

Reflections on a Decade of Global Rankings: what we've learned and outstanding issues*

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The World is Watching

Ten years have passed since the Shanghai Jiao Tong University first published the Academic Ranking of World Universities (*ARWU*) in 2003. Followed shortly thereafter by the Times Higher Education QS Top University Ranking (*THE-QS*) in 2004, the arrival of rankings has been a game-changer for higher education and research, intensifying cross-national comparisons. They immediately attracted the attention of policymakers and the academy, challenging perceived wisdom about the status and reputation, as well as quality and performance, of higher education institutions (HEIs¹). The Irish Minister for Education and Science, speaking in his capacity as President of the European Council, echoed the concerns of many political and academic leaders:

Last year the Shanghai Jiao Tong University's Institute of Education ranked the world's top 500 universities on academic and research performance. For the European Union, the news is not all that good. The study shows that 35 of the top 50 Universities in the world are American . . . (Dempsey, 2004).

Almost ten years later, at the launch of *Europe 2020*, unease was just as palpable:

Europe is no longer setting the pace in the global race for knowledge and talent, while emerging economies are rapidly increasing their investment in higher education (Europa, 2011, p. 2).

The arrival of global rankings coincided with a *Zeitgeist* of modernising higher education, and ideological and public support for markets; their continuing influence is a manifestation of the intensification of global competitiveness and their visibly multi-polar character.

Despite volumes of criticism and commentary, and some boycotts by HEIs, rankings have become an increasingly popular way to compare higher education performance and productivity. Their legacy is evident in the way they have become an implicit, and often explicit, reference point for policy-making and decision-making and have reinforced an evaluative state's over-reliance on quantitative indicators to measure quality. They are embedded in popular discourse and have informed behaviour, positively and perversely, of many stakeholders, both within and outside the academy. But, rankings have also produced their antithesis in the form of alternatives; importantly, they have sparked a world-wide conversation about the role, value and contribution of higher education.

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Set against significant changes in the world economy, this article will reflect on three inter-related issues arising from the growing interest in and use of HE rankings, what they measure, and the way in which different stakeholders have responded to them. There are three main sections. The first considers the way rankings have heightened policy and investment interest in higher education. The second considers whether the modifications to rankings have resolved some of the questions about what they measure, and the third looks at how rankings have influenced stakeholder behaviour. Finally, the article will reflect on what we have learned and some outstanding issues.

Rankings and the World Order

Since global rankings first appeared in 2003, the following years have borne witness to a dramatic transformation in the fortunes of the world economy and its citizens. The early years of the 'noughties' were associated with the tail-end of a long period of economic growth driven by unregulated finance capital, while the latter years have been marked by the lingering effects of the 2008 global financial crisis which plunged most developed economies into recession. In contrast with the steepest decline in growth in 60 years across OECD countries (OECD, 2009), growth in developing countries and economies in transition, in Latin America and Asia, such as Brazil, China and India, has been particularly robust in both absolute and relative terms, even if there has been some slackening in recent months. Although future growth is likely to be below the 7.5% achieved in 2010, developing countries will continue to 'stoke the engine of the world economy, growing on average by 5.6% in 2012 and 5.9% in 2013 in the baseline outlook' (UN, 2011a, p. 2). These developments are leading to noticeable shifts in the world order and intensification of competition between nations for a greater share of mobile investment capital and talent, raising the profile of knowledge-intense industries, including higher education.

The rise of new economic powers has been driven by a rapid structural transformation of their societies and economies, led by shifts from natural resource-based primary production to more sophisticated, skill- and technology-intensive activities. This is mirrored by significant demographic change. While the world population is ageing and the fertility rate slowing, it is still projected to reach 9.3 billion by 2050, an increase of 2.3 billion over 2011, equivalent to the combined populations of China and India. Most of this growth will be in developing countries (UN, 2011, p. 1). These patterns are responsible for a surging demand for higher education; according to UNESCO, there are almost 160 million students enrolled worldwide in higher education today compared with only 30 million in 1970 (UNESCO, 2009, p. 9). The overall global demand for places in higher education will peak at 263 million in 2025; India's demand will rise from 9.6 million to 61 million while China's will rise from 8 million to 45 million (Böhm *et al.*, 2002). To meet this escalating demand, one sizeable new university will need to open every week over the next decades (Daniel, 1996).

