

The changing geopolitics of world class research and innovation: the data behind the THE World University Rankings

#### **Phil Baty**

Chief Knowledge Officer, THE (Times Higher Education)









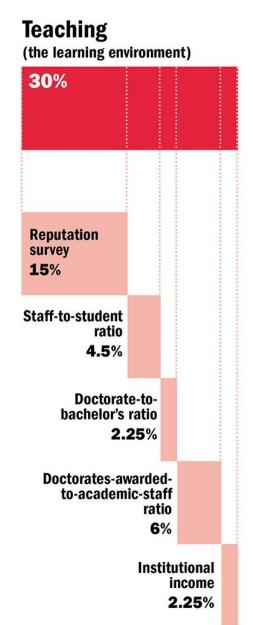




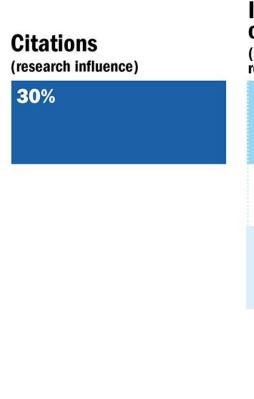




#### **Method**



### Research (volume, income and reputation) 30% Reputation survey 18% Research income 6% Research productivity 6%



#### Industry International outlook income (knowledge (staff, students, transfer) research) 2.5% 7.5% Internationalto-domesticstudent ratio 2.5% Internationalto-domesticstaff ratio 2.5%

