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REGIONAL DISPARITIES IN GROSS ENROLLMENT RATIO (GER) IN HIGHER EDUCATION AND ITS SOCIOECONOMIC DETERMINANTS IN KAZAKHSTAN: TRENDS AND POLICY IMPLICATIONS

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Abstract. *This study examines regional disparities in the Gross Enrollment Ratio (GER) in higher education in Kazakhstan and its socioeconomic determinants. The GER varies significantly across regions, reflecting differences in access to higher education and economic development. Urban centers like Astana and Almaty exhibit exceptionally high GERs due to a concentration of universities and educational opportunities, while rural regions such as Mangystau, North Kazakhstan, and Kyzylorda have consistently lower GERs. The study also explores the correlation between GER and per capita income, revealing strong positive correlations in regions like West Kazakhstan and Zhambyl, whereas regions such as Atyrau and Mangystau show weaker correlations, indicating additional barriers to educational access. Gender disparities in GER are also analyzed, with women consistently having higher GER than men, particularly in urban areas. Policy implications include the need for targeted investments in rural and industrial regions to enhance educational access and infrastructure, as well as gender-balanced educational policies to support equitable development.*

Keywords*: Gross Enrollment Ratio, Higher education disparities, Regional differences, socioeconomic factors, Urban-rural divide, Gender disparities, Educational policy.*

Main provisions. This study reveals significant regional disparities in the Gross Enrollment Ratio (GER) in higher education across Kazakhstan, with urban centers like Astana and Almaty showing the highest rates and rural areas like Mangystau and Kyzylorda consistently lagging. A strong positive correlation between GER and per capita income is observed in several regions, though in industrialized areas like Atyrau, the relationship is weaker, indicating non-economic barriers. Gender disparities are also evident, with female GER exceeding male GER in most regions, especially in urban areas. The findings suggest the need for targeted investments in rural and underperforming regions, alongside gender-balanced educational policies to ensure equitable access to higher education.

Introduction. Higher education plays a crucial role in shaping economic development, social mobility, and human capital formation. One of the key indicators used to measure access to higher education is the Gross Enrollment Ratio (GER), which represents the ratio of students enrolled in higher education institutions to the total population of the

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typical age group (18-22 years). A higher GER suggests broader access to higher education, while lower GER values may indicate barriers to enrollment such as financial constraints, geographic accessibility, or socio-cultural factors.

In Kazakhstan, the GER in higher education has exhibited significant fluctuations over the years, influenced by factors such as economic growth, policy interventions, and demographic shifts. Nationally, the GER increased from 48.44% in 2015 to 66.98% in 2019, reflecting efforts to expand educational access. However, a slight decline followed, with GER reaching 62.64% in 2021. While urban centers like Astana and Almaty have consistently reported exceptionally high GERs, many rural and less industrialized regions continue to lag behind, highlighting regional disparities in higher education access.

This research investigates the regional variations in GER in Kazakhstan from 2015 to 2023, analyzing the factors that contribute to these differences. Specifically, the study examines how economic factors, particularly per capita income, correlate with GER across different regions. By assessing trends in GER and income distribution, the research aims to identify the challenges and opportunities in achieving equitable access to higher education nationwide.

The study also explores gender disparities in GER, with findings indicating that female enrollment generally surpasses male enrollment across most regions. This gender gap raises important questions regarding societal and economic drivers influencing higher education participation rates among men and women. Additionally, the research highlights anomalies such as West Kazakhstan, where male GER exceeds female GER, suggesting the presence of region-specific factors affecting enrollment trends.

By evaluating the interplay between GER, economic conditions, and gender disparities, this study seeks to provide insights for policymakers, educators, and stakeholders in formulating targeted strategies to enhance higher education accessibility in Kazakhstan. Addressing these disparities is essential for fostering inclusive economic development and ensuring that all individuals, regardless of region or socio-economic background, have equal opportunities to pursue higher education.

Literature review. This study analyzes the regional disparities in the gross registration relationship (GER) of Kazakhstan, its socioeconomic determinants and suggests specific policies investments. The GER serves as a crucial accuser of educational access and inclusion, which reflects the ability of different regions to provide higher education opportunities. Recent studies highlight significant variations in GER in the various regions of Kazakhstan, attributed mainly to socio -economic factors such as income levels, infrastructure and demographic characteristics [1, 2].

