Assessment of Female Employment, Education, and Political Representation in Kazakhstan

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Abstract

The relevance of the study is due to the need to quantify the contribution of gender equality to the economic development of countries with economies in transition. This study investigates the relationship between gender equality and economic growth in Kazakhstan, with a focus on women's participation in the labor market, politics, and access to early childhood education. The methods used are correlation analysis based on official macroeconomic and social data from the World Bank. The results show that GDP per capita positively correlates with the proportion of women in formal employment (r = 0.906), as well as with their representation in parliament (r = 0.696) and pre-school education (r = 0.420). A negative correlation was found between women's vulnerable employment and GDP (r = - 0.916), as well as between the unemployment rate among women and pre-school education (r = - 0.884), indicating the role of institutional infrastructure in supporting women's employment. The conclusions emphasize the need to develop a gender-oriented policy aimed at increasing women's access to stable employment, policy mechanisms, and pre-school education as strategic factors for sustainable growth. Future research prospects include a deeper analysis of qualitative aspects of women's employment, such as pay levels, job stability, working conditions, and career opportunities.

1. INTRODUCTION

In the context of growing global competition and the pursuit of sustainable development, gender inequality has emerged as a critical issue shaping social and economic outcomes. Gender disparities in labor market participation, education, and political representation have significantly affected countries' economic growth and social stability (Kim, 2017; Peña-Sánchez, 2020). Although substantial progress has been made in documenting the negative impact of gender inequality in education and employment on economic performance, several important research gaps remain (Mazhar, 2023; Nyussupova et al., 2024; Blau, 2025).

Some gaps remain in the study of gender equality and its impact on economic development. Firstly, the role of women's political participation remains less understood and requires further empirical analysis. Secondly, only a limited number of studies examine a set of different indicators of gender equality concerning the level of economic development, making it challenging to identify the most significant factors influencing economic growth. In addition, the studies on the relationship between the development of the childcare system (preschool education) and economic growth in the context of Kazakhstan are limited.

The research aims to identify gender factors influencing economic growth in Kazakhstan.

Following the aim, the hypotheses are formulated:

H1: Higher female labor force participation contributes to economic growth.

H2: Female unemployment has a negative impact on economic growth.

H3: The expansion of pre-primary education contributes to economic growth.

H4: A higher level of women's representation in parliament positively correlates with GDP per capita.

H5: A decrease in the level of vulnerable employment among women is associated with economic growth.

H6: An increase in the share of formal female employment promotes GDP growth.

This research paper uses quantitative methods, such as correlation analysis, to understand the impact of gender indicators on Kazakhstan's economy. Through correlation analysis, the relationships between female employment rates, vulnerable employment, pre-primary education enrolment and women's representation in national parliaments are examined to identify structural factors that promote or hinder women's economic and social empowerment in the context of sustainable development.

This research contributes to the existing literature on gender equality by examining the relationship between women's participation in the labor market, access to pre-primary education, political representation, and economic growth. The findings provide theoretical insights and practical implications for formulating gender-responsive economic policies in Kazakhstan and other transition economies. The paper is structured as follows: introduction, theoretical framework, methods, results and discussion, and conclusion.

The theoretical framework section reviews key academic literature and theoretical perspectives on gender inequality and its impact on economic development. It contextualizes the study by analyzing prior research on female employment, vulnerable labor, education, and political representation, focusing on developing and post-Soviet countries, including Kazakhstan. The methodology section outlines the quantitative research design, specifically using Pearson correlation analysis to assess relationships between macroeconomic indicators (e.g., GDP per capita) and various gender-related factors. It also details the data sources and variables employed in the analysis. In the results and discussion section, the outcomes of the correlation analysis are presented and interpreted. All proposed hypotheses are confirmed, and the section discusses the strength and direction of the relationships between female employment, access to pre-primary education, political participation, and

economic growth.

