

Abstract

The essay presents a comprehensive study of the influence and repercussions of academic rankings in higher education. It explores the methodologies and criteria of major ranking systems like ARWU, QS, and THE, highlighting their impact on university policies, strategies, and the broader educational landscape. The essay critically examines how these rankings shape institutional priorities, potentially biasing resource allocation and academic focus. It investigates the financial and ethical implications of striving for higher rankings, including their effect on tuition fees and accessibility. The essay also addresses the impact of rankings on the quality and diversity of education, the career prospects of graduates from top-ranked universities, and the global versus local relevance of institutions. Recommendations for future directions in academic rankings emphasize diversifying criteria, enhancing transparency, balancing global and local contributions, and promoting ethical practices in higher education. The essay concludes by underlining the demand for continuous research and dialogue to address the issues posed by academic rankings and seek improvements.

1. Introduction

1.1. Overview and Significance of Academic Rankings

Academic rankings have emerged as a significant element within the realm of higher education, profoundly influencing how students, educators, policymakers, and various other interested parties perceive and make decisions. These rankings, professing to provide a neutral evaluation of a university's quality and reputation, are instrumental in enabling global comparisons and benchmarks among educational institutions. Understanding the methodologies behind these rankings is essential for studying their impact and significance accurately [1].

Academic excellence, however, is a multidimensional concept that covers a range of factors extending beyond what can be adequately conveyed by ranking mechanisms. While rankings provide insights into certain areas of academic quality, they should not be viewed as the sole indicator of an institution's merit. This recognition underlines the need for a comprehensive understanding of academic quality that considers various indicators and viewpoints, beyond the metrics typically used in rankings [1].

Furthermore, it's important to consider the broader implications of rankings on higher education institutions. The drive to improve or maintain high rankings can influence universities to align their strategies and policies with the criteria emphasized in these rankings. This can lead to a shift in resource allocation, academic priorities, and even the overall mission of institutions. The pursuit of global recognition and status, often driven by rankings, might conflict with the responsibility to address local needs, leading to a complex dynamic where universities must balance global competitiveness with local relevance and societal contributions [2] [3].

The trio of foremost international university ranking frameworks comprises the Academic Ranking of World Universities (ARWU), the Times Higher Education (THE) World University Rankings, and the QS World University Rankings. Each framework has crafted its distinctive set of methodologies and benchmarks, substantially influencing the global academic sphere. The ARWU places a strong emphasis on the scholarly contributions of an institution, evaluating aspects such as the prevalence of Nobel Prizes and Fields Medals among its alumni and faculty. THE Rankings, in contrast, adopt a more comprehensive perspective, assessing not just research but also instructional quality, the impact of research as indicated by citations, the institution's global perspective, and its

contribution to the industrial sector. Meanwhile, QS Rankings assign considerable importance to factors related to the institutional reputation among academics and employers, the proportion of faculty to students, the frequency of citations to faculty work, and the ratio of international students.

The prominence of these rankings has led to a competitive environment where universities worldwide strive to improve their standings. They are often used as benchmarks for academic excellence and play a crucial role in influencing university policies, strategies, and global perceptions. However, the focus on these rankings also raises questions about their impact on the overall quality of education, research priorities, and the broader mission of higher education institutions. By examining these three leading rankings, we can gain a comprehensive understanding of the complex dynamics at play in the global higher education sector.

1.2. Presentation of Key Research Questions

Exploring the wide-ranging impact of academic rankings, this section presents key research questions that shape our understanding of their influence on higher education. These questions aim to uncover how rankings affect university strategies, financial decisions, the quality of education, and the balance between global prominence and local commitments. Addressing these inquiries will provide deeper insights into the role and repercussions of academic rankings in the educational landscape.

- **RQ1.** How do global university rankings like ARWU, THE, and QS influence the strategic planning and policy-making of higher education institutions?
- **RQ2.** What are the financial and ethical implications of striving for higher rankings for universities and their stakeholders?
- **RQ3.** In what ways do academic rankings affect the quality and diversity of education offered by universities?
- **RQ4.** How do university rankings impact the career prospects of graduates from top-ranked institutions?
- **RQ5.** What is the effect of university rankings on the global and local relevance of universities?

