

An analysis of university ranking systems with a focus on QS

Yan SHEN

University of Manchester, Manchester M13 9PL, UK
Email address: yan.shen-4@postgrad.manchester.ac.uk

Abstract: University ranking systems are becoming crucial in higher education, influencing both student choices and institutional reputations. This article reviews the growing impact of university ranking systems on student choice and institutional reputation. In addition to this, the paper provides an in-depth analysis of the strengths and weaknesses of university ranking systems and criticizes the credibility and fairness of the QS system. The analysis concludes with recommendations for future development of the ranking system to better meet the needs of students and educational institutions worldwide.

Key words: QS world university rankings; university ranking systems; higher education; student decision-making; institutional reputation

1 Introduction

Nowadays, the access to higher education is expanding worldwide, which has increased the national and global demand for information on academic quality. This growing demand has triggered the development of university rankings in many countries around the world. Altbach highlighted that rankings are an inevitable consequence of the global massification of higher education and thus the status of rankings in the field of higher education is visible [1]. To some extent, university rankings are considered an important tool for assessing the quality of higher education institutions (HEIs), having a great impact on higher education and stakeholders around the world [9]. As students and HEIs are important participants in the higher education system, this paper will firstly reveal the actual impact of rankings on the decision-making of individuals to study abroad, and secondly expand the focus to the university level, critically examining the positive and negative aspects of the university ranking system as well as the strengths and limitations of university rankings in practice.

2 THE-QS world university rankings

With the internationalization of higher education, ranking systems have gained popularity [13]. University ranking systems are produced by various organizations, media, and academic institutions for consumers including students, parents, governments, and other stakeholders [7]. They rank higher education institutions through different methodologies and indicators of assessing faculty, research, graduates, income, and reputation [19]. Over the last two decades, university rankings have become the primary measure of university performance [3]. A university's position in the rankings symbolizes its status, which may influence students' enrollment choices [13]. From the perspective of universities, the

enrollment process is somewhat simplified as well [15].

Quacquarelli Symonds Ltd (QS) launched the THE-QS world university rankings with Times Higher Education (THE) in 2004. Quacquarelli Symonds Ltd is an independent education industry organization and THE is a weekly magazine published in the United Kingdom that focuses on higher education [2]. It claimed that the original purpose of THE-QS world university rankings was to "serve students and their families" although it is now used by "governments and university leaders ... to set strategic targets". THE-QS world university rankings contain eight indicators, including mission, research, teaching, globalization, employer reputation, faculty-student ratio, citations per faculty, and graduate employability using academic peer review [19].

3 Impact brought by the international university ranking system

Both schools and students are partly affected by university rankings in different ways. On the one hand, university rankings influence students' choices of schools because rankings are seen as an indicator of a school's quality and reputation. On the other hand, the ranking system also contributes to shaping a university's reputation, enrollment, recruitment impact, and international cooperation, thus attracting better students. In this case, they form a positive correlation. However, over-reliance on rankings can also lead to some disadvantages. This section will critically analyze the impact of university rankings on students and schools.

3.1 For students

Rankings can provide comparative results of the performance of different institutions, creating a reputation that attracts students to universities, thus guiding students in choosing their preferred university [9][19][5]. Students make decisions by searching the college ranking system for information about higher education institutions. Moreover, Griffith and Rask's study found that good rankings in influential university ranking systems could contribute to a significant increase in the number of applicants and the rate of university acceptance [8]. Furthermore, in the study of Cullen et al, more than half of the participants from the universities in South Africa agreed that university rankings have an influence on their choice of school [3]. Nevertheless, the questionnaire made in this study lacked the indicators of the extent to which participants agreed with this, and thus it was unclear for readers to learn how much of a role university rankings play in decision-making.

3.2 For universities

The university ranking system can be used to measure the success of a university. A good ranking in the university ranking supports an institution in promoting its recognition in the international education community and building a good reputation and image, thus improving its enrollment and financing [11]. What's more, recruiting talented students with higher academic literacy and career prospects also facilitates higher education institutions in occupying better positions in university rankings [9]. In light of this, university rankings promote a positive, mutually reinforcing cycle between students and schools. In addition to this, the pursuit of university rankings can also be converted into an incentive for the instructional advancement of the university, based on which, academic reforms that are favorable to it can be implemented [17]. Given that some universities refer to university rankings before establishing academic collaborations [6], high rankings also help higher education institutions establish partnerships and collaborations with other HEIs.

