INTERNATIONAL PERSPECTIVES ON UNIVERSITY TEACHING AND LEARNING SYMPOSIUM

Global, National, and University Trends

DISCLAIMER

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AGENDA

Introduction and Housekeeping

A Brief Timeline of International Education

A Perspective on Global Student Mobility Trends and Drivers

International Students Accessing the U.S.

U.S. University Perspectives: Rankings, Reputation, and Talent Attraction

Implications

Discussion

HOUSEKEEPING

Housekeeping

- This presentation is geared towards 40 minutes of presentation time, with additional time allotted for discussion.
- The presentation will be made available as a PDF file through the Symposium / Auburn University, as well as ICG.

A FEW QUESTIONS TO GET STARTED

A Few Questions to Get Started

- Who has an international background?
- Who has studied, taught, or researched outside of the U.S.?
- Who deals with international issues students, faculty, or programs – at their institution?
- Who do you think are leaders in international education at a national and institutional level?
- Do you think internationalization themes are fully understood and implemented in your institution?
- Bonus question: Who do you think was the most helpful U.S.
 President for international education over the last 30 years?

A PERSONAL STORY LINE

Seven Numbers

- 1974 John Wayne
- 1981 Go west or bust
- 1987 Corner of Oxford and Kirkland
- 1991 Harvard
- 1999 San Francisco
- 2002 ICG
- 2017 Vancouver

AGENDA

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A BRIEF TIMELINE OF INTERNATIONAL EDUCATION

A Brief Timeline of International Education

| 1945 | Post-WW II order commences led by the U.S. |
|------------------------|--|
| • 1950s | Tail end of U.Sbound migration of European scientists who had fled to the UK until 1945 |
| • 1960s | Roll-out of technology and modern management concepts solidifies U.S. dominance as science and talent destination |
| • 1970s | U.S. continues its dominance, leaden silence otherwise |
| • 1980s | First stirrings of European mobility and research strategy |
| • 1990s | Major disruptions: Collapse of the East Bloc, emergence of the Internet, sprouts of Asian wealth creation |
| • 2000s | Rapidly emerging commercialization of IE results in real market dynamics, Australia leads the way. 9/11 generates a shock to the U.S. IE landscape |
| • 2010s | U.S. dominance is waning, global policy disruptions emerge, technology is upending past rules, China fully emerges, |

AGENDA

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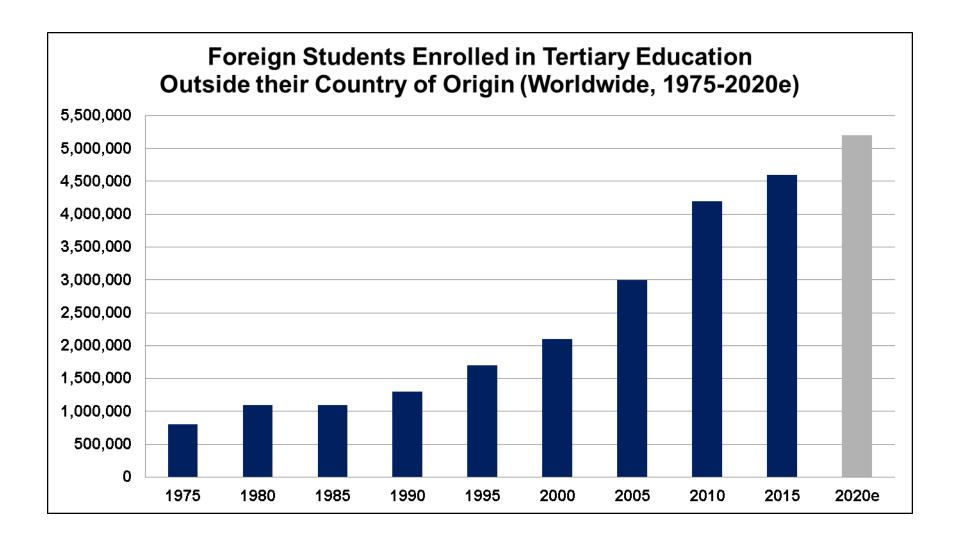
Discussion

INTERNATIONAL STUDENT MOBILITY TRENDS Introduction

Introduction

- The following discussion centers on elements of international education that have been measured for decades, students.
- Global student mobility data is of moderate quality at best often delayed and incomplete, and sometimes meaningless.
- In fact, no agreed-on unit definition of "one international student" exists.
- Still, student data is more complete than faculty data, and more concise than revenue data if one accepts geographic gaps (e.g., Africa) and conceptual misalignments (e.g., student status).
- The following data discussions should thus be treated as indicative rather than definitive.

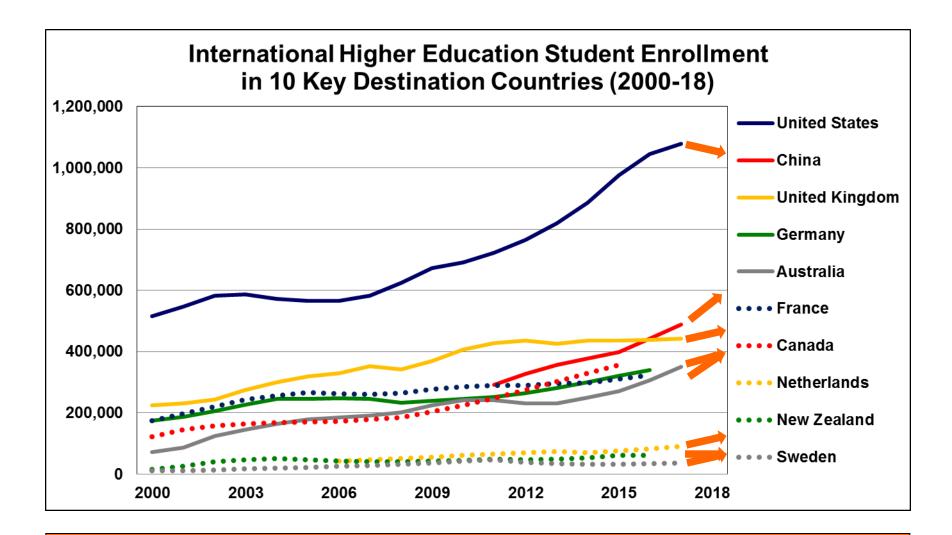
INTERNATIONAL STUDENT MOBILITY TRENDS Total International Higher Education (Tertiary) Students



Strong growth acceleration since the early 2000s

Sources: OECD, ICG estimate.

