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PARTICIPATION OF KAZAKHSTANI UNIVERSITIES IN GLOBAL RANKINGS: ANALYSIS OF DYNAMICS, PROBLEMS, AND PROSPECTS

Abstract. Global university rankings are increasingly used as tools for assessing university effectiveness and shaping educational policies. This article presents a comprehensive analysis of the participation of Kazakhstani universities in the international rankings QS, THE, and ARWU. The study reveals both positive dynamics and persistent institutional barriers for Kazakhstani universities.

The research methodology includes quantitative and qualitative analysis of university positions, as well as comparative analysis. The findings show that the main problems with the global positions of Kazakhstani universities are related to insufficient scientific productivity, limited internationalization, and a disconnect between public policy and institutional practice. Recommendations are provided for the development of the research ecosystem and the transformation of academic management mechanisms.

Keywords: university rankings, Kazakhstan, higher education, internationalization, academic reputation.

Introduction

Over the past two decades, global university rankings have become powerful tools for institutional competitiveness and higher education policy. Rankings such as the QS World University Rankings, Times Higher Education (THE), and the Academic Ranking of World Universities (ARWU) have become influential indicators of academic reputation, research potential, internationalization, and the attractiveness of universities for students, investors, employers, international partners, and national governments (Hazelkorn, 2015; Marginson, 2014).

In this context, a university's ranking position is no longer considered an additional reputational asset but is becoming an essential component of strategic planning, mission formulation, and resource allocation. Countries with developing education systems, including Kazakhstan, are increasingly participating in the global competition for academic recognition and striving to integrate into the international education space. Since the 2010s, Kazakhstan has institutionalized efforts to increase university competitiveness through participation in global rankings, reflected in regulations, state programs, and public funding (MoES RK, 2020).

For example, the State Program for the Development of Education and Science of the Republic of Kazakhstan for 2020-2025 explicitly states the goal of placing Kazakhstani higher education institutions among the top 500 in global rankings. Al-Farabi Kazakh National University, Nazarbayev University, and L.N. Gumilyov Eurasian National University are supported through targeted funding, research clusters, and the recruitment of foreign faculty.

Despite this, the participation of Kazakhstani universities in global rankings remains limited in both scope and quality. Many institutions fail to meet ranking criteria in several areas: scientific productivity, internationalization of faculty, involvement in global collaboration, citations, and academic reputation. Internal institutional barriers, fragmented internationalization strategies, limited research output in English, and staff turnover further exacerbate the issue.

Therefore, analyzing the participation of Kazakhstani higher education institutions in global rankings is an important research objective. On the one hand, it enables an objective assessment of the higher education system in the international context. On the other hand, it identifies strategic growth areas, institutional challenges, and potential reform directions. This article aims to systematize empirical data, analyze the dynamics of Kazakhstani universities' participation in global rankings from 2020 to 2025, compare the experience with other countries, and offer recommendations for improving Kazakhstan's position in the global academic arena.

Literature Review

The participation of universities in global rankings has been the focus of academic debate for over a decade. Researchers emphasize several key aspects of how rankings influence educational policy and university behavior.

First, rankings institutionalize hierarchies in the global academic space, strengthen the dominance of English-speaking institutions, and place pressure on developing countries' higher education systems (Marginson, 2007; Hazelkorn, 2015). In this regard, rankings serve not only as assessment tools but also as mechanisms of global inequality (Shin et al., 2011; Stack, 2021).

Second, rankings influence internal resource distribution in universities: priority is given to academic publications (especially in English), citation rates, and visibility in the international academic space. This shapes institutional strategies - from curriculum design to international collaboration (Rauhvargers, 2013; Salmi, 2009).

Third, rankings shape external perceptions of universities among key stakeholders - students, parents, partners, donors, and government agencies. They have become crucial elements in marketing and positioning in the global educational market (Usher & Savino, 2006; Altbach, 2013).

