2009-01-01

Rankings and the Battle for World-Class Excellence: Institutional Strategies and Policy Choices

Ellen Hazelkorn
Dublin Institute of Technology, ellen.hazelkorn@dit.ie

ISSN 1682-3451
Higher Education Management and Policy
Volume 21, No. 1

Rankings and the Battle for World-Class Excellence: Institutional Strategies and Policy Choices

by
Ellen Hazelkorn
Dublin Institute of Technology, Ireland

Global rankings are creating a furore wherever or whenever they are published or mentioned. They have become a barometer of global competition measuring the knowledge-producing and talent-catching capacity of higher education institutions. These developments are injecting a new competitive dynamic into higher education, nationally and globally, and encouraging a debate about its role and purpose. As such, politicians regularly refer to them as a measure of their nation's economic strength and aspirations, universities use them to help set or define targets mapping their performance against the various metrics, while academics use rankings to bolster their own professional reputation and status.

Based on an international survey (2006) and extensive interviews in Germany, Australia and Japan (2008), this paper provides a comparative analysis of the impact and influence of rankings on higher education and stakeholders, and describes institutional experiences and responses. It then explores how rankings are influencing national policy and shaping institutional decision making and behaviour. Some changes form part of the broader modernisation agenda, improving performance and public accountability, while others are viewed as perverse. Their experiences illustrate that policy does matter.

ISSN 1682-3451
Higher Education Management and Policy
Volume 21, No. 1

Les classements et la course à l'excellence de niveau international : stratégies institutionnelles et choix politiques

par
Ellen Hazelkorn
Institut de technologie de Dublin, Irlande

Les classements mondiaux suscitent l'enthousiasme chaque fois qu'ils sont publiés ou mentionnés. Ils sont devenus le baromètre de la concurrence mondiale, mesurant la capacité des institutions d'enseignement supérieur en termes de production, de savoir et de captation des talents. Ces développements injectent une nouvelle dynamique de compétition dans l'enseignement supérieur, au niveau national et mondial, et suscitent un débat sur son rôle et ses objectifs. À ce titre, les hommes/femmes politiques y font régulièrement référence en tant qu'instrument de mesure de la puissance économique et des aspirations de leur nation, les universités s'en servent pour établir ou définir leurs objectifs en termes de performance par rapport à diverses métriques, tandis que les universitaires utilisent les classements pour appuyer leurs propres réputation et statut professionnels.

Cet article se fonde sur une enquête internationale (2006) et des entretiens approfondis menés en Allemagne, en Australie et au Japon (2008) pour réaliser une analyse comparative de l'impact et de l'influence des classements sur l'enseignement supérieur et ses parties prenantes et pour décrire les expériences et réponses institutionnelles. Cet article étudie également la manière dont les classements influencent la politique nationale et façonnent la prise de décision et les comportements institutionnels. Certains changements s'inscrivent dans le cadre plus large du programme de modernisation qui tend vers une amélioration des performances et une plus grande responsabilité publique, tandis que d'autres sont considérés comme pervers. Leurs expériences démontrent l'importance des choix politiques.

Globalisation, rankings and public policy

The evolution from agricultural to industrial to knowledge production has transformed every aspect of society, worldwide. Across the OECD, there is strong acknowledgement that the "transition to more knowledge-based economies, coupled with growing competition from non-OECD countries" requires heightened capacity and capability to create, disseminate and exploit "scientific and technological knowledge, as well as other intellectual assets, as a means of enhancing growth and productivity" (OECD, 2004, p. 11). Because knowledge has become the foundation of economic, social and political power, higher education is at the top of the policy agenda. Yet, many countries face difficulties associated with sharp demographic shifts evidenced by the greying of the population and a concomitant decline in students, especially PhD graduates. The "scramble for students" (Matsumoto and Ono, 2008, p. 1) or "battle for brainpower" now complements traditional geo-political struggles for natural resources (Wooldrige, 2006, p. 2). Global competition is reflected in the rising significance and popularity of rankings which attempt to measure the knowledge-producing and talent-catching capacity of higher education institutions (HEIs).

While the immediate popularity of rankings has been credited with satisfying a "public demand for transparency and information that institutions and government have not been able to meet on their own" (Usher and Savino, 2006, p. 38), these explanations do not fully explain the almost instantaneous and universal endorsement and obsession with the Shanghai Jiao Tong *Academic Ranking of World Universities* (henceforth SJT, 2003) or the Times QS *World University Ranking* (THE – QS, 2004). Within months of publication, a major European Union meeting was told Europe was "behind not just the US but other economies" (Dempsey, 2004). This assessment was based on the first SJT ranking which showed only 10 European universities among the top 50 compared with 35 for the United States. In subsequent years, it has been followed by numerous government and institutional pronouncements and pledges, and occasional hand-wringing and exhortations.

The arrival of the SJT and the Times QS was remarkably well-timed and auspicious, albeit arguably, global rankings were a product whose time had come. As a manifestation or artifact of globalisation, rankings appear to order global knowledge and give a "plausible" (Marginson and Van der Wende (2007, p. 55) explanation for or framework through which the global economy and

national (and supra-national) positioning can be understood. As such, politicians and ministry officials, across the OECD and beyond, follow rankings closely. While reticent to acknowledge the full extent to which rankings provide the justification and/or evidence for policy and decision making, they are anxious to strengthen and/or protect the global status of their universities. To lose status can be humiliating for nations and institutions alike (EdMal, 2005; Alexander and Noonan, 2007).

