

**Exchange Rate Modeling:  
An Informal, Academic Perspective**

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## **“Academic” for Two Reasons:**

- Avoid important but (currently) insoluble problems
- Different meanings of “academic”

## **A Bald View of the State of the Art:**

- To a good first approximation, there are essentially no *consistent strong* links between exchange rates and the macro-economy for low-inflation countries of reasonable income
  - True of *determinants* and *effects* of exchange rates
  - True of exchange rate *levels, volatility, regimes*
  - True for short- and medium-run (around 2 years)
  - True of all technical levels of empirical work

## Generally Negative Impression

- Economists should be (and typically are) humble in claims of reliable linkages
- Skepticism means that occasional successes (of model/period/country/technique) are basically ignored
- Much discouragement for research in international finance

## Big Effects on Research

- Theoretical implications often untested (e.g., NOEM)
- Empirics designed to avoid testable implications
  - Exchange rate regime classifications
  - Currency unions (EMU)
  - Monetary regimes for developing countries
  - Financial Integration (BWII)
  - Crises, Debt, Default
  - Long-Run focus high and rising in importance

## Key (Negative) Results in Determination Literature

- Meese-Rogoff (1983) on exchange rate forecasting/determination
  - Baxter-Stockman (1989) on exchange rate regimes
  - Many on currency crises/early warning systems

## A Few Exceptions

- High-Inflation (and other pathologies) have big, reasonable impact across episodes and countries
- A few Long-run effects
  - PPP – though still disputed
  - Balassa-Samuelson – relatively weak
- Fixes lower exchange rate volatility

## Negative Attitude Seems Warranted

- *JIE* (2003): symposium on 20<sup>th</sup> anniversary of Meese-Rogoff with little substantial progress
- Chinn et al (2005): weak verdict on many models
  - echo of Meese-Rogoff



## **Even Identity of “Fundamentals” much disputed**

### ○ Trade Flows?

- Focus of Practitioners – limited success

### ○ Monetary?

- Money stock (demand)

### ○ Real?

- Real GDP (money demand)
- Productivity and “Balassa-Samuelson”

○ Relative Prices?

- PPP in short-run – Imbs et al (2005)
- Terms of Trade

○ Financial Flows?

- Focus of some currency crisis work

○ Financial Stocks?

- Lane-Milesi-Ferretti and Gourinchas-Rey on NFAs and Valuation Effects

- Commodity Prices?
- Fiscal Shocks?
- Policy Shocks? (protection)
- Rate of Return shocks?
- Demographics? (long run)

## **Most Exchange Rate Shocks seem to be Noise**

- Traditional “Fundamentals” of limited explanatory value
  - Engel-West (2005): may be inevitable result of trending fundamentals
  - Jeanne-Rose (2002) and Kilian-Taylor (2003): may be result of beliefs of chartists/noise traders

## Where does this leave Central Banks?

- Little interplay between Fundamentals and exchange rates in short/medium term
  - Enormous simplification!
  - An obvious problem? Consider other long-term assets (e.g., stock and real estate markets)
- Meese-Rogoff done for FRB

## Where does this leave Academics?

- Continue to avoid topic
  - Treat exchange rate as exogenous in practice
- Continuing Opportunity for new “killer app”