Kireyeva et al. (2023) claim that income inequality plays a fundamental role in educational disparities, with richer regions that exhibit higher registration rates compared to economically disadvantaged areas [3]. This finding is supported by Pons (2015), who described the regional inequalities that have persisted in the Kazakhstan education system, further underlining the need for focused interventions [4]. Olzhebayeva (2024) adds a gender dimension to this discussion, emphasizing that both economic resources and the socioeconomic state significantly influence access to higher education for women, which aggravates disparities in GER [5].

In addition, regional infrastructure significantly affects educational registration in Kazakhstan. Satybaldin et al. (2024) propose a national adaptive social welfare index that correlates with regional disparities, indicating that regions with solid educational infrastructure tend to show higher registration rates [2]. This corroborates the findings of

Toimbek (2022), who links the transition to an economy based on knowledge with educational investments, which suggests that regions that cannot modernize their educational landscapes are further back in GER [6].

Demography also plays a vital role in the configuration of registration patterns. Avalueva et al. (2022) argue that regions with younger populations tend to achieve greater ger, which reflects social needs for education and demands of the labor market [7]. Political implications arise from these analyzes, which suggests that investments should be strategically assigned to address identified disparities. Ambasz et al. (2023) recommend that specific policies focus on unattended regions, ensuring an equitable distribution of resources and improving regional educational infrastructure [8]. This resonates with the findings of Zamirbekkyzy et al. (2024), who emphasize the importance of interbudgetary relations in education financing, proposing systemic reforms to improve educational financing mechanisms at the regional level [9].

In addition, promoting inclusion in education will not only address registration disparities, but will also contribute to the broader socioeconomic objectives of Kazakhstan. Number of studies highlight that inclusion, particularly in education, is essential to guarantee demographic security, which is closely linked to economic stability. Consequently, it is necessary to cultivate an educational environment that encourages participation throughout demography without discrimination, thus facilitating equitable access to higher education [10-13].

In summary, regional disparities in the ger of Kazakhstan are deeply intertwined with socio -economic factors such as income inequality, infrastructure, demography and gender problems. Participating with these factors through systematic policies and directed investment strategies will encourage an equitable higher education ecosystem. By prioritizing regions that suffer from low registration and implementation of support measures, the government can work towards a more inclusive and only educational scenario, which finally leads to broader socio -economic advances for Kazakhstan [14]. Therefore, it is crucial that policy formulators adopt interdisciplinary approaches that guarantee that the higher education of each citizen is maintained to the quality of quality, paving the way for sustainable development.

Methodology. This study aims to examine regional disparities in the Gross Enrollment Ratio (GER) in higher education in Kazakhstan and its socioeconomic determinants. The research is guided by the following questions: What are the trends in GER across different regions of Kazakhstan from 2015 to 2023? How does per capita income correlate with GER in different regions? What gender disparities exist in GER across regions, and what factors contribute to these differences? What policy interventions can be proposed to address regional inequalities in GER?

The primary objectives of this research are to analyze trends in GER across various regions of Kazakhstan from 2015 to 2023, to investigate the correlation between GER and per capita income across different regions, to examine gender disparities in GER and identify potential socioeconomic determinants, and to provide policy recommendations aimed at reducing regional disparities in higher education enrollment.

This study employs a quantitative research design, utilizing secondary data from government statistical agencies, higher education institutions, and socioeconomic reports. The study employs statistical analysis to identify correlations and trends.

The data for this study were sourced from the Bureau of National Statistics of Kazakhstan, the Ministry of Education and Science of Kazakhstan, and World Bank and OECD reports on Kazakhstan’s higher education sector. The key variables include Gross Enrollment Ratio (GER), defined as the ratio of students enrolled in higher education

institutions to the total population aged 18-22; per capita income, which represents regional income levels measured in Kazakhstani tenge; and gender-specific GER, which includes enrollment ratios for men and women in different regions.Statistical analysis is used to examine trends in GER from 2015 to 2023 across all regions.

The following limitations should be considered; the study relies on secondary data, which may have inconsistencies or reporting biases and non-economic factors affecting GER, such as cultural influences and migration, are not directly examined. The study does not account for qualitative factors such as student satisfaction or academic quality. This research relies solely on publicly available data, ensuring no ethical breaches. Proper attribution is given to all data sources. The analysis is conducted with objectivity and transparency, ensuring that findings contribute constructively to higher education policy discussions in Kazakhstan.