Globalisation has changed the relationship between higher education and the state, but it is also transforming the relationship between institutions, and between institutions and society. In place of the old bargain wherein HEIs were "largely free to do as they choose, funded but not impeded by a grateful state", their activities are now tied directly to national economic success (Robertson, 1997, p 78). By highlighting reputational differentiation, rankings have affected all HEIs – even institutions which had previously been sheltered by history, mission or governance. High-ranked and not-ranked, international-facing and regionally-focused, all institutions have been drawn into the global knowledge market, challenging underpinning assumptions about (mass) higher education. Rankings are helping transform all HEIs into strategic corporations, engaged in positional competition, balanced fragilely between their current and preferred rank. By appearing to strengthen or grant visibility to some institutions, rankings have also exposed perceived weaknesses at the system and institutional level. To succeed, or even just survive, requires significant changes in the way HEIs conduct their affairs. Despite criticism of the methodological validity of particular indicators or the weightings attributed to them, rankings have become a policy instrument and management tool.

This paper provides a comparative analysis of institutional responses and strategic choices drawing upon a 2006 international survey and interviews with higher education (HE) leaders, faculty, students and stakeholders in Germany, Australia and Japan during 2008.[1] The three countries share some common characteristics and experiences:

i) a national ranking system;

ii) competitive challenges to the historic and presumptive global position of each country;

iii) government policy to reform/restructure higher education in response to escalating competition;

iv) internationalisation as an important goal.

Their experiences enable a broader understanding of the impact and influence of rankings, beyond that of individual institutional behaviour. The paper is organised as follows:

- Part 1 identifies salient characteristics of the impact and influence of rankings on higher education.
- Part 2 provides a broad overview of the policy context within the target countries.
- Part 3 describes some institutional and policy choices.

The conclusion provides a short summary and reflects on the implications.

Impact and influence of rankings[2]

Initially college guides fulfilled a public service role aimed at informing undergraduate students and their parents. They were usually produced by media organisations or independent agencies, which rated and occasionally ranked HEIs using a combination of qualitative and quantitative information. Over time they developed an advocacy or public accountancy role, re-interpreting government and other public data or developing bespoke surveys on, *inter alia*, research productivity and teaching/learning into a ranking, with or without weightings. By effectively naming and shaming, rankings introduced a competitive dynamic into the national system which was seen to positively influence institutional behaviour and thereby improve quality. Global rankings were the next logical step, but they shifted attention to a single dimension: research. Today, rankings consciousness is on the rise around the world accelerated by "excellence" initiatives, shifting national demographic profiles, student and professional mobility, public belief that rankings are equated with quality and value for money, and media coverage of the results.

Given this scenario, it is not surprising that 58% of respondents to the 2006 survey were so disappointed with their current rank that 93% and 82% want to improve their national or international position, respectively. And, notwithstanding methodological concerns or the mathematical impossibility of it, 70% desire to be in top 10% nationally and 71% in the top 25% internationally (Hazelkorn, 2007). HE leaders believe "rankings are here to stay" and they have little alternative but to take them "into account because others do".

Across OECD countries, the impact of rankings on higher education shares a number of well-documented characteristics (Hazelkorn, 2007, 2008; Locke *et al*., 2008).

Student choice

As the marketisation of higher education has transformed students into savvy consumers, rank has become a source of information, and an attribute of self-pride and peer esteem. Each category of student uses rankings differently.

- *Domestic undergraduates* usually attend a local or easily accessible university. They are informed by a combination of local intelligence, local rankings (*e.g.* Ashahi Shimbun University Ranking [Japan], CHE-HochschulRanking [Germany], the Good University Guide or the Melbourne Institute *International Standing of Universities* [Australia]), or entry scores [Japan] perceiving the difficulty of entry as an indicator of quality. High-achievers are increasingly more mobile, with the proportion of "out-of-zone" students varying according to institution. Ranking consciousness rises while at university.
- *International undergraduates* constitute a relatively small percentage of the student cohort, except for Australia where approximately one in five is a foreign student. Their decision is based on local intelligence and family connections, although residency requirements may also be a factor.
- *Domestic postgraduates* use rankings to inform choice. While making complex choices based upon field of specialisation and expertise of faculty, they are keenly attuned to the perceived after-sale value of their qualification. High-achieving postgraduates are mobile within their country and increasingly to another.
- *International postgraduates* are the major consumer of global rankings, using them to shortlist a choice of institutions, sometimes within an identified country: "[They] Might know about Australia, but not where in Australia to go". Like their domestic colleagues, international students are conscious that rank can transmit social and cultural capital which resonates with family, friends and potential employers. This can be critical for students seeking employment in their home country, as this Asian experience testifies: "… I have a colleague who graduated from Columbia University and she's holding a very high position… They did not tell me frankly but I could read their minds that if I am lucky enough to graduate at this university I could not be as highly appreciated as the one who graduated from Columbia University."

In summary, students use rankings to select or verify their choice rather than determine their choice, although this is dependent upon ability and socio-cultural aspirations. Those seeking professional employment, in medicine and law, or an academic career, are more aware of status than students in other/newer disciplines, *e.g.* media/journalism or liberal arts. Students are particularly sensitive to media coverage and publicity: "we've got one university which has suffered a very steep drop in enrolments internationally and it's because of bad publicity …".

In turn, demographic changes and accelerating competition have compelled HEIs and governments to use rankings to target particular types of students. New sophisticated marketing/recruitment strategies are being developed to woo high-achieving students with attractive financial and scholarship packages. In turn, HEIs use rankings to short-list postgraduate applicants, while governments are tying study-abroad scholarships to high-ranked HEIs.

Strategic thinking and planning

Rankings are an item on the agenda of most senior executive meetings, and the majority of HEIs undertake some form of analysis usually led by the Vice Chancellor/President but occasionally by the governing body. Sixty-three per cent of respondents said they had taken strategic, organisational, managerial or academic action, while only 8% said they had taken no action (Hazelkorn, 2007). This represents a remarkable change from the 20% of US university presidents who claimed they ignored rankings in 2002 (Levin, 2002).

