

# **DISCUSSION OF INTERMEDIATED DOLLAR LENDING OF LAST RESORT**

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Ding, Lewis, and Zeng (2025)

Discussed by Julie (Zhiyu) Fu

## DOLLAR SWAP LINES: “THE DECISIVE INNOVATION OF THE CRISIS”

- Dollar swap lines: emergency lending disguised under obscure names
- Gigantic in scale: \$580 billion in Dec 2008, 35% of the Fed's balance sheet
  - ▶ All without a fuss at the congress!
  - “The scale of lending to foreign banks . . . was a closely guarded secret even by standards of the always secretive Fed. . . .” (Irwin, 2013)*
- Justification: “The dollar liquidity swap lines are designed to help maintain the flow of credit to U.S. households and businesses by reducing risks to U.S. financial markets caused by financial stresses abroad. ” (Fed FAQs)
- A free lunch? **This paper: It increases Treasury fragility!**

- A timely paper on a very important topic
- A classic moral-hazard tale in a novel setting: swap lines and long-run allocation
- Relatively early stage (at least in writing)
  - ▶ Discussions focusing more on big pictures rather than implementation details
- The focus of my discussion
  - ▶ Recap of the model in a very simplified way
  - ▶ A wish list on more model predictions
  - ▶ Suggestions on empirical support

## THE (VERY SIMPLIFIED) MODEL

Two countries, US and Japan, and three periods:

- Long run  $t = 0$ : Japanese banks borrow in dollar debt  $b_0^*$  invest in Treasuries maturing in  $t = 2$ 
  - ▶ Triple roles of Treasury holdings
    - ▶ Offer higher returns
    - ▶ Vehicles of precautionary saving: during liquidity crisis, sell it to raise dollar
    - ▶ Sources of the liquidity crisis: Treasury holdings are funded by dollar debt
  - ▶ Last two roles do not completely offset each other
- Short-run liquidity crisis  $t = 1$ : Japanese banks need to rollover the dollar debt  $b_0^*$
- Crisis resolved  $t = 2$

Key question: how does liquidity injection via swap lines at  $t = 1$  affects Treasury investment in  $t = 0$ ?

## LIQUIDITY CRISIS AT $t = 1$

- Japanese banks need to roll over dollar debt  $b_0^*$ , with two means:
  - ① Synthetic borrowing  $s$ : with a cost of  $\mu$  (CIP deviation)
    - ▶ ...limited by collateral constraint  $s \leq \theta p$
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- Swap lines as plumbing: more  $s$  available, less fire sale, less drop in  $p$

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- What's the long-run implication?
  - ▶ My conjecture: It lowers the ex-ante dollar debt by Japanese banks  $b_0^*$  (?), as they can rely on BoJ to bail them out
  - ▶ Because BoJ is a social planner who internalize the pecuniary externality, banks do not simply undo BOJ's action by reducing  $b_0^*$  one-to-one.
  - ▶ How about the total positions (BoJ + banks?)

## LONG-RUN ALLOCATION (2): SWAP LINES

- Swap lines shifts Treasury holdings from the official sector to private sector
  - ▶ Japanese banks borrow more  $b_0^*$  and buy more Treasuries  $q_0^*$
  - ▶ BoJ accumulates lower reserves  $q^R$
- Both relative to the case without swap lines and the first-best
- My intuition:
  - ▶ With less fire sale at  $t = 2$ , dollar debt is less costly, yield-seeking dominates
- In what sense it's inefficient? How's the first-best defined?
  - ▶ Compared to Laissez-faire: More currency mismatch indeed, but also less costly

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Main thesis: Swap lines increase Treasury fragility by shifting holdings to less stable investors

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- ...but the model can directly speak to the Treasury fragility:
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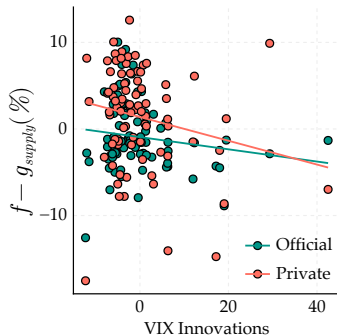
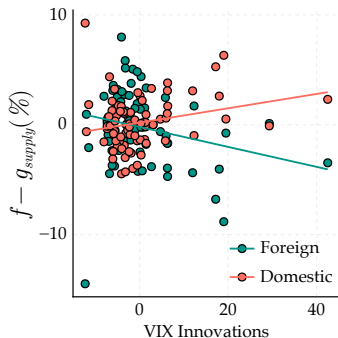
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- Who are more unstable in the model? Private banks or official lenders?
  - ▶ The first-line defense of banks is synthetic borrowing; while official lenders accumulate Treasuries just for sale;

