

TENDENCIES IN DEVELOPING UNIVERSITY RANKINGS AND THE WAYS OF IMPROVING THEM

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Abstract. The article is devoted to university rankings: the problems of their development, the real results of their use based on the role they fulfil in modern society. The university rankings classification according to the level of coverage of universities (international global, international regional, national, intra-university rankings), the target groups of users (rankings for applicants, for employers, for investors and financial donors, for society, general rankings), the methodology of compiling (rankings based on objective indicators, on peer reviews, mixed rankings) is developed. It is emphasized that the objectivity of university ranking depends largely on its methodology that above all covers its philosophy and methods of preparing. Philosophy of university ranking reflects its main idea, the purpose and the objectives of compiling, target audience, and the principles of formation. The methods of preparing comprise evaluation indicators, methods of their weighting (weight ratio), methods of surveys and experts selection, data sources for indicators assessment, verification of ranking results, ways and means of their publication, etc.

Key words: globalization, university rankings, Higher Education Institutions, quality evaluation tools,

Problem statement. Globalization of the educational environment and the educational services market caused the development of tools for assessing the quality of such services by both their direct consumers and the employers. University rankings are one of indirect but most common and most accessible to the public tools of education services quality evaluation in the system of higher education.

At present, a large number of university rankings are compiled at the national levels of individual countries, at the regional levels (Europe, America, Asia etc.), and also on a global (worldwide) scale. Obviously, different rankings present different information about the position of particular universities, and this fact, on the one hand, complicates the evaluation of the quality of their educational services in the process of decision-

making by the users of such rankings, and, on the other hand, causes discontent among the members of the university academic communities concerning the position of their universities in these rankings. Taking into account that the authorities of Higher Education Institutions (hereinafter – HEIs) and the society in general consider university rankings primarily in the marketing aspect, every publication of any ranking is usually accompanied by considerable criticism. Especially severe is the criticism of the international university rankings due to the fact that globalization of the world economy makes the market of educational services extremely competitive.

Analysis of recent research and publications. Despite the criticism, there is quite a number scientific works and publications devoted to university rankings, especially international ones, that present the results work of independent expert or intergovernmental organizations. Some of them deal exceptionally with HEIs rankings (e.g. IREG), while others highlight the field of higher education in general. The scientific papers generally reflect the comparison of different rankings according to their results, the methods of compiling or directly according to the indicators formed by these methods [1, 2]; analysis of statistical parameters of individual rankings, including those that characterize the laws of rankings indicators distribution [3]; specific measures for improving the position of universities in rankings [4]; the role of university rankings as tools of transparency that indirectly characterize the quality of educational services [5] etc.

The criticism of international university ranking systems has led to creation of an International Ranking Expert Group (IREG), whose mission is to develop principles of rankings

formation, which would provide an objective evaluation of universities' performance [6]. However, criticism and dissatisfaction with the results of rankings are still continuing. In our opinion, this is caused by the lack of proper understanding of the role and purpose of the university rankings both by their users and by their compilers. Thus, **the aim of this research** is to study the trends in developing university rankings as to the correspondence of the purpose of their compiling to the results of their actual use with the account of the role assigned to them in the modern society.

Material presentation. The purpose of compiling HEIs rankings, as one of the tools of educational environment transparency, is to provide users with the information necessary for:

- choosing HEIs for entrance by applicants;
- selecting specialists by employers;
- allocating funds for higher education financing by the state, local communities, NGOs or charities, businesses etc.;
- determining directions of HEIs development and so on.

It is clear, that such a multidimensional purpose of these ratings as well as the fact of their being intended for different target user groups cannot be objectively achieved by one ranking of universities. This explains the existence of many rankings that may have different purpose and target direction. In general, university rankings can be classified in many ways (Fig. 1).

