How global comparisons matter: the 'truths' of international rankings

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Introduction

International ranking lists of universities and higher education organizations are proliferating. This development consists of three main elements: (i) the number of rankings has multiplied; (ii) the scope of the rankings has increased to cover a larger number of universities in different parts of the world; and (iii) the rankings are attracting increasing global attention inside, as well as outside, the higher education field. There is widespread understanding that these rankings are influential, affecting everything from local university strategy-making, identity formation and reputation management, to national and even transnational policy-making on higher education and research matters. This has made rankings an important element in the development of a global governing field of universities. But what is it that makes rankings influential in this field?

The present chapter will elaborate on the role and impact of international rankings in the global higher education field. The aim is to increase our understanding of how rankings gain attention and legitimacy, and to analyse the implications of this development for the field of universities. To do this, I will attempt to shift focus in the ranking debate: from mainly centring on what the rankings measure, and how, and the methodological, and other, shortcomings of ranking systems, towards an emphasis on understanding the role and meanings attached to rankings as well as the dynamics of their development [1].

A ranking paradox

There is no lack of research on the development and implications of ranking systems, quite the contrary. A great number of studies have shown how rankings to an increasing extent are being used for governance purposes internally in universities: to promote and propel change and reform, as well as to show account-ability and transparency towards different stakeholders [2]. Hazelkorn [3] has shown how nearly 60% of university managers claim that rankings have positively influenced the development of their institutions, and equally, many admit that

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their universities have developed systems and procedures to analyse and make use of the ranking information. Similarly, Locke et al. [4] have shown through case studies of six British universities how rankings influence strategic decisions and governance procedures internally: by influencing the formulation of 'key performance indicators', shaping practices and procedures to collect, analyse and report data for the rankings, and, in some cases, by becoming strategic goals and targets in themselves.

Studies of rankings systems of business schools and law schools, two fields where rankings systems have been used for a long time and have been particularly influential, point to further influences of rankings on relations between organizations, and the development of entire fields. Studies have, for instance, pointed to the role of rankings in shaping organizational identities and identification processes among schools [5], where rankings form the basis for comparisons and positioning with others [6], and their role in creating and maintaining reputation and status within an international higher education market [7,8]. As a fundamental element, rankings constitute a commensuration process [9], whereby qualities of different entities become translated into quantitative common measures. This way, information is reduced and simplified, making complex relationships, conditions and qualities easy to present and compare. This shapes perceptions of quality, performance and worth, as well as beliefs about positions, value and relative standing among organizations [10].

However, a major part of the literature analysing academic rankings has focused on the rankings as measurement practices and has been "orientated towards correcting the flaws identified in rankings systems" [1]. The basis for much of this literature has been an assumed connection between rankings and quality: that rankings are created to measure, assess and compare quality of higher education institutions and offerings. Following this assumption, a wide range of criticisms of the rankings has been formed. Among these criticisms are the problem of quantifying inherently qualitative judgments; difficulties in measuring process and results in education; and the lack of contextual factors and account of cultural aspects of education. Researchers have also criticized the use of reputation as a proxy for quality in rankings, showing, for instance, the 'anchoring effects' of reputation, meaning that the rankings themselves guide subsequent assessments of reputation [11]. Significant critique has also been directed towards the validity of rankings: the choice and use of indicators and criteria and the weightings assigned to them [12,13]. Taken together, these studies, and a host of other writings on rankings, have provided a significant and robust critique of claims of measurement and quality inherent in global university ranking systems.

There is an apparent paradox in the development described above. This is owing to the fact that despite widespread discontentment and significant knowledge about the shortcomings of rankings, they are proliferating and becoming widely used by universities as well as by other actors in the higher education landscape. Universities and others shape actions and strategies deriving from them. Thus, as noted by Martins [14], the rankings are proliferating and being used regardless of their legitimacy. This paradox, I believe, requires an explanation and forms the baseline for my argument in what follows.

