

Discussion: US Banks and Global Liquidity  
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## What Does This Paper Do?

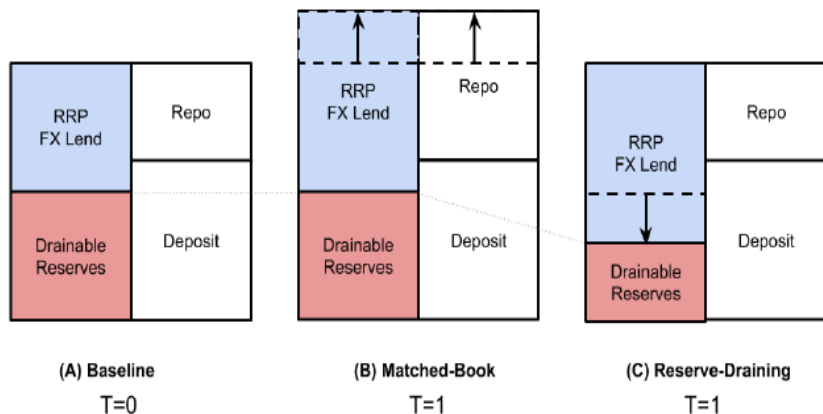
- Document “reserve draining intermediation”, in contrast to the traditional “matched book intermediation” model
  - Examine the daily balance sheet of US GSIBs during USD shortages, i.e, quarter ends and TGA balance increase days and find US GSIBs drain reserves to finance net reverse repo lending and FX swap lending
  - Reserves play a similar role for foreign banks
  - Where does the reserve go? Small domestic banks passively accommodate the reserve flows
  - The scarcity of reserves lead to repo market liquidity dryup and intermediation spread spike (September 16, 2019)

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- In a different post-crisis reserve and regulatory environment

# Reserve Draining and Matched Book Intermediation

Figure 5: An illustration of different types of dollar intermediation



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- More balance sheet space for reserves, excess reserves earning interests
- What is the new role of reserves in the post-crisis financial system?
  - Important for policy design, for example, whether the Fed should shrink its balance sheet, especially in the current times of inflation
  - Important for guiding liquidity regulation policy
  - How is monetary policy transmitted, for example, to the asset prices, inflation, and output?

## Internal Liquidity Sharing

- The broker-dealer arm of BHCs borrow through an internal repo
- The depository arm of BHCs drain their reserves and lend internally
- The reserve draining intermediation relies on smooth internal repo borrowing
  - To what extent it is frictional, even though it is within a firm?

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  - Cost: financial institutions need to take up balance sheet space to hold reserves
  - Yang (2021) assesses whether reserves are enough based on a model of reserves used for interbank payment subject to strategic complementarity
  - Altogether with an optimal setting of IOER and regulatory environment

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  - Too stringent liquidity regulation makes reserves undrainable
- Transmission of liquidity shortage. If lenders understand that reserves (as liquidity) are drained, it may trigger a run
- Maybe specific requirement on reserves and non-reserve liquid assets (such as Treasuries) can be helpful and prevent spillovers

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- DSS treats the banking sector as a whole, i.e., a frictionless interbank funding market. Nominal interest rate and the quantity of reserves has a 1-1 mapping
- The possible shortage of dollar and intermediation friction breaks this 1-1 setting. The quantity (and distribution) of reserves not only determines the cost of liquidity, but also the degree of frictions in the interbank market



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- A potential transmission of financial intermediation (Fang and Liu, 2021) and fiscal policies abroad through this FX swap lending channel, which is state-dependent on the quantity of reserves
  - Ample reserve, small CIP deviation, strong FX swap lending response
  - Scarce reserve, large CIP deviation, weak FX swap lending response

# The Organizational Structure of BHC

- The smooth internal transfer of reserves from the depository institution arm to the broker-dealer arm is crucial for effective intermediation
- Measuring and monitoring the internal transfer frictions – what organizational structure of BHC can alleviate the internal transfer frictions?

## Conclusion

- A great paper, very clear, step-by-step illustration, I learn a lot
- Important topic, new angle of understanding reserves and intermediation, solid analysis and detailed institutional description
- Can potentially lead to many important research on this pipeline, look forward to seeing more followup research
- Should be put on the top of his/her reading list if interested in financial intermediation, central banking and asset pricing