ROLE OF HUMAN RESOURCES IN AN EMERGING ECONOMY COUNTRY

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Council of Higher Education

October 8, 2015, Ankara

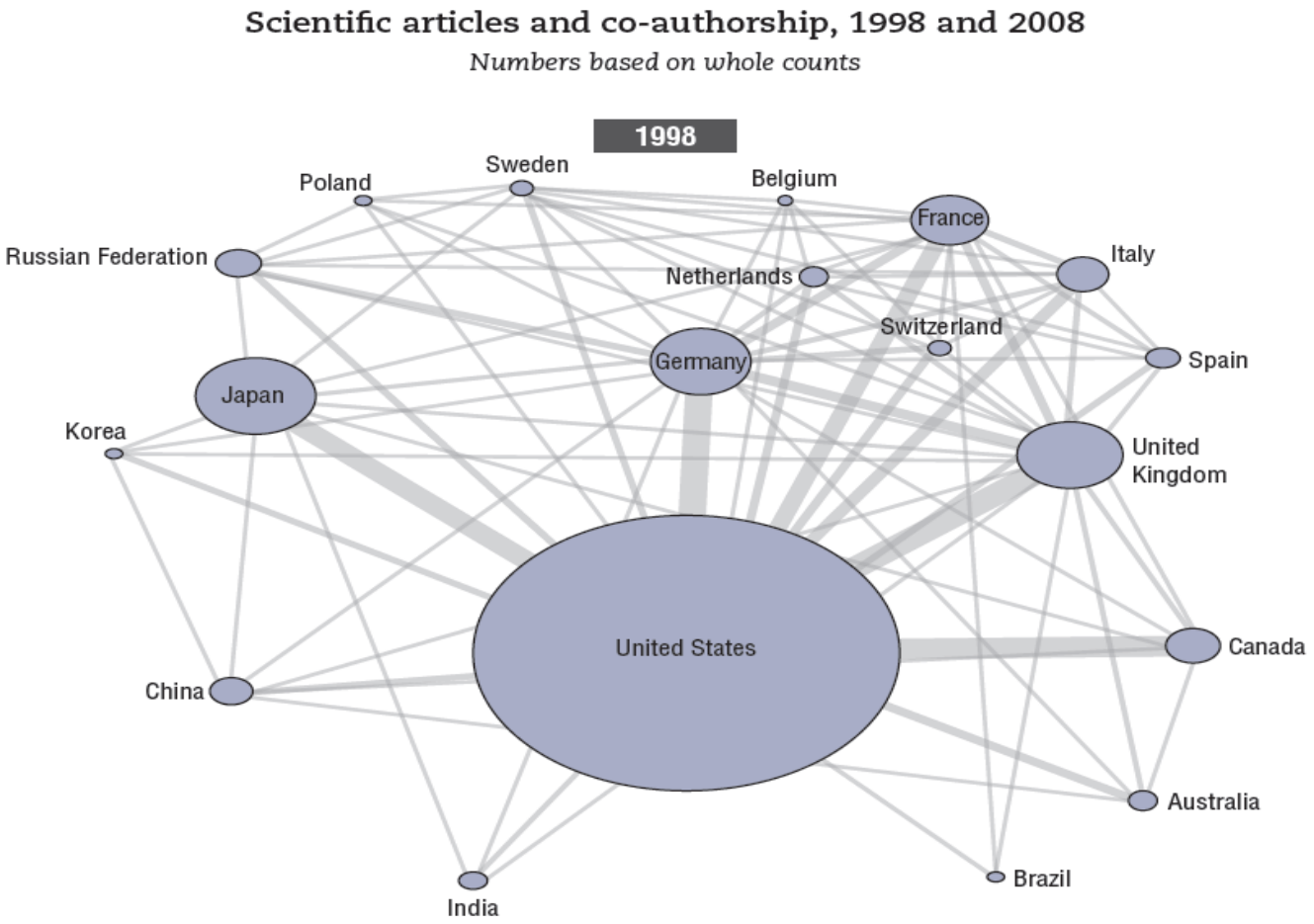
Trends in Higher Education

- Decrease in the Public Funds
- Internationalisation
- Importance of Societal Outreach
- Quality Assurance and Accreditation
- Rankings

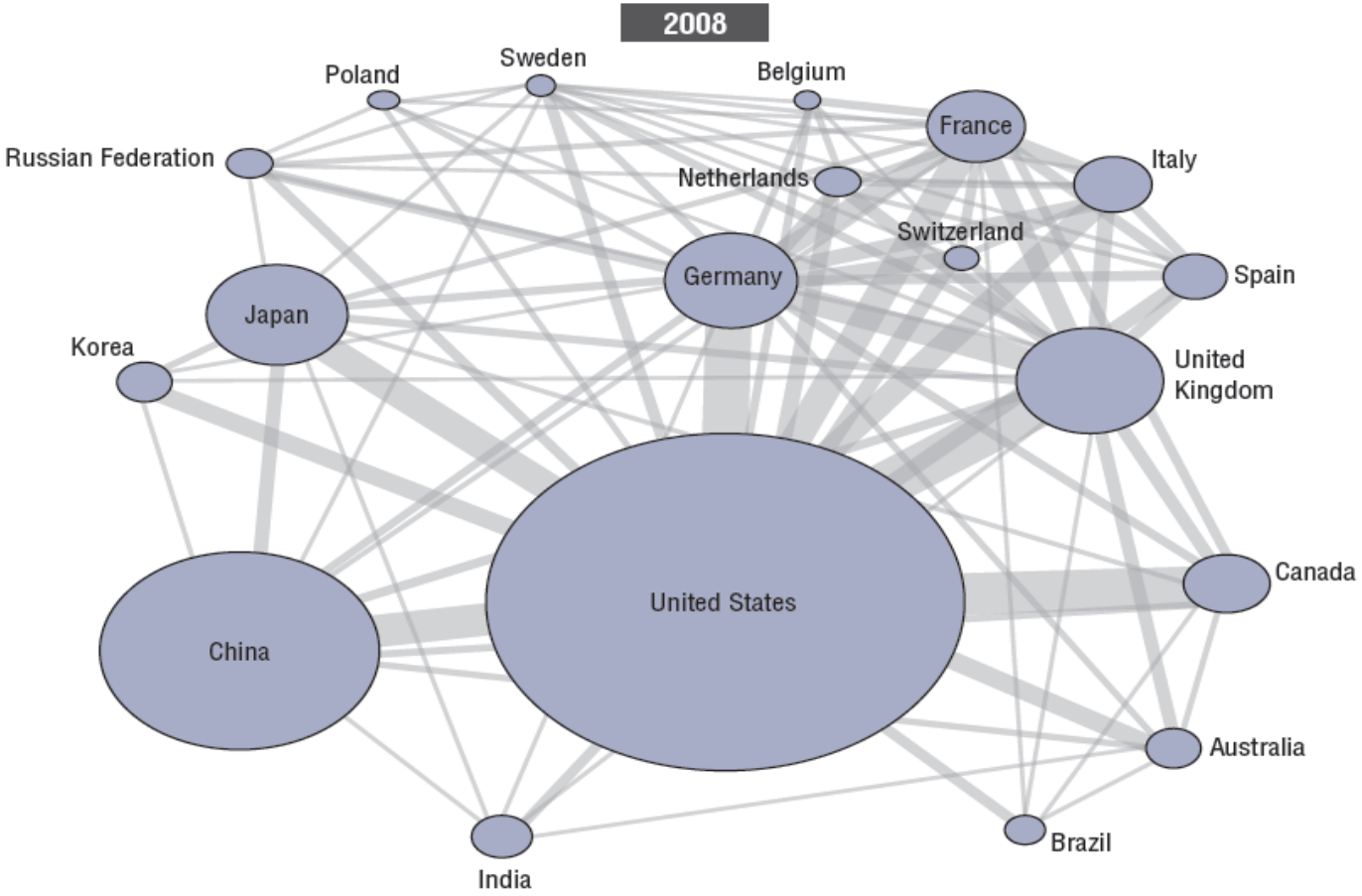
Globalization (Collaboration)

