Discussion of “Can Financial Frictions Account for the Cross-Section Feldstein-Horioka Puzzle?”
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NBER IFM Meeting, Oct 21, 2005
Goal of the Paper

- Account for **cross-section** Feldstein-Horioka puzzle

Outline of Discussion

- The idea of the paper
- Contributions
- Extension and suggestions
Is the Feldstein-Horioka finding Puzzling?

- Famous regression

\[(I/Y)_i = \gamma_0 + \gamma_1 (S/Y)_i\]

FH coefficient \(\gamma_1 = 0.46\). 57 countries, time average over 1960-2000

- Theoretical Framework

A continuum of small open economies with production. Idiosyncratic TFP shock

Calibrate regime-switching TFP process for 57 countries

- Complete market model: FH coefficient is zero

The cross-section FH finding is a puzzle in a frictionless world!
What financial frictions can account for the FH puzzle?

- First candidate: market incompleteness

  Bond model with natural borrowing constraints

  Debt repayment and positive consumption regardless of shock realization

  Market incompleteness is insufficient to account for the FH puzzle

  Reasons: Too much intl borrowing and lending (current account/GDP of 42%)

    Loose borrowing constraints (7-8 times of countries’ current income)
Bond model with enforcement constraints

- Problem with the previous model

  Natural borrowing constraints $\implies$ Perfect debt enforcement

  Limited enforcement in international borrowing

  Countries’ incentive to repay debt is to avoid financial exclusion

- Bond model with enforcement constraints

  Countries choose consumption, capital and bonds holding $x = \{ c(a^t), k(a^t), b(a^t) \}$

  Enforcement constraints

  \[
  U(a^{t+1}, x) \geq V^{AUT}(a^{t+1}, k(a^t))
  \]

  Combination of market incompleteness and limited enforcement works!
Endogenous borrowing constraints

- Transform to bond model with endogenous borrowing constraints
  
  For TFP shock $a$ and capital choice $k'$, endogenous debt limit function is $B(a, k')$.
  
  Transformed model is equivalent to the original one and has a recursive structure.

- Properties of endogenous borrowing constraints
  
  - Tight borrowing constraints (about 20% of output on average)
    
    Limited enforcement restricts the amount of borrowing.
  
  - Borrowing constraints increase with capital stock
    
    Gain from default decreases with capital stock.
How do enforcement constraints account for the puzzle?

- Tight borrowing constraints

  \[ \text{High rate of return in country } i \quad \rightarrow \quad \text{High domestic investment} \]

  Limited international capital inflow

  \[ \text{High domestic saving} \]

- Constraints increase with capital stock

  Poor countries cannot borrow much from rich countries.

  Rich countries do not borrow

  Conjecture: Generate positive FH coefficients for country sub-groups
Some suggestions

- Does the model account for the FH puzzle at the expense of other features of the data?
  
  Saving rates and investment rates correlation is the only statistics analyzed

- Compare other aspects of model predictions and data
  - Dispersion of saving rates and investment rates
- Cross-country dispersion of saving rates and investment rates
Some suggestions

- Does the model account for the FH puzzle at the expense of other features of the data?
  Saving rates and investment rates correlation is the only statistics analyzed

- Compare other aspects of model predictions and data
  - Dispersion of saving rates and investment rates
  - Proportion of countries in debt
  - Dispersion of capital-output ratio and country income
  - Degree of international risk sharing
Other extensions

- Account for sovereign defaults and country credit spreads
  
  Recurrent debt crises in history

  Different endogenous borrowing constraints in the presence of explicit default
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- Analyze international business cycle in bond economy with limited enforcement
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- Explore the role of financial globalization
Concluding Remarks

• An Interesting paper!

• Questions:

  Can the model account for other aspects of the world economy?