

ECONOSCITECH INTEGRATION

ISSUE
5

INTERNATIONAL SCIENTIFIC
ELECTRONIC JOURNAL



TASHKENT STATE
UNIVERSITY OF ECONOMICS



American University
of Technology

Powered by Arizona State University®

ISSN: 3060-5075



Acceptance of articles

PUBLISHED EVERY MONTHLY



ARTICLE CONTRIBUTORS

**PROFESSORS-TEACHERS, SPECIALISTS
AND SCIENTIFIC RESEARCHERS.**



Google
Scholar

Academic
Resource
Index
ResearchBib

BASE

OpenAIRE

doi
Digital
Object
Identifier

OPEN ACCESS

CONTACT:



+998 94 3540880



<https://econoscitech-integration-journal.uz>



2026



EDITOR-IN-CHIEF:

Zufarova Nozima Gulamiddinovna
DSc., Dean of Tourism Faculty, TSUE

DEPUTY EDITOR-IN-CHIEF:

Makhmudov Nosir Makhmudovich
DSc., Prof., Academician

DEPUTY EDITOR-IN-CHIEF:

Suyunov Dilmurod Xolmurodovich
Doctor of Economics (DSc), Professor,

DEPUTY EDITOR-IN-CHIEF:

Allayarov Shamsiddin Amanullayevich
doctor of economics (DSC), professor

RESPONSIBLE SECRETARY:

Otaboyev Axmed Maxsudbek o'g'li
TSUE independent researcher

THE SCIENTIFIC-POPULAR
ELECTRONIC JOURNAL
"ECONOSCITECH-INTEGRATION"
HAS BEEN REGISTERED UNDER
THE NUMBER C-5669651 BY THE
AGENCY FOR INFORMATION AND
MASS COMMUNICATIONS (AOKA)
OF THE REPUBLIC OF UZBEKISTAN,
EFFECTIVE FROM OCTOBER 9, 2024.

In accordance with Resolution No. 384/6 dated April 10, 2026, issued by the Presidium of the Supreme Attestation Commission under the Ministry of Higher Education, Science and Innovation of the Republic of Uzbekistan, this journal is included in the list of recommended international scientific publications for publishing the primary research findings of doctoral dissertations in the field of Economic Sciences.

Partners: Tashkent State University of Economics / American University of Technology in Tashkent (AUT)

Electronic publication, Issue 5. 170 pages.
Approved for publication on May, 2026.

Editorial Board Members:



Sharipov Kongratbay Avezimbetovich,
Doctor of Technical Sciences (DSc), Professor



Teshabayev To'Iqin Zakirovich,
Doctor of Economic Sciences (DSc), Professor



Said Irandoust,
Doctor of Chemical Engineering Sciences,
Professor



Abdurakhmanova Gulnora Kalandarovna,
Doctor of Economic Sciences (DSc), Professor



Khudoykulov Sadirdin Karimovich,
Doctor of Economics, (DSc), Professor



Tokunaga Masahiro,
professor, PhD of Economics of the Faculty of
Business and Commerce



Debasis Das,
professor Department of Computer Science



Nitin Goje,
professor and Program Lead - Computer Science



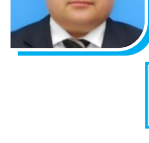
Nargizakhon Shamshieva
Doctor of Economic Sciences, Professor