- Demand in Higher Education
- Change in Learning Environments by Information Technologies
- Diversity of HEIs (Mission Differentiation)

Networking and Collaborations -1-



Networking and Collaborations – 2-



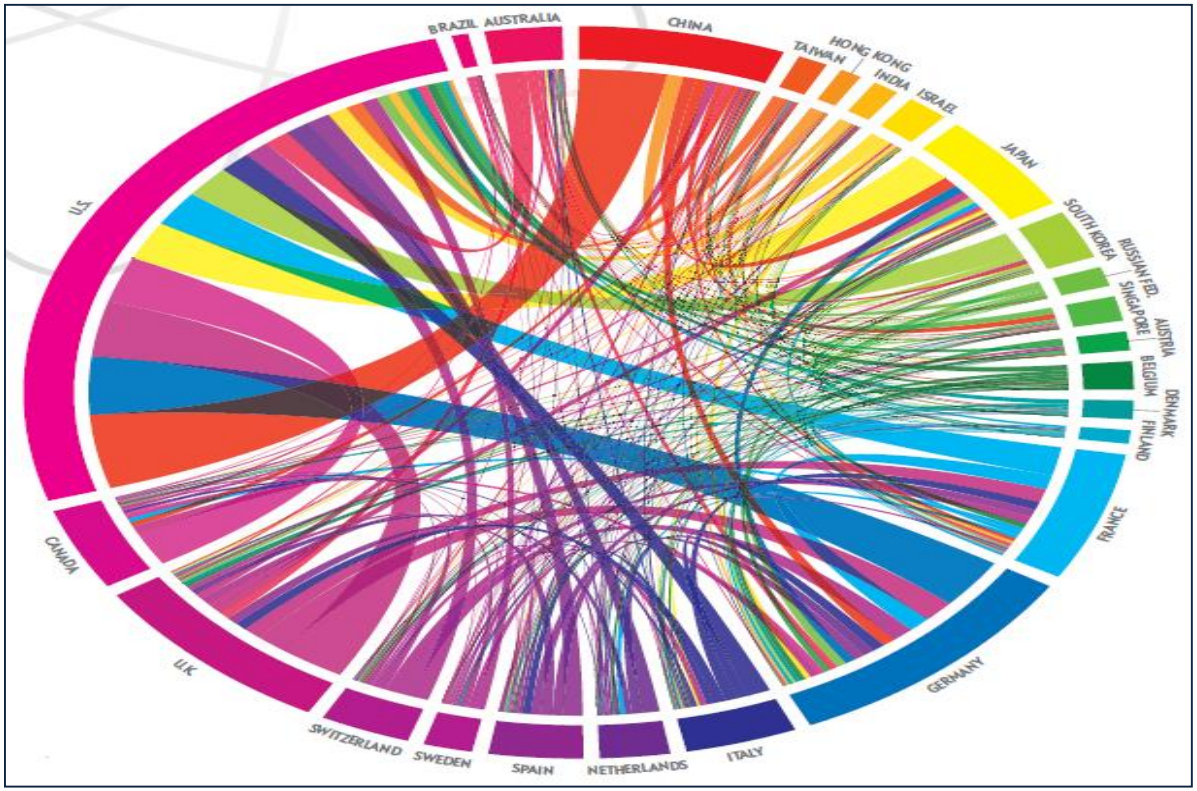
How to read this figure

The size of the bubbles reflects the number of scientific publications and the thickness of the link indicates the intensity of collaboration, *i.e.* co-authorship.

Source: OECD calculations, based on Scopus Custom Data, Elsevier, December 2009. See chapter notes.

