

Why Capital flow?

2012

- 2011年, 台灣對中國的投資總額是900億美元,
- 80萬台灣人長駐中國工作

40%投資上限

- 2010-08年民進黨執政期間, 台灣政府規定企業在中國之投資金額不得超過企業淨值的40%
- 馬英九於2008年當選總統之後, 2008年7月14日將投資上限鬆綁至6成; 未來在台設立營運總部企業登陸, 資金將全面鬆綁

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- 資本移動的方向為何?
- 資本移動之影響為何?

- 以 Cobb-Douglas 生產函數為例

$$Y = AK^{\beta}L^{1-\beta}, \quad 0 < \beta < 1,$$

- 勞動生產力

$$y = Y/L = Ak^{\beta};$$

資本/勞動比例 $k \equiv K/L$ 。

- 因此, $k = (y/A)^{1/\beta}$

- 資本邊際產量:

$$\begin{aligned}MPK &= \beta A \cdot k^{\beta-1} \\ &= \beta A^{1/\beta} y^{1-(1/\beta)}\end{aligned}$$

- 若 C, T 兩國之 β 值相同, A 值也相同, 則
 $y_T > y_C$ 表示 $k_T > k_C$; 因此, $MPK_T < MPK_C$
- 資本將由 T 往 C 移動

- y of the U.S. is about 15 times what it is in India
- If $\beta = 0.4$, then

$$\begin{aligned}\frac{MPK_{US}}{MPK_{India}} &= 15^{1-(1/0.4)} = 15^{-1.5} \\ &= 1/58 = 0.017.\end{aligned}$$

Implications

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- “The assumptions on technology and trade conditions ... must be drastically wrong”

What's wrong?

- Difference in human capital
- External benefits of human capital
- Capital market imperfections

- In 2010: $y_{Taiwan}/y_{China} = 5$

$$\frac{MPK_{Taiwan}}{MPK_{China}} = 15^{1-(1/0.4)} = 0.089$$

- There is tremendously capital flow from Taiwan to China, but maybe not as strong as the theory suggests

- 同理可推知: 台灣的勞動邊際產量高於中國
- 勞動力將由 C 國往 T 國移動
- Usually, labor is immobile

- Catching-up

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- What are the effects of globalization (goods and capital flow) on inequality?