

How good are Australian universities?

Simon Marginson

CGHE seminar

19 October 2017

Universities, and Australia



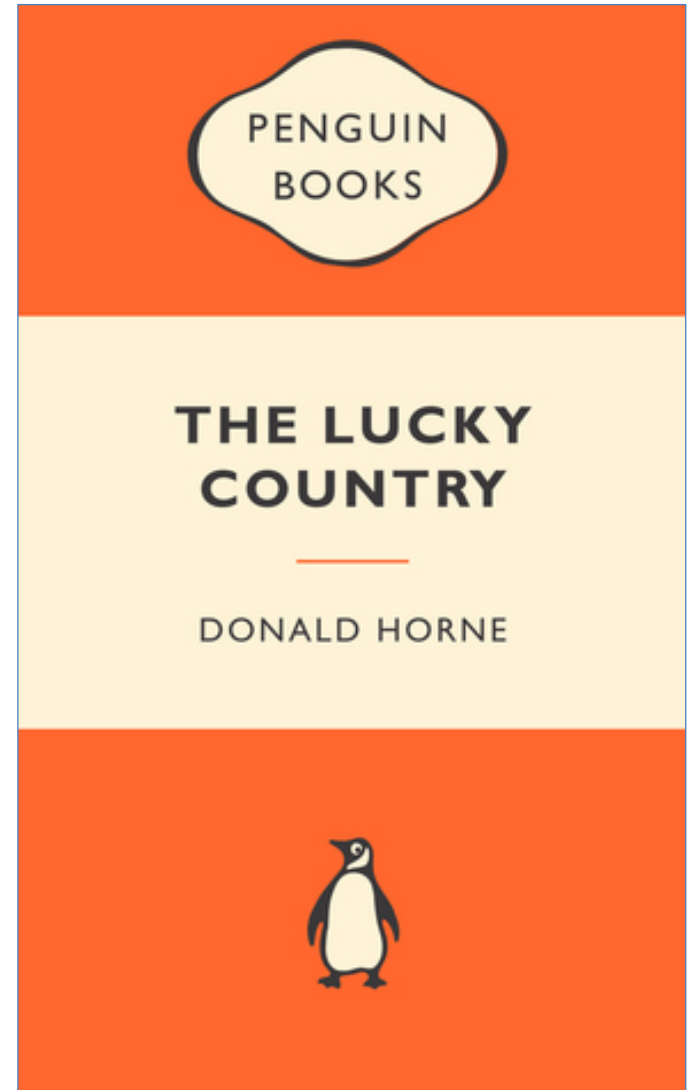
‘How good?’

How good are Australian universities?

- In relation to what—
 - to other universities abroad?
 - to the global common good?
 - to their own potential?
 - to what the country allows them to be?
- How good are they for Australia?
- How good is Australia itself?
- How good have the universities made Australia?

‘Australia has not got a mind. Intellectual life exists but it is still fugitive... Australia has not been a country of great innovation or originality. It has exploited the innovations and originality of others.’

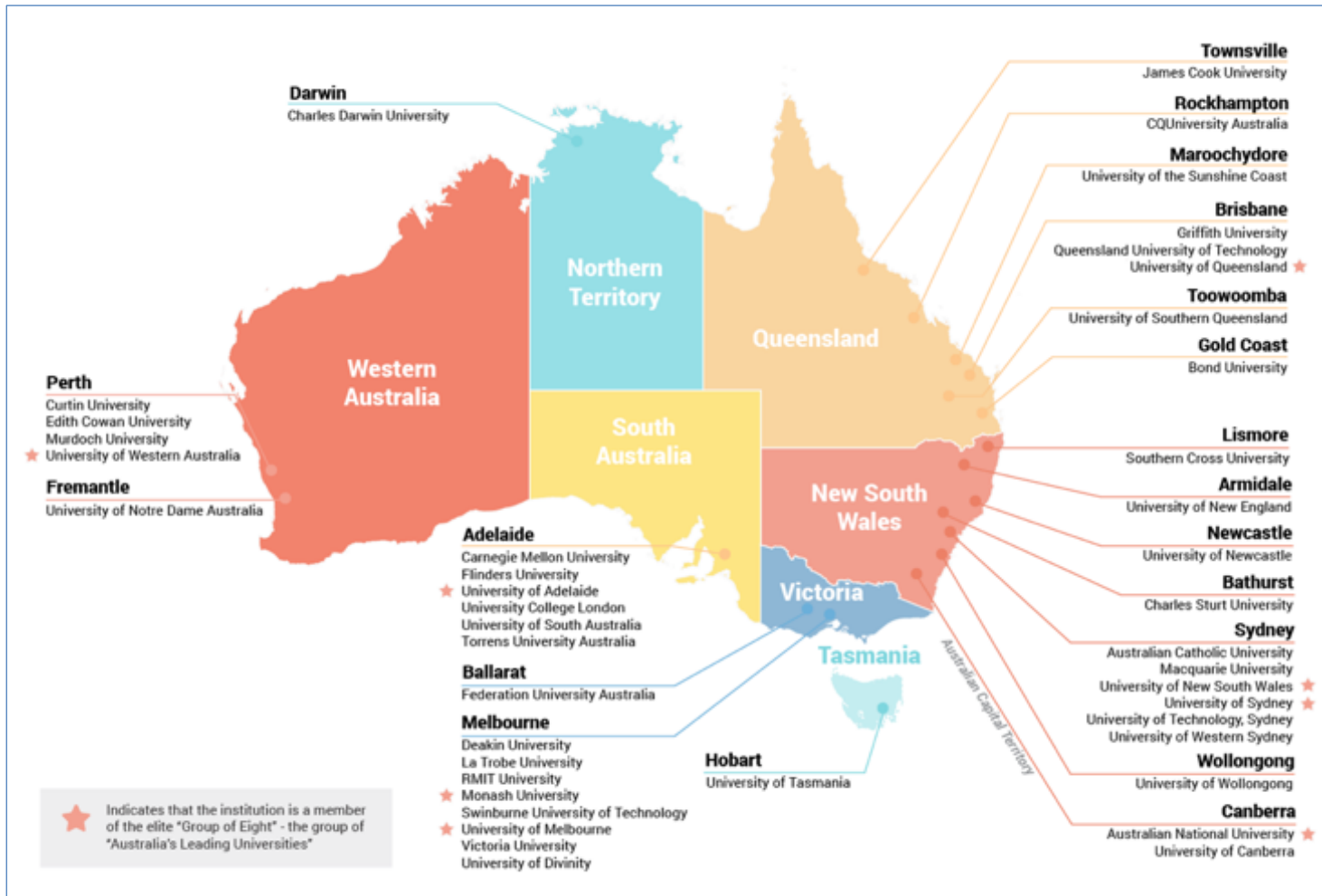
Donald Horne, *The Lucky Country*, 1964, pp. 24-25.



