# БІЛІМ БЕРУ ЖӘНЕ ОҚЫТУ: ӘДІСТЕМЕ, ТЕОРИЯ, ТЕХНОЛОГИЯ ОБРАЗОВАНИЕ И ОБУЧЕНИЕ: МЕТОДОЛОГИЯ, ТЕОРИЯ, ТЕХНОЛОГИЯ EDUCATION AND TRAINING: METHODOLOGY, THEORY, TECHNOLOGY

IRSTI 06.56.02 UDC308 JEL I23, J16, I24

https://doi.org/10.46914/1562-2959-2025-1-2-503-515

# **KENZHEALI Y.A.,\***1

PhD student. \*e-mail: y.kenzheali@gmail.com ORCID ID: 0000-0003-3412-3706

# AINAKUL A.N.,<sup>2</sup>

PhD, associate professor. e-mail: n.ainakul@turan-edu.kz ORCID ID: 0000-0002-6055-6217 NURGALIYEVA K.O.,<sup>1</sup>

c.e.s., professor. e-mail: nurgalieva.k@uib.kz ORCID ID: 0000-0002-8735-667X

### KARACSONY P.,<sup>3</sup>

PhD, professor. e-mail: karacsony.peter@uni-obuda.hua ORCID ID: 0000-0001-7559-0488 <sup>1</sup>University of International Business named after K. Sagadiev, Almaty, Kazakhstan <sup>2</sup>Turan University, Almaty, Kazakhstan <sup>3</sup>Óbuda University, Budapest, Hungary

# EDUCATION LEVEL IMPACT ON CAREER OPPORTUNITIES OF MEN AND WOMEN IN KAZAKHSTAN

### Abstract

A detailed examination of the labor market trends from 2012 to 2022 in regard to labor force participation, employment, self-employment, and wage increase is presented. Using descriptive statistical techniques and regression, the following critical measures have been researched: hired and self-employment rate, gender gaps, unemployment rate in finding systemic trends, and significant correlations. It implies, finally, that labor force and hired employment keep improving steadily, while self-employment keeps falling due to changes in labor market structural preference. Gender inequality remains obvious with females suffering from their relatively slow labor force growth coupled with a rather moderate improvement of job opportunities. The regression analysis brings out that the year and self-employment variables have a significant impact on determining wage growth, while hired employment and gender are not too significant. The unemployment rate turns out to be positively correlated with changes in wages, so it is possible that changes in wages have been smoothed over labor market fluctuations. This research also reflects on the possible impact of exogenous factors, such as the COVID-19 pandemic, on employment structures and gender relationships.

These findings expose the need for policy interventions on gender disparities, support for entrepreneurship, and equal access to labor market opportunities. This study gives some key recommendations toward sustainable and inclusive economic development through the light it casts on the long-term transformation in labor market conditions.

Keywords: education, gender equality, career opportunities, wage growth, labour market, economic development, unemployment, qualifications.

#### Introduction

In modern society, one of the most important job opportunities and career success determinants on labor markets is education. In Kazakhstan, too, educational level has become a serious factor that affects the job positions of male and female workers. Nevertheless, in spite of huge advances made to attain equality in education for the country's population within the last decades, job opportunities have continued to demonstrate evident discrepancies among genders. Since labor wages, unemployment rates, and access to managerial positions differ for males and females, educational attainment provides different potential for them in building their future career.

Due to the rapid growth of Kazakhstan's economy and an increase in the employment rate for women, there is a clear need for analysis concerning how educational level influences men's and women's careers. The research will define the main tendencies and issues for men and women during their career development and provide some recommendations on how to reduce gender inequality in this field. The changes brought by education in seeking jobs can, therefore, be one of the bases on which policies for developing proper policies promoting professional advancement through state initiative towards gender equality have to rest.

Other key trends over the period observed included incessant growth in hired employment, balanced by structural decline in self-employment, reflecting structural changes within labor market preferences and economic opportunities. In this respect, while labor force participation has grown, its share of the population is on the whole declining, showing how the influence of demographic and labor-market economic structures has been one of change. Yet, female participation in the labor market and employment patterns still show significant gender disparities, given that women, despite the modest improvements, continually face obstacles in their pursuit of opportunities for paid work. This underlines how complex the interactions among economic growth, structural change, and social factors are in bringing out specific labor market outcomes.

It further elaborates on the important determinant impacts within wage dynamics over time, in respect to the year of observation, self-employment status, hired employment, the unemployment rate, and sex. The current study, by using regression methods, intends to discuss how those variables explain the average monthly wages which would outline all the significant relationships indicating systemic trends and disparities. While the growth of hired employment is high, shocks to wages seem less evident; but self-employment and unemployment rates are still more responsive in terms of wage variability. This study also reveals that, although employment has increased in the aggregate level, wage and labor force participation differentials between males and females act as a strong deterrent for achieving equity in labor markets.