Investment in higher education and research and development (R&D) is now widely recognised as vital for providing the knowledge base essential for economic growth, and now recovery. Societies best able to invest heavily, especially in the bio-sciences and technology, are poised to make the greatest gains in the future; many of these entrants are emerging societies. OECD data on R&D expenditures show China and South Africa spending more as a percentage of the gross domestic

product (GDP) over the last 10 years. China was the world's second largest R&D spender in 2009 and South Korea's trajectory starting ten years ago is also very impressive. They are now spending more than any other country on R&D as a percentage of GDP. The EU is planning to spend over 70 billion EUR through its *Horizon 2020* programme between 2014 and 2020. Nonetheless, it has predicted that Brazil, Russia, India, and China would dominate future R&D growth, overwhelming Europe and Japan and eventually matching US investment. At current levels of trend-expenditure, China will match EU-27 spending on R&D by 2018 and US spending by 2022 (Ritzen, 2010, pp. 37–70). Brazil has a balance sheet four times that of the World Bank and India is also investing heavily (Leahy, 2012, p. 7). This reflects a deliberate national strategy by, *inter alia*, China, Singapore, Malaysia, South Korea and the Gulf countries to become important educational and research hubs in their area of influence (Knight, 2011), challenging the US and Europe (Knobel, 2011, p. 2).

Given the changing dynamics of the world economy, the quality and status of HEIs and university-based research have become vital indicators of competitiveness. This explains why global rankings have assumed such significance at a geo-political level. Academic rankings are often trumpeted as providing better and informed student choice, but the attention now being given to rankings by policymakers and other decision-makers indicates that, in reality, they are much more about geo-political positioning, by nations and HEIs. Around the world, rankings consciousness has risen sharply, in response to globalisation and the worldwide 'battle for excellence'. This is apparent in the way the comparative and competitive strength of nations and institutions — the knowledge world order — is projected. Developed nations and established universities in the US and Europe continue to be the primary 'winners' in the rankings race with relatively little movement among the top 25, but the pervasiveness of focusing on the top institutions obscures the changing geography of academic activity (see Table I; Hazelkorn, 2013a). Latin America, Africa and the Middle East have only a few universities amongst the top 500; Sub-Saharan African gains have been made only by historically white institutions from South Africa; and within the Middle East, only Israel regularly succeeds. However, Asian societies, most notably China, are beginning to make an appearance due to a combination of government investment strategies and changes in ranking methodology (Sharma, 2010; Lau, 2012; Li *et al.*, 2011). When measured against population size, smaller countries, notably Hong Kong and Singapore, are doing particularly well (QS, 2013b). These trends have sharpened in recent years, although this does depend on which ranking is being used.

Despite the chorus of criticism about what rankings measure, they have succeeded in putting higher education within a wider comparative and international framework. This has challenged self-perceptions of greatness at the national, institutional and individual faculty level. Quality and excellence are now the key differentiators in the national and global markets; accordingly, there is a wide acceptance, reluctantly perhaps, that measuring and comparing academic performance and productivity are sine-qua-non underpinning quality. Winning and maintaining support for higher education, especially for institutions dependent upon the public exchequer, are key components of this process. This has all helped to push higher education, including investment levels and discussion about its contribution and impact on/for the economy, up the political and policy agenda in both developing and developed societies. As a consequence, rankings are spoken

TABLE I. Number of Institutions in Global Top 100: World Regions in Selected Rankings, 2004-2013

RANKING	YEAR	NORTH AMERICA	EUROPE (W/RUSSIA)	AUSTRALIA & NEW Z.	ASIA (W/INDIA)	LATIN AMERICA	AFRICA	MIDDLE EAST
QS/THE-QS	2013	34	42	7	17	0	0	0
	2011	35	40	7	18	0	0	0
	2008	42	35	8	13	0	0	1
	2004	38	36	12	13	0	0	1
THE	2013	50	35	5	11	0	0	0
	2011	57	30	4	9	0	0	0
	2010	57	28	5	10	0	0	0
ARWU	2013	56	33	5	3	0	0	3
	2011	57	33	4	5	0	0	1
	2008	58	34	3	4	0	0	1
	2004	55	37	2	5	0	0	1
WEBOMETRICS	2013	73	14	3	8	2	0	0
	2011	73	16	2	7	2	0	0
	2009	71	21	1	5	2	0	0
SCIImago	2013	45	27	5	20	2	0	1
	2011	46	25	4	24	1	0	0
	2009	47	25	4	24	2	0	0

