



Article

Assessment of The Relationship Between Higher Education and Employment (Case of Uzbekistan)

Khusniddinova Gulnoza

1. Tashkent State University of Economics “Demography Labor Economics” specialty basic doctoral student
* Correspondence: xusniddinovagulnoza@gmail.com

Abstract: This article analyzes the relationship between the growth in the number of graduates of higher education institutions and changes in the employment level in the Republic of Uzbekistan. Although a significant increase in the number of highly educated personnel was observed during 2014–2024, it was determined that the growth of the employment level is relatively slow and stable in nature. The research results indicate that the level of compatibility between the higher education system and the labor market is insufficient. Also, the impact of the pandemic period is separately evaluated, and the influence of economic factors on employment is revealed.

Keywords: employment level, higher education, labor market, human capital, graduates, economic development, employment, quality of education.

1. Introduction

In the context of a modern economy, where the role of human capital is steadily increasing, studying the development of the higher education system and its interrelationship with the labor market is one of the most pressing issues. In particular, in developing countries, the expansion of higher education coverage is considered an important factor in ensuring economic growth, employment levels, and social stability.

In recent years, in the Republic of Uzbekistan, an increase in the number of higher education institutions, an expansion of admission quotas, and a sharp rise in the number of graduates have been observed. However, the issue that this process is not fully supported by corresponding jobs in the labor market is emerging as one of the key scientific problems.

From this perspective, determining the relationship between the number of personnel trained through the higher education system and the employment level, assessing their interaction, and identifying existing imbalances are of great importance [1], [2], [3], [4], [5].

2. Materials and Methods

Scientific studies conducted in this field indicate that the relationship between higher education and employment is determined by multiple factors.

In the human capital theory, Gary Becker emphasizes that investments in education increase labor productivity and expand employment opportunities [6]. At the same time, Jacob Mincer scientifically substantiated in his research that as the level of education increases, both income and the probability of employment rise [7]. However, international experience shows that the expansion of higher education does not always lead to a sharp increase in employment. For example, studies conducted by Richard

Citation: Gulnoza, K. Assessment of The Relationship Between Higher Education and Employment (Case of Uzbekistan). Central Asian Journal of Innovations on Tourism Management and Finance 2026, 7(2), 567-571.

Received: 10th Jan 2026
Revised: 21th Feb 2026
Accepted: 08th Mar 2026
Published: 15th Apr 2026



Copyright: © 2026 by the authors. Submitted for open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>)

Freeman indicate that under conditions of an oversupply of highly educated personnel, the problem of “overeducation” may arise [8].

Studies conducted in European and Asian countries also demonstrate that the mismatch between the education system and the labor market can lead to slow growth in employment levels.

In this study, statistical and comparative analysis methods were employed. The main data sources included information for the years 2014–2024 obtained from the State Statistics Committee of the Republic of Uzbekistan and other official sources. During the analysis process, methods such as time series analysis, comparative analysis, graphical methods, and logical generalization were applied.

3. Results and Discussion

To assess the interrelation between the education system and the labor market, it is necessary to conduct a dynamic analysis of their key indicators. In particular, the changes in the employment level and the number of higher education graduates over the years are of significant importance in understanding this process.

According to the data for 2014–2024, the employment level in the Republic of Uzbekistan remained relatively stable.

Table 1. Employment Rate Across Regions of Uzbekistan (percent) [9]

Region	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Republic of Uzbekistan	67,7	68,2	68,7	69,2	67,4	68,1	66	67	67,2	67,9	68,3
Karakalpakstan	57,9	58,1	58,1	58,3	62,9	62,9	62	61,1	61,6	62,9	64,3
Andijan region	70,8	71,5	72,3	73	69,6	70,1	66,5	68,2	69,5	70,6	70,2
Bukhara region	74	73,4	72,9	72,5	70,7	69,3	68,3	67,2	67,2	68,7	67,7
Jizzakh region	57,3	58,1	59,1	60	61,6	67,1	66,2	67,5	66,2	66,3	66
Kashkadarya region	62,5	63,3	64,3	65,4	64,8	63,9	60,9	62,2	61,9	61,9	65
Navoi region	73,6	73,2	72,8	72,4	69,2	69,5	66,8	68,3	67,7	69,8	70,5
Namangan region	59,3	60,5	61,9	63,4	63,8	66,4	65	65,5	64,8	65,9	66,8
Samarkand region	66,5	67,6	68,7	69,7	66,3	65,3	63,2	63,7	64,7	65	64,8
Surkhandarya region	63,4	64,3	65,4	66,6	65,2	67	63,9	64,5	64,2	63,8	63,7
Syrdarya region	72,9	72,2	71,7	71,1	70,5	68,9	64,8	64,5	64	63,8	65,3
Tashkent region	75,1	75,3	75,4	75,2	71,4	71,4	68,2	72,4	71	72,2	72,3
Fergana region	68,8	69,1	69,6	69,9	66	67,5	65,1	66,2	67,1	68,4	68
Khorezm region	65	65,6	66,3	66,9	64,6	66,1	63,7	64	64,7	66,9	66,2
Tashkent city	80,9	81,1	81	80,8	77,5	80,1	81,7	81,3	82,5	82,3	82,3

Source: Data of the State Statistics Committee of the Republic of Uzbekistan

According to the data in this table, it can be observed that during 2014–2024, the employment rate in the Republic of Uzbekistan was formed in a relatively stable condition.

