country is the income of the population. For most people, income is wages and bonuses, returns on investments, pensions and other types of transfer income. Today, the economic analysis of the living standard of the population based on objective statistical data, the study of monetary income and expenses of the population, the level of participation of households in the economy and the analysis of the classification of expenses are considered urgent issues. In turn, it plays an important role in increasing the income of the population, increasing its purchasing power, expanding the volume of production and ensuring stable economic development in the country.

In the conditions of the market economy, the income of economic entities is not guaranteed and is not distributed among different layers of the population. Because one of the positive aspects of the market economy is the growth of property income and business income (even if they correspond to a small part of the population). Differences in per capita incomes are income stratification. Separation of the population into social classes in terms of income is a characteristic of the market economy, and the classification of the population by income reflects the uneven distribution of income among different socio-demographic groups. Also, the analysis of income inequality among the population of the country also leads to conclusions about the standard of living of the population. After all, in which of the four categories of the standard of living of the population in the country (welfare, standard level, poverty, destitution), the high percentage of the population is considered to be one of the indicators reflecting the socio-economic situation in the country.

Depending on the amount measured, there are different conditions of income. The total income of the population represents the gross income before making compulsory payments and other deductions. The total income of the population includes monetary incomes and incomes in kind and consists of incomes received by the household or its individual members on a permanent basis, with a recurring nature, in the period of an annual or shorter period of time. Real income represents the real purchasing power of nominal income, taking into account changes in retail prices and tariffs. An increase in the real and nominal income of the population has a positive effect on people, communities and the country's economy as a whole. Therefore, the study and analysis of the factors affecting the increase in the income of the population remains an urgent issue today.

Research methodology

The research methods of scientific abstraction, empirical, descriptive statistics, grouping, econometric-statistical analysis, comparative and dynamic analysis are used in the article. As a database

for the research, the open sources reflected in the annual statistical publications of the Agency of Statistics under the President of the Republic of Uzbekistan, the annual reports of relevant ministries and agencies were consulted.

Analysis of literature on the topic

Many foreign, CIS countries and local scientists have been covering the issues of population well-being, income growth and analysis of factors affecting it based on different approaches in their scientific work. Research in this direction first began to appear in the works of the English scientist William Petty (1623-1687). He considers the economic development of the population in the society as dependent on objective laws.

It should be noted that the social aspects of employment and approaches aimed at increasing the labor income of the employed population are widely covered in the researches of academician K.Kh.Abdurahmanov, one of the Uzbek scientists. One of the ultimate goals of socio-economic reforms, the problems of increasing the population's income and reducing poverty, the fact that the effective and productive employment of the population has not been systematically researched, and that the methodological and conceptual approaches are not sufficiently scientifically based require theoretical, methodological and practical study of these problems. .

Research results

The standard of living of the population means that the population is provided with the necessary material goods and services, and the level of satisfaction of the population's consumption and needs. The level of meeting the needs of the population depends on the level of their income. Economic, social, demographic and geographical factors influence income stratification. According to the Statistics Agency under the President of the Republic of Uzbekistan, the total income of the population in our country changed from 126,268.0 billion soums to 634,797.0 billion soums during 2013-2022. So, over the last 10 years, the total income of the population has increased by 508,529 billion soums. Also, the total income per capita in 2022 was 14,769.0 thousand soums.

Creating a multi-factor econometric model based on the income of the population in Uzbekistan and the factors affecting it, checking the constructed model through various tests and determining the statistical significance of the model, making forecasts for future periods, and making scientifically based decisions on the development of the social sphere.

Ko'p omilli ekonometrik modelga omillarni asosli tanlash uchun korrelyasion tahlil o'tkazish kerak. Buning uchun omillar o'rtasida xususiy va juft korrelyatsiya koeffitsentlari hisoblanadi(1-table).

1-table

Correlation matrix

	lny	lnx ₁	lnx ₂	lnx ₃
lny	1			
lnx ₁	0,981922	1		
lnx ₂	0,76463	0,759315	1	
lnx ₃	0,956681	0,915675	0,700741	1

The correlation coefficient takes values from -1 to +1, and the strength of the connection is determined according to it. Also, a positive sign represents a positive connection, and a negative sign represents an inverse connection. However, the correlation coefficient only measures the degree of connection between economic indicators, so it cannot explain the causes of economic relations. This purpose is served by a special method known as regression analysis, and it provides an opportunity to assess the level of influence of the factors affecting the resulting indicator.

It can be seen from Table 1 that private correlation coefficients indicate the density of connections between the resulting factor (lny) and the factors influencing it (except for lnxi, x1). So, private correlation coefficients show that there is a close connection between the resulting factor (lny) and influencing factors, that is, the values of private correlation coefficients are greater than 0.5 and they can be included in the multifactor model. However, according to the results of the calculation, some of the values of mutual pair correlation coefficients (rx,y) of the influencing factors described above are higher than 0.7. It can be seen that there is a problem of multicollinearity between the selected factors. The most

important thing here is that the influencing factors should not be closely related to each other. That is, there should be no multicollinearity between influencing factors. If the value of the pairwise correlation coefficient between two influencing factors is greater than 0.7, the problem of multicollinearity arises.

For this, we need to eliminate the problem of multicollinearity first, and then move to the next stages of econometric modeling. For this, first, we exclude the x_1 factor, which has a low degree of correlation with the resulting factor, from the list of influencing factors and does not use it for the model. Secondly, another way to check the absence of multicollinearity between the influencing factors x_2 , x_3 and x_4 , which caused multicollinearity, is to calculate the coefficients of VIF (Variance Inflation Factors - effect of multicollinearity). VIF coefficients are calculated for each factor.

Conclusions and suggestions

In conclusion, it is known from the results of the above-mentioned analysis that the use of such a method is effective in studying the issues of increasing the income of the population and the factors affecting it. Because by analyzing the income of the population in a statistical method, the stratification of the population in terms of income and the influence of various socio-economic factors on it were analyzed, and the most important influencing factor in increasing the income of the population is the expected years of education, and the annual income of people additional education will increase their annual total income to 157,127.6 billion. it was found that it will increase to soums. Therefore, it has been confirmed that the development of human capital is one of the most urgent issues of today's improvement of the population's well-being.

References

1. Keynes, J. M. The General Theory of Employment, Interest and Money. - N.Y.: BN Publishing, 2008. -296p.
2. Маршал А. Основы экономической науки. / Пер. с англ. – М.: Эксмо, 2007 г. -832 с.
3. Милль Дж.С. Автобиография. История моей жизни и убеждений. / Пер. с англ. – М.: Рипол-Классик, 2020 г. -384 с.
4. Рикардо Д. Начала политической экономии и налогового обложения. / Пер. с англ. – М.: Эксмо, 2016 г. -1040 с.
5. Смит А. Исследование о природе и причинах богатства народов. / Пер. с англ. – М.: Эксмо, 2016 г. -1056 с.
6. Фридман М., Фридман Р. Свобода выбирать: Наша позиция / Пер. с англ. – М.: Новое издательство, 2007. - 356 с.
7. Хайек Ф.А. Конституция свободы / Пер. с англ. –М.: Новое издательство, 2018 г. - 528 с.
8. Одегов Ю.Г., Карташов С., Лукашевич В. Управление человеческими ресурсами. Учебник. / Под ред. Одегов Ю.Г, Лукашевич В. – М.: Кнорус, 2020 г. – 222 с.