Key: *THE-QS* = Times Higher QS World Rankings; *QS* = Quacquarelli Symonds World University Rankings; *ARWU* = Academic Ranking of World Universities; *THE* = Times Higher Education World University Rankings.

Note: *THE-QS* (pre-2011) is combined with *QS* for 2011 and 2012 as the methodology is broadly similar. *THE* was established in 2010. *THE-QS* for 2008 only sums to 99 due to tying institutions; *THE* sums to 101 for 2013 as there were two HEIs tied for 100th place.

about in overtly geo-political language. Billal (n.d. 2), for example, argues that ‘the size and strength of higher education systems are determined by possession of world class universities which are considered [a] more powerful asset for a nation than possession of weapon[s] of mass destruction’. Similarly, the Russian Minister for Education said rankings were an ‘instrument of competitive battle and influence’ (Kishkovsky, 2012; also Silverstein & Singhi, 2012; Anon, 2012; ABS-CBN News, 2012; Marszal, 2012). Rankings chronicle changes in the world polity — symbolised by the G8 being overshadowed by the G20 and China coming to the aid of the EU financial crisis (Alderman & Barboza, 2011; Wade, 2011) — in which different world regions vying for prominence in a complex, multi-polar world have replaced the previous binary Cold War.

Measuring What’s Meaningful

When ARWU first appeared in 2003, the higher education world was caught unawares. *US News and World Report (USNWR)* had been producing college rankings since 1983, but it was a US phenomenon for a society in which higher education was a commodity and students were relatively mobile. Even for students who remained within their own city or state, the variety of institutional choices encouraged a consumerist approach to decision-making. But, ARWU foreshadowed an entirely new set of circumstances, where international or cross-jurisdictional comparisons would become the norm. Today, global rankings have become the simple (and simplistic) tool of choice for a wide range of stakeholders on the presumption that they provide a good measure of quality. They have become big business for the media organisations and a business opportunity for others.

The history of rankings can be divided into three main periods:

Phase 1: The origin of rankings dates back to the US and the publication of Cattell’s *American Men of Science* (1910). Focusing on ‘distinguished persons’, it set the trend until the 1950s, using indicators such as faculty expertise, graduate success in later life, and academic resources. This approach effectively excluded most public universities as they were newer with a different mission than the older private universities (Webster, 1986, pp. 14, 107–19).

Phase 2: National rankings became popular after 1960. Drawing heavily on the Science and Social Sciences Citation Indexes, they focused initially on graduate institutions. This changed with the publication of USNWR in 1983, whose success over subsequent years has paralleled the transformation to near-universal higher education. Today, there is a growing number of national rankings.

Phase 3: *ARWU* marked the era of global rankings, and the realisation that in a global knowledge economy, national pre-eminence is no longer enough. Despite being developed to highlight the position of Chinese universities vis-a-vis competitor universities and being entirely focused on research, it has effectively become the ‘gold standard’. It was followed by Webometrics, and *THE-QS* in 2004; the latter partnership split in 2009 giving birth to two new rankings: *QS World University Rankings* (2010) and *THE World University Ranking*, the latter partnering with Thomson Reuters (2010), thereby representing a significant entry into the market by the producer of one of the major bibliometric databases. The EU commissioned U-Multirank as a companion instrument to its U-Map classification system; a feasibility study was published in 2011 and the next phase is due in 2014. Today, there are over 10 global rankings of varying scope and influence, plus a growing number of system-level, regional, specialist and professional rankings. Of these,

ARWU, *THE World University Rankings*, and *QS World University Rankings* are the ‘big three’.