The 'truths' of rankings

The essence of my argument is that ranking systems build on and help to construct truths about reality. Such truths, however, need not be directly 'in accordance with fact or reality', meaning that the rankings produce one true and correct picture of the higher education field and its constitutive parts. Rather, we can consider truth to be 'a fact or belief that is accepted as true', thus following an alternative definition of 'truth' provided by the Oxford English Dictionary. With this concept of truth in mind, I consider the rankings as mechanisms that produce statements, opinions, images and beliefs that become accepted as true, concerning elements of the field such as the status of universities, their relative standing and their inherent qualities. Such truths, in turn, influence how we understand reality, regardless of whether these in fact correspond to any essential or 'real' quality or performance of higher education organizations or programmes. Both research and our experience tell us that any such relationship between ranking and quality and/ or performance is questionable [15,16].

The following sections will give three examples of the kinds of truths that the rankings produce. First, rankings build on and help to construct an understanding of the field of higher education as a global field. Secondly, rankings create a measurement for success, helping to shape and spread the idea of the 'excellent' university. Thirdly, the rankings help to construct measures and means of comparison, building the notion of competition among universities. In all of these cases, it should be noted that the rankings are neither the sole mechanism constructing and/or diffusing these images and truths, nor are they single-handedly responsible for the effects that these may have on the higher education field.

A global higher education field

One of the most marked features of the current ranking trend in higher education is its global character. Although ranking systems for higher education have been prominent in many countries and contexts for decades, for instance in the U.S.A. and the U.K., the past decade has witnessed a marked proliferation of international rankings and comparisons. The two best known of these are the ARWU (Academic Ranking of World Universities) produced by the Shanghai Ranking Consultancy in China and the World University Ranking produced by the British magazine *Times Higher Education*. These have been produced annually since 2003 and 2004 respectively. Since then, initiatives to rank and make competitive league tables and comparisons of universities worldwide have flourished.

Although not the first rankings of universities to appear, the ARWU and *Times Higher Education* rankings have had a significant impact on the field. The rankings have attracted increasing interest within and among universities around the world, and universities in varied contexts became interested in comparisons and assessments of themselves and others. At conferences, meetings and in networks, the issue of rankings is currently a prominent feature of university debates. Focused conferences on rankings have been organized yearly, for instance in Shanghai in

2007 and Leiden in 2009, and an IREG (International Ranking Expert Group) has been formed to lead the global discussion and development of rankings. The ranking debate has also spurred actors such as governments and international organizations to pay increasing attention to rankings [17]. A particular example is the European Union's effort to develop a new, comprehensive and multi-dimensional ranking of world universities (U-Multirank) [18].

These international rankings make a strong claim that higher education is global, and they carry the implicit assumption that universities (and in some cases other forms of higher education organizations) are comparable across countries, continents and institutional settings. The Shanghai rankings (ARWU) claim, for instance, to cover 500 universities from 43 countries in their ranking, and the ranking produced by QS (Quacquarelli Symonds) claims to cover 874 universities from 47 different countries. EduRoute makes an even more comprehensive claim in their 'G-factor' ranking, where 10 000 universities in 172 countries are included. Although only the top 500 feature in the comparison on the web page, breakdowns into regional or country rankings can include larger sets of schools.

A slightly troubling aspect of this claim of globalism is that the 'global' character of this market is quite strongly skewed towards the North American, and to some extent the European, perspective on universities. In several of the leading international rankings, North American, mainly U.S., universities occupy the majority of the top 100 positions. In the ARWU 2013 ranking, 56 of the top 100 universities were North American, and only three non-U.S. schools managed to break into the top 20 (Cambridge, 5th; Oxford, 10th; and the Swiss Institute of Technology, 20th). In contrast, 33 European universities and 11 Asian/Australian ones occupy the remaining positions. A similar picture is given by the *Times Higher Education* World University Ranking, where 52 of the top 100 universities are North American, 32 are European and 16 are Asian/Australian.