The paper concludes by summarizing key insights, highlighting policy implications, and suggesting directions for future research. It emphasizes the importance of gender-responsive policies for inclusive and sustainable economic development. This study investigates the relationship between gender equality and economic growth in Kazakhstan, focusing on women's participation in the labor market, politics, and access to early childhood education.

2. LITERATURE REVIEW

Gender disparities in employment and economic participation significantly impact countries' social and economic development (Kim, 2017). Gender equality is widely recognized as a key factor contributing to economic efficiency, social stability, and sustainable growth (Peña-Sánchez, 2020). Nevertheless, women continue to face systemic barriers, including unequal employment opportunities, limited access to leadership positions, and persistent gender-based wage gaps (Cook & Glass, 2013; Alqahtani, 2020).

Several recent studies emphasized that restricting women's participation in the economy leads to the underutilization of human capital, a decrease in overall labor productivity, and, consequently, slower growth in GDP per capita (Ivandić & Lassen, 2023; Nyussupova et al., 2024; Blau, 2025). According to Mazhar (2023), integrating women into the labor force can significantly boost GDP, particularly in low- and middle-income countries. Women's active involvement in the economy contributes to the quantitative expansion of the labor force and qualitative improvements in human capital through education and professional skills development. This, in turn, increases overall productivity and stimulates economic growth.

The effect of women's formal employment is particularly evident in developing countries. The study by Pervaiz et al. (2023) showed that the share of women employed in the formal sector has a positive and statistically significant effect on economic growth. Therefore, expanding economic opportunities for women, including access to quality education and equal labor market conditions, should be considered a strategic priority for sustainable and inclusive development (Hong et al., 2019).

Including women in the labor force and their participation in political decision-making processes is a crucial factor contributing to sustainable socio-economic development. As noted by Mirziyoyeva and Salahodjaev (2023), the active participation of women strengthens horizontal social ties, fosters trust in society and increases levels of social capital. Furthermore, more excellent representation of women in legislative bodies, particularly in national parliaments, positively impacts economic growth by laying the groundwork for more balanced and effective public policies (Buterin et al., 2023; Dahlum et al., 2022). A high level of social capital associated with women's political involvement enhances coordination across economic sectors, improves public governance quality, and facilitates inclusive reform implementation. A larger share of women in national parliaments may also lead to adopting laws to improve women's status in the labor market, thereby increasing their share in stable and salaried employment.

Nevertheless, despite these positive trends, women continue to face systemic barriers to influencing political priorities and shaping economic development agendas (Roberts et al., 2013). According to Altuzarra et al. (2021), even in conditions of formal equality, women may lack access to political resources and meaningful influence over decision-making and the distribution of economic benefits. This highlights the need to increase women's numerical representation and strengthen their substantive political and economic influence.

The high levels of vulnerable employment and unemployment among women may be attributed to the inadequate adaptation of economic and social structures to the changing demands of the labor market, particularly those specific to women's employment. Empirical

findings on this issue remain mixed. While some studies suggest that vulnerable employment may contribute positively to economic growth in the short term by mobilizing low-cost labor and expanding production , others argue that high levels of precarious work and unemployment among women can hinder long-term growth by undermining the foundations of sustainable development and reducing the quality of human capital (Armstrong & Read, 2002; Cordina, 2004).

A comparative analysis of international data reveals considerable variation across countries. For example, in some developing economies, female unemployment correlates positively with GDP growth, possibly due to the dynamics of informal and shadow economic sectors (Ebere Ume Kalu et al., 2020). In contrast, in countries like Kazakhstan, prolonged female unemployment has a negative impact on economic growth, as it impedes the realization of labor potential and deepens social inequality (Buterin et al., 2023).

The development of early childhood education systems significantly affects human capital formation and female employment, particularly among mothers. As Kimmel (2006) emphasized, high enrollment in pre-primary education can substantially increase women's labor market participation by easing the challenge of balancing work and family responsibilities. However, most studies in this area focus on the impact of preschool education on children's development and subsequent human capital accumulation, while the maternal employment aspect remains underexplored (Warner & Prentice, 2013).

