Solutions to Improve the Quality of Lecturers' Research Activities in Vietnamese Private Universities to Meet the QS Asia University Rankings Criteria

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Abstract

This study investigates the issues related to the current state of scientific research and university rankings of private higher education institutions in Vietnam in accordance with the research criteria of the QS Asia University Rankings. The study employs the methods of literature review and analysis of primary and secondary data, reflecting the university rankings of private higher education institutions and focusing on the analysis of data concerning the research-related criteria of Vietnamese private higher education institutions in the QS Asia University Rankings. The current state of scientific research and university rankings is examined from both subjective and objective perspectives to propose solutions aimed at enhancing the quality of scientific research by faculty members at Vietnamese private higher education institutions to meet the criteria of the QS Asia University Rankings.

Keywords: scientific research, university ranking, QS Asia University Rankings, private higher education institutions, Vietnam

1. Introduction

It can be said that the THE, QS Rankings, and ARWU rankings are the three most reputable, widely-used, and globally recognized university ranking systems at present. Over the past 5 years, Vietnamese universities have been ranked on these three ranking systems. This demonstrates that the quality of Vietnamese higher education is gradually approaching the standards of advanced countries' university education. It also shows the efforts made by Vietnamese universities in improving the quality of their education, seeking international accreditation, conducting scientific research, and engaging in international collaboration, yielding certain positive results. Depending on the objectives of each ranking system, there are different methodologies and criteria employed. Within the scope of this study, the author focuses on the QS Asia University Rankings. According to statistics from the Ministry of Education institutions, including 175 public universities and 67 private universities (MOET, 2022). Based on the results of the QS Asia University Ranking, of which 11 are public universities (73.33%) and 4 are private universities (26.67%). Thus, compared to the total number of

higher education institutions in Vietnam, the number of higher education institutions in general, and private universities in particular, represented in this ranking is relatively low. The ultimate goal of any university participating in these rankings is to improve the quality of their education, scientific research, and promote integration with global education. However, to be included in a reputable global ranking like the QS Asia University Rankings, educational institutions must further enhance the quality of their education, scientific research, and social services (Linh & Trinh, 2015). With the purpose of proposing solutions to improve the quality of scientific research at private higher education institutions to meet the research criteria and, consequently, increase the number and position of private universities in reputable global university rankings, including the QS Asia University Rankings, we have conducted a study titled "Solutions to Improve the Quality of Scientific Research Activities of Lecturers at Private Higher Education Institutions in Vietnam to Meet the QS Asia University Rankings Criteria."

2. Research Methods

The document research method was used for the documentary research method on global and Vietnamese literature on the research topic of scientific research, university rankings, and types of universities. The author examines the results of the QS Asia University Rankings published from 2021 to 2024. This approach helps the author construct a theoretical framework on university rankings, scientific research, and types of higher education institutions based on internationally recognized concepts, categories, and theories about university rankings, scientific research, and higher education institutions.

Additionally, the author employs primary and secondary data analysis methods to reflect the university ranking results of private higher education institutions and focuses on analyzing data on the scientific research criteria of private Vietnamese higher education institutions in the QS Asia University Rankings. This allows the author to accurately formulate conclusions and provide policy recommendations for the fields of scientific research and university rankings for private higher education institutions in Vietnam. The research results are synthesized, analyzed, and used to provide comments and solution proposals to improve the quality of scientific research by lecturers at private Vietnamese higher education institutions to meet the criteria of the QS Asia University Rankings..

3. Theoretical Basis

3.1. Concepts

3.1.1. Scientific Research

According to Earl R. Babbie (1986), scientific research is the systematic and holistic way in which human beings investigate the various objects and phenomena in the world. Scientific research is simultaneously the process of applying scientific ideas and principles to uncover new knowledge with the aim of analyzing the existence and evolution of objects and phenomena in the world.

