

# Globalization and University Rankings: Consequences and Prospects

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## Abstract

This study focuses on the effect of globalization on university ranking and current developments and challenges that HEIs face in the global higher education market. It provides detailed information about the origins of international ranking systems, diversification of university rankings and strategic planning of higher education institutes. Moreover, this study describes the global university classification, continuous exposure to elite universities, neglect of the humanities, arts and the social sciences researches, limited description of methods and indigent metrics. The expected effects on ranking system amid the COVID-19 crisis are mentioned which are widely being discussed by the researchers. The study concludes that there is a threat that universities which are investing time and money in accumulating and using statistics and data for the sake of improvement in their performance for the rankings may destabilize themselves from the development in other areas such as learning, teaching or community involvement.

**Keywords:** university rankings, internationalization, COVID-19, globalization

## 1. Introduction

Globalization and internationalization forces propel higher education institutes (HEI) to prepare for the battle of global university rankings. This article focuses on the impact of globalization on university ranking and contemporary trends and challenges facing by HEIs to strive in the global higher education industry. The global/international ranking is a hotly debated issue that is shifting in its role and scope (Kehm & Stensaker, 2009; King, 2015). It is appreciable that international rankings are diversifying and moving towards more broadly balanced criteria and becoming multidimensional (Yudkevich, Altbach, & Rumbley, 2016), however, competition and international comparisons are not without challenges and consequences.

Whilst developed countries such as United States, Australia, Canada and Germany generally view global rankings as a challenge to their leading position in the higher education sector (Marginson & Van der Wende, 2007; Marginson, 2007; Hazelkorn, 2015). Whereas, developing or middle-income countries like Malaysia, Pakistan, India Saudi Arabia usually treat global rankings more compassionately (Thakur, 2007; Shin & Harman, 2009; Marginson, 2009). Rankings can be considered as a beneficial accountability tool, particularly for institutions where such practices are immature or weak. Therefore, they can lead higher education institutions to “the global knowledge network on an equal basis with the top academic institutions in the world” (Altbach et al., 2011, pg 319)

## 2. The Origins of International Rankings

The notion of comparison among universities is historical, where ranking universities was practised around 1900 in England with the publication of “*Where We Get Our Best Men*” (Maclean, 1900). The study focused on the backgrounds of the highly successful and most prominent men with a focus on the institutions where they studied. Consequently, the list of universities classified by the numbers of eminent alumni was produced and published (Myers & Robe, 2009). Though the practice was rapidly rivalled in other countries, it gained a little debate outside academic institutions. Later, the next eighty years carried some other studies on rankings, particularly in graduate programs but still unnoticed by society in general. The wide-ranging interest in university rankings began in 1983 with one publication by US News and World Report titled ‘America’s Best Colleges’ (Lukman, Krajnc & Glavič, 2010). The information related to undergraduate programs in US higher education institutions was publicly and widely available for the first time in history. These statistics were accessible widespread among the parents and the general population

of high schools. A couple of years later, the first “Good University Guide” was issued by *The Times* in the United Kingdom in 1993 (O’leary, 2010), stimulating the public debate concerning the institution’s choice of good and bad. Subsequently, the 1990 decade witnessed the fame of global rankings. However, the well-swept over this sector was initiated by the the Academic Ranking of World Universities (ARWU) in China started by Shanghai Jiao Tong University (Liu & Cheng, 2005). Later in 2004 , the Times Higher Education-QS World University Rankings was introduced by Times Higher Education (THE), a British magazine. *Times Higher Education (THE)* with the association of Quacquarelli Symonds (QS) issued the annual Times Higher Education-QS World University Rankings. Meanwhile, QS rated 500 top universities whereas, THE focused on the top 200 and released the data via media partners (Aguillo, Bar-Ilan, Levene, & Ortega, 2010). In 2009, THE parted from QS and started the collaboration with Thomson Reuters and announced a new ranking titled ‘Times Higher Education World University Rankings’ (Huang, 2012). Afterwards, the ranking system was one of the highlighted topic to be researched by the researchers (Hazelkorn, 2015) and now the topic has increasingly engrossed more anti-ranking discussions and initiatives (Marope & Wells, 2013; Mmantsetsa, Peter & Silvia, 2014).