## FOREIGN INVESTORS' RELATIONSHIP TO TREASURIES

- Two contrasting views:
  - ▶ Safe-haven view: Foreign want to **buy** Treasuries during bad times  
(Jiang et al., 2021, 2024); (He et al., 2020); WSJ; The Economist; FT;
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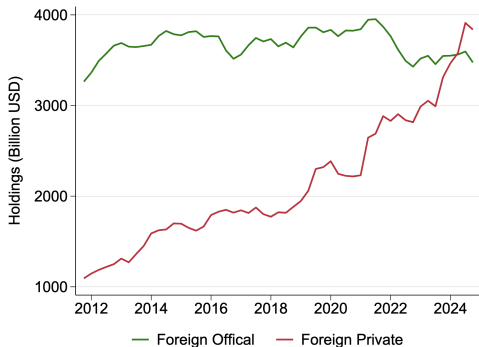
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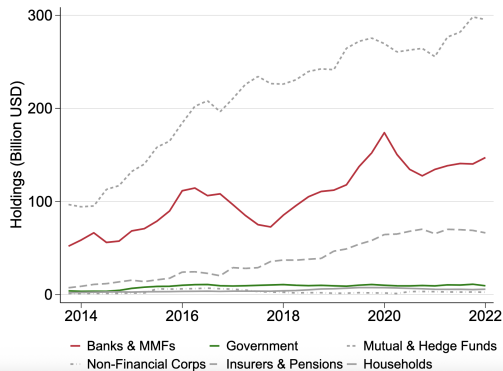
Source: TIC (Chaudhary et al., 2024)

# THE ROLE OF SWAP LINES: EMPIRICAL EVIDENCE

(a) Holdings of Long-Term US Treasury by Foreign Investors

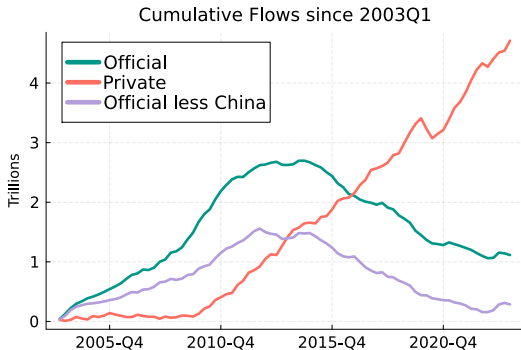


(b) Holdings of Long-Term US Government Debt by EA Investors



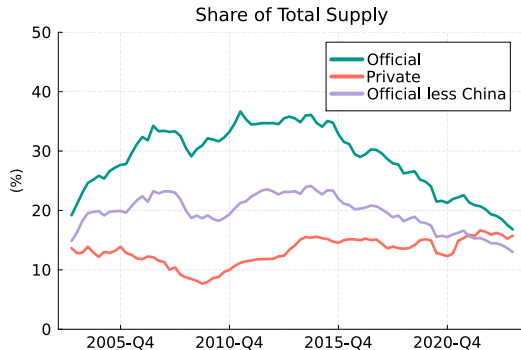
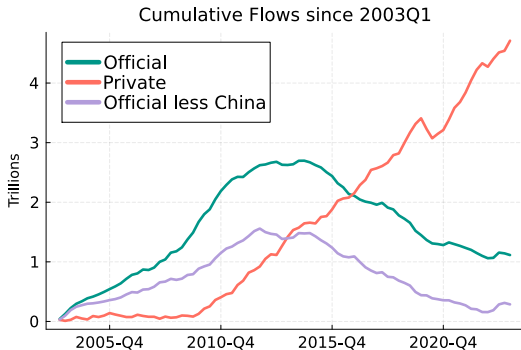
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- What's consistent: A visible structural break around the GFC/swap line
- More ambiguous: The break is more due to the withdrawal of the official sector than the private sector, who merely catch up with the supply



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## SUGGESTION: USE THE CROSS-SECTIONAL VARIATIONS

- A natural DID setup: Swap lines are only available for selected economies
- Measure the US Treasury holding in reserves using USD assets in reserves (Chinn et al., 2022)
  - ▶ The model does not discriminate between these two
- For countries with swap line access:
  - ▶ Do they reduce dollar reserves more?
  - ▶ Does the relationship between dollar debt and dollar reserve weakened more?

## CONCLUSION

- A very nice paper on a hugely underappreciated topic
- Major comments:
  - 1 Model: Characterize the Treasury fragility directly
  - 2 Empirical front: The structural break seems to be driven by the withdrawal of the official sector
    - 1 Investigate using cross-sectional evidence