INTERNATIONAL STUDENT MOBILITY TRENDS Ten Key Destination Countries: Data



Overall, sustained growth but trajectories differ

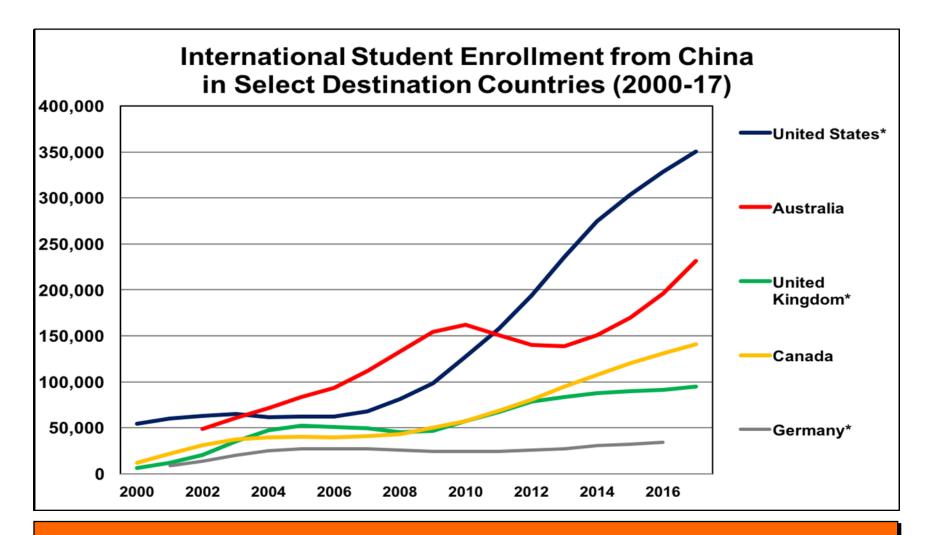
INTERNATIONAL STUDENT MOBILITY TRENDS Ten Key Destination Countries: Discussion

Top Five Destination Countries Trends

- USA: Strong recovery from post 9/11 enrollment losses starting in 2007. Recent growth was driven by China (Saudi Arabia). Declines kicked in in 2017.
- China: Rapid emergence as a destination with a target of 1,000,000 students.
 Shift into full-degree students, supported by 58,600 scholarships in 2017.
- UK: Balanced recruiting operations produced strong enrollment gains in the past. Flat enrollments since 2013 owing to policy crack downs and Brexit.
- Germany: Flat enrollment in mid-2000s but strong growth lately much driven by (Eastern) European mobility patterns, and no fees (except BW & NRW).
- Australia: After two decades of growth, Australia experienced a reversal across most sectors half a decade ago. A five year recovery is running its course now.

International student enrollment: There is no perpetual growth

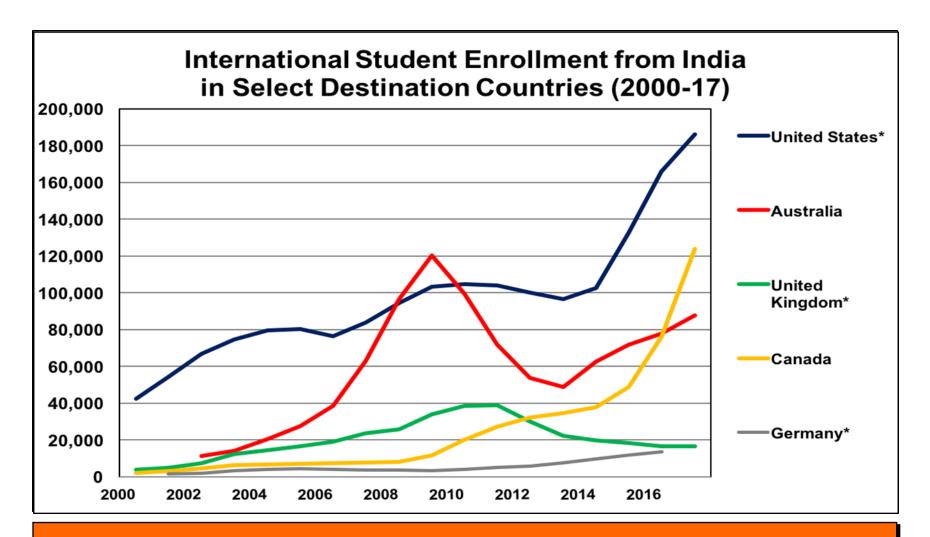
INTERNATIONAL STUDENT MOBILITY TRENDS Key Sending Countries: Data



Strong overall growth with the U.S. and Australia as key destinations

Note: For countries marked with an asterisk (*), data includes only enrollments in higher education institutions. Source: AEI, HESA, HIS, IIE, IRCC.

INTERNATIONAL STUDENT MOBILITY TRENDS Key Sending Countries: Data



Heavily volatile trends owing to acute ROI-driven behavior

Note: For countries marked with an asterisk (*), data includes only enrollments in higher education institutions. Source: AEI, HESA, HIS, IIE, IRCC.

