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Rankings and the Global "Battle for Talent"

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Talent”

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Rankings and the Global “Battle for Talent”

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...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 U.S. or the UK...[it is a question]...of the export image.¹

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.

The Global Battle for Talent

A few years ago, few people outside of the United States were familiar with the ranking of higher education institutions (HEIs). Today, global rankings or cross-national comparisons have emerged as an inevitable by-product of globalization and international competitiveness. As internationalization has become both a government and higher education priority, the talent-catching and knowledge-producing capacity of higher education has become a vital sign of a country’s capacity to participate in world science and the global economy. According to the OECD, countries with high levels of international students benefit from the contribution they make to domestic research and development while those with low numbers find it “more difficult ... to capitalize on this external contribution to domestic human capital production.”²

The positioning of knowledge as the foundation of economic, social and political power has been driven by the transformation of economies based on productivity and efficiency to those based on higher-valued goods and services innovated by talent. If the first phase of globalization was marked by “working cheaper,” the current phase is measured by connecting people and processes globally, and breaking down traditional barriers.³ Almost 80% of a company’s value comes from intangibles or soft knowledge—unique knowledge of services, markets, relationships, reputation, and brand.⁴ Successful economies are those which rely more on the ability to exploit knowledge for “competitive advantage and performance ... through investment in knowledge-based and intellectual assets: R&D, software, design new process innovation, and

human and organizational capital.”⁵ The EU Lisbon Agenda, which aims to make Europe “the most dynamic and competitive knowledge-based economy in the world” by significantly increasing investment in R&D to 3% GDP and doubling the number of PhD students,⁶ is a prime example of this “talent-dependent” strategy.

Ironically, this approach has emerged at a time when many OECD countries are facing demographic challenges. This has arisen for a combination of reasons, including graying of the population and retirement of professionals combined with the end of the “baby boomer” bubble and decline in the number of students, especially those choosing science and technology subjects. In the U.S., the pool of high-school students is anticipated to fall by 10% over the next decade, and colleges and universities risk being closed down or merging with competitor institutions.⁷ The number of 18-year-old Japanese has fallen to 1.3 million in 2007 from 2.05 million in 1992, and is likely to drop to 1.21 million by 2009. The German government predicts that even with 200,000 immigrants a year, Germany's population will shrink from today's 82.5 to 75 million by 2050; the decline in the number of students matriculating from undergraduate to graduate has shrunk so much that restrictions on the number of students which had been introduced to keep a very high standard had to be lifted.

As a result, what Japan's *Daily Yomiuri* calls the “scramble for students” and the *Economist* refers to as the “battle for brainpower” has moved center stage, complementing more traditional struggles for natural resources. Knowing that people with higher levels of education are more likely to migrate,⁸ governments around the world are introducing new policies and targeting high skilled immigration—especially in science and technology—to attract “the most talented migrants who have the most to contribute economically.”⁹ The importance of mobility stems not just from its contribution to the production and dissemination of codified knowledge but also transmitting tacit knowledge in the broadest sense. There can be benefits for both sending and receiving countries (not just brain drain but brain circulation), if the latter has the appropriate absorptive capacities to attract (back) and retain high skilled talent.¹⁰ Internationalization, once seen simply as a policy of cultural exchange, is increasingly viewed as a necessary mechanism to increase the number of international students, especially graduate (PhD) research students.

The importance of the lucrative international student market has raised the global competitive stakes. In terms of actual numbers and percentage of total students, Western Europe and North America are the world regions of choice. Together, they host approximately 1.7m of the 2.5m international students, or 70% of all international students.¹¹ Under GATS, international or cross-border student mobility has become a recognizable, tradable commodity which is likely to encompass 7.2m students annually by 2025.¹² But this is not a simple good news story for receiving regions and their economies. While the number of receiving countries is growing, countries which have traditionally sent students abroad are quickly expanding their domestic HE capacity. UK universities have been urged to “buckle up for a rough ride” while Japanese universities are having to “send ... recruiters out to high schools, hold ... open houses for prospective students, build ... swimming pools and revamp ... libraries, and recruit ... more foreign students.”¹³ As a counter measure, governments are seeking better alignment between higher education, innovation and immigration policies to guarantee access to the global talent pool.