### 3. Diversification of University Rankings

The last decade has witnessed diversity and innovation in global university rankings. Particularly, from the past few years, several new rankings have been introduced in the education industry with distinction in methodology and evaluation factors such as academic performance, innovativeness, and internationalization presence (Shin, Toutkoushian & Teichler, 2011; Aguillo, Ortega & Fernández, 2008). However, research including several citations for published articles is considered as an essential indicator in the evaluation process by most of the ranking establishments (Shin, Toutkoushian, & Teichler, 2011).

The major newsworthy global rankings include: the Academic Ranking of World Universities (ARWU, also known as Shanghai rankings); the *Times Higher Education* World University Rankings (*THE*), and the QS (Quacquarelli Symonds Limited) World University Rankings (Chen & Liao, 2012). Other rankings for instance “The Center for World University Rankings (CWUR), G-factor and Reuters World’s Top 100 Innovative Universities failed to attract higher media attention, but are still substantial within the academic world. Table 1 lists numerous existing global university rankings-inclusive of their origins, established years, and methodologies.

Table 1. Types of rankings

Ranking	Origin	Methodology / Indicators
<b>Academic Ranking of World Universities</b>	Shanghai Ranking Consultancy, China	-No: of published articles (Nature or Science) -Fields Medalists (mathematics) -No: of Nobel Prize winners
<b>Times Higher Education World University Rankings</b>		Five groups of performance indicators: -Research (volume, income and reputation) -Teaching (the learning environment)
<b>Times Higher Education World Reputation Rankings</b>		-Citations (research influence) -Industry income (knowledge transfer) - International outlook (staff, research and students)
<b>Young University Rankings</b>	Times Higher Education (THE), UK	
<b>QS World University Rankings</b>		Five indicators: - Academic peer review - International staff ratio
<b>QS Asian University Rankings</b>	Quacquarelli Symonds, UK	-International student ratio
<b>QS Latin American University Rankings</b>		- Citations per faculty - Employer reputation - Faculty/Student ratio
<b>Center for World University Rankings</b>	the Center for World University Rankings, Saudi	- Quality of education -Scientific impact

	Arabia	<ul style="list-style-type: none"> <li>- Number of publications</li> <li>- Number of publications in high-quality journals</li> <li>- Citations</li> <li>- Alumni employment</li> <li>- Number of patents</li> <li>- Quality of faculty</li> </ul>
<b>Eduniversal Business School Ranking</b>	Eduniversal, France	<ul style="list-style-type: none"> <li>- Official Selection of the best 1000 Business Schools</li> <li>- Palmes of Excellence classification (from 1 to 5)</li> <li>- Dean's vote</li> </ul>
<b>Leiden Ranking</b>	The Centre for Science and Technology Studies, Leiden University, The Netherlands	<p>Bibliometric normalization and impact indicators:</p> <ul style="list-style-type: none"> <li>- Citations-per-publication</li> <li>- Including the number of publications</li> <li>- Field-averaged impact per publication</li> </ul>
<b>Professional Ranking of World Universities</b>	École nationale supérieure des mines de Paris	The number of Chief Executive Officers (or equivalent) among the Fortune Global 500
<b>Reuters World's Top 100 Innovative Universities</b>	Thomson Reuters	<ul style="list-style-type: none"> <li>- Patent Volume</li> <li>- Total Web of Science Papers</li> <li>- Patent Success</li> <li>- Global Patents</li> <li>- Patent Citations</li> <li>- The patent to Article Citation Impact</li> <li>- Per cent of Industry Collaborative Articles</li> <li>- Patent Citation Impact</li> <li>- Per cent of Patents Cited</li> <li>- Industry Article Citation Impact</li> </ul>
<b>SCImago Institutions Rankings</b>	SCImago Research Group, Spain	<p>Based on 13 separate indicators grouped into five categories:</p> <ul style="list-style-type: none"> <li>- Teaching</li> <li>- International mix</li> <li>- Citations</li> <li>- Research</li> <li>- Industry income</li> </ul>
<b>U-Multirank</b>	Androulla Vassiliou, Commissioner for Higher Education and Culture, Belgium	Based on 30 separate indicators and rated in five performance groups, from 'A' (very good) through 'E' (weak)
<b>UniRanks "The Ranking of Rankings"</b>	UniRanks World University Ranking	<p>Use the following rankings and weights:</p> <ul style="list-style-type: none"> <li>- THE Innovative Universities</li> <li>- QS</li> <li>- US News Best Global University</li> </ul>