In particular, while the employment rate was 67.7 percent in 2014, this indicator gradually increased during 2015–2017 and reached 69.2 percent in 2017. This indicates that positive shifts were observed in the labor market during this period.

However, during the period 2018–2020, a declining trend in the employment rate was recorded, and especially in 2020 the indicator fell to 66 percent. This situation can be explained by economic factors, including the negative impact of the pandemic conditions on the labor market.

In the following years, namely during 2021–2024, the employment rate recovered again and positive growth was observed. By 2024, this indicator amounted to 68.3 percent.

In general, during the analyzed period, the employment rate fluctuated within the range of 66–69 percent and demonstrated a stable trend without sharp fluctuations. Such changes in the employment rate indicate that although the process of job creation in the economy is ongoing, its pace is not high. That is, there is growth in employment, but it is not significantly rapid.

Table 2. Number of Higher Education Graduates by Region in Uzbekistan (persons)
[10]

Region	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Republic of Uzbekistan	67 643	66 290	64 133	67 448	70 325	70 793	83 905	103 898	102 381	184 133	211 197
Karakalpakstan	3 752	3 957	3 939	4 358	4 484	4 312	5 475	6 475	6 545	12 863	14 527
Andijan region	3 427	3 425	3 664	4 039	4 209	4 791	4 293	4 622	6 403	4 963	10 188
Bukhara region	3 138	3 484	3 357	3 376	3 409	3 523	3 770	4 784	6 214	6 017	11 182
Jizzakh region	2 157	2 183	2 469	2 261	2 732	2 872	2 850	3 862	3 561	3 822	7 108
Kashkadarya region	2 543	2 834	2 990	3 111	3 559	3 842	3 908	5 193	5 909	5 896	9 861
Navoi region	2 148	2 088	2 166	2 097	2 197	2 300	2 374	3 107	3 895	3 253	5 103
Namangan region	2 977	2 891	2 753	2 734	2 948	3 004	3 218	4 113	5 524	5 508	9 290
Samarkand region	5 299	5 708	5 917	5 986	6 417	6 869	6 842	7 165	8 528	8 962	15 276
Surkhandarya region	1 639	1 687	1 671	1 705	1 891	1 962	2 086	3 329	3 583	3 962	9 629
Syrdarya region	928	1 006	1 023	983	986	1 014	1 045	1 632	2 190	1 938	3 484
Tashkent region	2 809	3 111	1 837	1 797	1 745	2 710	2 787	4 041	3 694	4 049	11 055
Fergana region	2 059	4 633	4 782	4 657	4 769	4 557	4 778	5 833	9 266	8 289	15 845
Khorezm region	1 925	2 038	2 037	1 984	2 163	2 229	2 426	3 229	4 216	4 046	8 815
Tashkent city	25 641	28 803	27 667	25 464	26 065	26 168	26 104	27 520	34 440	35 131	54 434

Source: Data of the State Statistics Committee of the Republic of Uzbekistan

This table reflects the changes in the number of graduates of higher education institutions during 2014–2024. The results of the analysis show that this indicator has increased significantly.

In particular, while in 2014 the number of graduates of higher education institutions amounted to slightly more than 67 thousand people, in the following years this indicator consistently increased. Especially after 2020, it can be observed that the growth rate accelerated sharply.

During the period 2021–2024, the number of graduates increased very rapidly and by 2024 exceeded 200 thousand people. This means that within a short period, an increase of several times was observed.

This situation indicates that the coverage of higher education in the country is expanding. In recent years, the increase in the number of higher education institutions, the expansion of admission quotas, and the growth of opportunities for obtaining education have served as the main factors of this growth.

The sharp increase in the number of higher education graduates is considered a positive situation, as it contributes to the development of human capital. However, if this process does not develop in accordance with the opportunities of the labor market, it may lead to certain problems.

From this point of view, ensuring the compatibility between the higher education system and the labor market is of great importance.

Dynamics of Employment Rate and Higher Education Graduates (Uzbekistan)

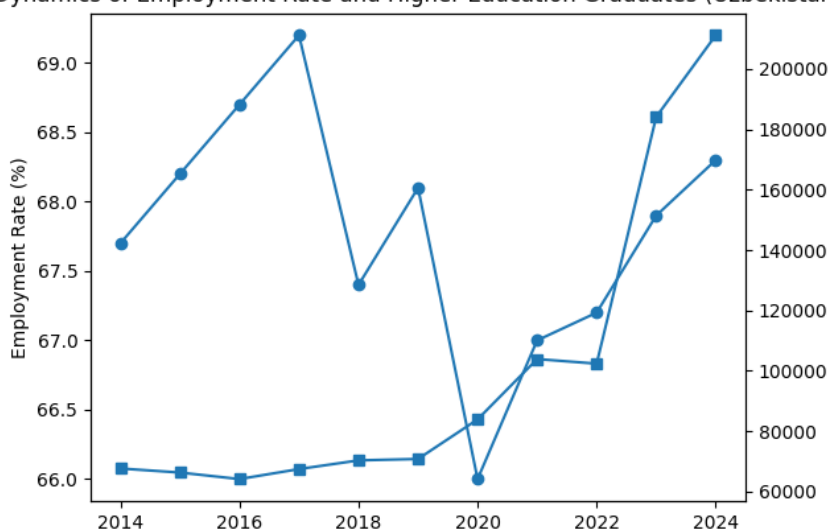


Figure 1. Dynamics of the Employment Rate and Higher Education Graduates in the Republic of Uzbekistan [11]

