Currency Mispricing and Dealer Balance Sheets

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Summary

Why doesn't CIP hold?

- Existing works
  - Differences in liquidity premia (Rime, Schrimpf, and Syrstad 2017), monetary policy divergence and regulatory reforms (Arai, Makabe, Okawara, and Naganono 2016)
  - Costly financial intermediation and imbalanced demand cross currencies (Du, Tepper, and Verdelhan 2018), balance sheet constraints arising from counterparty risk (Borio, Iqbal, McCauley, McGuire, and Sushko 2018)
- This paper
  - Focus on the supply side: dealer banks' balance sheets.

Summary

How to quantify the causal relation between banks' financial constraints and CIP deviations?

- Existing works
  - Empirical challenges: isolating demand and supply side unobservables from banks' financial constraints.
  - The DiD test in DTV shows that CIP deviations increase toward the quarter-ends, as banks face tighter balance sheet constraints due to quarterly regulatory filings.
- This paper
  - What if clients' hedging demand and banks' leverages are driven by same unobservables? Transaction-level data to hold demand constant (time-client-currency fixed effect)!
  - Bank leverages change with other bank-side unobservables? Regulation shocks to leverage disclosure and requirement.

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How does the hedging demand interact with dealers' leverage in affecting CIP deviations?

- This paper
  - Larger violation when interacting higher dealer leverage with increases in hedging demand to sell USD in forwards.
  - Proxy for hedging demand of USD: Monetary policy announcements and negative client order flow.

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Comment 1 - Does the market structure play a role?

Why would clients keep paying dealers high premiums?

Do market competitions also evolve post-crisis?

- How long does client-dealer relationship last on average?
- Do bigger clients have more dealers?
- If the relation is sticky, then why? Hold-up issues? Are switching costs high?

- Build a HHI index for each forward contract type and interact it with leverage.
- Use the number of dealers per client as a proxy for clients' bargaining power and interact it with leverage.

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Comment 2 – Even neater identification?

- Are treatment banks and control banks truly comparable?
- What about demand related to forward maturity?
- Augmented quarter-end effects?
- Untapped variation of forward term structure.

- Match banks on size, business scope etc.
- Try maturity-currency-client-time FE.
- DiD: After the filing frequency changes from quarterly to monthly, forwards appearing on month-end (not quarterend) exhibit higher violations than those who don't, while controlling for client-dealer fixed effects.
- Per client-dealer, the difference between the three-month and one-month CIP deviation drops once the one-month contract crosses the quarter-end?

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Comment 3 – Why does leverage explain CIP violation better than the capital ratio does?

Both ratios work but capital ratios lose significance when they are put together as RHS?

- Discrepancy: asset vs risk-weighted assets as the denominator.
- Which assets in the denominator determine the differential roles played by the two ratios in determining CIP deviations?
- Or maybe there is no economic interpretation behind this statistical finding.

- Higher leverage increases costs of short-term forwards market-making and risk-weighted requirements increase the costs of long-term forwards market making?
- Alternative funding costs measure: UK equivalent of spread between the interest rates on excess reserves and the federal funds rate used in DTV.

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Comment 4 – When is the requirement more binding?

This paper: the public disclosure for leverage ratio is even more binding for banks with low leverage in 2007

- As the leverage ratio becomes more binding, regulated dealer banks face higher intermediation costs which translate into a wider dollar basis

- Alternative treatment groups: banks with leverage/capital ratios around the requirement threshold before the regulations are announced

Conclusion

- Crystal clear messages and identification with amazing data and excellent execution.
- Maybe the data can tell even more economics.
- I look forward to the published version of the paper!