



Statistics relating to PCT applications by universities

Geneva, June 18, 2018

Hao Zhou

Data development section

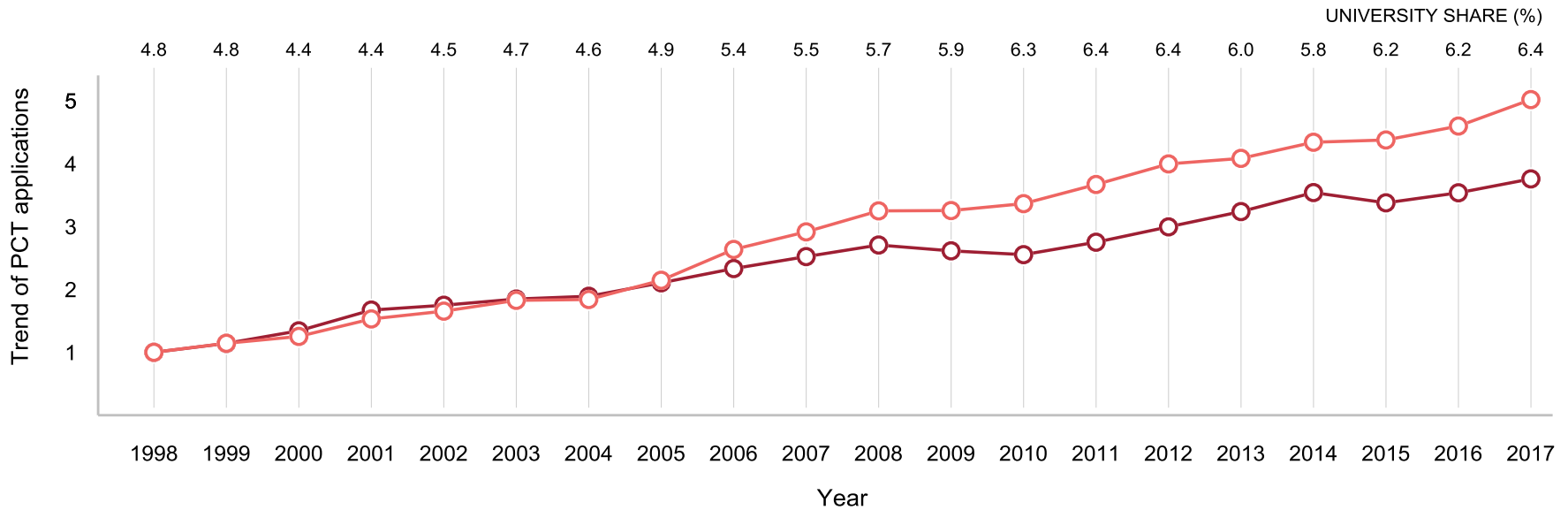
WIPO Economics and Statistics Division

How do we identify universities?

- Method: keywords matching (affirmative or negative)
- 3000+ keywords used: UNIVERSITY, COLLEGE, ECOLE, HOCHSCHULE,
- Non-obvious names & abbreviations:
ISIS INNOVATION LIMITED
ARIZONA BOARD OF REGENTS
EPFL, ETH, ENSAM,
- Controlling for false-positive results (user confirmation)
- Results “good enough” for statistics