This graph reflects the dynamics of changes in the employment rate and the number of graduates of higher education institutions during 2014–2024. According to the results of the analysis, the number of higher education graduates increased consistently and rapidly during this period. Especially after 2020, a sharp increase in this indicator is observed, and by 2024 it increased several times. This indicates that the coverage of higher education in the country is expanding.

The employment rate, however, remained relatively stable during this period and was mainly formed within the range of 66–69 percent. In 2020, a decrease in the employment rate was observed, which can be explained by the negative impact of the COVID-19 pandemic on the economy worldwide. In the following years, the employment rate gradually recovered and positive growth was recorded [12], [13], [14], [15].

However, when comparing these two indicators, it can be observed that their rates of change do not correspond to each other. That is, while the number of higher education graduates is increasing sharply, the employment rate has not increased significantly and has remained mostly stable.

This situation indicates that there is a certain imbalance between demand and supply in the labor market. That is, the rapid growth in the number of highly educated personnel does not fully correspond to the jobs being created in the economy.

Also, even without considering the pandemic factor, it can be seen that this imbalance persists. This means that there is a need to further improve the relationship between the higher education system and the labor market.

In conclusion, the data of the graph show that an increase in the level of higher education does not automatically lead to an increase in the employment rate, but rather indicates the need for a comprehensive approach to effectively manage this process.

4. Conclusion

In conclusion, the conducted analysis shows that the expansion of the higher education system does not fully lead to a significant increase in the employment level. This situation indicates the existence of an imbalance between the needs of the labor market and the education system.

Based on this, the following recommendations can be proposed:

- a. Aligning higher education fields with labor market demands
- b. Developing a practice-oriented education system
- c. Strengthening mechanisms for graduate employment
- d. Training personnel taking into account regional labor market needs
- e. Expanding cooperation with the private sector.

REFERENCES

- [1] C. E. Montenegro and H. A. Patrinos, "Returns to Education in Developing Countries," *World Bank Policy Research Working Paper*, no. 8093, 2017, doi: 10.1596/1813-9450-8093.
- [2] T. McCowan, "Three Dimensions of Equity of Access to Higher Education," *Comp. Educ.*, vol. 52, no. 4, pp. 645–665, 2016, doi: 10.1080/03050068.2016.1227537.
- [3] U. Teichler, "Higher Education and the World of Work: Conceptual Frameworks, Comparative Perspectives, Empirical Findings," *Globalisation, Societies and Education*, vol. 7, no. 1, pp. 93–110, 2009, doi: 10.1080/14767720802677465.
- [4] R. J. Barro, "Education and Economic Growth," *Annals of Economics and Finance*, vol. 14, no. 2, pp. 301–328, 2013.
- [5] E. A. Hanushek and L. Woessmann, "Schooling, Educational Achievement, and the Latin American Growth Puzzle," *J. Dev. Econ.*, vol. 99, no. 2, pp. 497–512, 2012, doi: 10.1016/j.jdeveco.2012.06.004.
- [6] G. S. Becker, *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*, 3rd ed. Chicago: University of Chicago Press, 1993.
- [7] J. Mincer, *Schooling, Experience and Earnings*. New York: Columbia University Press, 1974.
- [8] R. B. Freeman, *The Overeducated American*. New York: Academic Press, 1976.
- [9] World Bank, *World Development Report 2020: Trading for Development in the Age of Global Value Chains*. Washington, DC: World Bank, 2020.
- [10] OECD, "Digitalisation and business regulation: Policies for responsible innovation," 2022, Paris.
- [11] International Labour Organization, *Global Employment Trends 2021*. Geneva: ILO, 2021.
- [12] State Statistics Committee of the Republic of Uzbekistan, *Socio-economic Indicators of the Republic of Uzbekistan (Statistical Collection)*. Tashkent, 2024.
- [13] Ministry of Higher Education of the Republic of Uzbekistan, *Annual Reports on the Development of the Higher Education System*. Tashkent, 2023.
- [14] G. Psacharopoulos, *Returns to Investment in Education: A Global Update*. Washington, DC: World Bank, 1994.
- [15] P. Burnett, "Theodore W. Schultz (1902–1998)," in *The Palgrave Companion to Chicago Economics*, R. A. Cord, Ed., Cham: Palgrave Macmillan, 2023, pp. 401–420. doi: 10.1007/978-3-031-01775-9_17.