World-Class Universities or World-Class Systems? Rankings and Higher Education Policy Choices

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‘The task given to them [the universities] was simple. They knew the measurement criteria of the *THES* rankings. All they had to do was to identify how their existing plans for improving the quality of their institutions matched those criteria’. (Higher Education Minister, Malaysia, 2007)

‘We should have ‘one of our universities listed in the top 100.’’ (President of Lithuania)

‘What do we need to achieve by 2013? Two universities ranked in the top 20 worldwide’. (Chief Executive, Forfás, Ireland)

‘Europe must act:...According to the Shanghai index, only two European universities are in the world's top 20’ (European Commission, 2010)
Questions

• Is it always a good thing when a university rises up the rankings and breaks into the top 100?

• How much do we really know and understand about rankings and what they measure?

• Do rankings raise standards by encouraging competition or do they undermine the broader mission to provide education?

• Should rankings be used to help decide educational policy and the allocation of scare financial resources?

• Should policy aim to develop world-class universities or to make the system world-class?
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1. Growing Obsession with Rankings
Drivers of Change (1)

1. Knowledge as foundation of economic, social and political power:
   – Successful economies rely on ability to develop and exploit new knowledge for competitive advantage and performance;
   – This places higher education at the centre of policymaking;
   – Because higher education plays a fundamental role in creating competitive advantage in market environment, investment and performance matters.

2. Countries dependent upon talent, but many under demographic pressure:
   – World population increasing, but population of more developed regions dependent on net migration;
   – This challenges strategies for growing knowledge-intensive industries;
   – Governments introducing policies to attract most talented migrants and students, especially in science and technology.
Drivers of Change (2)

3. Higher education is essential component of the productive economy:
   – How higher education is governed and managed is a major policy issue;
   – Quality and status indicates a country’s ability to participate in world science and compete successfully in the global economy;
   – Increasing emphasis on value-for-money, international benchmarking, and (public) investor confidence.

4. Students (and their parents) are savvy consumers:
   – Education and graduate outcomes and lifestyle are strongly correlated with higher qualifications and career opportunities;
   – Students assess institutions and programmes as an opportunity-cost;
   – Decline in the traditional student market has heightened competition for high-achieving students – the balance of consumer power is shifting.
Why Rankings

Satisfy a ‘public demand for transparency and information that institutions and government have not been able to meet on their own’ (Usher & Savino, 2006, p38):

Rankings act as a cue to:

• Students/consumers re: monetary ‘private benefits’ of university attainment and occupational/salary premium;

• Employers what they can expect from graduates;

• Government/policymakers re: quality, international standards & economic credibility;

• Public because they are perceived as independent of the sector or individual universities;

• HEIs because they want to benchmark their performance.
Rankings Rise in Popularity

• Rankings consciousness rose sharply after 2003, and has reached fever-pitch in the Global Financial Crisis era;
  
  • Global rankings reflect the realization that in a global knowledge economy, national pre-eminence is no longer enough;
  
  • Rankings appear to be a simple and easy way to measure and compare performance and productivity.

• Today – no part of the world is immune:
  
  • 50+ countries have national rankings, and the number is growing;
  
  • 10 major global rankings.

• There are 15,000 HEIs worldwide, but we are obsessing about less than 100.
Influential Global Rankings

- **Academic Ranking of World Universities** (Shanghai Jiao Tong University, China) (2003)
- **THE QS World University Rankings** (UK) (2004 - 2009)
- **Webometrics** (Spain) (2004)
- **Performance Ranking of Scientific Papers for Research Universities** (Taiwan) (2007)
- **Leiden Ranking** (Centre for Science and Technology Studies, Netherlands) (2008)
- **SCImago Institutions Rankings** (Spain) (2009)
- **QS World University Rankings** (UK) (2010)
- **THE Thomson Reuters World Ranking of Universities** (UK) (2010)
- **U-Multirank** (EU, 2011)
Other Rankings

- **Single-country:**
  - Das CHE-HochschulRanking (Germany)
  - *US News and World Report* (US)
  - *Guardian* (UK)
  - Sunday Times (UK and Ireland)
  - Asahi Shimbun (Japan)
  - *Washington Monthly College Guide* (US)

- **Business Schools:**
  - *Financial Times*
  - *Business Week*

- **Graduate Schools:**
  - *US News and World Report* Best Graduate Schools

- **Regional:**
  - *AsiaWeek*
  - CHE ExcellenceRanking Graduate Programmes

- **HE System:**
  - *University Systems Ranking. Citizens and Society in the Age of Knowledge* (Lisbon Council)
  - National System Strength Rankings (QS)