INTERNATIONAL STUDENT MOBILITY TRENDS Key Sending Countries: Discussion

Top Two Sending Countries Trends

- China: Chinese students have powered international education enrollments in many key destination countries, including the U.S. About 90 percent are self-paying, and a majority are enrolled at an undergraduate level. These students' level of academic capability and arguably interest in socio-cultural integration has dropped notably compared to Chinese students from decades ago.
- India: Indian students are often driven by work and/or immigration considerations which have shaped their choice of subjects, regional preferences, and transactional approach to their studies. Their ROI-driven behavior can serve as an acute test of institutional and national attraction strength.

No real number three is in sight at this time

AGENDA

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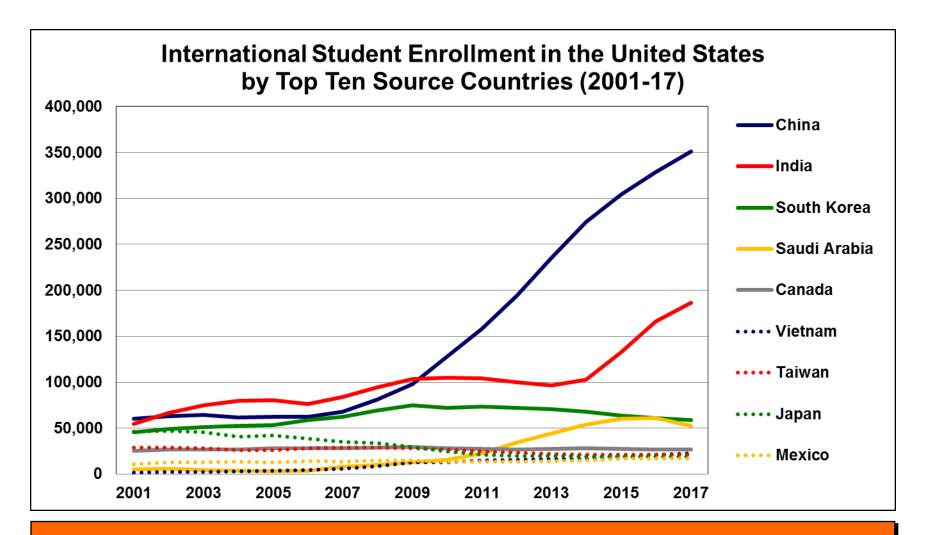
Discussion

INTERNATIONAL STUDENS IN THE UNITED STATES Introduction

Introduction

- International student enrollments in the U.S. have undergone multiple large scale shifts:
 - For one, simple sustained growth with total enrollments topping one million (includes OPT).
 - Second, from graduate towards undergraduate, and from exchange / scholarship to self-paying students.
 - Third, from a somewhat balanced portfolio to one driven by demand surges from countries such as China, India, and Saudi Arabia.
 - Fourth, from an above-average talent pool to a rather "differentiated" group of international students
- Perceptions matter by late 2016, the attraction of the U.S. started to wane. By 2017, numbers have borne out this trend.

INTERNATIONAL STUDENTS IN THE UNITED STATES International Higher Education Students by Top Ten Source Countries

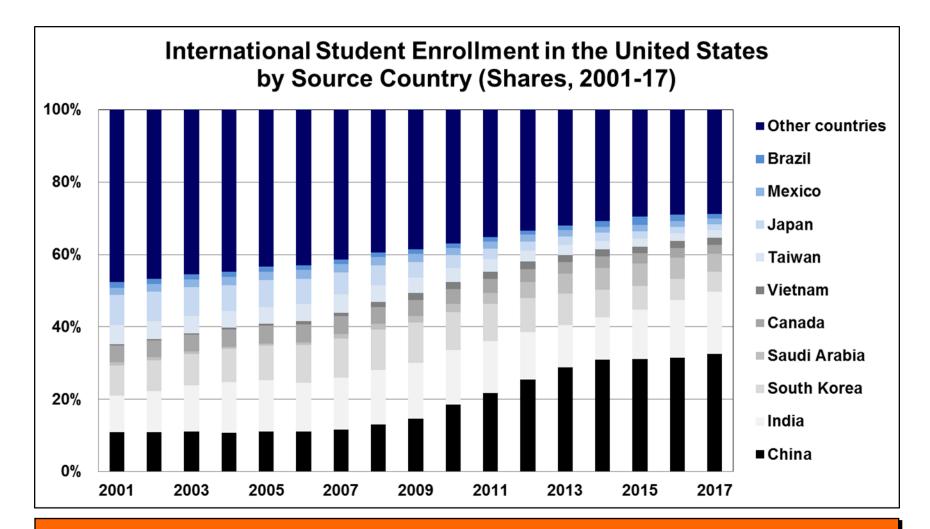


China, then a big gap, then India, and another big gap

Notes: Includes non-degree (e.g., language students) and OPT.

Source: IIE.

INTERNATIONAL STUDENTS IN THE UNITED STATES International Higher Education Students by Top Ten Source Countries

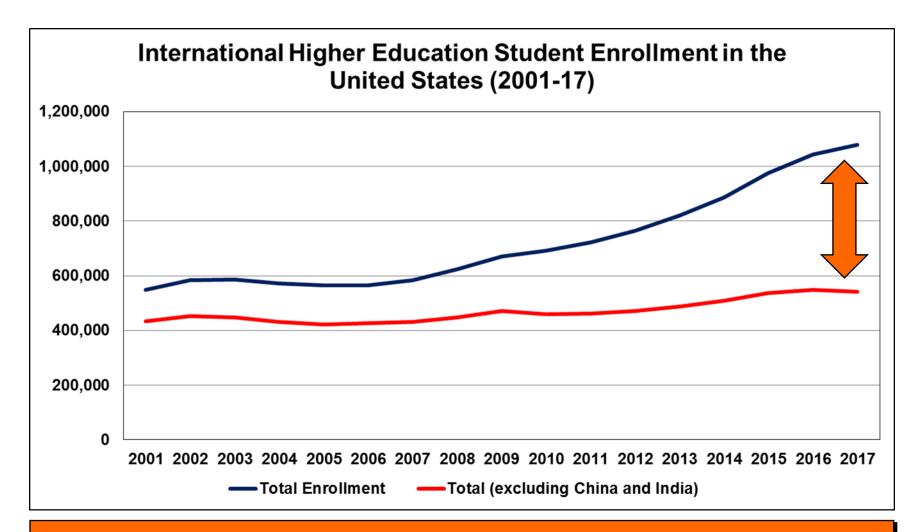


China and India account for a full half of all international students

Notes: Includes non-degree (e.g., language students) and OPT.