		- ARWU - Reuters World Top 100
<b>U.S. News &amp; World Report's Best Global Universities Rankings</b>	U.S. News & World Report, USA	Judging by factors such as: - Publications - Global research reputation - Number of highly cited papers
<b>Webometrics</b>	Cybermetrics Lab, Spain	Based on a composite indicator that considers both the volume of the Web contents (number of web pages and files) and the visibility and impact of these web publications according to the number of external links (site citations) they received

Source: topuniversities.com, THE, Rathenau Institute, UniversityRankings.ch

#### 4. Globalization and World University Rankings

The academic world in the 21st century is considered more market-oriented and competitive where international rankings are unavoidable and essential (Hazelkorn, 2015). Globalization affects regions, countries, and cultures in diverse ways, and higher education was also affected by globalization (Knight, 2008). Thus, in the last few years, there have been huge changes in the higher education sector, and demand for global competitiveness and completeness is quite prominent and evident (Rust & Kim, 2012). In accordance with globalization and the development of the global knowledge economy, these competitive forces lead to global comparisons and assessments.

The growing relevance of the global universities rankings get recognition all over the world and these rankings allow evaluation of the quality of the higher education and its competitiveness in the educational market. Today, rankings have placed themselves as gatekeepers for higher education, defining what and who is appraised, and to what extent.

#### 5. Global Rankings and University's Strategic Planning

##### 5.1 National Efforts to Develop World-Class Universities

Altbach (2003) explains that the desire to have world-class universities can be seen in every country. However, the limited cognizance about what a world-class university is and how to get it is quite challenging. At one time, the government's role in the development of world-class universities was not considered a critical factor. For instance, the Ivy League universities in the US disclose that; they nurtured to superiority because of incremental progress, instead of deliberate intervention by the government (Salmi, 2009). Likewise, the Universities of Oxford and Cambridge grew over the centuries due to their own volition (Smith & Ho, 2006).

Essential elements while adopting the goal of establishing world-class universities are; an integrated teaching system, innovative research environment and digitalized, technology-oriented institutions (Salmi, 2009). However, in current times it is unlikely that a world-class university can be quickly created without an adequate national policy and direct support from the government. In that respect, standardization, quality assurance, and funding for research projects are some of the key policies playing a role in developing a world-class university.

##### 5.2 Quality Assurance Practices

In the current era of rapid globalization, quality assurance has been regarded as a primary concern in the global rankings of the universities (Myers & Robe, 2009). The rapid expansion of students, propagation of institutions, student overseas mobility, and some other factors have pushed policymakers to attend to quality and accountability. Historically, the key focus of most nations has been to raise enrolments and access, however, now the focus is moving towards quality and the global ranking playing a leading role in this shift (Blanco-Ramirez & B. Berger, 2014).

What quality assurance practices should a university follow to become world-class? A world-class university should attain the following three major competence roles: (1) students' educational quality, (2) research, dissemination and development of knowledge, and (3) initiatives making a contribution to the community and the society (Levin, Jeong, & Ou, 2006). Despite these factors, most of the well-known rankings seek out quality of research rather than teaching quality.

Quality assurance is based on the three fundamental criteria which are: control, improvement and accountability (Parry, 2006). In the case of universities, quality assurance can be dispersed into external and internal quality

assurances. Internal quality assurance focuses on the development of institution and internal accountability assessment, whereas, external quality assurance focuses on attaining public accountability (Newton, 2000). Both are essential for a university to prove to keep its standing in global international rankings. Quality assurance practices such as external review and Internal self-evaluation, directed openly by independent experts, are vibrant for enhancing the institutional quality.

### *5.3 Internationalization of Universities*

The rationalisations classified in the literature to internationalize a university are academic, economic social and political (Knight, 2004; Kreber, 2009; Qiang, 2003). Academic motives for internationalization are based on meeting the need for the educational mission and approaches of the university, remaining academically relevant in an interconnected globalized society, and attracting the best students and faculty around the world. Internationalization, from the last two decades, is an important aspect where universities are focusing to be more global and competent (Myers & Robe, 2009). The conventional features which determine the internationalization level at any institution are; inbound mobility of foreign students, students exchange programs, international faculty, and international contents in educational courses (Khalid, Ali, Islam, Khaleel, & Shu, 2017).