With more than half of the top positions in these rankings being occupied by universities from only two countries (U.S.A. and Canada), they provide a very particular image of the global higher education field. To be fair, the rankings from QS and EduRoute have a slightly more diverse composition with only approximately one-third of the top universities originating in North America, adding nuance to the dominant image. But the overall impression, I believe, is unmistakeable: aggregating the scores from several of the leading international rankings, the North America dominance is apparent. No fewer than 91 of the top 300 universities worldwide (featuring in eight or more international rankings) are from the U.S.A. alone.

The image of a global higher education field has led universities and higher education organizations to pay increasing attention to aspects of internationality, and they have come to see themselves as international players on a global university field. In my studies of international rankings in the field of business schools, I found how previously local or regional business schools began to claim that they were international, comparable with and in competition with leading American and other business schools across the world [6]. In particular, European business schools used the rankings as rhetorical devices to argue for their position and status in an international market for business education; using the rankings

to argue for 'top' positions, 'world-leading' status, or, for lower-ranked schools, 'inclusion' in the global business school field [19]. In the business school rankings, as well as in several of the international university rankings (for instance *Times Higher Education* World University Rankings), various measures of internationality have become central aspects of what constitutes an international or global higher education organization.

Given the claims of global scope and reach of international rankings and the heightened awareness and orientation to an international market among higher education organizations, the image of a global market constructed by the rankings is both pervasive and powerful. The rankings build on as well as help to produce an image of a global field, in which universities and higher education organizations increasingly organize themselves to act as global players, despite the fact this this globalism appears to be rather limited in scope.

Measuring the excellent university

A dominant rhetoric in higher education is the notion of 'excellence'. To create excellence, and to aspire for excellence in research as well as in education and training, has been an explicit ambition both in policy and in practice for more than a decade [20]. Continuing to hold a prominent position in this debate, the notion of excellence was the key concept in a conference on higher education and research arranged during the Danish European Union presidency in the spring of 2012. The purpose of the conference was to discuss "how Europe can in the future finance and provide optimal conditions for excellent research", and to provide input to negotiations of the new framework programme for research, Horizon 2020 [21].

As one of the outcomes, the conference settled agreement on a set of guidelines for future policy work on higher education and research within the European Union and its members, collated in the 'Aarhus Declaration'. This declaration states that excellence in research "remains essential to *the future of Europe*", and "is the *essential foundation* that secures the development and availability of *human capital* to meet the needs of the future" [22]. Clearly a political target, ideas of excellence stretch well beyond the confines of the higher education field.

As a key organizational and political goal, the notion of excellence has served as a rationale for much reform in higher education and research systems across Europe, and perhaps the rest of the world, over the past decades. Among the clearest examples, we find Germany where the 'Excellence initiative', first carried out in 2006/2007, served to reform the university and higher education landscape. By injecting and distributing a significant amount of federal money to a few select institutions, a number of 'elite' universities were acknowledged and given resources to develop excellent research [23]. Continuing this path towards excellence, subsequent initiatives have identified and funded 'excellence clusters', giving significant resources to research units within these environments. Similar efforts to distinguish elite universities and promote excellence in research can be noted in several other European countries as well.

Table 1
Comparison of toppers in four rankings [24–27]

