Discussion of

Covered Interest Parity in Emerging Markets: Measurement and Drivers

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CEPR Paris Symposium

8 December 2023

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*The views expressed here do not necessarily represent those of the Bank of England or of any of its Committees.

This paper

[#1] **Measurement**

- Constructs CIP deviations free of credit and liquidity risk from supranational bonds in EM currencies

[#2] **Theory**

- Develops a simple but general model of intermediary-based CIP deviations

[#3] **Model meets the data**

- Shows that the ‘purified’ CIP deviations align with model predictions better than ‘naive’ ones

My discussion

- Fantastic paper
- Why is it important? Crucial role of CPI deviations for
    - Exchange rate determination
    - Monitoring of risk in global funding markets
    - Policy response (CB swap lines, FXI, etc)
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- My comments
  - Empirical approach (liquidity premia)
  - Role of central bank swap lines

CIP deviations in EMs

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- Main insight → Exploit variation in bond yields from safe multi-currency issuers
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- E.g. Kreditanstalt fur Wiederaufbau (KfW)'s bonds are fully backed by German government
  - Very minimal credit risk
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- **This paper** Generalizes approach and extends to a larger set of AE and EM currencies

Measurement: Recap of the approach

- Start from this paper's decomposition (drop superscript *Supra*, fix tenor, and set $\hat{l}_{i,jt} = 0$):

$$\phi_{i,jt} = \tau_{i,t} - \lambda_{USD,jt} + \lambda_{i,jt}$$

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- Can measure directly from the data $\phi_{i,jt}$ and $\lambda_{USD,jt}$

- Assume that the Supra liquidity premium in EM currency is given by:

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- Plug into definition of $\phi_{i,jt}$ and re-arrange to get:

$$\phi_{i,jt} + \lambda_{USD,jt} = \tau_{i,t} + \lambda_{ij} + \alpha_j \times BidAskS_{i,jt} + \epsilon_{i,jt}$$

- Recover pure CIP basis by estimating time-by-currency fixed effects from previous expression

Comments

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  - Three relevant measures: cross-currency basis swap, bonds in USD, bonds in LC

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- **Question** How well estimated is $\tau_{i,t}$ when there are only few Supras in a given i and t?
  - Plot evolution of number of available js for a given i over time
  - For AEs, does this number correlate systematically with $\phi_{i,t}^{Gov} - \tau_{i,t}$?

A model of intermediary-based CIP deviations

- Theoretical model's equilibrium conditions yield simple formula for CIP deviations

$$CIP_{it} = \left(\frac{a_i}{1+\eta_i} \cdot \frac{1}{\kappa_i} \right) \times \mu_t \times \frac{F^*_{it}}{Y_{it}}$$

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- Naturally leads to the following regression specification

$$CIP_{it} = \alpha_i + \beta_1\Delta USD_t + \beta_2\left(\Delta USD_t \times HedgeDemand_i\right) + Controls + u_{it}$$

Model meets the data

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- Or, allowing policy to vary over time, to the following specification:

$$\begin{aligned} CIP_{it} \quad = \quad & \alpha_i + \beta_1 \Delta USD_t + \beta_2 \left(\Delta USD_t \times HedgeDemand_i \right) + \\ & \beta_3 \left(\Delta USD_t \times HedgeDemand_i \times Policy_{it} \right) + Controls + u_{it} \end{aligned}$$

Central bank swap lines

- Swap lines can help restoring market conditions in global dollar funding markets
  [Bahaj and Reis (21), Cetorelli, Goldberg and Ravazzolo (20)]
- **Comment** Model and empirical set up well-suited to study the (heterogeneous) effects swap lines

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  - Or estimate effects directly using high frequency Fed swap line shocks $\underline{\varepsilon_t^{SL}}$
    [Cesa-Bianchi, Eguren Martin, Ferrero (22)]

$$CIP_{it} = \alpha_i + \beta_1 \underline{\varepsilon_t^{SL}} + \beta_2 \left(\underline{\varepsilon_t^{SL}} \times HedgeDemand_i \right) + Controls + u_{it}$$

In sum

- Great paper on an important issue
- Scope to refine and better understand the empirical approach to measure pure CIP deviations
- Simple but general set up (both theoretical and empirical)
    - Suitable for many other first-order questions, including central bank swap lines