Source: IIE.

INTERNATIONAL STUDENTS IN THE UNITED STATES The U.S. Juggernaut is a Mirage



IE in the U.S. has grown and become less international at the same time

Notes: Includes non-degree (e.g., language students) and OPT.

Source: IIE.

AGENDA

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RANKINGS, REPUTATION, AND TALENT ATTRACTION Section Overview

Section Overview

Rankings

- From U.S. News to international rankings
- What international rankings measure
- Performance of U.S. universities in international rankings

Reputation

- What does "reputation" mean?
- How is reputation measured?
- Performance of U.S. universities in international reputation surveys

Talent Attraction

Rankings, reputation and talent attraction in institutional perspective

RANKINGS, REPUTATION, AND TALENT ATTRACTION Rankings: Introduction

Rankings: Introduction

- In the U.S., one domestic ranking is fairly dominant U.S. News.
- Other U.S. rankings include:
 - Business Insider; Council for Aid to Education; The Daily Beast's Guide to the Best Colleges; The Economist's "America's Best Colleges. The Value of University"; Educate to Career rankings; Faculty Scholarly Productivity rankings; Forbes; Money's "Best Colleges"; The Princeton Review Dream Colleges; Niche; Parchment et al; Social Mobility Index (SMI); The Top American Research Universities; TrendTopper MediaBuzz College Guide; UniversityBenchmarks Academic Rankings; University Entrepreneur Report; The Wall Street Journal / Times Higher Education College Rankings; Washington Monthly national universities rankings; and "What will they Learn?" Report - American Council of Trustees and Alumni.

Outside of the U.S., the above matter little or, actually, not at all

RANKINGS, REPUTATION, AND TALENT ATTRACTION Rankings: 21 International University Rankings

| | '03 | '04 | '05 | '06 | '07 | '08 | '09 | '10 | '11 | '12 | '13 | '14 | '15 | '16 | '17 |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Academic Ranking of World Universities (ARWU, aka Shanghai Ranking) | | | | | | | | | | | | | | | |
| Ranking Web of Universities (Webometrics Ranking) | | | | | | | | | | | | | | | |
| World University Rankings (Quacquarelli Symonds (QS)) | | | | | | | | | | | | | | | |
| University Web Rankings & Reviews (4 International Colleges & Universities (4ICU)) | | | | | | | | | | | | | | | |
| Performance Ranking of Scientific Papers for World Universities (NTU (formerly HEEACT)) | | | | | | | | | | | | | | | |
| CWTS Leiden Ranking | | | | | | | | | | | | | | | |
| University Ranking by Academic Performance (URAP) | | | | | | | | | | | | | | | |
| SCImago Institutions Rankings (new version) | | | | | | | R | R | R | R | R | R | R | | |
| World University Rankings (Times Higher Education (THE)) | | | | | | | | | | | | | | | |
| Global Employability Rankings (Emerging/ Trendence) | | | | | | | | | | | | | | | |
| Round University Rankings (RUR) | | | | | | | | R | R | R | | | | | |
| U-Multirank (Universities Compared. Your Way) | | | | | | | | | | | | | | | |
| UI GreenMetric World University Ranking | | | | | | | | | | Е | Е | Е | Е | Е | |
| Center for World University Rankings (CWUR) | | | | | | | | | | | | | | | |
| Global University Ranking (Youth Inc. / Education Times of India) | | | | | | | | | | | | | | | |
| nature INDEX | | | | | | | | | | | | | | | |
| Worldwide Professional University Rankings (RankPro) | | | | | | | | | | | | | | | |
| Best Global Universities Rankings (U.S. News & World Report) | | | | | | | | | | | | | | | |
| Reuters Top 100 Most Innovative Universities | | | | | | | | | | | | | I | I | |
| In4M | | | | | | | | | | | | | | | |
| Moscow International University Ranking (2018) | | | | | | | | | | | | | | | |

Notes: "R" denotes retroactive. "E" denotes environmental focus. "I" denotes innovation.

Source: Rankings agencies, ICG.

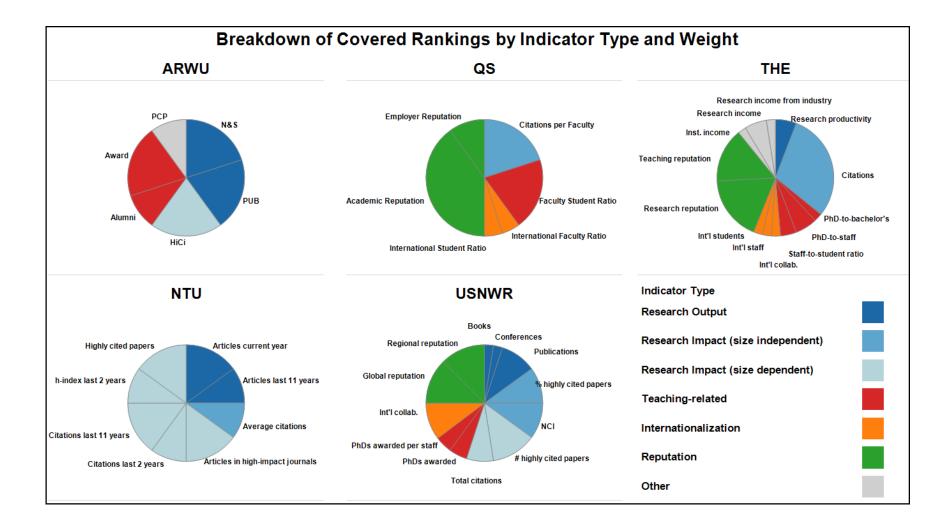
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Multi-indicator ranking