In the post-Soviet region, including Kazakhstan, rankings are often used as a tool to validate educational reforms. Ranking results are integrated into national university evaluation systems, impacting funding, accreditation, and leadership appointments (Kushnir et al., 2021; MES, 2023).

However, the literature also contains significant criticism of rankings. Scholars highlight methodological flaws, cultural biases (e.g., prioritization of English-language sources), and the misalignment between ranking metrics and national educational goals (Deem et al., 2008; Stack, 2021). These issues are particularly acute for countries with underdeveloped research infrastructures, limited academic autonomy, and low international visibility.

For Kazakhstan, this underscores the need for a balanced and strategic approach to ranking participation, viewing it as a tool for quality improvement, not a goal in itself.

Methodology

The study is based on the following approaches:

1. Secondary analysis of open data from the global rankings of QS, THE, and ARWU.
2. Analysis of bibliometric indicators of Scopus and Web of Science: publication activity, citation index, and share of publications in high-ranking journals.
3. Comparative analysis with universities from Uzbekistan, Malaysia, the Czech Republic, and Russia.

The following research questions serve as a guide for the study:

- How do Kazakhstani universities compare to their regional and international peers in terms of global rankings?
- Which governmental initiatives and institutional practices propel these ranks upward?

- What structural barriers stand in the way of Kazakhstan's higher education system's long-term progress?

The study's primary objective is to monitor Kazakhstan's advancement in global rankings in relation to the broader framework of domestic reforms in higher education.

The study seeks to achieve the following specific objectives:

1. To aggregate and organize quantitative data on Kazakhstani university representation in QS, THE, and ARWU rankings;
2. To assess publication activity and citation impact using bibliometric analysis;
3. To identify regional trends by contrasting Kazakhstan with a few reference nations;
4. To investigate institutional tactics and structural limitations influencing ranking results.

Methodologically, the analysis is predicated on comparative policy viewpoints (Marginson, 2014; Hazelkorn, 2015) and bibliometric methodologies (Moed, 2005; Glänzel, 2003). These frameworks make it possible to integrate ranking dynamics with systemic developments and to emphasize both structural and institutional features.

Results and Discussion

Analysis of the participation of Kazakhstani universities in global academic rankings (QS, Times Higher Education, Web of Science, Scopus) shows positive changes that reflect certain institutional changes in the country's higher education system. At the same time, as Hazelkorn (2015) and Marginson (2014) note, the growth of ranking positions does not necessarily coincide with sustainable academic development: the influence of external indicators may lead to selective strategic decisions aimed at satisfying the ranking criteria, rather than fundamental changes.

Dynamics of participation and position of Kazakhstani universities

Analysis of quantitative data shows that the number of Kazakhstani universities included in the QS and THE rankings is gradually increasing, but this representation remains very low compared to international and even regional counterparts.

The analysis should be interpreted in light of Kazakhstan's Concept for the Development of Higher Education and Science (2023–2029), which places a strong emphasis on institutional autonomy, international competitiveness, and integration into the global academic environment.

Table 1.

Number of Kazakhstani universities in international rankings

| Rankings | 2020 | 2023 | 2025 |
|------------------------------|------|------|------|
| QS World University Rankings | 8 | 10 | 11 |
| Times Higher Education (THE) | 1 | 2 | 2 |
| ARWU | 0 | 0 | 0 |

Sources: compiled by the authors based on the analysis of data from QS, THE, Scopus university reports

QS (2025) reports that 11 Kazakhstani universities were listed in 2025, up from just one in 2015. The results show a similar trend, declining over the same period of time from one to two universities. As reported in OECD (2021) and Altbach (2013), this increase is ascribed to strong academic reporting, increased publishing activity, and internationalization initiatives.