The remainder of this chapter will look at the impact that rankings are having on student choice and mobility, and the way in which both higher education institutions (HEIs) and government are responding to global competition for talent. It draws on the results of an international survey of HE leaders in 2006 and interviews with HEIs in Australia, Japan and Germany during 2008. The research was conducted under the auspices of the OECD Programme for Institutional Management of Higher Education, the International Association of Universities, and the Institute of Higher Education Policy—the latter with funding from the Lumina Foundation. There are three main sections: part 1 describes the growing importance that rankings are having on student mobility and student choice; part 2 provides an overview of the recruitment and other initiatives HEIs are adopting; and part 3 looks at policy reaction. The final section offers some concluding observations on the way in which rankings are accelerating competition for the lucrative international student market.

Rankings and the Global Higher Education Market

While rankings have become very popular in recent years, they have existed—in the United States—for a long time. *U.S. News and World Report (USNWR)* began providing consumer-type college-guide information for students and their parents in 1983. The demand for more comparative information, and greater accountability and transparency has intensified ever since. Today, national rankings exist in over 40 countries. Global rankings are recent but they are also more influential; the Shanghai Jiao Tong *Academic Ranking of World Universities* (henceforth SJT) began in 2003, followed by *Webometrics* and *Times QS World University Ranking* in 2004, the Taiwan *Performance Ranking of Scientific Papers for Research Universities* in 2007, and *USNWR's World's Best Colleges and Universities* in 2008. The EU has announced a “new multi-dimensional university ranking system with global outreach” to be piloted in 2010. Rankings’ popularity has risen for the following two reasons: X and X.¹⁴

1) Because higher education is now seen as the motor of the economy, global rankings are perceived as providing a gauge of international competitiveness as measured by the number of a given country’s HEIs in the top 20, 50 or 100. Politicians often refer to them as an expression of national ambition, and their results are covered widely in the popular press. Higher education widely believes that rankings enable institutions to build, maintain or elevate their reputation and profile (nationally and internationally); that high-achieving students use rankings to shortlist institutional choices, especially at the graduate level; that stakeholders use rankings to influence their decisions about funding, sponsorship and employee recruitment; and that high rankings bring benefits and advantages. A high rank is seen as self-perpetuating once achieved, but there are also down-sides: “by far and away the most important is reputational risk.”¹⁵ In other words, on a year-to-year comparison, a lower ranking would be perceived as having lower standards of quality.

2) Because graduate and employment outcomes are strongly correlated with higher qualifications and institutional type,¹⁶ students (and their parents) have become savvy consumers. Institutional reputation is a key driver of student choice and much of the attractiveness of rankings is their simple, easy-to-understand format. They provide a fast, short-hand Q-mark, enabling the user to “pre-sort” a group of HEIs prior to more in-depth inquiry.¹⁷ They are also an attribute of self-pride and peer-esteem. There are positive vibes associated with

a high ranked HEI while students in low ranked institutions fear the reverse may be true. Thus, in the UK, 61% of students referred to rankings before making their choice, and 70% considered them important/very important,¹⁸ while 60% of prospective German students “know rankings and use rankings as one source of information among others.”¹⁹ Forty percent of U.S. students use news magazine rankings, and 11% of said rankings were important factor influencing their choice.²⁰

Students are not a homogeneous group, and their attitude towards and use of rankings can be divided into, at least, four distinct groups.