This paper is aimed at analyzing the influence of the educational level on men and women's career prospects in Kazakhstan. It will review the main tendencies within the labor market, compare career opportunities with regard to gender and education level, and suggest some recommendations for improvement. This study is based on official statistics, results of sociological surveys, and expert opinions that give a whole picture of the situation.

By mapping labour market developments in a structured way over the past decade, this study aspires to make a contribution toward deepened understanding of drivers underlying the processes of employment and wages. Among other things, policy suggestions for specific underpinning programs for inclusive labor market participation, reduction in disparities along gender lines, and support for entrepreneurship aimed at ensuring a resilient, innovative economy emerge from the analyses presented. The study underlines not just areas of concern but shows opportunities for a more equitable and adaptive labor market in the future. There was applied a mixed-method approach, focusing on gender-based analysis of labor market data from 2012 to 2022. Official statistics on employment, unemployment, wages, and gender disparities were utilized. Methods included percentage change analysis, regression modeling, and binary coding (0 for females, 1 for males), enabling the identification of key trends, influencing factors, and persistent gender disparities. This approach provided a comprehensive evaluation of gender-specific transformations in the labor market over the decade.

Education is in the central position in shaping employment opportunities and career trajectories, as it equips candidates with both professional qualification and flexible competencies. It is regarded as a tool for the development of complex skills and learning environments necessary for employability [1]. While higher education credentials remain significant, there is increasing interest among students in additional value, such as work experience and personal skills, to stand out in a competitive labor market [2]. From a gender perspective, addressing inequalities has become a critical role of education. Thus, such soft skills as teamwork, communication, and adaptability have become important, over hard skills, even in technical professions [3]. However, Suleman [4] stated that both cognitive and non-cognitive skills are equally important while addressing systemic mismatches between education supply and labor market demand. Women's underrepresentation in STEM fields excludes them from high-paying positions in related fields. Thus, Czako [5] showed that energy sector is key area where systemic mismatches between education supply and labor market demand persist. In comparison, Bursell and Bygren [6] focused on stereotypes which are driven by societal perceptions that limit women's access to male-dominated positions despite their qualifications.

Ultimately, education serves as both a means of personal empowerment and a signal of potential to employers, shaping not only individual career paths but also the broader dynamics of labor market participation, particularly in reducing gender disparities. While education is a critical indicator of competence, Kang et al. [7] stated that even highly educated minority job seekers modify or fit their résumés to reduce other challenges as racial cues, societal perceptions and labor market structures as they overshadow the value of education in securing equitable employment opportunities. On the other hand, gendered nature of issues are less affected by professional qualifications or skills, consequently female students report lower confidence and are less likely to take ownership of their careers compared to their male counterparts due to persistent gender inequalities in career progression [8].

Similarly, Dilli and Westerhuis [9] added that women's underrepresentation in STEM fields limits their access to entrepreneurial opportunities, despite qualification advancements. Moreover, structural constraints hinder the full potential of education to reduce gender gaps in labor market participation. Ahmed and Hyndman-Rizk [10] findings in the study of the case of Bangladesh showed that women gain intrinsic empowerment but face systemic barriers to instrumental empowerment, such as limited career aspirations and stereotyped subject choices.

However, economic factors play crucial role in strengthening gender inequality. Such economic crisis as COVID-19 pandemic intensified existing gender inequalities in the labor market, and showed the major role of education in mitigating gender disparities. Farré et al. [11] revealed that increased unpaid domestic work, especially during pandemic, disproportionately burdened women in Spain, limiting their participation in paid labor and professional development. Similarly, caregiving according to Collins et al. [12] led to reduced work hours for women, stalling their career trajectories and raising the need for flexible educational opportunities to support upskilling. There were observed disproportionate job losses faced by women in vulnerable industries, Reichelt et al. [13] showed that the education and reskilling programs for transitioning into more resilient sectors are important.

Gender equality in Kazakhstan has passed through significant transformations, affected by institutionalization of gender policies including societal attitudes and economic opportunities for women. Some studies focused on systemic factors that influence gender equality. Van Klaveren et al. [14] analyzed gender disparities in labor market, identifying significant occupational segregation and gender pay gap. Despite higher educational attainment, structural barriers restricted access to high-paying sectors like energy and finance for women, making such fields as education and healthcare traditionally female-dominated. International actors aim was to embed gender equality principles into Kazakhstan's policy frameworks. Shakirova [15], in turn, noted that involvement of international organizations led to the establishment of the National Commission on Women's Affairs, promoting gender equality across political, economic, and social spheres, through adoption of international conventions as Convention on the Elimination of All Forms of Discrimination Against Women.