Rank	Times Higher Education (2013)	ARWU (2013)	QS (2013)	EduRoute (2011)
1	California Institute of Technology	Harvard University	Massachusetts Institute of Technology	Massachusetts Institute of Technology
2	Harvard University	Stanford University	Harvard University	University of California, Berkeley
3	[=2] University of Oxford	University of California, Berkeley	University of Cambridge	Penn State University
4	Stanford University	Massachusetts Institute of Technology	University College London	University of Michigan
5	Massachusetts Institute of Technology	University of Cambridge	Imperial College London	Harvard University
6	Princeton University	California Institute of Technology	University of Oxford	National Autonomous University of Mexico
7	University of Cambridge	Princeton University	Stanford University	University of Wisconsin, Madison
8	University of California, Berkeley	Columbia University, NY	Yale University	Stanford University
9	University of Chicago	University of Chicago	University of Chicago	University of Pennsylvania
10	Imperial College London	University of Oxford	California Institute of Technology	University of Oxford
11	Yale University	Yale University	[=10] Princeton University	University of La Rioja
12	University of California, Los Angeles	University of California, Los Angeles	ETH Zürich/Swiss Federal Institute of Technology	Cornell University
13	Columbia University, NY	Cornell University	University of Pennsylvania	University of Washington
14	ETH Zürich/Swiss Federal Institute of Technology	University of California, San Diego	Columbia University, NY	University of Vienna
15	Johns Hopkins University	University of Pennsylvania	Cornell University	The University of Tokyo
16	University of Pennsylvania	University of Washington	Johns Hopkins University	Michigan State University
17	Duke University	The Johns Hopkins University	University of Edinburgh	Yale University
18	University of Michigan	University of California, San Francisco	[=17] University of Toronto	University of Santiago de Compostela
19	Cornell University	University of Wisconsin, Madison	Ecole Polytechnique Fédérale de Lausanne	Institute of Technology Bandung, Indonesia
20	University of Toronto	ETH Zürich/Swiss Federal Institute of Technology	[=19] King's College London	Columbia University, NY

As Readings [20] has noted, the term 'excellence' is an essentially empty concept, meaning it has no natural referent and no particular ideological content. The notion of excellence reaches beyond the related notion of quality, as it is inherently relational: everybody can have good quality, but only a few select ones can be excellent. On the other hand, the term excellence stops short of winning, since it is not exclusive and the terms of the rivalry are not necessarily clearly set.

This emptiness makes the concept of excellence useful as a political tool, but requires practices and procedures that can fill it with content. And efforts to do so are not lacking. The newly established ERC (European Research Council), for instance, has gone to great efforts to define the concept of 'scientific excellence', and establish criteria and evaluation practices to assess and determine research excellence in Europe, and to distribute funding accordingly. One of their aims is to "put excellence at the heart of European Research" [28], thus both promoting it as a political goal and defining the terms of its uses.

Serving a similar role, at least partly, the rankings have become one of the referents of excellence, both for universities and for policymakers. International rankings and their results are being used by university boards and managers in making strategic discussions and serve as input in formulating goals and defining key performance indicators, as noted above. Rankings and ranking results have also been used in national policy-making and priority-setting [29], as well as in debates within the European Union, in processes to defend, construct or revise a 'geo-political pecking order' of higher education systems around the world [30]. Table 1 compares the top 20 universities in four rankings [24–27].

As referents for excellence, rankings formulate and help to institutionalize measures for, and practices to assess, success. Even if there is great diversity across rankings as to what they measure and how, they propagate a somewhat coherent "global definition of academic quality" [31]. The core features of this definition include a focus on input measures, such as students, faculty and financial resources, and reputation as important criteria for success.

This has largely come to centre on measures of reputation as a proxy for quality, focusing on student surveys and judgments of quality, as well as on employer surveys and attempts to assess the 'employability' of graduates. In studies of the influence of rankings in management education, I and others have noted how this has resulted, among other things, in an increasing focus on marketing and PR, student services and career guidance in business schools across Europe [32]. Some rankings in this field explicitly aim to create measures to assess the financial value, also termed value-for-money, of academic education, leading to what could well be described as a shift from 'learning to earning' [33].

A particularly salient feature of this global definition of quality is also an emphasis on research and research production, particularly in the form of publications and citations. This trend is supported by the general proliferation of systems and practices for bibliometric analysis, which are spreading rapidly as quality measures in internal university evaluations, in national funding and quality-assurance systems, as well as in international rankings. These analyses build on and codify practices for evaluation and assessing research.