The majority of institutions use rankings to set a target or benchmark, "selectively choosing indicators for management purposes". The metrics are carefully analysed and mapped against actual performance to identify strengths and weaknesses, aid resource allocation, and often designate key performance indicators for individual department/units. Rankings provide the evidence or rationale for making significant change, speeding up reform or pursuing a particular agenda. It "allows management to be more business-like", for evidence-based decision making and offers "a rod for management's back".

For many HEIs, rankings have taken on a quality assurance (QA) function, especially in countries where QA mechanisms are relatively new or weak. This may reflect a lack of public trust in institutional-based assessment. HEIs are paying more attention to student satisfaction, the quality of the teaching/learning environment and facilities, etc. Although different processes, there is a close correlation between professional accreditation and rankings. The former provides a similar international value-mark; institutions without appropriate accreditation in those fields for which professional recognition matters may find themselves increasingly isolated.

Re-organisation/re-structuring of HEIs

Rankings are influencing the shape of HE organisations, *e.g.* merging discipline compatible departments or whole institutions, incorporating external organisations within the domain institution or, on the contrary, separating undergraduate and postgraduate activity via creation of semi-autonomous research institutes/Centres of Excellence or graduate schools. The latter is a universal theme. The objective is not just greater efficiencies

but better visibility through critical mass: more active researchers working in teams, winning more competitive funds and producing more verifiable outputs, with national/international partners, in a timely fashion. In countries where English is not the native language, the emphasis is on creating the above as English-language units.

HEIs are professionalising admissions, marketing and publicity activities into year-round offices with rapidly expanding budgets and staff. A fully-resourced institutional planning and research office is *de rigueur*. Almost 50% of international respondents and 35% of US presidents use their rank for publicity purposes (Hazelkorn, 2007; Levin, 2002), highlighting positive results on their webpage, in speeches or when lobbying government.

HE priorities

There is growing evidence that rankings are influencing priorities, including curriculum: a growth in (English-language) specialist/professional Masters programmes to attract international students, harmonising programmes with US or European models, such as Bologna, or discontinuing programmes. The biggest changes are apparent in rebalancing teaching/research and undergraduate/postgraduate activity, and re-focusing resource allocation towards those fields which are likely to be more productive and better performers. Regardless of what kind of HEI, the message is clear: "research matters more now, not more than teaching necessarily but it matters more right now at this point in time".

The arts, humanities and social sciences feel especially vulnerable. Professional disciplines, *e.g.* engineering, business and education, which do not have a strong tradition of peer-reviewed publications, are also under pressure. There is little doubt that HEIs are considering the costs associated with remaining in fields/disciplines which are deemed less vital to their profile or perform poorly on comparative indicators. Their choice is boosting the performance of strong areas and perhaps redistributing funds to weaker areas later, bringing weaker areas up to the level of the strong or closing them down. There is evidence of the (relative) strengthening of bio-science areas, accomplished by using the president's special fund to assign additional faculty to particular units or building new dedicated labs and other facilities, or indirectly by rewarding those departments which are especially productive or secure exemplary funding.

Academic profession

Academics are coming under intense pressure to alter the way in which they have traditionally performed. Rankings are used to identify the best and under-performers: "I think the university needs to calm down. We've had two

career panic days; it's what I call them where they're like Communist training sessions where everyone has to stand up and say what they are doing to improve their career."

Institutional autonomy has enabled the introduction of market-based salaries, merit/performance pay and attractive packages to be used to reward and woo high-achieving scholars. Recruitment emphasis is on mid-career scholars, amid fear this may impact negatively on post-docs, younger scholars and women.

At the same time, faculty are not innocent victims. They are quick to use rankings to boost their own professional standing and, as one person stated, are "unlikely to consider research partnerships with a lower ranked university unless the person or team was exceptional".

Stakeholders

While rankings were initially developed to inform undergraduate students and their parents, ranking consciousness now extends to a wide range of external stakeholders. Most governments are cautious about acknowledging the extent rankings inform policy thinking, but the various excellence initiatives are a good example (Salmi, 2007). Alumni, philanthropists and industrial partners refer to rankings as an indication of the value of their relationship or potential return on investment. Small and medium-sized enterprises and local employers have implicit rankings based on their own experiences which are self-perpetuating although larger/international businesses and professional organisations are more "systematic".

Policy environment and institutional positioning

HEIs are often perceived as responding irrationally to rankings, but do they? This section comprises brief vignettes – drawing on the experience of Germany, Australia and Japan – to contextualise institutional responses.

Germany

"What are the universities people talk about internationally – Oxford, Cambridge, Harvard, Stanford – but no German universities … We look back decades and people came to German universities; today they go to US universities."

The *Exzellenzinitiative* (2005), coupled with demographic shifts and increased institutional autonomy, marks a significant shift from traditional emphasis on egalitarianism – "having good universities across Germany" – towards competition and hierarchical stratification. Global rankings, rather than the CHE-HochschulRanking which has existed since 1998, are identified as the prime driver. In the absence of German universities among the top 20 or

50 in the SJT and only one in the Times QS ranking (Chambers, 2007), it aims to promote top-level science and research via graduate schools and Excellence Clusters. In so doing, the objective is to create a German "Ivy League" and reclaim Germany's historic leadership position in research.

Not only did the *Exzellenzinitiative* provoke a huge response from the universities and jockeying for position for "relatively small amounts of money" (EUR 1.9 billion over five years), but the results have been perceived and used both within Germany and in the other countries as a ranking. One HEI's lack of success in the first round of the *Exzellenzinitiative* was interpreted as "Are you not excellent anymore?". It boosted international visibility – giving "a little more glamour to Germany" –, and increased interest from international students and faculty who found it "not as easy as … before to get a visa to the US", and from employers and industrial partners.