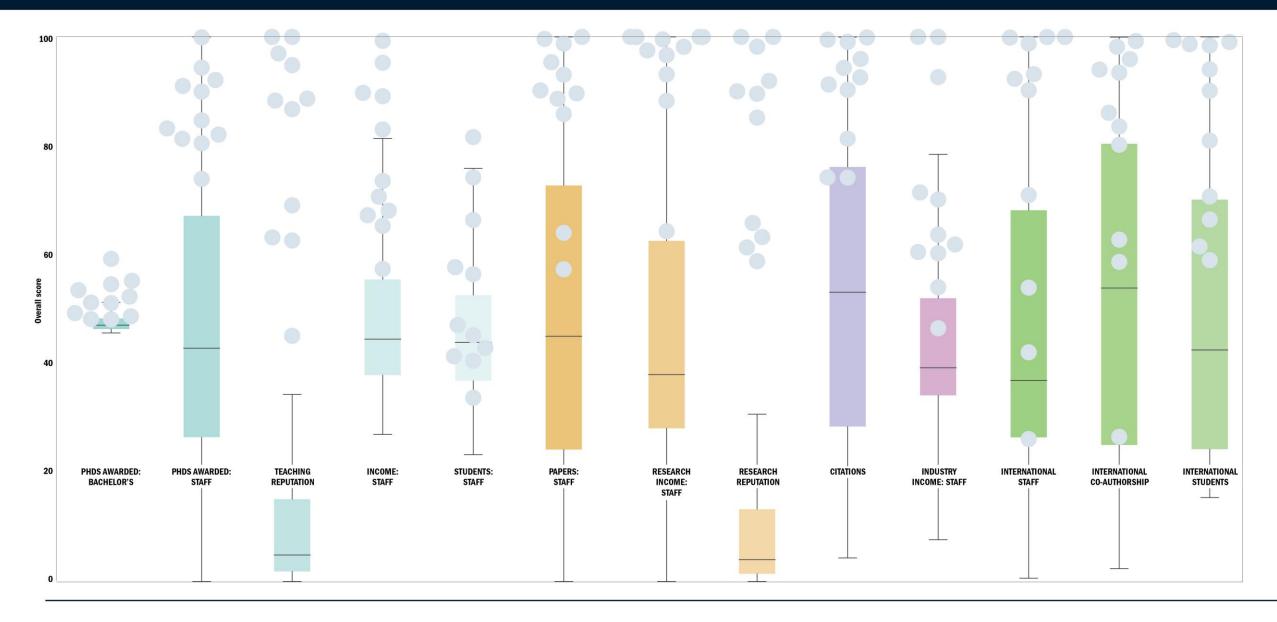
International

collaboration

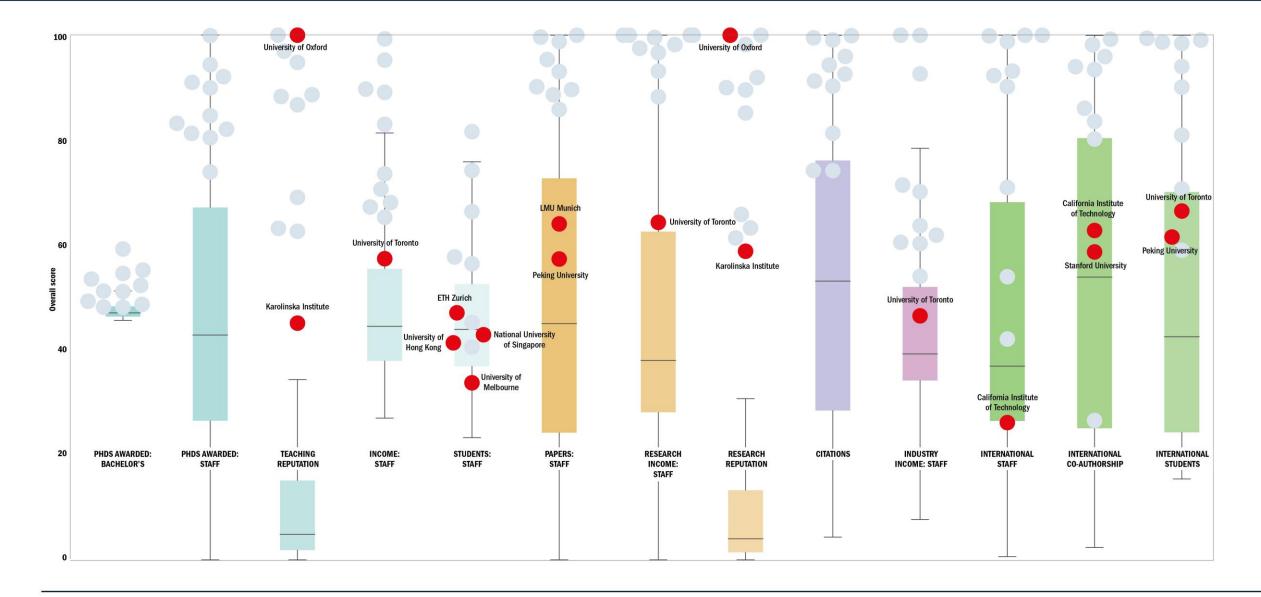
2.5%















#### THE WORLD UNIVERSITY RANKINGS 2019 TOP 10

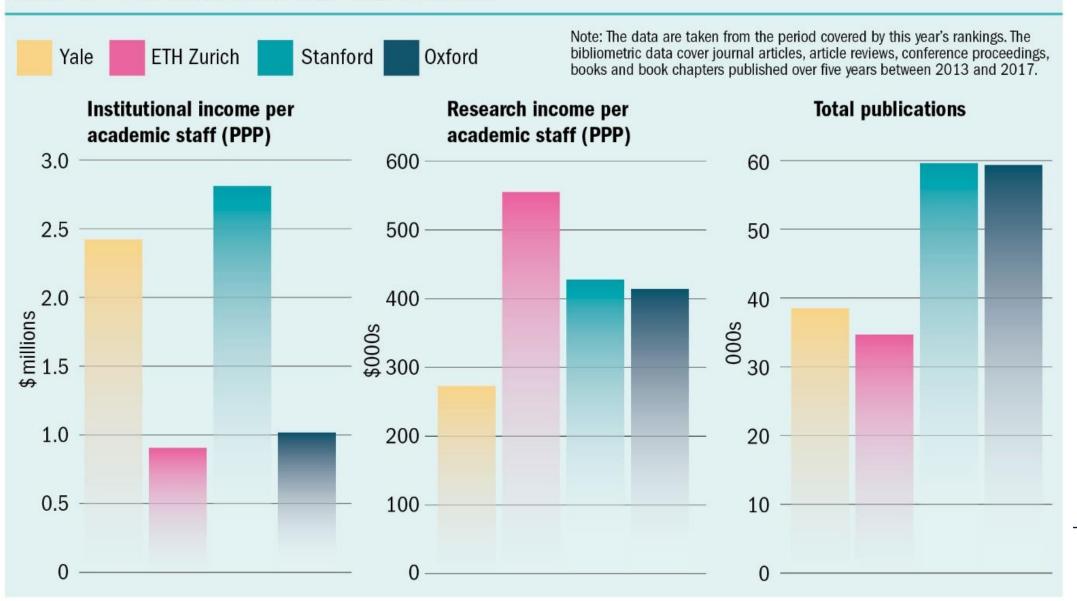
Rank 2019	Rank 2018	Institution	Country/region
1	1	University of Oxford	United Kingdom
2	2	University of Cambridge	United Kingdom
3	=3	Stanford University	United States
4	5	Massachusetts Institute of Technology	United States
5	=3	California Institute of Technology	United States
6	6	Harvard University	United States
7	7	Princeton University	United States
8	12	Yale University	United States
9	8	Imperial College London	United Kingdom
10	9	University of Chicago	United States

2019





#### FANTASTIC FOUR: PRODUCTIVITY MEASURES COMPARED



#### COUNTRIES/REGIONS REPRESENTED IN THE TOP 200

Country/region	Number of institutions in top 200	Top institution	Rank
United States	60	Stanford University	3
United Kingdom	29	University of Oxford	1
Germany	23	LMU Munich	=32
Netherlands	12	Delft University of Technology	58
Australia	9	University of Melbourne	=32
Canada	9	University of Toronto	21
China	7	Tsinghua University	22
Switzerland	7	ETH Zurich	11
Hong Kong	5	University of Hong Kong	36
South Korea	5	Seoul National University	63
Sweden	5	Karolinska Institute	40
Denmark	4	University of Copenhagen	=116
France	4	Paris Sciences et Lettres – PSL Research University Paris	41
Belgium	3	KU Leuven	48
Italy	3	Scuola Superiore Sant'Anna	=153
Finland	2	University of Helsinki	=99
Japan	2	The University of Tokyo	42
Norway	2	University of Oslo	=121
Singapore	2	National University of Singapore	23
Spain	2	Pompeu Fabra University	=135
Austria	1	University of Vienna	=143
Republic of Ireland	1	Trinity College Dublin	120
Russian Federation	1	Lomonosov Moscow State University	=199
South Africa	1	University of Cape Town	=156
Taiwan	1	National Taiwan University	170