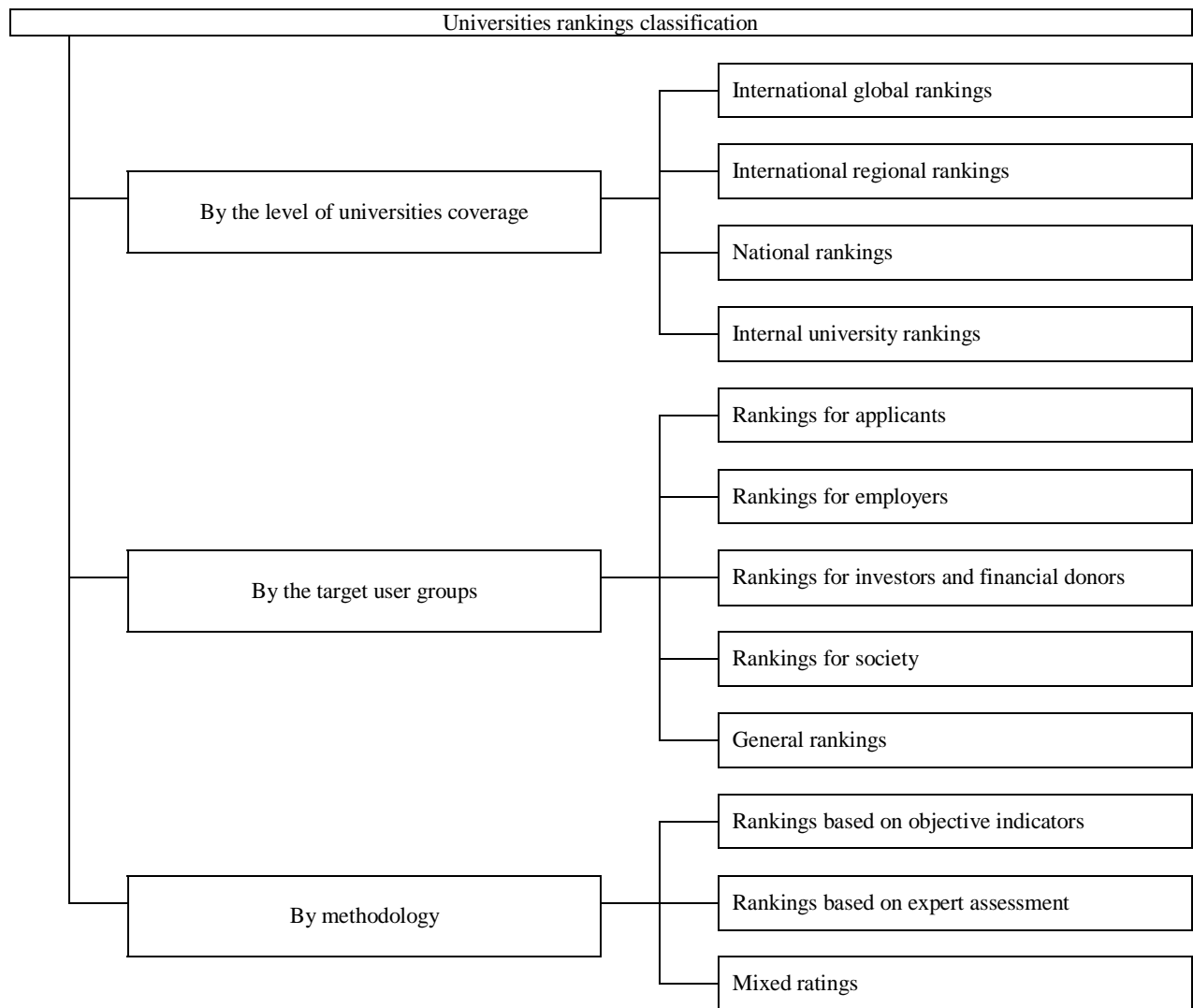


Fig. 1. Classification of universities rankings

Tendencies in developing university rankings and the ways of improving them

According to the level of universities coverage by ranking, four types of rankings can be distinguished:

- international rankings of universities covering the global space of higher education. The most popular global rankings of universities are: The Academic Ranking of World Universities (ARWU/ Shanghai ranking) compiled by Jiao Tong University; the rankings published by the British magazine Times Higher Education (THE) – THE World University Rankings; the rankings published by the company British Quacquarelli Symonds (QS) – QS World University Rankings; Webometrics Ranking of World Universities, also known as Ranking Web of World Universities published by the Cybermetrics Lab, a research group of the Spanish National Research Council (CSIC) located in Madrid [7, 8, 9, 10];

- international regional rankings which rank universities of a particular geographic area, usually a continent. Sometimes regional universities rankings are formed by the compilers of global rankings. Thus, British Quacquarelli Symonds but for “QS World University Rankings” also compiles some regional universities rankings: “QS University Rankings: Asia”, “QS University Rankings: Latin America”, “QS University Rankings: BRICS” (a dedicated ranking of the top 100 universities in the BRICS countries (Brazil, Russia, India, China and South Africa) etc. [9];

- national rankings of universities that embrace the higher education environment of a particular country. In Ukraine, such rankings are HEIs rankings that is formed under the auspices of the Ministry of Education and Science of Ukraine as well as “Compass” and “Top 200 Ukraine” rankings [11, 12, 13];

- internal university rankings that assess the state or activities of one university. For example, in the system of quality management of Lviv Polytechnic National University the departments and academic staff are annually ranked, and every semester students rankings are calculated [14].

International and national rankings can also include rankings by the subject or industry criterion, for example, rankings of technical universities or rankings of medical universities, as well as rankings

on the basis of a certain status, for example, rankings of research universities and so on.