Results. The Gross Enrollment Ratio (GER) in higher education is determined as the ratio of the number of students, regardless of age, enrolled in technical and vocational education organizations and universities, to the total population aged 18-22 years.The Gross Enrollment Ratio (GER) in higher education in Kazakhstan demonstrates varied trends across regions from 2015 to 2024, reflecting disparities in access to education and regional development. At the national level, the GER increased significantly from 48.44% in 2015 to 66.98% in 2019, indicating improved access to higher education. However, a slight decline followed, with the GER decreasing to 62.64% in 2021, possibly due to external factors like the COVID-19 pandemic. Astana and Almaty cities stand out with exceptionally high GERs. Astana's GER fluctuated but remained the highest in the country, increasing from 123.31% in 2015 to 118.84% in 2021. Almaty followed a similar trend, growing from 121.27% in 2015 to an impressive 204.64% in 2021. These figures highlight the concentration of higher education institutions and opportunities in major urban centers. Regions such as Aktobe, Karaganda, and West Kazakhstan also performed well. West Kazakhstan region's GER peaked at 96.51% in 2019 before slightly declining to 83.2% in 2021. Karaganda's GER rose steadily from 55.35% in 2015 to 64.88% in 2021, while Aktobe experienced strong growth, reaching 70.96% in 2019 before dropping to 64.09% in 2021. Conversely, rural and less industrialized regions showed lower GERs. Mangystau, North Kazakhstan, and Kyzylorda regions consistently recorded GERs below the national average. Mangystau's GER rose from 23.07% in 2015 to 33.64% in 2019 but fell back to 23.2% in 2021. Kyzylorda saw a modest increase, reaching 31.4% in 2021. Regions such as Almaty and Turkestan exhibited some of the lowest GERs, with Almaty region remaining around 13%, and Turkestan showing a significant decline after 2018, possibly due to regional restructuring or other factors. Shymkent city, with data available only from 2018, showed high GERs, peaking at 152.57% in 2019 before falling to 124.41% in 2021. This trend reflects its growing urbanization and development of educational infrastructure. Overall, while Kazakhstan has made significant progress in expanding access to higher education, disparities remain between urban centers and rural regions, as well as among different areas of the country.

Across Kazakhstan, there has been a steady and significant increase in per capita income over the years, reflecting general economic growth. However, there are clear regional disparities, with industrialized regions such as Atyrau consistently outperforming others. The national average income rose from 72,931 KZT in 2015 to 210,840 KZT in 2024, marking a nearly threefold increase. The growth rate accelerated notably after 2020, possibly due to economic recovery or inflation adjustments. Atyrau region, benefiting from its strong oil sector, consistently records the highest incomes, rising from 136,789 KZT in 2015 to 336,743

KZT in 2024. Urban centers like Astana and Almaty exhibit high income levels due to urbanization and better job opportunities. Astana saw an increase from 148,005 KZT in 2015 to 296,337 KZT in 2024, while Almaty's income grew from 122,646 KZT in 2015 to 338,663 KZT in 2024, surpassing Astana in later years. Mangystau region experienced significant growth to 282,740 KZT in 2023 but showed a slight decline to 243,627 KZT in 2024, indicating economic fluctuations. Regions like Zhambyl, Turkestan, and Shymkent consistently show lower per capita incomes, reflecting disparities in economic opportunities. Meanwhile, the newly formed regions of Abay, Zhetysu, and Ulytau display steady increases in income, though data for these regions is only available from 2021 onward. Ulytau region, in particular, demonstrated remarkable growth, reaching 284,793 KZT by 2024. East Kazakhstan shows consistent and moderate growth from 59,389 KZT in 2015 to 224,625 KZT in 2024. In contrast, regions like Mangystau and others exhibit some volatility, with incomes fluctuating more noticeably. Overall, while the national trend reflects strong growth, significant disparities persist between industrialized/urban regions and rural or less developed areas.