Employability-based league table

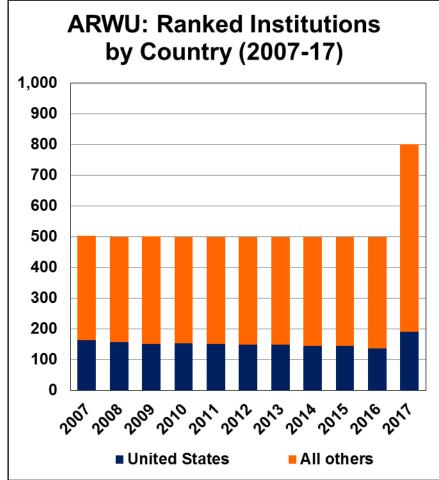
Web presence league table

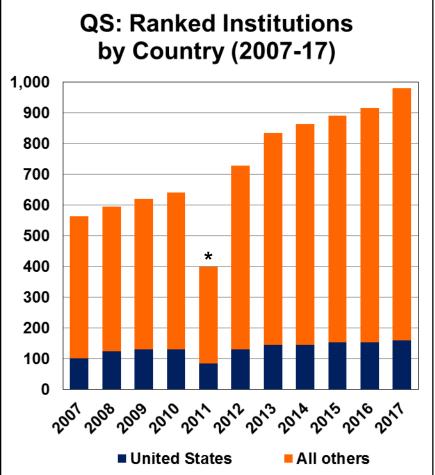
RANKINGS, REPUTATION, AND TALENT ATTRACTION Rankings: Key Rankings by Indicator Type and Weight



A very different approach from U.S. News

RANKINGS, REPUTATION, AND TALENT ATTRACTION Rankings: U.S. versus World in ARWU and QS



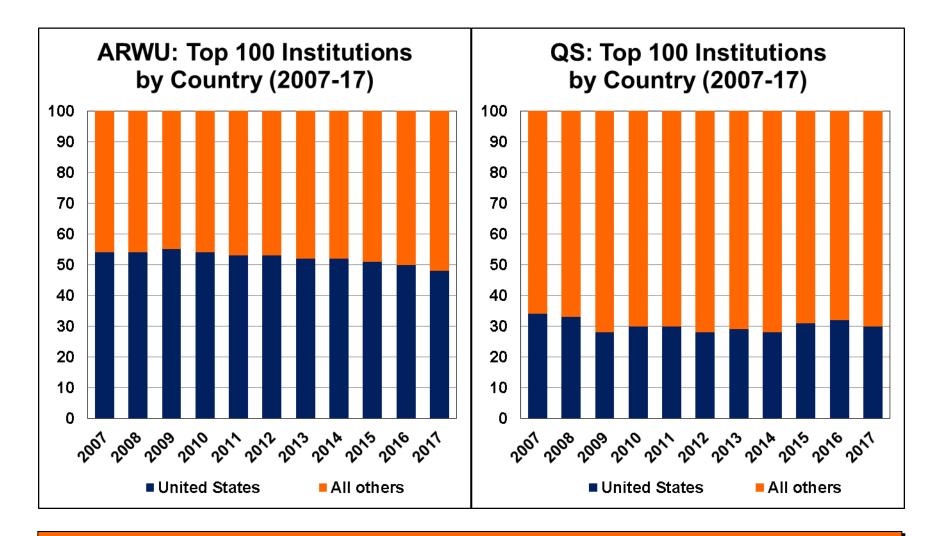


The U.S. – ARWU: From 32.4 to 23.9%. QS: From 18.1 to 16.2%

Notes: * No complete data available.

Sources: ARWU, QS. ICG © 2018

RANKINGS, REPUTATION, AND TALENT ATTRACTION Rankings: U.S. versus World in ARWU and QS (II)



The U.S. – ARWU: From 54.0 to 48.0%. QS: From 34.0 to 30.0%

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RANKINGS, REPUTATION, AND TALENT ATTRACTION Reputation: Introduction (I)

Reputation: Introduction

QS Definition

- Academic Reputation: "The highest weighting of any metric is allotted to an institution's Academic Reputation score. Based on our Academic Survey, it collates the expert opinions of over 70,000 individuals in the higher education space regarding teaching and research quality at the world's universities. In doing so, it has grown to become the world's largest survey of academic opinion, and, in terms of size and scope, is an unparalleled means of measuring sentiment in the academic community."
- Employer Reputation: "Students will continue to perceive a university education as a means by which they can receive valuable preparation for the employment market. It follows that assessing how successful institutions are at providing that preparation is essential for a ranking whose primary audience is the global student community."

Reputation is both a subjective and an objective metric

RANKINGS, REPUTATION, AND TALENT ATTRACTION Reputation: Introduction (II)

Reputation: Introduction

Clarivate Definition

• "The survey was designed with the help of many experts in the field and aims to be the most comprehensive snapshot of academics' opinion of the world's universities... The primary purpose of the survey was to quantify academics' opinions regarding both the research and teaching reputations of global academic institutions within the disciplinary programs with which they were familiar"

THE Definition:

 "In the survey, scholars are questioned at the level of their specific subject discipline. They are not asked to create a ranking themselves or to list a large range of institutions, but to name no more than 15 universities that they believe are the best in each category (research and teaching), based on their own experience."