Nonetheless, several studies have examined the relationship between access to childcare and women's economic activity. For instance, Akkan et al. (2023) argued that expanding childcare services can increase the number of employed women, especially in countries with underdeveloped childcare infrastructure. In contrast, other studies, including the work of Krafft and Lassassi (2024), question the universality of this effect, suggesting that increased access to preschool education does not always lead to higher female employment rates. Such mixed outcomes may be explained by institutional limitations, low service quality, or cultural norms that continue to restrict women's participation in the formal economy. This issue is particularly relevant in post-Soviet countries such as Kazakhstan, where the transition to a market economy has led to substantial changes in labor market dynamics. As noted by Kireyeva et al. (2023), market reforms have been accompanied by institutional and structural shifts that have, on the one hand, stimulated economic activity but, on the other hand, exacerbated gender inequality. Women have become more vulnerable to precarious employment, are more likely to occupy low-paid positions, and often face limited access to resources and career advancement opportunities.

Despite some improvements over the past decade, recent studies underscore the persistence of gender inequality in Kazakhstan's labor market. Although women make up more than half of the population, their economic contribution remains below potential due to structural and institutional barriers. A gender gap continues to exist in employment, wages, and leadership roles, with many women facing a "glass ceiling" in career advancement (Nyussupova et al., 2023). While women's share in overall employment is nearly equal to that of men, achieving equal opportunity remains elusive. Addressing these inequalities is essential for reducing social tension and resolving broader socio-economic challenges (Zharkynbayeva et al., 2020).

Although Kazakhstan has made notable progress in educational gender parity, these achievements have not fully translated into labor market equality. Institutional constraints and persistent gender stereotypes continue to hinder women's employment opportunities (Kireyeva et al., 2022). In addition, gender imbalance extends beyond the labor market. Rodionov et al. (2023) highlighted the underrepresentation of women in the political science discipline. Meurs et al. (2021) further showed how motherhood and limited access to early childcare infrastructure significantly

affect women's labor market participation, especially in post-Soviet societies.

In conclusion, the literature highlights the persistent and multidimensional nature of gender inequality in Kazakhstan, particularly in employment, wages, and political representation. While the country has made significant progress in achieving gender equality in education, this has not provided equal opportunities in the labour market. Empirical findings confirm that indicators such as female formal employment, preschool education enrollment, and women's representation in parliament are positively associated with economic growth, whereas female unemployment and vulnerable employment are negatively correlated with GDP per capita.

Thus, addressing gender inequality requires a comprehensive approach that combines institutional reforms, targeted social support, changes in societal norms, and the enhancement of women's political representation. Only a comprehensive strategy can ensure more equitable and sustainable economic and social development.

3. RESEARCH METHODS

This study uses a quantitative research methodology to assess the impact of gender inequality on Kazakhstan's economy, with a specific focus on GDP per capita. The approach is grounded in the analysis of macroeconomic statistical data to identify patterns and relationships between gender-related indicators, such as female labor force participation, formal and vulnerable employment, access to pre-primary education, political representation, and economic growth.

Table 1 provides summary statistics for each variable from 1991 to 2023.

Table 1. Descriptive statistics

Variable	Description	N	Min	Max	Mean	Median
LF	Labor force, female (% of total labor force)	33	1091,55	13478,46	5979,78	6449,44
UNEMPL	Unemployment, female (% of female labor force)	33	48,54	50,01	49,42	49,62
PREPRI	School enrollment, preprimary (% gross)*	33	1,04	15,52	8,09	6,62
SL EMP	Wage and salaried workers, female (% of female employment) (modeled ILO estimate)	33	53,12	76,05	64,06	64,63
EMP VULN	Vulnerable employment, female (% of female employment) (modeled ILO estimate)	33	23,27	46,44	35,18	34,26
PARL	Proportion of seats held by women in national parliaments (%)*	33	10,39	27,36	18,66	17,76
GDP	GDP per capita (current US$)	33	1091,55	13478,46	5979,78	6449,44
*Missing values were replaced with the average value of the corresponding indicator						

Note: compiled by the authors

The study's objective justifies selecting a quantitative design to establish empirical correlations between measurable variables over a longitudinal timeframe. This design enables a systematic investigation of how gender disparities affect economic outcomes, using statistical tools to ensure objectivity, replicability, and analytical clarity. By focusing on Kazakhstan, research contributes to a better understanding of the structural role of gender in emerging market economies. The findings are expected to inform policy

decisions to promote gender equality as a sustainable and inclusive growth driver.

