# Changes in Funding Structure for Higher Education in an Age of Global Mobility

Symposium for the 10<sup>th</sup> Anniversary of China Institute for Educational Finance Research Peking University

October 28, 2015

Yukari Matsuzuka, Hitotsubashi University Fujie Yuan, The Open University of Japan

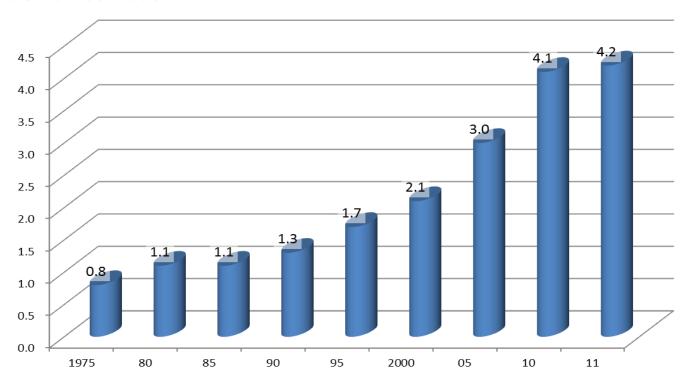
## Outline

- 1. Growing mobility in the world
- 2. Who pays the increasing cost of mobility

- 3. Theoretical interpretation
- 4. Changes in Funding Structure for Higher Education

### **Expansion of International Flow of Students**

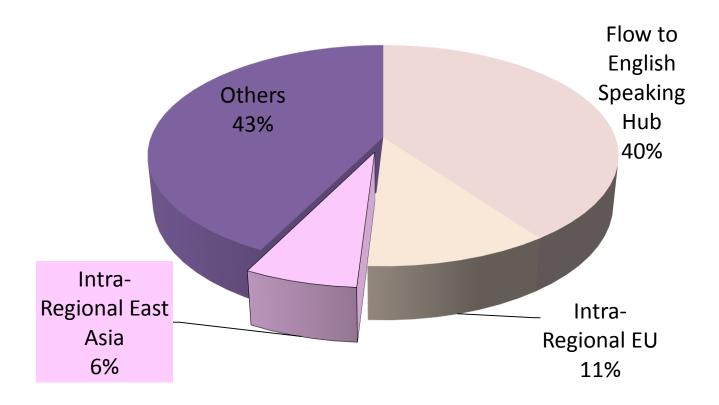
- Students in foreign Countries (10 thousand)
- Doubled since 2000



出所: OECD(2013), Education at a Glance: OECD Indicators.

## The patterns of global mobility (%)

Intra-regional mobility of East Asia is small relative to the population size



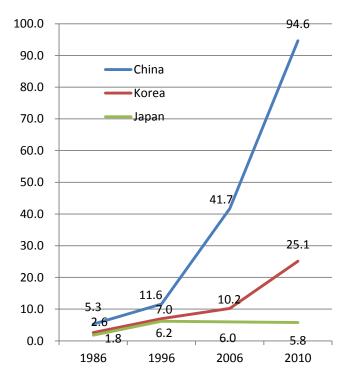
Source: Estimated from OECD, *Education at a Glance* 2010, Box C2.7

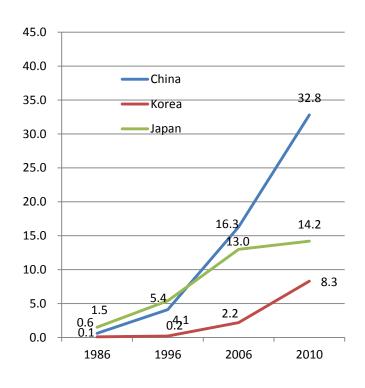
### International flow in East Asian countries

- China
   Rapid expansion in both outbound. Recent expansion in inbound
- Korea Rapid expansion in both outbound. Recent expansion in inbound
- Japan Inbound has expanded, surpasses outbound

#### Outbound (10 thousand)

#### Inbound (10 thousand)

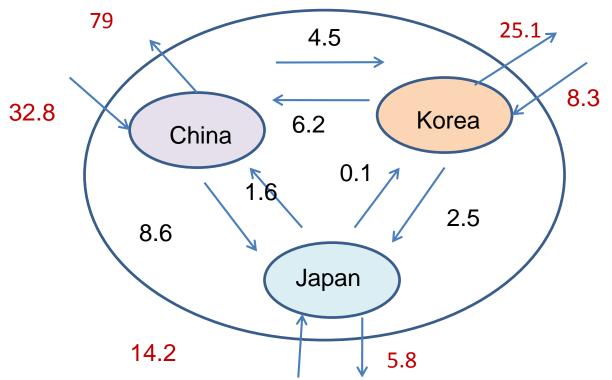




出所: UNESCO Statistical Yearbook, UNNESCO Global Education 1988,1998 <a href="http://www.studayinchina.edu.cn/infoIndexisp">http://www.studayinchina.edu.cn/infoIndexisp</a>, <a href="http://www.mest.go.kr/web/275/ko/board">http://www.mest.go.kr/web/275/ko/board</a>