StatLink http://dx.doi.org/10.1787/835027386353

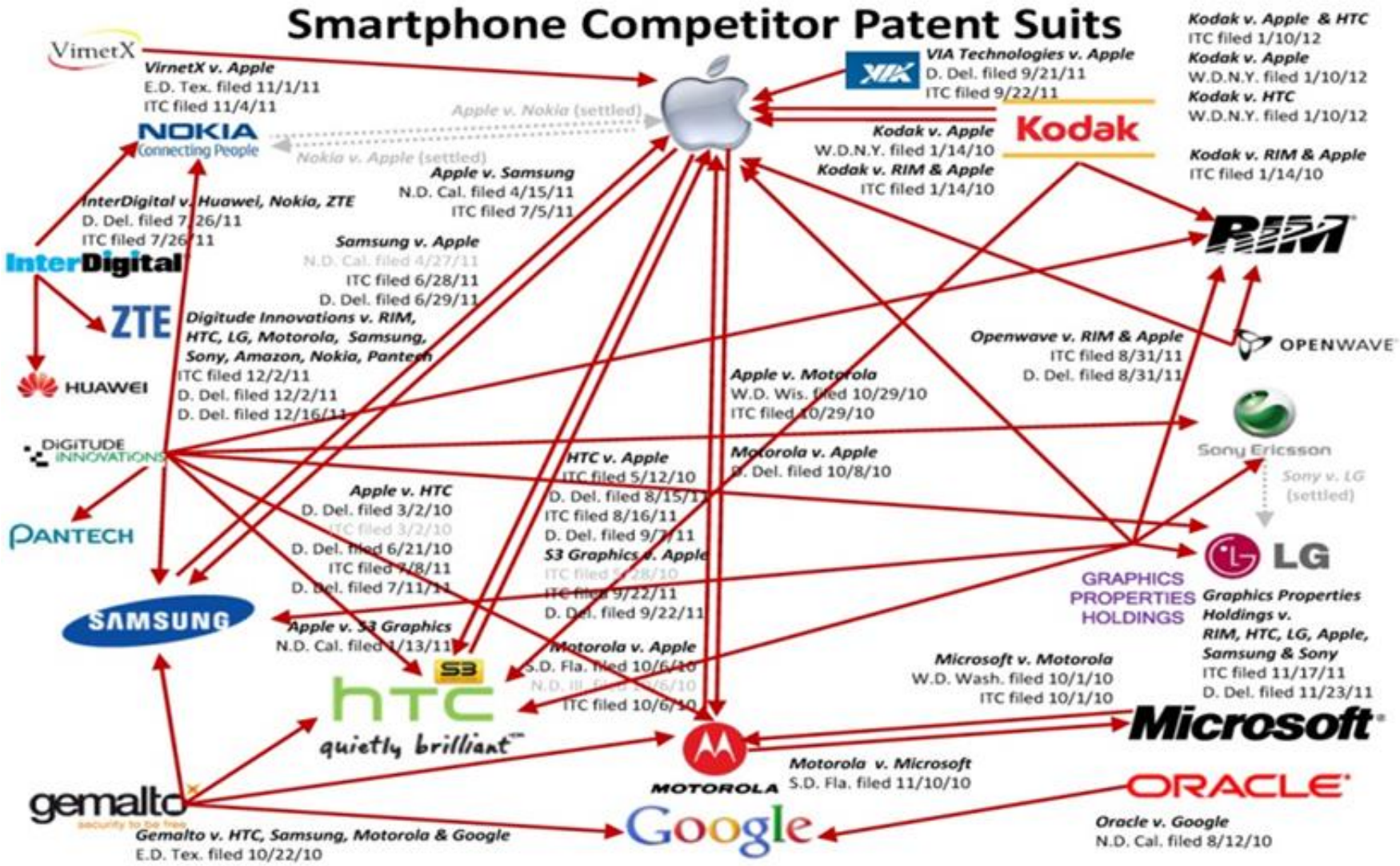
COLLABORATIONS
(25 NATIONS WITH THE LARGEST SCIENCE OUTPUT)



This circular graph shows collaboration among the 25 nations with the largest science output, as measured in scientific papers that appeared in 2011 in a select group of journals. Not included are collaborations that took place inside each country.

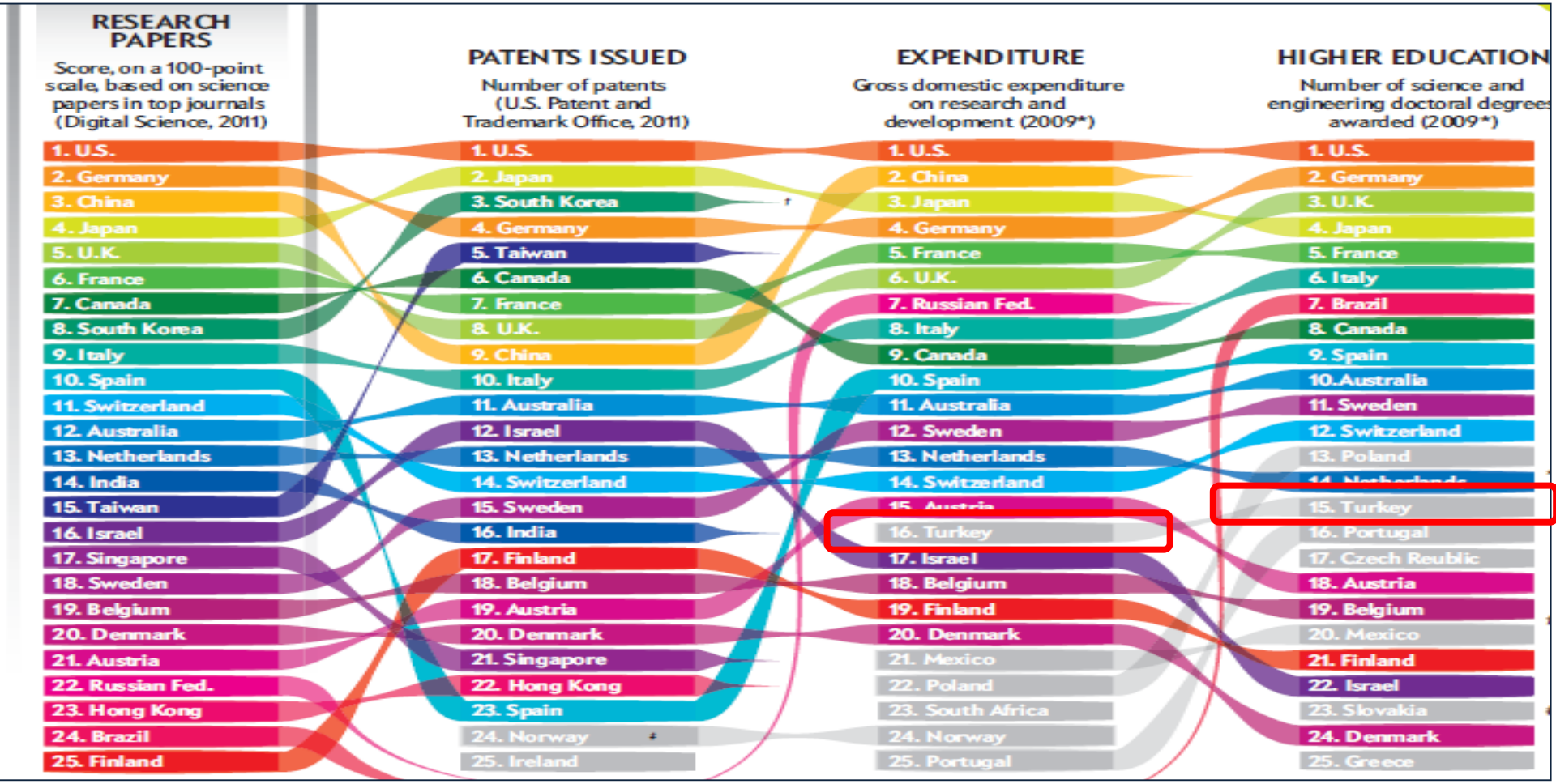
Source: Scientific American, October 2012

