Discussion of

"Shocks and Exchange Rates in Small Open Economies"

by V. Cormun & Pierre De Leo

A. Cesa-Bianchi*

Bank of England, CFM, and CEPR

18th Workshop on Macroeconomic Dynamics
Pavia - December 20, 2019

*The views expressed in this paper are those of the author and do not necessarily represent the views of the Bank of England or its committees.

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$$\mathbb{E}_t[\hat{x}_{k,t+m}] = \hat{r}_{k,t|m} - \hat{r}^*_{t|m} - \mathbb{E}_t[\Delta \hat{s}_{k,t+m}] \quad \rightarrow \text{UIP deviation}$$

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- Interpret evidence with open economy DSGE model with segmented asset markets.

This paper: Main findings

VAR

- External shocks drive a large fraction of fluctuations in UIP deviations.
- US risk aversion (ε_t^{**}) and *Home* ($\varepsilon_{k,t}$) shocks lead to different conditional responses of UIP deviations.
- NFA/GDP ratio governs country k's sensitivity to US risk aversion shock.

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DSGE

- Only US risk aversion shock is consistent with the above findings.

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  - Impulse to US broker dealers' leverage.
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- **My discussion** [#1] Identification, [#2] Economics, [#3] Cross-section.

[#1] Shock identification in SOEs

- **Identification assumption** In a small economy domestic shocks do not affect external variables at any horizon.

- Methodology:
  - Typically: Cholesky (violates 'at any horizon').
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UNAPPEALING

$$\begin{bmatrix} r_t^* \\ r_{k,t} \\ s_{k,t} \end{bmatrix} = \begin{bmatrix} f_{11} & f_{12} & f_{13} \\ f_{21} & f_{22} & f_{23} \\ f_{31} & f_{32} & f_{33} \end{bmatrix} \begin{bmatrix} r_{t-1}^* \\ r_{k,t-1} \\ s_{k,t-1} \end{bmatrix} + \begin{bmatrix} u_t^{r^*} \\ u_{k,t}^r \\ u_{k,t}^s \end{bmatrix}$$

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- Identification assumption is even more strongly satisfied... though news shock cannot be identified!

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- **Comment** A new approach to separately identify *domestic and external shocks in small open economies*?
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- **Suggestion** Implement bock exogenous approach.

[#2] How different from a recursive VAR?

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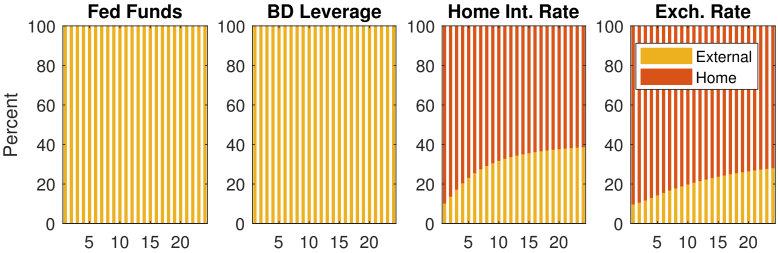
CHOLESKY

- Consider a shock to Broker-Dealers' leverage using a recursive identification scheme.

- Mean group estimates for a panel of 17 countries with flexible exch. rates.

[#2] How different from a recursive VAR?



- External shocks explain a small(ish) fraction of the variation at *Home* (✗).

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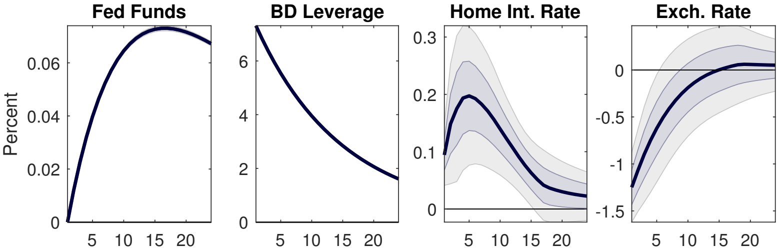

- Persistent increase in the Fed Funds, large *Home* appreciation (✓).