By the target user groups the universities rankings can be compiled for employers, students, financial donors etc. There are also general rankings that are not targeting any particular social user group. Most HEIs rankings are perceived by the public as general, although some of them are designed for a specific group of users. In particular, the global ranking “QS World University Rankings” is aimed primarily at meeting the information needs of applicants; national ranking “Compass” has been initiated as a survey of employers (although today its methodology involves also surveys of alumni, but the subject of ranking is still the assessment of the practical value of acquired knowledge and job prospects); the primary task of the Shanghai ranking (it was first published in 2003) was to show lagging of Chinese universities from the world leading universities, so its main user was the Chinese government that had to take certain measures to improve the quality of higher education in this country, this being the evidence of the fact that the Shanghai ranking is first of all intended for financial donors.

Although the mentioned above rankings have target orientation, they are perceived by the public as general, which, in our opinion, is one of the reasons for their criticism. The narrow purpose of rankings allows to concentrate its methodology more thoroughly on the necessary aspects of the university’s performance and to choose the right indicators that will help to increase the objectivity of evaluation results. However, in this case the other, equally important, aspects of university performance are neglected. For example, rankings focused on the employers pay little attention to the social conditions of training, students’ accommodation, scientific research etc. For the target group of universities ranking users such aspects of university activities may be indeed unimportant, but often rankings are published for the wide audience, not only for the target user group. Meanwhile, other users who are not the part of the rankings’ target groups while evaluating the results do not always take into account that rankings might have inherent drawbacks and limitations.

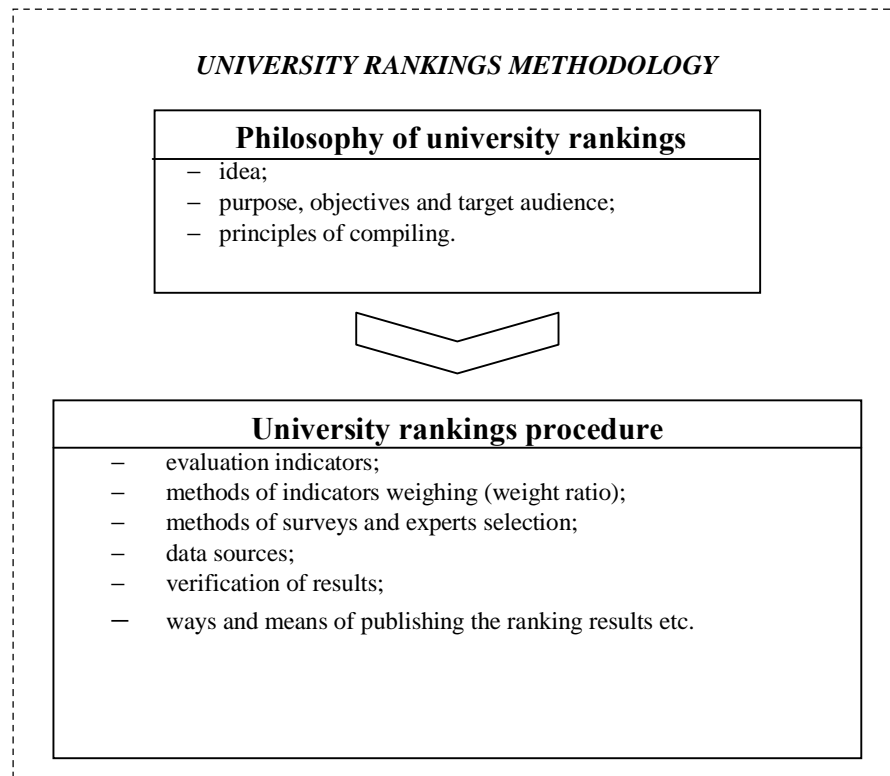


Fig. 2. Formation of universities rankings methodology.

Therefore, the objectivity of HEIs ranking depends largely on its methodology that above all covers its philosophy and methods of compilation (Fig. 2). Philosophy of universities ranking reflects its main idea, the purpose and the objectives of compiling, target audience, and the principles of formation. These concept components of rankings philosophy are actually the factors that determine the essence of compiling procedure, that is: evaluation indicators, methods of their weighing (weight ratio), methods of surveys and experts selection, data sources for indicators assessment, verification of ranking results, ways and means of their publication etc.

University rankings methodology can be based both on objective indicators, with quantitative measurement, and expert assessments. The use of expert assessments, according to some critics, reduces the objectivity of rankings. However, it is impossible to compile a ranking without any experts at all, even if such a ranking is based only on objective indicators, because expert judgments are necessary for selecting indicators, defining criteria of their weighing, and eventually, the selection of experts itself is based on certain expert judgment. Therefore, most university rankings are mixed.