History



The universities today



- 1.4 million students
- 40 public universities (91% of students)
- 363,000 international students (26% of all students)
- 442,000 students in STEM and health
- 359,000 students in management and commerce
- 57,000 in PhDs
- AUD \$26.6 billion higher education income [1 AUD = 0.59 GBP]
- 42% income from governments
- 20% income from domestic students via tuition loans
- 24% income from other student fees, 20% (\$5.3 billion) from international students
- total education exports (2016-17), including spending in general community = \$28 billion [almost two thirds HE]

Large universities in Australia, 2015

- Monash University 70,071 students
- Royal Melbourne Institute of Technology U 60,086
- U Melbourne 58,883
- U Sydney 58,624
- U New South Wales 54,025
- Deakin U 51,841
- U Queensland 50,830
- Curtin U Technology 50,648
- Queensland U Technology 48,479
- Griffith U 46,017
- U Manchester UK 39,700
- U College London UK 37,135

Informal tiers in Australia

Grouping	Universities (competitive funding for research, 2015, AUD million)
Group of Eight (most research intensive)	Melbourne (203), Queensland (186), Sydney (177), Monash (173), NSW (142), ANU (89), Western Australia (87), Adelaide (84)
Middle universities	Macquarie (43), Queensland UT (39), Tasmania (38), Newcastle (35), Curtin (29), Griffith (29), Wollongong (27), South Australia (22), Deakin (22), RMIT (20), James Cook (20), UT Sydney (19), La Trobe (19), Charles Darwin (18), Flinders (18), New England (14), Swinburne (12), Western Sydney (11), Murdoch (10)
Primarily teaching universities	Sunshine Coast (9), Australian Catholic (8) , Southern Queensland (7), Charles Sturt (6), Canberra (4), Southern Cross (3), Bond (3) , Victoria (3), Edith Cowan (2), Central Queensland (2), Federation (1), Notre Dame Australia (0.4) , Torrens (0), Divinity (0)