However, limited public childcare support, another systematic barrier, as stated by Dugarova [16] reinforced traditional gender roles and restricted women's participation in the labor market despite formal commitments to equality. Additionally, Khairullayeva et al. [17] marked that cultural resistance to women in leadership persisted as a key barrier. Followed improvements in maternal and child health systems indirectly facilitated women's participation in the workforce. According to Semenova et al. [18] it led to reducing caregiving burdens on women.

A number of features characterize the modern labour market in Kazakhstan, among which are the career opportunities for men and women. The important cause influencing such situation is gendered labour market segregation, putting men in high-paid industries like oil and gas, construction, and IT, while women represent the low-paid sectors of education, health care, and social work. According to Buribayev and Khamzina [19], women are more represented in sectors like healthcare, education, and social services, making up over 70% of the workforce in these fields, while their employment in, such industries as construction, oil and gas, and mining, remains minimal. Alpysbayev et al. [20] highlighted horizontal segregation, where women are concentrated in lower-paying sectors, and vertical segregation, reflected in the underrepresentation of women in higher-ranking positions, also affected considerably by economic crises shifting women into less stable and informal employment forms. These findings align with the analysis conducted in the work of Kuanova and Anessova [21], where they marked limited access for women to prestigious professions and stable employment. Structural barriers and societal norms hinder women's career advancement, confining them to lower-paying and less secure sectors.

Modern studies confirm that with the very high level of female education in Kazakhstan, women still experience limitations in their career prospects. reflected in lower representation of women in commanding positions and their lower remuneration as compared to men. This may be due to the combination of some factors such as gender stereotypes that continue to influence the labor market, a lack of sufficient measures toward women's career advancement, especially in the private sector. Economic and social factors have great effects on the labor market of Kazakhstan. Recently, it has sought to create enabling conditions toward achieving gender equality by pursuing policies for female entrepreneurship and professional growth. At the same time, the policies and practices for equality between women and men in labor are far from being improved notwithstanding efforts taken so far.

Besides, global economic processes influence the career prospects of men and women in Kazakhstan align with internal migration. On one hand, the growth of the urban economy and the new industries appearing give new opportunities for women workers; on the other hand, they increase their qualification requirements and adaptive capabilities concerning new working conditions. Despite some achievements in the sphere of equal opportunities for men and women in the Kazakhstani labor market, the country faces the task of further improving the conditions for equal access to career opportunities for men and women.

### Materials and methods

The following paper is based on the mixed-method approach, as it involves the quantitative analysis of the regression modeling of the data of the labor market in analyzing the trend and factors affecting employment, self-employment, and wage dynamics between 2012 and 2022. Methods used:

Data collection. Official labor market statistics are used herein-reports on employment, demographic records, economic indices. The database covers the years from 2012 to 2022 and comprises information on labor force participation, employment status, divided in this paper into hired workers and self-employed, gender differences, unemployment rate, and average wage per month.

Comparative analysis. The analysis of labor market indicator trends over the years was determined by the percentage change method. Table 1 below presents the annual percentage changes for each factor with respect to the base year 2012, thus giving a summation of the long-run developments in employment and unemployment. In this comparative study, the year 2012 was considered as the base year, and the percentage change was calculated by using the following formula:

Percentage change = 
$$\frac{\text{value for each year} - \text{value of the base year}}{\text{value in 2012}} * 100$$
 (1)

3. Regression analysis. A multiple linear regression model was developed to explain the dependent variables of average monthly wages against independent variables of the year, self-employment, hired workers, gender, and unemployment rate.

4. Gender disparity analysis. Binary coding (0-female, 1-male) was employed in the analysis of gender disparities in labor force participation and wage dynamics. These results were also put into perspective in broader demographic and economic trends.

Using these tools, the analysis provides a comprehensive look at how labor market transformations unfolded throughout the decade, underlining systemic changes and persistent disparities.

### **Results and discussion**

This results section displays, for the years 2012–2022, changes in labor market trends through changing trends in labor force participation and the structure of employment, complemented by wage dynamics. Specific findings related to the very significant change within the employment pattern include gradual decline in self-employment, coupled with simultaneous growth in volume among hired workers, while constant differences in labor activity by gender remain. Regression analysis reveals the influence of independent variables on the average wages in respect of the year, self-employment, and unemployment rate that mix statistically very significant with insignificant results. In the figure 1 all calculations were calculated using formula (1).



Figure 1 - Percentage change in factors compared to 2012

Note: Elaborated by authors based on calculations.

In 2013, this went up by 0.66% to show that labor force growth was a modest yet sure thing. Similarly, the number of employees grew by 0.75%, and most surprisingly, the numbers for employees were 2.34% higher. The indication is that it is not just the number of employed within the formal sector that has grown. Concurrently, self-employed are declining at 2.69%, which might probably refer to fact that more shift toward hiring has been observed and a decline in the number of entrepreneurs is observed, while 0.86 % reduction in unemployment is really good news for the economy. In 2014, deceleration of economic activities of the state labor force showed a decline by 0.22 and a decline in the share in the population labor force by 1.39%. At the same time, employment remained almost at the same level-plus 0.04%.