Most academic, political and stakeholder commentary and criticism have focused on how rankings measure education/academic quality by comparing ‘whole institutions’, using a limited set of weighted attributes for which (internationally) comparable data are available. Quantification of performance gives the ‘appearance of scientific objectivity’ (Ehrenberg, 2001, p. 1), but ignores the complexity of HEIs and their different contexts and the fact that some institutions may score higher in some domains than others. It also assumes that the indicators are a meaningful measure of quality. Reputational surveys are prone to being subjective, self-referential and self-perpetuating. Bibliometric data are less reliable for the arts, humanities and social science disciplines, and there is no focus on the impact or benefit of research. Similarly, research income benefits capital-intensive bio-sciences and medicine disciplines and says little about the impact of research on teaching. No attention is given to regional or civic engagement, a major policy/mission objective for many governments and HEIs.

Over the years, new rankings have emerged and others have responded to critics by modifying their assertions (cf. Baty in Sharma, 2013) and methodologies; the latter has provoked disapproval, with critics saying it creates volatility making year-on-year comparability difficult and rankers saying it affirms they are listening to criticism. There have been changes at the level of analysis, leading to a growing number and range of specialist rankings in response to censure as much as to each other. There are rankings pitched at discipline/field of study level as well as different categories of institutions (e.g. *THE 100 Under 50*), world region (e.g. Asia, Latin America) or specialisation (e.g. *THE Reputation Ranking*, *QS Best Student Cities*). Another format is the *QS Stars* rating system; unlike rankings, universities pay to be assessed against a range of criteria and be awarded between 1–5 stars (Guttenplan, 2012). Thompson Reuters created the *Global Institutional Profiles* project and ARWU has its *Global Research University Profiles* project; both will produce a rich vein of institutional data. New ventures have also emerged, such as Smartphone apps, and a plethora of informational conferences, master classes and consultancies. *THE* sponsored a video competition encouraging participants to say why ‘my university is world class because. . .’ as part of the official launch of the 2012–13 and 2013–2014 rankings; winners receive an iPad and the chance for their film to be broadcast on their website and viewed by over 30,000 in year one (*THE 2012, 2013*). IREG (2011) has emerged as the ‘regulator’ for the industry. In business parlance, these initiatives are tantamount to new product development or revitalising products in response to new market opportunities or consumer demand and feedback.

Throughout, ARWU has remained consistently focused on research, with few changes to its methodology because, as its promoters recognise:

It would be impossible to rank the quality of university education worldwide because of the huge differences of universities in the large variety of countries and the technical difficulties in obtaining internationally comparable data (Liu & Cheng, 2005).

In contrast, *THE* and *QS* have revised their methodology several times — before and after their divorce and subsequently (Rauhvargers, 2011, 2013); nonetheless there are some clear trends. *THE* relies heavily on research, equivalent to 65% if

research, citations, innovation and its new indicator of international publications are combined; both *THE* and *QS* emphasise reputation or peer review. The former has two separate reputational surveys: per academic for research (18%) and for teaching (15%) equating to 33%, albeit it was 19.5% and 15%, respectively, in 2010; *QS* assigns 50% of marks to institutional reputation based on surveys amongst academics (40%) and employers (10%). Whereas the old *THE/QS* ranking measured graduate employability, *QS* asks a select list of employers to identify universities that produce the best graduates; *THE* asks similar questions of academics with respect to teaching (see Table II).

TABLE II. Indicators and Weightings of Selected Rankings (2013)

Ranking	Indicators and Weightings, percentage				
	Indicator	Total	Research	Teaching	Reputation
Academic Ranking of World Universities (ARWU) (2003–)	•Quality of education	10	100	0	0
	Quality of faculty	20			
	•No. Nobel Prize/Field Medal	20			
	•No. HiCi researchers	20			
	Research output	20			
	•No. articles in Nature/Science	10			
	•No. articles in Citation Index				
Times Higher Education/QS World University Rankings (THE QS) (2003–2009)	•Peer appraisal	40	60	20	10
	•Graduate employability	10			
	•Teaching quality/Staff-student ratio	20			
		5			
	•International students	5			
	•International faculty	20			
	•Research quality/Citations per faculty				
QS World University Rankings (2010–)	•Academic Peer Review	40	20	20	50
	•Employer Review	10			
	•International Faculty Ratio	5			
	•International Student Ratio	5			
	•Student/Faculty Ratio	20			
	•Citations per Faculty	20			
Times Higher Education World University Ranking (THE) (2010–)	•Teaching	30	65	30	33
	•Research	30			
	•Citations	30			
	•Economic/Innovation	2.5			
	•International Diversity	7.5			

