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FACTORS OF UNIVERSITY COMPETITIVENESS IN AN INTERNATIONAL CONTEXT: A COMPARATIVE ANALYSIS OF HIGHER EDUCATION SYSTEMS

Abstract

This article presents a comparative analysis of higher education systems in ten countries: Kazakhstan, China, Singapore, South Africa, Finland, the United Kingdom, Germany, Turkey, the United States, and Mexico. The study identifies key factors influencing the national competitiveness of universities, including funding models, institutional autonomy, research activity, internationalization, and labor market linkages.

The research identifies key factors influencing the national competitiveness of universities, ranging from fiscal structures and self-governance to scholarly output and cross-border integration. Through a multi-dimensional assessment of governance models and academic outcomes, this study determines strategic priorities for the systemic modernization of Kazakhstani universities. By integrating quantitative indicators, such as R&D expenditure and education spending as a percentage of GDP, with qualitative governance characteristics, the research provides a multifaceted matrix of success factors.

The findings indicate that fiscal sustainability, administrative freedom, active research engagement, and integration with the economy are primary drivers of global competitiveness. Kazakhstan is identified as a country with a transitional higher education system, where key priorities include strengthening institutional sovereignty, modernizing educational quality, developing R&D, digitizing academic programs, and enhancing university–industry linkages to improve international competitiveness.

Keywords: higher education, international practices, university autonomy, funding, internationalization, education quality.

INTRODUCTION

Modern higher education systems are a key driver of a country's economic and social development, shaping a skilled workforce, fostering scientific and technological progress, and enhancing international competitiveness (Altbach & de Wit, 2015). In the context of globalization, digitalization, and rapid labor market transformation, countries face the need to adapt their educational systems, modernize curricula, strengthen research activity, and expand international integration.

Kazakhstan is undergoing a strategic transition from a centralized post-Soviet model to a flexible, market-oriented higher education system, aiming to align with international standards, including the Bologna Process and OECD principles. At present, the system is characterized by relatively low university autonomy, limited integration of research with industry, and substantial disparities in the quality of educational programs between leading and regional institutions (Hartley & Ruby, 2017; OECD, 2020; World Bank, 2021).

The scientific significance of this study lies in the systematization of structural differences between centralized, hybrid, and market-oriented educational models during a period of global digital transformation. By identifying specific correlations between institutional autonomy and research productivity, this research provides a theoretical framework for understanding how transitional economies can bypass middle-income traps through higher education reform. The work contributes to the academic discourse on educational comparative studies by offering a multifaceted matrix of success factors applicable to developing nations.

The aim of this article is to conduct a comparative analysis of higher education systems in ten countries: Kazakhstan, China, Singapore, South Africa, Finland, the United Kingdom, Germany, Turkey, the United States, and Mexico to identify international best practices, assess factors determining global competitiveness, and develop strategic recommendations for the modernization of Kazakhstan's higher education system. To achieve this aim, the

study analyzes the impact of various governance models on university performance, compares the sustainability of different funding mechanisms, and evaluates the current level of university–industry integration in Kazakhstan relative to global leaders. Furthermore, the research identifies specific barriers that prevent Kazakhstani universities from achieving higher positions in global rankings. Special attention is given to university autonomy, funding, research activity, internationalization, and the alignment of educational programs with national economic needs.

Analysis of international experience indicates that the key factors determining the success of national higher education systems include sustainable funding, a high degree of university autonomy, integration of research with industry, active international engagement, and robust quality assurance mechanisms. Implementing these principles in the context of Kazakhstan is expected to enhance the quality of educational provision, improve graduate employability, and strengthen the country’s competitiveness in the global higher education landscape.

LITERATURE REVIEW

Contemporary research emphasizes that the effectiveness of a national higher education system depends on a combination of factors: governance structures, funding models, institutional autonomy, industry integration, program quality, and internationalization (Altbach & de Wit, 2015; OECD, 2020; World Bank, 2021).

International practices demonstrate a wide range of approaches. In state-funded systems such as Finland and Germany, higher education is affordable or free, promoting social equity and high citizen engagement. These countries prioritize the development of research infrastructure, strong university–industry linkages, and the maintenance of sustainable program quality (OECD, 2025). China, with its highly centralized system, implements the “Double First-Class” initiative, concentrating resources on research-intensive universities and priority scientific and technological fields (Wang & Zha, 2023; Atherton et al., 2024).

