Discussion of

Global Portfolio Rebalancing and Exchange Rates

by Nelson Camanho, Harald Hau and Hélène Rey

Oleg Itskhoki
itskhoki@econ.Ucla.edu

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This paper

- One of the few papers focusing on the joint determination of cross border equity returns and exchange rates
  - the focus in the literature is typically on the co-determination of bond prices and exchange rates (UIP, CIP)
  - this paper focuses on the problem of mutual funds and their portfolio rebalancing in an open economy

- Very intense paper
  - portfolio choice in open economy is notoriously difficult, even with exogenous exchange rates
  - Think of Lucas trees in a two-country world with endogenous exchange rate (however, in partial equilibrium)

- Theory is motivated by the empirical analysis
  - justifies strong assumptions in the model

Main Results

- Theoretical mechanism:
  1. Inelastic supply of FOREX and exchange rate risk create an asymmetry in mutual funds portfolios across countries
     - in particular, endogenous home bias (in levels and changes)
  2. Capital gains on foreign equity positions result in excessive exposure to foreign stock market and rebalancing away from it
     - rebalancing is stronger in periods of high ER volatility
     - (reminiscent of Kraay & Ventura ptf view of Current Account)
  3. Capital outflows triggered by rebalancing result in home exchange rate appreciation
     - appreciation triggered by low relative returns on home equity

- Empirical evaluation of these implications using detailed micro-data on international equity positions of mutual funds
  - including estimation of aggregate FOREX supply elasticity

Comments I

Theoretical Framework

- While theoretical predictions are intuitive, the model is a bit too involved to be illustrative
  - e.g., the effect of κ (elasticity of FOREX supply) on portfolio home bias in levels and changes (rebalancing)

- Related, I did not get a clear sense of which results are robust and which are quantitative possibility
  - e.g., do high foreign returns always predict rebalancing away from foreign equity?

- At the same time, the model relies on strong assumptions:
  - e.g., exogenous interest rates, nominal returns, stationary nominal exchange rates, forex supply as a function of ER level
  - some of these assumptions can be relaxed, but maybe the right side of the trade-off is to have even stronger assumptions?

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- High foreign returns $\Rightarrow_1$ rebalancing away from foreign $\Rightarrow_2$ home ER appreciation
  - empirical test of $\Rightarrow_1$ and $\Rightarrow_2$ separately
  - test: high foreign returns $\Longrightarrow$ home ER appreciation?

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  - test: high foreign returns $\Longrightarrow$ home ER appreciation?
- Empirical estimation of the FOREX supply elasticity κ:
  - for structural interpretation, need a universe of cap flows ΔH_t^f
  - GIV: weighted minus unweighted average rebalancing (what if unweighted average is dominated by noise)

Comment III

General equilibrium

- ER determined in interaction of real and financial markets:
  1. Goods market – interaction of budget constraint and goods market clearing (Mukhin and Itskhoki, 2019, 2021):

$$\beta B_{t+1} - B_t = \lambda E_t + \xi_t$$

  2. Financial market clearing balanced demand for currency:

$$B^*_{t+1} + N^*_{t+1} + Q^*_{t+1} = 0,$$

$$Q^*_{t+1} = -\frac{r_t - r^*_t - \mathbb{E}_t \Delta \log E_{t+1}}{\omega \sigma_e^2}$$

- This paper:
  - drops (1) and uses $Q^*_{t+1} = -\kappa(E_t - \bar{E})$ in (2)
  - replaces noise traders N^*_{t+1} with endogenous ptf rebalancing
  - relies only on dividend shocks
- Would be fun to do it in GE!