

UNIVERSITY RANKINGS AS TOOL FOR REFORMATION OF UNIVERSITY EDUCATION IN UKRAINE

Sergiy Kurbatov

Centre for Russian and Eurasian Studies, University of Uppsala (SWEDEN)

sergiy.kurbatov@gmail.com

Abstract

The idea of an international university ranking is relatively new, but for a decade now it has been extremely influential among academics. "Global university rankings have cemented the notion of a world university market arranged in a single 'league table' for comparative purposes and have given a powerful impetus to intranational and international competitive pressure in the sector" (Simon Marginson, Marjik van der Wende, 2007) [1]. Moreover, we think the process of ranking is relevant to contemporary reality, in which the factor of adequate representation in the informational sphere is becoming more and more important. The high level of technological and technical development of human civilization presents numerous challenges to the system of higher education and to each University in particular. The globalized world needs new model of the University, and the idea of "World Class Universities" is one response to these challenges. The classical quality criteria of the WCU, which evaluate teaching and research potential with the addition of social, business, and other innovative dimensions of University activities, must also be taken into consideration.

The history of Ukrainian University ranking starts in 2000, when the project "Sophia Kyivska" [2] was established by the International Academy of Personal Management, the Institute of Higher Education of Academy of Pedagogical Sciences of Ukraine, the Ukrainian Institute of Social Researches and other academic institutions. It was based mostly on two types of survey: among experts in academic area and among potential students. Thus, this ranking evaluates mostly the level of attractiveness of University among different audiences.

Two rankings of Ukrainian Universities, based mostly on internationally recognized standards and approaches, are "TOP 200 Ukraine", which was developed by the Department of UNESCO -- "High Technical Education, system analyses and informatics" of National University "KPI" and the Ukrainian weekly "Mirror of the Week"(2007) [3], and "Compass", which is run and financed by the SCM Group and Foundation "Development of Ukraine"(2008) [4]. The ranking "TOP 200 Ukraine" was criticized by Ukrainian researchers (Sergiy Kurbatov, 2007) [5] for its purely formal approaches (for example, evaluation of international activities mostly through membership in different associations) and for ignoring some important measurable indicators (for example, number of publications and citations of faculty members).

This work has received considerable public attention and numerous publications in mass media. We argue that this process needs to be continued and improved through active international cooperation and the implementation of internationally recognized principles, like the Berlin Principles (Ying Cheng and Nian Cai Liu, 2008) [6]. To be sure, international rankings give us a simplified picture of a World Class University. But without this simple picture it is impossible to identify the main dimensions for reforming the system of higher education, though it is a simple matter to imitate such reforms. The "language" of international ranking is now a kind of academic Esperanto, which gives to each University an opportunity to be a part of the modern globalized University system.

Keywords: University ranking, World Class University, new model of the university.

1 INTRODUCTION

The idea of an international university ranking is relatively new, but for a decade now it has been extremely influential among academics and other target audiences. "Global university rankings have cemented the notion of a world university market arranged in a single 'league table' for comparative purposes and have given a powerful impetus to intranational and international competitive pressure in the sector" (Marginson, van der Wende, 2007) [1]. Moreover, we think the process of ranking by itself is relevant to contemporary reality, in which the factor of adequate representation in the informational sphere is becoming more and more important. A kind of open competition, which is provided through

rankings, makes University life more attractive for public and destroys the effect of "Ivory Tower" with the relevant elitism. The high level of technological and technical development of human civilization presents numerous challenges to the system of higher education and to each University in particular. How to generalize these numerous challenges? How to understand the role and place of University education in contemporary society, which is often called "knowledge society" or "learning society" (Valimaa, Hoffman, 2008) [7]? To some extent, University is the central economic and social institution of this new type of society and this new mission enforces radical transformation of its main forms, structures and functions.