2. Comparative Analysis of Major Rankings (ARWU, QS, THE)

This chapter begins with an overview of the methodologies and criteria of ARWU, QS, and THE, detailing their unique approaches and metrics. The subsequent sections provide a critical examination of each ranking's strengths and limitations, offering insights into how these systems influence university strategies and the broader academic landscape.

2.1. Overview of Methodologies and Criteria

ARWU

The Academic Ranking of World Universities, often referred to as the Shanghai Ranking or ARWU, is conducted by Shanghai Jiao Tong University. ARWU evaluates universities based on several key pillars, primarily focusing on research performance. It includes the analysis of alumni and staff winning notable awards, such as Nobel Prizes and Fields Medals, reflecting the institution's historical influence. The quality of research is assessed through the number of papers published in top-tier journals like Nature and Science, and the frequency of citations indicates the impact of the research. The methodology also considers the scale of the institution's research output and the per capita performance, allowing for fair comparison across institutions of different sizes [4].

In addition to these main criteria, the ARWU subject rankings incorporate specific indicators such as the volume of publications in relevant Web of Science categories and the average citation count per article, adjusted for field and publication date. These subject-specific metrics provide a more detailed view of an institution's strengths in particular academic fields. However, ARWU's reliance on bibliometric indicators, which account for a substantial portion of its overall score, has not been without its disadvantages. Some have pointed out that the methodology does not account for the full breadth of a university's scholarly work since it does not encompass all published works. Additionally, the components most influenced by reputation, such as papers published in *Nature* and *Science* and the number of highly cited researchers, may suffer from biases in the editorial and citation processes. This can potentially skew the results in favor of certain institutions or disciplines [5].

QS

The QS World University Rankings are highly regarded and frequently referenced in the academic world. This ranking places significant emphasis on its academic survey, which gathers opinions from thousands of academics globally about universities' reputations. The QS ranking system places a strong emphasis on reputation, derived from large-scale surveys of academics and employers, providing a perception-based measure of a university's prestige. It also evaluates the teaching environment through the student-to-faculty ratio, suggesting the commitment to teaching and personal student engagement. The research quality is indicated by citations per faculty, reflecting the influence of the research output. Additionally, the international outlook is assessed by the diversity of the faculty and student body, indicating the institution's global appeal and environment [6].

However, the QS Rankings have faced criticism for their methodology. The significant role of peer assessments in the evaluation process might be more indicative of a university's perceived prestige rather than its actual output or quality of education. Moreover, the methodology does not fully account for the university's scholarly output, as it does not consider the number of published papers, only the average citations. This could favor universities with limited but highly cited publications. Additionally, the return rate and representativeness of survey respondents have been questioned, raising concerns about the reliability of the results. There's also evidence of regional bias, with a higher number of returned questionnaires from the Commonwealth countries and the USA, potentially influencing the rankings in favor of these regions [7].

THE

The World University Rankings by Times Higher Education, commonly abbreviated as THE Rankings, gather a broad spectrum of data. The methodology includes 13 indicators spread over five dimensions: teaching, research, citations, international outlook, and industry income. THE rankings use a comprehensive methodology, allocating significant weight to teaching by considering the learning environment, including surveys and staff-to-student ratios. Research quality and productivity are assessed through research reputation surveys, research income, and publication volume. Citations are used to gauge the university's global research influence. The international outlook is evaluated through the ratio of international to domestic students and staff, as well as international collaborations. Finally, the university's ability to support industry with innovations and consulting is measured through industry income [3].

2.2. Comparative Discussion Highlighting Key Differences

- **ARWU's Research-Centric Approach:** ARWU predominantly emphasizes research output and academic achievements. This focus is evident in its heavy reliance on metrics such as

Nobel Prizes, Fields Medals, and publications in prestigious journals. This methodology benefits institutions excelling in scientific research and those with a history of high-profile academic accomplishments. The concentration on objective, research-oriented indicators results in a more stable year-to-year ranking, with less fluctuation compared to QS and THE. However, this approach has been critiqued for favoring institutions strong in sciences and English language publications, potentially overlooking diverse academic disciplines and achievements in other fields.