Global rankings consider internationalization as an important indicator for the evaluation process, for example, THE World University Rankings has an international outlook as a performance indicator with a given weight 7.5%. The QS World University Rankings, give 10% weight to internationalization indicators which are equally divided into the proportion of international faculty and international students (Shin et al., 2011; Topuniversities, 2017). Thus, universities that desire to stay world-class in the rankings have to focus on their internationalization policies, exclusively on increasing the enrollment of international students, academic/staff mobility, co-authored international research publications, and English as an instructional medium.

## **6. Consequences and Prospects of Global University Rankings**

The yearly composite rankings of universities do not always satisfactorily accomplish the university's demands. The reality is that no ranking is without limitations and consequences. Key deficits and limitations refer to the continued focus on elite universities (Weingart & Maasen, 2007), the relative neglect of the arts, social sciences and humanities (Kanhere, Arjunwadkar & Vichare, 2009), superficial methodology description and poor indicators (Taylor & Braddock, 2007), self-critical attitude to rankings from the providers (Amsler & Bolsmann, 2012), inadequacies in identifying and directing institutional diversity (Dill & Soo, 2005), and anticipated commercial interests (Kiraka, Maringe, Kanyutu & Mogaji, 2020).

### *6.1 Continued Attention towards Elite Universities*

The analysis of the procedures following by different ranking systems in a selection of universities exposed that the applied methodologies were not covering most universities, and consequently could not deliver a comprehensive basis for analyzing complete higher education systems. ARWU ranking principally chooses universities based on highly cited researchers, the number of Nobel Prize winners, and the published articles in *Science* or *Nature* (Salmi, 2016). The Leiden Ranking (CWTS) chooses universities which have at least 500 papers publications in Web of Science (WoS) for five consecutive years, but discounts the publications in the fields of humanities and arts. QS also selects its top higher education institutions worldwide based on per paper citations before applying further indicators such as reputation survey performance, domestic ranking performance, and geographical balancing (Aguillo et al., 2010). However, there is no further explanation of how those criteria are applied.

In THE World University Ranking system, the procedure regarding the selection of universities is not available on THE methodology page (Rauhvargers, 2013). Organizing academic reputation surveys also indicates the selection of elite universities, and additionally, the high-rank positions attained by a small group of higher education institutes are often self-perpetuating.

### *6.2 Relative Negligence of the Humanities, Arts and the Social Sciences*

The humanities, arts and especially the social sciences fields remain underrepresented in the international rankings (Kanhere, Arjunwadkar & Vichare, 2009). This inattention comes from insistent biases that persist in field-normalized citation counts and bibliometric indicators, despite substantial improvements in methodology (Benneworth & Jongbloed, 2010). This characterizes that citation impacts are more reliably determined through indicators measuring the proportion of publications in highly cited journals (Van Raan, 2005), and therefore favours those research areas in which these articles are focused, namely natural sciences, medicine and engineering (Perkmann et al., 2013). Moreover, these are the most significant fields in the Elsevier and Thomson Reuters databases and thus determine, to a

substantial extent, performance in the rankings worldwide. In the humanities, arts, and social sciences research, the output of the published article is typically concerted in books.

### *6.3 Shallow Descriptions of Methodology and Indigent Indicators*

In the process to normalize bibliometric indicators, there is often no reference to the normalization method being adopted (Van, 2005). Although regional weights are sometimes declared, their standards and values remain unrevealed. For instance, in the methodology of the QS description, it is stated that the world's top universities are chosen on the base of citations per paper, nevertheless, several other indicators are also put into consideration, such as reputation survey performance, domestic ranking performance, direct case submission, and geographical balancing (Taylor & Braddock, 2007). The further explanation about how they are applied is absent (QS, 2016). Besides this, the use of poor and indigent indicators also persists in global ranking systems. Despite prevalent criticism, reliance on reputation factors is becoming more widespread. Furthermore, regardless of the controversy regarding indicators of staff/student ratio, they are still commonly used to measure the teaching performance.

### *6.4 Provider's More Self-Critical Attitude to Rankings*

Some of the ranking providers such as Webometrics recently moved from distancing themselves from the potentially adversative effects of rankings to giving warnings about how the produced results may be misused (Federkeil, 2002). The introduction of new implications that would discourse these inadequacies would be more obliging (Saisana, d'Hombres, & Saltelli, 2011). For instance, THE ranking output could be demonstrated by individual indicators, rather than an aggregated 'ranking criteria' that is the combination of five diverse indicators.

