How costly are children in Taiwan?

An-Chi Tung

Academia Sinica, Taiwan

Nicole Mun Sim Lai

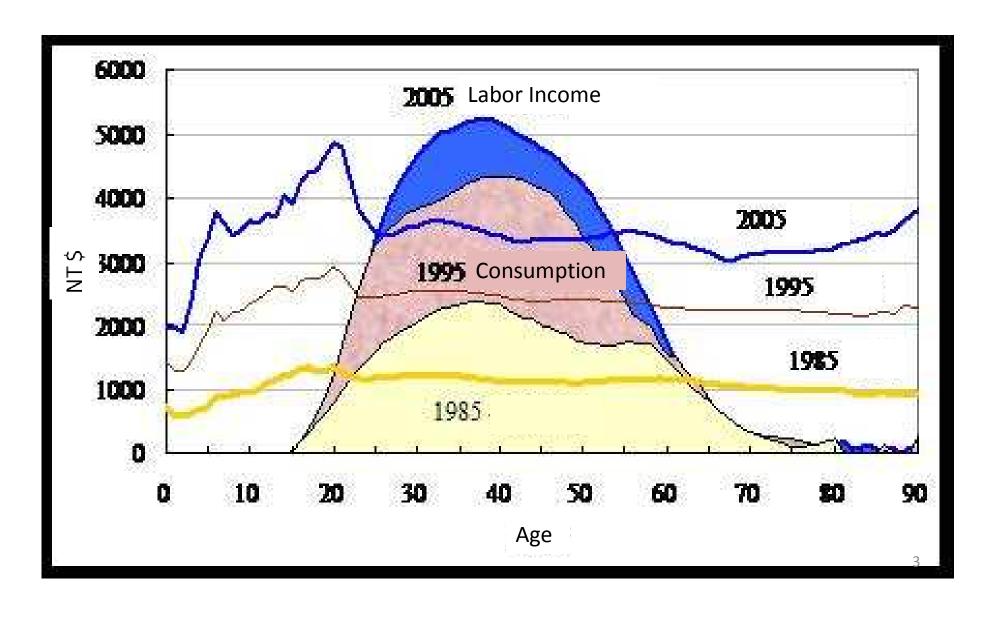
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Objectives

 To examine the increasing cost of raising children over time

 To investigate the reasons behind this trend and its implications.

Consumption in Taiwan



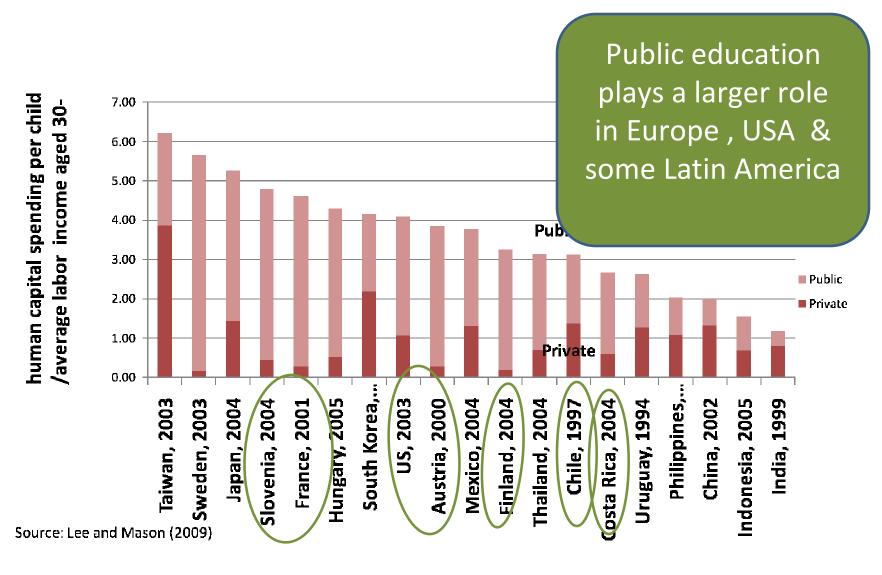
Taiwan V.S. Other Countries

 Consumption of children is high and now exceeds adults' consumption.