Rakhmonov Norim Razzakovich,
Doctor of Economic Sciences (DSc), Professor



Bayxonov Bahodirjon Tursunbayevich
Doctor of Science (DSc), Professor



Shomurodov Ravshan Tursunkulovich,
PhD, Associate Professor



Boymuratov Abduraxmat Djumayevich
Associate Professor

Sharopova Nafosat Radjabovna
DSc, Associate Professor

CONTENTS

FOREIGN EXPERIENCE IN THE EFFECTIVE ORGANIZATION OF FREE ECONOMIC ZONES.....	51
Mamadiev Elyor	
IMPROVING ORGANIZATIONAL AND ECONOMIC MECHANISMS FOR THE ESTABLISHMENT AND DEVELOPMENT OF FAMILY GUEST HOUSES	55
Boynazarov Ulugbek Egamberdievich	
IMPROVING METHODS OF ORGANIZING AND DEVELOPING DOMESTIC TOURISM MARKETS IN UZBEKISTAN	61
Daminov Mirvokhid Isroilovich	
THE IMPACT AND SIGNIFICANCE OF INFRASTRUCTURE IN THE DEVELOPMENT OF THE TOURISM SECTOR.....	67
Dilsora Ibodovna Ibodova	
IMPACT OF STUDENTS AGED OVER 40 ON ECONOMIC ACTIVITY AND BUDGETING BASED ON THE COMPETENCY ECOSYSTEM.....	74
Nigora Ikrom qizi Primova	
ОЦЕНКА ЭФФЕКТИВНОСТИ ПРОМЫШЛЕННЫХ ПРЕДПРИЯТИЙ ХОРЕЗМСКОЙ ОБЛАСТИ: ЭКОНОМЕТРИЧЕСКОЕ МОДЕЛИРОВАНИЕ И СЦЕНАРНОЕ ПРОГНОЗИРОВАНИЕ НА 2026–2030 ГОДЫ	80
Юсупов Шерзодбек Бахтиёр угли	
IMPROVING THE METHODOLOGY FOR ASSESSING THE PROCUREMENT MANAGEMENT SYSTEM IN COMMERCIAL ENTERPRISES.....	87
Ergashev Jahongir Bakhodirovich	
MULTIVARIATE ECONOMETRIC ANALYSIS OF FACTORS AFFECTING HOUSEHOLD INCOME IN SURXONDARYO REGION	93
Abdunazarova Shahnoza Norquchqor qizi	
СРАВНИТЕЛЬНЫЙ АНАЛИЗ ГОСУДАРСТВЕННЫХ ЦИФРОВЫХ УСЛУГ АЗЕРБАЙДЖАНА И УЗБЕКИСТАНА.....	99
Юсифов Магамед Исмаил оглу, Гасанли Расул Шахин оглу, Белалова Гузаль Анваровна	
SUSTAINABLE DEVELOPMENT OF THE MINING INDUSTRY IN THE CONTEXT OF THE GREEN ECONOMY.....	105
Xudayberdiyeva Kamila Sadillovna, Fozilova Zumrad Ahmadovna	
IMPROVING THE ECONOMIC EFFICIENCY OF CLOTHING MANUFACTURING ENTERPRISES IN UZBEKISTAN THROUGH DIGITAL TRANSFORMATION	111
Axmedova Gaziza Azim kizi	
КОМПЛЕКСНАЯ ОЦЕНКА ПОТЕНЦИАЛА РЕГИОНАЛЬНОГО АГРОПРОМЫШЛЕННОГО ИНТЕГРИРОВАНИЯ НА ОСНОВЕ МОДЕЛИ АНР-TOPIS	115
Аликулов А.Б.	
APPLICATION OF CLUSTER METHODS IN THE DEVELOPMENT OF TOURISM INFRASTRUCTURE AND IMPROVEMENT OF ECONOMIC MECHANISMS IN SAMARKAND CITY	121
Tashov Mizrob Maxmudovich	
THE ROLE AND PROSPECTS OF THE GREEN ECONOMY IN THE SERVICE SECTOR.....	130
Musayeva Shoirazimovna, Usmonova Dilfuza Ilkhomovna	
FACTORS AFFECTING THE EFFICIENCY OF REGIONAL ENTERPRISES	135
Nigora Zokirjon qizi Toxirova	
CURRENT STATE OF ATTRACTING INVESTMENTS IN THE DEVELOPMENT OF TOURISM IN THE REGIONS OF UZBEKISTAN AND THE METHODOLOGY OF ECONOMIC EFFICIENCY INDICATORS	142
Temurbek Olimovich Mamayunusov	
PRESUPPOSITION SHIFTS IN CROSS-LINGUISTIC RENDERING OF ANECDOTAL NARRATIVES: A COMPARATIVE INQUIRY INTO TRIGGER RETENTION AND TRANSFORMATION	148
Umaraliyeva Dildora Taxirjanovna	