Despite criticism that global rankings do not adequately measure Germany's strong presence in engineering/technological fields, HEIs are developing strategies and readying their institutions for the more competitive environment. This means using rankings to define targets and promote a distinctive profile. Ambitious HEIs have already adopted a more professional approach to management, strategic planning and decision making, using attractive salary and benefits packages to head-hunt international scholars. Institutional position is critical to this strategy.

The emphasis on elite institutions is straining traditional fault-lines (*e.g.* between the more distinguished HEIs of the South/South West and those of the North/East) and creating new alliances (between universities and research institutes, and between universities). Rankings are also altering the relationship between universities and *Fachhochschulen*. "[I]t depends not so much on the type of [HEI] … but more on the specific profile and in that sense universities … [have] very much relied on their status as a university. They are … afraid of the new competition with some *Fachhochschulen*."

There is some reluctance to admit the scale of likely changes but no institution, department or discipline is immune.

Given EU policies (*e.g.* Bologna) and Germany's geographic position, regional, cross-border and global "networks of excellence" have increasing importance for benchmarking, research, programme development and student/academic exchanges. Higher education's relationship to the *Länder* (which are essentially competing with each other) and the federal government is already taking a different form. Thus far, rankings are viewed positively – globally ranked HEIs are a matter of national pride. There are few voices arguing to return to traditional egalitarian values.

Australia

"… the government is very keen for Australia's export image to be seen to have these high class universities and then … say to the world look we have high class universities in Australia, come and study here. You don't only have to go to the US or the UK … [it is a question] of the export image."

Australian HEIs have operated in a competitive environment, nationally and globally, for years. The replacement of the binary with a unitary system in 1989 coupled with fiscal incentives and other liberal policies introduced a strong competitive element, and compelled HEIs to earn an increasing proportion of their income from tuition fees, performance and international students. The latter has made Australia the major student-importing country internationally comprising 19.3% of the student population (2005) exceeding the OECD average of 6.7%, although it lags behind in the vital postgraduate/PhD student market (OECD, 2007). In some universities/faculties, international students comprise over 50% of total students. Education is the third largest export sector in Australia (IDP, 2008). This situation is both a cause for celebration and anxiety; it is unlikely the government or alternative income sources can replace the AUD 2 375.4 million earned in international fees in 2006.

The SJT and Times QS consistently feature at least two Australian universities among the top 100. This is greeted positively by those who welcome enhanced visibility for "brand Australia" and critically by those who say Australia lacks "truly stellar research universities" (Marginson, 2008). These responses reflect the opposing strategic options now being considered: to abandon the egalitarian policies and preferentially fund a small number of top-tier competitive universities or to ensure the "creation of a diverse set of high performing, globally-focused institutions, each with its own clear, distinctive mission".

Despite statements to the contrary, rankings are informing and influencing institutional strategies. They are regularly discussed at senior team meetings, and most HEIs are engaged in microscopic mapping or benchmarking exercises. HE leaders and planners "play against a basket [of rankings] and link it to your mission"; some have a (privately held) preferred ranking-designation.

> … the fact that you can link an international student driver and a domestic research driver and a government agenda and a philanthropist all through the one mechanism is quite a powerful tool in the arsenal of management and so I actually think it's been good for the sector in being able to drive change and create a vehicle or a discussion point that then gives management more impetus …

Rankings feature in public and official announcements, on webpages and blogs, in brochures, and in any other publicity/marketing material: we "use whatever accolades [we] have and ignore everything else".

Because international students are most likely to use global rankings, globalisation is injecting a new competitive dynamic into the system and debate about the role and purpose of mass higher education. It has reawakened arguments about the 1989 Dawkins reforms: how can Australia meet the investment needs required to compete at the highest level internationally while funding all universities at the same level? Are there too many universities with similar missions? And if teaching is differentiated from research, what happens to regionally-focused research? The recent government change, from liberal to social-democratic, is likely to affect the nuances around this debate, as one leader wryly acknowledged: it could be "a disadvantage to be ranked too highly" because government may look to spend funding elsewhere.

Japan

"The government wants a first class university for international prestige … Rankings are becoming important to present Japan attractively and getting good students and good workers as the population declines. That's the government's motivation."

Japan, like many OECD countries, is facing a demographic transformation – declining numbers of prospective HE students and increasing numbers of older people – and a financial crunch at a time when global competition is demanding greater investment. Previously protected by geography, Japan's universities are facing considerable pressure and urgency to reform and modernise. Since 2000, the government has introduced a series of legislative and policy initiatives to increase institutional autonomy, boost management capabilities, enhance evaluation, emphasise quality, and develop internationally-competitive research via centres of excellence and graduate schools (Oba, 2007). The government hopes these factors will transform higher education, replacing traditional public/private distinctions with differentiation based on market-sensitive profiles.

The reforms have coincided with and are a response to global rankings. There is stiff competition from China, Korea, Singapore and Taiwan – all of whom are investing heavily with the objective of establishing world-class universities. Japan has ambitions to designate about 30 top universities (Yonezawa, 2007), albeit some believe the government will do "what's necessary" to protect the status of the Imperial universities of Tokyo and Kyoto from other (Asian) competitors.

Internationalisation has become a university and government priority. The government has announced plans to increase the number of international students from 100 000 to 300 000 by 2020 but this strategy is not without its

challenges. Readying Japanese higher education for an influx of international students means upgrading campuses, and transforming programmes and activities into English – even though over 92% of foreign students come from Asia, of which 60% are Chinese and 15% Korean (JSSO, 2007). Twenty universities will receive additional funding to help establish an international strategy and "strengthen support systems for foreign researchers and students" (MEXT, 2005).