The number of employed people increased significantly, plus 5.09%, while the number of selfemployed people sharply decreased by minus 10.88%, perhaps a testimony to some transformation in the forms of employment. The number of unemployed people increased by 4.82%, but the unemployment rate increased by 5.66%, evidence of increasing economic burdens. Actually, all these negative trends strengthened in 2015.

In general, the labor force number was contracted by 1.05%, while the share of labor force in the population dropped by 2.79%. The employment was contracted by 0.87%, though the number of employed people grew by 8.28%, while on the contrary, the number of self-employed people decreased even more, by 20.61%. It was a year of sharp economic decline since the growth of the unemployed population increased by 4.34%, as well as in the unemployment rate by 3.77%. A slight recovery took place in 2016. The labor force increased by 0.19%, though its share continued to fall by 2.37%. The increase in the employed population was 0.54%, and employees continued to grow more, +9.10%, while the self-employed decreased, -17.93%. During the observed period, the number of the unemployed population increased by 6.17%, and the unemployment rate increased by 5.66%.

Further on, in 2017, it continued to stably grow. The labor force grew by 0.51%, but its share in the population continued to decline (-2.79%). Employment was expanded by 0.92%, and the number of employees notably grew (+11.56%), while self-employment continued to shrink (-22.06%). The unemployment rate rose to 7.55%, reflecting financial distress continuously. In 2018, this has become even more biased to the financial recovery. The total workforce grew by 1.74%, business grew as many as 2.21%. Even the number of representatives went up by 13.74%, while on the other side, self-employed kept falling by -22.68%. The unemployment rate was high, with a growth rate of 7.55%. It followed in the development in 2019 too. Labor force limit increased by 2.67% while business in comparison increased by 3.22%. Employees increased by 14.93% whereas self-employed decreased by 22.06%. Unemployment is also increased once again by 9.43%, showing that the portion of population still stayed jobless even though there is a growth in the count of employed. 2020 is a year hit by a pandemic, and so obvious differences are found. Labor force increased by 2.21%, but labors as share of the population still shows decline by 3.49%. Employment went up by 2.64%, while the number of employed went up by 15.02%. Self-employed continued to decrease (-24.06%), while the unemployment rate was still high (-7.55%).

Figure 2 represents percentage change in labor force and unemployment rate, 2013–2022.



Figure 2 - Percentage change in economic and unemployment population

Note: Elaborated by authors based on calculations.

In the recent years also, the unemployment rate has remained considerably below that of 2012, which may indicate such a rise in the labour force has been absorbed by the labour market with corresponding job creation. Many of those people who might find themselves without a job have become employed because of the increased demand for labour.

Figure 3 shows the change in labor force participation and employment rates by gender, 2012–2022. Regression analysis allows for the quantification of differences in changes between women and men. The results show a widening in the gap in labor force participation rates, with the percentage difference between women and men increasing over the ten-year period. Although paid employment opportunities are gradually increasing, both demographic shifts and systemic barriers have contributed to overall limited labor market participation of women, a fact that underlines the need for dedicated efforts to reduce gender inequity and reach more inclusive economic growth.



Figure 3 – Change in the difference between men and women from 2012 to 2022

Note: Elaborated by authors based on calculations.

This regression analysis will show the fluctuation in the labor force for the period analyzed. Notice the coefficient that reflects the contribution of the independent variables and the change in the magnitude of the dependent variable, being the labor force. The graph above describes the variation between women and men over the years from 2012 to 2022. Using the labor force as an example, it changed from -0.2 to -3.97, which means that the percent variation of women relative to men has gone down. That is the difference between women and men percentage is -0.2 in 2013 then ups to -3.97 in 2022 that is the gap between them are growing. In the share of labor forces within a population, in 2013 the change in 2012 reveals that the gap between both genders is -0.28 percent. The share of females actively participating in the labor market, be it employed or unemployed but searching for a job, is lower. The result is probably worse than it needs to be, as the demographic changes-either an aging of the population or more people not contributing economically-take their toll. In all, the number of female employees rose-even though in a rather low degree. That is possible since more women found work and were recruited to different branches of the economy. On the whole, the fact that paid employment for women increased in 2013 compared with 2012 shows that the amount of women working under employment relationships has grown during the decade studied. What that means in the given context is that the job opportunities have been extended for females including private and public bodies.

The dataset presented in table 1 provides a comprehensive foundation for analyzing the factors influencing average monthly salaries in Kazakhstan over the period from 2012 to 2022.

Table 2 presents the data used in constructing the regression. In this column, gender is represented using a binary system of 0 and 1. In this regression, 0 was designated as female and 1 as male. The dataset illustrates labor market dynamics: how the composition of employment and wage growth has been changing over time for males and females, as well as between regular and casual workers. By analyzing these factors, the study aims to point out the share of each variable in determining wage outcomes, thus providing an insight into the structural changes and disparities of the labor market during the observed decade.