- *Domestic undergraduate students* usually attend a local university, but depending upon circumstances and choice this could be within their city or a geographically adjacent region. As such, they use a combination of local intelligence, local rankings or entry scores—the more difficult a university is to enter, the better it is seen to be—as appropriate. There is growing evidence that high-achievers are becoming more mobile, and HEIs are beginning to target this group with special packages. For the bulk of domestic students, ranking consciousness rises while at university, usually because of internal communications from the president, faculty, brochures or conversations with peers.
- *International undergraduate students* constitute a varying proportion of the total student cohort.²¹ Full-time international students make their choice based on family or institutional connections, although ease of residency and employment opportunities, in addition to access to higher education are also factors. For students who may spend a portion of their undergraduate students abroad, their decisions are often made on the basis of institutional partnerships, albeit within the choice available, some students do consider reputational factors.
- *Domestic graduate students* are likely to have become conscious of rankings while at university and use them to inform their graduate choice. While they do make more complex choices based on their field of specialization and expertise of faculty, they are keenly attuned to the perceived after-sale value of their qualification. High-achieving graduate students are increasingly likely to travel either within their country or to another country. Indeed, the idea of remaining at the same institution for undergraduate and graduate studies is increasingly frowned-upon.
- *International graduate students* are the major users of global rankings—not least because they have less local intelligence. A recent UK study confirmed that 92% of international students considered UK league tables important/very important to inform their choice²². Because the majority of international students fund their studies from their own/family sources, rankings fulfill an important function. They are likely to “choose the country and subject areas of the study” based on their calculations regarding the monetary and status reward a foreign degree can bring.²³ Thus, they “might know about Australia, but not where in Australia to go.” Institutional rank transmits social and cultural capital which resonates with family, friends and potential employers. This is particularly critical for students seeking employment in their home country—but it can work both ways. As one student said:

... 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.

Cross-border mobility within particular regions is also growing; students in Arab countries migrate to Egypt and Jordan, and students from Bangladesh and Nepal travel to India for opportunities not readily available at home.²⁴

There are other differences. Students seeking employment in some professions e.g. business, medicine and law or an academic career appear more sensitive to institutional status than other students. This is because the former subjects have a history of being ranked, while the latter employment opportunities in the academy are often influenced by the reputation of the institutions from which the qualifications have been acquired.²⁵

But students of different abilities and socio-economic backgrounds also make different kinds of choices. Research in the U.S. has found that rankings are particularly significant for high-ability and second-generation students, especially students from Asian backgrounds.²⁶ Richard Spies argues that above-average students make choices based on non-financial factors, such as reputation.²⁷ Students who have the financial ability to pay full fees and are not reliant on government or other grants—who are effectively free to choose—are more likely to attend higher ranked colleges (even by a few places) than grant-aided students who appear to be less responsive to rankings. Clarke also cites UK, German and New Zealand experiences that high-achieving students are more likely to use rankings to inform choice. Research indicates strengthening usage of rankings among lower-income groups,²⁸ but elite responsiveness among students and parents remains most significant.²⁹

Attendance at the most select universities and colleges is seen to “confer extra economic advantages to students, in the form of higher early career earnings and higher probabilities of being admitted to the best graduate and professional schools” albeit this may be more for “under-represented minority students and students from low-income families.”³⁰ It also confers indirect benefits, such as connections to “elites” and future decision-makers, membership of “the right” social and golf clubs and schools, etc. Accordingly, there is growing evidence that students have “tried to increase the standing of their program in satisfaction-based rankings by sending back surprisingly upbeat surveys.”³¹

Not enough is known about the influence of the media and public opinion, but it is clear that students are sensitive to media coverage and publicity. One administrator stated: “The *Good University Guide* doesn't influence student recruitment but media reporting of it does” while another commented that “one university...suffered a very steep drop in enrollments internationally and it's because of bad publicity...” A student similarly observed:

...people have a general perception, an accepted perception of which university is the best and which is second best and third best and so on. It's just out there among the community. Even worldwide people know that Harvard, Oxford and Yale and Cambridge are like the top universities because they see and hear it in movies and all the different culture and media and that really establishes people[s] perception of them....People automatically see the name of the university...in all these little articles and they get it drummed into

their head that this university must be at the cutting edge, it must be at the forefront and its obviously respected by people if it keeps showing up with different things ...

In summary, undergraduate students are relatively less influenced by rankings, compared to graduate students, who comprise the fastest growing number of internationally mobile students worldwide.³² The latter are more responsive to worldwide rankings given their maturity, career focus and capacity for mobility, in addition to increasing national and institutional anxiety and efforts to recruit these lucrative students who can also shore up national research and economic development strategies.

Rankings and Student Recruitment

In this context, it is not surprising that competition between countries and HEIs for (top) students is rising. While the U.S. has had lengthier exposure to the marketization of higher education “products” and to rankings, international experience is converging. HEIs use rankings to inform strategic decision-making, aid branding and enhance visibility nationally and internationally:

... those who are looking at their institution on an international scale are fully aware of the potential of these ratings, rankings, evaluations to attract students, to attract faculty and so on and it is also commented in...the newspapers, in comments in the media and so on

While some HEIs vie for high rank, for many others just being mentioned can be beneficial, helping to overcome local bias or tradition.³³

‘Since global rankings have appeared, we are receiving an increasing number of foreign delegations.’