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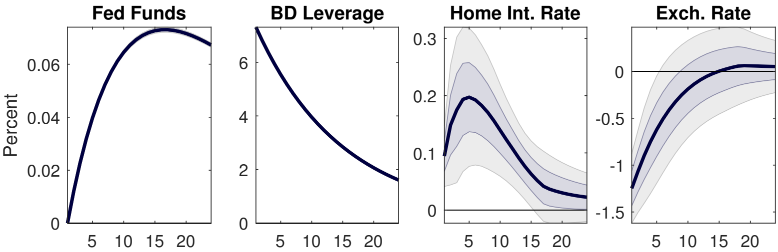

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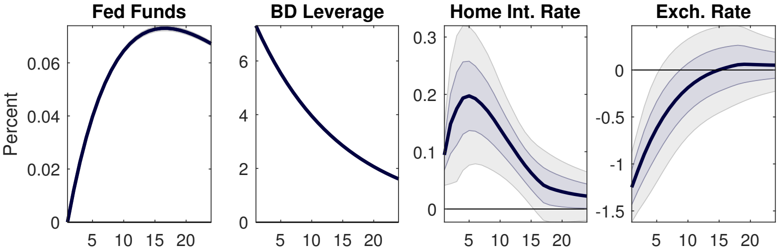

- Persistent increase in the Fed Funds, large *Home* appreciation (✓).
- But *Home* policy rate <u>increases</u> (✗).
- **Issue** *Home* policy rate is crucial $\rightarrow$ Important driver of UIP deviations.

[#2] The response of *Home* policy rate

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- Again, consider a shock to Broker-Dealers' leverage using a recursive identification scheme.

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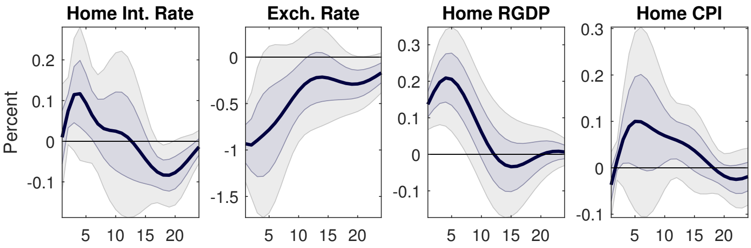

- *Home* exchange rate appreciate, *Home* CPI and *Home* GDP increase.
- Consistent with inflation targeting central bank & flexible exch. rate regime.

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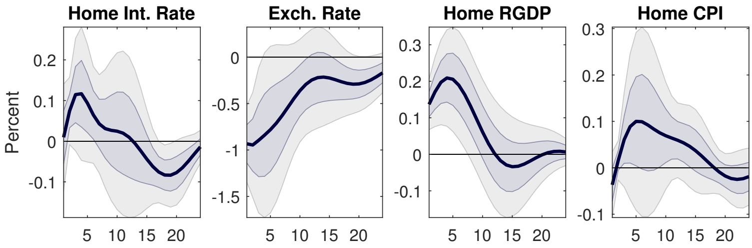

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- **Suggestion** Report similar exercise in the paper to interpret *Home* policy rate response.

[#3] Cross sectional implications

- NFA/GDP ratio governs *Home*'s sensitivity to external news shock (ε_t^{**}).
- But NFA/GDP can be correlated with other determinants of exchange rate sensitivity.
- In our paper we show (theoretically and empirically) that exch. rate response depends on:
  - Share of foreign currency debt.
    [See also [Akinci and Queralto (2019)]]
  - Max LTV ratios.
- **Suggestion** Would be interesting to condition on those characteristics.

Other comments

- Explain what you plot (mean group estimator?).
- List of number of lags for each country.
- Why zero restriction on Fed Funds?
  - Does not hold in DSGE model & Kurmann and Sims relax it.
- Globally synchronized shocks can affect the US.
  - Need to control for global output.
- Some odd choices in the definition of the sample period.
  - Euro area countries are still fluctuating vis-a-vis the Dollar after 1998.
  - Philippines only two years of data?
  - If concerned with the ZLB maybe stop consistently in 2007:M12.
- Useful reference: Forbes, Hjortsoe, Nenova (2018).
- Robustness to oil price.

In sum

- Nice paper!
- Main suggestions:
  - Clarify the value added of identification.
  - Better understand the behavior of the *Home* policy rate.
- Looking forward to seeing new versions!

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