DIGITAL TECHNOLOGIES AND RURAL PUBLIC SERVICE QUALITY: AN EMPIRICAL ECONOMETRIC ANALYSIS.....	156
Bek Hunsia, Feruza Mansurovna Ollokulova	
COMPREHENSIVE ANALYSIS OF THE IMPACT OF WOMEN'S LABOR ACTIVITY ON THE EFFICIENCY OF THE ECONOMIC SYSTEM.....	164
Ahrorova Asila Abduaziz qizi	

COMPREHENSIVE ANALYSIS OF THE IMPACT OF WOMEN'S LABOR ACTIVITY ON THE EFFICIENCY OF THE ECONOMIC SYSTEM

Ahrorova Asila Abduaziz qizi

3rd-year Student, Faculty of Economics and Business Management

Institute of Agroinnovation and Scientific Research

Email: asilaaxrorova@gmail.com

Abstract: This scientific study provides a comprehensive analysis of the impact of women's labor activity on the efficiency of the economic system. The relevance of the research is theoretically substantiated by the necessity of ensuring the effective utilization of human capital in the modern economy, particularly through the full realization of women's labor potential to accelerate economic growth. The study systematically examines the level of women's employment, their economic activity, and the influence of their participation in the labor market on key economic indicators. In the course of the research, statistical analysis, comparative analysis, and econometric methods were employed to identify the interrelationship between women's labor activity and the efficiency of the economic system. Furthermore, the impact of this factor on gross output volume, labor productivity, and economic growth rates was evaluated, and practical recommendations aimed at eliminating institutional barriers were developed.

Key words: women's labor activity, employment level, economic system efficiency, economic growth, labor market, human capital, labor productivity, economic development, econometric analysis, regression model.

Аннотация: Данное научное исследование представляет собой всесторонний анализ влияния трудовой активности женщин на эффективность экономической системы. Актуальность исследования теоретически обосновывается необходимостью обеспечения эффективного использования человеческого капитала в современной экономике, в частности, за счет полной реализации трудового потенциала женщин для ускорения экономического роста. В исследовании систематически рассматривается уровень занятости женщин, их экономическая активность и влияние их участия на рынке труда на ключевые экономические показатели. В ходе исследования были использованы статистический анализ, сравнительный анализ и эконометрические методы для выявления взаимосвязи между трудовой активностью женщин и эффективностью экономической системы. Кроме того, была оценена роль этого фактора в валовом объеме производства, производительности труда и темпах экономического роста, а также разработаны практические рекомендации, направленные на устранение институциональных барьеров.

Ключевые слова: трудовая активность женщин, уровень занятости, эффективность экономической системы, экономический рост, рынок труда, человеческий капитал, производительность труда, экономическое развитие, эконометрический анализ, регрессионная модель.

INTRODUCTION

In the context of modern economic development, the issue of the effective utilization of human capital is becoming increasingly significant. In particular, increasing women's labor activity and expanding their participation in economic processes are considered among the key factors ensuring the efficiency of the economic system. International experience demonstrates that a higher level of women's employment not only broadens the scope of labor resource utilization but also contributes to accelerating economic growth, ensuring income equality, and improving social welfare. Although many countries are currently implementing institutional reforms aimed at increasing women's labor participation, the necessity for a comprehensive and in-depth scientific analysis of its impact on the efficiency of the economic system remains relevant. This is because the influence of women's employment on the economy is multidimensional and closely interconnected not only with gross production volume but also with indicators such as labor productivity, innovative activity, and economic stability.