Reputation is both a subjective and an objective metric

RANKINGS, REPUTATION, AND TALENT ATTRACTION Reputation: Survey-based Measurements

Survey-based Reputation Metrics

QS Survey

- Academic survey: 75,015 voters (5 years)
- Employer survey: 40,455 voters (5 years)
- Online survey probing for lists of up to 30 "best" universities

Clarivate Survey

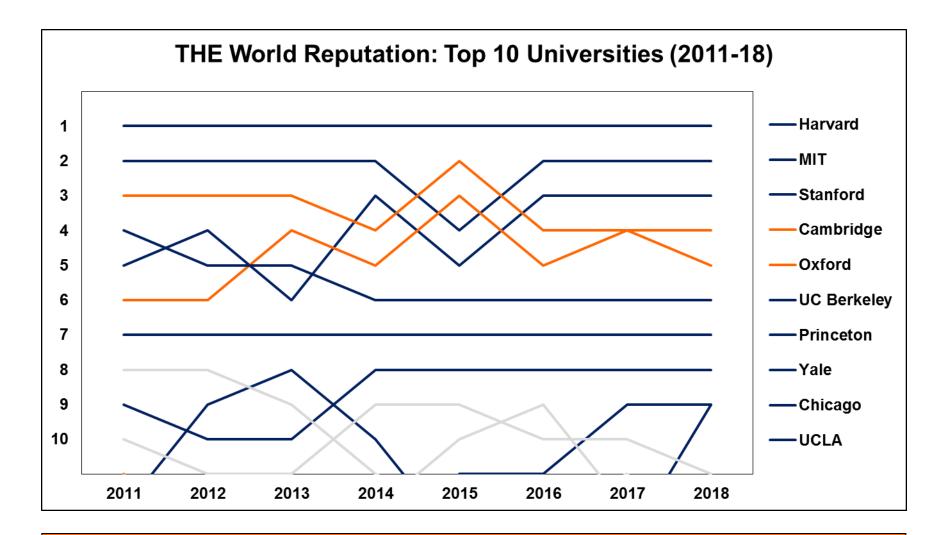
- Academic survey: 3,945 voters (1 year)
- Online survey targeting academics for lists of up to 15 "best" universities based on research and teaching

THE Survey:

- Academic survey: 10,500 voters (1 year)
- Online survey targeting academics for lists of up to 15 "best" universities based on research and teaching

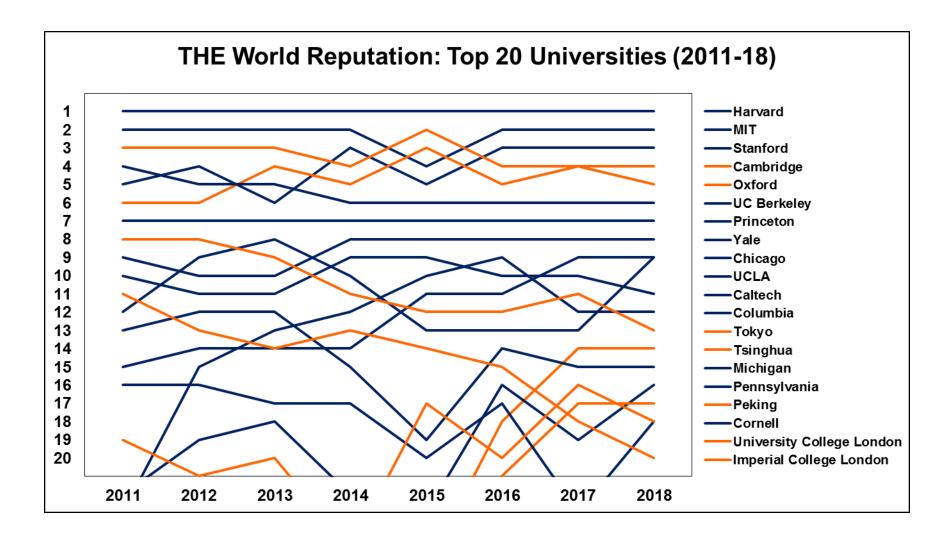
Surveys differ in size, scope, and composition of respondents

RANKINGS, REPUTATION, AND TALENT ATTRACTION Rankings: U.S. versus World in THE



The U.S. has maintained its dominant position in the Top 10, but...

RANKINGS, REPUTATION, AND TALENT ATTRACTION Reputation: U.S. University Performance in the THE Ranking



... much less so for the Top 11-20

RANKINGS, REPUTATION, AND TALENT ATTRACTION Reputation: U.S. University Performance in the QS Ranking