- **QS - Balancing Reputation and Academic Measures:** QS, in contrast, dedicates a significant portion of its evaluation to reputation, through academic and employer surveys. This emphasis indicates a broader consideration of a university's perceived impact and prestige in the academic and professional world. Additionally, QS considers factors like faculty-to-student ratio and citations per faculty, offering a more holistic view of a university's performance. However, the subjective nature of reputation surveys introduces variability, with rankings potentially swayed by changing perceptions and opinions. This subjectivity can result in more pronounced year-to-year shifts in university standing.
- **THE's Balanced and Diverse Criteria:** THE rankings employ a balanced methodology, incorporating a wide range of indicators. This diverse approach allows for a comprehensive assessment of universities, considering not just research output but also the quality of teaching, the global reach of the institution, and its ability to secure industry funding. Similar to QS, THE uses reputation surveys, which contribute to its variability and subjectivity. However, THE's methodology is more detailed and complex, with a higher number of indicators providing a nuanced view of university performance [8].

ARWU's focus on research excellence, primarily through objective metrics, results in greater stability in its rankings over time. In contrast, QS and THE, with their reliance on reputation surveys, are more susceptible to year-to-year variations. These surveys, while capturing current perceptions and trends, can fluctuate based on changing opinions and global events, leading to more dynamic rankings..

These differing methodologies influence how universities approach their strategies for improvement and recognition. Institutions aiming for a higher ARWU ranking might focus more on enhancing their research output and attracting high-profile researchers, while those targeting QS and THE rankings might invest in building their global reputation, improving teaching quality, and fostering international collaborations.

The following table presents a comparative overview of the 2023 rankings of world's top universities across three major ranking systems: ARWU, QS, and THE, containing data from the official websites. These rankings illustrate the varying criteria and evaluation methods used by each system. Notably, U.S. universities dominate the top positions in all three rankings, with Harvard University, Stanford University, and MIT consistently appearing in the top spots. The University of Cambridge and the University of Oxford represent the UK in this elite group, each maintaining a strong presence across all three rankings. There are noticeable differences in specific rankings for some universities, such as the University of California, Berkeley, and Columbia University, highlighting the distinct methodologies of each ranking system.

University	Country	ARWQ [9]	QS [10]	THE [11]
Harvard University	US	1	5	2
Stanford University	US	2	3	4
Massachusetts Institute of Technology (MIT)	US	3	1	5
University of Cambridge	UK	4	2	3
University of California, Berkeley	US	5	27	8
Princeton University	US	6	16	7
University of Oxford	UK	7	4	1

Columbia University	US	8	22	11
California Institute of Technology	US	9	6	6
University of Chicago	US	10	10	13

3. The Business and Influence of Rankings

This chapter examines the impact of university rankings on institutional policies and strategies. It explores how rankings drive universities to align academic priorities and research with ranking indicators, influencing their approach to education, resource allocation, and student recruitment. This chapter also delves into the ethical considerations and financial implications of these rankings, revealing how they shape national policies, affect funding opportunities, and lead to strategic shifts within universities.

3.1 Impact on University Policies and Strategies

One significant impact is the realignment of academic priorities and research to match ranking indicators, often leading universities to focus more on producing high-achieving students and world-class research outputs. This shift is not just about modernizing educational approaches but also about adhering to the metrics that rankings emphasize. For example, there is a noticeable trend toward increasing the number of English-language specialist/professional Master's programs, which are designed to attract international students and harmonize programs with global educational models like the Bologna Process. This kind of strategic adaptation is indicative of the broader influence of rankings on university policies [12].

Furthermore, rankings have a profound influence on how universities balance their teaching and research activities, as well as their undergraduate and postgraduate engagements. The emphasis is often placed on enhancing research capabilities and outputs, as these are heavily weighted in most ranking systems. Consequently, this may lead to a rebalancing of resource allocation towards fields that are more likely to yield productive outcomes and better performance in rankings. Such strategic shifts can have far-reaching implications for the scope and quality of teaching, potentially sidelining disciplines like the arts, humanities, and social sciences, which might not contribute as directly to the university's ranking position [12].