PCT filings by Universities

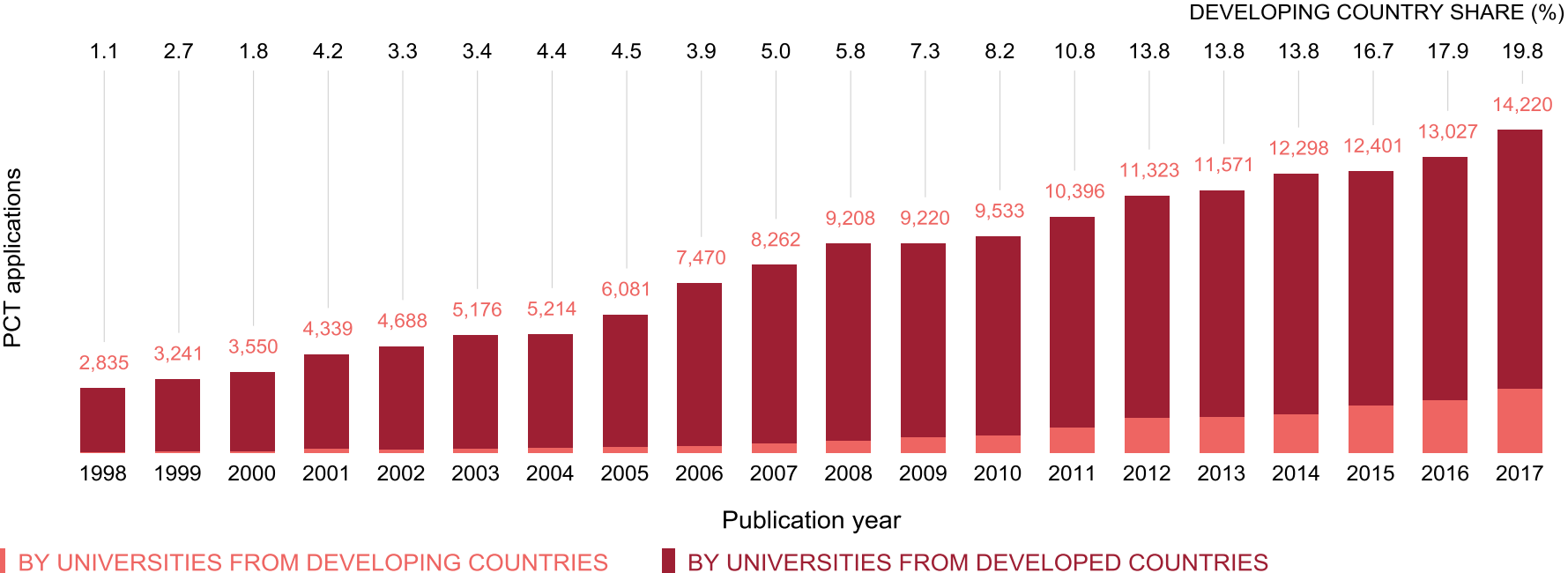
- Universities intensified PCT involvement
- University share is still very low