According to Salkind (2010), scientific research is a complex process through which new ideas are discovered, providing information about phenomena of interest, as well as established ideas that can be used to inform further research directions or apply research findings in practical settings.

Scientific research can be understood as a human endeavor aimed at expanding knowledge through the application of rigorous research methodologies. The outcomes of scientific research serve to contribute to the collective body of human knowledge, with a particular emphasis on practical applications that enable individuals and societies to better adapt and respond to the changing dynamics of the natural and social worlds.

3.1.2. University Rankings

According to Ellen Hazelkorn (2017), university rankings are a statistical phenomenon that involves the application of specific standards and criteria by a system or organization. University rankings have a significant influence on the policy decisions of higher education institutions, while also driving competition among universities at both the national and global levels.

Furthermore, Lindblad and Lindblad (2009) suggest that university rankings serve as an administrative tool for higher education, shaping the processes of translating institutional capabilities into measurable data, structures, and calculations. These rankings are designed to be highly reliable, transparent, objective, valid, and legally legitimate, providing accessible information to various stakeholders within the higher education management domain. This, in turn, enables organizations to better position themselves, improve their strategies, developmental choices, quality, and performance.

In this research, university rankings are identified as a strategic management approach for higher education institutions. Through the perceived value of university rankings, these institutions develop their strategies, plans, regulations, and policies related to rankings, with the aim of aligning their activities to meet the criteria set by the ranking organizations. This allows for the assessment of the reputation, quality, and effectiveness of higher education institutions based on their degree of responsiveness to the requirements of the evaluation system.

3.1.3. Private Higher Education Institutions

The higher education system in Vietnam consists of public higher education institutions and non-public higher education institutions, with the latter being further divided into two specific types: private higher education institutions and higher education institutions with 100% foreign investment. The higher education institutions with 100% foreign investment must comply with the current laws and regulations, and be in accordance with the charter of Vietnamese universities (Article 48, Education Law, 2005).

Private higher education institutions are established by social organizations, socioprofessional organizations, economic organizations, or individuals. They invest in building the physical infrastructure and ensure the operating budget using capital from sources other than the state budget or 100% capital from foreign investors (referred to as 100% foreignowned universities). Currently, Vietnam has 60 private higher education institutions with 100% domestic investment, with the Red River Delta region having the highest number and the Southeast region ranking second. The contribution of private universities to the development of the higher education system is not only to relieve the pressure on the state budget, but also to diversify the education system and meet the growing demands of society.

3.1.4. QS Asia University Rankings

The QS Asia Region Ranking, similar to the other regional rankings, adheres to the publication cycle of the QS World University Ranking (Table 1). The research data and survey data utilized for the QS World University Ranking are reemployed, in conjunction with additional indicators, to construct this regional ranking.

Content	%					
Academic Reputation	30%					
Employer Reputation	20%					
Faculty Student Ratio	10%					
Citations per Paper	10%					
International Research Network	10%					
Papers per Faculty	5%					
Staff with PhD	5%					
International Student Ratio	2.5%					
International Faculty Ratio	2.5%					
Inbound Exchange Student Ratio	2.5%					
Outbound Exchange Student Ratio	2.5%					

Table 1. The list of indicators

3.2. Overview of Research

3.2.1. Overview of Scientific Research

The authors Trinh Thi Phuong Thao et al. (2020) investigated the factors influencing the international publication of Vietnamese education researchers with the aim of identifying the key factors affecting international publication as perceived by Vietnamese education researchers, measuring the level of impact of these factors, and comparing the impact of the factors on international publication between different groups (senior researchers (with a Doctoral degree) versus junior researchers (without a Doctoral degree)). The author group used the Analytic Hierarchy Process (AHP) method to address the research objectives. The study analyzed three groups of aspects and 15 factors influencing the international publication of Vietnamese researchers. The author group also made significant recommendations for policymakers, notably the issue of domestic and international scientific research collaboration, and policies to encourage international research.