Hybrid and market-oriented models, as in the United States, the United Kingdom, and Singapore, combine public funding with high tuition fees, providing universities with substantial autonomy, competitive environments, and international recognition. These systems achieve strong outcomes in global rankings and research output but face challenges related to high education costs, student debt, and unequal access (Altbach & de Wit, 2020; Atherton et al., 2024).

Developing and transitional models, including Kazakhstan, South Africa, and Mexico, encounter common challenges: significant disparities in program quality between leading and regional universities, insufficient funding, low research activity, and the need to align curricula with labor market requirements. These countries are actively implementing international standards, fostering collaboration with foreign universities, and piloting initiatives to expand university autonomy (Hartley & Ruby, 2017; Popov et al., 2024; Lubinga et al., 2023).

Comparative studies highlight five factors most influential for the global competitiveness of higher education systems: sustainable and diversified funding, high institutional autonomy, close industry integration, active internationalization, and a reliable system of independent accreditation (OECD, 2019). Successful countries demonstrate that the combination of these factors attracts talented students and faculty, promotes an innovative environment, and strengthens the international reputation of universities.

For Kazakhstan, international experience indicates the need to implement the following strategies: gradually expand autonomy for leading universities, establish an independent quality assurance agency, create a national skills council to align curricula with economic needs, diversify funding sources, and develop competitive research grants. These measures will enable the country to transition from a centralized system to a flexible, innovative, and globally competitive higher education model (Hartley & Ruby, 2017; OECD, 2019; Wang & Zha, 2023).

METHODS

This study is based on a comparative analysis of higher education systems in ten countries: Kazakhstan, China, Singapore, South Africa, Finland, the United Kingdom, Germany, Turkey, the United States, and Mexico. The primary aim of this methodological approach was to identify factors determining the global competitiveness of universities and to develop recommendations for the modernization of Kazakhstan’s higher education system. The analysis relied on official government reports, statistical data from ministries of education and national agencies, publications from international organizations such as the OECD and the World Bank, as well as data from international university rankings, including QS and Times Higher Education. These sources enabled the comparison of funding structures, institutional autonomy, internationalization, and research activity, as well as the assessment of strategic priorities, including digitalization of teaching, student support, and industry engagement.

The study involved the systematic comparison of key higher education parameters, including governance models, funding sources, tuition costs, levels of university autonomy, internationalization, and alignment with the labor market. To visually represent differences and similarities across countries, tables and graphical visualizations were employed, highlighting both quantitative and qualitative characteristics of the systems. This comprehensive approach allowed not only for a detailed description of the current state of higher education systems but also for the identification of universal factors affecting global competitiveness, providing a foundation for adapting

international best practices to formulate strategic recommendations for the development and modernization of Kazakhstani universities.

RESULTS AND DISCUSSION

The comparative analysis of higher education systems in ten countries identified three primary models of organization and governance, each shaped by historical, economic, and socio-cultural factors (Altbach & de Wit, 2015; OECD, 2019; Atherton et al., 2024).

The first category includes state-funded and centralized systems, characteristic of China, Finland, and Germany. These countries demonstrate stable infrastructure and substantial government investment in research activities, allowing them to combine educational accessibility with high-quality research output (World Bank, 2021). Specifically, China implements strategic initiatives such as the “Double First-Class” project, aimed at enhancing the global competitiveness of universities while maintaining a highly centralized governance structure (Wang & Zha, 2023). Germany represents a decentralized model in which individual federal states possess significant autonomy, whereas Finland combines a high level of university autonomy with nearly full public funding and free tuition for students. This structure enables a focus on interdisciplinary programs, a sustainable research base, and social equity, while ensuring broad access to educational services (Altbach & de Wit, 2015; Atherton et al., 2024; Popov et al., 2024).