Table 2.*Kazakhstani universities in global rankings (QS and THE, 2025)*

| University | QS 2025 | THE 2025 | Number of publications (Scopus, 2024) | Share of foreign teachers (%) |
|--|-----------|----------|---------------------------------------|-------------------------------|
| Nazarbayev University | 138 | 301–350 | 5,420 | 43% |
| Al-Farabi Kazakh National University | 223 | 601–800 | 3,610 | 19% |
| Satpayev University | 441–490 | 801–1000 | 3,020 | 13% |
| L.N. Gumilev Eurasian National University | 492 | - | 1,420 | 10% |
| Kazakh Agrotechnical University | 601–650 | - | 1,120 | 8% |
| Kazakh-British Technical University (KBTU) | 631–680 | - | 1,030 | 12% |
| Karaganda University named after Buketov | 701–750 | - | 790 | 7% |
| Abai Kazakh National Pedagogical University | 751–800 | - | 660 | 6% |
| Almaty Technological University (ATU) | 801–1000 | - | 570 | 5% |
| Kazakh University of Humanities and Law (KazGUU) | 901–1000 | - | 460 | 3% |
| Sh. Ualikhanov Kokshetau University | 1001–1200 | - | 340 | 2% |

Sources: compiled by the authors based on QS (2025), THE (2025), Scopus (2024), and university reports

Kazakhstan is starting to solidify its top-tier participation, as seen by the ascent of Al-Farabi KazNU to QS 223 and Nazarbayev University to QS 138. The majority of universities, however, continue to be in the lower tiers (651–1000+), suggesting that resources are heavily concentrated in a limited number of establishments.

Thus, there is an effect of “ranking concentration”, in which strategic resources are concentrated in a narrow group of universities, while other institutions remain outside the global academic arena. However, as Dim et al. (2008) argue, representation in the rankings does not in itself indicate comprehensive academic improvement, but can be an indicator of active participation in the global educational space.

Regional and international context

Kazakhstan has maintained its advantage in the Central Asian region, but it is significantly lower than that of the countries of Southeast Asia. For example, in the QS ranking (2024), the Czech Republic has 14 universities. This can be partly explained by systematic state support and academic autonomy, as documented in the OECD (2021) and Rauchvargers (2013) studies.

Table 3.*Regional position of Kazakhstan in the global university rankings*

| Country | QS (2025) | THE (2025) | ARWU (2025) |
|----------------|-----------|------------|-------------|
| Kazakhstan | 11 | 2 | 0 |
| Uzbekistan | 6 | 2 | 0 |
| Malaysia | 24 | 15 | 5 |
| Russia | 32 | 21 | 11 |
| Czech Republic | 13 | 9 | 2 |

Sources: compiled by the authors based on the analysis of QS, THE, ARWU data (2025)

Kazakhstan's situation highlights the drawbacks of a rankings-based approach to international integration, going beyond the numbers. Although QS representation is higher in Kazakhstan than in Uzbekistan, the difference with Malaysia highlights the structural advantages of nations that have made steady investments in regional hubs, research ecosystems, and English-medium education. As a result, unless structural reforms guarantee sustainability, Kazakhstan runs the risk of staying in a "middle position," above its regional rivals but below its global leaders.

Rankings as a factor in changing university strategy

A number of Kazakhstani higher education institutions are reconsidering their strategic orientations in favor of indicators measured by global rankings: international mobility, academic reputation, and citations.

In line with the world-class university model, Nazarbayev University has focused its strategy on creating research-intensive centers with close international engagement.

Although citation quality is still inconsistent, Al-Farabi Kazakh National University (KazNU) has implemented an aggressive publication policy and increased partnerships with Chinese and Russian schools to boost Scopus production.

As a sectoral adaptation rather than a simple reputational one, Satpayev University has placed a high priority on engineering-focused collaborations with business and global research networks.

This demonstrates how rankings serve as a selective force behind institutional modernization, while different universities employ different approaches: some adopt worldwide models, while others modify ranking logics to play to their unique advantages.

According to Hazekorn (2015) and Salmi (2009), colleges are run like corporations and are governed by the "competitiveness" concept. This is consistent with global trends. In particular, Nazarbayev University is focused on the model of a world-class university, which is reflected in its intensive support for research centers and international collaborations. However, Altbach (2013) warns that excessive imitation of global models can neutralize the local missions of universities and exacerbate educational inequalities.