Year (X1)	Self-employed, thousand people (X2)		Hired workers, thousands of people (X3)		Unemployment rate, % (X5)		Average monthly salary (thousand) (Y)	
Gender (X4)	М	W	М	W	М	W	М	W
2012	1 390,00	1 303,40	2 985,90	2 827,80	4,10	6,50	118,80	82,62
2013	1 373,40	1 247,50	3 015,90	2 933,70	4,60	5,90	129,38	87,68
2014	1 255,70	1 144,70	3 133,70	2 976,00	4,30	5,80	144,18	96,55
2015	1 182,30	956,1	3 188,90	3 105,90	4,40	5,90	151,69	99,91
2016	1 212,30	998,2	3 228,00	3 114,80	4,40	5,50	169,35	116,11
2017	1 127,30	971,9	3 331,60	3 154,40	4,40	5,40	179,58	121,79
2018	1 091,10	991,5	3 383,60	3 228,80	4,30	5,40	195,96	129,04
2019	1092,4	1006,8	3443	3238,6	4,30	5,30	222,51	150,78
2020	1115,3	930,1	3404,2	3282,5	4,40	5,40	243,52	182,68
2021	1140,9	956	3414,1	3296,1	4,20	5,50	281,24	220,16
2022	1174	950,3	3499,3	3348	4,30	5,50	355,30	265,76
Note: Elaborated by authors based on calculations.								

Table 1 – Initial data for regression analysis

During this period, average monthly salaries exhibited a steady upward trend, indicating significant improvements in earnings, thereby reflecting broader economic transformations, such as increased productivity, sectoral shifts, and potential inflationary adjustments. Concurrently, the decline in selfemployment showed a gradual shift away from informal or independent work arrangements toward more formalized employment opportunities. Thus, it supported the steady increase in the number of hired workers, pointing to structural changes within the labor market and the formalization of economic activities.

The unemployment rate also showed a gradual decline, reflecting improved labor market conditions over the observed period. However, its direct impact on wage dynamics remains complex and requires further investigation to determine whether wage growth is primarily driven by lower unemployment or other economic factors, such as policy interventions or sectoral diversification. By examining these variables together, the dataset provides valuable insights into the interplay between employment composition, labor market conditions, and wage outcomes. It highlights both the progress made in improving labor market structures and the ongoing challenges that may influence the sustainability of these positive trends.

According to table 3, which evaluate the strength and accuracy of the model in predicting the dependent variable – average monthly salary.

Regression statistics	Variable
Multiple Correlation	0,98
Coefficient of determination	0,96
Adjusted coefficient of determination	0,95
Standard error	16,40
Number of observations	22,00
Note: Elaborated by authors based on calculations.	

Table 2 – Regression statistics

The results showed high predictive capability of the regression model. The multiple correlation coefficient of 0.98 showed there is a strong positive linear relationship between the independent and

dependent variables. Furthermore, 96% ( $R^2$ ) of the variability in the target variable was explained by the model. The adjusted  $R^2$ , at 95%, supported the conclusion by accounting for the number of predictors in the model, ensuring its robustness. The standard error of 16.40 showed an acceptable level of precision in the model's predictions, marking its reliability.

Next, in table 3 there are results for the hypotheses testing.

Constant	Coefficients	Standard error	t-statistics	P-value	Lower limit 95%	Upper limit 95%		
	(53,19)	11,57	(4,67)	0,00	(77,57)	(29,37)		
Year	26,29	5,90	4,46	0,00	13,79	38,78		
Self-employed, thousand people	0,20	0,09	2,15	0,05	0,00	0,40		
Hired workers	(0,02)	0,15	(0,11)	0,92	(0,34)	0,31		
Gender	64,97	35,91	1,45	0,09	(30,24)	160,19		
Unemployment rate	27,47	12,54	1,57	0,05	(9,71)	64,65		
Note: Elaborated by authors based on calculations.								

Table 3 – Regression Estimation Results

The regression analysis demonstrates a dynamic interplay between key economic and social factors in the labor market. Over time, as indicated by the significant coefficient for "Year" (26.29, p < 0.01), structural improvements have positively influenced the dependent variable, suggesting progressive trends in economic activities or policy impacts. The role of self-employment is notable, with a positive association (0.20, p = 0.05), reflecting its importance in creating economic opportunities, particularly in sectors where formal employment remains limited. However, the lack of significant impact from hired workers (-0.02, p = 0.92) underscores stagnation or inefficiencies in institutional labor structures.

Gender, with a coefficient of 64.97 (p = 0.09), hints at disparities in opportunities or outcomes, highlighting ongoing challenges in achieving equality. The unemployment rate (27.47, p = 0.05) also demonstrates a moderate positive effect, potentially indicating countercyclical dynamics or the role of unemployment as a marker for underutilized labor capacity.