The impact of rankings extends to the recruitment of students as well. Universities may prioritize admitting students who are likely to excel and thus contribute to the institution's reputation and ranking. This selective approach, while potentially enhancing the university's performance in rankings, raises ethical questions about accessibility and diversity in higher education.

Additionally, [3] highlights the far-reaching impact of rankings on both national policy-making and institutional strategies. The pursuit of higher rankings has become intertwined with national objectives, such as building a highly skilled workforce and fostering a knowledge society. The number of 'world-class' universities in a country, as gauged by international rankings, has become a metric of national success in the global arena. This situation places immense pressure on universities to adapt their strategies to meet these national ambitions, further entrenching the influence of rankings in higher education policies and practices.

3.2 Financial Implications and Ethical Considerations

Higher-ranked universities often have greater opportunities to secure sustained public funding and private investments. This is because institutional reputation, significantly influenced by global rankings, makes it easier for these institutions to attract scholars and students both domestically and internationally. This enhanced reputation serves as a key underpinning of their credibility and

perceived excellence. As a result, top-ranked universities are often seen as more attractive options for donors and investors, leading to increased financial support [8].

Additionally, the strategic decisions made by universities, particularly those influenced by the desire to improve or maintain their ranking positions, have significant financial implications. Many higher education institutions align their strategic plans and institutional performance with the criteria of world university rankings. There's a strategic choice to enhance the performance of areas that excel in comparative indicators, possibly by reallocating funds from less impactful areas. This reallocation can lead to a strengthening of certain departments, like bio-sciences, often evidenced by additional faculty appointments, new laboratory constructions, and improved facilities. This financial redirection is influenced heavily by the desire to improve or maintain ranking standings [12].

Another financial aspect is the effect of rankings on tuition fees. Universities with higher rankings may feel justified in charging higher tuition fees due to the perceived quality of education and the prestige associated with their institution. This could lead to increased financial pressure on students and their families, raising ethical questions about accessibility and the widening gap in educational opportunities.

In summary, the financial implications of academic rankings on universities are extensive and complex. While higher rankings can lead to increased funding and donations, they also drive strategic decisions that can have far-reaching consequences, including the reallocation of resources and the potential increase in tuition fees. Universities must balance the pursuit of rankings with a commitment to equitable access to education and the responsible use of financial resources.

4. Effects of Rankings on Education Quality and Diversity

This chapter provides a critical examination of the impacts that university rankings have on the landscape of higher education. It delves into how these rankings, while serving as tools for comparison, often fall short of capturing the comprehensive nature of academic quality and the vital importance of diversity and inclusivity in education.

4.1. Influence on Academic Priorities and Research Directions

The influence of university rankings on higher education cannot be overstated. While they provide a useful tool for comparing institutions, they also bring significant challenges. Rankings often rely on a limited set of metrics, leading to an oversimplification of academic quality. This narrow focus can result in an incomplete understanding of an institution's strengths and areas for improvement.

One of the most concerning aspects of these rankings is their impact on institutional priorities. Universities, under pressure to climb the ranking ladder, may prioritize short-term measures that promise quick improvements in these metrics. This often means focusing on areas that are heavily weighted in rankings, such as research output, sometimes at the expense of crucial factors like teaching quality, student support, and community engagement. Such an approach can lead to the diversion of resources away from less visible but essential areas, including mental health services, student diversity initiatives, and arts programs [1].

Furthermore, the emphasis on rankings can affect faculty recruitment and development. There might be a tendency to favor researchers with high publication rates over educators with strong teaching skills, impacting the quality of education. Additionally, this emphasis often leads institutions to prioritize STEM fields over humanities and social sciences, resulting in a skewed perception of academic quality and the undervaluing of the contributions of non-STEM areas [1].

The global influence of rankings exacerbates academic inequalities. Institutions in wealthier countries, with better access to funding and resources, are more likely to top these rankings,

overshadowing the achievements of institutions in developing countries. This can create a perception that quality education is predominantly available in certain regions, contributing to global academic inequality.