Vogel et al. affirmed the benefits of ranking systems to higher education institutions in terms of institutional reforms, enrollment, institutional collaboration, and funding [23]. However, in the study of Sayed, this view is considered flawed as it ignores the fact that the indicators of rankings fail to cover all aspects of performance [19]. Worse still, given the actual impact of rankings on higher education institutions, the excessive pursuit of rankings may lead to a focus on improving

rankings rather than quality [15]. The following section will discuss the inherent flaws of the university ranking system so that rankings can be perceived and applied in a more scientific and rational manner.

4 Critiques of international university ranking systems

In the previous literature, a considerable number of scholars have criticized ranking systems [4][22][14]. The questioning of university rankings reflects a lack of academic consensus on ranking systems. Therefore, in this section, the article will further analyze the sources of controversy and explore the shortcomings of the ranking system.

4.1 Methodological critiques

Problems in current university ranking systems include arbitrary selection of assessment metrics, undefined users, limited and unreliable data sources, and simplistic presentation [21]. For example, Davis points out the illogicality of assessing the reputation and status of HEIs via subjective survey and alumni status, the former of which can be characterized by the presence of personal tendencies of the respondents, and the latter of which fails to present job satisfaction, academic freedom and equal opportunities [4]. With the extensive application of rankings in university activities, university ranking systems are gradually becoming commercialized [10]. The study of Hazelkorn and Jabjaimoh et al. noted that many colleges and universities specifically assign their employees to be involved in ranking-related activities [10][14]. In addition to this, there are also controversies from the transparency issues of the ranking system [21].

4.2 Credibility and fairness critiques

The university ranking system dominates the field of higher education, but the credibility of its data and the fairness of the system have also been highly disputable, since it has been questioned to maintain ranking positions through data manipulation [22]. In addition, many stakeholders have questioned the comprehensiveness of the university rankings as the same university has been voted as the number one university in the rankings for several years in a row [16]. The study by Dearden et al. analyzed the data manipulation of ranking publications on ranking methodology [5]. Publications will first analyze whether the ranking methodologies will increase the university's reputation to determine the operation in the next step. If reputation improves, then publications' optimal methodology would deviate from students' needs and preferences; while if not, they are likely to use profit-maximizing ranking methodology to close to students' preferences. In short, the unwarranted changes in ranking methodology made by ranking publications demonstrate their inherent profit-oriented drive.

Despite the controversies in the ranking system, Sayed and Altbach argued that the importance of the rankings can never be ignored [19][1]. It is suggested that colleges and universities, ranking agencies, and stakeholders must recognize the limitations of the ranking system [4].

5 Critiques of QS ranking systems

According to Altbach, QS World University Rankings are the most problematic [1]. Similarly, Sowter identifies a number of problems with it, including an oversimplified categorization of the diversity of institutions and a lack of discipline-level indicators [20]. In addition to this, the biggest strategic weakness of the QS World University Rankings is its reliance on reputation indicators, which has caused its significant fluctuation over the years. Reputation surveys make up half of the QS World University Rankings [18]. However, the validity and fairness of reputation is dubious. Firstly, the selection of respondents is not sound enough, since they cannot have precise knowledge of academic institutions due to their differences in geography and expertise. Secondly, the results of a reputation survey cannot be employed to measure the quality of learning and teaching and the contribution of an institution to society. Furthermore, unfairness is created with a tendency in favor of English-speaking countries. Quacquarelli Symonds Limited, which is a private, for-profit company, even runs specific programs to improve the image of academic institutions.

6 Future developments and recommendations

More and more institutions turn to boost their performance based on popular indicators, however, students care more about the educational resources, learning environment, and faculty strength of an institution. As a result, university ranking systems should optimize the selection of indicators and increase the transparency of the ranking system in order to provide a more comprehensive and equitable illustration of the true level of university performance and thus better serve students and higher education institutions around the world.

Considering the lack of relevance of many rankings to the needs of national and international students, a new type of student-oriented "personalized university ranking" has been proposed [12]. It provides a multi-dimensional ranking and its indicators are presented individually. In this way, students are able to choose appropriate indicators individually to examine the quality of a school, as well as to compare specific schools and majors they are interested in. Undeniably, in the future, more user-based ranking systems will be developed at the national and international levels.