■ TOTAL PCT APPLICATIONS ■ PCT APPLICATIONS BY UNIVERSITIES

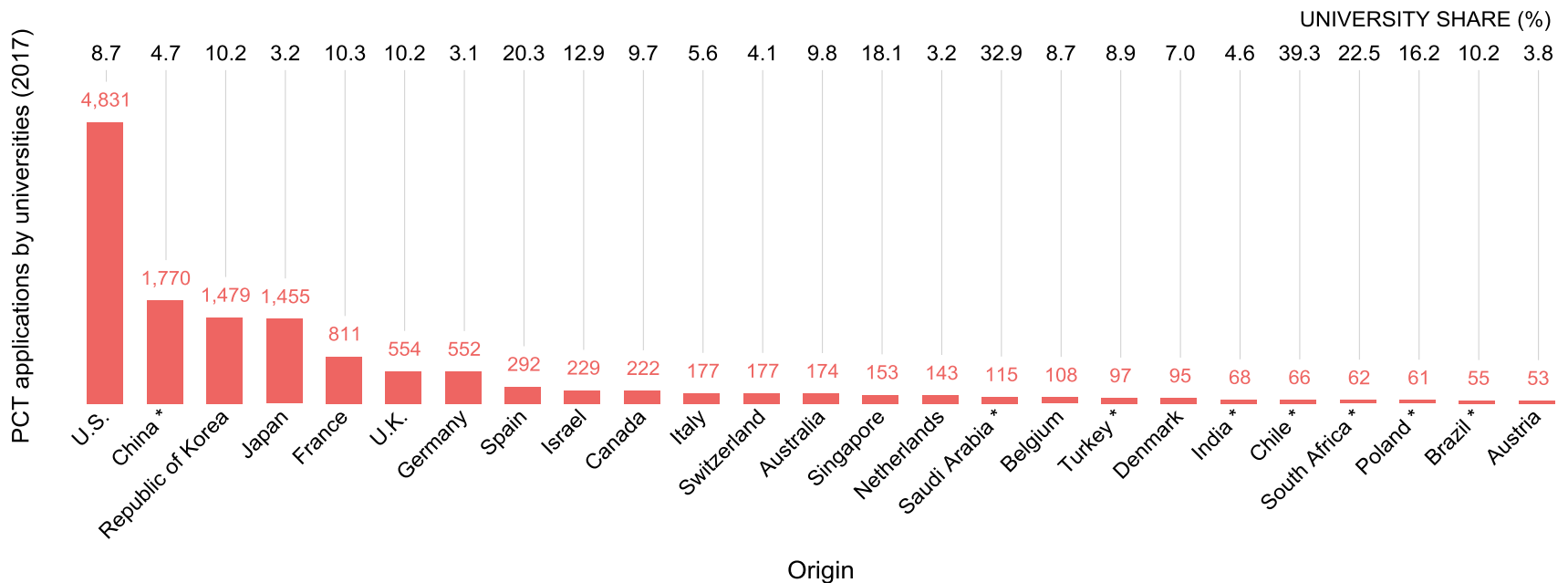
PCT filings by Universities

- Universities from developing countries are catching up (developing country = countries qualified for PCT fee reduction)



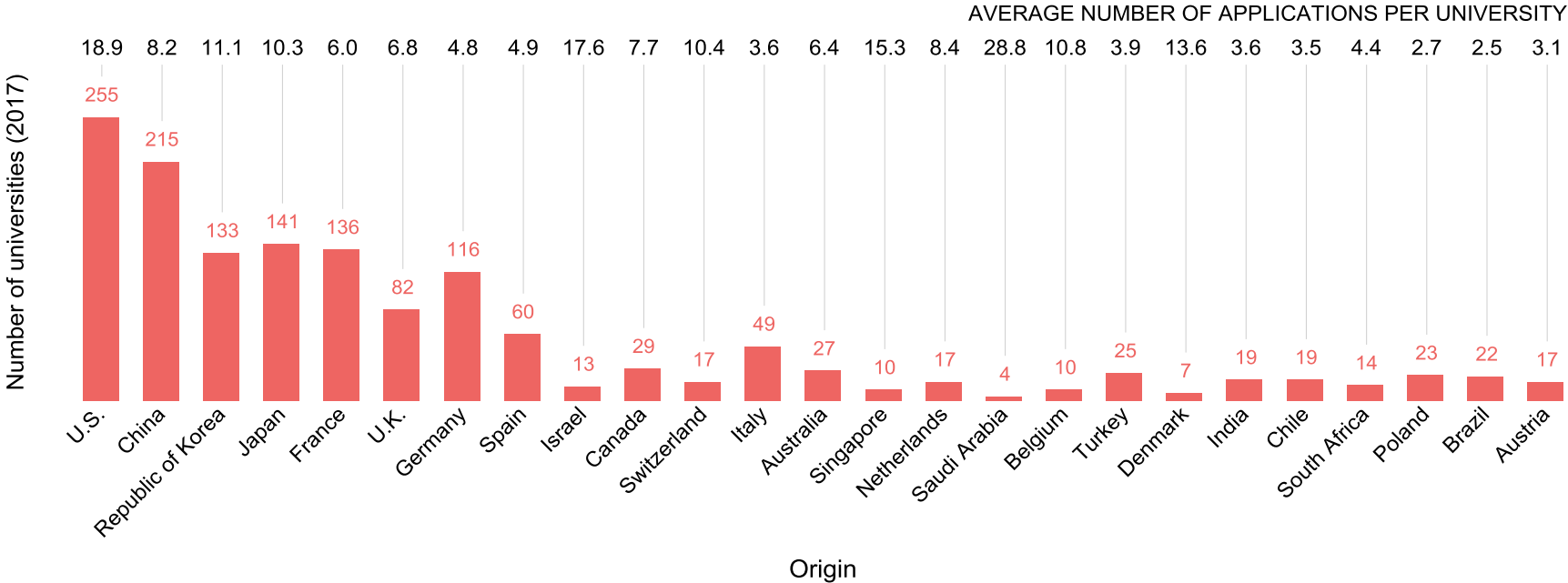
PCT filings by Universities

- U.S. universities filed most, followed by East Asian countries and European countries
- Large share of applications were filed by universities in Chile and Saudi Arabia



PCT filings by Universities

■ Number of universities using PCT:



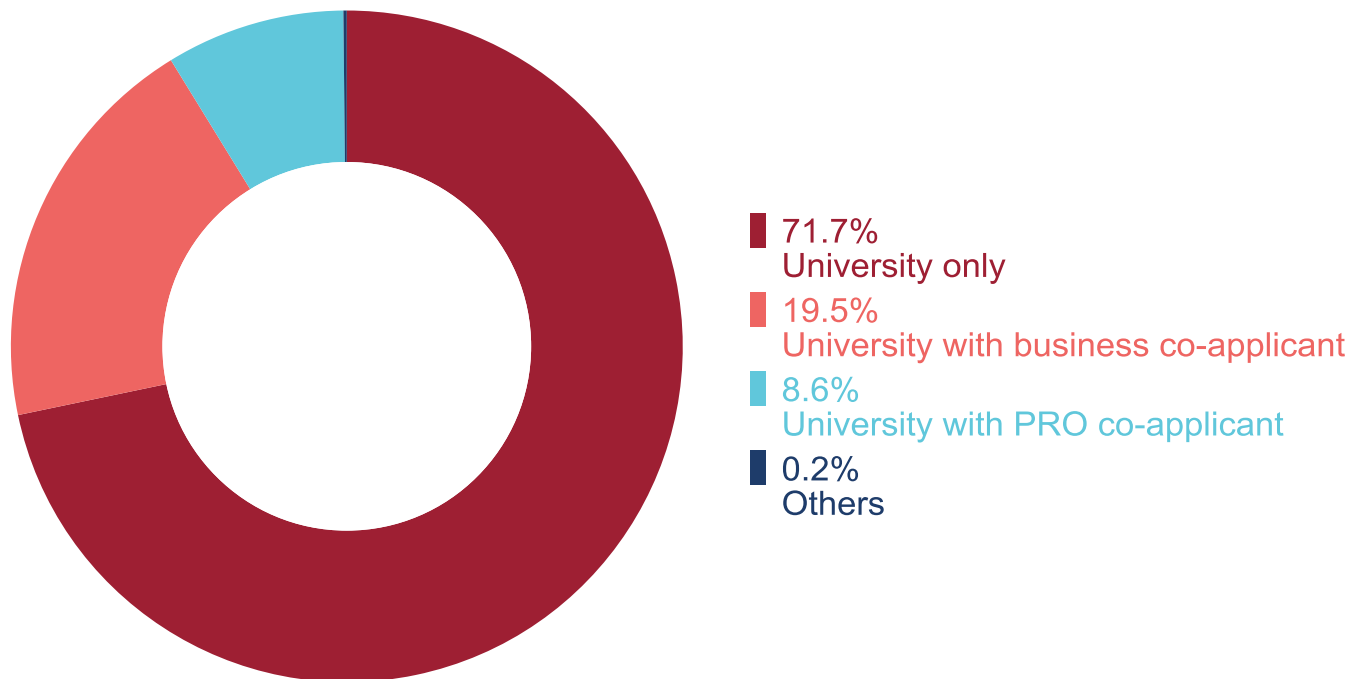
PCT filings by Universities

- For example, two universities in Saudi Arabia filed most of PCT applications for that country:

KING ABDULLAH UNIVERSITY OF SCIENCE AND TECHNOLOGY	99
KING FAHD UNIVERSITY OF PETROLEUM AND MINERALS	16

Do universities collaborate with companies?

- Most universities file alone
- Some file together with companies or PROs



2017

Do universities collaborate with companies?

- Among applications jointly filed by universities and other institutions, 86% of them are within the same country
- Cross-country collaboration (2017):

University	Company	Applications
U.K.	U.S.	20
U.S.	Switzerland	18
U.S.	Japan	18
Saudi Arabia	U.S.	13
China	U.S.	12
U.S.	China	12
U.S.	Republic of Korea	12

Do universities collaborate with companies?

■ Example of U.S. – China collaboration (2017):

U.S. university	Chinese company	Applications
ARIZONA STATE UNIVERSITY	STATE GRID CORPORATION OF CHINA	4
KENT STATE UNIVERSITY	BOE TECHNOLOGY GROUP CO.,LTD	3
MIDDLE TENNESSEE STATE UNIVERSITY	GUANGXI BOTANICAL GARDEN OF MEDICINAL PLANTS	1
MIDDLE TENNESSEE STATE UNIVERSITY	INSTITUTE OF MEDICINAL PLANT DEVELOPMENT	1
RICE UNIVERSITY	HUAWEI TECHNOLOGIES CO., LTD.	1
RICE UNIVERSITY	SHANGHAI INSTITUTE OF MICROSYSTEM AND INFORMATION TECHNOLOGY	1
UNIVERSITY OF CALIFORNIA	GUANGZHOU INSTITUTES OF BIOMEDICINE AND HEALTH	1
UNIVERSITY OF PITTSBURGH	GENERON (SHANGHAI) CORPORATION LTD.	1
UNIVERSITY OF TEXAS SYSTEM	HUAWEI TECHNOLOGIES CO., LTD.	1