The change of the type of economic system in the leading developed countries of the world, in particular, the formation of intellectual and innovative economies (knowledge economies), which finally determines the trends of global economy as well has led to the focusing of university rankings (especially international) on their research potential. Thus, just the research universities occupy first positions in the leading international universities rankings (Table 1).

However, excessive focusing of international university rankings on universities' research capacity has caused sharp criticism of these rankings by the authorities of universities (usually of those that are not research universities or cannot reach a high position in rankings), and also by the scientists and experts. In particular, the Shanghai ranking is criticized for taking into account the number of alumni and staff of institutions winning Nobel Prizes and Fields Medals that meet the philosophy of this ranking, aimed at forming "a standard" of the world-class university. It is just this indicator that became almost the main reason for criticizing the Shanghai ranking, due to at least two reasons:

Extract from the leading international universities rankings in 2013 [7, 8, 9]

Number of position in the ranking	Academic Ranking of World Universities	QS World University Rankings	Times Higher Education World University Rankings
1	Harvard University	Massachusetts Institute of Technology	California Institute of Technology (Caltech)
2	Stanford University	Harvard University	University of Oxford
3	University of California, Berkeley	University of Cambridge	Harvard University
4	Massachusetts Institute of Technology (MIT)	University College London	Stanford University
5	University of Cambridge	Imperial College London	Massachusetts Institute of Technology (MIT)
6	California Institute of Technology	University of Oxford	Princeton University
7	Princeton University	Stanford University	University of Cambridge
8	Columbia University	Yale University	University of California, Berkeley
9	University of Chicago	University of Chicago	University of Chicago
10	University of Oxford	California Institute of Technology	Imperial College London
11	Yale University	Princeton University	Yale University
12	University of California, Los Angeles	Swiss Federal Institute of Technology in Zurich (ETH Zurich)	University of California, Los Angeles (UCLA)
13	Cornell University	University of Pennsylvania	Columbia University
14	University of California, San Diego	Columbia University	ETH Zürich – Swiss Federal Institute of Technology Zürich
15	University of Pennsylvania	Cornell University	Johns Hopkins University
16	University of Washington	Johns Hopkins University	University of Pennsylvania
17	The Johns Hopkins University	University of Edinburgh	Duke University
18	University of California, San Francisco	University of Toronto	University of Michigan
19	University of Wisconsin – Madison	Swiss Federal Institute of Technology in Lausanne (EPFL)	Cornell University
20	Swiss Federal Institute of Technology Zurich	King's College London	University of Toronto

1) there are objectively not enough Nobel Prizes and Fields Medals for all universities, considering ratio between the number of such laureates and the number of universities;

2) according to American experts, implicit knowledge that cannot be presented verbally, but becomes explicit only in the context of its application, plays much more significant role in the development of innovative capacity [15, p. 57-58]. It is the ability to accumulate and transfer to students this implicit knowledge that determines the research capacity of the university, whereas the

presence in university research and teaching staff or among its alumni one or more Nobel Prizes and Fields Medals winners does not indicate the achievement of this task.

Moreover, the activities of universities as social institutions should be directed at fulfilling socially important objectives, among which the central place belongs to the formation of an educated person as a bearer of knowledge and a subject of its reproduction. The universities focusing on research capacity promotes the development of “academic capitalism”, i.e.

commercialization of research, venture business that finally undermines the fundamental scientific values [15, c.56-60]. Nevertheless, the main activity of universities is education, but in HEIs rankings, according to many experts, this function is not sufficiently reflected.

On the other hand, the international rankings are criticized for mainly advertising and marketing approach to the selection of their indicators that are largely designed to meet the information demands of potential consumers of educational services – applicants [16, 17]. However, in marketing of educational services, due to their social implication, it is impossible, as in other areas of economic activity, to be focused only on the consumer.

Conclusions. Publication of successive national, regional or international universities rankings, particularly on the eve of the HEIs entrance campaigns, usually attracts wide public attention. As the public perceives universities rankings as a kind of advertising and marketing, the authorities of HEIs and their academic communities are periodically involuntarily involved into the public debate on the quality of the educational services provided by a certain HEI that is based on rankings as indirect assessments. However, those who use rankings do not always correctly and adequately perceive their results regarding the purpose of the rankings formation. Each part of the society perceives rankings primarily in terms of their own information requests. Demand always causes supply, therefore, in our opinion, we will observe in the future the tendency of further “specialization” of university rankings following the public demand, with the simultaneous increase of the role of the global rankings that will establish the standards of universities and will serve as a benchmark for the development of universities’ activities. Herewith, taking into account the innovative and intellectual nature of the global economy, it is the research capacity of universities that should be one of the major factors in selecting indicators for forming university rankings, though not at the expense of the universities educational activities that are considered by the society to be fundamental university activities.

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