7 Conclusion

The contribution of rankings in shaping student perceptions and institutional strategies has been confirmed. University ranking systems are capable of providing students with information that can be drawn upon to inform their choice of university, as well as promoting healthy competition and growth among higher education institutions. However, the analysis also reveals potential pitfalls and criticisms associated with these systems, highlighting the unintended consequences of methodological transparency, credibility, and the short-sighted pursuit of rankings. In view of the importance of rankings, this paper calls for a balanced approach that encourages students to consider a wider range of factors in their decision-making process. In addition, the study proposes recommendations for the future development of ranking systems by advocating user-based ranking systems and personalized approaches to meet the diverse needs of students and to facilitate a more scientific assessment of educational institutions.

Conflicts of interest

The author declares no conflicts of interest regarding the publication of this paper.

References

- [1] Altbach PG. 2012. The globalization of college and university rankings. *Change: The Magazine of Higher Learning*, 44(1): 26-31.
- [2] Al-Juboori, Ko F. 2011. University ranking and evaluation: trend and existing approaches. In *The 2nd International Conference on Next Generation Information Technology*, 137-142.
- [3] Cullen MD, Calitz AP, Kanyutu W. 2020. The importance of university rankings for students' university of choice: A South African perspective. *Higher Education Marketing in Africa: Explorations into Student Choice*, 315-342.
- [4] Davis M. 2016. Can college rankings be believed? *She Ji: The Journal of Design, Economics, and Innovation*, 2(3): 215-230.
- [5] Dearden JA, Grewal R, Lilien GL. 2019. Strategic manipulation of university rankings, the prestige effect, and student university choice. *Journal of Marketing Research*, 56(4): 691-707.
- [6] Dill DD. 2018. Enhancing academic quality and collegial control: Insights from US policy on the ethical conduct of human subjects' research. *Higher Education Policy*, 33: 45-64.
- [7] Espeland W, Sauder M. 2009. Rating the rankings. *Contexts*, 8(2): 16-21.
- [8] Griffith A, Rask K. 2007. The influence of the US news and world report collegiate rankings on the matriculation decision of high-ability students: 1995-2004. *Economics of Education Review*, 26(2): 244-255.
- [9] Hazelkorn E. 2014. Rankings and the global reputation race. *New Directions for Higher Education*, 168: 13-26.

- [10] Hazelkorn E. 2015. *Rankings and the Reshaping of Higher Education*. London: Palgrave Macmillan UK.
- [11] Hazelkorn E, Gibson A. 2017. Global science, national research, and the question of university rankings. *Palgrave Communications*, 3(1).
- [12] Hou AYC, Morse R, Shao YE. 2012. Is there a gap between students' preference and university presidents' concern over college ranking indicators?: a case study of "College Navigator in Taiwan". *Higher Education*, 64(6): 767-787.
- [13] Huang LL, Chen SW, Chien CL. 2014. The effect of university ranking on learning satisfaction: Social identities and self-identity as the suppressor and mediators. *Asian Journal of Social Psychology*, 18(1): 33-42.
- [14] Jabjaimoh P, Samart K, Jansakul N, et al. 2019. Optimization for better world university rank. *Journal of Scientometric Research*, 8(1): 18-20.
- [15] Kehm BM. 2013. Global university rankings - impacts and unintended side effects. *European Journal of Education*, 49(1): 102-112.
- [16] Lincoln D. 2012. Rankings: an idea whose time has come, and gone. *Inside Higher Ed*, 28.
- [17] Madden AD, Webber S, Ford N, Crowder M. 2018. The relationship between students' subject preferences and their information behaviour. *Journal of Documentation*, 74(4): 692-721.
- [18] Olcay GA, Bulu M. 2017. Is measuring the knowledge creation of universities possible?: A review of university rankings. *Technological Forecasting and Social Change*, 123:153-160.
- [19] Sayed OH. 2019. Critical treatise on university ranking systems. *Open Journal of Social Sciences*, 7(12): 39-51.
- [20] Sowter B. 2013. Issues of transparency and applicability in global university rankings. *Rankings and Accountability in Higher Education*, 55.
- [21] Tilak JBG. 2016. Global rankings, world-class universities and dilemma in higher education policy in India. *Higher Education for the Future*, 3(2): 126-143.
- [22] Vernon MM, Balas EA, Momani S. 2018. Are university rankings useful to improve research? A systematic review. *PLoS ONE*, 13(3): e0193762.
- [23] Vogel R, Hattke F, Petersen J. 2017. Journal rankings in management and business studies: what rules do we play by? *Research Policy*, 46(10):1707-1722.