The pressure exerted by rankings can also create a high-pressure environment for students, compelling them to choose highly ranked institutions or programs, sometimes against their interests or career aspirations. Moreover, to improve rankings quickly, some institutions might resort to short-term tactics that do not genuinely enhance academic quality or the educational experience.

4.2. Consideration of Diversity and Inclusion in Ranking Systems

University rankings, while offering a comparative measure for academic institutions, frequently neglect the significance of diversity and inclusivity. These aspects are not only integral to a holistic educational experience but also essential to fostering an environment of learning that prepares students for a globally interconnected world. The methodologies used in these rankings typically rely on a narrow set of metrics, which fail to capture the breadth of elements contributing to academic excellence.

For example, the unique missions of different institutions, the diversity of their student populations, and their regional contexts are often overlooked in ranking systems. This oversight can result in a limited and skewed understanding of what constitutes quality education, potentially undervaluing institutions that excel in areas not typically emphasized by ranking criteria. Such a narrow focus might ignore the efforts and successes of institutions in promoting diversity, equity, and inclusion, both within their student body and faculty [1].

There is an increasing acknowledgment of the need for assessment measures that account for diversity and equity. This involves developing evaluation frameworks that recognize the unique strengths and contexts of different institutions. It's essential to consider factors like the diversity of student populations, the inclusivity of campus environments, and the role institutions play in addressing regional socio-economic challenges [1].

In addition to recognizing diversity in student populations, it's also important to consider how institutions support underrepresented groups. This includes providing access to quality education for marginalized communities and creating an inclusive campus culture that respects and celebrates diversity. Evaluating how well institutions facilitate social mobility and reduce educational disparities is another critical aspect that should be included in ranking methodologies.

5. Real-world Implications for Graduates and Institutions

This chapter explores the tangible effects of university rankings on graduates' career prospects and the global and local relevance of institutions. It discusses the advantages that graduates from top-ranked universities enjoy in the job market and the challenges universities face in balancing global stature with local engagement and responsibilities. This chapter provides an insightful analysis of the broader implications of academic rankings in shaping the futures of both individuals and educational institutions.

5.1. Career Prospects for Graduates of Top-Ranked Universities

The correlation between graduating from a top-ranked university and career success is a subject of much debate and interest. According to [13], these prestigious institutions often provide a platform for enhanced career prospects. This is not solely due to the quality of education but also because of the brand value and network opportunities these universities offer.

Graduates from top-ranked universities not only benefit from a strong alumni network but are also perceived by employers as pre-vetted candidates. The rigorous selection process of these institutions often leads employers to assume that these graduates possess superior skills and knowledge. This perception reduces the need for extensive interviewing, as acceptance into such a university is seen as a credible indicator of the candidate's abilities. Consequently, this can lead to better job offers, higher starting salaries, and faster career progression, reflecting the trust and value placed in the education provided by these top-ranked institutions.

Moreover, the resources available at top-ranked universities, including state-of-the-art facilities, renowned faculty, and extensive research opportunities, contribute significantly to the development of students. These resources not only enhance the learning experience but also provide graduates with a competitive edge in the job market.

However, it's essential to acknowledge that the success of graduates is not solely determined by the reputation of their alma mater. Personal skills, work ethic, and the ability to adapt and learn are equally, if not more, important. The article [13] suggests that while the prestige of a top-ranked university can be a stepping stone, it does not guarantee success.

Furthermore, the focus on rankings can sometimes overshadow the importance of choosing a university and a program that aligns with a student's interests and career aspirations. The best educational experience comes from a match between the student's goals and the university's offerings, irrespective of its ranking.

While there are clear advantages to graduating from a top-ranked university, it's crucial to maintain a balanced perspective. The prestige of such institutions can indeed enhance career prospects, but it should not be the sole factor guiding educational choices. Personal attributes, skill development, and aligning one's education with career goals are equally important for long-term success.

5.2. Impact on Universities' Global and Local Relevance

The pursuit of global reputation often propels universities to focus on measures that enhance their international standing, such as research output, faculty quality, and the recruitment of high-achieving students from around the world. This pursuit, however, can sometimes lead to civic disengagement. As universities transform into self-serving entities focused on global recognition, their commitment to local and regional needs can diminish. This shift in priorities raises questions about the role of higher education in addressing societal challenges, as universities may become less involved in tackling issues like poor quality schooling or health outcomes in their immediate communities [2].