While progress is evident, structural barriers remain a challenge. The positive role of selfemployment shows its contribution to economic resilience. However, the limited impact of formal employment suggests the need for targeted improvements in organized labor markets. For the economy, these findings emphasize the importance of creating inclusive policies, promoting entrepreneurship, and addressing inequalities to boost productivity and ensure social equity.

### Conclusion

It gives an overview of the labor market trends from 2012 to 2022, by means of indicators referring to participation in the labor force, categories of employment, unemployment rates, and differences by gender. During this decade, the labor force developed steadily, attaining, at the end of 2022, an increase of 4.99% from that in 2012, against the decline in the participation rate due to change of guard regarding demographic and economic reordering. This employment trend shows a sharp rise in the number of hired workers, signaling structural changes in the direction of formal employment, while self-employment shows a steady decline due to the changing economic landscapes and labor market preferences.

The period under survey was marked by gender disparities. While the increase in women's participation in the labor force and paid employment has been modest, the relative gap between men and women has widened, an indication that structural and societal factors still hamper full economic participation by women. On the other hand, the growth in hired employment opportunities for women signals a certain advance toward more inclusive labor market dynamics.

The regression analysis drew several important relationships from the studied factors. From the results, time-that is, the year-and self-employment seem to have a serious influence on the average

wage of an individual per month. The variable Year is positively trending upwards as the years go by, implying higher wage growth over the period under consideration. But from a statistical viewpoint, hired workers and gender do not seem to hold much significance in driving wages. Interestingly, unemployment appeared to relate positively with wages, perhaps reflecting changes in wages around economic fluctuations due to changes in labor market pressures.

This, in turn, underlines interactions of factors at play within the labor market, with further effects that ultimately result in economic consequences. Such continuing declines in self-employment beg for increased scrutiny to examine ways such activity may best be fostered more sustainably. Likewise, gender disparities in participation and wage growth also highlight demands for including policies and discarding some impediments which impede the fuller women's potential in economic development.

The present study puts in perspective the changing dynamics of the labor market, brings forth a few important trends and inequalities that are needed to be kept in the limelight. The findings raise to the fore an imperative of a balanced and inclusive labor market, whereby all have access to economic opportunity for participation and growth without consideration of gender or type of employment. Sustained labour market development will therefore demand continued monitoring and targeting by interventions.

**Funding information.** This research has been funded by the Science Committee of the Ministry of Science and Higher Education of the Republic of Kazakhstan ("Modernization of the quality assurance system of higher education in Kazakhstan based on digitalization: development of approaches, mechanisms and informationbase" No.BR24992974)

### REFERENCES

1 Knight P.T., Yorke M. Employability and good learning in higher education // Teaching in Higher Education. 2003, vol. 8, no. 1, pp. 3–16.

2 Tomlinson M. 'The degree is not enough': students' perceptions of the role of higher education credentials for graduate work and employability // British Journal of Sociology of Education. 2008, vol. 29, no. 1, pp. 49–61.

3 Cimatti B. Definition, development, assessment of soft skills and their role for the quality of organizations and enterprises // International Journal for Quality Research. 2016, vol. 10, no. 1, p. 97.

4 Suleman F. The employability skills of higher education graduates: insights into conceptual frameworks and methodological options // Higher Education. 2018, vol. 76, pp. 263–278.

5 Czako V. Employment in the energy sector. Publications Office of the European Union, Luxembourg, 2020. URL: https://doi.org/10.2767/56789 (accessed: 22.02.2025)

6 Bursell M., Bygren M. The making of ethnic segregation in the labor market: Evidence from a field experiment // Working Paper. 2023, no. 13.

7 Kang S.K., DeCelles K.A., Tilcsik A., Jun S. Whitened résumés: Race and self-presentation in the labor market // Administrative Science Quarterly. 2016, vol. 61, no. 3., pp. 469–502.

8 Donald W.E., Ashleigh M.J., Baruch Y. Students' perceptions of education and employability: Facilitating career transition from higher education into the labor market // Career Development International. 2018, vol. 23, no. 5, pp. 513–540.

9 Dilli S., Westerhuis G. How institutions and gender differences in education shape entrepreneurial activity: a cross-national perspective // Small Business Economics. 2018, vol. 51, pp. 371–392.

10 Ahmed R., Hyndman-Rizk N. The higher education paradox: Towards improving women's empowerment, agency development and labour force participation in Bangladesh // Gender and Education. 2020, vol. 32, no. 4., pp. 447–465.