Across Kazakhstan, there is a noticeable variation in the correlation between per capita income and the Gross Enrollment Ratio (GER) as it is introduced on Figure 1. West Kazakhstan, Zhambyl, and East Kazakhstan regions show very strong positive correlations, with coefficients exceeding 0.80. These regions demonstrate that economic growth directly translates into improved educational access. Investments in these areas appear to significantly benefit educational outcomes. Regions like Akmola, Karaganda, and Kostanay exhibit strong correlations, indicating a robust linkage between income growth and GER. The national average correlation for Kazakhstan stands at 0.66, a moderate positive relationship that reflects the broader trend of economic development supporting education.

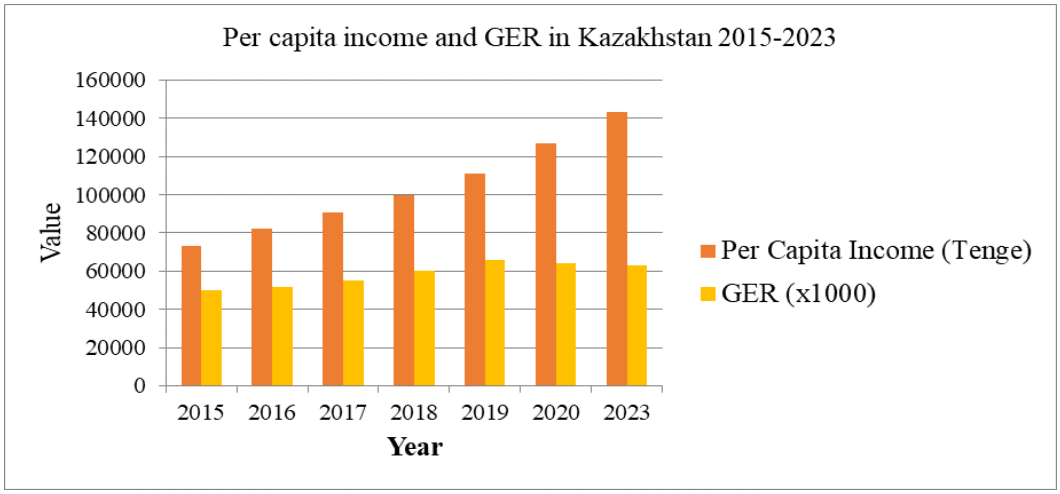

Figure 1 - Per capita income and GER in Kakhstan in 2015-2023

Note: compiled by the authors on the basis of data from the Bureau of National Statistics

Some regions, such as Mangystau (0.42), Almaty (region) (0.48), and Atyrau (0.34), display weaker correlations. In these areas, other barriers to education—such as geographic isolation, lack of infrastructure, or uneven resource distribution—may inhibit the impact of income growth on GER. Atyrau's low correlation, despite being an economically advanced region, suggests that its high baseline GER and localized factors reduce the effect of income on educational access. In urban centers like Astana City (0.56) and Almaty City (0.53), the

correlations are moderate. These cities already have high GER due to developed educational infrastructure. As a result, further income growth does not strongly drive GER improvements, as educational access in these regions is less dependent on economic conditions. There are clear disparities between industrialized or urbanized regions (e.g., Atyrau, Almaty City) and rural areas (e.g., Zhambyl, East Kazakhstan). Rural regions tend to see stronger links between income growth and GER, likely because additional resources are needed to improve education access in underdeveloped areas. Policy implications include the need for targeted investments in regions with weaker correlations, such as Mangystau and Atyrau, to address specific barriers beyond income growth. These could include improving institutional capacity or infrastructure. Regions with strong correlations, such as West Kazakhstan and Zhambyl, should continue leveraging economic growth for educational investments to maintain their momentum. In cities like Astana and Almaty, policies may need to focus on qualitative improvements in education, such as curriculum development and research infrastructure, rather than just access.

Overall, this analysis underscores the importance of region-specific approaches to improve GER and address economic and non-economic barriers to equitable educational access as presented at Table 1.