- **Other:**
  - *Green Metric World University Ranking* (Universitas Indonesia)
  - *Saviors of Our Cities*
Who uses Rankings

- Undergraduate, domestic students
- Parents
- Internationally mobile students and faculty
- Postgraduate students
- Academic partners and academic organisations
- Government/Policymakers
- Employers
- Sponsors, philanthropists and private investors
- Industrial partners
- The public and public opinion
- Ranking agencies/organisations
2. Do Rankings Measure What Counts?
How Rankings Work

• Compare institutions by using a range of indicators:
  – Indicators are chosen by the designers of each system;
  – Different indicators are weighted differently.
• Indicators are proxies, e.g.
  – Student Selectivity = Institutional Selectivity
  – Citations & Publications = Academic Quality
  – Budget & Expenditure = Quality of Infrastructure
• Each indicator is considered independently from each other;
• Final score aggregated to single digit in descending order.
## What Do Rankings Measure?

**Global Rankings Measure**
- Bio- and medical sciences Research
- Publications in *Nature* and *Science*
- Student and Faculty Characteristics (e.g. productivity, entry criteria, faculty/student ratio)
- Internationalization
- Reputation – amongst peers, employers, students

**Global Rankings Do Not Measure**
- Teaching and Learning, incl. ‘added value’, impact of research on teaching
- Arts, Humanities and Social Science Research
- Technology/Knowledge Transfer or Impact and Benefit of Research
- Regional or Civic Engagement
- Student Experience
Do Rankings Measure What Counts? (1)

1. Measuring Student Entry Levels:
   - Assumption that performance is roughly similar throughout career;
   - But ‘Many colleges recruit great students and then graduate great students [but is] that because of the institution, or the students?’ (Hawkins 2008);
   - Do entry scores simply reflect socioeconomic advantage?

2. Measuring Faculty/Student Ratio:
   - One of the only comparable and available indicators that seeks to measure teaching quality;
   - A smaller ratio is viewed as equivalent to better teaching, but it may say more about the funding or efficiency level, with different meanings for public and private institutions and systems;
   - But, what effect does this have on teaching quality and the student experience?
Do Rankings Measure What Counts? (2)

3. **Measuring Resources:**
   - Level of resources as a proxy for the quality of the learning environment, e.g. size of the budget or the library collection;
   - But expenditure per student can penalize ‘institutions that attempt to hold down their expenditures’ and it provides ‘little or no information about how often and how beneficially students use these resources’.

4. **Measuring Education Outputs:**
   - Focus on students who complete/graduate within the determined time-frame as a good measure of quality;
   - But educational performance is influenced by other factors, and may be disadvantageous to lower socio-economic and ethnically disadvantaged groups or mature students whose life or family circumstances disturb normal study patterns.
5. Measuring Research Productivity:

- Counting peer publications and citations is most common method;
- Main beneficiaries are the physical, life, and medical sciences – in contrast:
  - Arts, humanities and social sciences publish in a wide-range of formats;
  - New research fields, interdisciplinary research or ideas which challenge orthodoxy find it difficult to get published or be published in high impact journals.
- Bibliometric databases identify only a selection of peer-reviewed articles;
- English language bias benefits countries where English is native language;
- Ranking journals assumes journal quality is a proxy for article quality.

By measuring ‘impact’ between academics, ignores wider social and academic relevance.
6. **Measuring Reputation:**

- Uses peer review to measure the reputation of a university via survey to academic peers, students, or industry stakeholders;
- But, reputational surveys prone to being subjective, self-referential, and self-perpetuating;
- Benefits older institutions in developed countries and global cities with which there is an easy identification;
- Is it really possible to assess teaching quality, especially at the international level, via reputational surveys?
- Overestimation of a university ‘may be related to good performance in the past, whereas underestimation may be a problem for new institutions without long traditions’.
What Global Rankings tell Us

Because age and size matters, there is a super-league of large, well-endowed, comprehensive universities, usually with medical schools and in English-language countries.
Problems with Rankings

- No such thing as an objective ranking – because:
  - Choice of indicators and weightings reflect value-judgements or priorities of rankers;
  - Measurements are rarely direct but consist of proxies;
  - The evidence is never self-evident.