The second category encompasses hybrid and market-oriented models, exemplified by the United States, the United Kingdom, and Singapore. These systems are characterized by high institutional autonomy, substantial private funding, and significant reliance on tuition fees, creating a competitive environment that stimulates research and innovation. At the same time, this model is associated with significant social and economic barriers, including high student debt levels and limited access for socially disadvantaged groups (Altbach & de Wit, 2015; Atherton et al., 2024; Popov et al., 2024). The United States, with its decentralized structure and diverse institutional types, holds leading positions in global rankings for research activity and internationalization. The United Kingdom, combining market-based funding with university autonomy, maintains sustainable global competitiveness, while Singapore implements a dual model: research universities focus on globally significant research, whereas polytechnic institutions are oriented toward training skilled professionals for the domestic labor market (World Bank, 2021; Smith, 2021).

The third category comprises transitional and developing higher education systems, including Kazakhstan, South Africa, and Mexico. These countries are undergoing active transformation, seeking to integrate international standards and improve educational quality (Popov et al., 2024; Atherton et al., 2024; Lubinga et al., 2023). In Kazakhstan, the system is transitioning from a centralized Soviet model to a three-tier structure (bachelor’s, master’s, PhD), implementing digitalization and international initiatives, including partnerships with Germany and the United States. However, significant challenges remain, such as low research activity, weak university–industry integration, regional disparities in access to quality education, and an underdeveloped quality assurance system (MHES, 2024; Popov et al., 2024; Hartley & Ruby, 2017).

The comparative analysis of higher education systems reveals that institutional effectiveness is strongly correlated with a nation’s economic commitment to its knowledge economy. Table 1 shows these relationships by pairing governance models with key quantitative benchmarks.

Table 1. Comparative Characteristics of Higher Education Systems

Country	Public Exp. on Education (% of GDP)	R&D Expenditure (% of GDP)	Governance Model	Funding	Tuition Fees	University Autonomy	Internationalization	Industry Linkages
Kazakhstan	3.9	0.13	Transitional, hybrid	Public + private	Low	Medium	Growing	Weak
China	4.0	2.43	Centralized	Public	Low	Limited	Medium	Medium
Singapore	2.9	2.20	Dual	Public + private	High	High	High	High
South Africa	6.2	0.60	Developing	Public	Low	Medium	Low	Medium
Finland	6.5	2.98	Publicly funded	Public	Free	High	Medium	High
United Kingdom	5.5	2.90	Hybrid, autonomous	Public + fees	High	High	High	Medium
Germany	4.8	3.14	Decentralized	Public	Free	High	Medium	High
Turkey	4.3	1.09	Centralized	Public + private	Low	Limited	Medium	Medium
USA	6.1	3.46	Decentralized	Public + private	Very high	High	High	High
Mexico	4.5	0.27	Developing	Public	Low	Medium	Low	Medium

Note: compiled by the author based on the UNESCO Institute for Statistics (2025), OECD Education at a Glance (2024) and a literature review.

Analysis of Table 1 shows that publicly funded countries with centralized or decentralized structures, such as Finland and Germany, ensure high levels of social equity and educational accessibility while maintaining a robust research base. Hybrid and market-oriented models demonstrate high research activity and global competitiveness but face access limitations and significant social barriers. Transitional systems are gradually integrating international standards, yet remain vulnerable to challenges related to funding, autonomy, and industry integration (OECD, 2019; Altbach & de Wit, 2015; Atherton et al., 2024; Popov et al., 2024).

The shift to quantitative metrics reveals a significant 'innovation gap'. While Kazakhstan’s education spending nears the global average, its R&D expenditure remains far below the 1% threshold typical of competitive systems. This suggests that while access to education is funded, transitioning to a research-driven economy requires targeted resource reallocation toward scientific development.

The next step of the analysis considers strategic priorities and innovative university practices that determine global competitiveness. These indicators include digitalization of teaching, comprehensive student support, program internationalization, and industry integration. Table 2 provides a visual comparison of these aspects.