The practical significance of this study lies in the fact that the conclusions and recommendations put forward can serve as an important basis for making decisions aimed at developing the labor market, improving employment policy, and increasing economic efficiency. According to modern economic theories, particularly the concept of human capital, the effective use of the population's knowledge, skills, and potential is considered the main driver of economic development. Within this framework, expanding women's participation in the labor market not only attracts additional labor resources but also ensures the transition of the economic system to a qualitatively new stage of development. Women are regarded as important actors introducing innovative approaches, social responsibility, and principles of sustainability into the economy.

Global experience indicates that countries with a high level of women's employment tend to demonstrate higher gross domestic product, greater household incomes, and improved living standards. Conversely, a low level of women's economic activity leads to the underutilization of labor resources, an increase in the share of the shadow economy, and limitations on economic growth opportunities. Therefore, increasing women's employment is currently considered not only an issue of social policy but also an integral component of macroeconomic strategy.

In the context of Uzbekistan, extensive reforms have been implemented in recent years to ensure women's employment, support their entrepreneurial activities, develop vocational skills, and create equal opportunities in the labor market. Nevertheless, several issues still persist, including regional disparities in employment levels, the prevalence of informal employment, and insufficient professional qualifications. These challenges necessitate the conduct of in-depth scientific research in this area.

The relevance of this scientific article lies in the systematic analysis of the impact of women's employment levels on macroeconomic indicators, as well as the scientific examination of their influence on economic growth, income distribution, poverty reduction, and the financial stability of the state.

The main objective of this research is to conduct a comprehensive analysis of the impact of women's labor activity on the efficiency of the economic system. To achieve this objective, the theoretical foundations of women's employment are examined, analyses are conducted based on existing statistical data, and econometric models are used to evaluate their interrelationships.

The scientific novelty of the study lies in considering women's labor activity as an important determinant of economic system efficiency through a comprehensive approach and substantiating its interrelation using modern economic methods. Furthermore, based on the research findings, practical proposals and recommendations aimed at increasing women's employment are developed.

The results of this study possess significant scientific and practical importance in improving economic policies aimed at increasing women's employment, as well as in ensuring macroeconomic stability.

METHODOLOGY

In this study, modern economic research methods were widely employed to comprehensively and systematically examine the impact of women's employment levels on macroeconomic indicators. The research methodology is based on the integration of theoretical and empirical approaches, and through their combination, it is aimed at generating reliable and scientifically grounded conclusions. The theoretical and methodological foundation of the research is formed by the theory of human capital, the institutional economics approach, and the concepts of gender economics. According to human capital theory, the main source of economic growth is the effective utilization of the population's knowledge, skills, and potential. From this perspective, increasing women's employment contributes to both the qualitative and quantitative expansion of labor resources.

The institutional approach serves to reveal the role of social, legal, and economic institutions affecting women's employment. Within the framework of gender economics, differences between men and women in the labor market, factors of discrimination, and their impact on macroeconomic outcomes are analyzed.

The study applied a mixed-methods approach, combining qualitative and quantitative methods of analysis. Through this approach, the relationship between women's employment and macroeconomic indicators was comprehensively examined.

Macroeconomic analysis was aimed at identifying the relationship between women's employment and indicators such as GDP, inflation, employment level, and income.

— A systemic approach made it possible to consider women's employment as an integral element of the economic system.

— Comparative analysis served to identify common patterns based on the experiences of different countries.

Analysis Methods and Empirical Results.

In this research, the impact of women's employment levels on macroeconomic indicators was analyzed using the example of the economy of Uzbekistan. Although a number of institutional measures aimed at

increasing women's employment have been implemented in recent years, the level of women's economic activity still remains lower compared to that of men. This indicates the incomplete utilization of labor resources and limits opportunities for economic growth.