11 Farré L., Fawaz Y., González L., Graves J. How the COVID-19 lockdown affected gender inequality in paid and unpaid work in Spain. Social Science Research Network, 2020. URL: https://doi.org/10.2139/ ssrn.3643198 (accessed: 22.02.2025)

12 Collins C., Landivar L.C., Ruppanner L., Scarborough W.J. COVID-19 and the gender gap in work hours// Gender, Work & Organization, 2021, vol. 28, no. 1, pp. 101–112. URL: https://doi.org/10.1111/gwao.12506 (accessed: 22.02.2025)

13 Reichelt M., Makovi K., Sargsyan A. The impact of COVID-19 on gender inequality in the labor market and gender-role attitudes // European Societies. 2021, vol. 23, no. 1., pp. 228–245. URL: https://doi.or g/10.1080/14616696.2020.1823010 (accessed: 22.02.2025)

14 Van Klaveren M., Tijdens K., Hughie-Williams M., Ramos Martín N. E. An overview of women's work and employment in Kazakhstan. Amsterdam: AIAS Working Paper, 2010. URL: https://doi.org/10.2139/ ssrn.1845635 (accessed: 22.02.2025)

15 Shakirova S. Gender equality in Kazakhstan and the role of international actors in its institutionalization // Institutionalizing Gender Equality: Historical and Global Perspectives. 2015, pp. 211–225.

16 Dugarova E. Gender, work, and childcare in Kazakhstan, Mongolia, and Russia // Social Policy & Administration. 2019, vol. 53, no. 3, pp. 385–400.

17 Khairullayeva V., Sarybayev M., Kuzembayeva A., Yermekbayev A., Baikushikova G. Gender Policy in Kazakhstan // Journal of International Women's Studies. 2022, vol. 24, no. 1, p. 25.

18 Press C.E.S.D. Gender Equality & Women's Empowerment in the Post-Soviet Space: Challenges and Perspectives. 2023.

19 Semenova Y., Lim L., Salpynov Z., Gaipov A., Jakovljevic M. Historical evolution of healthcare systems of post-soviet Russia, Belarus, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, and Azerbaijan: A scoping review // Heliyon, 2024.

20 Buribayev Y.A., Khamzina Z.A. Gender equality in employment: The experience of Kazakhstan // International Journal of Discrimination and the Law. 2019, vol. 19, no. 2., pp. 110–124. URL: https://doi. org/10.1177/1358229119846784 (accessed: 22.02.2025)

21 Alpysbayev K., Mukhamadiyeva A., Kanabekova M., Orazgaliyeva A., Elmira B. Gender analysis of the global labour market and comparative analysis of Kazakhstan, 2019–2021 // Applied Econometrics and International Development. 2024, vol. 24, no. 1, pp. 1–18.

22 Kuanova L., Anessova A. Gender disparities in Kazakhstan's labor market: Evidence from the quality employment // Eurasian Journal of Economic and Business Studies. 2024, vol. 68, no. 3, pp. 95–110. URL: https://doi.org/10.47703/ejebs.v68i3.423 (accessed: 22.02.2025)

### КЕНЖЕАЛИ Е.А.,\*1

докторант. \*e-mail: y.kenzheali@gmail.com ORCID ID: 0000-0003-3412-3706 АЙНАКУЛ А.Н.,<sup>2</sup>

PhD, қауымдастырылған профессор. e-mail: n.ainakul@turan-edu.kz ORCID ID: 0000-0002-6055-6217

# НУРГАЛИЕВА К.О.,<sup>1</sup>

э.ғ.к., профессор. e-mail: nurgalieva.k@uib.kz ORCID ID: 0000-0002-8735-667

### КАРАКСОНИ П.,3

РhD, профессор. e-mail: karacsony.peter@uni-obuda.hua ORCID ID: 0000-0001-7559-0488 <sup>1</sup>К. Сагадиев атындағы Халықаралық бизнес университеті, Алматы қ., Казахстан, <sup>2</sup>«Тұран» университеті, Алматы қ., Казахстан, <sup>3</sup>Обуда университеті, Будапешт қ., Мажарстан