With the aim of analyzing the fundamental factors that influence the research performance of universities through the data from the CWTS Leiden Ranking, the study

"What drives university research performance? Analyzing using CWTS Leiden data" by Frenken, K., Heimeriks, G. J., & Hoekman, J. (2017) employed regression analysis to explain the performance of a university with the dependent variables being the three indicators provided by the CWTS Leiden university ranking. The performance indicators analyzed included: the number of highly cited publications, the number of internationally co-authored publications, and the number of interdisciplinary co-authored publications. The results showed that highly cited publications indicate research excellence, which is a key objective for many universities. On the other hand, the university size measured by the total publication output plays an important role in the rankings.

Tahamtan, I. (2016) conducted a study on the factors influencing citation count by collecting 2,087 relevant articles from databases such as Web of Science, Scopus, PubMed, and Medline, of which 198 articles were selected for analysis. The factors identified as influencing citation count were categorized into three main groups: 1) factors related to the quality of the article; 2) factors related to the journal, such as the journal impact factor, language, scope, and publication format; and 3) factors related to the author, such as the number of authors, the reputation and academic level of the authors, self-citations, international and domestic collaboration, country, gender, age, and race of the authors, productivity, and organizational characteristics, as well as funding sources. Factors such as article quality, journal impact factor, number of authors, visibility, and international collaboration were found to be stronger predictors of citation count compared to factors such as the author's gender, age, race, or the characteristics of the results and discussion.

3.2.2. Overview of University Rankings

Brankovic, J., Ringel, L., and Werron (2018) posit that university rankings impact educational institutions in their perception of the value of university rankings. This, in turn, shapes their strategies, plans, implementation, and monitoring efforts to meet the criteria of the ranking system, with the aim of securing a place in the university rankings. The study also highlights the impacts of university rankings, such as: 1) facilitating the globalization of education; 2) ranking and informing about the world's prestigious universities through minimal performance differences; and 3) by means of repeated publication, transforming a stable status order into a dynamic competitive field among universities globally.

Andrejs Rauhvargers (2011, 2013) conducted two reports titled "Global university rankings and their impact" in 2011 and 2013. The reports noted that rankings are influencing the behavior of universities and impacting policy discussions by governments. The proliferation of ranking tables continues to have a strong influence on the behavior of universities, as their presence in the rankings enhances their brand, reputation, and prestige. This compels institutions to make ceaseless efforts to improve their ranking position. Accordingly, highly ranked universities must exert significant effort and investment to maintain their position.

In Vietnam, university rankings have been a focus of attention since 2008, as evidenced by the international workshop on "University Rankings: Global Trends and Perspectives" organized in October 2008 by the Vietnam National University, Hanoi in collaboration with the Ministry of Education and Training. In November 2018, the National Assembly of the Socialist Republic of Vietnam issued a Law amending and supplementing certain articles of the Law on Higher Education No. 08/2012/QH13, in which Article 9 on the ranking of higher education institutions clearly stipulates that "higher education institutions shall proactively select and participate in reputable domestic and international ranking systems." This provides an important basis for higher education institutions in Vietnam to have orientation and strategies regarding university rankings.

Bui Vu Anh et al. (2021) used a research method involving the review of literature on the topic of ranking higher education systems of various countries, both globally and in Vietnam, as well as the use of secondary data reflecting the Vietnamese education system. The research paper examined the resources and policy environment of Vietnam corresponding to the two input measurement criteria of resources and policy environment in the ranking systems. The author group proposed six solutions focused on the criteria of resources and policy environment to enhance the position of the Vietnamese higher education system, with the expectation that Vietnamese education will undergo strong transformations and appear in the top 50 rankings of the world's best national education systems.