Our “profile has increased because of rankings” among international students, recruitment agencies and other HEIs who want to form partnerships with us.

Effectively “caught between not wanting to place public emphasis on their ranking...and privately trying to avoid slipping,”³⁴ HEIs are compelled to respond to growing presence of rankings and specifically the way in which rankings have raised the competitive bar. As a result, they are making changes across their organizations.

Although there is no evidence that lower ranked universities lose students, students can and do modify their behavior in response to rankings, and high ranking does lead to increased applications,³⁵ causing perceptible “ebbs and flows in the number and quality of applicants,”³⁶ especially among international students. An institution whose rank improves also has greater scope for enhancing its position. It can accept a smaller percentage of its applicants and thereby enhance its selectivity index, a metric used by *USNWR* and *The Sunday Times*. On the other hand,

a less favorable rank leads an institution to accept a greater percentage of its applicants, [leading to] a smaller percentage of its admitted applicants [who] matriculate, and the resulting entering class is of lower quality, as measured by its average SAT [college entry] scores

And the circle repeats itself, leading to a downward spiral in terms of ranking position. Because difficulty of gaining entry is often interpreted as higher quality, HEIs often seek to influence the

number of applicants it receives while still retaining the actual number of available places. Hence,

[t]oo many institutions now spend their resources aggressively recruiting students with high SAT or ACT scores and other conventional markers of achievement that correlate strongly with socioeconomic status. In turn, at many institutions those choices skew the allocation of financial aid from students with the great need to those with the most offers of admission.³⁷

These actions may encourage HEIs to abandon distinctive missions—such as widening access or diversity—that are not measured in rankings.

While selectivity indices have not been a significant element of other national or worldwide rankings, especially in Europe where equity and open recruitment has tended to be the norm, there is evidence of change. Even in systems, such as in Ireland, where student admissions are effectively “blind” to subjective factors, there are suggestions HEIs have endeavored to influence the process for similar reasons indicated above. At the graduate level there is less secrecy: HEIs use rankings to assess the suitability of applicants’ undergraduate experience, especially international students, “so we’re as guilty.”

Private institutions are better able to respond to ranking pressure, given their ability to use endowment funds or adjust tuition fees to influence “student input” metrics used by some ranking organizations, such as *USNWR*, but this pattern is growing also. Other methods include using scholarship or merit aid to “purchase talent” or invest in “image-enhancing face lifts,” such as dormitories, fiber optic networks and sports facilities.

HEIs are improving, refocusing or developing admissions policies and procedures, and expanding their marketing and publicity activities into year-round professional offices with rapidly expanding budgets and staff. Many are heavily involved in student and trade fairs in key countries. Admissions and international officers confirm that prospective students regularly inquire as to institutional rank. Almost 50% of international respondents and 35% of U.S. HEI presidents use their rank for publicity purposes,³⁸ highlighting (positive) results on their webpage, in speeches, at new faculty or student orientation or international meetings, or when lobbying government. A notable number even advertise on the webpage of the ranking organizations.

For particular professional disciplines, e.g. business, rankings are perceived/used as equivalent to professional accreditation. Despite differences, both systems 1) measure number of graduates and professors, research output, etc., 2) bring international recognition, and 3) are used by prospective students to identify a good place to study. Professional accreditation enhances mobility, opening doors to future employment. While there is some disagreement about whether professional accreditation influence the ranking of a particular institution, their absence could be a stumbling block. Conversely, professional bodies are influenced by rankings, and this could in turn influence the outcome of the professional accreditation process.

International recruitment is having a significant and long-lasting impact on language diversity, because to be successful requires transforming programs and activities into English—even when, as in Japan for example, over 92% of foreign students come from Asia, of which 60% are Chinese and 15% Korean. Most Japanese universities are focusing on post-graduate activities, initially in

science and technology fields where they already have a reputation likely to be attractive to international students:

So it's obvious that some departments will introduce English not in the social science or the international relations but in engineering...if we could teach these courses in English then recruiting international faculty would be easier.