Table 1 – Correlation coefficient between educational access and GER by regions

Region	Correlation Coefficient	Interpretation
Kazakhstan	0.66	Moderate positive correlation
Akmola	0.79	Strong positive correlation
Aktobe	0.64	Moderate positive correlation
Almaty (region)	0.48	Weak positive correlation
Atyrau	0.34	Weak positive correlation
West Kazakhstan	0.87	Very strong positive correlation
Zhambyl	0.85	Very strong positive correlation
Karaganda	0.8	Strong positive correlation
Kostanay	0.78	Strong positive correlation
Kyzylorda	0.61	Moderate positive correlation
Mangystau	0.42	Weak positive correlation
Pavlodar	0.76	Strong positive correlation
North Kazakhstan	0.71	Strong positive correlation
East Kazakhstan	0.83	Very strong positive correlation
Astana City	0.56	Moderate positive correlation
Almaty City	0.53	Moderate positive correlation
Note: calculated by the authors on the basis of data from the Bureau of National Statistics		

The analysis of the Gross Enrollment Ratio (GER) in higher education for men and women in Kazakhstan in 2021 reveals several key trends. Nationally, GER for women is 69.24%, which is significantly higher than 56.34% for men, demonstrating a consistent pattern of higher female participation in higher education across the country. In urban centers like Astana and Almaty, both genders show high GER, but women consistently outperform men. In Astana, GER for women is 131.17%, compared to 106.69% for men. Similarly, in Almaty, women's GER is 222.28%, while men's GER is 187.05%. This suggests that urban areas provide better access and opportunities for women to pursue higher education, possibly due to superior infrastructure and societal support. In rural regions, women also tend to have higher GER than men. For example, in Akmola, women's GER is 41.36%, compared to

35.59% for men. In Zhambyl, GER for women is 41.77%, while for men it is 34.84%. However, in regions like Mangystau, the gap is smaller, with GER for women at 25.34% and men at 21.16%. Overall GER in these areas remains low, reflecting systemic barriers to higher education. West Kazakhstan is an exception, where GER for men (86.76%) surpasses that for women (79.51%), suggesting unique factors favoring male enrollment. In Turkestan, both genders show the lowest GER nationally, with 15.13% for women and 10.78% for men, highlighting significant barriers to educational access in this region.

The findings suggest that while women generally outperform men in GER, rural regions like Turkestan and Mangystau face challenges that affect both genders. Policy efforts should prioritize increasing GER for men in rural areas and balancing access across genders. Investments in infrastructure, outreach programs, and targeted interventions are necessary to address regional disparities and improve educational equity across Kazakhstan.

The comparison of Gross Enrollment Ratio (GER) for men and women in higher education in 2021 with per capita income by region reveals several patterns. At the national level, per capita income in 2021 is 142,909 tenge. GER for women is 69.24%, while for men it is 56.34%. This higher GER for women aligns with efforts to increase female participation in higher education, likely supported by social and governmental initiatives.

In urban areas such as Astana and Almaty, the relationship between high income and high GER is evident. In Astana, with a per capita income of 223,100 tenge, GER for women reaches 131.17% compared to 106.69% for men. Similarly, in Almaty, where income is 198,036 tenge, GER for women is 222.28%, and for men, it is 187.05%. These extremely high GER values reflect the regions' strong infrastructure and focus on education.

In rural regions, the relationship between income and GER is less consistent. Mangystau region, despite having a relatively high income of 166,945 tenge, shows low GER for both women (25.34%) and men (21.16%), suggesting that income alone does not guarantee higher GER. Cultural or logistical barriers may play a significant role here. In Zhambyl region, with an income of 94,983 tenge, GER for women is 41.77% and for men is 34.84%. Lower income in this region correlates with moderate GER, indicating financial constraints likely limit access to higher education. In West Kazakhstan region, with an income of 135,769 tenge, GER for men is 86.76%, surpassing women’s GER of 79.51%. This region stands out as one where men perform better in GER, possibly due to specific local economic or cultural factors.Regions with higher per capita income generally show higher GER for both genders, as seen in Astana and Almaty. However, exceptions like Mangystau highlight that income alone cannot explain all variations in GER. Urban centers consistently outperform rural areas in both income and GER, reflecting disparities in resources and opportunities. Women consistently exhibit higher GER than men in most regions, indicating progress in female education access. However, regions like West Kazakhstan suggest localized factors influencing gender dynamics in education.

Efforts should focus on addressing barriers in underperforming regions, particularly rural areas, through improved access and infrastructure. Programs to balance GER across genders and promote equitable educational opportunities are essential for fostering inclusive development.