This study is based on secondary data obtained from the World Bank Open Data repository, covering the period from 1991 to 2023. The dataset includes a selection of macroeconomic and gender-related indicators relevant to assessing the impact of gender inequality on economic growth in Kazakhstan.

To address gaps in the dataset, missing values for the variables proportion of seats held by women in national parliaments (unavailable prior to 1997) and pre-primary school enrollment, preprimary (% gross) (available only from 1991 to 2020) were imputed using mean value of each respective variable. This approach was selected under the assumption that the missing data points are randomly distributed and do not introduce significant bias to the statistical relationships being examined. Mean substitution was applied to maintain consistency in the dataset and ensure completeness for the correlation analysis.

Pearson correlation analysis was applied as a statistical method to assess the linear relationship between gender indicators and GDP per capita. The choice of correlation analysis is due to its informativeness for identifying associations in the data and the relative simplicity of calculating and interpreting the results. Pearson's correlation coefficient (r) is calculated using the following formula (1):

$$r = \frac{\sum xy - \frac{\sum x \sum y}{n}}{\sqrt{\left(\sum x^2 - \frac{(\sum x)^2}{n}\right)\left(\sum y^2 - \frac{(y)^2}{n}\right)}} \qquad (1)$$

where:
x and y – represent the paired data points;
n – the number of observations;
r – ranges from –1 (perfect negative correlation) to +1 (perfect positive correlation).

The choice of this method is justified by its simplicity, ease of interpretation, and widespread use in exploratory data analysis, especially in studies involving socioeconomic indicators. By applying correlation analysis,

the study provides an empirically grounded assessment of the extent to which gender inequality influences economic outcomes in Kazakhstan. The findings serve as a basis for further research and evidence-based policymaking in the fields of gender equality and inclusive growth.

Python was used to process data for accurate calculations. The use of Python ensured accuracy, reproducibility, and transparency in data handling. Heatmap was used as visualisation. This visual tool provides an intuitive representation of the strength and direction of correlations between variables, allowing for quick identification of the most significant relationships in the dataset. Color gradients were applied to distinguish between positive and negative correlations, enhancing interpretability for both academic and policy audiences.

4. RESULTS

Kazakhstan has made commitments to gender equality at the legislative and policy levels. However, applied implementation remains uneven. Women continue to face barriers in access to quality employment, career advancement, and political representation. These challenges are further compounded by gaps in social infrastructure, particularly in early childhood education and care, which limit women's full participation in the labor force. Understanding Kazakhstan's gender context of economic development is essential for formulating inclusive and sustainable policy solutions.

Table 2 summarizes the leading indicators characterizing the gender aspects of economic activity in Kazakhstan over three decades.

The analysis revealed significant structural shifts reflecting key stages in the country's social and economic development. GDP per capita decreased by 18.19% in 2000 compared to 1991, illustrating the economic consequences of the post-Soviet crisis and the transition to a market economy. However, by 2010, this indicator had sharply increased by 645.15%, signalling a period of economic