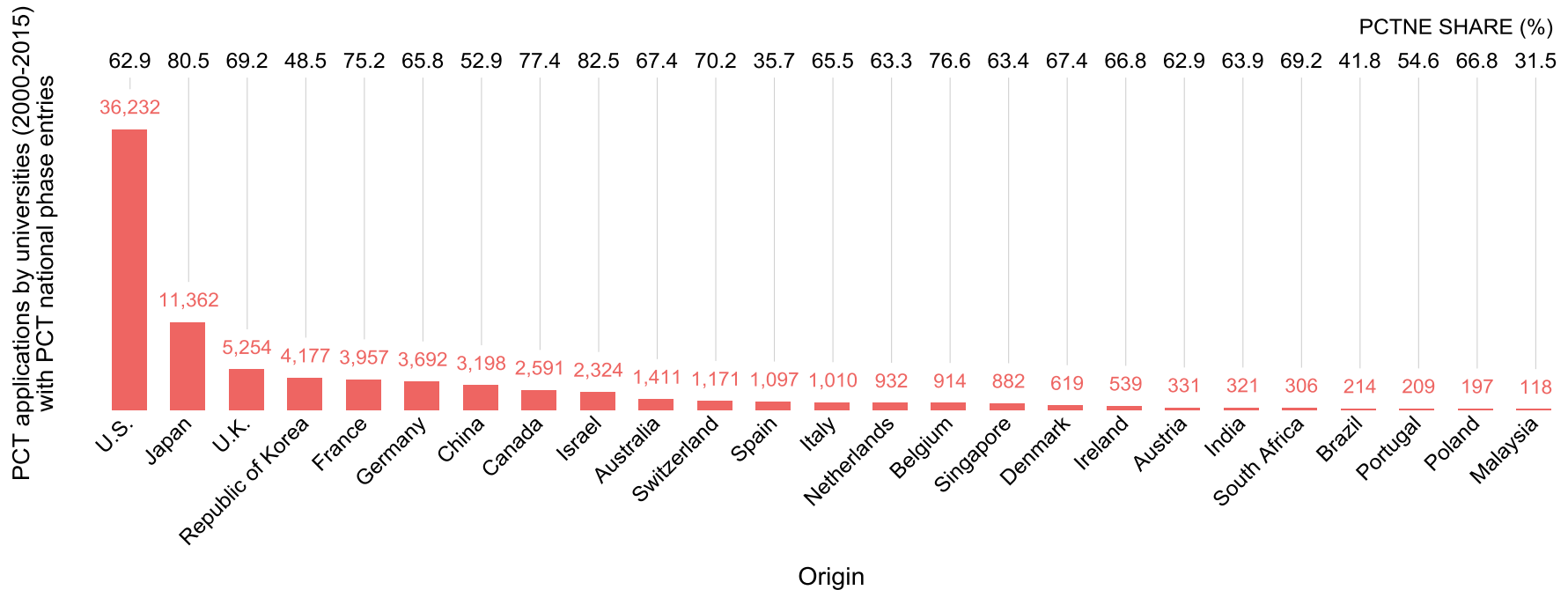
Do universities enter national phase?

- Two thirds of applications from universities entered PCT national phase (2000 – 2015)
- That share is slightly higher for jointly filed applications (73%)

All university applications (2000 – 2015)	
Total applications	130,730
Applications with national phase entries	84,502
PCT NPE share (%)	65%

Do universities enter national phase?

- Most applications from Israel and Japan entered national phase
- Relatively low percentage of application from Malaysia, Spain and Brazil entered national phase



How much did universities pay for PCT?

- In 2017, applications by university-only applicants accounted for around 14 million Swiss francs
- Universities from developed countries payed the most

Type of applicant	Applications in 2017	Fees (million CHF)
University from developed countries	7902	10.8
University from developing countries	2296	3.1

Questions?