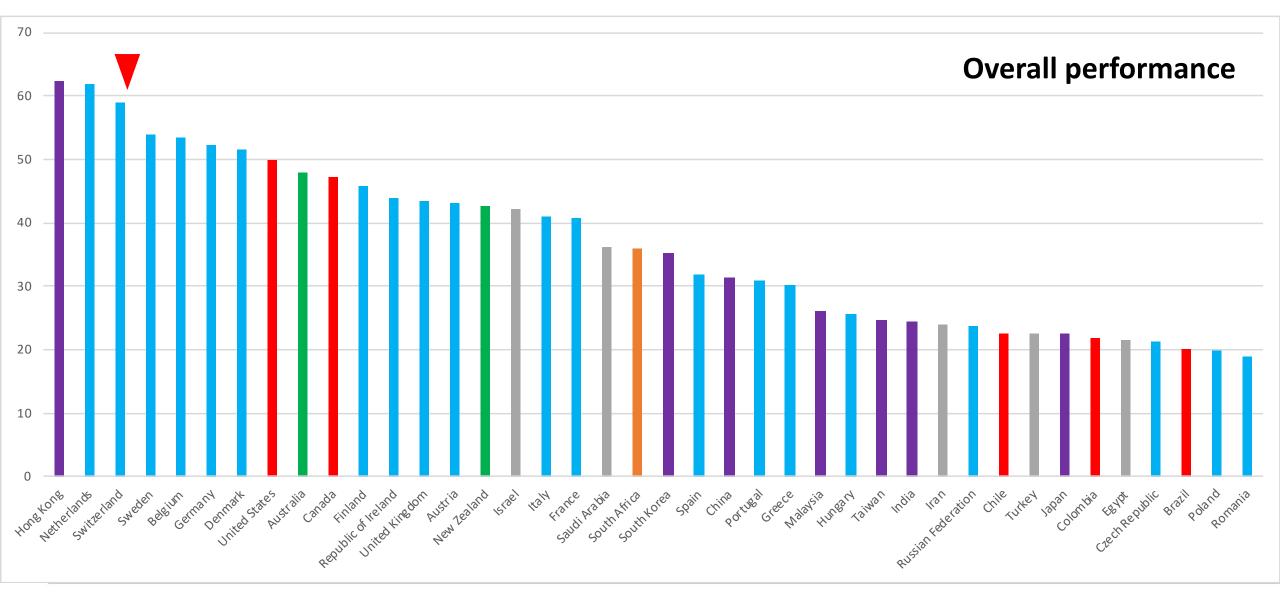


#### Switzerland's world ranked universities

Name	2019	2018
ETH Zurich	11	=10
École Polytechnique Fédérale de Lausanne	35	=38
University of Zurich	=90	136
University of Basel	103	=95
University of Bern	=110	=105
University of Geneva	=135	=130
University of Lausanne	=176	152
University of Fribourg	201–250	201–250
University of St Gallen	401–500	401–500
University of Neuchâtel	501–600	401–500