| | QS Academic Reputation Rank | | | | | | | | | | |
|--|-----------------------------|------|------|------|------|------|------|------|------|------|------|
| University | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| Harvard University | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 |
| University of Cambridge | 3 | 3 | 1 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 2 |
| University of California, Berkeley | | | | | | | | | | | |
| University of Oxford | 5 | 6 | 4 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 4 |
| Stanford University | | | | | | | | | | | |
| Massachusetts Institute of Technology | | | | | | | | | | | |
| University of Tokyo | 14 | 14 | 7 | 8 | 7 | 7 | 7 | 7 | 7 | 8 | 7 |
| University of California, Los Angeles | | | | | | | | | | | |
| Princeton University | | | | | | | 11 | 11 | | 10 | |
| Yale University | | | | 10 | 10 | 10 | | 10 | 10 | | 10 |
| National University of Singapore | 17 | 18 | 19 | 12 | 11 | 9 | 9 | 9 | 9 | 11 | 11 |
| Columbia University | 13 | 16 | | 14 | 13 | 12 | 12 | 12 | 12 | 12 | 12 |
| University of Chicago | | | | 13 | | 13 | | | 13 | 13 | 13 |
| Peking University | 19 | 19 | 17 | 22 | 18 | 19 | 19 | 19 | 16 | 14 | 14 |
| University of Melbourne | 20 | 21 | 20 | 19 | 16 | 16 | 21 | 20 | 22 | 17 | 15 |
| University College London | 34 | 34 | 28 | 23 | 24 | 22 | 16 | 15 | 15 | 16 | 16 |
| University of Toronto | 9 | 9 | 9 | 11 | 12 | 14 | 13 | 13 | 14 | 15 | 17 |
| Kvoto University | 26 | 22 | 14 | 20 | 19 | 18 | 17 | 16 | 18 | 61 | 18 |
| University of Michigan | 22 | | | 21 | 21 | 17 | | | | 19 | |
| Cornell University | 11 | 12 | | 15 | | | 22 | | 21 | 21 | |
| Swiss Federal Institute of Technology Zurich | 43 | 38 | 32 | 27 | 25 | 25 | 18 | 17 | 19 | 22 | 21 |
| California Institute of Technology | 21 | 20 | | | | | | | | | 22 |
| Imperial College London | 23 | 25 | 22 | 16 | 15 | 15 | 14 | 14 | 17 | 20 | 23 |
| Australian National University | 16 | 17 | 13 | 18 | 20 | 21 | 23 | 25 | 26 | 25 | 24 |
| University of Sydney | 25 | 26 | 24 | 24 | 23 | 23 | 27 | 28 | 29 | 26 | 25 |
| Tsinghua University | 36 | 31 | 29 | 30 | 30 | 30 | 29 | 27 | 27 | 28 | 26 |
| University of Hong Kong | 40 | 43 | 36 | 34 | 27 | 24 | 28 | 30 | 28 | 29 | 27 |
| University of Edinburgh | 33 | 36 | 33 | 28 | 28 | 27 | 24 | 21 | 24 | 24 | 28 |
| University of British Columbia | 18 | 13 | 12 | 17 | 22 | 26 | 26 | 24 | 25 | 27 | 29 |
| Seoul National University | 44 | 33 | 25 | 33 | 33 | 29 | 32 | 32 | 31 | 30 | 30 |
| New York University | | 35 | 39 | 45 | 37 | 35 | 35 | 35 | 34 | 35 | 31 |
| University of Texas at Austin | | | | | | | | | | | |
| University of Manchester | 50 | 51 | 40 | 32 | 32 | 31 | 30 | 29 | 30 | 31 | 33 |
| University of Pennsylvania | 30 | 32 | 35 | 31 | 31 | 32 | 36 | 33 | 33 | 33 | 34 |
| McGill University | 12 | 11 | 15 | 25 | 29 | 33 | 31 | 31 | 32 | 34 | 35 |
| University of New South Wales | 31 | 29 | 34 | 40 | 41 | 44 | 42 | 40 | 42 | 39 | 36 |
| University of California, San Diego | 27 | 27 | 31 | 29 | 3.4 | 36 | 37 | 38 | 38 | 37 | 37 |
| Ludwig Maximilian University of Munich | 79 | 79 | 69 | 44 | 44 | 40 | 34 | 36 | 36 | 36 | 38 |
| National Autonomous University of Mexico | 99 | 87 | 130 | 134 | 88 | 61 | 48 | 55 | 45 | 43 | 39 |
| National Taiwan University | 59 | 66 | 45 | 46 | 38 | 38 | 39 | 37 | 37 | 38 | 40 |
| University of Illinois, Urbana-Champaign | 41 | 42 | 48 | 35 | 35 | 34 | 38 | 39 | 39 | 40 | 41 |
| University of São Paulo | 134 | 102 | 120 | 153 | 102 | 65 | 51 | 54 | 51 | 47 | 42 |
| University of Queensland | 36 | 41 | 43 | 54 | 45 | 42 | 46 | 44 | 47 | 69 | 43 |
| University of Buenos Aires | 220 | 144 | 214 | 202 | 124 | 78 | 63 | 52 | 46 | 48 | 44 |
| Johns Hopkins University | 24 | 24 | 27 | 36 | 42 | 45 | 45 | 45 | 41 | 41 | 45 |
| Chinese University of Hong Kong | 68 | 74 | 63 | 58 | 52 | 48 | 50 | 49 | 50 | 49 | 46 |
| Duke University | 28 | 30 | 37 | 38 | 43 | 43 | 44 | 48 | 44 | 44 | 47 |
| Humboldt University of Berlin | 114 | 92 | 79 | 51 | 49 | 46 | 41 | 42 | 43 | 45 | 48 |
| University of Wisconsin - Madison | 42 | 45 | 51 | 42 | 40 | 30 | 40 | 41 | 40 | 42 | 49 |
| Nanyang Technological University | 74 | 68 | 70 | 76 | 64 | 59 | 60 | 62 | 52 | 53 | 50 |
| rianyang reciniological chiversity | 74 | 00 | 70 | 70 | 04 | 39 | 00 | 02 | JZ | JJ | 50 |

As of 2017, only 19 / 50 universities by reputation are from the U.S.