Collaboration in Smart Telephone Ecosystem



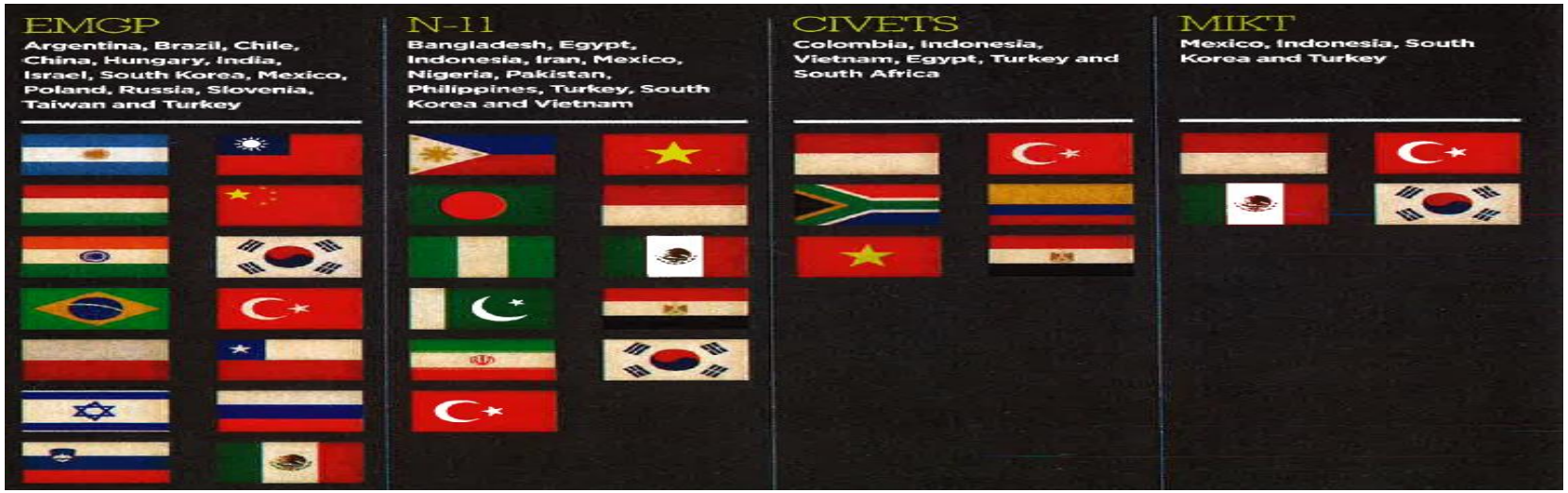
POSITION of TURKEY
in GLOBAL INNOVATION ECOSYSTEM

LEADING COUNTRIES IN SCIENCE AND TECHNOLOGY



Source: October 2012, ScientificAmerican.com

ECONOMIST LOOK AHEAD TO THE NEXT HOT AND EMERGING MARKETS



Columbia University created a list of Emerging Market Global Players (EMGP) this year that its economists believe to be up-and-coming.

Goldman Sachs economist Jim O'Neill, who coined the term BRIC to identify the four countries (Brazil, Russia, India and China) whose emerging economies should be watched, then identified the Next 11 or N-11 in 2005.

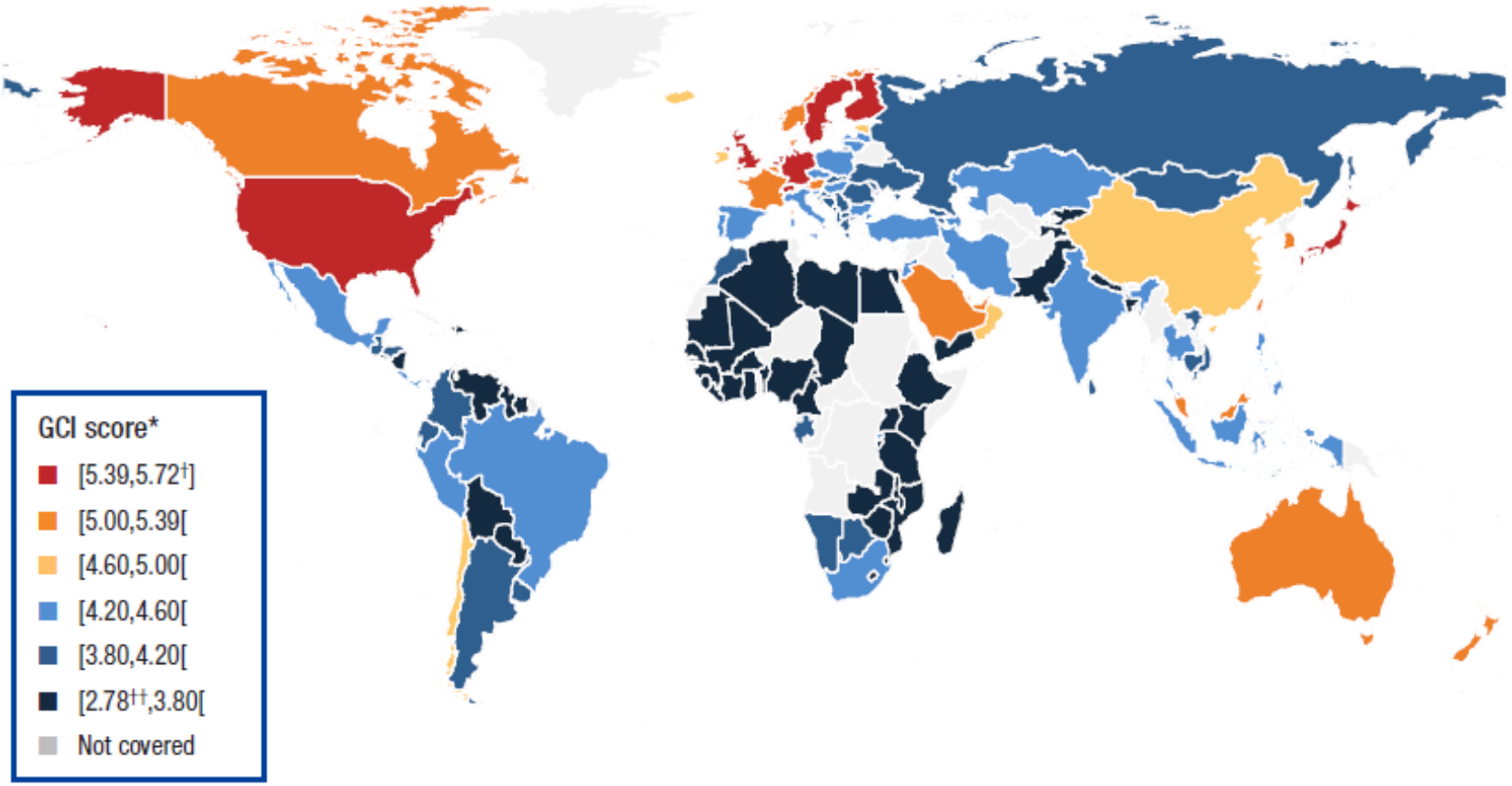
In 2009, economist Robert Ward drew attention to these countries as the next group of emerging markets (the acronym coincidentally links to a nocturnal mammal, the civet, native to several of the CIVETS countries).