Table 2. Changes in gender indicators in Kazakhstan for 1991-2023

Year	GDP	LF	UNEMPL	PREPRI	SL EMP	EMP VULN	PARL
1991	1442.42	48.59	1.04	76.15	54.68	44.90	18.66
2000	1180.04 (-18.19%)	49.61 (2.10%)	14.70 (1313.46%)	20.65 (-72.88%)	54.44 (-0.44%)	45.08 (0.40%)	10.39 (-44.32%)
2010	8793.08 (645.15%)	49.79 (0.36%)	6.62 (-54.97%)	34.45 (66.83%)	65.62 (20.54%)	32.82 (-27.20%)	17.76 (+70.93%)
2020	8781.51 (-0.13%)	49.07 (-1.45%)	5.37 (-18.88%)	74.13 (115.18%)	75.89 (15.65%)	23.41 (-28.67%)	27.10 (+52.59%)
2023	12918.87 (47.11%)	48.83 (-0.49%)	5.45 (1.49%)	43.96 (-40.70%)	76.05 (0.21%)	23.27 (-0.60%)	18.37 (-32.21%)

Note: compiled by the authors

stabilization, market liberalization, and increased investment activity.

In 2000, the female unemployment rate rose dramatically (from 1.04% to 14.7%), likely due to the collapse of the previous employment system and the limited availability of formal job opportunities for women during the economic transformation. Nevertheless, over the next two decades, the unemployment rate among women steadily declined, reaching 5.45% by 2023, which can be interpreted as a sign of adaptation of the female population to the new socio-economic realities and the gradual restoration of their labor market potential.

Pre-primary school enrollment, a key component of social infrastructure, demonstrated an unstable trajectory. In 2000, the rate dropped sharply by 72.88%, reflecting the reduced attention to social support sectors during the structural downturn. However, by 2020, enrollment had increased by more than 115%, highlighting the growing recognition of early childhood education as a critical factor in supporting women's labor force participation, particularly for mothers.

The trends also indicate a steady decline in the share of women in vulnerable employment, alongside an increase in their presence in formal and salaried positions. These changes can be interpreted as the result of institutional strengthening of labor legislation and the implementation of gender-sensitive employment policies.

Despite positive developments, women's representation in parliament remains volatile. Following significant growth between 2000 and 2020 (an increase of 70.93%), the proportion of women among elected deputies declined by 32.21% by 2023, pointing to the insufficient sustainability of political inclusion mechanisms and the ongoing need to strengthen gender mainstreaming in governance and legislative frameworks.

Correlation analysis was conducted to determine the relationship between GDP per capita and key social and economic indicators regarding women's position in society (Table 3).

Correlation analysis revealed significant relationships between key macroeconomic and social indicators related to the status of women in the labour market, education and politics. In line with Juhásová et al. (2023), the strongest positive correlation is between the GDP per capita (GDP) and the share of female employees (SL EMP) ($r = 0.906$), indicating that with increasing economic well-being, women's formal employment increases. This may indicate both increased opportunities for women in the formal sector of the economy and institutional strengthening of women's rights in the labour sphere. This relationship also supports the hypothesis that women's formal employment is not only a consequence of economic growth but also an important factor. Providing women with access to stable and paid jobs increases their economic autonomy.

Table 3. Heatmap correlation matrix

Variable	GDP	LF	UNEMPL	PREPRI	SL EMP	EMP VULN	PARL
GDP	1,000	0,413	-0,510	0,420	0,906	-0,916	0,696
LF	0,413	1,000	0,105	-0,194	0,363	-0,380	-0,028
UNEMPL	-0,510	0,105	1,000	-0,884	-0,530	0,531	-0,616
PREPRI	0,420	-0,194	-0,884	1,000	0,462	-0,457	0,728
SL EMP	0,906	0,363	-0,530	0,462	1,000	-0,999	0,758
EMP VULN	-0,916	-0,380	0,531	-0,457	-0,999	1,000	-0,752
PARL	0,696	-0,028	-0,616	0,728	0,758	-0,752	1,000

Note: compiled by the authors

It expands their opportunities to participate in household and societal decision-making, which can increase aggregate demand, productivity growth and social stability. Moreover, an increase in the share of women in formal employment may indicate improvements in equal opportunity policies and working conditions, including compliance with labor laws, expanded access to social insurance and maternity protection. It may also indicate the successful implementation of human capital development programs targeting women, including education and training.

