Discussion: Foreign Exchange Intervention with UIP and CIP Deviations: The Case of Small Safe Haven Economies

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FX Intervention

- How to assess the pecuniary welfare cost of FX intervention?
 - UIP deviation (Itskhoki and Mukhin, 2021)
 - CIP deviation (Amador et al, 2020)
- UIP and CIP deviations have opposite signs
 - Low-yield currencies have low UIP return but high CIP return
- Which one matters?

Main Result: The Utility Cost of FX Intervention

Denote m_{t+1} is the household SDF and m_{t+1}^* the investing intermediary SDF. X_{t+1}^* is the return of investing in the domestic currency. a_t is intermediary's domestic bond position and χ is the inconvenience yield.

$$UCFX_{t} = \frac{E_{t} \left[m_{t+1} X_{t+1}^{*} \right]}{E_{t} m_{t+1}} = E_{t} X_{t+1}^{*} + \frac{cov_{t} (m_{t+1}, X_{t+1}^{*})}{E_{t} m_{t+1}}$$
$$= \frac{\Gamma a_{t} + \chi}{E_{t} m_{t+1}^{*}} - \frac{cov_{t} (m_{t+1}^{*}, X_{t+1}^{*})}{E_{t} m_{t+1}^{*}} + \frac{cov_{t} (m_{t+1}, X_{t+1}^{*})}{E_{t} m_{t+1}}$$

Intuition: consider a safe-haven country ($X_{t+1}^* \uparrow$ in bad times)

• Domestic households face the tradeoff of safe-haven property and low return, which is pinned down by the valuation of intermediary on the safety $cov_t(m_{t+1}^*, X_{t+1}^*)$

Rest of the Paper

- Empirically show the JPY and CHF has the safe-haven property, i.e., cov(m^{*}, X^{*}) > cov(m, X^{*})
- Embed this insight to an optimal FX intervention framework and derive how it changes the optimal FX policy

- A very important point to make!
- A revived discussion of FX intervention in the recent decade following Gabaix and Maggiori (2015).
- Very few think about the role of **exchange rate risk property** and thus cross-sectional difference: low-yield and high-yield currencies may need different FX policies
- A significant advancement of the literature
 - International finance matters for macro and policy

Comment 1: Benefit of FX Intervention and the GE Effect

- This paper focuses on the UIP/CIP determination of welfare cost and is agnostic (mostly) on the benefit
- When the authors embed this insight to a constrained optimal problem, I find it helpful to specify one particular benefit in the literature, for example, Itskhoki and Mukhin (2022)
 - Will be cool if the authors can show the optimal policy changes substantially when taking the safe-haven property into consideration

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 - Will be cool if the authors can show the optimal policy changes substantially when taking the safe-haven property into consideration
- Suitable for a better assessment of the GE effect: FX intervention may change $cov(m^*, X^*)$ and $cov(m, X^*)$, especially the latter

Comment 2: The "Safe-Haven" Condition

- We agree that JPY and CHF have safe-haven property, i.e., exchange rate appreciates in bad times
- To what extent we know $cov(m^*, X^*) > cov(m, X^*)$?
 - This paper: Δc to approximate domestic SDF, intermediary capital ratio to approximate global intermediary SDF
 - CCAPM does not do well in many aspects
 - A better test on this is valuable, maybe using other asset return data?

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- Two views of exchange rate (Chernov, Haddad and Itskhoki, 2023)
 - Risk-sharing view: $\Delta s = m^h m^f$
 - Segmented market view: only m^{I} prices currencies
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 - The plausibility of the small-open economy assumption?

Comment 3: Different Frictions Faced by UIP and CIP

- In the model, the authors treat the friction faced by UIP and CIP deviations the same
- UIP and CIP trade faces different frictions
 - Convenience yield: The inconvenience yield of holding foreign bond is 10 times higher than a synthetic foreign bond (Jiang et al, 2021)
 - Intermediation friction: CIP trade subject to leverage ratio constraint while UIP trade involves risk (Fang and Liu, 2021)
- Does not change the main insight, but allowing for this flexibility may bring the model closer to the data

Model Clarification Questions

- The planner's problem: central bank chooses both price and quantity
 - Is it equivalent to a Ramsey problem if you include the price optimality conditions in the constraint? This seems necessary in decentralization
- How important is the money-in-utility determination of exchange rate outside the ZLB, i.e., S_tY_t = H_t?

Conclusion

- An important message: the cost of FX intervention depends on the risk properties of exchange rates. In particular, the difference between households and investors' valuation matters
- Illustrate the importance of this insight in a cutting-edge model of FX intervention can highlight its importance
- Useful to empirically estimate the valuation difference and link it to the discussion on what market structure can better explain exchange rate
- Recommend to everyone interested in reserve management and FX intervention