Improving Quality of Universities by World-University-Ranking in Slovenia and the Danube Region

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Universities can benefit from the currently active processes of world university rankings, even if a university does not appear at the top of a league table.

University rankings are not necessarily meant to impose competition, but to improve the university system and to advise university leaders how to orient further developments.

In “The World-Class University and Ranking: Aiming Beyond Status” Eds. J. Sadlak and N. C. Liu
Outline

- University ranking in the context of globalisation
- Importance of World-University-Rankings for Slovenia and in particular for the University of Maribor
- Case study on positive effects of World-University-Rankings for the University of Maribor
  - Presentation of the University of Maribor
  - Methodology of the case study
  - Results
  - Discussion of the positive effects of World-University-Rankings for the University of Maribor
University Ranking & Globalisation

- University ranking in history
- Development of different ranking systems
- Current World-University-Rankings and the specificities of universities
- Specificities of the University of Maribor
World-University-Rankings & University of Maribor
University of Maribor, Slovenia

• 1859 – the beginning of higher education in Maribor (a higher religious school)
• 1961 - the Association of Institutions of Higher Education in Maribor
• 1975 – University of Maribor

• Today we have 16 faculties
• More than 24,000 undergraduate and 2,000 post graduate students
Faculties

Faculty of Electrical Engineering and Computer Science – FEECS
Faculty of Chemistry and Chemical Engineering – FCCE
Faculty of Mathematics and Natural Sciences - FMNS
Faculty of Criminal Justice and Security – FCJS
Faculty of Economics and Business – FEB
Faculty of Mechanical Engineering – FME
Faculty of Oranisation Science – FOS
Faculty of Civil Engineering – FCE
Faculty of Health Sciences – FHS
Faculty of Energetics – FEN
Faculty of Education – FE
Faculty of Agriculture – FAG
Faculty of Medicine – FM
Faculty of Logistics – FLO
Faculty of Law – FL
Faculty of Arts – FA
Case study

University of Maribor
&
positive effects of
World-University-Rankings
The main idea

How World-University-Rankings stimulate positive trends in our university
Methodology
(Criteria for Evaluation)

• Quality of scientific research
• Quality of education
• Quality of international cooperation
• Efficiency of institutional organisation
• Academic reputation of the institution
Quality of Scientific Research

For the period 2002 - 2006

- Articles published in SCI, SSCI, A&HCl
- Number of citations
- Patents
- Number of total items in bibliographies

Remarks: Faculty of Medicine (FM), Faculty of Energetics (FEN) and Faculty of Logistics (FLO) are not included in the analysis of the quality of scientific research. Faculty of Arts (FA) and Faculty of Natural Sciences and Mathematics (FMNS) are included together with Faculty of Education (FE).
SCI, SSCI, A&HCI
to take into account different fields of research
Original Scientific Articles – SCI

Institution

Number of SCI articles

FAG  FCCE  FCE  FCJS  FE  FEB  FEECS  FHS  FL  FME  FOS
Original Scientific Articles – SSCI

![Graph showing the number of SSCI articles by institution]
Original Scientific Articles – A&HCl

Number of A&HCI articles

Institution

FAG FCCE FCE FCJS FE FEB FEECS FHS FL FME FOS
Impact Factors

are different in different fields of research
Original Scientific Articles – SCI  
1st quarter

Institution

Number of SCI articles (1st quarter)

- FAG 
- FCCE 
- FCE 
- FCJS 
- FE 
- FEB 
- FEECS 
- FHS 
- FL 
- FME 
- FOS
Patents conferred in EU, USA, Canada, Japan, South Korea
Number of citations in WoS

Institution
FAG  FCCE  FCE  FCJS  FE  FEB  FEECS  FHS  FL  FME  FOS

Number of citations

- FAG
- FCCE
- FCE
- FCJS
- FE
- FEB
- FEECS
- FHS
- FL
- FME
- FOS
COBISS (Co-operative Online Bibliographic System and Services)

COBISS is an organisational model of joining libraries into a uniform library information system with shared cataloguing.

Example:

HTML Document
SICRIS currently includes:

- 702 research organisations,
- 1118 research groups,
- 11,914 researchers,
- 4181 research projects,
- 599 research programs
Quality of Education

- Selection of students- ratio (interest/accepted)
- Percentage of postgraduates within total number of students
- Ratio between graduates / incoming students
- Duration of study – relative
- Student evaluation of teaching staff
- Number of doctoral theses / year
- Number of masters’ theses / year
- Numbers of graduates / year
- International prizes (students)
- National prizes (students)
- University prizes (students)
- Rate of employment of graduates
Student evaluation of teaching staff in period 2005/06
(evaluation scale 1 - 5)
Quality of international cooperation

- Tempus projects
- Erasmus projects
- Leonardo da Vinci projects
- Grundtvig projects
- 6th framework programme
- Other international projects
- Incoming and outgoing students (ratio, number, %)
- TS-mobility (ratio, number, %)
Tempus, Erasmus, Leonardo de Vinci, Grundtvig, FP6 and other international projects – number/year (2003-2006)
Tempus, Erasmus, Leonardo de Vinci, Grundtvig, FP6 and other international projects - value/year

(value of projects is normalised to the average value of projects per faculty (the average value is taken as 100% - dashed line)
Efficiency of Institutional Organisation

- Research projects
- Basic projects
- Applied projects
- Target research programmes
- Centres of excellences
- Other projects financed from state budget
- Other projects not financed from state budget
- Number of students per full-time teaching staff
- Percentage of project funds within total budget
Additional Financing – value/year

value of projects is normalised to the average value of projects per faculty (the average value is taken as 100% - dashed line)
Academic reputation of the institution

- international prizes
- national prizes
- university prizes
- memberships on international editorial boards
- TS - memberships in international associations
- memberships on domestic editorial boards
- TS - memberships in domestic associations
Membership in international editorial boards
Conclusions
Discussion of positive effects of World-University-Rankings for the University of Maribor

• **Improved awareness** of being part of global trends and orientations
• The university is developing in accordance with **international trends**
• **Healthy competition** has emerged and has become an important driving force for further development
• **Positive effects on habilitation** of professors
• Better selection of projects and in the future **positive consequences for allocation of funds**
• We also hope that this ranking will **help students to make informed decisions** regarding their studies
Healthy Competition is our Life!

THANKS FOR YOUR ATTENTION!