Discussion. The findings of this study highlight significant regional disparities in the Gross Enrollment Ratio (GER) in higher education across Kazakhstan. Urban centers such as Astana and Almaty demonstrate exceptionally high GER, while rural regions, particularly Mangystau, Kyzylorda, and North Kazakhstan, lag behind. These disparities suggest that economic development, geographic location, and the distribution of higher education institutions play crucial roles in determining educational access.

The correlation between GER and per capita income reveals a complex relationship. Regions such as West Kazakhstan and Zhambyl exhibit strong positive correlations, indicating that economic growth in these areas translates into increased access to higher education. In contrast, regions like Atyrau and Mangystau show weaker correlations, suggesting the presence of non-economic barriers such as geographic isolation, limited educational infrastructure, or socio-cultural factors that prevent students from accessing higher education despite higher income levels.

Urban centers such as Astana and Almaty, despite their high incomes, display only moderate correlations between per capita income and GER. This suggests that access to higher education in these cities is already well-established, with a concentration of universities and educational institutions mitigating the impact of income fluctuations. Conversely, rural regions rely more on economic growth to improve GER, reinforcing the need for targeted investments in these areas. Policy measures should focus on addressing barriers beyond income levels in low-GER regions. These could include investments in educational infrastructure, financial aid programs for students in rural areas, and incentives to establish higher education institutions in underserved regions.

The study confirms a consistent gender disparity in GER across Kazakhstan, with female enrollment exceeding male enrollment in most regions. This trend is particularly evident in urban areas like Astana and Almaty, where GER for women is significantly higher than for men. This suggests that women in urban centers have greater access to educational opportunities, potentially due to supportive societal norms and government policies promoting female education.

However, in rural and industrial regions, the gender gap persists, albeit with lower overall GER. In Mangystau and Turkestan, both men and women exhibit low GER, indicating systemic barriers to education that affect both genders. An exception to this trend is West Kazakhstan, where male GER surpasses female GER. This anomaly suggests the presence of region-specific socio-economic factors influencing gender participation in higher education. Addressing gender disparities requires targeted policies that encourage male participation in higher education, particularly in rural areas. Initiatives such as scholarship programs, awareness campaigns, and flexible learning options could help bridge the gender gap and improve overall GER.

Conclusions. This study reveals substantial regional and gender disparities in the Gross Enrollment Ratio (GER) in higher education across Kazakhstan. While urban centers such as Astana and Almaty benefit from concentrated educational infrastructure and opportunities, many rural and industrial regions—including Mangystau, Kyzylorda, and Turkestan—consistently underperform. These disparities highlight the complex interplay of economic, geographic, and socio-cultural barriers that influence access to higher education. Although a positive correlation exists between per capita income and GER in several regions, economic growth alone is not a universal determinant. In some economically advanced regions, such as Atyrau and Mangystau, other structural obstacles prevent income gains from translating into higher enrollment rates. Based on the findings, several concrete policy recommendations emerge. First, targeted investments should be directed toward low-GER regions. This includes establishing new higher education institutions, expanding financial aid for students from low-income and rural backgrounds, and improving transportation and student accommodation to enhance accessibility. Second, it is essential to improve digital learning infrastructure, particularly in remote areas, by ensuring access to high-speed internet and promoting digital literacy. Strengthening the quality of secondary education is also

crucial to preparing students for successful transitions into higher education. Gender disparities in GER require urgent attention. While female enrollment generally exceeds male enrollment—especially in urban areas—male participation remains significantly lower in many rural regions. Addressing this imbalance necessitates gender-sensitive strategies, such as awareness campaigns, tailored support services, and flexible learning options for male students, alongside continued encouragement of female enrollment in underserved areas. Educational policy should be region-specific, recognizing local socio-economic contexts and the varying strength of the correlation between income and enrollment.

This study has several limitations. It relies solely on secondary data, which may be affected by reporting inconsistencies or limitations in scope. Moreover, qualitative factors such as student satisfaction, institutional quality, and the impact of cultural norms on education access are not directly addressed. Internal migration and population mobility, which may influence regional GER levels, were also outside the scope of this analysis.

Future research should include in-depth qualitative studies to understand the lived experiences and perceptions of students in regions with low GER. It would also be valuable to assess the effectiveness of specific policy interventions—such as scholarship programs or distance learning platforms—on enrollment trends. Additionally, examining how labor market demands and higher education participation interact across regions and demographics could provide a more comprehensive understanding. Exploring the intersection of gender, region, and socio-economic status may yield deeper insights into the structural barriers to educational equity.