Table 2. Comparative Analysis of Strategic Priorities and Innovative Practices

Country	Digitalization & Innovation	Student Support	Internationalization	Industry Integration	Notes
Kazakhstan	Online platforms, micro-credentials	Academic advising, scholarships	Partnerships with USA & Germany	Weak	Pilot initiatives, growing internationalization
China	Virtual labs, R&D projects	Scholarships for talented students	Double First-Class programs	Medium	Large-scale government initiatives
Singapore	Innovative teaching technologies	Career centers	High, English-language programs	High	Dual model: universities + polytechnics

Country	Digitalization & Innovation	Student Support	Internationalization	Industry Integration	Notes
South Africa	Limited digital courses	Limited support	Low	Medium	Addressing social and historical inequalities
Finland	Virtual labs, digital platforms	Full academic support	Medium	Medium	Free education, strong research base
U n i t e d Kingdom	Flexible online programs	Psychological support, career services	High, dual degrees	High	Effective international integration
Germany	Applied science digitalization	Advising, scholarships	Medium	High	Strong research and applied science base
Turkey	Emerging online platforms	Limited resources	Medium	Medium	Internationalization via YÖKAK and scholarships
USA	Advanced EdTech, virtual labs	Full support and career services	High, global campuses	High	Leader in research and entrepreneurial initiatives
Mexico	Limited digitalization	Scholarships, academic support	Low	Medium	Challenges in resource and infrastructure access

Note: compiled by the author based on literature review

Analysis of Table 2 demonstrates that strategic priorities and innovative practices are closely correlated with governance and funding models. Centralized systems emphasize sustainable research infrastructure and interdisciplinary programs, hybrid systems prioritize digitalization and internationalization, while transitional systems focus on pilot initiatives and practice-oriented programs (Altbach & de Wit, 2015; Atherton et al., 2024; Popov et al., 2024).

Combining the data from Tables 1 and 2 allows the conclusion that the effectiveness of a higher education system is determined by a complex set of factors: funding sources, the level of university autonomy, strategic priorities (digitalization, internationalization, student support), and the degree of industry integration. Publicly funded systems ensure equity and accessibility, hybrid models deliver high competitiveness and research productivity, and transitional systems demonstrate developmental potential, provided that autonomy is strengthened and resources are diversified (OECD, 2019; World Bank, 2021).

Particular attention should be given to the integration of academic and industrial structures. In countries with a well-developed research base and effective student support, universities actively collaborate with industry, creating a closed cycle of innovation and economic growth. In transitional systems, industry integration remains limited, reducing the practical relevance of education and complicating the preparation of qualified specialists who meet labor market demands.

Thus, the comparative analysis confirms that the effectiveness of higher education systems depends on an interconnected set of factors. The study's findings provide a foundation for developing recommendations to improve the quality and competitiveness of higher education, especially in transitional systems such as Kazakhstan. Enhancing institutional autonomy, diversifying funding sources, developing research infrastructure, and actively implementing innovative practices can significantly increase both the competitiveness and quality of higher education in such countries (Altbach & de Wit, 2015; Atherton et al., 2024; Popov et al., 2024).

CONCLUSION

The comparative analysis shows that the effectiveness of university systems depends on the synergy of diversified funding, institutional autonomy, and the strategic integration of digitalization and industry links (Altbach & de Wit, 2015; Atherton et al., 2024; Popov et al., 2024). National competitiveness is ultimately shaped by the balance between investment, managerial autonomy, and technological adoption. Based on international

benchmarks, Kazakhstan's strategic transition is framed as a three-stage evolution from a transitional system toward global integration.

As a country with a transitional higher education system, Kazakhstan is advancing digital platforms, practice-oriented programs, international cooperation, and initial industry integration. However, major constraints remain, including limited university autonomy, low research intensity, insufficient funding, and disparities between capital-based and regional universities.

The analysis indicates that successful higher education models in centralized and hybrid systems, such as Germany, Finland, the United States, and Singapore, combine sustainable funding, high levels of autonomy, and the active adoption of innovative practices. These elements directly enhance university competitiveness, expand internationalization, and strengthen industry linkages, thereby improving graduate employability and stimulating innovation (QS, 2025; THE, 2022; World Bank, 2021).

Based on the comparative analysis, the following strategic recommendations are proposed for Kazakhstan:

1. Enhancing Institutional Autonomy. Developing academic, financial, and managerial independence will allow universities to adapt curricula to labor market needs, participate more actively in international projects, and establish their own research priorities (Altbach & de Wit, 2015).

2. Diversifying Funding Sources. In addition to public budgets, private investments, grant programs, and partnerships with industrial enterprises should be developed. This will create a sustainable financial base to support research, infrastructure, and innovative projects (Popov et al., 2024).