- Rankings do not measure what people think they measure:
  - Each system measures different things – and are not directly comparable;
  - Measure what is easy and predictable;
  - Concentrate on past performance rather than potential;
  - Emphasis on quantification as proxy for quality;

- Compare complex HEIs across different context and mission.
3. Policy Choices
‘We want the best universities in the world....How many universities do we have? 83? We're not going to divide the money by 83.’ (Nicolas Sarkozy, President, France, 2009)

‘The Higher Education Endowment Fund...[will] support the emergence of world-class institutions;...We are trying to leapfrog universities above the norm.’ (Julie Bishop, Federal Education, Science and Training Minister, Australia, 2007)

‘Work [is underway] on establishing the country's first "research-intensive" university... universities which earned a place in the top 500 rankings...were entitled to financial support’. (Jurin Laksanavisit, Education Minister, Thailand, 2009)

‘The price tag to get one Nigerian university into the global top 200 is put at NGN 5.7 billion [€31m] annually for at least ten years’. (National Universities Commission, Nigeria)
Rankings Reflect Global Competition

- Global rankings have drawn attention to the status and quality of higher education within the global ‘battle for world class excellence’;
- The Global Financial Crisis has heightened need to invest in the knowledge economy and ‘academic capital’;
- These developments have sparked a debate about university reform:
  - Politicians gauge global competitiveness and geo-political positioning within the world-order in terms of the rank of their universities;
  - As funding higher education comes under strain, many governments and institutions are questioning their commitment to mass higher education;
  - Some Governments are concerned their universities may not be elite or selective enough.
- In response, Governments have embarked on significant restructuring of their higher education and research systems.
# Indicator of Global Competitiveness?

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<th>Top 100 Universities</th>
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Rankings and the World-Class University

- The world-class university has become the panacea for ensuring success in the global economy, based on the characteristics of the top 20, 50 or 100 globally-ranked universities;
  - France, Germany, Russia, Spain, China, South Korea, Taiwan, Malaysia, Finland, India, Japan, Singapore, Vietnam and Latvia – among many other countries – have all launched initiatives to create world-class universities;
  - Individual US states (e.g. Texas and Kentucky) have sought to build or boost flagship universities, elevating them to what is known as Tier One status, a reference to *USNWR college rankings*;
- Rankings are providing the basis by which to assess HEIs, e.g.
  - Restructuring system and institutions;
  - Link resource allocation to performance, often measured by rankings.
Two Main Policy Trends

Neo-liberal Model: Concentrate excellence and resources in small number of elite universities

- Create greater vertical or hierarchical (reputational) differentiation;
- Greater differentiation between teaching and research universities;
- Link resource allocation to institutional profiling or other classification tools informed by rankings.

Social-democratic Model: Balance excellence and equity via support for a ‘good quality’ university system across country

- Greater horizontal (mission or functional) differentiation;
- Diverse set of high performing, globally-focused HEIs supporting excellence where it occurs – field specialisation;
- Emphasize close correlation between teaching and research functions;
- Use institutional compacts or strategic dialogues to enforce mission specialisation/differentiation.
Reputation Differentiation: the 'Harvard here' model:

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Field or Mission Specialisation model:

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Gavin Moodie, correspondence 7 June 2009
Other Policy Actions

- Romania, Jordan, Czech Republic – using rankings to help classify universities;
- Mongolia, Qatar and Kazakhstan restrict scholarships to students admitted only to highly ranked (top 100) universities;
- Singapore Foreign Specialist Institute criteria for collaboration;
- Dutch (2008) and Danish (2011) immigration laws target foreigners from top universities (150, and 20 respectively);
- US states benchmark salaries (Florida and Arizona) or ‘fold’ rankings into performance measurement system (Minnesota, Indiana and Texas).
4. World-class Universities or a World-class System?
‘Everyone wants a world-class university. No country feels it can do without one. The problem is that no one knows what a world-class university is, and no one has figured out how to get one. Everyone, however, refers to the concept.’ (Altbach, 2003)

‘Rather than more World-class Universities, what we really need in countries everywhere are more world-class technical institutes, world-class community colleges, world-class colleges of agriculture, world-class teachers colleges, and world-class regional state universities. The United States doesn’t have a world-class higher education system because it has many world-class universities; instead it has world-class universities because it has a world-class higher education system’. (Birnbaum, 2007)

Is the world-class model ‘synonymous with “elite Western” models’? (Salmi, 2009)
Global Rankings Are Inevitable

- Cross-national/jurisdictional comparisons are inevitable by-product of globalization and will intensify in the future;

- Rankings have created sense of urgency and are accelerating the modernisation agenda;
  - Driving up institutional performance and providing some public accountability and transparency;
  - Pushing higher education to focus more on quality and accurate data collection/benchmarking;

- Changing the way we think about higher education, and how we demonstrate value-for-money, and measure performance.
1. Rankings provide useful comparative information about university performance, facilitating student choice & policymaking.

