Dealer Risk Limits and Currency Returns

Discussion of Barbiero, Bräuning, Joaquim and Stein (2024)

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The views expressed here do not necessarily reflect the position of the Bank of England.

This Paper's Million-Dollar Question

This Paper's Answer: Intermediaries' Risk-Bearing Capacity

Theory has led empirics: Gabaix & Maggiori (2015) and Itskhoki & Mukhin (2021)

But lots of recent empirical papers setting out to shed further light, all using GIVs:

- ▶ Camanho, Hau & Rey (2022): mutual funds' rebalancing flows
- ▶ Aldasoro, Beltrán, Grinberg & Mancini-Griffoli (2023): bank flows at *country-level*
- ▶ Becker, Schmeling & Schrimpf (2023): banks' syndicated loan flows
- ▶ Bippus, Lloyd & Ostry (2023): UK-based (global) banks' USD positions
- ▶ …
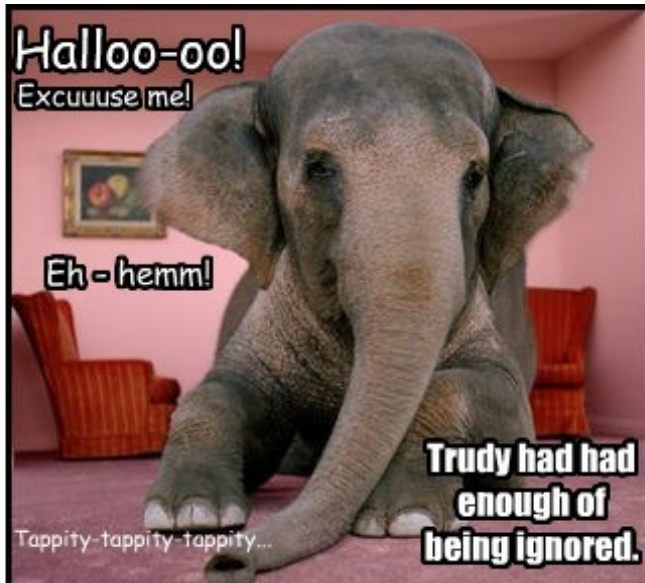
This Paper's Contribution: Specific Focus on Risk Limits

Key: distinguish dealers (who intermediate) from financiers (who speculate)

▶ Unique supervisory (VV-1) daily-frequency data on risk limits at trading-desk level collected by Fed under 2013 Volker rule

▶ Focus on desks trading currencies as primary product
  - Final data: 167 FX trading desks at 11 (global) banking groups

  ▸ Risk Limit Changes

Findings: risk limits themselves matter!

▶ Shocks to dealer risk limits significantly affect prices, quantities and spreads

▶ Intuitively, tighter risk limits reduce FX intermediation

Comment #1: Where is Currency Risk Managed Within Bank?

Authors aggregate the 167 dealer risk-limit shocks to the level of 11 banks, by currency:

$$\text{Limit Shock}_{c,t} = \sum_b \omega_{b,t-1}^c \text{Limit Shock}_{b,t} = -\sum_b \omega_{b,t-1}^c \sum_{\tau \in t} \sum_{d \in b} \omega_{d,t-1}^b \hat{\epsilon}_{d,\tau}$$

where:

- $\omega_{d,t-1}^b$: relative limit size of desk d over all desks associated with bank b
- $\omega_{b,t-1}^c$: share of net position in currency c held by bank b relative to all banks

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Comment: seems to imply homogeneous treatment of limits across desks d in bank b

- ▶ We know bank subsidiaries in, e.g., IFCs can structure cross-border lending very differently to those in HQs   [Bussière et al., 2021]
- ▶ More saliently...

Comment #1: Where is Currency Risk Managed Within Bank?

…is it reasonable to give currency risk-limit shocks in London vs. US (or other) desks same weight around UK gilt market turmoil in 2022?

Suggestion: Ideally, use currency exposures at desk or unconsolidated level. Otherwise, check with BIS LBS?

Comment #2: Where is the 'Granularity'?