Moreover, the drive for global status can influence universities to align their strategies with international models and benchmarks, sometimes at the expense of regional development. For example, in [3], it's suggested that global aspirations, driven by the desire to excel in rankings, might overshadow the importance of contributing to local economies and communities. This shift can lead to a reduction in programs and initiatives aimed at addressing local issues, such as community education programs, local economic development projects, or region-specific research.

Furthermore, the pressure to maintain or improve global rankings can lead universities to prioritize the recruitment of international students, often at higher tuition rates, over local students. This practice not only raises ethical concerns about inclusivity and accessibility but also impacts the demographic makeup and diversity of the student body, potentially leading to a less regionally representative campus community.

The challenge for universities is to find a balance that allows them to be both globally competitive and locally relevant. This requires a strategic approach that acknowledges the importance of global excellence while also embracing their role as key players in local and regional development. Universities need to foster an environment where global aspirations complement, rather than overshadow, their commitment to local communities.

6. Conclusions and Future Perspectives

6.1. Summary of Findings and Answers to Research Questions

From the strategic alignment with ranking criteria to the ethical dilemmas posed by financial incentives and the effects on educational quality and diversity, the research has provided a comprehensive understanding of the profound influence rankings hold. Additionally, the exploration of how these rankings impact graduates' career prospects and the global versus local relevance of universities has shed light on the broader societal implications of this phenomenon.

In synthesizing these findings, it becomes clear that while academic rankings play a crucial role in shaping the landscape of higher education, they should be approached with a nuanced understanding of their limitations and impacts. This conclusion underscores the need for ongoing dialogue and research in this area to ensure that the pursuit of academic excellence through rankings aligns with the broader goals of education and societal development.

RQ1 (Influence on Policies and Strategies): Global rankings like ARWU, THE, and QS significantly influence university policies and strategies, leading to a realignment of academic priorities and resource allocation. Universities often adjust their focus to enhance aspects that improve ranking positions, such as research output and international visibility, sometimes at the expense of other areas.

RQ2 (Financial and Ethical Implications): Striving for higher rankings brings financial benefits, like increased funding and investments, but also raises ethical concerns. Universities might prioritize departments and initiatives that boost rankings, leading to potential neglect of less measurable but crucial areas like inclusivity and accessibility.

RQ3 (Effect on Education Quality and Diversity): Academic rankings impact the quality and diversity of education. There's a tendency to emphasize fields that contribute to rankings, potentially marginalizing disciplines like the arts and humanities, and affecting the overall educational experience and diversity.

RQ4 (Impact on Career Prospects): Graduates from top-ranked universities enjoy enhanced career prospects due to the perceived value and reputation of their institutions. However, personal attributes and skills are equally important for long-term success.

RQ5 (Global and Local Relevance): University rankings influence the balance between global and local relevance. The pursuit of global status can lead to civic disengagement, challenging universities to maintain their commitment to local and regional needs while striving for international excellence.

6.2. Recommendations and Future Directions for Academic Rankings

To effectively address the complexities and consequences of academic rankings, we have the following recommendations and future directions:

- **Diversify Ranking Criteria:** Rankings should include a broader range of metrics, such as student satisfaction, graduate employability, and commitment to social responsibility, to provide a more comprehensive understanding of institutional quality.

- **Enhance Transparency:** Ranking organizations are encouraged to make their methodologies more transparent. This increased transparency will allow institutions and the public to have a better understanding of how rankings are determined.
- **Balance Global and Local Contributions:** Rankings should equally weigh both global research achievements and local community engagement, ensuring institutions don't compromise their local responsibilities in the pursuit of global recognition.
- **Promote Ethical Practices:** Universities should align their strategies with ethical considerations, prioritizing the core values of education and societal well-being over mere ranking improvements.
- **Encourage Continuous Research and Dialogue:** Further research into the impacts of rankings on various aspects of higher education is crucial, as is ongoing dialogue among educational stakeholders to address the challenges posed by rankings and seek improvements in these systems.

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