# Discussion of "Financial Intermediation and Exchange Rates," by Bahaj, Della Corte, Massacci and Seyde

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#### Context: Role of financial intermediaries

- Standard New Keynesian Open Economy models (with representative HHs and smooth stochastic discount factors) are unable to explain:
  - dramatic rise in cross-border gross capital flows and positions
  - outsize global role of the US dollar
  - excessive global spillover impacts of US monetary policy
  - low levels of risk sharing through portfolio diversification or equilibrium movements in terms of trade
- Portfolio Balance models that allow a role for financial intermediaries with limited capital do much better:
  - suggest that intermediaries need to be compensated for risk
  - can explain deviations from UIP and CIP
  - allow the supply of assets to impact prices

### More Context: Floating exchange rates

- Evidence suggests they have limited insulation properties
  - floating rates do not move to absorb real shocks
- This evidence provides additional support for Portfolio Balance models, which allow
  - potential efficacy of sterilized foreign exchange intervention
  - potential efficacy of quantitative easing
  - movements in asset prices and exchange rates to generate cross-country net wealth transfers that can potentially impact external adjustment
  - exorbitant privilege for safe asset providers

# Paper's focus: Intermediary interconnections

- Big Question: Does the global network structure of financial intermediaries play a role in exchange rate determination?
  - Gabaix and Maggiori (2015) show that intermediaries matter
  - Paper Contributions: multi-country setting, empirical predictions, granular bank-trade-exchange rate data analysis
- BIS Data contribution:
  - (Restricted) Locational Banking Statistics by residence (LBSR)
    - used to construct a network of cross-border financial connections
    - Restricted version: provides currency breakdown of cross-border lending positions (allows authors to trace currency networks)

# Paper's Empirical Strategy

- Step 1: determine cross-country (currency-based) financial interconnections using a network approach (and BIS data)
- Step 2: combine impacts of trade shocks with financial connections (from step 1)
- Step 3: connect steps 1 and 2 with exchange rate dynamics
- Ultimate Goal: show *how* the network of international financial intermediation affects exchange rate returns

### Emphasis is on how intermediation matters

- Idea that intermediation matters is not new
- Difficulty: many exchange rate models are statistically predictive, few are strongly economically predictive
- Nice aspect of this paper's approach: emphasis on *how*
- Remaining issue: potential alternative explanations
  - what is the appropriate counterfactual?
  - does the empirical work "test" or "match" the model?
  - might the network centrality measure be unnecessarily complex: is access to global banks predictive of "centrality"?

### First-order and higher-order connections

#### Definitions:

- First-order connections: capture direct intermediation of a country with its counterparties
- Higher-order: capture indirect intermediation with the partners of country's counterparties

#### Key Results:

- First order financial intermediation *reduces* future exchange rate responses to trade shocks (describes the standard smoothing role of financial markets)
- Higher order intermediation *can amplify* exchange rate reactions to trade shocks (depends on size of country and spillover responses of capital flows)

## (In the weeds) questions/suggestions/concerns

- Measurement bias from the forward- and backward-filling needed to construct monthly data from quarterly and annual data?
- Potential importance of capital flows not captured in LBSR data (equity flows)?
- Eigenvector centrality: robustness check with other measures of network centrality?
- Impact of standardizing country-level banking and trade centrality: seems like knowing the most central countries in the networks should matter?
  - Correlation of non-standardized banking and trade centrality is likely to be high.

# Takeaways

- Important and interesting topic.
- Three papers in one: (1) multi-country extension of Gabaix and Maggiori (2015), (2) construction of financial intermediary network structure, (3) verification (test?) of model predictions for exchange rate returns.
- Intriguing result higher-order intermediary network effects (partners of counterparties) may offset/dominate the impacts of more direct financial connections in mediating trade shock impacts on exchange rates.