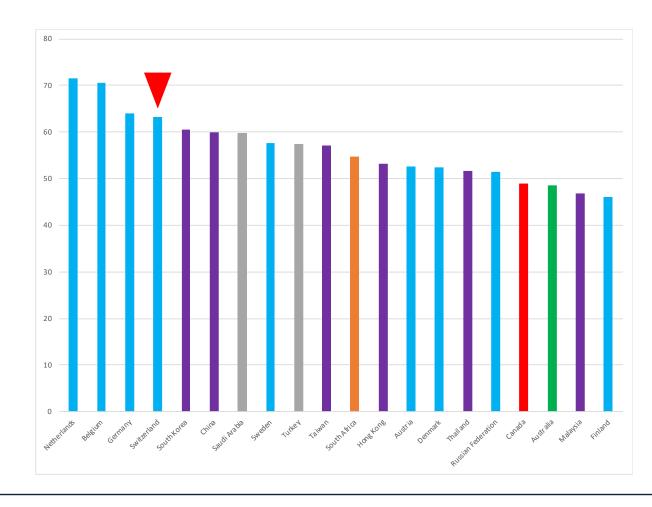






#### **Teaching**

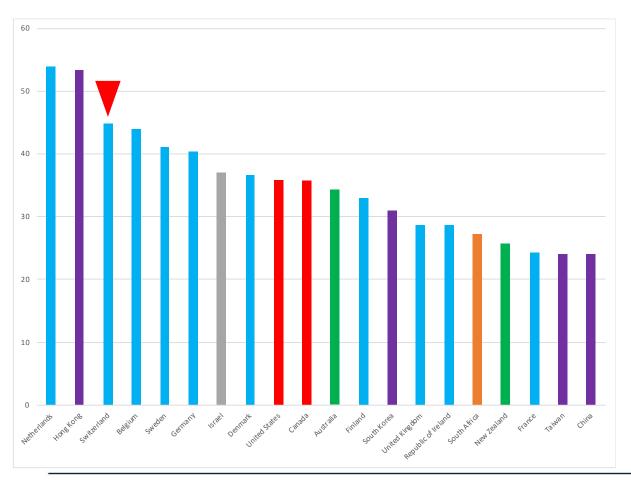
#### **Industry income**

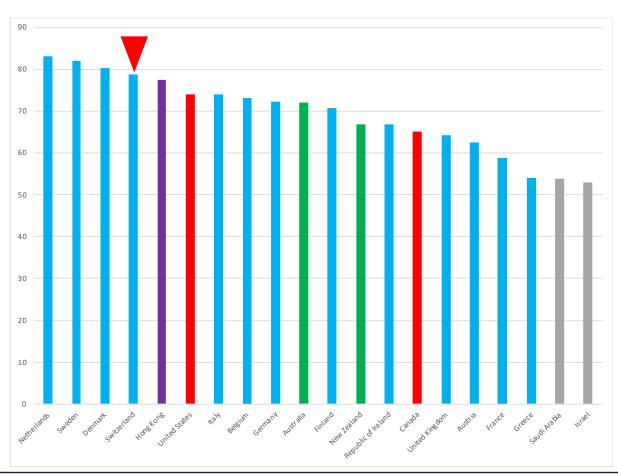




#### Research

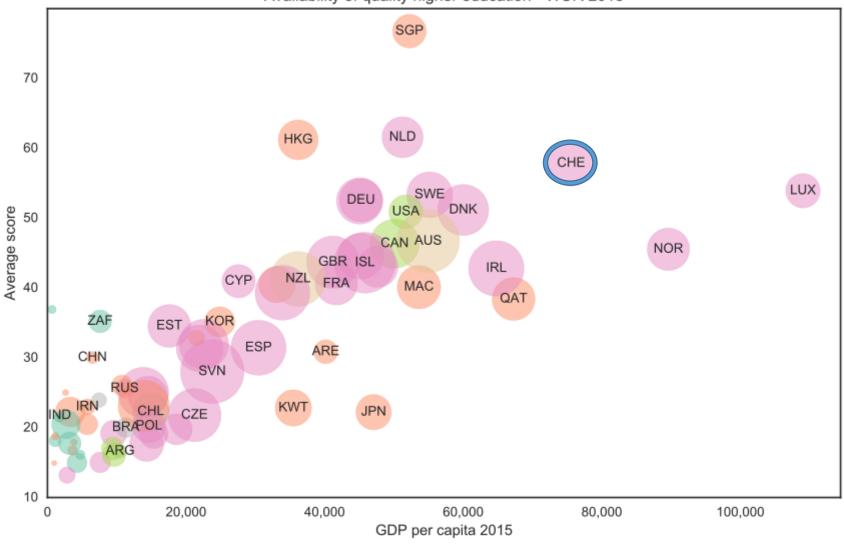
#### **Citations**





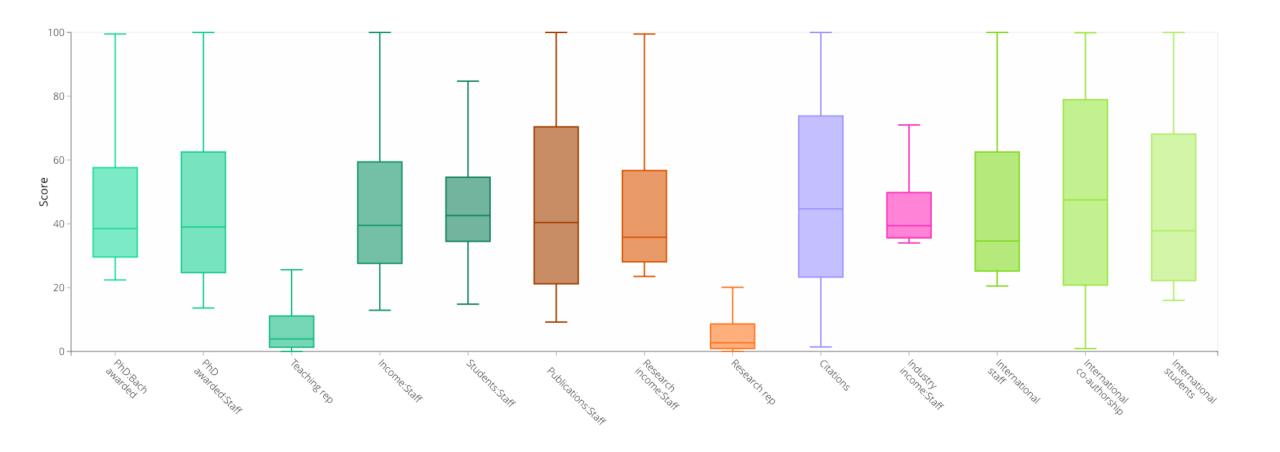


#### Availability of quality higher education - WUR 2018



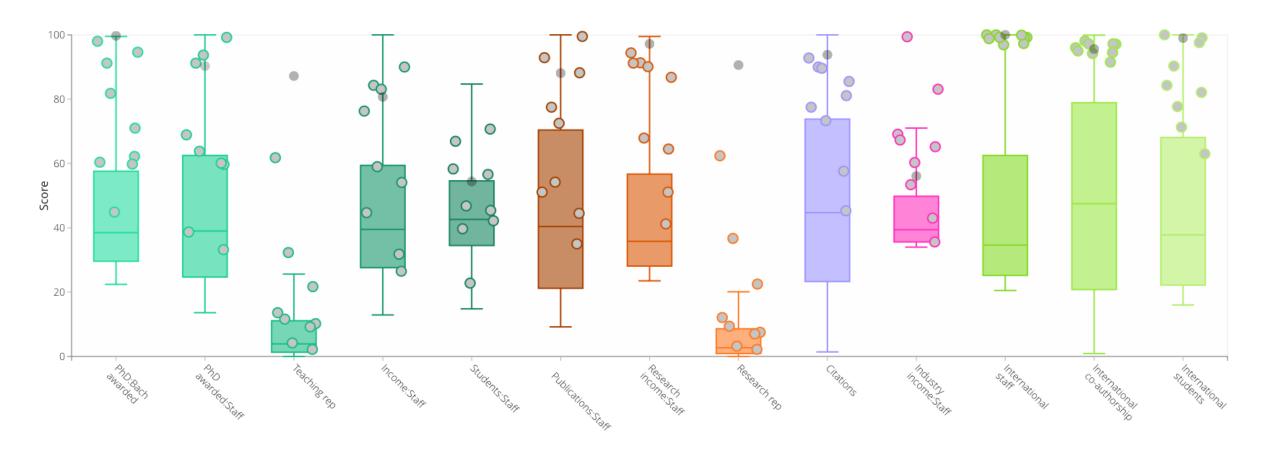