Among the ranking's limitations identified by Elsevier, the use of superficial and one-dimensional measurement indicators for sophisticated institutions, allows for variances in institutional size, and dependence on proxies to evaluate teaching performance as appropriate criteria are seemingly unavailable. Elsevier also advises that excessive reliance on East Asia rankings, particularly in research funds allocation, may be disadvantageous for the higher education systems towards development and progress. In summary, this trend is growing amongst ranking providers to converse openly the probable pitfalls. It is imperative to make certain that decision-makers are mindful of the limitations of the rankings results. The growing inclination of providers to raise voices is an inspiring first sign that progress may be ensured in the near future.

### *6.5 Commercial Interests/Commercializing Core Business*

Rankings are a fruitful and rewarding business model, however, as a result of the commercial interest in preserving the position and growing competition among universities (Kehm, 2014), their impact is unlikely to decay anytime soon. How rankings now act as a consultant is through shaping what Holmes (2013), author of "*Watching the Rankings*", defines it the prestigious events in spectacular settings. He exemplifies these events as a lucrative mix of business opportunities including customized rankings, conferences, consultancy, and workshops for world-class wannabes" (Holmes, 2013, pg 41). Moreover, according to Holmes, "a huge commercial success based on the participation rates charged, and their frequency" (Holmes, 2013, pg 27). University rankings industry is now full of discernment of conflict of interest and self-centeredness, in consort with self-appointed auditors (Hazelkorn, 2013a), which may not be productive for the higher education industry in a true sense.

## **7. The Expected Change in Trend during COVID-19**

From the perspective of university ranking systems, the data collection for the year 2021 was managed because the corresponding data period occurred for most of the metrics before the COVID-19 crisis took hold, and most of the agencies had already launched their ranking for the year 2021, e.g. the Time Higher Education, QS-World ranking. They include publications from 2015 to 2019 and citations from 2015 to-date for bibliometric information. According to THE (2020), data that overlap with the present situation will be used for the next year's University Rankings. The scores of universities can be influenced only by papers cited extremely quickly (THE, 2020). Regarding the internationalisation, the numbers of international students will decrease, but how far and for how long is unsure. One of the major losses in the academic research universities is apparent from now that the shortcomings of Erasmus in Europe, which has been a highly productive program for internationalisation, can be traced.

Despite the shortcomings of scholarships and governmental fundings, the students will still want to make the best choice for their education and can opt for admissions abroad via an online platform. To address COVID issue, researchers have been working on how universities are coping with this challenging period (Viner, et al., 2020; Ilmiyah & Setiawan, 2020; Zhong, et al., 2020). According to the report by Times Higher Education (2020), research will hit universities in Australia and the United Kingdom, and the impact will vary between countries and ranking institutions. Addressing the pandemic's impact on universities and their ranking, which is highly dependent on the students'

enrolment, Sahu (2020) suggests that universities need to strategically plan ways forward to manage admissions for new academic sessions. The admission departments must consider online applications from potential students and provide them with more convenient admission procedures to maintain their number of international students. Moreover, changes in academic research outcomes are also expected, yet it is again difficult to ascertain what effect this will have (Setiawan, 2020), but it is predicted that the parameters to rank the universities will be revised (THE, 2020).

## 8. Conclusion and Future Stance

The new forms of competition standards, research, international educational activities, and engagements are showing new and specialized forms of global rankings. The influx of global rankings over the past few years has engrossed considerable attention on the advancement of higher education, and placed a spotlight on the local and international comparison of universities. University rankings have undeniably facilitated to foster better responsibility, accountability, and amplified pressure to expand management practices in the tertiary sector.

Over the past couple of months, however, several analysts have argued that the impact of COVID-19 would be significant and permanent upon economics, education and rankings for higher education (Viner, et al., 2020; Ilmiyah & Setiawan, 2020; Zhong, et al., 2020), and early budget and policy and academic opinions are somewhat pessimistic.

While no short-term remedies are apparent, there are helpful approaches to boost the long-term internationalization of university rankings. Some of the basic higher education financial and implementation problems pre-date the COVID-19 pandemic, are exacerbated and will continue despite it. Efforts to improve trends in the long term should commence immediately. Currently, it would be difficult to argue that the offered benefits through information and results providing by these rankings, given the observed deficiency in transparency, are greater than the unwelcomed consequences. Nevertheless, there is a threat that universities that are investing time and money in accumulating and using statistics and data for the sake of improvement in their performance for the rankings, may destabilize themselves from the development in other areas such as learning, teaching or community involvement.

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