New facilities are also required: new and more dormitories, world-class labs, and international student services and amenities, in addition to recruitment of international scholars, often at attractive salaries. But this may not be enough. One student was asked why she went to Japan rather than an "English-speaking country whose education quality is a lot better and who has a lot of high ranking universities rather than Japan."

Policy Responses

High skilled mobility is shaped by a combination of push and pull factors. While general migration has strong economic incentives, high skilled mobility responds to more complex factors, including educational and professional development, research opportunities, work conditions, access to infrastructure and quality-of-life features, e.g. participatory recreation, culture and outdoor recreation, and societal diversity. Escalating global competition and demographic changes have compelled governments to introduce an array of new policies with respect to international students, with special emphasis on high achieving students and graduates.³⁹

Vital to this strategy is the prestige, reputation and attractiveness of the higher education system, individual HEIs and qualifications. In the absence of other cross-national comparative information, global rankings have acquired a prominence beyond their original intent, and are now perceived and used as a quality mark and indicator of value-for-money of the entire higher education system. Top ranking HEIs "act as magnets for the brightest students from countries unable to provide world-class standard tertiary education."⁴⁰ National competitions, for example the UK Research Assessment Exercise or the German *Exzellenzinitiative* (see below), have acquired a similar status, used by students and other stakeholders. One institution, unsuccessful in the first round of the latter competition, was asked "Are you not excellent anymore?" Thus, despite criticism of the methodologies used by the various ranking organizations, governments and government agencies are aware

... of the potential of these ratings, rankings, evaluations to attract students, to attract faculty and so on and it is also commented in...the newspapers, in comments in the media and so on

They can be decisive for students seeking government sponsorship/scholarship to study abroad (e.g. scholarships in Mongolia and Qatar are restricted to students admitted to highly ranked international universities)⁴¹ or recognition of foreign qualifications (Macedonia automatically recognizes qualifications from the top 500 universities listed in the THES or SJT or U.S. News and Report).⁴² In a move likely to be repeated by other governments, the Dutch are using rankings to approve skilled migrants, but only if they graduated from a university in the top 150 of the 2007 SJT or the Times QS Rankings.⁴³

Many governments are going further. Two main policy regimes are emerging:⁴⁴

1. *Create greater vertical (reputational) differentiation [neo-liberal model].*

Germany, Japan China, Korea, and France are using rankings as a free market mechanism driving the concentration of “excellence” in a small number of research-intensive universities. Part of the aim is to attract high-performing research-intensive students and faculty, and ward off demographic challenges in the future. For example, Germany fears a “shortage” of domestic students after 2015, and therefore sees international recruitment as vital. The German *Exzellenzinitiative* (2005) aims to create a German “Ivy League” which can compete successfully in world science and boost international visibility, giving “a little more glamour to Germany” by increasing interest from international students and faculty who are finding it is “not as easy as...before to get a visa to the U.S.,” and also from employers and industrial partners. Similarly, Japan aims to increase the number of international students from its current 100,000 to 300,000 by 2020. The “Strategic Fund for Establishing International Headquarters in Universities”⁴⁵ (2005) aims to create an internationally competitive research environment that will attract outstanding researchers from within Japan and abroad.

2. *Create greater horizontal (mission) differentiation [social-democratic]:*

Australia wants to “brand Australia” with a horizontally “diverse set of high performing, globally-focused HEIs.” A similar approach has been adopted by Norway. Rather than elevating a small number of elite institutions to world-class status, the recent Australian Review of Higher Education seeks to build a world class HE system providing excellence across diverse fields of learning and discovery, impacting economically and socially.⁴⁶ In contrast to an emphasis on competition of as a driver of excellence (as the above example), the focus here is recognizing and rewarding excellence wherever it occurs as a way to underpin social and regional equity. The Norwegian Commission for Higher Education, reporting in January 2008, likewise takes a similar approach to its structural and competitive challenges. Rather than opting to concentrate investment, it recommended building up “excellence wherever it occurs.”⁴⁷ In a different way, the University of Catalonia brings together eight different universities under a single umbrella to maximize capability beyond individual capacity.⁴⁸

Public policy in the United States differs across the different states. According to Eckel (2008), the characteristics of low government intervention, diverse funding and mission-based accreditation are being supplanted by increasing focus on the role of higher education as a driver of economic growth and innovation. This policy shift is creating a more competitive ‘market-driven environment [which] favours prestige’ factors⁴⁹, such as rankings as a mechanism of differentiation. In this respect, the neo-liberal experience referenced above reflects the US experience.