Traditionally, higher education has relied on peer review and internalised procedures of quality assurance. The difficulty with these processes, from an outsider's perspective, is that it can be difficult to decipher the information and compare performance, especially internationally (Hazelkorn, 2012, p. 353; Tremblay *et al.*, 2012, p. 35). They also tend to be technocratic, in that they are process-driven. In contrast, rankings have succeeded because of their simplicity, but this is also their Achilles' heel; the indicators chosen are often those for which data are available rather than being a meaningful measure. For example, they use faculty/student ratio as a proxy for teaching quality even though this can have different meanings and

implications for different disciplines and types of learning environments, and for public and private institutions and systems. Ultimately, this ratio may say more about available funding or the efficiency level rather than the quality of teaching and learning. Measuring employability or career readiness is also problematic; first-destination data capture only the first six to nine months post-graduation and are unable to distinguish between employment in 'graduate-level jobs or under-employed' (Dill & Soo, 2005, p. 509). It is also doubtful if such information provides an accurate reflection of quality during an economic recession such as the one being experienced now.

Many of the indicators simply expose the growing wealth-gap between well-endowed selective universities and public, mass recruiting HEIs without having anything noteworthy to say about the quality of teaching-and-learning, the student experience, or research. Rather, the overemphasis on particular indicators has narrowed our understanding of the intellectual footprint of higher education across teaching, research and engagement. Yet, despite all their limitations (Hazelkorn, 2011; Rauhvargers, 2011; Marope *et al.*, 2013), rankings have succeeded in exposing a higher education information deficit; collective anger has provoked a valuable conversation about what is 'quality' and how the value and impact of higher education are measured. Would this debate have happened anyway?

Alternatives have also emerged, part of a growing trend for 'transparency and accountability' instruments (see Box 1) (Hazelkorn, 2012; Harman, 2011). The

Box 1: Typology of Transparency Instruments (alphabetical)

- Accreditation: certifies legitimacy of a HEI or (professional) programme including the authority to award qualifications;
- Benchmarking: systematic comparison of practice and performance with peer institutions;
- Classification Systems: provides a typology or framework of HEIs to denote diversity usually according to mission and type;
- College Guides/Open Database/Social networking: fulfils public service role, putting information directly into hands of students, employers, peers and the general public;
- QA, Evaluation and Assessment: assesses institutional quality processes, or quality of research and/or teaching & learning;
- Qualifications Frameworks: provides an integrated approach to learning, forming a single hierarchy of different qualifications, usually from primary to doctoral level;
- Rankings and Ratings: assesses performance according to particular indicators and characteristics which set a 'norm' of achievement.

EU commissioned U-Multirank following worries about the position of European universities (EU Presidency, 2008). In contrast to existing rankings, U-Multirank is based on principles of: i) user-driven, ii) multi-dimensional, iii) peer-group comparable, and iv) multi-level (Van Vught & Ziegele, 2011, 2012). While it has yet to capture much interest outside Europe, policymakers see it as a valuable profiling tool (Hazelkorn, 2013b). Whatever its likelihood of overtaking the 'Big Three', its influence is evident in the way *THE* facilitates personalisation of rankings. OECD launched AHELO (Assessment of Higher Education Learning Outcomes), also as

a riposte to rankings. Its objective is to provide a better way to assess teaching and learning outcomes, although it has run into conceptual and methodological complications and rising costs (Tremblay *et al.*, 2012).