Most universities are focusing on post-graduate activities, usually in science and technology. Institutional flexibility allowed under "incorporation" (introduced 1 April 2004) permits universities to offer distinctive tenure arrangements and salary packages to entice internationally-competitive scholars. At one university, exceptional scholars can earn up to twice their baseline salary based on performance; others are introducing similar initiatives. Knowledge of Japanese is not required because these scholars will teach international or internationally-minded postgraduates.

National rankings, such as the comprehensive *Asahi Shimbun*, are growing in popularity (Yonezawa *et al*., 2002); a new one focused on teaching is being developed by *Yomiuri* newspaper. While undergraduate students still rely on a combination of local intelligence and entrance scores, rankings are commonly used by middle and low achieving students in contrast to the experience in other countries.

HEIs are becoming more strategic, identifying research strengths and niche competencies, reviewing resource allocation, recruiting international scholars, and adapting their curriculum. There are some differences between older Imperial and newer regional universities. The former have some experience operating and recruiting on the world stage while the latter have waited passively for locally-captive students. Most realise this situation is no longer tenable but the faculty profile may not be conducive to radical or immediate changes. Escalating inter-institutional competition for students, faculty, research funding and sponsorship have already led to the demise of a number of small private universities. There is a strong view that "in order for Japanese HEIs to compete globally, the government will close down some regional and private universities and direct money to the major universities" or that some institutions will become teaching only. The "traditional view, that teaching should be informed by research, is changing".

National and institutional strategic choices

The relationship between HEIs, national policy and globalisation is a complex one. Are HEIs hapless victims, buffeted by policy decisions, implemented by an equally helpless state, or does globalisation merely open up a "whole array of new opportunities" (Van Vught *et al*., 2002, pp. 106-107) or is the answer somewhere in-between? According to Kim (*et al*., 2007, p. 85), despite

changes in governance, national governments continue to have a major role in "defining the main objectives of the higher education system, determining the instruments with which to attain those objectives, and the criteria for assessing the performance of those instruments". But the processes and events impacting on and influencing both state and institutional behaviour and actions are increasingly competitive, and transcend national borders. The operating environment is shaped, as well as constrained, by a complex dynamic involving global, national and local agents, which Marginson and Rhoades (2002, p. 282, p. 290) call a "glonacal agency heuristic". Depending upon mission and other factors, HEIs are increasingly transnational or "global actors extending their influence across the world". Porter's diamond of "competitive advantage" adds another dimension; by highlighting the critical role of institutional strategy/choice, HEIs are not just acted upon but are knowledge intensive industries sharing characteristics with similar actors (Porter, 1990). There is a menu of possible institutional or enterprise strategies and policy choices that are obscured by the simpler one-dimensional framework. Every HEI strives to develop a distinctive strategy, but each operates within a national and increasingly global higher education system (Hazelkorn, 2005, pp. 112-115). This section examines the interplay between national and institutional strategic options.

Policy options

"What do we need to achieve by 2013? Two universities ranked in the top 20 worldwide" (Cronin, 2006).

"This is the opportunity for more of our universities to emerge as world-class institutions. More of our universities should aim to be within the top 100 internationally and I would like some of our universities to aspire to the top 10" (Bishop, 2007).

Rankings have become an important measure of international competitiveness and national economic strength. Despite SJT's over-reliance on research indicators or the Times QS's preference for reputation (arguably another indicator of research), governments and policy makers appear more responsive to global rather than national rankings: "It's a reputation race/game, and in this – research is sexy. Reputation, unfortunately, is always based on research, … and research attracts the best talent."

Rankings are used to underpin government exhortations to be more competitive and responsive to the marketplace and customers, define a distinctive mission, be more efficient or productive, and become world-class.

These trends are apparent, in differing degrees, across the OECD – and so are national responses. Japan and Germany have quite complex and substantially larger HE systems than Australia – 726, 333 and 38 HEIs, respectively. While Australia and Germany are predominantly public systems, Japan has a

substantial private HE sector equivalent to 76.2% of all HEIs, some of which are highly-ranked. Australia has a unified national system while Germany retains a binary system. All three countries face regional and competitive pressures arising from the global knowledge economy and huge investment in research and development elsewhere, especially by China, compounded by worldwide economic crisis and demographic changes. For Japan and Germany the demographic crunch is due about 2015, while Australia faces an immediate skills shortage.

These developments have provoked a wide-ranging debate on higher education and its associated costs. Should research and research training (PhD) investment be concentrated "through much more focussed funding of research infrastructure in [one or two] high performing institutions", "support for an unspecified number of high performing research intensive universities" or "support for excellent performance, wherever its institutional setting" (Australian Government, 2008)? Two strategies are discernable based on the countries under review:

- The *neo-liberal model* aims to create greater reputational (vertical) and functional differentiation in order to compete globally. Germany and Japan (plus China, France, Korea, Russia,) prefer a small number of world-class universities (10 and 30, respectively), focusing on research performance via competition for Centres of Excellence and graduate schools. This model has 2 forms: one which jettisons traditional equity values (Germany) and one which upholds traditional status/hierarchical values (Japan).
- The *social-democratic model* aims to build a world-class system comprised of a portfolio of horizontally diverse high performing HEIs with a global focus. Australia (plus Ireland and Norway) seeks to balance excellence with support for "good quality universities" across the country, using institutional compacts to drive clearer mission differentiation. This represents a significant policy redirection following the recent government change (Walters, 2008; cf. Bishop, 2007 and Gillard, 2008).

Some issues transcend policy boundaries. Problems associated with uneven or late-development has provoked fears (in Australia and Germany) of the "Matthew Effect" on the assumption that funding is a zero-sum game – unless more resources can be put into the system. Because of the implications for regionalism, widening access and community engagement, the debate is sharpest within the respective social-democratic parties.