O'Neill narrowed his picks for promising markets for investors in 2007.

Source: Executive Travel, October 2012

Box 1: Competitiveness from above: The GCI heat map

Figure 1: The GCI heat map



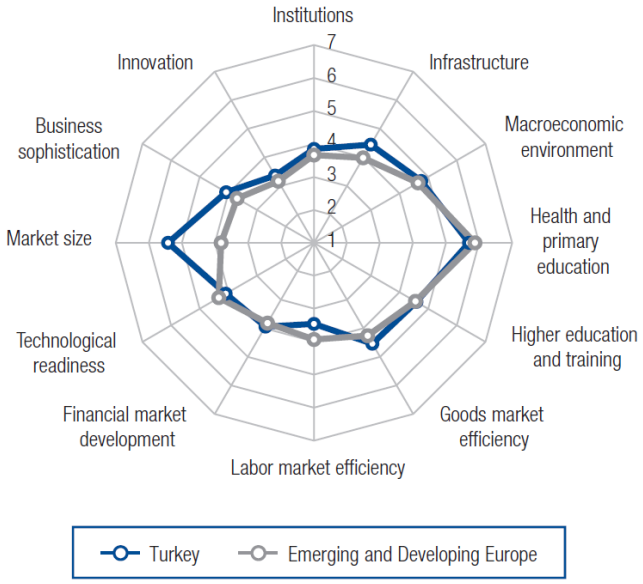
* The interval [*x*,*y*[is inclusive of *x* but exclusive of *y*. †Highest value; ††lowest value.

WEF 2012-2013 Report

THE WORLD ECONOMIC FORUM
GLOBAL COMPETITIVENESS REPORT 2015–2016

Global Competitiveness Index

	Rank (out of 140)	Score (1–7)
GCI 2015–2016	**51**	**4.4**
GCI 2014–2015 (out of 144)	45	4.5
GCI 2013–2014 (out of 148)	44	4.5
GCI 2012–2013 (out of 144)	43	4.5
Basic requirements (36.3%)	**57**	**4.7**
1st pillar: Institutions	75	3.8
2nd pillar: Infrastructure	53	4.4
3rd pillar: Macroeconomic environment	68	4.7
4th pillar: Health and primary education	73	5.7
Efficiency enhancers (50.0%)	**48**	**4.3**
5th pillar: Higher education and training	55	4.6
6th pillar: Goods market efficiency	45	4.5
7th pillar: Labor market efficiency	127	3.5
8th pillar: Financial market development	64	3.9
9th pillar: Technological readiness	64	4.1
10th pillar: Market size	16	5.4
Innovation and sophistication factors (13.7%)	**56**	**3.7**
11th pillar: Business sophistication	58	4.1
12th pillar: Innovation	60	3.4



Stage of development

Source: The World Economic Forum Global Competitiveness Report 2015–2016

THE MAIN TARGET FOR TURKEY TO BE ONE OF THE WORLD'S TOP TEN ECONOMIES IN 2023!!!

- **Achieving an R&D intensity of 3% by 2023 : %3 (%0.95*)**
- **Business enterprise expenditure on R&D (BERD) as %3 of GDP : %2 (%0.45*)**
- **R&D Personnel (FTE) : 300.000 (113.000*)**
- **R&D Personnel (FTE) by business enterprise sector : %60 (%52*)**

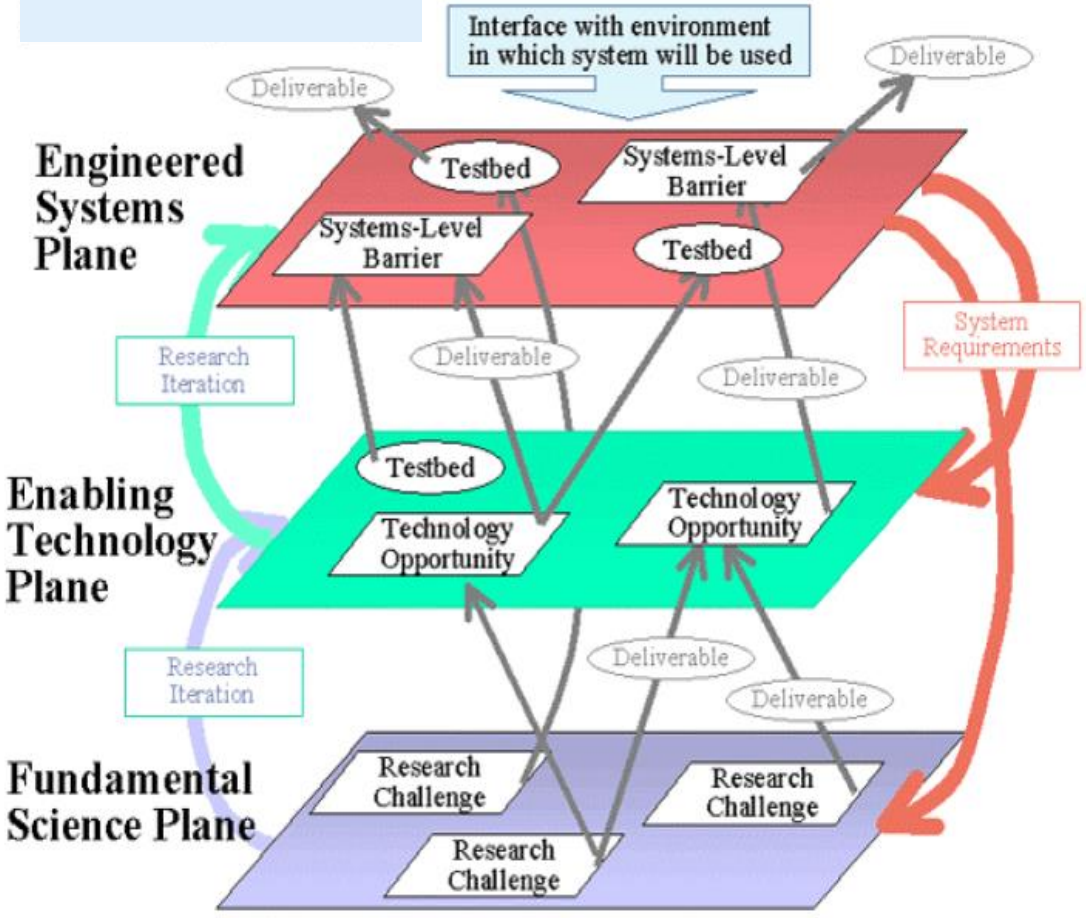
*End of 2013

Challenges and Opportunites

Technology Level	% in Exports in 2002	% in Exports in 2010
High	6.2	3.4 ↓
Above Average	24.3	32.2 ↑
Below Average	22.8	31.8 ↑
Low	46.8	32.6 ↓

Ref: TUIK, OECD-STAN Database

Transition to Commercilization at Advanced Technologies



* NSF ERC Research Management Guidelines

Multi-layer structure
Integrative thematic R&D

Contribution of all stakeholders (academics, researcher, student) – team science

Work necessary at all three layers

Synery effect: total value of all components are larger than every segments' value

Recommendations

- Capacity of countries to perform in the KE depends critically on the availability of highly skilled, innovative and flexible human resources, especially in the area of science and engineering

- Adjusting education and learning systems for the KE requires sustained investments and strategic and systemic interventions

- It also requires a new partnership between the government, the private sector and civil society

- What is most needed is a different type of leadership and capacity development across the various education and learning systems

THE MAIN TARGET FOR TURKEY TO BE ONE OF THE WORLD'S TOP TEN ECONOMIES IN 2023!!!

