# Are Rankings a Useful Benchmarking Instrument?

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# Themes

1. Why international comparisons
2. Do rankings measure what counts?
3. Impact of Rankings on Strategy and Policy
4. Rankings: Positive and Perverse Effects

# 1. Why International Comparisons?

# Setting the Context (1)

1. Globalisation is forcing change across all knowledge-intensive industries – including higher education – creating a 'single world market';

2. Because the application of knowledge is the source of social, economic and political power, investment in knowledge is seen as critical to national geo-political positioning. The 'battle for brainpower' now complements traditional struggles for natural resources;

3. Increasing emphasis on elite and world-class. Vertical stratification becoming steeper, with re-newed attention to status and reputation;

4. Trend towards market-steering governance mechanisms with increased emphasis on accountability and transparency;

# Setting the Context (2)

5. Institutional existence is not guaranteed but has to be earned. Higher education is required to respond to a diverse range of global, national, regional and local stakeholders;

6. Worldwide comparisons are becoming increasingly significant – at all levels and for all stakeholders:

   - If higher education is the engine of the economy, then the productivity, quality and status of higher education and university-based research becomes a vital indicator;
   - Global competition is reflected in the rising significance and popularity of rankings which attempts to measure the knowledge-producing and talent-catching capacity of higher education institutions (HEIs).

# EU Context

*Delivering on the modernisation agenda for universities: education, research and innovation* (May 2006)

'Universities should be funded more for what they do than for what they are, by focusing *funding on relevant outputs rather than inputs*,…Competitive funding should be based on *institutional evaluation systems* and on diversified performance indicators with *clearly defined targets and indicators supported by international benchmarking*'.

*Europe 2020: A European strategy for smart, sustainable and inclusive growth (March 2010)*

...Enhance the *performance and international attractiveness* of Europe's higher education institutions and raise the overall quality of all levels of education and training in the EU...'

# Rise of Rankings

- Public calls for greater accountability and scrutiny, pressure for value-for-money, and investor confidence – especially in the current global recession;
- Students have become savvy participants, consumers and customers as the link between HE and career/salary grows;
- Performance assessment of scientific-scholarly research is increasingly important, especially for publicly funded research;
- Greater focus on outputs and performance as mechanism for financing higher education and to actively encourage differentiation;
- Comparing competitiveness of nations and knowledge producing and talent catching capacity of HEIs.

# Most Influential Rankings

- **Global**
  - Shanghai Jiao Tong Academic Ranking of World Universities (ARWU) (2003)
  - *THE* QS World University Rankings (2004)
  - Webometrics (2004)
  - Performance Ranking of Scientific Papers for Research Universities (Taiwan) (2007)
- **Regional**
  - AsiaWeek (2000)
  - CHE ExcellenceRanking Graduate Programmes (2007)
- **Single-country**
  - Das CHE-HochschulRanking (Germany) (1980s)
  - *US News and World Report* (US) (1980s)
  - *Sunday Times*, *Guardian* (UK)
  - *Asahi* Shimbun (Japan) (1994)
- **Business Schools**
  - Financial Times
  - Business Week
- **Graduate Schools**
  - *US News and World Report* Best Graduate Schools

# Recent Additions

- Leiden Ranking (Centre for Science and Technology Studies [CWTS] (2008) (http://www.cwts.nl/ranking/LeidenRankingWebSite.html)
- World's Best Colleges and Universities (US News and World Report [US] (2008) (http://www.usnews.com/sections/education/worlds-best-colleges/index.html)
- Global University Rankings (RatER (Rating of Educational Resources) (2009) (http://www.globaluniversitiesranking.org/)
- SCImago Institutions Rankings (SIR): 2009 World Report http://www.scimagojr.com/index.php
- QS World University Rankings (from 2010)
- THE Thomson Reuters (from 2010)
- EU U-Multirank (to be piloted 2011)

# 2. Do rankings measure what counts?

# How Rankings Work

- Compare institutions by using a range of indicators
  - Different indicators are weighted differently
  - Choice of indicators/metrics are not value-free
- 3 different data sources
  - Independent third parties – e.g. government sources
  - University sources – institutional
  - Survey data – opinions or experiences of stakeholders – students, peer institutions, faculty
- Final score aggregated to single digit

# What do People Want to Know?

- Institutional/field data re. level of intensity, expertise, quality and competence;
- Efficiency level: how much output vis-à-vis funding;
- Quality of faculty and PhD students;
- Attraction capacity and internationalisation;
- Research infrastructure: level of use and efficiency;
- Employability of graduates: trends and competences
- Impact of research on teaching, staff/student ratio;
- Research capacity of HEI & research team;
- Performance benchmarked regionally, nationally & internationally.

