

Discussion of
“How Abundant are Reserves? Evidence From the Wholesale Payment System” (Afonso, Duffie, Rigon, and Shin)
&
“Market Power in Wholesale Funding: A Structural Perspective from the Triparty Repo Market” (Huber)

Discussed by **Yi Li** (Federal Reserve Board)

Financial Stability Conference, November 18, 2022

Disclaimer: The views expressed herein do not necessarily reflect those of the Federal Reserve Board or its staff.

Afonso, Duffie, Rigon, and Shin (2022): Summary

- Paper title: **How abundant are reserves? Evidence from the wholesale payment system**
- Key finding: Even in the era of large reserve balances (i.e., post-GCF), banks' outgoing payments remain highly sensitive to incoming payments.
 - A 1-percent increment received in incoming payments by a bank in a 15-min window predicts an additional 0.4 percent of outgoing payments in the subsequent 1-min window.
 - The coupling of payments is strengthened when aggregate bank reserves are low.
- This paper challenges the conventional wisdom that banks' large reserve balances eliminated the reliance on incoming payments to make outgoing payments.

Afonso, Duffie, Rigon, and Shin (2022): Implications

- It supports the emerging view that banks are still subject to balance sheet constraints even with “ample” reserves.
 - Reserves are deployed to repo lending and other short-term funding operations. [Afonso, et al. (2021), Correa et al. (2020)]
 - Post-GFC regulatory and supervisory liquidity requirements affect intraday reserves management. [Ihrig (2019), Copeland et al. (2022), d’Avernas and Vandeweyer (2021)]
- Findings are timely amid the ongoing shrinking of central bank balance sheets around the world.

Afonso, Duffie, Rigon, and Shin (2022): Comment 1

- **How much control do banks have for their payment flows?**
 - The Fedwire is a real-time interbank payment system, and the majority of payment transactions are **requested by bank customers** (rather than scheduled by banks themselves).
 - Banks are subject to unexpected payment outflows and inflows.
- Is it possible to **decompose** the sensitivity of outflows to inflows?
 - What proportion of such sensitivity is contributed by banks' **active** payment management?
 - What proportion is driven by banks' **passive** reaction to customers' requests?
 - Consider utilizing the information on transaction types provided by the Fedwire data.

Afonso, Duffie, Rigon, and Shin (2022): Comment 2

● Zoom into specific events of funding stress

- In mid-September 2019 (repo squeeze) and mid-March 2020 (COVID crisis), overnight repo rates paid by large banks surged.
- Relative to normal times, banks' incentive to sync their payment outflows with inflows should increase dramatically in times of stress.
- High-frequency transaction-level data should allow for a detailed investigation of these events.

Huber (2022): Summary

- Paper title: **Market Power in Wholesale Funding: A Structural Perspective from the Triparty Repo Market**
- Using structural estimation, this paper studies imperfect competition in the tri-party repo market.
 - Key feature: Cash lenders allocate their portfolios among **differentiated dealers who set repo rates**.
 - Key conclusion: Cash lenders' aversion to portfolio concentration and preference for stable lending **grant dealers substantial market power**.
 - Key number: Dealers borrow at rates that were 21 bps lower than their marginal value of intermediating borrowed funds.

Huber (2022): Implications

- The paper offers a novel explanation for funding spreads in securities typically financed by repo.
 - The observed repo rate understates the financing rate available to market participants who rely on repo funding (due to dealers' market power).
- It suggests that frictions in wholesale funding markets can be (partially) corrected by policy.
 - The Federal Reserve's Overnight Reverse Repo Facility (ONRRP) effectively reduces dealers' markdowns by offering repo lenders a competitive outside option.

Huber (2022): Comment 1

- **Further endogenize the equilibrium model**
- The model takes the following empirical findings as given:
 - ① Dealers' identities drive repo rate variation.
 - ② Different lenders accept the same rates when lending to the same dealer.
 - ③ Lenders do not shop for the highest rates, but prefer to spread out lending to different dealers.
- These empirical facts themselves are outcomes of market equilibrium.
 - Dealers' market power is already built-in in the model setup.
 - Consider loosening the assumptions based on the first two empirical facts (i.e., dealers have all the power to set rates)

Huber (2022): Comment 2

- **Use more granular data**
- The current data source is MMF holding report, only capturing month-end snapshots.
 - ① With this low-frequency data, only static model estimation is feasible.
 - ② For example, all estimates of dealer and MMF parameters are fixed over the 2011-2017 sample period.
 - ③ This limits the model's potential to study market dynamics in different time periods (say, during the Eurozone debt crisis).
- Transaction-level tri-party repo data is available.
 - This data allows for dynamic estimation of the model. All model parameters can be updated every quarter (or even every month).

Conclusions

- Papers are very interesting and provide deep insights!
- Financial institutions' liquidity condition is subject to various frictions.
 - Despite holding large reserve balances, intraday liquidity management is still a key concern for banks.
 - Wholesale short-term funding markets (like tri-party repo) are far from efficient.
- More research is warranted in these areas!
- Thank you!