4. Results and Discussion

4.1. The State of Scientific Research at Private Higher Education Institutions

Higher education institutions play a crucial role in creating new knowledge and technologies, not only as incubators for inventions and innovations that have the potential to transform human life. In the current digital economy era, scientific research activities at higher education institutions have become increasingly important. In recent years, alongside public universities, private higher education has experienced remarkable development, making substantial contributions to the overall advancement of Vietnam's higher education system in terms of enhancing the quality and capabilities of the national human resource pool. To gain a clearer understanding of the state of scientific research at private higher education institutions in Vietnam, this paper has employed a SWOT analysis, as detailed below:

Strengths: (1) Private universities exhibit flexibility and dynamism in managing and adjusting their scientific research strategies. They can quickly respond to emerging needs and trends in research. This is evident in the clearly articulated missions and visions of some private higher education institutions, such as Duy Tan University's mission "to provide education and conduct research closely integrated with science and technology," Ton Duc Thang University's commitment to "research, develop, and apply science, technology, and innovative solutions to address national, regional, and global tasks," and Van Lang University's pledge to "build a comprehensive education system ... improve educational quality by integrating research results into lifelong education"; (2) Many private universities have attracted a team of young, highly competent, and passionate faculty members who can bring creative and pioneering ideas; (3) Some institutions have established strong collaborative relationships with domestic and international businesses and organizations, which helps them access financial resources, physical infrastructure, and research collaboration opportunities.

Weaknesses: (1) The financial resources for scientific research at private universities are limited, mainly relying on tuition fees. This restricts the ability to invest in infrastructure, equipment, and attract talented researchers; (2) The research infrastructure and equipment at many universities are inadequate and outdated. This affects the quality and effectiveness of research activities; (3) Some faculty members at private universities have limited research capacity and experience. They need additional training and development; (4) The international research collaboration networks of private universities have not been strongly developed. This restricts their access to advanced resources, knowledge, and technology from abroad.

Opportunities: (1) The Vietnamese government is implementing various policies to support and encourage scientific research activities at universities, including private higher education institutions. This is an opportunity for private universities to leverage these resources and preferential policies. Some typical legal documents reflecting the government's attention to scientific research include: Law No. 08/2012/QH13 on Higher Education, Law No. 34/2018/QH14 amending and supplementing some articles of the Law on Higher Education, the Law on Education, the Law on Science and Technology, Circular No. 20/2020/TT-BGDĐT of the Ministry of Education and Training on regulations on the working regime of university lecturers, Decree No. 109/2022/ND-CP of the Government on regulations on science and technology activities in higher education institutions, among others; (2) In addition, the trend of cooperation and linkage between private universities and businesses is increasingly emphasized. This is an opportunity for private universities to access financial resources, infrastructure, and practical needs from the business sector; (3) The development of digital technology creates favorable conditions for interdisciplinary research and international collaboration. Private universities can leverage digital tools to expand collaboration and improve the quality of their research.

Threats: (1) Public universities are still considered more of a "brand" compared to private universities. This makes it difficult for private universities to attract top researchers and reputable sources of funding. (2) The competition between private universities in attracting resources and research talent is becoming increasingly fierce. Particularly in the context of international integration, private higher education institutions not only compete with public higher education institutions, but also with international educational institutions. This places significant pressure on private universities. (3) The demand for quality scientific research is increasing, requiring substantial investment in financial resources, infrastructure, and high-quality human resources. This poses a major challenge for private universities.

From the above analysis, we can see that although private higher education institutions have identified scientific research as a core mission, reflecting a clear vision and purpose, some universities have begun to produce quality research products with practical application. However, the research capacity of the faculty is still limited, the material and financial resources for research are scarce, and the effectiveness of partnerships and collaboration with research partners has not been fully realized. Private higher education institutions in Vietnam need to have specific strategies and actions to enhance the role, capacity, and effectiveness of scientific research in order to meet the development needs of society.