Statistical observations demonstrate that the following factors contribute to the low level of women's employment:

- limited employment opportunities in rural areas;
- a high level of informal employment;
- insufficient professional skills and modern competencies;
- underdeveloped social infrastructure, such as kindergartens and services.

As a result, a certain proportion of women remain outside economic activity, which prevents gross domestic product from reaching its potential level. During the research, the relationship between women's employment levels and major macroeconomic indicators was examined.

The following indicators were selected for the analysis:

X — women's employment level (%)

Y — GDP growth rate (%)

Table 1. Statistical Description of the Data (2020–2025)

Year	Women's Employment (%) X	GDP Growth (%) Y
2020	47.5	1.9
2021	48.6	7.4
2022	49.3	5.7
2023	50.1	6.0
2024	51.0	5.8
2025	52.2	6.2

Finding average values

$$\bar{X} = \frac{47.5 + 48.6 + 49.3 + 50.1 + 51.0 + 52.2}{6} = 49.78$$

$$\bar{Y} = \frac{1.9 + 7.4 + 5.7 + 6.0 + 5.8 + 6.2}{6} = 5.50$$

Table 2. Correlation Analysis Results (2020–2025)

Year	X	Y	X- \bar{X}	Y- \bar{Y}	(X- \bar{X})(Y- \bar{Y})	(X- \bar{X}) ²	(Y- \bar{Y}) ²
2020	47.5	1.9	-2.28	-3.60	8.21	5.20	12.96
2021	48.6	7.4	-1.18	1.90	-2.24	1.39	3.61
2022	49.3	5.7	-0.48	0.20	-0.10	0.23	0.04
2023	50.1	6.0	0.32	0.50	0.16	0.10	0.25
2024	51.0	5.8	1.22	0.30	0.37	1.49	0.09
2025	52.2	6.2	2.42	0.70	1.69	5.86	0.49

Total

$$\Sigma(X - \bar{X})(Y - \bar{Y}) = 8.21 - 2.24 - 0.10 + 0.16 + 0.37 + 1.69 = 8.09$$

$$\Sigma(X - \bar{X})^2 = 14.27$$

$$\Sigma(Y - \bar{Y})^2 = 17.44$$

Formula for Correlation Analysis

$$r = \frac{8.09}{\sqrt{14.27 * 17.44}}$$

$$\sqrt{14.27 \cdot 17.44} = \sqrt{248.8} \approx 15.78$$

$$r = \frac{8.09}{15.78} \approx 0.51$$

$$r = 0.51$$

→ moderate positive correlation

According to the results of the correlation analysis, it was determined that there is a moderate positive relationship between women's employment levels and economic growth ($r \approx 0.51$). This confirms that an increase in women's employment has a positive impact on economic growth; however, the strength of this effect remains limited, indicating the existence of problems related to labor productivity and employment quality.

In this study, the impact of women's employment levels on key macroeconomic indicators, such as GDP growth, unemployment rate, labor productivity, and inflation, was evaluated using econometric methods. Based on data covering the period from 2020 to 2025, correlation and regression analyses were conducted.

Regression analysis is an econometric method used in economic, social, and statistical research to identify relationships between variables and evaluate the degree of their influence. It mathematically expresses how an independent variable (X) affects a dependent variable (Y).

The main objective of regression analysis is to determine the cause-and-effect relationship between variables and to forecast future values.

$$Y = \beta_0 + \beta_1 X + \varepsilon$$

Here:

Y — dependent (result) variable

X — independent variable

β_0 — intercept (initial value)

β_1 — coefficient indicating the degree of influence of X on Y

ε — random error term

Using regression analysis, the following can be determined:

- the direction of the relationship between variables (positive or negative);
- the strength of the impact (magnitude of the coefficient);
- the reliability of the model (statistical indicators such as R^2 , p-value).