STRATEGIES & POLICIES

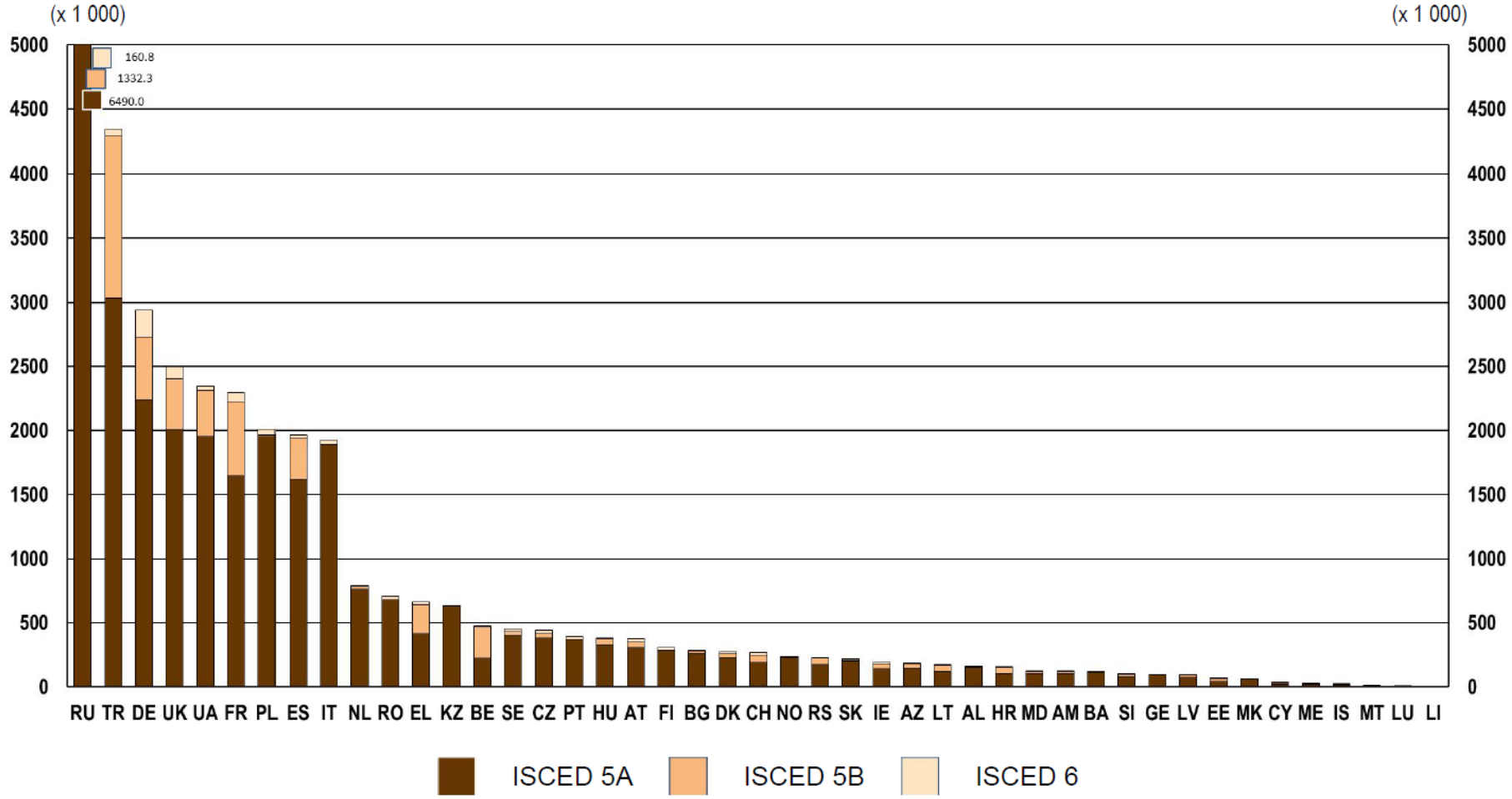
- ***Development and Improvement of Knowledge Transfer Ecosystem***

- **Development and Improvement of Higher Education System and therefore Human Resources System**

Information On The Higher Education in Turkey

The European Higher Education Area in 2015: Bologna Process Implementation Report