# Problems with Rankings

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

# Do Rankings Measure Quality?

- Each ranking system uses different indicators with different weightings – hence each has a different concept of quality;
- Different ranking systems 'provide consistent data for some institutions and inconsistent ones for others' (Usher and Medow, 2009, p13);
- Emphasis on research distorts and undermines other aspects of higher education: teaching and learning, engagement, knowledge exchange and technology transfer;
- Rankings measure the benefits of age, size and money. They benefit large institutions and countries which have more researchers and hence more output.

# Indicators are Proxies for Quality

- Student Selectivity = Institutional Selectivity
- Citations & Publications = Academic Quality
- Budget & Expenditure = Quality of Infrastructure
- Employability = Quality of Graduates
- Reputation = Overall Status and Standing
- Nobel Winners = Quality of Research/Research Standing'

# Different Ways to Measure Quality

| | BEGINNING CHARACTERISTICS | LEARNING INPUTS - STAFF | LEARNING INPUTS - RESOURCES | LEARNING ENVIRON-MENT | LEARNING OUTPUTS | FINAL OUTCOMES | RESEARCH | REPUTATION |
|---|---|---|---|---|---|---|---|---|
| **Melbourne Institute** | 11.0 | 3.5 | 11.0 | 0 | 12.6 | 4.8 | 40.0 | 17.1 |
| **Shanghai Jiao Tong ARWU** | 0.0 | 0.0 | 0.0 | 0 | 10.0 | 0.0 | 90.0 | 0.0 |
| **La Repubblica** | 10.0 | 44.4 | 14.6 | 0 | 10.0 | 0.0 | 20.0 | 0.0 |
| **Rzecpospolita** | 8.0 | 20.5 | 11.5 | 0 | 0.0 | 0.0 | 0.0 | 50.0 |
| **Guardian University Guide** | 28.0 | 35.0 | 10.0 | 0 | 10.0 | 17.0 | 0.0 | 0.0 |
| **Times QS World U Rankings** | 5.0 | 25.0 | 0.0 | 0 | 0.0 | 0.0 | 20.0 | 50.0 |
| **Maclean's U Rankings** | 10.7 | 20.0 | 48.3 | 0 | 5.0 | 0.0 | 0.0 | 16.0 |
| **US News & World Report** | 15.0 | 20.0 | 15.0 | 0 | 25.0 | 0.0 | 0.0 | 25.0 |
| **Asiaweek** | 25 | 28.3 | 10 | 0 | 0 | 0 | 16.7 | 20 |
| **Webometrics*** | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 50 |
| Usher & Savino, 2006 and Usher and Medow, 2009 | | | | | | | | |

# Another Way to Measure Quality

| | Overall Rank | Peer Review 40% | Employer 10% | Citations 20% | Student/ Faculty 20% | Int'l Faculty 5% | Int'l Students 5% |
|---|---|---|---|---|---|---|---|
| Cambridge | 2 | 1 | 1 | 42 | 20 | 30 | 40 |
| MIT | 9 | 6 | 10 | 5 | 59 | 351 | 44 |
| Cal Tech. | 10 | 23 | 142 | 1 | 66 | 1 | 69 |
| UCL | 4 | 22 | 5 | 68 | 15 | 41 | 32 |
| Heidelberg | 57 | 52 | 256 | 176 | 94 | 188 | 111 |
| LSE | 67 | 54 | 4 | 443 | 220 | 13 | 1 |
| NUS | 30 | 19 | 38 | 92 | 329 | 14 | 15 |
| Rice | 100 | 193 | 283 | 49 | 67 | 298 | 160 |
| DIT | 326 | 493 | 202 | 577 | 53 | 450 | 357 |

# 3. Impact of Rankings on Strategy and Policy

# Rankings used as a Management Tool (1)

- US University Presidents (Levin, 2002)
  - 51% attempted to improve their rankings;
  - 50% used rankings as internal benchmarks;
  - 4% established a task force or committee to address rankings,
- International HE leaders (Hazelkorn, 2006)
  - 63% took strategic, organisational, managerial or academic action;
  - 50% monitor performance of peer institutions worldwide;
  - 40% considered an HEI's rank prior to entering into discussion with them;
- Japanese University Presidents (Yonezawa et al., 2009)
  - 47 % refer to world-class rankings as an explicit management objective

# Rankings used as a Management Tool (2)

- Focus on institutional performance and benchmarking;
- Emphasis on strategic positioning:
  - Strategic planning;
  - Priority setting;
  - 'Modernisation agenda'.
- Professionalization of institutional services:
  - Institutional research;
  - Recruitment ;
  - Marketing and branding.
- Performance management:
  - Targets and resource allocation;
  - Academic contracts tied to outcomes.