There are also specialist rankings which challenge the prevailing ethos. The *Washington Monthly (US) College Guide* says: 'While other guides ask what colleges can do for students, we ask what colleges are doing for the country' (Editors WM, 2005). *Saviors of Our Cities: Survey of Best College and University Civic Partnerships* (Dobelle, 2009) takes a similar approach, highlighting the relationship between HEIs and larger metropolitan areas. It was followed by the 2012 *Metroversity Ranking* (Dobelle, 2012). System-level rankings, e.g. *Lisbon Council's University Systems Ranking: Citizens and Society in the Age of the Knowledge* (Ederer *et al.*, 2008), *QS National System Strength Rankings* (QS, 2010), and the newest *Universitas 21 Rankings of National Higher Education Systems* (Williams *et al.*, 2012) all seek to measure the quality, impact and benefit of the system-as-a-whole rather than as a beauty-competition between institutions. They use a broad set of indicators, such as investment, access and participation rates, contribution of higher education and research to society, internationalisation, and government policy/regulation. They raise important policy questions but so far remain peripheral.

The multiplicity of different rankings and new formats may, over time, diminish the predominance of the 'Big Three'. However, there is little evidence to-date (Dill & Beerkens, 2010, p. 318). Eventually, open source publishing and search engines are likely to eat away at the proprietary hold that both Thomson Reuters and Scopus currently have on bibliometric data. Web tools (e.g. Google Scholar, Webometrics), Internet forums (e.g. Facebook, Rate-my-professor), and open source and digital repositories are also gaining in popularity. Australian, UK and Catalan governments, to name three, have captured the essence of these tools by creating their own public databases with detailed information about institutional performance (MyUniversity; Unistats; Winddat). And, it is not too far-fetched to imagine a higher education 'Trip Advisor' in the future. Ultimately, the real success of any format is not simply the statistical data but the added-value generated through expert data-mining and *meaningful* analysis — the latter being the most challenging.

Policy and Institutional Changes

While rankings have been promoted on the basis of enhancing student choice, today they signify national reputation and status in the global marketplace, as illustrated by QS' provocative ad: 'who rules' (2013a). This has encouraged a continuing fascination with the performance of the top 100 universities which, in turn, has led to a simplistic trumpeting of world-class universities as the recipe for success in the global economy. This has had a 'norming' effect on all higher education. It is not uncommon for political leaders to specify national ambitions in terms of the number of 'world-class' universities they have or want. Thus, France, Germany, Russia, Spain, China, South Korea, Taiwan, Malaysia, Finland, India, Japan, Singapore, Vietnam and Latvia, to name a few countries, have developed policies which encourage mergers between HEIs or between HEIs and research institutes, in order to create a smaller number of universities to rival the 'Ivy League' and climb in the rankings. In a European context, this has meant a move away from a traditional egalitarian approach to one which purposefully emphasises vertical or hierarchical (reputational) differentiation and leads to growing

stratification between elite selective research-intensive universities and mass recruiting teaching-intensive HEIs.

Rankings are used by governments and HEIs to strategically inform and guide policy and decision-making, explicitly identify and define national or institutional ambitions and strategies or as a benchmarking or quality assurance (QA) tool. They drive performance improvement at a national level and are used for resource allocation (Hazelkorn, 2011, p. 163). Some governments have linked rankings with accreditation or quality assessment processes, using the results to decide whether a particular HEI should be formally recognised or how it should be classified (e.g. teaching, teaching/research, research). For example, Serbia, Albania, Romania, Jordan, Macedonia and the Czech Republic use rankings to classify and/or accredit universities; Russia, Brazil, Chile, Singapore, Saudi Arabia, Kazakhstan, Mongolia and Qatar restrict state scholarships to students admitted to high-ranked universities in other countries; India, Russia and Singapore use rankings as eligibility criteria for academic collaborations (Altbach, 2012a, 2012b); Dutch (2008) and Danish (2011) immigration laws privilege foreigners who graduate from top universities (150, and 20 respectively); and the Macedonian Law on HE (2008) automatically recognises the qualifications of graduates from the top 500 HEIs. The Indian government has begun discussions with *THE* in order to improve their nation's standing (Nanda, 2013; Chopra, 2013) while Albania and Macedonia have invited *CHE* and *ARWU*, respectively, to rank their HEIs (CHE, 2011; Macedonia Online, 2011). Similar effects are evident in the US, where different states use USNWR to benchmark salaries (Florida and Arizona) or as performance indicators (Minnesota, Indiana and Texas).