Across the OECD, system change is occurring because and regardless of rankings. Many governments have been content to quietly condone the role that rankings have played in accelerating competition. In Germany (not least because of Bologna) and Japan, traditional differences were already withering away. In Australia (plus the United Kingdom), national assessment processes

have effected system change by differentiating between teaching and research institutions. Another strategy – pursued by the new Australian government (plus Denmark) – is to link rankings with institutional contracts or compacts, in much the same way that QA or accreditation criteria might be used to both define/confirm differentiated missions. In these cases, rankings and assessments have become a quasi-funding instrument.

The battle for world-class excellence has fused national and institutional priorities, and transformed global rankings from a benchmarking tool into a strategic instrument. What matters is how different governments prioritise their objectives of a skilled labour force, equity, regional growth, better citizens, future Einsteins and global competitiveness, and translate them into policy. There are direct implications between societal value systems and policy choices, and how they are interpreted by HEIs.

Institutional options

"This strategic plan … reflects our unswerving commitment … to transform [xxx] University, within the next 10 years, into a world-class institution that will be ranked among the top 30 leading universities in the world."

"To be number two – that would be good – and to be among the first ten universities in Germany is also a goal. We are ten or eleven so it differs between the different rankings so that's a point. So we might reach number five or six …"

Policy focus on world-class excellence means few HEIs can ignore the fuss associated with rankings. While most HE leaders are quick to say they "are not controlled" by rankings, they are used "as a kind of technique to improve performance … it's an ambivalent situation". Others are more direct: "We analyse these different elements (SSR, publishing papers in English, increase international students, improve peer reputation) … we talk to the Dean of each school and we also discuss among the Board members. Then we find a method to improve the ranking. So that's the agenda."

The most logical response is to identify indicators which are easiest to influence. It is arguable the actions below can be directly attributed to rankings as distinct from normal competitive factors, better professional organisation, quality enhancement or the value placed on science and technology research, but there is a strong correlation between them and specific indicators (see below and Table 1).

The simplest and most cost-neutral actions are those that affect brand and institutional data, and choice of publication or language. Most non-native English HEIs encourage faculty to publish in English-language high-impact international journals, and all ensure a common institutional brand is used on publications. The latter is especially critical for HEIs which have recently merged different

Table 1. **Mapping institutions actions against rankings**

	Examples of actions	Approximate weighting
Research	• Increase output, quality and citations • Reward faculty for publications in highly-cited journals • Publish in English-language journals • Set individual targets for faculty and departments	SJT = 40% Times = 20%
Organisation	• Merge with another institution, or bring together discipline complementary departments • Incorporate autonomous institutes into host HEI • Establish Centres of Excellence and graduate schools • Develop/expand English-language facilities, international student facilities, laboratories, dormitories • Establish institutional research capability	SJT = 40% Times = 20%
Curriculum	• Harmonise with EU/US models • Favour science/bio-science disciplines • Discontinue programmes/activities which negatively affect performance • Grow postgraduate activity relative to undergraduate • Positively affect staff-student ratio (SSR) • Improve teaching quality	SJT = 10% Times = 20%
Students	• Target recruitment of high-achieving students, esp. PhD • Offer attractive merit scholarships and other benefits • Propose more international activities and exchange programmes • Open international office	Times = 15%
Faculty	• Recruit/head-hunt international high-achieving/HiCi scholars • Create new contract/tenure arrangements • Set market-based or performance/merit-based salaries • Reward high-achievers • Identify weak performers	SJT = 40% Times = 25%
Public image/marketing	• Professionalise admissions, marketing and public relations • Ensure common brand used on all publications • Advertise in *Nature, Science* and other high focus journals • Expand internationalisation alliances and membership of global networks	Times = 40%

Source: SJT; THE – QS.

organisations/units, each of which carried a separate identity. The aim is to ensure all activity is accurately captured by ranking and benchmarking organisations. After this, the costs rise – potentially exponentially.

Because rankings usually reward (older and) larger comprehensive institutions with a medical school, size does matter. Institutional restructuring, the reorganisation of research, and the creation of research institutes and graduate schools is common across higher education. Recent changes to the SJT aim to control for size but this has not affected this trend. The bio-sciences are favoured because their activity is best captured in internationally, publicly-available and verifiable data bases, *e.g.* Skopus or Thompson ISI. Many HEIs are developing/expanding English-language

facilities and capacity through the recruitment of international scholars and students; improving marketing and hence peer knowledge of the institution through expensive/extensive advertisement features, *e.g.* in *Nature*, glossy brochures or marketing tours; rewarding faculty and PhD students who publish in highly-cited journals; and seeking to positively affect the staff-student ratio. Institutions everywhere are preoccupied with recruiting more high-achieving student numbers, preferably at PhD level who like international scholars will be assets in the reputation.

Devising a coherent and successful strategy is the result of a complex set of choices. HEIs are torn between putting resources into revising the curriculum or building up research. Should the organisation be reconfigured, and if so how? What is the best way to organise processes and structures to improve quality, academic performance, visibility and/or efficiency? Should the emphasis be on recruiting high-achieving or HiCi (ISI Highly Cited) faculty with attractive salaries and benefits or helping develop existing faculty – and if focus is on the former, do we risk alienating or demoralising the latter? Should rankings be used to help improve our strategic planning or define our targets? Should we merge with another institution or re-organise our own institution? How much do we have to spend? How much can we afford to spend?