In either case, governments around the world are busy restructuring higher education in order to improve productivity and efficiencies, support national policy objectives and enhance the world-class status and reputation of the system. This involves merging and/or strengthening HEIs by building critical mass of active researchers in specialist fields winning more competitive funds and producing more verifiable outputs, with national/international partners. Directly or indirectly, the goal is to improve ranking position.

Conclusion

Rankings have risen in popularity because they are perceived to provide an independent assessment of the performance of higher education. As qualifications have become mobile and higher education viewed as the motor of the economy, global rankings have acquired a significance far beyond their original intention. In the absence of other cross-national comparative information, they are interpreted by students and others as a mark of quality—and effectively, their ability to attract international students is a measure of that quality. Today, internationalization is less about cultural exchange and more about economic survival.

The danger of not responding adequately to the challenge of internationalization is tremendous as the best academic institutions are competing intensely to attract to attract the best talent.⁵⁰

Thus, global rankings are the realization that in a global knowledge economy, national pre-eminence is no longer sufficient.

In teaching and research, national boundaries are declining in significance, and world-wide comparisons will be more significant in the future. This has implications even for “elite” HEIs, which may have been dominant within their national boundaries, but are now compelled—like their regional colleagues—to operate in “single world market.” All HEIs, globally facing and regionally focused, have been drawn into the global market. Institutions and countries which can maximize their attractiveness to high achieving students and highly skilled labor succeed. Accordingly, HEIs are choosing not just to benchmark themselves against peers in other countries, but to forge consortia through which research, program development, student and faculty exchange, and recruitment occurs, creating global higher education networks. New and different types of rankings and comparative directories will emerge.

At a time when demographic changes are shrinking the number of (traditional) students and intensifying competition, rankings help build brand awareness. Despite criticism and cynicism, few HEIs can afford to ignore their influence. While cost may be less important for top ranked universities whose “appeal derives from their continued scarcity and prestige as positional goods, and the perceived social networks they may offer,”⁵¹ rising fees and more competition will make students (and their parents) more focused on value-for-money and quality.⁵² This is likely to put a cap on the extent to which countries use international students as financial fodder—and put more power into the hands of students. In order to be successful, countries and HEIs will need to adopt different strategies if they are to win their share of the global talent pool.

¹Unattributed 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.

² OECD (2007) *Education at a Glance*, Paris, p34.

³ Peter Cheese, Robert J. Thomas and Elizabeth Craig (2007) *The Talent Powered Organization. Strategies for Globalization, Talent Management and High Performance*. Kogan Page. Retrieved 5 January 2009.

<http://www.accenture.com/NR/rdonlyres/9ADBF69-938C-4388-833C-CC8502305C85/0/TPOChapterOne.pdf>

