Financial Exchange Rates and International Currency Exposures

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Two papers

- Development of data set on Gross and Net FA positions by currency exposure
- Analysis using the new data set allows many important questions to be addressed

Methodological contribution

- Development of a comprehensive data set on foreign asset and liability positions by currency
  - Detailed “detective work” pulling together numerous sources and then predicting missing values using a model
  - “ground” up…looking at various disaggregated components and building up to aggregate positions over time

Analytical Questions

- Does the financial-exchange rate index diverge from trade-weighted?
  - Important since financially-weighted ex. rate index operates through the valuation channel and impacts international adjustment through wealth effects
  - Are financial exchange rates giving us important independent info.? Yes!

Value of Approach: Specific Answers to Important questions

- E.g. Developing country positions
  - historically have negative net fx position>> dom. depreciation leads to negative wealth effects
  - Large improvements in these positions
  - Improvement in NFA position (buildup of foreign assets) and thru currency composition shift of liabilities to local currency (via equity and FDI)

- E.g. wealth effects from a 20% USD depreciation (against all currencies)
- Substantial wealth gain for developing economies...and substantial wealth loss for advanced economies
- Emerging markets in middle

- Specific quantitative exercises not possible previously…now possible with this data set
- A number of interesting empirical exercises and exploratory analysis in paper…
- Much more to be done…

The big picture…

- This paper is focusing on net foreign asset position changes associated with exchange rate changes…a wealth effect
- But could this be offset by the wealth effect associated with real trade-weighted exchange rate changes (terms-of-trade effect)…and this effect must be the PDV of current and future effects on domestic consumption possibilities
- What is the net effect?

Methodology Question

- How good is the model in predicting missing observations?

$$\log(1 + EQ_{ijt}) = \phi_j + \theta_t + \beta Z_{ijt} + \gamma X_{it} + \varepsilon_{ijt} \qquad \text{(A.1)}$$

  - How good is the model prediction out-of-sample when we do have the observations?
    - In sample R2=0.79 with fixed country effects, but these are missing in predicting
  - How many observations are missing?
  - Is there a sample selection bias?
    - Are countries with missing values truly random or is there a systematic component biasing the results?

Question on Comparisons

- What the trade-weighted index used as a point of comparison?
  - No details given
  - Are the results (correlations) robust to different definitions?
    - Low or negative correlations used as a point to validate the net financial-weighted exchange rate

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- Big change in financial weighted index around “sudden stops” and “big changes” in ex. rates (Table 2)
  - Interesting to historically decompose specific financial crises and see how important were negative wealth effects in causing output losses
  - What is the transmission mechanism…consumption (private and government), government investment?

Determinants of foreign currency exposure?

- Table 8: regression of 2004 currency exposure (119 countries) on finds that gdp-pc, trade, inst. quality, population and EMU membership
  - higher pc-gdp, more trade, EMU member >> less exposure
- Omitted variable: financial crisis over past decade? Important result is buildup in reserves and more FDI/equity…trend due to past bad experiences…

- A few small issues on interpretation and extensions
- But exciting new research possibilities with this dataset in hand