Conclusion

As knowledge has become the key barometer of international competitiveness, global rankings have emerged to measure participation in world science by the number of HEIs or discipline/departments among the top 20, 50 or 100. Because "national pre-eminence is no longer enough" (University of Warwick, 2007), an internationalist strategy is now imperative for governments, and international-facing and regionally-focused HEIs. The accelerating pace of this "arms race", with its continual "quest for ever increasing resources" (Ehrenberg, 2001), leaves no one immune and poses major policy challenges for national governments and higher education.

HEIs have become strategic enterprises, using rankings to help define targets and set goals. Despite context differences – political regime, history, mission and geography – there are remarkable similarities between how different types of institutions in Germany, Australia and Japan are responding, the decisions they are making and the reasons why. It is clear that rankings are encouraging and influencing the modernisation and rationalisation of institutions, the professionalisation of services and marketisation of higher education, the research mission and fields of investigation, curriculum and disciplines, faculty recruitment and new career/contractual arrangements, and student choice and employment opportunities. As global competition intensifies and demographic changes shrink the number of (traditional) students, rankings help build brand awareness.

Rankings are also transforming the way HEIs liaise and collaborate with each other, moving beyond exchange programmes to global networks. Greater institutional autonomy, and for some financial independence, means HEIs are choosing to benchmark themselves against peers in other countries, and forge consortia through which research and programme development can occur. While some HEIs vie for high rank, for many others just being mentioned is beneficial – the more visible, the more attractive they are to potential consumers, whether they be students, prospective faculty, philanthropists, employers or other HE partners. Critically, even HEIs which are not globally ranked are affected/infected by the rankings obsession. They are concerned about being ignored, marginalised or by-passed. Public opinion, as expressed and disseminated via the media, can be especially cruel: the "local newspapers write that local government should not spend more money for our university".

Globalisation is bringing about greater convergence, but HEIs are fixtures of their state and national policy – and their (re)actions reflect those ambitions and value systems. In many instances, rankings are used as a policy instrument to direct or inform initiatives or as a quasi-funding mechanism. A common approach is to concentrate resources in a small group of elite universities which can compete head-to-head with top ranked US institutions. Size matters in this strategy; many government initiatives are aimed at encouraging mergers between institutions, or between institutions and other autonomous agencies, *e.g.* research institutes or hospitals. But there are alternative policy options as the case studies reveal.

Today politicians and other leaders proclaim national ambitions based upon a particular rank. While the initial frenzy may have passed, cross-national comparisons are an inevitable legacy of rankings and outcome of globalisation. They are creating a sense of urgency, accelerating the pace of reform and incentivising institutional behaviour. Some of these changes can be viewed as part of the broader modernisation agenda, improving performance and public accountability while others are perverse, *e.g.* reshaping/realigning academic priorities and research to match indicators, and recruiting only high-achieving students.

Because rankings and similar benchmarking assessments do influence institutional behaviour and performance, policy matters. Governments need to balance the objectives of helping institutions improve performance and quality; drive research excellence; provide better and more transparent information to students, potential students and the public; engender investor confidence to the public/taxpayer; provide the basis for evidence-based policy making; and create more transparency of diversity. The challenge is balancing excellence in world science (including the arts, humanities and social sciences) with a world-class higher education system – accessible to the

widest number of people – rather than simply building world-class institutions. Using (global) rankings as the benchmark only makes sense if the indicators are appropriate – otherwise, governments and institutions risk transforming their system and institutions to conform to metrics designed by others for other purposes.

Acknowledgements

This study has been generously supported through a sabbatical from the Dublin Institute of Technology, and by the Institute of Higher Education Policy (IHEP) with funding from Lumina Foundation, the OECD Programme for Institutional Management of Higher Education (IMHE) and the International Association of Universities (IAU). Special gratitude is due to Amanda Moynihan for her research assistance and to John Taylor, Vin Massaro, Brian O'Neill, Kris Olds, Oonying-Chin and colleagues in Germany, Australia and Japan – too numerous to mention here – for their hospitality, help organising the various interviews and their valuable comments. Special thanks go to the many participants in the study and their institutions. All errors and omissions are mine.

The author:

Ellen Hazelkorn
Director of Research and Enterprise, and Dean of the Graduate Research School
Higher Education Policy Research Unit (HEPRU)
Dublin Institute of Technology
143 Rathmines Road
Dublin 6
Ireland
E-mail: ellen.hazelkorn@dit.ie

Notes

1. This paper draws on two inter-related studies and approaches. An international online questionnaire was distributed to the members of IMHE and IAU from June to September 2006 asking about the impact and influence of rankings on their decision making and on higher education. Of the 639 people/institutions contacted, responses were received from 202 institutions, representing a 31.6% response rate. During 2008, interviews were conducted with an indicative sample of HEIs and stakeholders in Australia, Germany and Japan. This study was undertaken under the auspices of the IHEP, IMHE and IAU. In total, 29 organisations were visited and 75 interviews conducted. All phases of the work conformed to the DIT Research Ethics policy.
2. Unattributed quotations are from participants from the 2006 or 2008 study. They were guaranteed anonymity given the sensitivity of the issues involved. No reference is given to country or institutional type except in a general way.

References

Alexander, H. and G. Noonan (2007), "Macquarie Uni Falls in List", *Sydney Morning Herald*, 9 November.

Australian Government (2008), "Review of Australian Higher Education: Discussion Paper June 2008", Commonwealth of Australia, *www.dest.gov.au/HEreview*.

Bishop, J. (2007), "LH Martin Institute for Higher Education Leadership and Management", speech by Federal Minister for Education, Science and Training, Australia,*www.mihelm.unimelb.edu.au/news/mihelm_speech_30_august_07.pdf*, accessed 25 June 2008.

Chambers, M. (2007), "Germany Aims to Rebuild Research Strength", *International Herald Tribune*, 22 November.

Cronin, M. (2006), "Research in Ireland: The Way Forward", Advancing Research in Ireland Conference, 5 May.