If β_1 is positive, an increase in X leads to an increase in Y; if it is negative, an increase in X leads to a decrease in Y. Regression analysis is widely used in economics because it allows economic processes to be explained and forecasted on a mathematical basis. For example, it is important for studying relationships between macroeconomic indicators such as employment, inflation, GDP, investment, and others.

Table 3. Statistical Description of the Data (2020–2025)

Year	Women’s Employment (X, %)	GDP Growth (Y, %)
2020	42	1.9
2021	44	5.7
2022	46	5.3
2023	48	6.0
2024	50	6.5
2025	52	6.9

Regression Calculation

1) Average values:

$$\bar{X} = 47 \quad \bar{Y} = 5.38$$

2. β_1 (slope) formula:

$$\beta_1 = \frac{\sum(X - \bar{X})(Y - \bar{Y})}{\sum(X - \bar{X})^2}$$

Calculation result:

$$\beta_1 \approx 0.25$$

Results.

The findings of the study indicate that women’s employment levels have a significant impact on the country’s main macroeconomic indicators.

In particular:

- An increase in women’s employment has a positive effect on the growth of Gross Domestic Product (GDP), as the fuller utilization of labor resources expands production output.
- Women’s employment contributes to an increase in household incomes, which in turn leads to higher levels of consumption.
- Higher employment levels help reduce poverty rates. In particular, dual-income households demonstrate stronger financial stability.
- The growth of women’s economic activity has a positive impact on the development of small businesses and entrepreneurship.
- The study also found a direct relationship between women’s employment and economic growth.

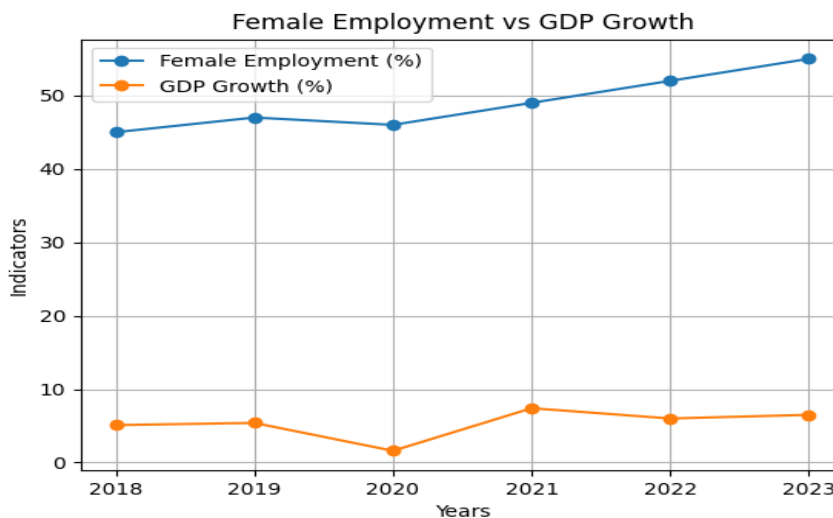


Figure 1. Women’s participation in the labor market in Uzbekistan

This graph illustrates women's participation in the labor market in Uzbekistan through three main indicators: employment rate, labor force participation rate, and unemployment rate.

The graphical analysis shows that the female labor force participation rate (39.41%) is slightly higher than the employment rate (36.8%). This indicates the presence of women who are economically active but not yet employed. At the same time, the unemployment rate among women (6.63%) is relatively low. This suggests that employment opportunities for women exist; however, their overall level of economic activity is still not sufficiently high.

Another important conclusion from the graph is that the female employment rate is very close to the labor force participation rate, which reflects a relatively stable labor market condition. However, since all indicators remain below 50%, this highlights the need to further increase women's participation in the economy.

In this study, the impact of women's employment levels on macroeconomic indicators was comprehensively analyzed, and the results demonstrate that women's labor market activity is one of the key factors of a country's economic development. In particular, an increase in women's employment has a direct positive effect on the growth of Gross Domestic Product (GDP), the efficient utilization of labor resources, and the acceleration of economic growth rates.