#### World scores distribution



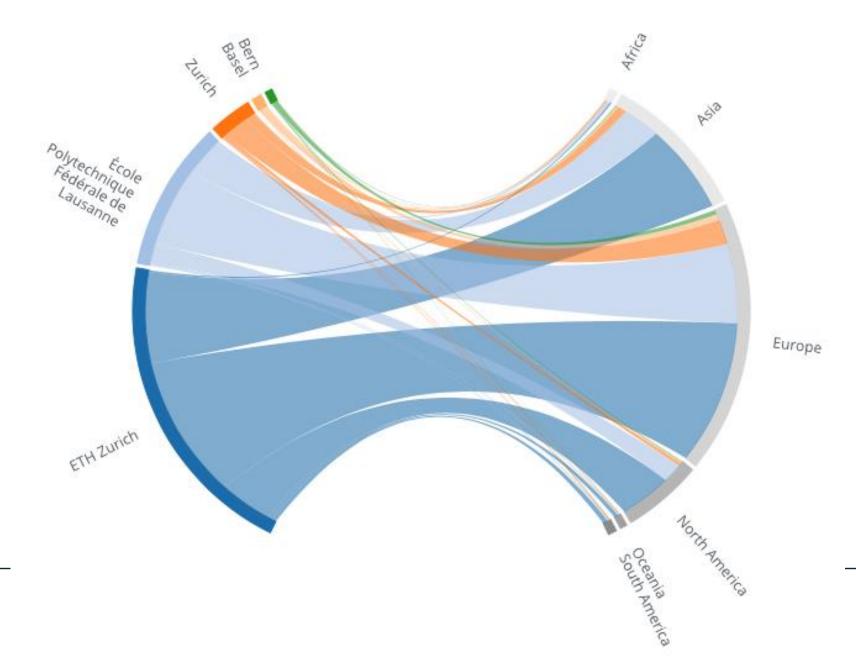


#### World scores distribution: How do Swiss universities compare?



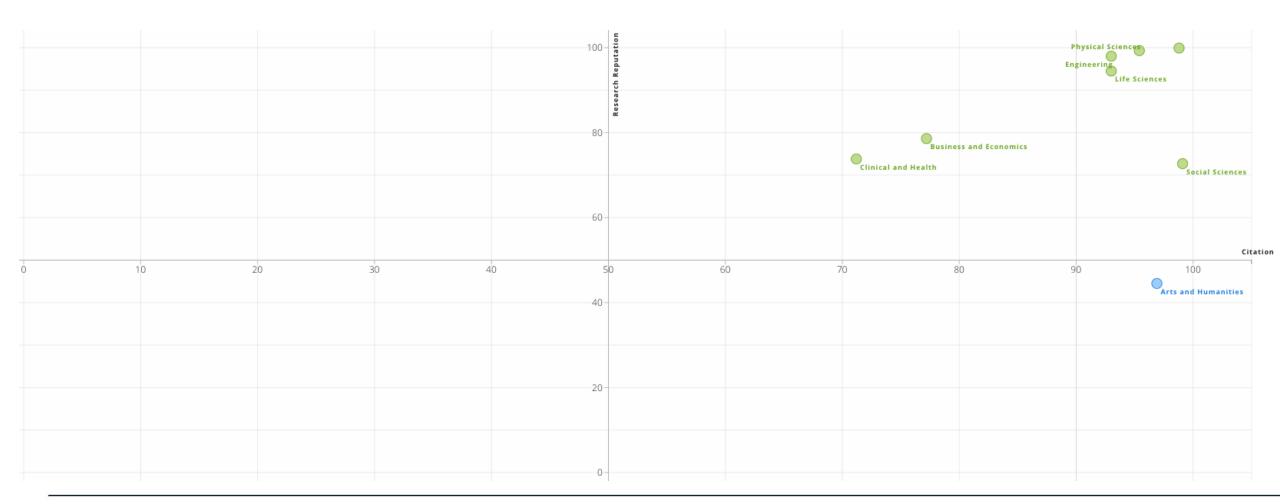


### Reputation by region



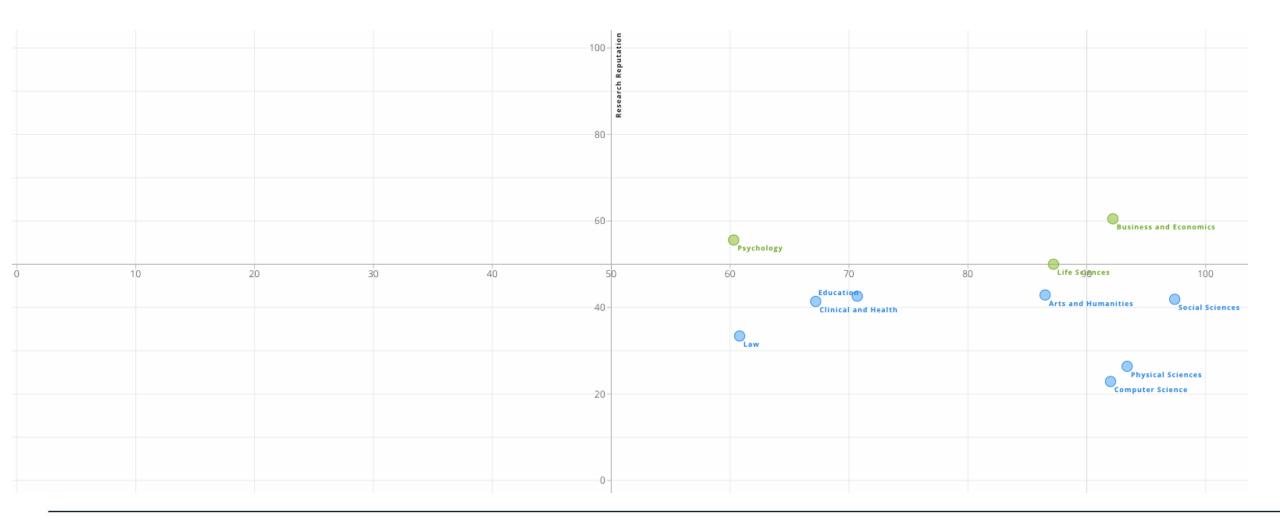


### **SWOT** analysis: ETH Zurich



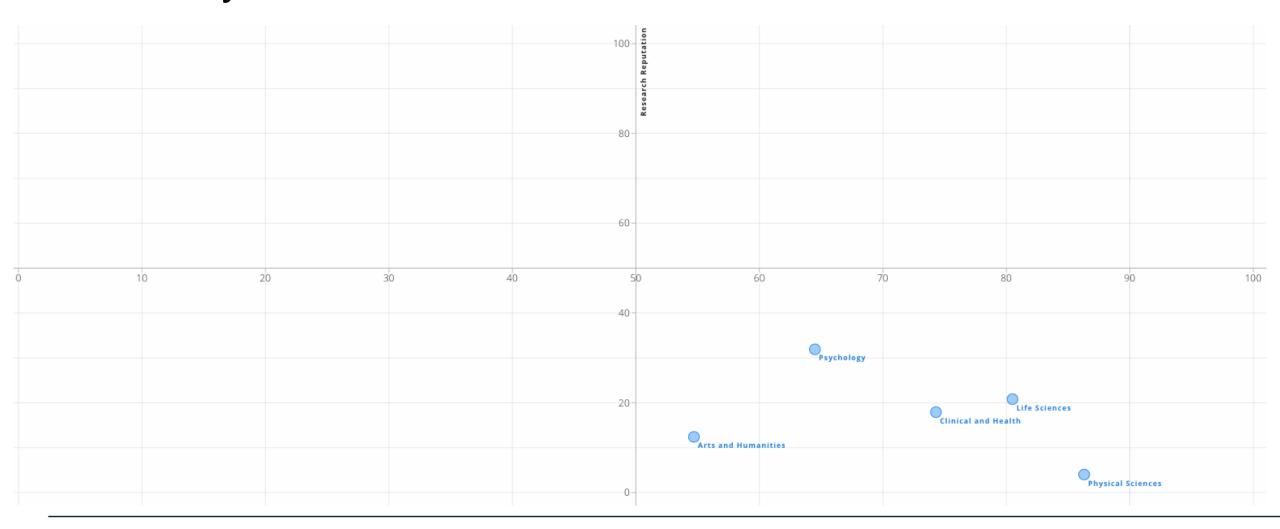