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- ⁴ Will Hutton (2006) "Building Successful Cities in the Knowledge Economy: The role of 'Soft Policy' Instruments," Retrieved 8 January 2009. <http://www.oecd.org/dataoecd/11/22/40077480.pdf>.
- ⁵ Ian Brinkley (2008) *The Knowledge Economy: How Knowledge is Reshaping the Economic Life of Nations*. The Work Foundation, London, pp17-18. Retrieved 3 January 2009. http://www.workfoundation.com/assets/docs/publications/41_KE_life_of_nations.pdf
- ⁶ http://europa.eu/scadplus/glossary/research_and_development_en.htm
- ⁷ Jon Marcus (2008) "The State of the Union," *Times Higher Education*, 3 July.
- ⁸ Eurobarometer (2006) *Europeans and Mobility. First results of a EU-wide survey on geographic and labour market mobility*. Fig. 1. Retrieved 3 January 2009. http://ec.europa.eu/employment_social/workersmobility_2006/uploaded_files/documents/FIRST%20RESULTS_Web%20version_06.02.06.pdf.
- ⁹ Katerina Rüdiger (2008) *Towards a Global Labour Market? Globalisation and the Knowledge Economy*. The Work Foundation, London, p5. Retrieved 8 January 2009. http://www.workfoundation.com/assets/docs/publications/30_globalisation.pdf
- ¹⁰ Mara Hvistendahl (2008) "China Entices Its Scholars to Come Home," *Chronicle of Higher Education*, 19 December.
- ¹¹ Kemal Guruz (2008) *Higher Education and International Student Mobility in the Global Knowledge Economy*, SUNY Press. p230.
- ¹² N. V. Varghese, (2008) *Globalization of higher education and cross-border student mobility*. International Institute for Educational Planning, UNESCO, Paris. p11.
- ¹³ David McNeill (2008) "Facing Enrolment Crisis, Japanese Universities Fight to Attract Students," *Chronicle of Higher Education*, July 11; John Gill (2008) "Buckle up for a rough ride, UUK tells sector," *Times Higher Education*, July 10;
- ¹⁴ Ellen Hazelkorn (2008) "Learning to Live with League Tables and Ranking: The Experience of Institutional Leaders," *Higher Education Policy*, 21:2, pp195-215, and (2007) "The Impact of League Tables and Rankings Systems on Higher Education Decision-Making," *Higher Education Management and Policy*, OECD, 19:2, pp87-110.
- ¹⁵ Unattributed quotations used come directly from the above-mentioned study. Anonymity was promised to all respondents.
- ¹⁶ Paulo Santiago, Karine Tremblay, Ester Basri and Elena Arnal (2008) *Tertiary Education for the Knowledge Society, vol. 2. Equity, Innovation, Labour Market, Internationalisation*. OECD, Paris, pp189-233.
- ¹⁷ Contreras, A. (2007) "The Cult of Speed," *Inside Higher Education*, 31 July. Retrieved 3 January 2009. <http://www.insidehighered.com/views/2007/07/31/contreras>.
- ¹⁸ D. Roberts and L. Thompson (2007) *University League Tables and The Impact on Student Recruitment, Reputation Management for Universities – Working Paper Series No. 2*. Leeds, Cambridge and Brisbane: The Knowledge Partnership, p20. Retrieved 3 January 2009. <http://www.theknowledgepartnership.com/docsandpdf/leaguetablepressrelease.pdf>
- ¹⁹ G. Federkeil (2007) "Rankings and Quality Assurance in Higher Education," Presentation to 3rd Meeting of the International Ranking Expert Group (IREG 3), Shanghai.
- ²⁰ P. M. McDonough, A.L. Antonio, M. Walpole and L.X. Pérez (1998) "College Rankings: Democratized College Knowledge for Whom? Research in Higher Education, 39:5, pp513-537.
- ²¹ OECD (2008) *Education at a Glance*, Paris, p358.
- ²² David Roberts with Lisa Thompson (2007) 'University League Tables and The Impact on Student Recruitment', *Reputation Management for Universities – Working Paper Series No. 2*. Leeds, Cambridge and Brisbane: The Knowledge Partnership. pp. 5, 18-20. Retrieved 29 January 2009. <http://www.theknowledgepartnership.com/docsandpdf/leaguetablefinalreport.pdf>
- ²³ Varghese, Op Cit., p22.
- ²⁴ Ibid. p23.
- ²⁵ See Linda Wedlin, (2006) *Ranking Business Schools: Forming Fields, Identities and Boundaries in International Management Education*, Cheltenham Glos: UK Edward Elgar; M. Sauder and Lancaster R. (2006) "Do Rankings Matter? The Effects of U.S. News & World Report Rankings on the Admissions Process of Law Schools," *Law & Society Review*, 40:1, pp105-134; M. Berger (2001) "Why the USNWR Law School Rankings are both Useful and Important," *Journal of Legal Education*, 51:4, pp487-502.