# Rankings Used as Policy Instrument

2 Main Policy Approaches:

- Create greater vertical or hierarchical (reputational) differentiation (e.g. German, Japan, China, Korea, France):
  - Concentrate excellence and funding in small number of elite universities;
  - Create greater differentiation between teaching and research universities;
  - Using research performance and international visibility + competitive mechanisms and rankings as market indicator/shaper.
- Create greater horizontal (mission or functional) differentiation (e.g. Australia, Norway):
  - 'Create diverse set of high performing, globally-focused HEIs' to support excellence where it occurs – field specialisation;
  - Close correlation between teaching and research functions;
  - Link 'compacts' to mission and performance.

# Other Actions

- Mongolia, Qatar and Kazakhstan restrict scholarships to students admitted only to highly ranked (top 100) universities;

- Macedonia Law on HE (2008) automatically recognises top 500 Times QS, SJT or USN&WR;

- Singapore Foreign Specialist Institute criteria for collaboration;

- Dutch immigration law (2008) targets 'foreigners that are relatively young and received their Bachelor, Master or PhD degree...from a university...in the top 150' of SJT/Times QS.

# 4. Rankings: Positive and Perverse Effects

# Some Positive Effects

- Cross-national/jurisdictional comparisons are inevitable by-product of globalization and will intensify in the future;
- Creating sense of urgency and accelerating modernisation agenda;
- Driving up institutional performance and providing some public accountability and transparency;
- Pushing HE to focus on quality and accurate data collection/benchmarking;
- Changing the way we think about HE, and assess performance.

# Perverse Effects

- Rankings are manifestation of globalization and marketization of HE.
  - They have gained popularity because they (appear to) gauge world class status, provide comparative information and accountability, and measure global competitiveness – in a simple, user-friendly format;
- Public policy imperative is being lost in the (self-interest) belief that elite research universities have a bigger impact on society and the economy.
  - Even in relation to scientific research, rankings do great damage – inducing HE and governments to adopt simplistic solutions and skew research agendas and policies to become what is measured.
- Policymaking by numbers.
  - Quantification of performance has become a powerful tool because it gives the 'appearance of scientific objectivity' (Ehrenberg, 2001, p. 1);
  - Especially in difficult times, tendency to measure .

# A Global Intelligence Information Business

- Many new developments each claiming to solve the problems associated with competitors:
  - THE Thomson Reuters ran aground with its citations;
  - Global Alliance for Measuring University Performance claims it will use 'only transparent, objective, and verifiable data, not subjective opinion surveys'.
- But, all rankings suffer the same defects and distortions:
  - Choice of indicators and metrics is not value-free;
  - Absence of internationally consistent and comparable data definition, collection, and reporting – even within national borders;
  - National context resist attempts to make simple and easy comparisons;
  - Rankings are not the same as comparability.

# The Way Forward (1)

A *system-focused methodology*, using an agreed set of sophisticated accountability and transparency instruments which:

1) Highlight and accord parity of esteem to diverse institutional profiles in order to facilitate public comparability, democratic decision-making and institutional benchmarking,

2) Identify what matters and assess those aspects of higher education, rather than be influenced by the availability of the data, and

3) Enable diverse users and stakeholders to design fit-for-purpose indicators and scenarios customised to individual requirements – but without the capacity to engineer hierarchical ordinal rankings.

# The Way Forward (2)

- Any comparison should be conducted at 5 year intervals
  - Annualised rankings are driven by commercial criteria because HEIs do not change dramatically from year-to-year
- Assessment and evaluation processes must embed methodologies which recognise, incentivise and reward the full spectrum of higher education's endeavours across teaching, research and engagement;
- Collection and control of the data and verification of the methodological processes should not be the remit of private/commercial providers or self-appointed auditors.

# In Conclusion

- Higher education must respond in a constructive manner to the debate about quality and performance, and identify smarter ways to assess and illustrate impact and benefit;
- Political and societal support for HE can only be maintained by quality profiling, performance enhancement and value-for-money which provides (public) investor confidence;
- But, aligning systems to indicators set by others for commercial or other purposes threatens the very foundations of national sovereignty and society.
- Rather than ranking institutions, governments should focus on benchmarking systems.

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http://www.dit.ie/cser/cserexpertise/hepru/
http://www.oecd.org/edu/imhe/rankings