3. Developing Research Infrastructure and Innovative Practices. Implementing modern EdTech solutions, virtual laboratories, micro-credential programs, and digital platforms will enhance the educational process and create opportunities for international collaboration and improved research quality (QS, 2025; THE, 2022).

4. Internationalization of Programs and Partnerships. Expanding international academic exchanges, dual-degree programs, and joint research projects will increase the global competitiveness of Kazakhstani universities and attract international students (Atherton et al., 2024).

5. Integration with Industry and Development of Practice-Oriented Programs. Establishing partnerships with enterprises and introducing dual education models will allow students to acquire practical skills aligned with modern labor market requirements while simultaneously stimulating innovation in the economy (OECD, 2019).

6. Reducing Social and Regional Inequalities in Access to Education. Developing scholarship programs, supporting students from regional areas, and creating distance learning platforms will help close the gap between urban and rural universities and ensure equal opportunities for all student groups (Hartley & Ruby, 2017; Smith, 2021).

Overall, implementing these strategies will enable Kazakhstan to accelerate the transformation of its higher education system, improve its quality, and enhance its competitiveness on the international stage. Transitioning to a model characterized by high university autonomy, diversified funding, digitalization, industry integration, and active internationalization will create conditions for sustainable development of the country's research potential and the formation of a qualified workforce aligned with the requirements of the global labor market (Altbach & de Wit, 2015; OECD, 2019; World Bank, 2021).

Thus, a comprehensive approach that integrates institutional, financial, and innovation-driven mechanisms of development constitutes a key prerequisite for building an effective and globally competitive higher education system.

Future research may focus on assessing the impact of specific reforms: university autonomy, digitalization, and industry partnerships on the quality of human capital development and research performance over time.

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REFERENCES

1. Altbach, P. G., & de Wit, H. (2015). Internationalization and global tension: Lessons from history. *Journal of Studies in International Education*, 19(1), 4–10. <https://doi.org/10.1177/1028315314564734>
2. Atherton, G., Lewis, J., & Bolton, P. (2024). Higher education around the world: Comparing international approaches and performance with the UK: Research briefing. House of Commons Library. <https://commonslibrary.parliament.uk>
3. GovUK. (2025). Higher education statistics for England. <https://www.gov.uk/government/collections/official-statistics-releases>
4. Hartley, M., & Ruby, A. (Eds.). (2017). Higher education reform and development: The case of Kazakhstan. Cambridge University Press.

5. Lubinga, S., Maramura, T., & Masiya, T. (2023). The fourth industrial revolution adoption: Challenges in South African higher education institutions. *Journal of Culture and Values in Education*, 6(2), 1–17. <https://doi.org/10.46303/jcve.2023.5>
6. Ministry of Higher Education and Science of the Republic of Kazakhstan. (2024). *Natsional'nyy doklad o sostoyanii i razvitiy sistemy vysshego obrazovaniya Respubliki Kazakhstan (za 2022–2023 gg.)* [National report on the state and development of the higher education system of the Republic of Kazakhstan (for 2022–2023)]. <https://enic-kazakhstan.edu.kz/files/1744864271/doklad-mnvo-rus-17-04-2025-postranichno.pdf>
7. National Center for Education Statistics (NCES). (2021). *Digest of education statistics*. U.S. Department of Education. <https://nces.ed.gov>
8. OECD. (2019). *Benchmarking higher education system performance*. OECD Publishing. <https://doi.org/10.1787/be5514d7-en>
9. OECD. (2020). *Education at a glance 2020: OECD indicators*. OECD Publishing. <https://doi.org/10.1787/19b01e87-en>
10. OECD. (2024). *Education at a glance 2024: OECD indicators*. OECD Publishing. <https://doi.org/10.1787/c00cad36-en>
11. OECD. (2025). *OECD economic surveys: Finland 2025*. OECD Publishing. <https://doi.org/10.1787/985d0555-en>
12. Popov, N., Vasquez Martínez, C. R., Wolhuter, C. C., & de Beer, L. (2024). *Education in developing, emerging, and developed countries: Different worlds, common challenges*. BCES. <https://files.eric.ed.gov/fulltext/ED656158.pdf>
13. QS World University Rankings. (2025). *QS world university rankings methodology*. <https://www.topuniversities.com/world-university-rankings/methodology>
14. Smith, J. A. (2022). *The future of higher education: Digital platforms and micro-credentials*. University Press.
15. Times Higher Education (THE). (2022). *World university rankings 2022 methodology*. <https://www.timeshighereducation.com/world-university-rankings/world-university-rankings-2022-methodology>
16. UNESCO Institute for Statistics (UIS). (2025). *Data for the Sustainable Development Goals*. <https://www.uis.unesco.org/en>
17. Wang, M., & Zhou, C. (2023). How does graduate training promote sustainable development of higher education: Evidence from China's "Double First-Class" universities' programs. *Sustainability*, 15(2), 944. <https://doi.org/10.3390/su15020944>
18. World Bank. (2021). *World development report 2021: Data for better lives*. World Bank. <https://wdr2021.worldbank.org/>

