Discussion of:
“Interest Rate Arbitrage under Capital Controls: Evidence from Reported Entrepôt Trades”
by Jiafei Hu and Haishan Yuan

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An Alternative and More Informative Title:
“Can you Arbitrage the People’s Bank of China?”
by Jiafei Hu and Haishan Yuan

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The CNH – offshore renminbi – was introduced by China to internationalize its currency without opening its capital accounts.
Are offshore (CNH) and onshore (CNH) renminbi different?

- driven by demand a supply on separate markets, and CNH does not fluctuate within a tight band as the CNY,
- CNH is generally weaker than CNY when there are depreciation expectations, and vice versa,
- converting renminbi in dollars, for instance, will have a different exchange rate depending on whether one uses the CNH or CNY.

Can you easily swap CNH for CNY?

- an underlying trade flow is needed because of capital controls on capital flows,
- Hong Kong is the main trading center for CNH and HKMA provides liquidity thanks to a swap agreement with PBoC.
Onshore/Offshore Dollar Exchange Rate

- China often intervenes in offshore market to maintain a tight spread
- an IMF’s requirement to have the renminbi in the currency basket underlying the SDR,

Source: Intraday (10 minutes) dollar exchange rates from Thomson Reuters.
Any Room for Arbitrageurs?
Arbitrage I: Exploiting the Exchange Rate Differential

✓ You can arbitrage the exchange rate differential if you can transfer renminbi to offshore centers (e.g., Hong Kong and Singapore),

✓ Suppose that buying USD is cheaper using CNY than CNH,

✓ An arbitrageur borrows $1 and then buys CNY in China, say at the exchange of 6 CNY/USD,

✓ She then imports something with minimum transportation costs (gold?) from Hong Kong and settles the imports in CNY,

✓ CNY flows to Hong Kong and becomes CNH.

✓ A business partner will then convert CNH into USD in Hong Kong, say at the exchange rate of 6.10 CNY/USD.

✓ Finally, she exports the imported gold which is settled in USD, dollars flows into mainland China and the arbitrage is completed.
Onshore and offshore interest rates for renminbi are different

In China, an arbitrageur could borrow 1 CNY at 6% for two weeks (time needed for getting CNH loans in Hong Kong?),

She then opens a bank deposit for a year at 3% and asks the bank to issue a letter of credit (L/C),

She then imports something with minimum transportation costs (gold?) from Hong Kong using the L/C,

A business partner receives the L/C, and discount it at the one-year offshore interest rate (i onshore rate),

CNH is then wired to Mainland China and the arbitrage is completed.
Summary of the Paper

✓ This paper studies the interest rate differential arbitrage using entrepôrt (fictitious) trades

✓ A rich and novel dataset on administrative RMB inflows and outflows reported from entrepôrt trades between 2011 and 2016,

✓ The dataset refers to one of the largest coastal province of China,

✓ The authors have information about receipt dates, transaction value of trades, identifiers and payers in China, etc.

✓ Key Results

✓ In the data, 98% (77%) of the inflows (outflows) are settled through wire transfers (L/C),

✓ the interest rate differential is strongly correlated with MB inflows from entrepôrt trades,

✓ the arbitrage is feasible but potentially costly.
✓ You have a beautiful dataset but you do not fully exploit it!

✓ What is the economic value of this onshore-offshore arbitrage?
  ✓ you assume than an investor has a startup amount of money but a pure arbitrage strategy implies a long-short strategy.

✓ Can you quantify the average excess return per RMB invested? How expensive is this strategy? (several bits and pieces involved),

✓ Who is behind this arbitrage? Small investors?

✓ you work with 3-month rates and expose yourself to roll-over risk as the strategy is typically based on one-year horizon,

✓ Is still tradable? Apparently, the spread has narrowed significantly since mid-2015.
✓ Is this a riskless or a risky strategy?

✓ Perhaps this is a risky strategy and the excess return you enjoy is compensation for it. Any results?

✓ Have you thought about the peso problem? The CNH/CNY could deviate from 1 in the future and then invalidate the arbitrage.
✓ Can you go beyond correlations?
  ✓ Can you make any causality statement?
  ✓ You can have reverse causality as well as endogeneity issues in your key regression?
  ✓ You have information about payers and receivers, can you disentangle demand shocks from supply shocks?
  ✓ You could add a payers fixed effect interacted with time to control for changes in demand shocks.

✓ Can you setup a difference-in-differences exercise?
  ✓ You could perhaps use the China’s FX reform 11 August 2015 as an exogenous event?
Conclusion

- It is a very interesting paper
- I have enjoyed very much reading it
- I look forward to reading the revised version of this paper
- I will definitely add it to my reading list

Thank you!