The globalized world needs new model of the University, and the idea of "World Class University" is one response to these challenges. "In the past decade, the term "world-class university" has become a catch phrase, not simply for improving the quality of learning and research in tertiary education but also, more important, for developing the capacity to compete in the global tertiary education marketplace through the acquisition, adaptation, and creation of advanced knowledge"(Salmi, 2009) [8]. The classical quality criteria of the World Class University, which evaluate teaching and research potential with the addition of social, business, and other innovative dimensions of University activities, must also be taken into consideration for objective evaluation of adequate University performance. The "Third Mission of the University" (Patricio Montesinos, Jose Miguel Carot, Juan-Miguel Martinez, Franco Mora, 2008) [9] could be an excellent start point for the discussion about further modifications of classical "idea of University"(Jaroslav Pelican, 1992) [10]. University rankings give to national universities a kind of guidance how to be competitive at global academic market, how to transform their activities and functions (sometimes at institutional level) in order to be relevant to current economical and social demands. That is why it is extremely important to introduce decision- makers in the area of University education to the fundamental principles of creating rankings and their main indicators.

When we compare different things we need objective criteria, which give us the opportunity to construct a hierarchical order. It is impossible to compare incompatible, so it is important to have certain level of consensus among academic community regarding important dimensions of current university activities. But where we have some specific criteria but remain in ignorance of other dimensions of University activity, one cannot achieve an objective picture. We have a situation of "the distillation of complex reality into a limited set of attributes to determine an institution's placement" or "simplification" (McCormick, 2008) [11]. But any theoretical construction is a kind of simplification of multi-dimensional reality. In case of Universities we think it is impossible to cover even the most important dimensions of its activities in a single specific ranking system. However, as the case of the most influential rankings of world Universities (Academic Ranking of World Universities by the Institute of Higher Education, Shanghai Jiao Tong University [12], The Times Higher Education World University Rankings[13], QS World University Rankings [14], Ranking Web of World Universities[15] and others) shows, we can formulate criteria for evaluation of teaching and research activities. These criteria (which could be flexible) can then serve as a kind of guidelines for reforming national systems of higher education. Such a reform is especially important in countries with transitional political and economic system, like Ukraine. We believe that rankings of world Universities and their criteria can contribute to clarifying the contemporary vision of the University for Ukrainian University Management, policy makers and other people, who influence the educational politics here.

2 UNIVERSITY RANKINGS AND UKRAINE

2.1 Ukrainian system of University education

Ukraine has a really developed system of University education. According to the date from State Statistic Service of Ukraine [16], in February, 2011 our country has 854 higher educational institutions of the 1-4 level of accreditation, with more than 2491000 students. The number of students in Ukrainian higher educational institutions increased 2,5 times since 1991, the year when Ukraine became independent state. The number of the higher educational institutions of the 3-4th levels of accreditation (which could be marked as universities according to Western system of education) during this period increased from 149 to 349. In 2010 543,7 thousands people graduated from higher educational institutions and this is four times more, than in 1991. The number of doctoral students during 1991-2010 increased three times.

Knowledge economy index (KEI) for Ukraine in 2009 was 6,00 and according to it this country has 51 position in the list of 145 countries [17]. Global Competitiveness Report 2010-2011[18] ranked Ukraine

as 56th with the score 3,9 according to quality of the educational system. According to tertiary education enrolment rate Ukraine is the 8th in the world. At the same time according to GDP per capita in 2009 Ukraine with 2542 USD was 96th in the world. General Global Competitiveness Index ranks Ukraine as 89th country in the world, so we could mention the system of Ukrainian University education as one of the most competitive in comparison with other components, which were evaluated in this index. In 2011-2012 [33] according to the General Competitiveness Index Ukraine improved its position and was 82nd country in the world, but according to quality of education system it performs worse and was 62nd with the score 3,82. According to tertiary education enrolment rate Ukraine become this 7th country in the world. According to Human Development Index in 2010 Ukraine was 69th country in the world [34].

There were no one Ukrainian university in Academic Ranking of World Universities by the Institute of Higher Education, Shanghai Jiao Tong University [12], The Times Higher Education World University Rankings [13] and QS World University Rankings[14] in 2010. In 2011 two Ukrainian universities appear under the number 601+: National Technical University of Ukraine “Kyiv Polytechnic Institute” and Donetsk National University [14]. In Ranking Web of World Universities [15] among top 12000 world universities in July, 2011 were 137 Ukrainian ones. The best among them were National Taras Shevchenko University of Kyiv (1321 position), National technical University of Ukraine Kiev Polytechnic Institute (1325 position), Kharkov National University VN Karazin (1395 position), Ivan Franko National University of Lviv (1409 position) and Lviv Polytechnic National University (1738 position) [19]. The five top Ukrainian universities on July, 6, 2011 according to SciVerse Scopus bibliographic database [28] could be observed from the table 1:

Table 1

N	University	Number of publications	Number of citations	h-index
1.	Taras Shevchenko National University of Kyiv	8686	23552	49
2.	VN Karazin Kharkiv National University	5312	16632	41
3.	Ivan Franko National University of Lviv	3688	11928	33
4.	Odessa National University named after I.I. Mechnikov	2011	5695	31
5.	National technical University of Ukraine “Kyiv Polytechnic Institute”	3445	5157	29

In general, we need to mention that Ukraine have a large University infrastructure, which at the same time could not perform competitively at global educational market. This is the result of low level of financial support of R&D activities at University level – total state budget for R&D activities in Ukraine in 2010 was 465,3 millions USD [29]. Also, the University managers mostly represent the old generation of academic people and are often in captivity of prejudices and stereotypes of the soviet times, for example regarding international cooperation. International University rankings could be a relevant tool for explanation for decision-makers in the system of Ukrainian University education what are contemporary world-class universities, how they perform and function.

2.2 The main University rankings in Ukraine and their results

Although the process of creation of national University rankings was started in 1983 in the USA, the first Ukrainian University ranking was established in 2000, when the project "Sophia Kyivska" was established by the International Academy of Personal Management, the Institute of Higher Education of Academy of Pedagogical Sciences of Ukraine, the Ukrainian Institute of Social Researches and other academic institutions [2]. It was based mostly on two types of survey: among experts in academic area and among potential students. Thus, this ranking evaluates mostly the level of attractiveness of University among different audiences and had subjective character.

In 2006 the process of ranking of Ukrainian Universities was started by the Ministry of Education and Science of Ukraine [20]. This ranking is based on six criteria: teaching potential; international activity; the quality of education and the level of research activities among students; material background of Universities; and scientific research among the faculty. The data for this ranking come from materials for the accreditation of University by the Ministry, so it is calculated entirely on the basis of formal criteria.

The idea of ranking also became attractive for our mass media. Since 2007 the Ukrainian journal "Money" has published its own ranking [21], based on a survey of the most prestigious employers, who evaluate the graduates of different Ukrainian Universities. In 2007 another popular Ukrainian journal "Korrespondent" started its own ranking, based on the competition during the admission process (number of applicants per place) and the opinion of employers about quality of knowledge among the graduates. Later this ranking began to base on the opinion survey of the largest Ukrainian employers [22]. Ranking of Ukrainian weekly "Comments" [23], which also based on the opinion survey of the largest Ukrainian employers, was established in 2010.

Two rankings of Ukrainian Universities, based mostly on internationally recognized standards and approaches, are "TOP 200 Ukraine" [3], which was developed by the Department of UNESCO -- "High Technical Education, system analyses and informatics" of National University "KPI" and the Ukrainian weekly "Mirror of the Week" in 2007, and "COMPASS" [4], which is run and financed by the SCM Group [24] and Foundation "Development of Ukraine" [25] since 2008.

"TOP 200 Ukraine" in 2011 was calculated according to evaluation of 21 indicators (80%) and opinion survey among educational experts (20%) [26]. Its main formula: Integrated Index(II)= Index of Quality of Teaching and Research Potential of Faculty(IQTRP – 10 indicators)+ Index of Quality of Teaching (ICT – 4 indicators)+ Index of International Activities (IIA – 7 indicators). The ranking "TOP 200 Ukraine" was criticized by Ukrainian researchers (Sergiy Kurbatov, 2007 [5]) for its purely formal approaches (for example, evaluation of international activities mostly through membership in different associations) and for ignoring some important measurable indicators (for example, number of publications and citations of faculty members). The ten best universities in 2010 according to the University ranking "TOP 200 Ukraine" [27] are presented in table 2:

Table 2

N	University	Integrated Index
1.	National technical University of Ukraine "Kyiv Polytechnic Institute"	70, 103
2.	Taras Shevchenko National University of Kyiv	69, 97
3.	VN Karazin Kharkiv National University	46, 39
4.	Bogomolets National Medical University	41, 54
5.	National University of "Kyiv-Mohyla Academy"	40, 69
6.	National University "Kharkiv Polytechnical Institute"	40, 34
7.	National Mining University	35, 13
8.	Dnipropetrovsk National University	35, 02
9.	National University of Life and Environmental Sciences of Ukraine	34, 03
10.	Kyiv National Economic University named after Vadym Getman	30, 87

As we see, here we have mostly universities from the capital of Ukraine, Kyiv (6 positions, including 2 top), Kharkiv (2 positions) and Dnipropetrovsk (2 positions). Also, we could mark the absence in the first top of this ranking Ivan Franko National University of Lviv, which is among the top five Ukrainian universities according to Ranking Web of World Universities and SciVerse Scopus bibliographic database.

