Discussion of "World Financial Cycles"

by Yan Bai, Patrick Kehoe, Pierlauro Lopez and Fabrizio Perri

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Summary of the paper

Motivation and Goal

What drives EM sovereign spreads? Two views:

1. Standard (Eaton-Gersovitz '81, Arellano '08, ...)
    - South real shocks drive South spreads
2. Global cycle (Longstaff et al. '11, Rey '13, Morelli-Ottonello-Perez '21, ...)
    - North shocks drive both North and South spreads

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This paper: argues that data calls for a model that incorporates both of these views. And that's what it does.

Four phases identified

1. **Emerging Market Crises (1994-2002):** Minimal comovements; U.S. market boomed, EM spreads high.
2. **Great Spread Moderation (2002-2007):** U.S. assets stable; EM spreads fell significantly.
3. **Global Cycle (2008-2016):** High comovements; significant spread spikes during financial crisis.
4. **Geoeconomic Fragmentation (2016-2024):** U.S. stocks stable then booming; EM spreads spiked.

Main Elements of the Model

Quantitative model to generates the previous patterns

- One North country (US) and J small South countries
- North (US): Bansal-Yaron + production w/ firm default risk
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Key mechanisms

- Model allows for "global intermediary" and "common shock" mechanisms
- South drives South (from quantity of risk in South)
- North drives both North and South (from price of risk in North)

One Equation

$$Q_t(B_{i,t+1}, s_{i,t})B_{i,t+1} = E_t\left\{M_{N,t+1}\left[(1-d_{t+1})\mathcal{R}(B_{i,t+1}, s_{i,t+1}) + d_{t+1}\Omega(B_{i,t+1}, s_{i,t+1})\right]\right\}$$

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- Early Sov-debt literature: $M_{N,t+1} = 1/(1 + r^*)$.
- More recent: time-variation in r^* (e.g. Johri, Khan & Sosa-Padilla 2022), risk-aversion, etc.

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- **This paper:** full model of the North country delivers endogenous $M_{N,t+1}$.

Results

- Due to long-run risk in North and South, model is consistent with high correlation of spreads across countries even though local economic conditions are not highly correlated

- Quantitatively:
  - most important driver of the corr. of spreads across countries is a common factor in the quantity of risk in the South before 2007 and post Covid
  - time-varying price of risk from North shocks (through SDF) accounts for 2/3 of sovereign spread movements during global cycle phase, but matters less than 30% in other phases.

My comments

Comment 1. “Identification” of the phases

- “Eyeball” approach to identifying the phases
- **I buy it!** Concern: others may not

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- Is there a more systematic way of dating/separating the phases?
  - There is a literature on regime-switching for dynamic correlations... may be an alternative?
  - 'Regimes' not necessarily equal to 'phases'

- Don't have a clear actionable idea, sorry! Maybe others in the audience do.

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- Does it matter for policy (in the South)?

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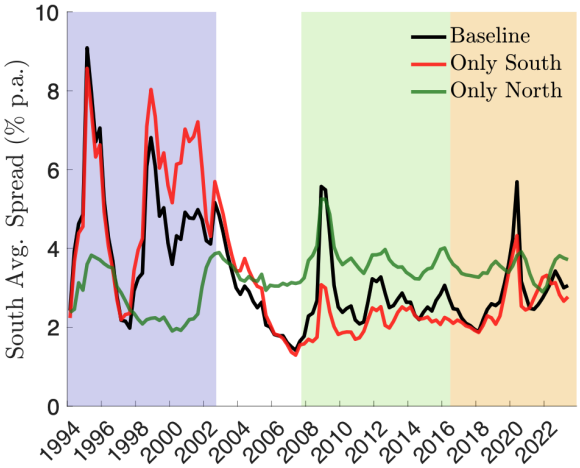
- Does it matter for policy (in the South)?
- Imagine $M(\cdot)$ following an exogenous but richly specified process (w/ level + volatility shocks). How far does that take us?

Comment 2. GE: lots of pain, lots of gain (?) – (cont'd)

(c) *Decomposition of aggregate EM spread*



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- International Monetary System increasingly shaped by "South-South" flows
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- Not a comment for the paper, just thinking out loud:
  - What elements of Bai et. al. should we retain when thinking about South-South flows?
  - What to add? Geopolitical interests? Mkt power? Climate risks? Other risks?

Last slide

[I have many detailed questions → email to Yan]

- Really liked the paper!
- A complete **Tour de force**: cool data facts, ambitious model + solution, thorough decomposition of results
- Looking forward to the next iteration!