The widespread use of bibliometric analysis for public evaluations has led to the establishment and diffusion of simplified and often commercialized 'gold

standards' for counting and valuing academic work. These include, for instance, 'A-journal' lists, 'FT-40 lists', 'journal impact factor' scores, and 'ISI Highly Cited' or 'Google scholar' counts. The FT-40 list, for instance, is the list of 40 journals that the *Financial Times* uses to measure research output in their annual MBA and business school rankings. This list is used in several European business schools as an explicit reference point for faculty publication assessment and strategies. Such simplified practices for bibliometric analysis have become a quick and relatively cheap way to create apparently 'objective' measures of academic success that may, in turn, influence publication strategies and research practices of individual as well as groups of researchers, including entire departments and universities.

Competition as the key to success

The field of higher education is undergoing a process of marketization whereby organizations increasingly adhere to and act on market logic and rhetoric [34]. In this field, the adherence to market ideals and principles is witnessed in the increasing production and use of quality measures and performance assessments, and a subsequent interest in measurements and assessments of value, particularly perhaps financial value, as noted above. This is further enhanced by the diffusion of a market and marketing rhetoric [35], an increasingly consumerist perspective on education [36], and a growing concern with producing relevant, useful and applicable knowledge to diverse audiences [37].

In this marketized higher education field, competition has become recognized as a key for success. Although managing competition, for students, faculty and resources, is a key strategic concern for university managers and leaders, creating competition and stimulating competition among universities, research groups and researchers are central activities for policymakers and regulatory agencies. As an example of the latter, the European research policy debate has been explicitly focused on the logic of the market and the ideas of competition. With the expressed aim to create Europe-wide competition among researchers and research groups and to promote 'excellence' in research, the launch of the ERC is a particularly clear example of this. In this sense, the notion of competition serves as a key to create both excellence and 'global success' in the market for higher education and research.

The logic of rankings follows this market ideology and rationale nicely, and clearly supports the idea of competition. A central argument in the promotion of rankings is the idea that there is a market out there to 'serve': a market where students are the customers and education is the product, and where other higher education providers are competitors. In this market, rankings serve as consumer-information tools, providing the market actors necessary information to make informed choices of where to study, where to invest resources, or where to go to work. And the notion of competition is, of course, central to any hierarchical ranking system: if one player moves up in a ranking list, another one must, by necessity, move down.

But rankings not only follow from ideas of the market. The development of international rankings has also helped to shape notions of competition, and created a basis for competition in the international field. How? First and foremost by creating

comparability: the rankings have made it both possible and desirable to compare universities, programmes and courses across country and regional boundaries. By creating standardized measures of performance, applying them to a diverse set of universities and higher education organizations, and by reducing this information to a hierarchical ordering of universities, comparisons are both encouraged and facilitated. This has also led universities and, in my case, business schools, to form strategies and deploy resources to compete and to position themselves vis-à-vis other organizations. Much like what was noted above, this forms new comparisons globally, and thereby shapes organizational change and development.

The characteristics of the rankings, particularly their criteria for assessment, further suggest that the competition created and spurred by rankings is centred on issues of reputation. The hierarchical ordering of schools on the ranking list can be used to create, enhance or validate organizational reputation, and it shapes how external audiences value and assess the university and its offerings. Rankings also influence the positional status of universities, such that it becomes important to be equal to or better than those in your own perceived status group. Acting on these status and reputation cues provided by rankings, universities seem to become increasingly occupied with media, PR and marketing activities, as well as on issues of profiling and branding [38]. This may lead to what Gioia and Corley [39] describe as a "Circean transformation from substance to image".

Conclusion

Rankings have become associated with the powerful and pervasive images of a global and competitive higher education market. They gain influence in part because they help to explicate and codify dimensions of this market and the ensuing competition. But where, we may ask, will this ranking game take us, and is there an alternative?