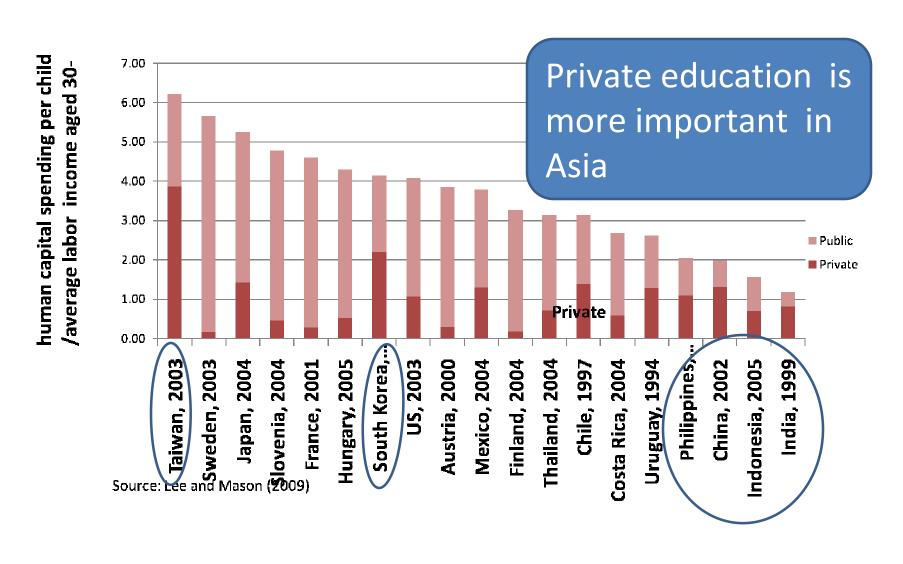
 This is due to extraordinary high private education consumption.

 These issues are unique to Taiwan, and uncommon in other countries!

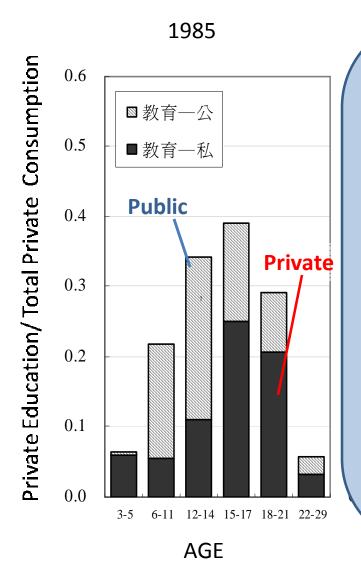
Human Capital Spending Around the World



Human Capital Spending Around the World



Components of Private Education

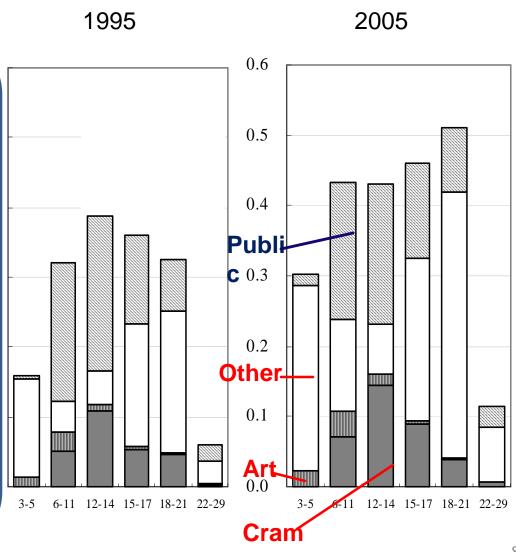


In the 1980s, private education spending was mostly on senior high school and college education.

Components of Private Education, Taiwan

Major expenses include tuition, extracurricular activities and cram schools.

Cram schools are specialized schools that train their students to pass the entrance examinations of colleges.



Some explanations for the increase in private education consumption

1. Fertility declines & human capital investment per child increases

Becker, Murphy et. al 1990, Mankiw et al 1992

Becker's quality-quantity trade off

Lee & Mason 2009

Ogawa et. al 2010

2. Demand for skilled labor accelerates during the high economic growth

return of schooling rises

Some explanations for the increase in private education consumption (cont'd)

3. Drastic increase in private education providers & Large enrollment at private education institutions

Students enrolled in tertiary education, 2006			
	Public	Private	
Asia	%	%	
Taiwan	34	66	
Japan	24	76	
South Korea	22	78	
Thailand	87	13	
Phillipines	32	68	
Indonesia	34	67	
USA	72	28	
Australia	98	2	
Germany	96	4	
France	87	13	
Source: OECD Education Report, 2008			

Some explanations for the increase in private education consumption (cont'd)

Tuition fees on tertiary education per student
relative to per capita GDP

	Public	Private
		% of GDP
Taiwan 2008	11	20
Japan 2007	20	32
South Korea 2007	17 - 35	11 - 45
USA 2005	15	64
Germany	2	
France	0.6	
c		0.000

Source: Taiwan Education Statistics 2008

Some explanations for the increase in private education consumption (cont'd)

4. Children really repay parents in Taiwan!

(Lai 2006)

parents born between 1920 and 1940 receive positive economic returns

parents of later cohorts get back half of what they have invested in children

5. Confucius stresses the importance of education.

Implications

Do and to what extent high education consumption lead to higher economic growth?

Does and to what extent increases in education consumption reduce income inequality?

Does the high cost of raising children lead to fertility decline or vice versa?