Sources: QS. ICG © 2018

RANKINGS, REPUTATION, AND TALENT ATTRACTION Talent Attraction: The Nexus of Rankings, Reputation and Attraction

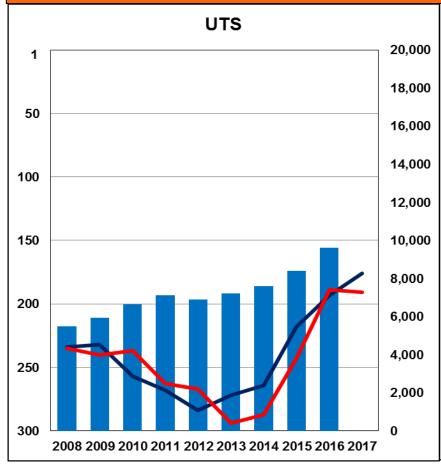
The Nexus of Rankings, Reputation and Attraction

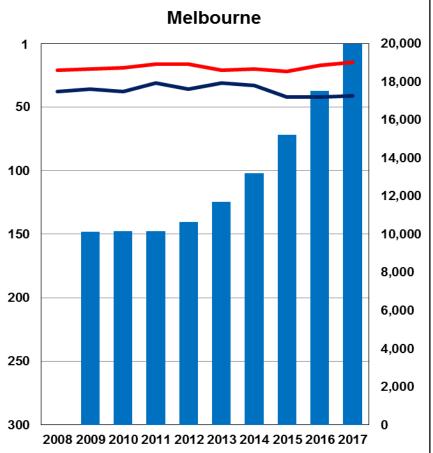
- Stakeholders use rankings and their closely related function of reputation indicator to make decisions – about which country, institution, and program to access.
- Rankings have become key arbiters because they offer an "unbiased", and global perspective no domestic ranking can offer. In addition, they capture salient metrics better.
- Rankings direct students at the front end, but also influence the back end – hiring – through employability rankings and by shaping hiring practices.
- Hundreds of universities engage with international rankings.

International rankings have become a veritable battle ground

RANKINGS, REPUTATION, AND TALENT ATTRACTION Talent Attraction: Institutional Perspectives (I)

Red Line: QS Reputation / Blue Line: QS Rank / Bars: International Students

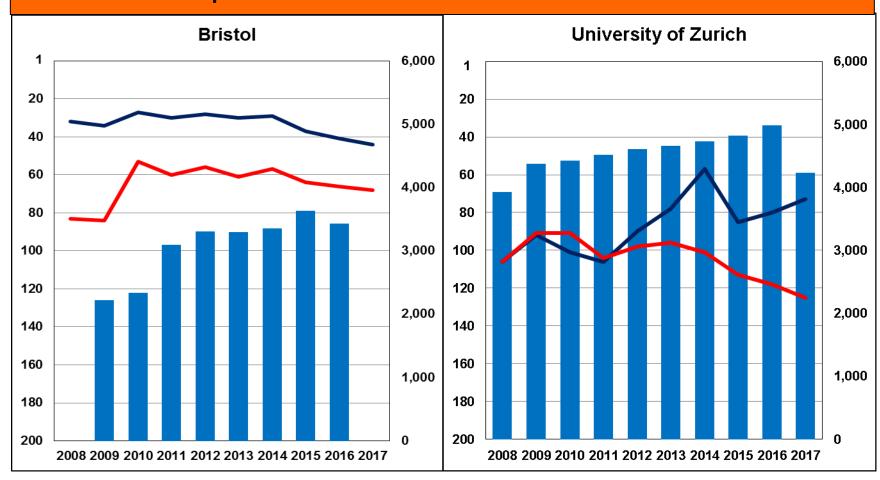




High performance or improving performance drive attraction

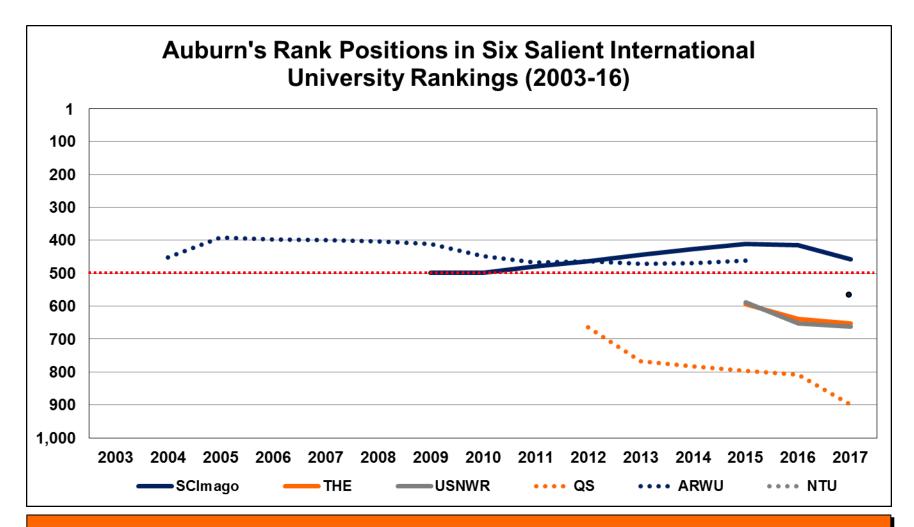
RANKINGS, REPUTATION, AND TALENT ATTRACTION Talent Attraction: Institutional Perspectives (I)

Red Line: QS Reputation / Blue Line: QS Rank / Bars: International Students



Sliding performance depresses growth

RANKINGS, REPUTATION, AND TALENT ATTRACTION Rankings: Auburn in World University Rankings



Auburn dropped out of the Top 500 in the Big Three: ARWU, QS & THE

Notes: Auburn has not been ranked by NTU (Top 500). Auburn dropped out of the ARWU Top 500 in 2016 (now Top 800). Sources: ARWU, NTU, SCImago, THE, USNWR, QS.

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IMPLICATIONS

Implications

- The period of U.S. dominance is gone.
- We are slowly entering a multi-polar university landscape (with the exception of Ivy Plus).
- Talent will follow attraction drivers with international rankings having emerged as a key decision and preference tool.
 Rankings also drive pricing power (tuition fees levels).
- Doing well in rakings and being held in high esteem are useful.
 Even better, understanding what, why, and how will allow an institution to position itself in front of a global audience.
- What matters most: How the world is looking at the U.S. from the outside-in.

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- What questions do you have?
- Where do you see the role of the United States and your institution in international education going forward?
- How attractive do you think is your institution for international talent?
- What challenges and opportunities do you perceive?

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