Yet, by appearing to address the question, 'How can our university/nation perform better?' (Marginson, 2009, p. 591), rankings have emphasised the importance of (investing in) higher education. This has been so everywhere, but especially in those regions and countries which hitherto may not have done so.

For middle-income and developing countries . . . a major challenge for building and sustaining successful research universities is determining the mechanisms that allow those universities to participate effectively in the global knowledge network on an equal basis with the top academic institutions in the world. (Altbach & Salmi, 2011, p. 1).

Over the decade, the Organisation of Islamic Countries, African Union, Association of Southeast Asian Nations (ASEAN) and Middle East and North Africa (MENA) states have developed strategies linking social and economic development with the performance and productivity of their respective higher education and research systems. The EU has adopted a similar approach, creating the European Higher Education Area and the European Research Area to bring coherence to otherwise disparate national systems, in a way which can make European higher education attractive and internationally competitive (Hazelkorn & Ryan, 2013; Hazelkorn, 2013a).

HEIs and individual academics are not innocent victims in this process. Evidence from around the world shows how rankings continue to influence the business of higher education. While some HEIs strive to improve their standing, others simply wish to be included, as being ranked is equivalent to being visible to potential students, HE partners, policymakers, the media, etc. This explains why HEIs advertise on the web-pages of the various rankings. Thus, it is not

uncommon for rankings to inform and shape institutional strategy and priorities, including international partnerships (Hazelkorn, 2011, chapt. 4), and for benchmarking (Proulx, 2011) (see Table III). Institutional strategic plans often make specific reference to rankings, stating that being within the top 20, 50, or 100 is a key ambition. HEIs have invested considerable resources in institutional research, recruiting full-time managers to work with ranking agencies and develop appropriate strategies (Trounson, 2013), and soliciting participants for referee surveys (Jaschik, 2013). In other cases, HEIs use rankings to motivate faculty or drive change, speed-up reform or pursue a particular agenda. Because rankings reward low student/faculty ratios and research productivity, especially in the bio-sciences and medicine, institutions have changed student selection criteria and revised class sizes, set departmental targets, and merged departments. Some have prioritised or altered the balance between teaching and research, between undergraduate and postgraduate activity, and between disciplines; others have redirected resources towards knowledge fields and units more likely to succeed vis-à-vis rankings criteria. In the US, where rankings have had a longer gestation, the media is full of stories of how different universities have skewed their data on student entry tests or faculty numbers or altered their recruitment/selection procedures to improve their position in the rankings, but there is also similar evidence from other countries (Hazelkorn, 2011).

TABLE III. Indicative Actions Taken by Higher Education Institutions

Strategy	Form task group to review and report on rankings Merge HEIs/cognate departments Establish Centres-of-Excellence & Graduate Schools Establish Institutional Research capability Set individual targets for faculty and departments
Organisation	Develop/expand English-language facilities, international student facilities Professionalise Admissions, Marketing and Public Relations Advertise in <i>Nature</i> and <i>Science</i> and other high focus journals Expand internationalisation alliances and membership of global networks
Management	Realign resources to favour science/bio-science disciplines Positively affect student/staff ratio (SSR) Set market-based or performance/merit based salaries Create new contract/tenure arrangements Recruit/head-hunt international high-achieving/HiCi scholars Target recruitment of high-achieving students, esp. PhD Reward high-achievers and identify weak performers
Academic	Enable best researchers to concentrate on research/relieve them of teaching Offer attractive merit scholarships and other benefits Discontinue programmes/activities which negatively affect performance Grow postgraduate activity relative to undergraduate Urgent faculty to increase research output, quality and citations Reward faculty for publications in highly-cited journals Encourage faculty to publish in English-language journals

Source: Hazelkorn, 2011.

Rankings have also underpinned or accelerated changes to academic work practices, supporting the introduction of market-based salaries with merit or performance pay and attractive packages to reward and woo high-achieving scholars. Recruitment strategies, informed by rankings data, have targeted faculty from high-ranked universities or 'capacity-building professors' on the basis that they can help improve an institution's rank. In turn, faculty are giving more consideration

to the type of research they undertake and where it is published, with the emphasis on international high-impact journals rather than other formats, such as books, book chapters, policy reports, etc. Other evidence suggests faculty prioritise partnerships with high-ranked universities, with those HEIs reporting heightened interest in them by visiting delegations and, conversely, HEIs in developing countries saying they feel shut out.