### **SWOT** analysis: Zurich





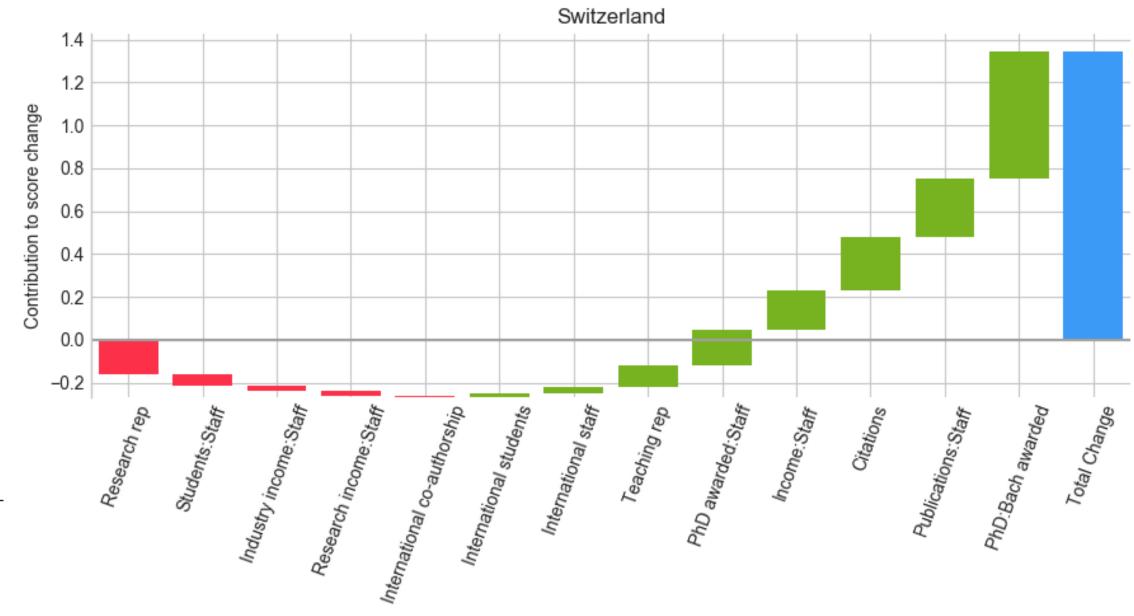
## **SWOT** analysis: Basel







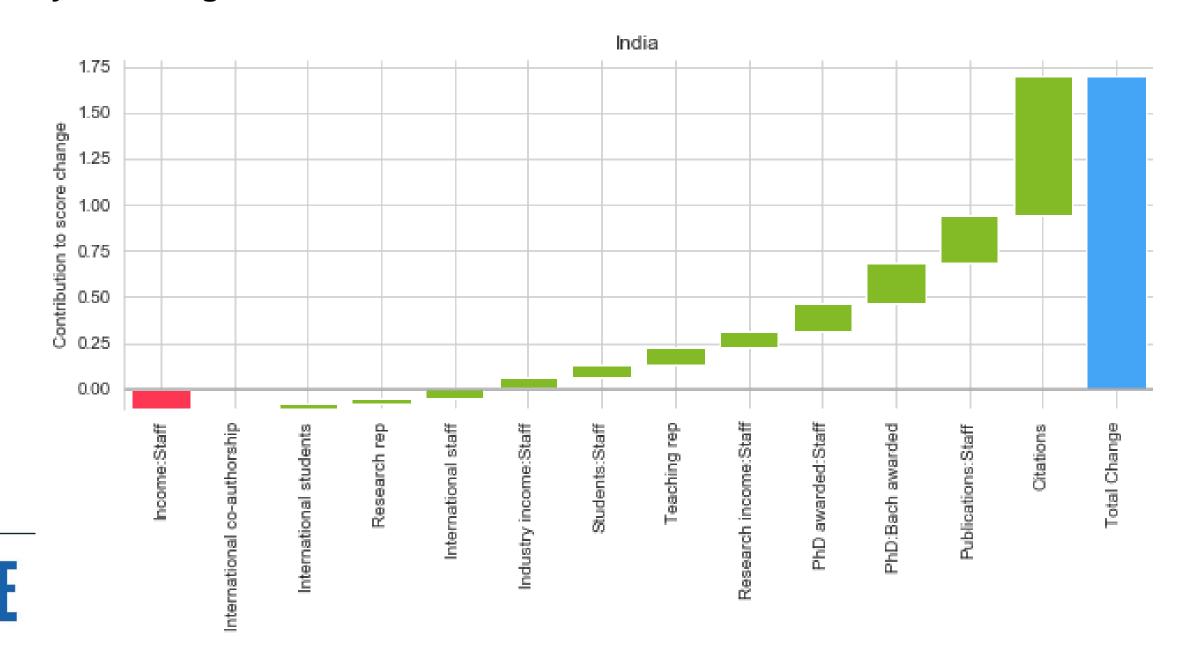
#### Year on year change: Switzerland



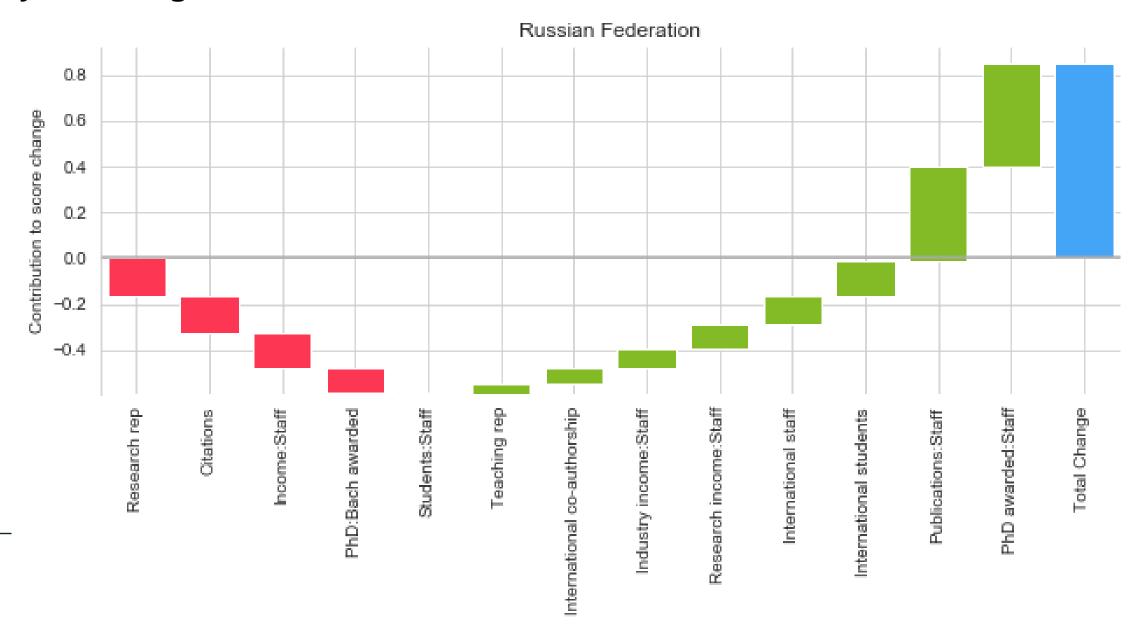


4

#### Year on year change: India



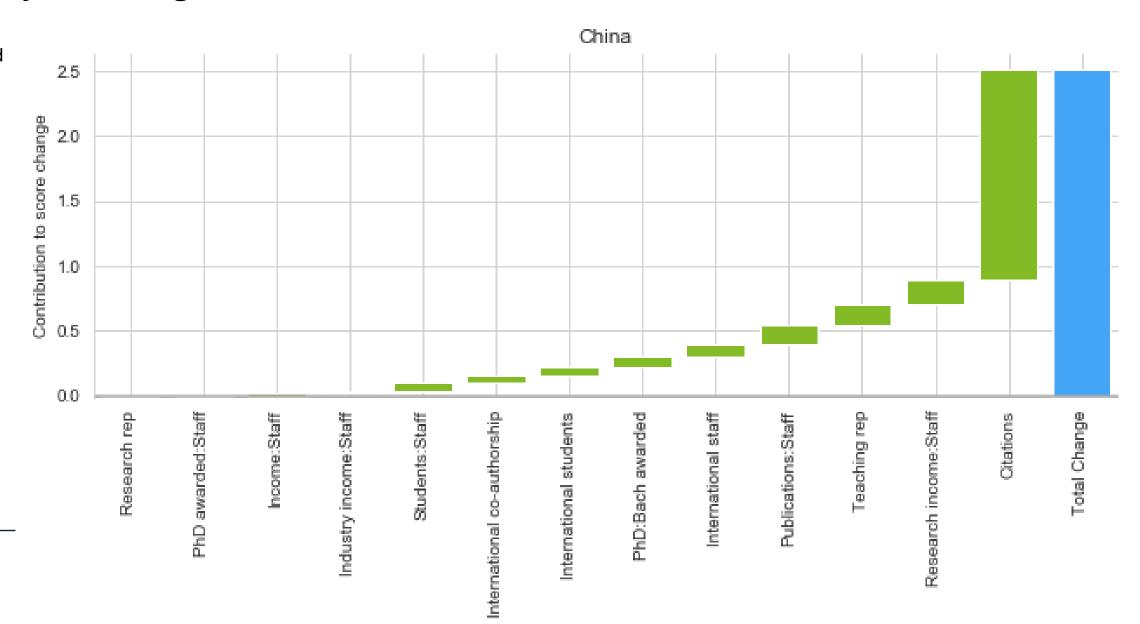
#### Year on year change: Russia





### Year on year change: China

Country mean based on universities present in both years

