Discussion on

Capital Flows to Developing Countries: the Allocation Puzzle

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This paper

- Calibrates simple open economy growth model for non-OECD countries

- When compared with data for the 1980-2000 period, this calibrated model predicts,
  - much larger capital inflows into Asia
  - capital outflows from Africa and Latin America

- Why? Countries with a decrease (increase) in their relative productivity should export (import) capital
The main idea

- Take a Ramsey growth model and think of an economy that opens its capital account in the initial period $t = 0$

- Countries borrow for convergence

- Moreover, countries with productivity catch-up:
  - increase borrowing to expand investment
  - increase borrowing to smooth consumption

- Higher productivity growth $\rightarrow$ higher capital inflows.
The Exercise

- Focus on non OECD countries

- Calibrate Ramsey open-economy growth model to match capital accumulation:
  - productivity growth calibrated from the data ($\hat{g}$)
  - country-specific distortion to match observed investment ($\hat{\tau}$)

- With data on $k_0$, $\hat{g}$, $\hat{\tau}$, $n$ and world productivity growth:
  - $\Delta K$ well predicted by the model

- Now include preferences, we have predictions for savings and:
  - capital inflows due to convergence
  - capital inflows due to productivity catch-up (both savings and investment change)
Main Results

• Model vs. data:
  – too much capital has flowed to non-OECD countries in general
  – geographically: too much to Latin-America and Africa and too little to Asia
  – income: too much to upper-middle income countries

• Why? Effect of $\hat{g}$ on investment and (a lot of) consumption smoothing

• Interesting to note that:
  – both private and public flows follow the same pattern
  – FDI (gross), on the other hand, behaves as predicted

• Results consistent with other recent findings:
  – Prasad, Rajan, and Subramanian (PRS) find positive relationship CA/growth among non-industrialized countries
Few comments...

• Can the interpretation of $\tau$ be biasing the results?
  – for example, adjustment costs
  – there is a discussion in the paper, I would expand it

• One-size-fits-all calibration in consumption?

• A richer description of the data
Is it all in the savings?

- The paper frames the problem in terms of savings:
  - magnitude of results very sensitive to modeling of savings
  - this reflects the procedure followed

- And, to some extent, result is consistent with what we know:
  - representative-agent consumption model does not perform well on aggregate data

- I am willing to go with this. PRS again:
  - positive relationship CA/growth disappears when $S$ (not $I$) included in regression
Alternative views on savings

A. Life cycle models

– consider simple life cycle model with OLG
– if young save and old dissave, countries with higher productivity growth save more
– two problems:
  * investment?
  * evidence on distribution of consumption by age (Deaton)
Alternative views on savings (II)

B. A different interpretation is that consumption is sluggish

– here is where a time-series description of the data might be useful

• Habit formation

  – useful in addressing the main puzzles in consumption. Why not here?
  – smaller changes in consumption in response to changes in productivity growth

• Uncertainty/learning?

  – uncertainty regarding future productivity growth
  – difficulty in distinguishing between permanent and transitory changes in productivity growth (Heymann)

• BUT, any explanation based solely on savings:

  – applies only to non-OECD?
  – should still account for FDI (also present in PRS)
Is it financial underdevelopment?

- PRS again:
  - positive relationship CA/growth only significant for countries with low financial development

- How might this work?
  - in the standard model, greater productivity growth $\left\{ \begin{array}{c} \uparrow I \\ \downarrow S \end{array} \right.$
  - financial underdevelopment
    - can limit $I$
    - limits borrowing and can enhance the impact of productivity growth on $S$ (Japelli and Pagano, QJE)
    - might lead to positive relationship between CA and productivity growth
  - greater productivity growth will still attract more FDI, which bypasses the financial system

- Such a model
  - would be consistent with Asian countries exporting financial flows and importing FDI
  - might shed light on different behavior of OECD vs. non-OECD

- I look forward to seeing more of this