# Regional mobility of students in East Asia(in 10 thousand persons, 2010)

- ▶ Intra-regional mobility is much smaller than those towards out of the region
- ▶ Flows from Japan to China and Korea are very small



出所: Institute of International Education. Opendoors Fast Facts. Unesco Global Education Digest ,Statistical Yearbook , <a href="http://www.mest.go.kr/web/275/ko/board">http://www.mest.go.kr/web/275/ko/board</a>

### Incentives for studying abroad

- To gain advanced knowledge and technology in host countries
  - More likely for graduate students
- 2. For better chance for better employment
  - Diplomas from foreign countries help to get better opportunities for employment at home country
- 3. For the experience of education AND culture
  - Significance of self-exposure to foreign culture and language
  - Could be Short-term sty in foreign institution

Major Factors of expansion in the 2000s

# Incentives for Chinese students to return to home country

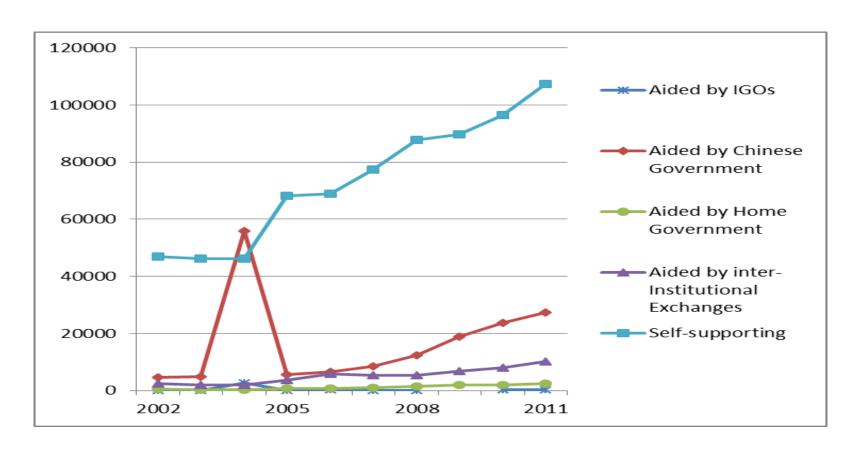
At both central and regional government, provision of:

- 1. Changjiang Scholar Program
- 2. Guest Professorship
- 3. Special visiting professorship
- 4. Talented one thousand program

#### With

- a) Higher salary
- b) High amount of research support
- c) Large office or laboratory for research
- d) Arrangement of a support team for research
- e) Work arrangement of work for his/her family
- f) Provision of housing

# What are the Sources of Funding for Foreign Students Studying in China?



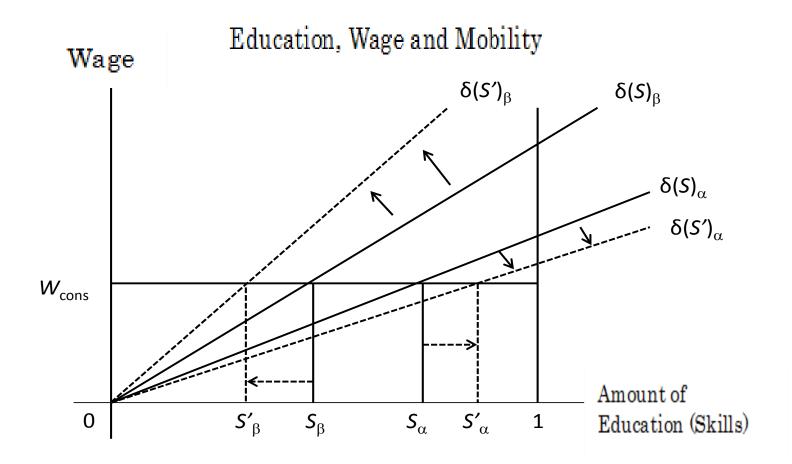
Source: Prepared by based on Annual Report of China Education Statistics

# Application of economic theories for the interpretation of mobility and its financing

More students moving abroad by their own decision and based on private financing

- > Self selection hypothesis applied
- 1. Roy Model (Job selection for hunter and/or fisher) Roy, A. D. (1951), "Some Thoughts on the Distribution of Earnings," *Oxford Economic Papers*, 3(2): 135-46.
- 2. Applied model by Kaz Miyagiawa for skills migration over the scale of economic growth Miyagiwa, K. (1991), "Scale Economies in Education and the Brain Drain Problem," *International Economic Review*, 32(3): 743-58.