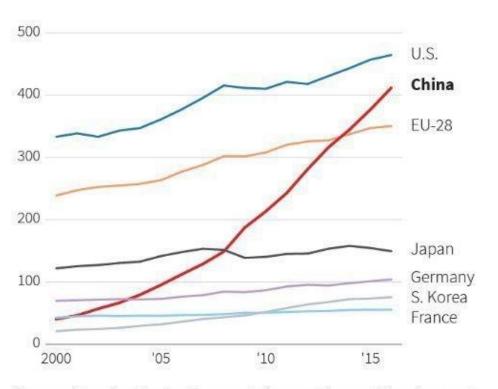




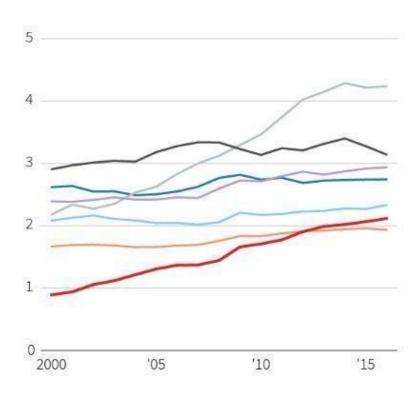
### Research spending

China's spending on research and development in science and technology, surged ten-fold since 2000, while the U.S. spending grew a modest 39 percent in the same period.