Negative correlation between women's wage employment (SL EMP) and women's vulnerable employment (EMP VULN) ($r = -0.999$), which logically reflects the structure of the labor market: as the share of women in formal (paid) employment increases, the share of women in unstable and unprotected employment decreases sharply. Such a relationship emphasizes the importance of legalizing labor relations and providing social guarantees to reduce labor vulnerability.

This trend also indicates improved mechanisms for legal protection of workers, increased inspection functions of government agencies, development of the social insurance system and tightening of employment standards. For developing countries, where a significant portion of women's labor may be in the informal sector, such changes are strategically important.

Reducing the level of vulnerable employment has a positive effect on women's financial situation and overall economic stability since legalized jobs contribute to the growth of the tax base, create sustainable domestic demand and reduce the burden on state social programs. Contrary to the results of Krafft and Lassassi (2024), enhancing pre-primary education will decrease the female unemployment rate ($r = -0.884$). this highlights the importance of access to early childhood education as a factor in facilitating women's inclusion in the labor market. The pre-primary education system indirectly impacts women's economic activity since the availability of institutional infrastructure for childcare reduces barriers to mothers' employment.

Pre-primary education is an important element of social infrastructure that indirectly impacts women's economic activity, creating conditions for work-life balance. In developing countries, the availability of affordable and quality preschool institutions can be a key factor in facilitating women's entry into the labour market, especially in conditions of limited access to flexible forms of employment and a lack of institutional mechanisms for family support. Moreover, the development of the pre-primary education sector affects the quantitative indicators of women's employment and its qualitative characteristics. Free from complete dependence on informal childcare, women can apply for stable, formal and more qualified jobs. This, in turn, helps to strengthen their economic independence and increase labor productivity.

Interesting dependencies are also observed in women's political representation (PARL). Contrary to Altuzarra et al. (2021), women in

parliament positively correlated with economic growth. Also, this indicator is positively correlated with access to pre-school education (r = 0.728) and with the share of women in wage employment (r = 0.758), and, conversely, is negatively associated with vulnerable employment of women (r = –0.752). These results can be interpreted as evidence that increased political participation of women contributes to improving their position in the labor market, including by implementing gender-sensitive social policies to formalise employment and develop educational infrastructure.

There are generally weak to moderate correlations between female labor force participation (LF) and other variables, which may indicate that labor force participation is not a determinant of employment quality. For example, female labor force participation is weakly associated with female unemployment (r = 0.105). It has virtually no association with political representation (r = –0.028), suggesting the need for a more in-depth analysis of not only quantitative but also qualitative characteristics of employment. These results highlight the limitations of using purely quantitative indicators such as labour force participation rates to assess the real situation of women in the labour market. High participation rates can coexist with high levels of informal or vulnerable employment, limited career opportunities, gender pay gaps and lack of social protection.

Thus, the following results were achieved:

H1: Higher female labor force participation contributes to economic growth – confirmed.

H2: Female unemployment has a negative impact on economic growth – confirmed.

H3: The expansion of pre-primary education contributes to economic growth – confirmed.

H4: A higher level of women's representation in parliament positively correlates with GDP per capita – confirmed.

H5: A decrease in the level of vulnerable employment among women is associated with economic growth – confirmed.

H6: An increase in the share of formal female employment promotes GDP growth – confirmed.

5. CONCLUSIONS

The results confirm a strong relationship between economic development and the position of women in employment, education, and politics. The strongest positive correlation is between GDP per capita and the share of women in formal employment, which highlights the significance of institutional provisions for equal working conditions. The negative correlation between formal and vulnerable women's employment emphasizes the need to legalize labour relations and provide social guarantees. The development of preschool education, contrary to individual studies, has shown a significant impact on reducing female unemployment, and women's participation in politics has significantly impacted GDP growth and improved access to education. However, participation in the labor force does not guarantee an increase in the quality of employment, which requires further analysis.