### Theory: Self selection hypothesis



Suggests that more students will move to countries (institutions) that offer higher return to education at steeper rate

### Then what recipients do?

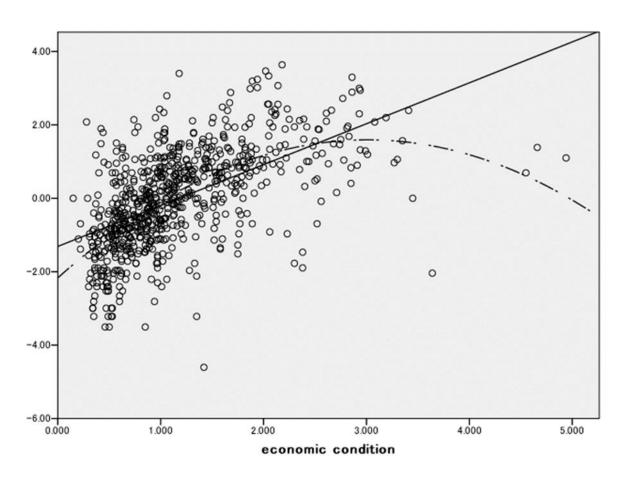
### Two step migration

- 1. Attracting highly performing students from other countries
- 2. Let ablers to stay by offering working visa

	Number of status change	% of staying	Reason for Change		
			Work	Family	Other
Australia	200	18.0	_	_	_
Belgium	280	_	66	17	17
Canada	10010	14.7	76	20	4
France	14680	27.4	56	39	5
Germany	10180	29.5	46	47	7
Japan	10260	19.8	100	_	_
Netherlands	1010	15.0	65	34	1
Norway	660	22.5	80	18	2

Source: OECD (2010), International Migration Outlook 2010: SOPEMI 2010, OECD Publishing.

# Indication of more students moving to countries with higher growth rate: Economic power and mobility



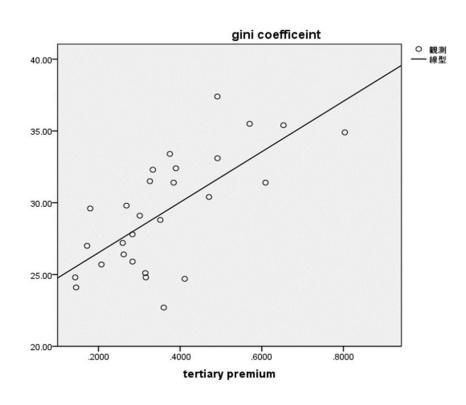
Source: Author's estimation based on Eurostats published in 2012

### Mobility and other indicators

#### Mobility and college premium

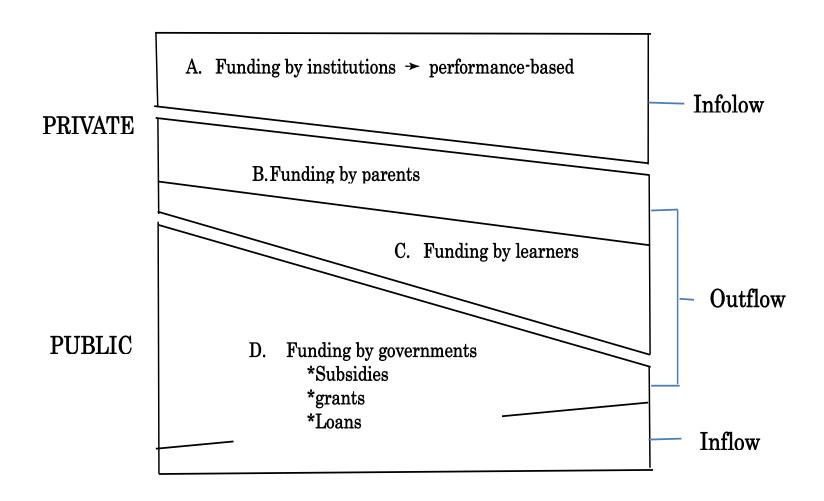
#### %studying abroad2009 20.0 15.0-00 10.0-0 0 0 .4000 .6000 .8000 .2000 tertiary premium

#### Mobility and disparity



Source: Authors estimation based on Eurostats published in 2012

# Changing funding structure under increasing mobility



Thank you

謝謝