- ²⁶ A. Griffith, and K. Rask (2007) "The Influence of the USNWR Collegiate Rankings on the Matriculation Decision of High-Ability Students: 1995-2004," *Economics of Education Review*, 26:2, pp44-255; R. G. Ehrenberg (2001) "Reaching for the Brass Ring: How the USNWR Rankings Shape the Competitive Environment in U.S. Higher Education," Paper prepared for Macalester Forum on Higher Education; J. Monks and Ehrenberg R.G. (1999) "U.S. News & World Report's College Rankings: Why they do matter," *Change*, 31:6, pp43-51.
- ²⁷ R. R. Spies, (1978) *The Effect of Rising Costs on College Choice. A Study of the Application Decisions of High-Ability Students*, Princeton, NJ: College Board Publication Orders.
- ²⁸ McManus quoted in Roberts, Op Cit., p18.
- ²⁹ A. Machung (1998) "Playing the Rankings Game" *Change*, July/August, pp12-16.
- ³⁰ R. G. Ehrenberg (2004) "Econometric Studies of Higher Education," *Journal of Econometrics* 121, pp19-37.
- ³¹ M. Clarke (2007) "The Impact of Higher Education Rankings on Student Access, Choice and Opportunity," in IHEP (ed.) *College and University Ranking Systems: Global Perspectives and American Challenges*, Washington D.C.: Institute for Higher Education Policy, pp. 35-47; Coughlan, Sean (2008) "Faculty in league table expulsion," *BBC News*, 25 July. Retrieved 5 January 2009. http://news.bbc.co.uk/2/hi/uk_news/education/7526061.stm?TB_iframe=true&height=650&width=850
- ³² Guruz, Op Cit., pp 172-175.
- ³³ Hazelkorn, 2007, Op. Cit, Figure 5.
- ³⁴ Griffith and Rask, Op. Cit.
- ³⁵ Monks and Ehrenberg, Op. Cit; Ehrenberg, 2001, Op. Cit., p2, 10.
- ³⁶ I. Dichev (2001) "News or Noise? Estimating the Noise in the U.S. News University Rankings," *Research in Higher Education*, 42, p238.
- ³⁷ C. Lovett (2005) "The Perils of Pursuing Prestige," *Chronicle of Higher Education*, 21 January.
- ³⁸ Hazelkorn, 2007, Op. Cit.; Daniel Levin (2002) *The Uses and Abuses of Rankings*. Association of Governing Boards Priorities, 20, Fall.
- ³⁹ Varghese, Op. Cit., pp22-25, and Santiago, Op. Cit., chpt. 10.
- ⁴⁰ Santiago, Op. Cit., p25.
- ⁴¹ J. Salmi and A. Saroyan (2007) "League Tables as Policy Instruments: Uses and Misuses" *Higher Education Management and Policy*, 19:2, p52.
- ⁴² Macedonia: Article 159 of the Law on Higher Education, 26 February 2008, number 35/2008.
- ⁴³ Eric Beerkens (2008) "What if I graduated from Amherst or ENS de Lyon..." <http://blog.beerkens.info/>; "On the use of rankings and league tables" <http://blog.beerkens.info/index.php/2008/07/on-the-use-of-rankings-and-league-tables/>
- ⁴⁴ E. Hazelkorn (2009) "Rankings and the Battle for World Class Excellence: Institutional Strategies and Policy Choices," *Higher Education Management and Policy*, 21:1, Forthcoming.
- ⁴⁵ <http://www.jsps.go.jp/english/e-quart/13/index02.html>
- ⁴⁶ *Review of Australian Higher Education*, 2008. http://www.deewr.gov.au/HigherEducation/Review/Documents/PDF/Higher%20Education%20Review_Executive%20summary%20Recommendations%20and%20findings.pdf
- ⁴⁷ Norwegian Commission for Higher Education, <http://stjerno.no/site/in-english>
- ⁴⁸ http://www.acup.cat/index.php?option=com_content&task=view&id=77&Itemid=137
- ⁴⁹ Peter Eckel (2008) "Mission Diversity and the Tension between Prestige and Effectiveness: An overview of US Higher Education", *Higher Education Policy*, 21, p188.
- ⁵⁰ Universitat Politècnica de Catalunya (2008) *From International Relations to Internationalisation. International Policy Plan, 2008-2015*, p4. Retrieved 8 January 2009. <https://www.upc.edu/sri/strategy/>
- ⁵¹ J. Lee, A. Maldonado-Maldonado and G Rhoades (2006) "The Political Economy of International Student Flows: Patterns, Ideas, and Propositions" in J. Smart (ed), *Higher Education: Handbook of Theory and Research*, 21, pp545-590 quoted in Santiago, Op Cit, p249.
- ⁵² Marcus, Op. Cit.