The study highlights the need for targeted policy intervention, including the following priority areas:

(1) developing preschool education infrastructure as a key factor in facilitating women's involvement in the labour market and reducing barriers for mothers in employment.

(2) strengthening mechanisms to support women's formal employment through legislative and institutional measures aimed at protecting labor rights and reducing the level of vulnerable employment.

(3) encouraging women's political participation contributes to inclusive decision-making and the development of socially oriented policies that consider the gender perspective.

(4) focusing on the qualitative characteristics of employment, including occupational safety, wage levels, and career opportunities, rather than just on quantitative indicators of labor force participation.

(5) developing interdisciplinary research that allows for a deeper analysis of the impact of gender factors on economic growth, social justice, and sustainable development.

Future research should move beyond mere participation rates to examine the qualitative dimensions of women's employment, including wage equity, job stability, working conditions, and opportunities for career advancement.

AUTHOR CONTRIBUTION

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REFERENCES

Akkan, B., Buğra, A., & Knijn, T. (2023). Gendered familialism in a Mediterranean context: Women's labor market participation and early childhood education and care in Turkey. *New Perspectives on Turkey, 69*, 111–127. https://doi.org/10.1017/npt.2023.18

Altuzarra, A., Gálvez-Gálvez, C., & González-Flores, A. (2021). Is gender inequality a barrier to economic growth? A panel data analysis of developing countries. *Sustainability, 13*(1), 367. https://doi.org/10.3390/su13010367

Alqahtani, T. (2020). The Status of Women in Leadership. *Archives of Business Research, 8*(3), 294–299. https://doi.org/10.14738/abr.83.8004

Armstrong, H. W., & Read, R. (2002). The phantom of liberty?: Economic growth and the vulnerability of small states. *Journal of International Development, 14*(4), 435–458. https://doi.org/10.1002/jid.886

Blau, F. D. (2025). Gender inequality in the labor market: Continuing progress? *ILR Review, 78*(2), 275–303. https://doi.org/10.1177/00197939241308844

Buterin, V., Fajdetić, B., & Funarić, B. (2023). Understanding the macroeconomic effects of female participation in the labour market. *Economies, 11*(11), 280. https://doi.org/10.3390/economies11110280

Dahlum, S., Knutsen, C. H., & Mechkova, V. (2022). Women's political empowerment and economic growth. *World Development, 156*, 105822. https://doi.org/10.1016/j.worlddev.2022.105822

Cook, A., & Glass, C. (2013). Women and top leadership positions: Towards an institutional analysis. *Gender, Work & Organization, 21*(1), 91–103. https://doi.org/10.1111/gwao.12018

Cordina, G. (2004). Economic vulnerability and economic growth: Some results from a neo-classical growth modelling approach. *Journal of Economic Development, 29*(2), 21–39.

Ebere Ume Kalu, C., Achike, A., Ogbo, A., & Ukpere, W. (2020). Economic growth and unemployment linkage in a developing economy: A gender and age classification perspective. *Problems and Perspectives in Management, 18*(4), 527–538. https://doi.org/10.21511/ppm.18(4).2020.42

Hong, G., Kim, S., Park, G., & Sim, S.-G. (2019). Female education externality and inclusive growth. *Sustainability, 11*(12), 3344. https://doi.org/10.3390/su11123344

Ivandić, R., & Lassen, A. S. (2023). Gender gaps from labor market shocks. *Labour Economics, 83*, 102394. https://doi.org/10.1016/j.labeco.2023.102394

Kim, E. M. (2017). Gender and the Sustainable Development Goals. *Global Social Policy, 17*(2), 239-244. https://doi.org/10.1177/1468018117703444

Kimmel, J. (2006). Child care, female employment, and economic growth. *Community Development, 37*(2), 71–85. https://doi.org/10.1080/15575330609490208

Kireyeva, A. A., Sabdenaliyev, B., Doszhan, R., Kredina, A. A., & Yermekbayeva, D. (2022). Analysis of educational services distribution: The case of Kazakhstan. *Journal of Distribution Science, 20*(11), 19–31. https://doi.org/10.15722/jds.20.11.202211.19