4.2. The Current Status of Participation in University Rankings by Private Higher Education Institutions in Vietnam

In recent years, amid the competitive and globalized landscape of education, Vietnam has seen some of its higher education institutions participate in the rankings of the world's largest universities. However, the number of higher education institutions, particularly private higher education institutions, that are present on reputable global university rankings in general and the QS Asia University Ranking in particular, remains quite modest, not yet meeting the expectations of the education sector (Ngoc, N. M., & Tien, N. H. (2023).

The results of the comparative analysis of the QS Asia University Ranking show that from 2021 to the present, the number of private higher education institutions in Vietnam has increased, but the increase is not significant. From 2 private higher education institutions in 2021, by 2024 there are 2 additional private higher education institutions, bringing the total number of private higher education institutions present in the QS Asia University Ranking to 3 out of 15 higher education institutions from Vietnam (Table 2).

	2021				2022			2023				2024				
Inst itut e	Rank	Pap ers per Facu 1 (5%)	Cita tions per Pape r (10 %)	Intern ationa 1 Resea rch Netw ork (10%)	Ran k	Pap ers per Facu 1 (5%)	Citati ons per Paper (10%)	Intern ational Resear ch Netwo rk (10%)	Rank	Pape rs per Facu 1 (5%)	Citations per Paper (10%)	Interna tional Resear ch Netwo rk (10%)	Rank	Paper s per Facul (5%)	Citatio ns per Paper (10%)	Interna tional Resear ch Netwo rk (10%)
А	351- 400	n/a	37.2	48.7	210	9.1	54.6	71.8	145	17.3	77.3	98.6	115	22.8	98.9	99.3
В	163	7.2	49.2	91.6	=14 2	12	66.5	99.9	=138	25.6	85.6	99.9	138	35.5	97.8	99.9
С	none				none			none			291- 300	5.2	67	24.8		
D	none					none			none			701- 750	1.4	1.7	1.8	

Table 2. Results of the research quality criteria of private higher education institutionsin Vietnam in the QS Asia University Rankings

To clarify the current state of university ranking participation by private higher education institutions in Vietnam, the study focuses on the following specific SWOT analysis:

Strengths: (1) University ranking has received attention from all levels of government and agencies to higher education institutions. This is evidenced by Vietnam's issuance of regulatory documents, including content related to university ranking, such as the Law on Higher Education (2012), Decree No. 72/2015/ND-CP (2015) on standards for stratification, ranking framework, and ranking criteria for higher education institutions, and the Law amending and supplementing certain articles of the Higher Education Law (2012); (2) Private higher education institutions have developed, adjusted their mission, vision, and strategic objectives, clearly reflecting their content, viewpoints, and orientation to become institutions with a presence on the international university ranking map. For example, Duy Tan University aims to be among the top 300 universities in Asia according to the QS Asia Ranking and among the top 1,000 universities globally according to the Times Higher Education Ranking by 2030; Ton Duc Thang University aims to be a research-focused university in the top 200 best universities in the world; (3) Some private higher education institutions have already appeared on reputable global university rankings such as QS, THE, and ARWU. This serves as a motivation for other private higher education institutions to strive to increase the number of Vietnamese higher education institutions on prestigious global university rankings; (4) Private higher education institutions have built a reputation and international brand, attracting high-quality faculty and students; (5) Private higher education institutions have invested heavily in scientific research and innovation activities.

Weaknesses: (1) The majority of private universities still lack a presence in prestigious international university rankings; (2) These institutions tend to focus on market-oriented education, without sufficient emphasis on scientific research and innovation activities; (3) Some universities lack the policies and resources to attract and retain high-quality faculty and researchers; (4) Many universities have not invested enough in internationalization activities such as international partnerships and student/faculty exchanges.

Opportunities: (1) The Vietnamese government is implementing preferential policies and support for private universities to participate in rankings; (2) There is growing societal demand for high-quality human resources to meet the requirements of the Fourth Industrial Revolution; (3) Private universities have increased opportunities to collaborate with businesses and international organizations to enhance research and innovation.