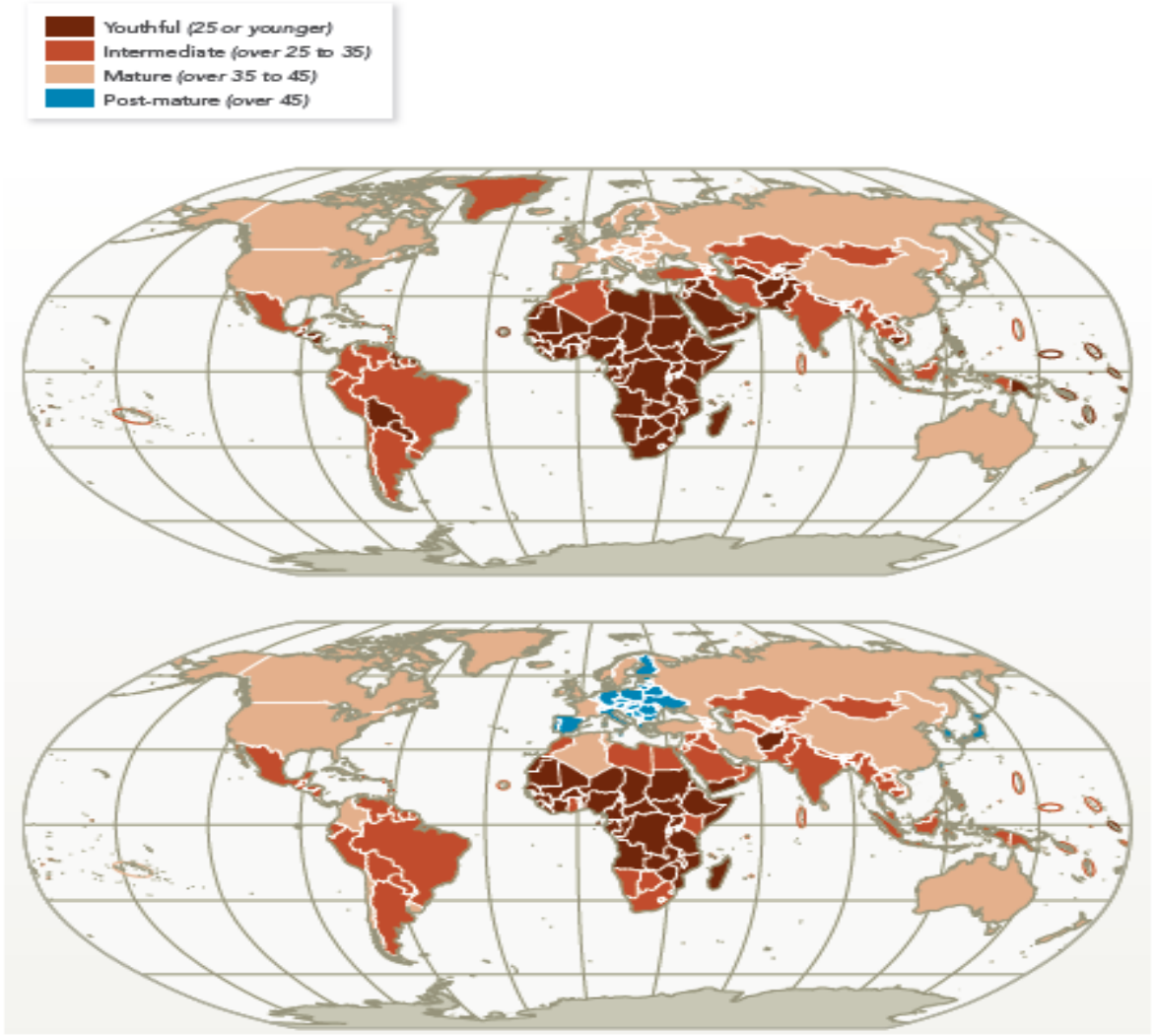
Figure 1.1: Number of students enrolled in tertiary education by ISCED level, 2011/12



Total Number of Students (2014-2015)

Total	**6.063.680**
Short Cycle (associate)	2.013.078
First Cycle (bachelor)	3.628.871
Second Cycle (master)	343.979
Third Cycle (Phd)	77.752

THE MEDIAN AGE OF COUNTRY-LEVEL POPULATIONS, 2010-2030



Source: US Census Bureau's International Database, June 2011. The median ages of Arab Gulf states (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and UAE) reflect the age structure of resident citizens, omitting temporary labor migrants.

PhD Students:

2013-2014: 67157

2014-2015: 77752

PhD Graduates:

2012-2013: 4873

2013-2014: 4665

Fields %

Social Sciences: 42

Natural and Eng. Sci: 40

Health Sciences: 18

Demand (Only for HEIs):
at least 6000 in 2015, 8000 in 2019 (Only for HEIs)

Global Challenges

↓

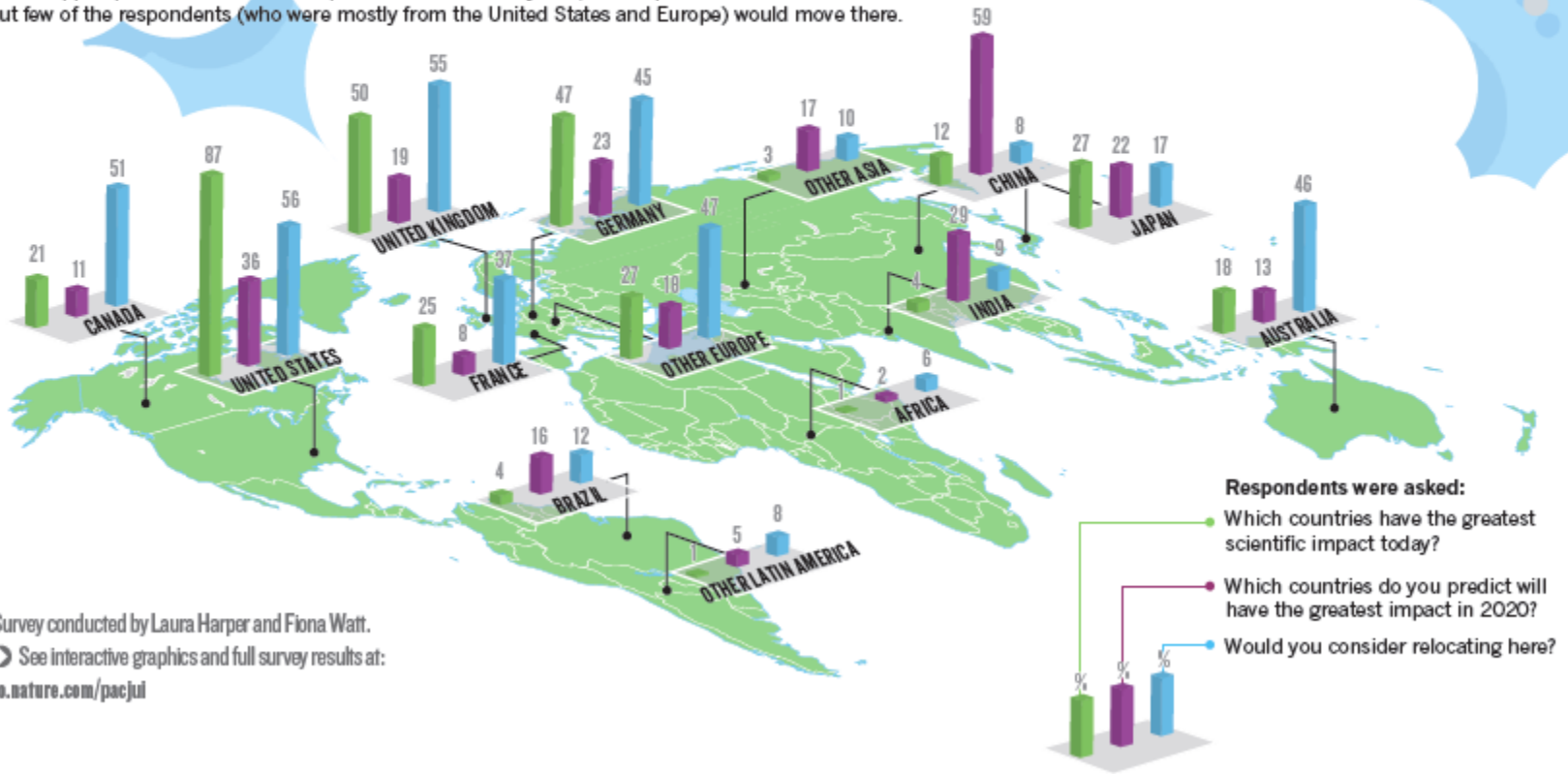
Global Collaborations

↓

Global Mobility

LANDS OF PROMISE

China topped predictions of future impact in a *Nature* survey of 2,300 respondents worldwide.
But few of the respondents (who were mostly from the United States and Europe) would move there.