The good news is that the image of the global field of higher education may be changing, albeit slowly. In the 10 years that international rankings have developed, the image of the field has become more diverse, in two respects. First, the number of universities featured in rankings has increased, and particularly the number of universities from areas outside North America and Europe has increased. This is partly a result of an increasing number of rankings being produced and circulated, and that several rankings also have expanded in scope to include more schools into their ranking systems. However, the position of these universities also seems to be increasing slightly over time. Secondly, as a result of the increasing number of rankings systems in circulation, all with their respective criteria, methodology and measurement tactics, the criteria with which universities are compared and assessed in public rankings is more diverse today than a decade ago. This allows, among other things, for selective attention to rankings and their assessments [40].

The bad news, on the other hand, is that change is both rather slow and rather limited in scope. It is still only changes in the margin in terms of altered positions, and there is still close to no inclusion of universities from, for instance, Africa or South America. There are also somewhat worrying standardizing

tendencies in the rankings field, where efforts to set criteria and standards for ranking practices risk limiting the diversity of higher education evaluations through these systems. The recent effort of the IREG, for instance, represents an effort to set standards for ranking practices through an 'audit system' [41]. This seems not only to be a problematic endeavour, but also one that risks legitimizing existing ranking practices and limiting the scope for potential ranking alternatives.

Taken together, the proliferation and increasing influence of a 'rankings game' in global higher education is problematic on several accounts. Most significantly, they shape our own, as well as our audience's, expectations and assumptions about higher education and the universities. As a note of warning, we should be careful not to play along in this ranking game too far, or we may find ourselves in a situation where rankings alone define and determine our success. Instead, it is our responsibility to contemplate, construct and promote other, potentially more useful, models and methods to assess and evaluate quality, contribution and success in this field.

References

1. O'Connell, C. (2013) Research discourses surrounding global university rankings: exploring the relationships with policy and practice recommendations. *Higher Education* **65**, 709–723
2. Kehm, B. and Stensaker, B. (2009) *University Rankings, Diversity, and the New Landscape of Higher Education.* Sense Publishers, Rotterdam
3. Hazelkorn, E. (2007) The impact of league tables and ranking systems on higher education decision making. *Higher Education Management and Policy* **19**, 87–110
4. Locke, W., Verbik, L., Richardson, J. and King, R. (2008) *Counting What is Measured or Measuring What Counts? League Tables and Their Impact on Higher Education Institutions in England.* Higher Education Founding Council for England, Bristol
5. Elsbach, K. and Kramer, R.D. (1996) Members' responses to organizational identity threats: encountering and countering the business week rankings. *Administrative Science Quarterly* **41**, 442–476
6. Wedlin, L. (2007) The role of rankings in codifying a business school template: classifications, diffusion and mediated isomorphism in organizational fields. *European Management Review* **4**, 24–39
7. Sauder, M. (2006) Third parties and status position: how the characteristics of status systems matter. *Theory and Society* **35**, 299–321
8. Sauder, M. (2008) Interlopers and field change: the entry of the US News into the field of legal education. *Administrative Science Quarterly* **53**, 209–234
9. Espeland, W. and Stevens, M. (1998) Commensuration as a social process. *Annual Review of Sociology* **24**, 313–343
10. Wedlin, L. (2006) *Ranking Business Schools.* Edward Elgar, Cheltenham
11. Bowman, N. and Bastedo, M. (2011) Anchoring effects in world university rankings: exploring biases in reputation scores. *Higher Education* **61**, 431–444
12. Bowden, R. (2000) Fantasy higher education: university and college league tables. *Quality in Higher Education* **6**, 41–60
13. Usher, A. and Savino, M. (2007) A global survey of university league tables. *Higher Education in Europe* **32**, 5–15
14. Martins, L. (2005) A model of the effects of reputational rankings on organizational change. *Organization Science* **16**, 701–720
15. Devinney, T., Dowling, G.R. and Perm-Ajchariyawong, N. (2008) The *Financial Times* business school ranking: what quality is this signal of quality? *European Management Review* **5**, 195–208
16. Morgeson, F.P. and Nahrgang, J.D. (2008) Same as it ever was: recognizing stability in the Business Week rankings. *Academy of Management Learning and Education* **7**, 26–41
17. King, R. (2009) *Governing Universities Globally. Organisations, Regulation And Rankings.* Edward Elgar, Cheltenham