Constraints and structural barriers

Several interconnected structural hurdles continue to limit Kazakhstan's sustainable academic development despite noticeable quantitative growth. One of the main challenges is financial: chronic underfunding and restricted access to competitive research funds create unequal institutional capacities, particularly in regional universities. Another issue concerns academic autonomy. Although the 2023–2029 Concept stresses the importance of greater independence, centralized governance procedures still constrain universities' ability to implement autonomous strategies. International integration also remains limited: even though

the number of foreign professors has increased, collaboration is mostly project-based rather than systemic, and participation in global research networks is fragmented. Language barriers add to these difficulties. The transition to English-medium instruction enhances international visibility but generates internal challenges, such as a shortage of qualified teachers and a decline in the quality of social sciences and humanities education. In addition, a bibliometric imbalance persists: the quantity of Kazakhstani publications grows more quickly than their citation impact, which means national research is not receiving sufficient recognition in global academic communities. Taken together, these factors show that without systemic reforms, improvements motivated by rankings will remain fragile.

Conclusions

The results of the analysis show that the participation of Kazakhstani universities in global university rankings is limited in scope, unstable in dynamics, and vulnerable to external and internal institutional factors. While the number of universities represented in the QS and THE rankings is gradually increasing, qualitative indicators such as citation counts, academic reputation, internationalization, and the stability of the research environment remain low.

For instance, in QS 2025, Kazakhstan has eleven universities while Uzbekistan has just six, demonstrating the relative strength of the area. Nonetheless, Malaysia's 24 QS and 15 THE universities, which are supported by steady funding and internationalization efforts, highlight the differences between Central and Southeast Asia. This illustrates how Kazakhstan's dependence on partial reforms rather than radical change is the root cause of its fragility.

Of particular concern is the phenomenon of “rating rationality,” in which universities’ strategic priorities are replaced by a focus on quantitative indicators, to the detriment of their core academic mission. This creates a risk of institutional degradation: universities strive to enter the rankings, but not to achieve real scientific and educational breakthroughs.

Taking into account the identified trends, the following strategic directions are proposed:

- 1) Development of a national system for supporting research productivity, focusing on the quality, not the quantity, of publications;
- 2) Implementation of a sustainable internationalization policy, including programs to attract foreign teachers and students, expanding academic mobility, and supporting English-language programs;
- 3) Formation of reputation strategies aimed at strengthening the academic image of Kazakhstani universities through international cooperation, participation in global scientific consortia, and publications in high-ranking journals;
- 4) Revision of the KPI system of universities to align the rating requirements with the long-term objectives of developing academic freedom, autonomy, and the quality of education.

Thus, Kazakhstani universities should consider international rankings not as a goal in themselves, but as an indicator of the maturity of the national academic ecosystem. Only through institutional integrity, strategic stability, and academic credibility can Kazakhstani higher education achieve long-term success and real recognition on the global stage.

Limitations and Future Research. There are various restrictions on this study. First of all, it mostly uses secondary data from bibliometric databases and international rankings, which might not adequately represent the qualitative aspects of institutional development. Second, the comparison with a few chosen nations (Malaysia, the Czech Republic, Russia, and Uzbekistan) is representative but not all-inclusive. Third, the rapid change of ranking algorithms (e.g., QS 2023–2025 updates) complicates longitudinal consistency.

Future studies should use mixed methods that incorporate interviews with university leaders, broaden the comparative analysis to include other Central and Southeast Asian systems (such as Vietnam, Thailand, and Indonesia), and investigate the long-term impacts of rankings on academic identity, equity, and governance.

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Author Contributions

Baurzhan Bokayev: Conceptualization, Methodology, Resources and Editing. Zulfiya Torebekova: Writing - Original draft preparation, Supervision, Writing-Reviewing, Investigation, Project administration. Nurbek Aizharykov: Formal analysis, Visualization, Investigation.

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