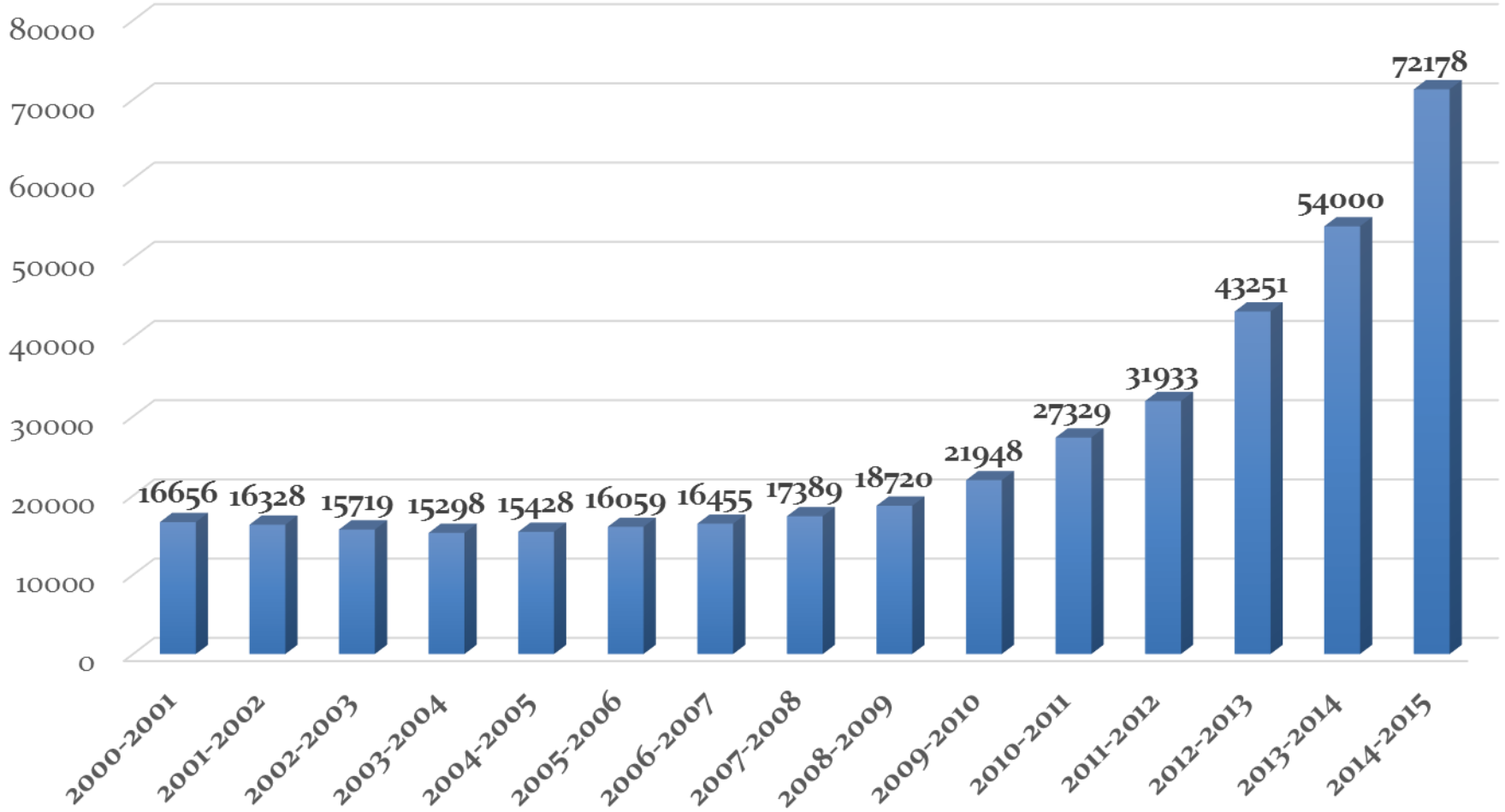
Survey conducted by Laura Harper and Fiona Watt.

See interactive graphics and full survey results at:
go.nature.com/pacjui

Information On The Higher Education in Turkey

Numbers of International Students in Turkey

(https://istatistik.yok.gov.tr/)

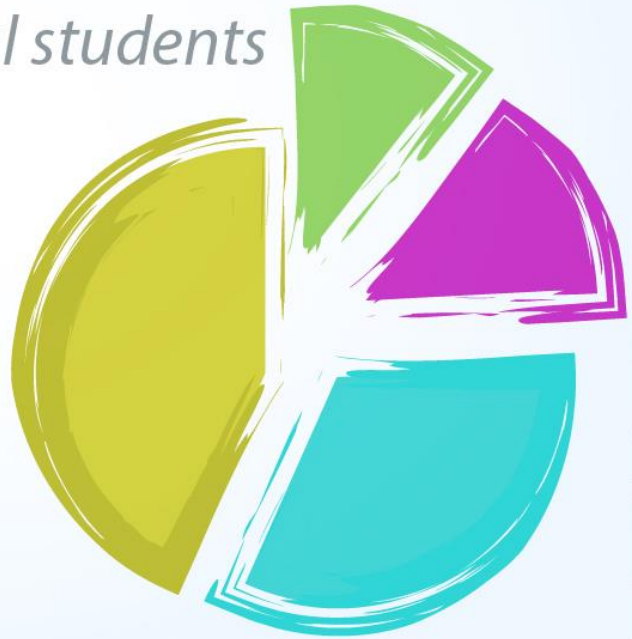


STUDY IN TURKEY
key for future

2014-2015

In total, **193** higher education institutions

72.178 international students



- 1st Cycle (50.080 - 69,5%)
- 2nd Cycle (12.690 - 17,5%)
- 3rd Cycle (5.068 - 7%)
- Short Cycle (4.340 - 6%)

source: https://istatistik.yok.gov.tr

designed by abdulkadir tasdelen

AGENDA FOR COUNCIL OF HIGHER EDUCATION

- Mission Differentation in HEIs
- Qualifications and Employability
- Priority Areas
- Improvement Academic Promotion System
- Increase in PhD Graduates (HEIs, R&D Centres…)
- Professional PhD Programmes
- Policies for Increase International PhD Students especially from Focused Countries
- Mobility in all Levels
- Improvement in Recognition and Equivalency Policies
- Coordination between Higher Education and Resarch Policies
- Quality Assurance and Accreditation

THANK YOU !

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