18. Van Vught, F. and Westerheijden, D. (2010) Multidimensional ranking: a new transparency tool for higher education and research. *Higher Education Management and Policy* **22**, 1–26
19. Wedlin, L. (2011) Going global: rankings as rhetorical devices to construct an international field of management education. *Management Learning* **42**, 199–218
20. Readings, B. (1996) *The University in Ruins.* Harvard University Press, Cambridge, MA
21. Horizon 2020. http://www.excellence2012.dk/horizon2020/ (Accessed 9 October 2013)
22. Aarhus declaration. http://www.excellence2012.dk/the-aarhus-declaration/ (Accessed 9 October 2013)
23. Weingart, P. and Maasen, S. (2007) Elite through rankings: the emergence of the enterprising university. In *The Changing Governance of the Sciences* (Whitley, R. and Gläser, J., eds), pp. 75–99, Springer, Dordrecht
24. The Times Higher Education World University Rankings 2013–2014. http://www.timeshigher education.co.uk/world-university-rankings/2013-14/world-ranking (Accessed 28 October 2013)
25. Academic Ranking of World Universities 2013. http://www.shanghairanking.com/ARWU2013.html
26. QS World University Rankings 2013. http://www.topuniversities.com/university-rankings/world-university-rankings/2013#sorting=rank+region=+country=+faculty=+stars=false+search=
27. EduRoute Top 500 universities in the world 2011. http://www.eduroute.info/Edu-world-university-rankings-top500.aspx
28. European Research Council. http://erc.europa.eu/mission (Accessed 28 October 2013)
29. Siganos, A. (2008) Rankings, governance, and attractiveness of higher education: the new French context. *Higher Education in Europe* **33**, 311–316
30. Kivinen, O. and Hedman, J. (2008) World-wide university rankings: a Scandinavian approach. *Scientometrics* **74**, 391–408
31. Dill, D. and Soo, M. (2005) Academic quality, league tables, and public policy: a cross-national analysis of university rankings. *Higher Education* **49**, 495–533
32. Wedlin, L. (2006) *Ranking Business Schools.* Edward Elgar, Cheltenham
33. Wedlin, L. (2004) Competing for employability. The media ranking of graduate business education. In *Learning to be Employable. New Agendas on Work, Responsibility and Learning in a Globalising World.* (Garsten, C. and Jacobsson, K., eds.), pp. 252–273, Palgrave, Basingstoke
34. Engwall, L. and Weaire, D. (2008) *The University in the Market.* Portland Press, London
35. Kirp, D. (2003) *Shakespeare, Einstein and the Bottom Line. The Marketing of Higher Education.* Harvard University Press, Cambridge, MA
36. Modell, S. (2005) Students as consumers? An institutional field-level analysis of the construction of performance measurement practices. *Accounting, Auditing and Accountability Journal* **18**, 537–563
37. Frank, D. and Meyer, J.W. (2007) University expansion and the knowledge society. *Theory and Society* **36**, 287–311
38. Drori, G.S., Delmestri, G. and Oberg, A. (2013) Branding the university: relational strategy of identity construction in a competitive field. In *Trust in Higher Education Institutions* (Engwall, L. and Scott, P., eds), pp. 134–147, Portland Press, London
39. Gioia, D. and Corley, K. (2002) Being good versus looking good: business school rankings and the Circean transformation of substance to image. *Academy of Management Learning and Education* **1**, 107–120
40. Sauder, M. and Espeland, W. (2006) Strength in numbers? A comparison of law and business school rankings. *Indiana Law Journal* **81**, 205–227
41. Hägg, I. and Wedlin, L. (2013) Standards for quality? A critical appraisal of the Berlin Principles for international rankings of universities. *Quality in Higher Education* **19**, 326–342