СПИСОК ИСПОЛЬЗОВАННЫХ ИСТОЧНИКОВ

1. Altbach, P. G., & de Wit, H. (2015). Internationalization and global tension: Lessons from history. *Journal of Studies in International Education*, 19(1), 4–10. <https://doi.org/10.1177/1028315314564734>
2. Atherton, G., Lewis, J., & Bolton, P. (2024). *Higher education around the world: Comparing international approaches and performance with the UK: Research briefing*. House of Commons Library. <https://commonslibrary.parliament.uk>
3. GovUK. (2025). *Higher education statistics for England*. <https://www.gov.uk/government/collections/official-statistics-releases>
4. Hartley, M., & Ruby, A. (Eds.). (2017). *Higher education reform and development: The case of Kazakhstan*. Cambridge University Press.
5. Lubinga, S., Maramura, T., & Masiya, T. (2023). The fourth industrial revolution adoption: Challenges in South African higher education institutions. *Journal of Culture and Values in Education*, 6(2), 1–17. <https://doi.org/10.46303/jcve.2023.5>
6. Национальный доклад о состоянии и развитии системы высшего образования Республики Казахстан (за 2022–2023гг.) <https://enic-kazakhstan.edu.kz/files/1744864271/doklad-mnvo-rus-17-04-2025-postranichno.pdf>
7. National Center for Education Statistics (NCES). (2021). *Digest of education statistics*. U.S. Department of Education. <https://nces.ed.gov>
8. OECD. (2019). *Benchmarking higher education system performance*. OECD Publishing. <https://doi.org/10.1787/be5514d7-en>
9. OECD. (2020). *Education at a glance 2020: OECD indicators*. OECD Publishing. <https://doi.org/10.1787/19b01e87-en>
10. OECD. (2024). *Education at a glance 2024: OECD indicators*. OECD Publishing. <https://doi.org/10.1787/c00cad36-en>

11. OECD. (2025). OECD economic surveys: Finland 2025. OECD Publishing. <https://doi.org/10.1787/985d0555-en>
12. Popov, N., Vasquez Martínez, C. R., Wolhuter, C. C., & de Beer, L. (2024). Education in developing, emerging, and developed countries: Different worlds, common challenges. BCES. <https://files.eric.ed.gov/fulltext/ED656158.pdf>
13. QS World University Rankings. (2025). QS world university rankings methodology. <https://www.topuniversities.com/world-university-rankings/methodology>
14. Smith, J. A. (2022). The future of higher education: Digital platforms and micro-credentials. University Press.
15. Times Higher Education (THE). (2022). World university rankings 2022 methodology. <https://www.timeshighereducation.com/world-university-rankings/world-university-rankings-2022-methodology>
16. UNESCO Institute for Statistics (UIS). (2025). Data for the Sustainable Development Goals. <https://www.uis.unesco.org/en>
17. Wang, M., & Zhou, C. (2023). How does graduate training promote sustainable development of higher education: Evidence from China's "Double First-Class" universities' programs. Sustainability, 15(2), 944. <https://doi.org/10.3390/su15020944>
18. World Bank. (2021). World development report 2021: Data for better lives. World Bank. <https://wdr2021.worldbank.org/>

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ФАКТОРЫ КОНКУРЕНТОСПОСОБНОСТИ УНИВЕРСИТЕТОВ В МЕЖДУНАРОДНОМ КОНТЕКСТЕ: СРАВНИТЕЛЬНЫЙ АНАЛИЗ СИСТЕМ ВЫСШЕГО ОБРАЗОВАНИЯ

Аннотация

В статье представлен сравнительный анализ систем высшего образования десяти стран: Казахстана, Китая, Сингапура, Южной Африки, Финляндии, Великобритании, Германии, Турции, Соединённых Штатов и Мексики. В исследовании выявлены ключевые факторы, влияющие на национальную конкурентоспособность университетов, включая модели финансирования, институциональную автономию, уровень исследовательской активности, интернационализацию и связь с рынком труда.