#### SPENDING IN R&D - In million U.S. dollars



#### AS PERCENT OF GDP



Source: Organisation for Economic Cooperation and Development

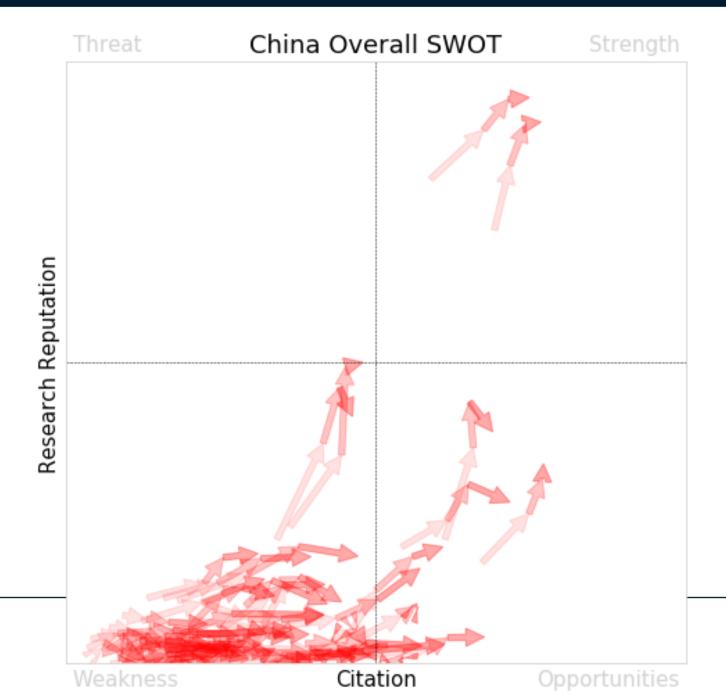
C. Inton, 13/04/2017







Growing research strength and growing global recognition







In partnership with



# How talent thrives

10-12 September 2019, Zürich, Switzerland

SUPER EARLY BIRD DISCOUNT

**BOOK BEFORE 31 OCTOBER 2018** 