Two layers of granularity (dealer and bank) are treated differently:

$$\text{Limit Shock}_{c,t} = \sum_b \omega^c_{b,t-1} \text{Limit Shock}_{b,t} = -\sum_b \omega^c_{b,t-1} \sum_{\tau \in t} \sum_{d \in b} \omega^b_{d,t-1} \hat{\epsilon}_{d,\tau}$$
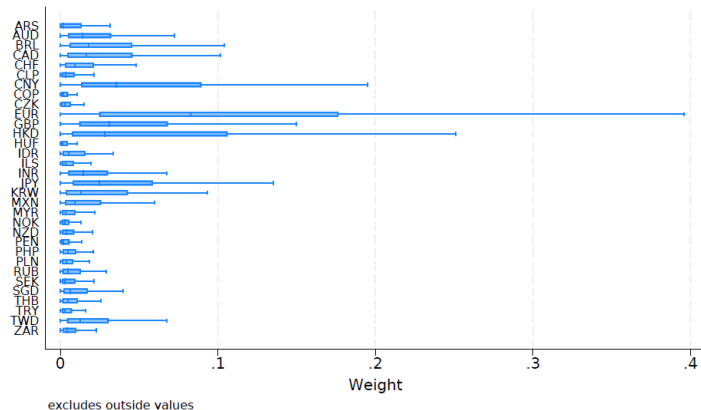
where:

- $\omega^b_{d,t-1}$: relative limit size of desk d over all desks associated with bank b

  ⇒ not necessarily realised

- $\omega^c_{b,t-1}$: share of net position in currency c held by bank b relative to all banks

  ⇒ realised

Question: Which layer *really* matters for identification?

Comment #2: Where is the 'Granularity'?

With only 11 banks, hard to see where granularity is...

Weights Used to Aggregate Bank-Quarter Limit Shocks
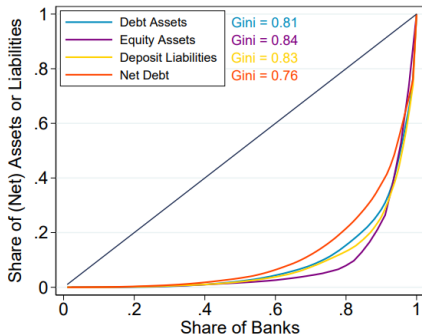

excludes outside values

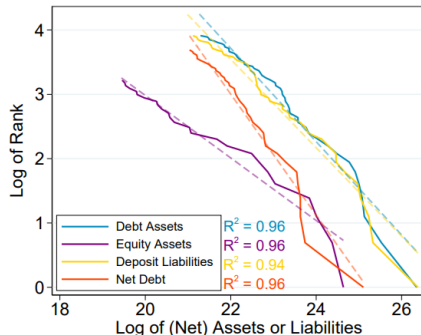# Comment #2: Where is the 'Granularity'?

Suggestion: Provide more formal assessment of granularity to allow reader to probe identifying assumptions more readily

From Bippus, Lloyd & Ostry (2023)

(a) Size Concentration

(b) Granularity
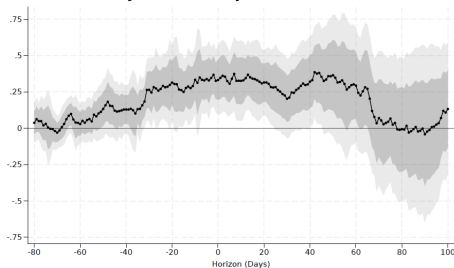
Comment #3: Can Dynamics Be Tested More Simply?

Authors aggregate daily shocks to quarterly frequency:

$$\text{Limit Shock}_{c,t} = \sum_b \omega_{b,t-1}^c \text{Limit Shock}_{b,t} = -\sum_b \omega_{b,t-1}^c \sum_{\tau \in t} \sum_{d \in b} \omega_{d,t-1}^b \hat{\epsilon}_{d,\tau}$$

then regress shifted daily FX on quarter-end shock

► End result is difficult to interpret...

Dynamic Daily FX Response to Limit Shock

Comment #3: Can Dynamics Be Tested More Simply?

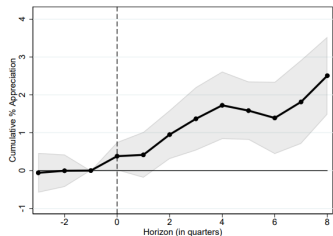Authors aggregate daily shocks to quarterly frequency:

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then regress shifted daily FX on quarter-end shock

- ▶ End result is difficult to interpret...
- ▶ ...and hard to compare with other estimates

Suggestion: Drop time aggregation and / or show like-for-like quarterly responses

From Bippus, Lloyd & Ostry (2023)

In Sum

- ▶ Paper contributes to growing literature assessing role of intermediaries' risk-bearing capacity on FX
- ▶ Key novelty here is focus on actual risk limits
- ⇒ **Risk limits matter for exchange rates and currency intermediation**

Appendix

Risk Limit Changes of Trading Desks

Monthly Average of Trading Desks Daily Risk Limit Changes (%)

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