Evaluation Needs and University Rankings: Uneasy Mutual Dependence

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Needs for evidence-based "evaluation" with regard to what HE does [in particular "research"]

Research-derived "knowledge" [most of it being produced and transmitted by higher education and its institutions] becomes an indispensable factor for active stand with regard to opportunities and challenges defined by globalization and advent of the 4th industrial revolution. At the same time, research has become an expensive high-stake actor, which means that governments [society] are making pressures for evidence of performance and quality.

Why there is some validity in saying that "Not everything that counts can be counted; not everything that can be counted counts." [attributed to Albert Einstein], pursuing of measurable evidence is important because:

- ■it can standardize, simplify, and provoke comparison;
- ■it can serve as scorekeeping and empirical base for coherent discussion particularly important in present-day time of globalization [interview with Angus Reaton, Noble Laureate in economics, December 2015].

University rankings

"Rankings" is an evaluation approach which purpose is to assess and display a comparative standing of whole institutions or certain domains of its performance on the basis of relevant data and information collected according to a pre-established methodology and procedures.

There are two types of ranking:

- One-dimensional, which goal is assessing performance of all institutions included in the ranking according to one set of indicators and identical weight attached to a given indicator [expressed as a percent of a total]. A consolidated result of such exercise is presented in ordinal form.
- **Multi-dimensional**, which also use one set of indicators to construct an overall list of performing institutions but its methodology enable users to weight indicators by using own criteria and preferences [it could be called *la carte* ranking].

University rankings: Why it is done

University rankings are based on assumption that measured-based evaluation can be done and as such it has inherent value by:

- •providing basis "to make informed choices" on the standing and performance of academic institutions, study programs etc. for individual or group decision-making;
- fostering healthy competition among academic institutions;
- stimulating an emergence of centres of excellence, world-class universities;
- •providing additional rationale for allocation of research funds;
- ■responding to agenda of "quality assurance" and transparency tools;
- becoming a tool for marketing and public relations.

"The growing concern for the quality and assessment of university-based research partly explains the increasing importance attached to university rankings, especially global rankings."

"Rankings enjoy a high level of acceptance among stakeholders and the wider public because of their simplicity and consumer-type information."

[Ref. Assessing Europe's University Based Research, European Commission, 2010]

Global /international university rankings

A. **Most frequently** referred to:

- -Academic Ranking of World Universities (ARWU) [Centre for World-Class Universities, Shanghai's Jiao Tong University], China (2003);
- -QS World University Rankings [Quacquarelli Symonds], UK (2010);
- -THE World University Ranking [Times Higher Education], UK (2010);
- -U-21 Ranking of National Higher Education Systems [Institute of Applied Economic and Social Research], Australia (2012);
- -U-Multirank [supported by the European Commission], (2014).

B. Other widely-recognized rankings:

- Webometrics Rankings of World Universities [Cybermetrics Lab, Spanish Consejo Superior de Investigaciones Científicas (CSIC)], Spain (2007);
- Performance Ranking of Scientific Papers of World Universities from Higher Education Evaluation & Accreditation Council of Taiwan (2007);
- ■CWTS Leiden Ranking [Centre for Science and Technology Studies, University of Leiden], the Netherlands (2008);
- SCImago Journal and Country Ranking [SCImago Research Group], Spain (2009);
- UI GreenMetric Ranking of World Universities [Universitas Indonesia] (2010);
- ■Best Global Universities Rankings [U.S. News & World Report] (2014).

Who does university rankings [global/international and national]

There are more than 100 national and some 20 global/international university rankings.

Contrary to going perception a number and type of providers of ranking is quite diversified:

- media and knowledge management agencies
- academics themselves
- independent professional organizations
- accrediting bodies
- funding bodies;
- individual/group initiatives;
- international bodies and organizations.

Data and informational base for university rankings

- Public domain data and information collected by governments and various agencies involved in higher education and research.
- Bibliometrics and deriving from it national and international data bases - <u>ISI Web of Knowledge</u> (Thomson Reuters), Web of Science (Clarivate Analytics), <u>Scopus</u> (Elsevier), and Google Scholar.
- Surveys which allow receiving opinions of various stakeholders in order to obtain qualitative information.
- Data and information collected by institutions of higher education [regularly collected; exclusively requested and provided to those conducting rankings].

Number of indicators on which a particular ranking is based varies – from 1 to more than 70.

informational shortcomings and methodological challenges of university rankings

- Favours research outcomes in natural and life sciences visà-vis humanities and arts encourage convergence towards a research-dominated model and reducing system diversity.
- Questioning appropriateness of aggregating information across a range of study programs in case of a large and multi-disciplinary research university into a single ranking number.
- Seek to capture characteristics that cannot be measured directly and require indirect proxies while the presentation of outcomes is based on the arbitrary assignment of weight to variables.
- Lack or insufficient "warning clause" about the methodological limitations of a particular rankings.
- Conceptual problems in devising measures of 'value added' in teaching and learning.

University rankings has/are evolving

- The adoption in May 2006 of the Berlin Principles on Ranking of Higher Education Institutions known as the "Berlin Principles". The 16 principles articulate several standards of good practice recommending that rankings should (www.ireg-observatory.org):
- recognize the diversity of institutions and take the different missions and goals of institutions into account;
- be transparent regarding the methodology used for creating the rankings;
- measure outcomes in preference to inputs whenever possible;
- use audited and verifiable data whenever possible;
- provide consumers with a clear understanding of all of the factors used to develop a ranking, and offer them a choice in how rankings are displayed.

All these principles have been integrated in "IREG Ranking Audit Manual"

IREG Observatory

In October 2009, informal network become the **IREG Observatory on Academic Ranking and Excellence** [IREG Observatory]. It is a non profit membership organization of a scientific and educational nature.

Its raison de etre is:

- Enhance public awareness and understanding of academic ranking and academic excellence;
- Set-up standards and promotion of good practices with regard to elaboration and use of national, regional and international rankings;
- Undertake analysis and provide assistance deriving from the impact of ranking on institutions of higher education, stakeholders and policy making;
- Undertake analysis of expressions of academic excellence.

Final observation and few advices

In a field as error-strewn as statistical evidence of academic quality caution is always wise. It needs to be said that ranking can only be a proxy reflection of the complex work of higher education and other academic enterprises. Therefore:

- Recognize that there is also a possibility of "great scholars and not so great universities". Try to find them and provide support.
- It is irresponsible to take any personal or institutional decision solely based on rankings.
- Use other research evaluation methods such as systematic peer review, consultations, benchmarks.

Institutions and academia need to come to terms with new conditions in which higher education and academic organizations function in which competition is more evident than before but if they are to compete [nationally or internationally] be inspired but do not be mesmerized by ranking.