It is difficult to compare whole institutions across different national contexts or measure quality through measurements of quantification. Most rankings focus narrowly on research – especially in the life-sciences. The absence of internationally comparable and meaningful consistent data undermines their credibility.

2. The indicators are a ‘plausible’ and significant measure of research and knowledge creation.

Rankings emphasize a narrow definition of research and fail to recognise the breadth of knowledge’s contribution to society and the economy. They damage the RDI enterprise by failing to value what the EU calls the ‘knowledge triangle’ of education, research and innovation.
Ranking Myths (2)

3. Concentrating resources in a few elite institutions or scientific disciplines will ‘lift all boats’.

Estimates for a world-class university are approx. $1.5-2b annually. Few countries can afford this level of investment without sacrificing other policy objectives. It’s a zero-sum game.

More importantly, it is not obvious this kind of investment will create patentable knowledge that can be exploited, while concentration could reduce overall national research capacity.

4. High ranked HEIs are better than lower ranked institutions.

Rankings have ‘fooled’ people into believing what are the most important indicators of quality.

According to the IAU, there are 15,000 HEIs worldwide. But rankings – and their users – concentrate on only the top 100, less than 1%.
Measuring the Quality of the System

‘We must address the rights of all citizens to share in [society’s] benefits’ (Australia Review of HE, 2008, pxi)

‘In our eyes, America’s best colleges are those that work hardest to help economically disadvantaged students earn the credentials that the job market demands. They’re the institutions that contribute new scientific discoveries and highly trained PhDs. They’re the colleges that emphasize the obligations students have to serve their communities and the nation at large.’ (Washington Monthly, September/October 2009)

‘A university system has a much broader mandate than producing hordes of Nobel laureates or cabals of tenure and patent bearing professors’ (Lisbon Council, Ederer, Schuller and Willms, 2008, p. 6).
Characteristics of a World-class System

• Open and competitive education, offering the widest chance to the broadest number of students;

• Coherent portfolio of horizontally differentiated high performing and actively engaged institutions – providing a breadth of educational, research and student experiences;

• Developing knowledge and skills that citizens need to contribute to society throughout their lives, while attracting international talent;

• Graduates able to succeed in the labour market, fuel and sustain personal, social and economic development, and underpin civil society;

• Operating successfully in the global market, international in perspective and responsive to change.
An Alternative Approach (1)

- The key issue is what is required and for what purpose?
- Align with policy objectives, using qualitative and quantitative tools – not simply testing student performances or counting inputs and outputs;
- To be meaningful comparisons should be conducted at 5 year intervals;
- The collection and control of data and verification of the processes should not be remit of private/commercial providers or self-appointed auditors.

University Systems Ranking (Lisbon Council, 2008)
- **Inclusiveness** – participation rates
- **Access** – Threshold of skill aptitude required for HE graduation.
- **Effectiveness** – Value of HE to labour market as per wage premia.
- **Attractiveness** – Ability to attract international students.
- **Age range** – Lifelong learning capacity as % 30-39 year olds enrolled.
- **Responsiveness** – ability of system to reform and change.
An Alternative Approach (2)

- System-focused methodology, using an agreed set of sophisticated quantitative/qualitative accountability and transparency instruments:
  - Highlight and accord parity of esteem to diverse institutional profiles to facilitate public comparability, democratic decision-making and institutional benchmarking;
  - Identify what matters and assess those aspects of higher education, including improvements in performance not simply absolute performance;
  - Enable diverse users and stakeholders to design fit-for-purpose indicators and scenarios customised to individual requirements.

- Embed methodologies which recognise, incentivise and reward the full spectrum of higher education endeavours across teaching, research and engagement;
Because rankings incentivise behaviour...

• Governments should stop obsessing about global rankings and the top 1% – they risk transforming their higher education system and institutions, and subverting other policy objectives, to conform to indicators designed by others for other purposes;

• What matters is how governments prioritize their objectives of a skilled labour force, equity, regional growth, better citizens, future Einsteins and global competitiveness, and translate them into policy;

• Benchmarking should be used to improve the capacity and quality of the whole system – not simply reward the achievements of elites and flagship institutions.