

Discussion of  
**Financial Integration and Capital Account  
Re-regulation: An Emerging Market  
Perspective**  
by Kim, Kim, Song, and Yie (Bank of Korea)

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# Overview

- New Open Economy Macroeconomics model of a small open economy
  - Endogenous deviations from the law of one price because of monopolistically competitive importers
  - Taylor-type monetary policy rule
- Foreign exchange market (micro-) structure:
  - Domestic banks cannot contract directly for ForEx
  - Swap arrangements with foreign banks who cannot buy domestic government bond directly
  - Motivated by failure of CIP in Korean data



# Main Findings

- Increasing competition in foreign exchange swap market is welfare-reducing
- Mechanism:
  - increased exchange rate volatility translates into higher domestic volatility
  - Reduces welfare because of domestic price dispersion
- Analysis of prudential policies:
  - Tax on foreign banks ineffective
  - Progressive tax on foreign capital inflows



# Key Contributions

- Attempt to take the foreign exchange market seriously
- ‘Reverse engineer’ adverse effects of hot money flows
- Quantity effects in exchange rate determination:  
number of foreign banks determines volume of trades
- Address important issue: efficacy of central bank intervention
  - “preferred habitat”
  - QE I, QE II, ...
  - Sterilized intervention



# Disclaimer

These views are my own and do not necessarily reflect the views of the Federal Reserve Bank of Richmond, the Board of Governors, and the Federal Reserve System



# Suggestions

- Role of Importers:
  - Useful device for generating deviations from LoOP
  - Incomplete pass-through reduces effects of foreign shocks: Justiniano and Primiceri (2010)
  - Link between pass-through and capital account?
- Optimal policy analysis
  - (Ramsey), Monacelli (2005): contractionary bias
  - Simple rules
  - Exchange rate stabilization: Lubik and Schorfheide (2007)



# Suggestions

- Quantitative evaluation of the model using a likelihood-based approach:
  - Lubik and Schorfheide (2005)
  - Rabanal and Tuesta (2010)
  - Rubio-Ramirez et al. (2010)
- GMM-estimation of the asset-pricing equations:
  - Mark (1985)
  - Backus, Gregory, and Telmer (1993)
  - Verdelhan (2010)

# Thinking about UIP, CIP, and all that

- Budget constraint:

$$\dots + B_t + e_t B_t^* + e_t F_t = \dots + R_{t-1} B_{t-1} + e_t R_{t-1}^* B_{t-1}^* + f_{t-1} R_{t-1}^* F_{t-1}$$

- Optimality conditions imply stochastic discount factor:

$$\lambda_t = \beta(1 + i_t) E_t \lambda_{t+1},$$

$$\lambda_t e_t = \beta(1 + i_t^*) E_t e_{t+1} \lambda_{t+1},$$

$$\lambda_t e_t = \beta(1 + i_t^*) f_t E_t \lambda_{t+1},$$

- And by arbitrage ...



# Thinking about UIP, CIP, and all that

- UIP:

$$R_t = R_t^* \frac{E_t \left[ \frac{e_{t+1} U_{c,t+1}}{e_t P_{t+1}} \right]}{E_t \left[ \frac{U_{c,t+1}}{P_{t+1}} \right]}$$

- CIP:

$$R_t = R_t^* \frac{f_t}{e_t}$$

- Forward exchange rate efficiency:

$$f_t = \frac{E_t \left[ e_{t+1} \frac{U_{c,t+1}}{P_{t+1}} \right]}{E_t \left[ \frac{U_{c,t+1}}{P_{t+1}} \right]}$$

# Thinking about UIP, CIP, and all that

- UIP equation can be rewritten:

$$\frac{R_t}{R_t^*} = E_t \frac{e_{t+1}}{e_t} + \frac{\text{COV}_t \left( \frac{e_{t+1}}{e_t}, \frac{U_{c,t+1}}{P_{t+1}} \right)}{E_t \left[ \frac{U_{c,t+1}}{P_{t+1}} \right]}$$

- The second term is a time-varying risk premium and depends on conditional moments
- Specifically, risk premium increases in the covariance of marginal utility with the depreciation rate:

# Thinking about UIP, CIP, and all that

- $RP_t > 0$  if

$$\text{cov}_t \left( e_{t+1}, \frac{U_{c,t+1}}{P_{t+1}} \right) > 0.$$

- high marginal utility  $\Rightarrow$  low consumption  $\Rightarrow$  demand for asset that delivers high return in bad times
- holding foreign currency asset translates into higher domestic purchasing power with expected depreciation
- since foreign assets are more desirable, domestic assets have to deliver a higher return.



# Thinking about UIP, CIP, and all that

- ‘UIP’-condition in the paper abstracts from these risk-sharing arguments
- Asset pricing relationships:
  - depend on ad-hoc formulations about transaction costs
  - Assumed to look like standard UIP
- Concern:
  - Does not impose enough discipline on analysis
  - ‘standard’ UIP known to be misleading: Frankel (1979)



# Summary

- Thought-provoking paper
- Useful framework to do policy analysis
- Concerns about:
  - Robustness of results
  - Lack of micro-foundations