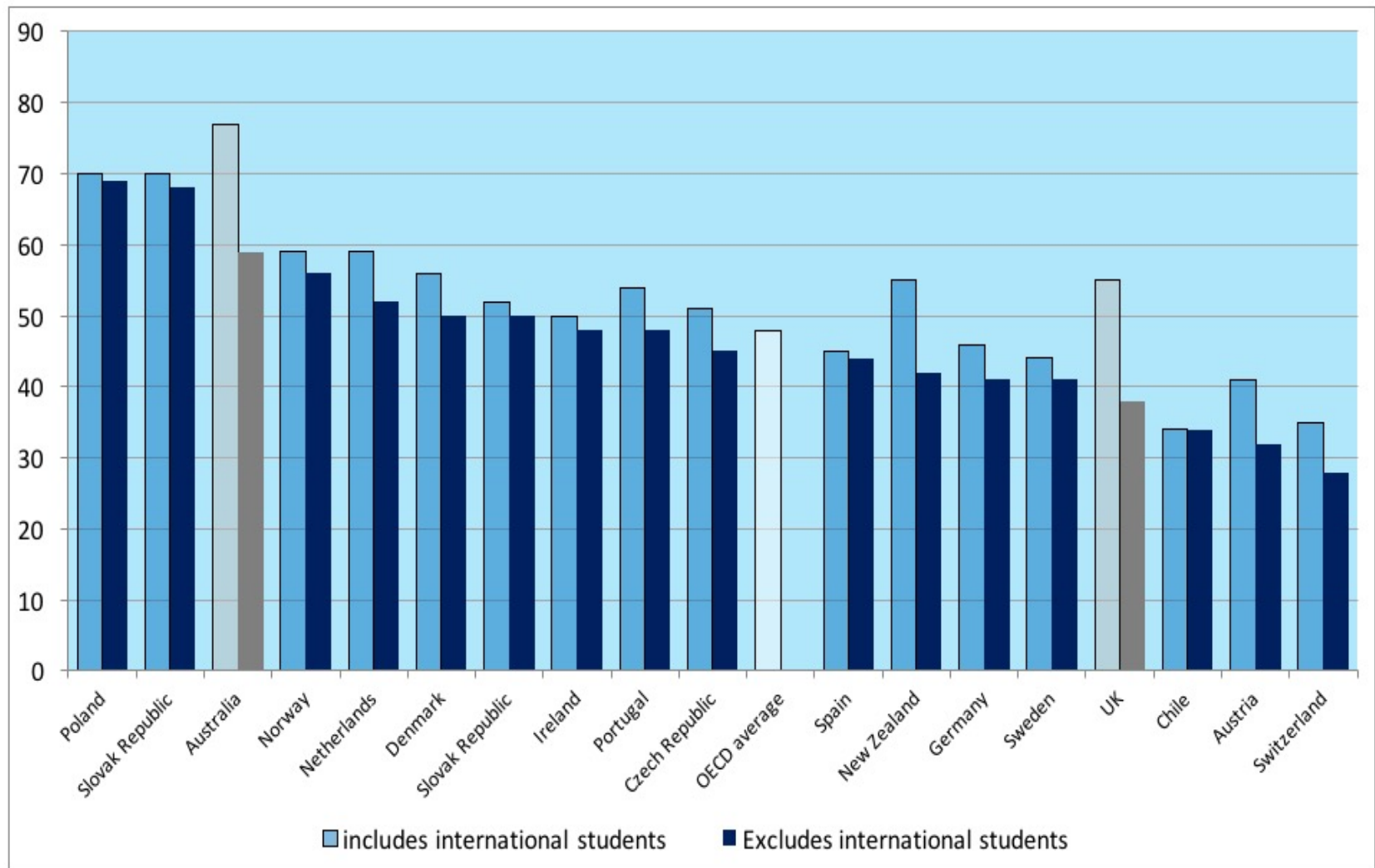
Lighter blue = private sector

International comparisons



Effect of international students on rate of entry into degree programmes by age 25

OECD average includes international students. Source: OECD 2014



Proportion of research papers that had international co-authors, 2008-14

- Netherlands 58%
- UK 56%
- **Australia 52%**
- Canada 51%
- USA 35%
- China 24%

International student mobility

- In 2015, 14% of first degree students, 43% at Masters level and 34% at doctoral level were international students who crossed borders for a year or more
- Of the 363,298 international students, 280,102 (77%) were on shore and 83,196 (23%) were offshore
- Over half were in business studies and related areas
- 107,084 (29% of the total) were from China, 33,298 India, 32,404 Singapore and 28,913 Malaysia
- But only 0.7% of the domestic student body in Australia went abroad for a year or more
- Ratio of incoming students to outgoing students was 25, the highest level in the OECD (USA 21)

Australia in the Shanghai ARWU top 500

	Australian universities in the ranking in 2017
1-50	Melbourne (39)
51-100	Queensland (55), Monash (78), Sydney (83), Western Australia (91), ANU (97)
101-150	Adelaide, New South Wales
151-200	Curtin, Macquarie
201-300	Deakin, QUT, Tasmania, Wollongong
301-400	Griffith, James Cook, La Trobe, Swinburne, Newcastle, U Technology Sydney, Western Sydney
401-500	Flinders, RMIT

Papers published 2012-2015 in top 10% of their field by citation rate (selected comparators)

- Harvard U USA 7134
- Stanford U USA 3372
- U Toronto CANADA 2980
- University College London UK 2357
- U Wisconsin-Madison USA 1766
- U British Columbia CANADA 1730
- National U Singapore SINGAPORE 1597
- U Melbourne AUSTRALIA 1518
- U California Davis USA 1493
- U Queensland AUSTRALIA 1443
- U Sydney AUSTRALIA 1416

The inner university



The outer university



The region and the world



High citation papers in maths, computing, physical sciences, engineering, 2012-2015: world top 12 (Leiden data)

World rank	University and system	High citation papers in Mathematics, Computing, Physical Sciences and Engineering
1	Tsinghua U CHINA	1421
2	MIT USA	1420
3	UC Berkeley USA	1360
4	Nanyang TU SINGAPORE	1190
5	Stanford U USA	1184
6	Zhejiang U CHINA	1113
7	Harvard U USA	1008
8	National U SINGAPORE	975
9	U Cambridge UK	936
10	ETH Zurich SWITZERLAND	842
11	U Science and Technology CHINA	835
12	Shanghai Jiao Tong U CHINA	834

Concluding thoughts