Dempsey, N., T.D., Ireland's Minister for Education and Science (2004), Address to the "Europe of Knowledge 2020 Conference", 26 April.

EdMal (*Education in Malaysia*) (2005), "UM's Fall: Denial, Ignorance and Incredulity", *Education in Malaysia*, 30 October .

Ehrenberg, R.G. (2001), "Reaching for the Brass Ring: How the USNWR Rankings Shape the Competitive Environment in US Higher Education", paper prepared for "Macalester Forum on Higher Education".

Exzellenzinitiative (2005), *www.wissenschaftsrat.de/exini_start.html*, accessed 7 July 2008.

Gillard, J. (2008), Interview, Australian Broadcasting Commission, 20 February.

Hazelkorn, E. (2005), *University Research Management: Developing Research in New Institutions*, OECD, Paris.

Hazelkorn, E. (2007), "Impact and Influence of League Tables and Ranking Systems on Higher Education Decision Making", *Higher Education Management and Policy*, Vol. 19, No. 2, pp. 87-110.

Hazelkorn, E. (2008), "Learning to Live with Leagues Tables and Ranking: The Experience of Institutional Leaders", *Higher Education Policy*, Vol. 21, No. 2, pp. 193-216.

IDP (2008), "Education Replaces Tourism as Australia's No. 1 Services Export", media release, IDP Education Pty Ltd., 5 February, *www.idp.com/about_idp/media/2008/february/tourism_no_1_services_export.aspx*.

JSSO (Japan Student Services Organization) (2007), "International Students in Japan, 2007", *www.jasso.go.jp/statistics/intl_student/data07_e.html*, accessed 26 June 2008.

Kim *et al.* (2007), "Rethinking the Public-Private Mix in Higher Education: Global Trends and National Policy Challenges", in P.G. Altbach and P. McGill Peterson (ed.), *Higher Education in the New Century. Global Challenges and Innovative Ideas*, Sense Publishers/ Centre for International Higher Education, Rotterdam, p. 85.

Levin, D.J. (2002), "The Uses and Abuses of the US News Rankings", Association of Governing Boards (AGB) Priorities, Fall/Autumn.

Locke, W.D. *et al.* (2008), *Counting What Is Measured or Measuring What Counts? League Tables and the Impact on Higher Education Institutions in England*, Appendix A. Research Methodologies Circular 2008/14, Higher Education Funding Council for England, Bristol.

Marginson, S. (2008), "Rankings and Internationalisation: Sustainability and Risks of Internationalisation", paper presented at "The Australian Financial Review Higher Education" conference, Sydney.

Marginson, S. and G. Rhoades (2002) "Beyond National States, Markets, and Systems of Higher Education: A Glonacal Agency Heuristic", *Higher Education*, Vol. 43, pp. 282, 290.

Marginson, S. and M. van der Wende (2007), *Globalisation and Higher Education*, Education Working Paper No. 8, OECD, Paris.

Matsumoto, A. and K. Ono (2008), "The Scramble for Students", *The Daily Yomiuri*, 31 May.

MEXT (Japan's Ministry for Education, Culture, Sports, Science and Technology) (2005), "Strategic Fund for Establishing International Headquarters in Universities", MEXT, Tokyo.

Oba, J. (2007), "Incorporation of National Universities in Japan", *Asia Pacific Journal of Education*, Vol. 27, No. 3, pp. 291-303.

OECD (2004), *Science, Technology and Industry Outlook*, OECD, Paris.

OECD (2007), *Education at a Glance*, OECD, Paris.

Porter, M.E. (1990), *The Competitive Advantage of Nations*, MacMillan, London.

Robertson, D. (1997), "Social Justice in a Learning Market", in F. Coffield and B. Williamson (eds.), *Repositioning Higher Education*, Open University Press/SRHE, p. 78.

Salmi, J. (2008), "The Challenge of Establishing World-Class Universities", paper to "2nd International Conference on World-Class Universities", Shanghai, 2007.

SJT (Shanghai Jiao Tong University Institute of Higher Education) (2003), *Academic Ranking of World Universities – 2003*, *http://ed.sjtu.edu.cn/rank/2007/ranking2007.htm*, accessed 26 May 2008.

THE – QS (Times Higher Education – QS World University Rankings) (2004), THE – QS World University Rankings – 2004, *www.topuniversities.com/worlduniversityrankings*, accessed 26 May 2008.

Usher, A. and M. Savino (2006), *A World of Difference: A Global Survey of University League Tables*, Educational Policy Institute, Canadian Education Report Series.

Van Vught, F., M. van der Wende and D. Westerheijden (2002), "Globalisation and Internationalisation: Policy Agendas" in J. Enders and O. Fulton (eds.), *Higher Education in a Globalising World. International Trends and Mutual Observations: A Festschrift in Honours of Ulrich Teichler*, Kluwer Academic Publishers, Dordrecht, pp. 103-120.

Walters, C. (2008), "New Directions in 'Australian Higher Education Policy'", presentation to IMHE General Conference, "Outcomes of Higher Education, Quality, Relevance and Impact", Paris.

University of Warwick (2007), *Vision 2015: A Strategy for Warwick*, accessed 7 July 2008. *www2.warwick.ac.uk/about/vision2015/*.

Wooldridge, A. (2006), "The Battle for Brainpower", *The Economist*, 5 October, p. 2.

Yonezawa, A. (2007), "Making World-Class Universities: Japan's Experiment", *Higher Education Management and Policy*, Vol. 15, No. 2, pp. 9-23.

Yonezawa, A., I. Nakatsui and T. Kobayashi (2002), "University Rankings in Japan", *Higher Education in Europe*, Vol. 27, No. 4, pp. 373-382.