Comments on Financial Integration and Capital Account Re-regulation by Kim, Kim, Song and Yie

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Overview

• Standard DSGE model of small open economy
• Twist: FX swap market imperfectly competitive
  – So UIP doesn’t hold in principle
    • Good, since it doesn’t hold in practice
• Surprising Conclusion: more financial integration reduces welfare
  – Even though market power of foreign banks falls
Interest Parity Conditions

• Distinguish *Covered* from *Uncovered* Interest Parity more sharply
Covered Interest Parity

• CIP: \( R_t = R^f_t \cdot \left[ \frac{S_t}{For^{t+1}_t} \right] \)
  – \( R_t \): gross domestic interest return at \( t \)
  – \( R^f_t \): gross foreign return
    • Same asset, taxes, liquidity, maturity, ...
  – \( S_t \): domestic price of unit of foreign exchange
  – \( For^{t+1}_t \): forward price of FX, agreed on at \( t \), delivered at \( t+1 \)
• Note: all prices available at \( t \): arbitrage
CIP Usually Holds Well

• Norm is within 2/3 basis points
• For onshore markets, “political risk” (future capital controls)
  – For offshore markets, default risk usually negligible
• FX markets much deeper than stock or bond markets
  – Unsurprising that CIP works well usually
CIP Fails During Korean Great Recession

- Evidence Figures 1, 2
- Interesting, worth examining
- Notes
  - Volatility Key
  - 0 as tranquil norm?
Messages from Figure

1. Linking Crises to CIP Deviations seems key
   - Assuming constant market power for banks doesn’t seem natural modeling strategy
     • Is market power cyclic (a la Rotemberg-Saloner)?
     • FX market doesn’t look oligopolistic from Table 1

2. CIP Deviations are ... CIP Deviations
Uncovered Interest Parity

- UIP: $R_t = R^f_t \cdot \left[ \frac{S_t}{E_t(S_{t+1})} \right]
  - $E_t()$: conditional expectation at $t$
  - $[S_t/\text{For}^{t+1}_t]$ for CIP

- Since expectation is unobservable, cannot be tested without measurement error
UIP Deviations

• UIP is a speculative (not arbitrage) condition
  – Usually tested via regressing $\%\Delta S_t$ on $(R_t - R^f_t)$
  – Not tested here at all
  – Can’t tell if UIP deviations match model

• *Different from CIP!*
Discomfort

- Final producers are competitive
- Intermediate producers are monopolistically competitive
- Seems odds to add *ad hoc* form of imperfect competition in financial markets
  - (Quadratic cost of changing capital inflows – eq26)
  - Usually model real side as having *more* frictions than financial markets
  - Especially true for short-maturity money markets
Discomfort, continued

• Swaps here are involve exchange of currencies, later reversed at different prices
• Hence “Foreign Exchange Swap”
  – “Currency Swap” is exchange of interest streams in different currencies, BIS *Triennial Report* p32
• But FX swap market *deepest in world*
  – $1,765 billion *daily* turnover in April 2010 (BIS, p7)
  – >50x stock/bond markets
More Discomfort from BIS

• P9: “Among the top 13 global FX centres (covering 90% of global turnover), a decrease in the number of banks accounting for 75% of the turnover was reported between 2007 and 2010 in most centres. In contrast, in Denmark, Hong Kong SAR and Korea, an increase in competition is evident (Table B.3)”
  – In 2010, 16 banks accounted for 75% of foreign exchange turnover in Korea
  – Korea: most competitive of top 13 global FX centers (CR75 for US=7, Japan=8, UK=9)
Welfare Effects

• Notice small effect of foreign financial competition on welfare

• In practice, probably bigger but omitted potentially big effects of capital flows:
  – Production (quantity or quality)
  – Consumption smoothing
  – Domestic financial market structure
Bottom Line

• Modeling mechanism doesn’t seem to match up with observed interest parity deviations
  – Crisis-related CIP deviation, not steady-state UIP
  – Imperfect Competition in real before financial markets

• Key conclusion (capital market liberalization can lower welfare) based on narrow model, hard to generalize