# ҚАЗАҚСТАНДАҒЫ БІЛІМ ДЕҢГЕЙІНІҢ ЕРЛЕР МЕН ӘЙЕЛДЕРДІҢ МАНСАПТЫҚ МҮМКІНДІКТЕРІНЕ ӘСЕРІ

#### Аңдатпа

2012 жылдан 2022 жылға дейінгі жұмыс күшіне қатысу, жұмыспен қамту, өзін-өзі жұмыспен қамту және жалақының өсуіне қатысты еңбек нарығы үрдістерінің егжей-тегжейлі зерттеуі ұсынылған. Сипаттамалық статистика және регрессиялық талдау әдістерін қолдана отырып, келесі негізгі көрсеткіштер зерттелді: жалдамалы және өзін-өзі жұмыспен қамту деңгейі, гендерлік алшақтық, жүйелік үрдістер мен маңызды корреляцияларды анықтау үшін жұмыссыздық деңгейі. Нәтижесінде зерттеу жұмыс күші мен жалдамалы жұмыспен қамту тұрақты өсуді жалғастырып жатқанын көрсетеді, ал өзін-өзі жұмыспен қамту еңбек нарығының құрылымдық басымдықтарының өзгеруіне байланысты төмендеуде. Осы қорытындыға байланысты гендерлік теңсіздік айқын болып қалуда: әйелдер жұмыспен қамту мүмкіндіктерінің қалыпты жақсаруымен қатар жұмыс күшіне қатысудың салыстырмалы баяу өсуіне тап болуда. Регрессиялық талдау жыл және өзінөзі жұмыспен қамту айнымалылары жалақының өсуін анықтауға айтарлықтай әсер ететінін көрсетеді, ал жалдамалы жұмыспен қамту және гендерлік фактор аз маңызды. Жұмыссыздық деңгейі жалақының өзгеруімен оң корреляцияда болып шығады, бұл еңбек нарығының ауытқуы кезінде жалақының өзгеруінің тегістелуін көрсетуі мүмкін. Зерттеу сондай-ақ COVID-19 пандемиясы сияқты сыртқы факторлардың жұмыспен қамту құрылымдары мен гендерлік қатынастарға ықтимал әсерін көрсетеді. Бұл тұжырымдар гендерлік теңсіздікке қатысты саяси шаралардың, кәсіпкерлікті қолдаудың және еңбек нарығындағы мүмкіндіктерге тең қол жеткізуді қамтамасыз етудің қажеттілігін көрсетеді. Бұл зерттеу еңбек нарығы жағдайларының ұзақ мерзімді трансформациясы призмасы арқылы тұрақты және инклюзивті экономикалық даму үшін негізгі ұсыныстар береді.

**Тірек сөздер:** білім, гендерлік теңдік, мансап мүмкіндіктері, жалақының өсуі, еңбек нарығы, экономикалық даму, жұмыссыздық, біліктілік.

### КЕНЖЕАЛИ Е.А.,\*1

докторант. \*e-mail: y.kenzheali@gmail.com ORCID ID: 0000-0003-3412-3706

## АЙНАКУЛ А.Н.,<sup>2</sup>

PhD, ассоциированный профессор. e-mail: n.ainakul@turan-edu.kz ORCID ID: 0000-0002-6055-6217

### НУРГАЛИЕВА К.О.,1

к.э.н., профессор. e-mail: nurgalieva.k@uib.kz ORCID ID: 0000-0002-8735-667

### КАРАКСОНИ П.,3

РhD, профессор. e-mail: karacsony.peter@uni-obuda.hua ORCID ID: 0000-0001-7559-0488 <sup>1</sup>Университет международного бизнеса имени К. Сагадиева, г. Алматы, Казахстан <sup>2</sup>Университет «Туран», г. Алматы, Казахстан <sup>3</sup>Университет Обуда, г. Будапешт, Венгрия

# ВЛИЯНИЕ УРОВНЯ ОБРАЗОВАНИЯ НА КАРЬЕРНЫЕ ВОЗМОЖНОСТИ МУЖЧИН И ЖЕНЩИН В КАЗАХСТАНЕ

### Аннотация

Представлено детальное исследование тенденций рынка труда с 2012 по 2022 гг. в отношении участия в рабочей силе, занятости, самозанятости и роста заработной платы. С использованием методов описательной статистики и регрессионного анализа были исследованы следующие ключевые показатели: уровень наемной и самозанятости, гендерные разрывы, уровень безработицы для выявления системных тенденций и значимых корреляций. В итоге исследование показывает, что рабочая сила и наемная занятость продолжают устойчиво расти, в то время как самозанятость снижается из-за изменений в структурных предпочтениях рынка труда. Гендерное неравенство остается очевидным: женщины сталкиваются с относительно медленным ростом участия в рабочей силе в сочетании с умеренным улучшением возможностей трудоустройства. Регрессионный анализ выявляет, что переменные года и самозанятости оказывают значительное влияние на определение роста заработной платы, в то время как наемная занятость и гендерный фактор менее значимы. Уровень безработицы оказывается положительно коррелированным с изменениями в заработной плате, что

### Научный журнал «Вестник университета «Туран» № 2(106) 2025 г.

может указывать на сглаживание изменений в заработной плате во время колебаний рынка труда. Исследование также отражает возможное влияние внешних факторов, таких как пандемия COVID-19, на структуры занятости и гендерные отношения. Эти выводы указывают на необходимость политических мер в отношении гендерного неравенства, поддержки предпринимательства и обеспечения равного доступа к возможностям на рынке труда. Данное исследование предоставляет ключевые рекомендации для устойчивого и инклюзивного экономического развития через призму долгосрочной трансформации условий рынка труда.

Ключевые слова: образование, гендерное равенство, возможности карьерного роста, рост заработной платы, рынок труда, экономическое развитие, безработица, квалификация.

Article submission date: 07.01.2025