В исследовании выявлены ключевые факторы, влияющие на национальную конкурентоспособность университетов: от фискальных структур и самоуправления до результатов научной деятельности и трансграничной интеграции. Посредством многомерной оценки моделей управления и академических результатов в данной работе определяются стратегические приоритеты системной модернизации казахстанских вузов. Благодаря интеграции количественных показателей, таких как расходы на НИОКР и затраты на образование в процентах от ВВП, с качественными характеристиками управления, исследование предлагает многогранную матрицу факторов успеха.

Полученные результаты показывают, что устойчивое финансирование, высокий уровень институциональной автономии, активная научно-исследовательская деятельность и интеграция с экономикой являются ключевыми драйверами глобальной конкурентоспособности. Казахстан определяется как страна с переходной моделью высшего образования, для которой приоритетными направлениями развития являются укрепление автономии университетов, модернизация качества образования, развитие НИОКР, цифровизация образовательных программ и усиление связей между университетами и индустрией для повышения международной конкурентоспособности.

Ключевые слова: высшее образование, международные практики, автономия университетов, финансирование, интернационализация, качество образования, Казахстан, сравнительный анализ.

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**ХАЛЫҚАРАЛЫҚ КОНТЕКСТЕГІ УНИВЕРСИТЕТТЕРДІҢ БӘСЕКЕГЕ ҚАБІЛЕТТІЛІК
ФАКТОРЛАРЫ: ЖОҒАРЫ БІЛІМ БЕРУ ЖҮЙЕЛЕРІН САЛЫСТЫРМАЛЫ ТАЛДАУ****Аңдатпа**

Мақалада он елдің жоғары білім беру жүйелеріне салыстырмалы талдау ұсынылады: Қазақстан, Қытай, Сингапур, Оңтүстік Африка, Финляндия, Ұлыбритания, Германия, Түркия, АҚШ және Мексика. Зерттеу университеттердің ұлттық бәсекеге қабілеттілігіне әсер ететін негізгі факторларды айқындайды, оның ішінде қаржыландыру модельдері, институционалдық автономия, зерттеу белсенділігі, интернационалдандыру және еңбек нарығымен байланыс.

Зерттеуде университеттердің ұлттық бәсекеге қабілеттілігіне әсер ететін негізгі факторлар - фискалдық құрылымдар мен өзін-өзі басқарудан бастап, ғылыми нәтижелер мен трансшекаралық интеграцияға дейін анықталған. Басқару модельдері мен академиялық нәтижелерді көпөлшемді бағалау арқылы бұл жұмыста қазақстандық университеттерді жүйелі модернизациялаудың стратегиялық басымдықтары айқындалады. Зерттеу барысында ҒЗТКЖ шығындары мен білім беруге жұмсалатын шығындардың ЖІӨ-дегі үлесі сияқты сандық көрсеткіштерді басқарудың сапалық сипаттамаларымен ұштастыру нәтижесінде табыс факторларының көпқырлы матрицасы ұсынылған.

Зерттеу нәтижелері тұрақты қаржыландыру, жоғары институционалдық автономия, ғылыми-зерттеу белсенділігінің жоғары деңгейі және экономикамен интеграция жаһандық бәсекеге қабілеттіліктің негізгі факторлары болып табылатынын көрсетеді. Қазақстан өтпелі кезеңдегі жоғары білім беру жүйесіне ие ел ретінде анықталады; басты басымдықтар университет автономиясын күшейту, білім сапасын жаңғырту, ҒЗТКЖ дамытуды жеделдету, білім беру бағдарламаларын цифрландыру және университет-индустрия байланыстарын нығайту болып табылады.

Түйін сөздер: жоғары білім, халықаралық тәжірибе, университет автономиясы, қаржыландыру, интернационалдандыру, білім сапасы.