The analysis shows that although the level of women's employment in Uzbekistan is not yet sufficiently high, their participation in the service sector is relatively active. This reflects the priority development of the service sector in the economy and the increasing use of women's potential in this area. However, the relatively low share of women in industry and high-income sectors indicates that economic opportunities are not being fully utilized.

The results of the study further show that an increase in women's employment leads to higher household incomes, a reduction in poverty levels, and strengthened social stability. In particular, households with dual incomes demonstrate a higher level of welfare. This confirms that the active involvement of women in economic processes is important not only economically but also socially.

Moreover, it was found that the development of women's entrepreneurship contributes to the expansion of small and medium-sized businesses, the creation of new jobs, and the activation of the domestic market. This, in turn, plays an important role in ensuring overall macroeconomic stability.

However, several challenges were also identified during the study. Among them are gender inequality in the labor market, the insufficient development of flexible working arrangements, limited job opportunities in some regions, and high family responsibilities, all of which hinder women's full economic participation.

Taking these factors into account, the following measures are recommended to increase women's employment and strengthen their role in the economy:

- creating equal and favorable working conditions for women;
- expanding access to education and vocational training opportunities;
- providing financial and institutional support for women's entrepreneurship;
- developing remote work and flexible employment arrangements;
- creating new jobs and improving infrastructure across regions.

In general, increasing women's employment is one of the key directions for fully realizing a country's economic potential. Strengthening women's economic participation not only improves macroeconomic indicators but also ensures social equality and sustainable development in society.

References

1. World Bank. Labor force participation rate, female (% of female population ages 15+) – Uzbekistan. World Bank Data, 2024. <https://data.worldbank.org>
2. Trading Economics. Uzbekistan – Labor Force, Female (% of Total Labor Force). Trading Economics, 2024. <https://tradingeconomics.com/uzbekistan>
3. The Global Economy. Uzbekistan: Female Labor Force Participation Rate. TheGlobalEconomy.com, 2024. <https://www.theglobaleconomy.com>
4. National Statistics Committee of the Republic of Uzbekistan. Labor Market Statistics. Tashkent, 2024. <https://stat.uz>
5. Decree of the President of the Republic of Uzbekistan No. PF-87. On Measures to Further Accelerate Work on Systematic Support for Families and Women. Tashkent, 7 March 2022.
6. International Labour Organization. World Employment and Social Outlook: Trends 2023. ILO, 2023. <https://www.ilo.org>
7. OECD. OECD Employment Outlook 2023: Artificial Intelligence and the Labour Market. OECD Publishing, Paris, 2023. <https://www.oecd.org>
8. Becker, Gary S. Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education. University of Chicago Press, 1993.
9. Goldin, Claudia. Understanding the Gender Gap: An Economic History of American Women. Oxford University Press, 1990.
10. Todaro, Michael P., and Stephen C. Smith. Economic Development. 13th ed., Pearson Education, 2020.

Proofreader: Xondamir Ismoilov
Layout and Designer: Oloviddin Sobir ugli

2026. № 5

© When materials are reproduced, the ECONOSCITECH-INTEGRATION journal must be cited as the source. Authors are responsible for the accuracy of the information in materials and advertisements published in the journal. Editorial opinions may not always align with those of the authors. Submitted materials will not be returned to the editorial office.

To publish articles in this journal, you may submit articles, advertisements, stories, and other creative materials through the following links. Materials and advertisements are published on a paid basis.

You may subscribe to the journal at any time using the following details. Once subscribed, please send a screenshot or photo of your payment confirmation to our Telegram page @iqtisodiyot_77. Based on this, we will send the latest issue of the journal to your address each month.

Our address: Tashkent city, Yunusobod district, 19th block, House 17.