Kireyeva, A., Kenzheali, Y., Vasa, L., & Nurmangaliyev, A. (2023). Analysis of gender inequality in the labor market and its adaptation to the conditions of Kazakhstan. *Eurasian Journal of Economic and Business Studies, 67*(1), 156–172. https://doi.org/10.47703/ejebs.v1i67.267

Krafft, C., & Lassassi, M. (2024). Public pre-primary and maternal employment in Algeria: Evidence from a natural experiment. *The World Bank Economic Review, 38*(1), 74–94. https://doi.org/10.1093/wber/lhad024

Juhásová, S., Buleca, J., Tóth, P., & Mirdala, R. (2023). The impact of gender inequality on GDP in EU countries. *Central European Journal of Public Policy, 17*(2), 13–32. https://doi.org/10.2478/cejpp-2023-0011

Mazhar, S. (2023). Tapping the latent resource (women) as a potential contributor towards increasing GDP. *Mind and Society, 11*(04), 27–31. https://doi.org/10.56011/mind-mri-114-20223

Meurs, M., Nugmanova, M., Salimzhanova, A., & Marvin, S. (2021). Gender regime and women's employment in Kazakhstan. *Comparative Economic Studies, 63*(4), 603–622. https://doi.org/10.1057/s41294-021-00173-0

Mirziyoyeva, Z., & Salahodjaev, R. (2023). Does representation of women in parliament promote economic growth? Considering evidence from Europe and Central Asia. *Frontiers in Political Science, 5*, 1120287. https://doi.org/10.3389/fpos.2023.1120287

Nyussupova, G., Aidarkhanova, G., Kenespayeva, L., & Kelinbayeva, R. (2023). Gender features of the Kazakhstan labour market in the context of sustainable development. *Hungarian Geographical Bulletin, 72*(1), 59–74. https://doi.org/10.15201/hungeobull.72.1.4

Nyussupova, G., Aidarkhanova, G., Aubakirova, G., Zhumagulov, C., & Mukhtarov, U. (2024). Gender features of human capital development in the Republic of Kazakhstan. *Prace Komisji Geografii Przemysłu Polskiego Towarzystwa Geograficznego, 38*(1), 62–75. https://doi.org/10.24917/20801653.381.4

Peña-Sánchez, A. R., Ruiz-Chico, J., Jiménez-García, M., & López-Sánchez, J. A. (2020). Tourism and the SDGs: An analysis of economic growth, decent employment, and gender equality in the European Union (2009–2018). *Sustainability, 12*(13), 5480. https://doi.org/10.3390/su12135480

Pervaiz, Z., Akram, S., Ahmad Jan, S., & Chaudhary, A. R. (2023). Is gender equality conducive to economic growth of developing countries? *Cogent Social Sciences, 9*(2), 2243713. https://doi.org/10.1080/23311886.2023.2243713

Roberts, A., Seawright, J., & Cyr, J. (2013). Do electoral laws affect women's representation? *Comparative Political Studies, 46*(12), 1555–1581. https://doi.org/10.1177/0010414012463906

Rodionov, A., Sabitov, Z., Gainous, J., Wagner, K. M., Bekmagambetov, A., & Rodionova, K. (2023). Economic growth and the feminisation of political science in Kazakhstan: A leaky pipeline? *Europe-Asia Studies, 75*(1), 110–130. https://doi.org/10.1080/09668136.2021.1998381

Warner, M. E., & Prentice, S. (2013). Regional economic development and child care: Toward social rights. *Journal of Urban Affairs, 35*(2), 195–217. https://doi.org/10.1111/j.1467-9906.2012.00622.x

Zharkynbayeva, R., Abdiraiymova, A., Sarsenbayev, A., & Bekzhanova, N. (2020). Societal perspectives: Gender equality in Central Asia, between desideratum and realities. *Codrul Cosminului, 26*(2), 331–356. https://doi.org/10.4316/CC.2020.02.003

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