Challenges: (1) The disparity in investment resources and infrastructure between public and private universities remains significant; (2) There is still skepticism and apprehension about the quality of education at private universities; (3) Changes in ranking criteria, with increased emphasis on scientific research and innovation, are posing difficulties for private universities.

Overall, the status of private universities' participation in international university rankings in Vietnam still has many weaknesses and challenges. Only a few large private universities can maintain a presence in reputable rankings. To improve this situation, universities need to focus on investing in infrastructure upgrades, attracting talent, strengthening research activities, and enhancing international collaboration.

4.3. Solutions to Improve the Quality of Lecturers' Research Activities at Private Higher Education Institutions

For higher education institutions, the selection of appropriate ranking systems that align with the institution's mission, objectives, and current situation is crucial. They need to focus on the highest-weighted criteria to ensure fair evaluation of their activities and avoid being at a disadvantage when participating in international rankings (Do Thi Hoai Van, Le Huy Tung, 2022). According to statistical results, currently, only 04 out of 60 private higher education institutions in Vietnam are included in the QS Asia University Rankings. To increase the number of Vietnamese higher education institutions, including private ones, in the rankings, private higher education institutions should focus on implementing the following solutions:

Develop policies and incentive mechanisms to motivate lecturers at private universities: Establish a set of evaluation criteria and rewards for lecturers at private universities based on the quantity and quality of their research publications and articles published in reputable international journals; Balance the budget of private universities to have financial support policies such as: providing funding for research projects, supporting publication and conference participation costs for lecturers, and ensuring that at least 20% of the total annual expenditure of the higher education institution is allocated to scientific research activities (Articles 3 and 4, Decree No. 73/2015/ND-CP); Develop a mechanism to reduce teaching hours at private universities to allow lecturers to focus on research; The university's scientific council needs to consider specific, highly practical research topics to suggest or assign to lecturers

Organize training activities and capacity building for research skills for lecturers at private universities: Invite reputable experts and scientists from both domestic and international institutions to private universities to conduct training courses and workshops on modern scientific research methods; Send lecturers from private universities to participate in research-oriented courses and programs at leading universities and research institutes both domestically and abroad; Encourage lecturers at private universities to engage in overseas study and research through international exchange and collaboration programs.

Establish and develop a research environment within private universities: Establish research centers and laboratories with modern facilities and equipment at private universities; Facilitate the participation of private university lecturers in specialized research groups; Regularly organize academic workshops and forums at private universities for lecturers to exchange experiences and share research findings.

Establish a network of research collaboration with partners for private universities: Sign research cooperation agreements with reputable domestic and international universities and research institutes for private universities; Participate in joint research programs and projects with both domestic and international partners for private universities; Invite renowned experts and scientists to private universities to provide guidance and share their expertise in research for the lecturers.

5. Conclusion

In this article, we have analyzed the current state of scientific research and university rankings of private higher education institutions in Vietnam using a SWOT analysis to gain a comprehensive understanding of the current landscape. The results of the criteria in the QS ASIA UNIVERSITY RANKINGS were also examined to clarify how private universities in Vietnam have met the criteria for scientific research. Based on this, we propose solutions to improve the quality of scientific research at private higher education institutions.

The research is limited as it only relates to the aspect of private higher education institutions appearing in the Qs Asia University Rankings, and has not considered other types of educational institutions to have a comprehensive view or to benchmark the database in order to provide a comprehensive solution for the entire Vietnamese education system. Currently, there are reputable university ranking systems in the world such as THE, ARWU, etc., however, the research has only focused on the QS Asia University Rankings. Additionally, the research has focused on the criteria related to scientific research, but has not considered all the criteria of this ranking table. This is also a limitation of the research.

Subsequent studies need to comprehensively examine higher education institutions in Vietnam, and may also consider data from many other reputable university ranking systems in the world, as well as all the criteria in the Qs Asia University Rankings.

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