Nowhere to Hide

Rankings started out by being about student choice but, today, they are about global and institutional positioning. What began as a small endeavour has become a profitable industry, replete with perceptions of conflict of interest and self-interest. They cast a huge influence on higher education, in direct and indirect ways, with positive and perverse affects, amid continuing concern that they are (unintentionally) skewing policies and decisions as governments and institutions manoeuvre in choppy global waters. Many people use the expression ‘rankings are here to stay’; however, it may be more appropriate to say that cross-national comparisons are ‘here to stay’, of which rankings are the current phenomenon.

Rankings have charmed audiences worldwide by their crude simplicity. By focusing on a limited set of attributes for which (internationally) comparable data are available, they have narrowly defined ‘excellence’ and ‘worldclassness’ with implications for nations and individual institutions, and promulgated a small set of indicators as being a meaningful, albeit unproven, measure of quality. Indeed, the difficulties encountered by both U-Multirank and AHELO highlight the complexity associated with assessing quality. Context remains fundamentally important: national and global, public or private, student cohort and learning environment can radically affect the performance of institutions and render simple comparisons meaningless. Fundamentally, rankings benefit resource-intensive institutions.

On the other hand, rankings have acted as a wake-up call for higher education, challenging self-perceptions of greatness, by nations, by institutions and by individual academics. In a global marketplace, international comparisons are inevitable, leaving no room for self-declaration. At a time of growing demand for/on higher education and rising costs, there is an emphasis on outcomes and evidence that performance measures up. By placing consideration of quality, performance and productivity within a wider comparative and global framework, rankings have taken the debate outside the traditional bailiwick of higher education and placed it firmly in the public and policy agenda. With the involvement of the EU via U-Multirank and OECD via AHELO, quality assurance has moved to the supra-national level, confirming that higher education has effectively lost its role as the primary guardian of quality (Harman, 2011, p. 51; Dill & Beerkens, 2010, pp. 313–315). Even the US, traditionally comfortable with regional accreditation processes built upon strong institutional autonomy, has moved to introduce a rating system linking performance with affordability (Anderson & Rucker, 2013). The genie won’t go back into the box.

These developments and reactions have accelerated what the EU calls the ‘modernisation agenda’, leading to a reshaping of institutions and systems (Ferlie *et al.*, 2008). And, by pushing nations and HEIs to realise the strategic importance of higher education within a wider policy context, rankings have underwritten investment and spurred ambition, arguably creating a resource-intensive ‘arms

race' although there is little wrong with being ambitious. This has increased the sense of urgency surrounding the international debate about 'quality' as part of the call for greater transparency and public disclosure of student and institutional performance. Research has relied on a combination of peer review and international bibliometric indicators, but nowadays there is a deeper understanding of the breadth of/differences between disciplinary practice, and the convergence between fundamental and applied research and commercialization/knowledge transfer. At the same time, governments are asking very direct questions about the impact and relevance of publicly-funded research. This has forced higher education to engage in the conversation and identify meaningful measures which can demonstrate value and contribution rather than sit on the sidelines.

Alternative methodologies and new transparency formats have emerged, and there is growing interest in benchmarking and/or profiling tools to compare and improve/enhance performance and demonstrate distinctiveness; some governments, such as Ireland and Norway, have begun to use these tools as part of their system, (re)structuring and resourcing strategies (Salmi, 2010; van Vught *et al.*, 2010; O'Connor, 2013; Skodvin, 2012). In the absence of credible and efficient substitutes, the emphasis and debate have focused on identifying better indicators and metrics of performance and productivity. The ground is shifting, again, between autonomy and accountability and between steering and regulation. Over time, rankings may be overtaken by social networking and online and open-source tools. These formats will put information directly into the hands of students, employers, peers and the general public, by-passing rankings, but also higher education. This is the new educational battleground.

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NOTE

1. The word university is used interchangeably with higher education institution (HEI) for the purposes of this article.

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