Ultimately, ensuring equitable access to higher education in Kazakhstan requires a multifaceted and inclusive policy approach. By addressing both economic and non-economic barriers and tailoring strategies to regional needs, the country can foster a more balanced and inclusive higher education system that supports long-term socioeconomic development.

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ҚАЗАҚСТАНДАҒЫ ЖОҒАРЫ БІЛІМ БЕРУДЕГІ ЖАЛПЫ ҚАМТУ КӨРСЕТКІШІНІҢ (GER) АЙМАҚТЫҚ АЙЫРМАШЫЛЫҚТАРЫ ЖӘНЕ ОНЫҢ ӘЛЕУМЕТТІК-ЭКОНОМИКАЛЫҚ АЛҒЫШАРТТАРЫ: ҮРДІСТЕР ЖӘНЕ САЯСИ ҰСЫНЫСТАР

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Түйін. *Бұл зерттеу Қазақстандағы жоғары білімге қабылдау коэффициентінің (GER) аймақтық теңсіздіктерін және оның әлеуметтік-экономикалық факторларын қарастырады. GER аймақтар бойынша айтарлықтай ерекшеленеді, бұл жоғары білімге қолжетімділік пен экономикалық даму деңгейіндегі айырмашылықтарды көрсетеді. Астана мен Алматы сияқты қалаларда университеттер мен білім беру мүмкіндіктерінің шоғырлануына байланысты GER өте жоғары, ал Маңғыстау, Солтүстік Қазақстан және Қызылорда сияқты ауылдық аймақтарда бұл көрсеткіш тұрақты түрде төмен. Зерттеу GER мен жан басына шаққандағы табыс арасындағы өзара байланысты да талдайды, Батыс Қазақстан мен Жамбыл облыстарында күшті оң корреляция байқалса, Атырау мен Маңғыстау облыстарында әлсіз байланыс бар, бұл қосымша кедергілердің бар екенін көрсетеді. GER-дегі гендерлік теңсіздіктер де талданады, мұнда әйелдердің GER деңгейі ерлерге қарағанда айтарлықтай жоғары, әсіресе қалалық жерлерде. Саясатқа қатысты ұсыныстарға ауылдық және өнеркәсіптік аймақтарда білімге қолжетімділікті жақсарту үшін мақсатты инвестициялар мен гендерлік теңгерімді білім беру саясатын енгізу қажеттілігі кіреді.*

Түйін сөздер: *жалпы қамту коэффициенті, жоғары білімдегі теңсіздік, өңірлік айырмашылықтар, әлеуметтік-экономикалық факторлар, қала мен ауыл арасындағы алшақтық, гендерлік теңсіздік, білім беру саясаты.*

РЕГИОНАЛЬНЫЕ ДИСПРОПОРЦИИ В ОБЩЕМ КОЭФФИЦИЕНТЕ ОХВАТА ВЫСШИМ ОБРАЗОВАНИЕМ (GER) И ЕГО СОЦИАЛЬНО-ЭКОНОМИЧЕСКИЕ ДЕТЕРМИНАНТЫ В КАЗАХСТАНЕ: ТЕНДЕНЦИИ И ПОДХОДЫ К РЕГУЛИРОВАНИЮ

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Резюме. *В данном исследовании рассматриваются региональные различия в показателе валового коэффициента обучения (GER) в сфере высшего образования Казахстана и его социально-экономические факторы. GER значительно варьируется в разных регионах, отражая различия в доступе к высшему образованию и уровне экономического развития. В городах, таких как Астана и Алматы, GER исключительно высок, в то время как в сельских регионах, таких как Мангистауская, Северо-Казахстанская и Кызылординская области, он остается низким. Анализ показывает, что GER и доход на душу населения сильно коррелируют в некоторых регионах, таких как Западный Казахстан. Особое внимание уделяется гендерным различиям, где GER среди женщин существенно выше. Рекомендуется целевое финансирование образования в сельских регионах и внедрение гендерно-сбалансированной политики.*

Ключевые слова: *коэффициент охвата высшим образованием, неравенство в высшем образовании, региональные различия, социально-экономические факторы, региональный разрыв, гендерное неравенство, образовательная политика.*

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