The University ranking “COMPASS”[4] is based on the methodology developed by Kiev International Institute of Sociology [30], which could be identify as opinion survey among few target groups: University graduates, employers and experts. This ranking has four main criteria: 1) the level of satisfaction of education and its implementation in professional life from University graduates (weight coefficient 0,10); 2) the perception of quality of Ukrainian University education by employers (0,31); 3) the perception of quality of Ukrainian University education by the experts (0,29) and 4) evaluation of the level of cooperation between universities and labor market(0,30). For example, 1182 graduates from 233 Ukrainian universities and representatives of 964 companies participated in survey. The top Ukrainian universities according to ranking “COMPASS” are presented in table 3:

Table 3

N	University	Score
1.	National technical University of Ukraine “Kyiv Polytechnic Institute”	87
2.	Taras Shevchenko National University of Kyiv	81
3.	Kyiv National Economic University named after Vadym Getman	53
4.	National University of “Kyiv-Mohyla Academy”	46
4.	Kyiv National University for Construction and Architecture	45
5.	Lviv Polytechnic National University	41
5.	Donetsk National Technical University	40

Again, the majority among the seven top Ukrainian universities according to ranking “COMPASS” are located in Kyiv (5), also one university from Lviv and one from Donetsk are presented. Kharkov National University VN Karazin, which are among the top tree Ukrainian universities according to Ranking Web of World Universities and SciVerse Scopus bibliographic database is beyond the top.

2.3 Rankings as a tool for reformation of universities

For creation of theoretical and methodological background for the adequate ranking of Ukrainian university a special concept was developed in 2009 at the Institute of Higher Education, National Academy of Pedagogical Sciences of Ukraine under my coordination [31]. According to this concept the optimal for Ukrainian system of University education ranking could include three main criteria: 1) quality of teaching; 2) quality of research activities and 3) perception of University among the main target audiences. *The quality of teaching* could be calculated according to the following indicators: a) quality of faculty; b) ratio of students and teachers; c) the level of internationalization among the faculty and the students and d) the level of informative and technological support of teaching processes. *The quality of research activities* includes: a) number of patents by faculty and students; b) number of publications in leading academic journals; c) index of citing of faculty and d) amount of grants and other financial resources from external sources per one faculty member. *The perception of University among the main target audiences* could be based on: a) the evaluation of the level of competitiveness of graduates at the labor market by employers; b) evaluation of the quality of teaching and research activities by students and graduates and c) evaluation of the University by expert in the area of education.

These three dimensions of activities cover the most important components of the University mission: teaching, research and the visible presence of University in public sphere as an active and influential actor (the 3rd mission of the University). So, with the proposed indicators we try to fix important

aspects of all three dimensions. The indicators were selected from different rankings for the purpose of creation more objective, multi-dimensional ranking system. On the other hand they could give a clear vision of the ways of reformation and improving of the situation for managers and other policy-makers in the area of University education. This is especially important for current Ukrainian situation, because join the TOP of the leading international University ranking for the best Ukrainian universities was marked in 2010 as an indicator of successful realization of the Program of economic reforms for 2010-2014 by current President of Ukraine Viktor Yanukovich "Prosperous Society, Competitive Economics and Effective State" [32]. So, the state enforces Ukrainian universities to be much more sensitive to University ranking's issue and, as a result, to be more competitive at global educational market.

3 CONCLUSIONS

We see that international and national University rankings play important role in shaping of contemporary educational policies. Through their indicators decision makers in the area of University education could create a kind of vision of the main processes and tendencies at global educational space. Especially important University rankings are for countries in transition, like Ukraine, which try to reform their University system according to European and world's standards. So, the role of University rankings for such reformative activities is important and crucial for successful development of this system in future.

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