Do non-banks need access to the lender of last resort? Evidence from mutual fund runs

Johannes Breckenfelder   Niklas Grimm   Marie Hoerova

Discussant: Yiming Ma
(Columbia Business School)

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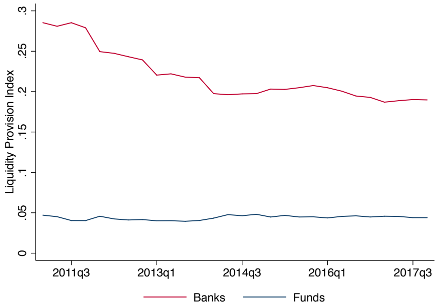
Fixed-Income Open-end Mutual Funds

- Have rapidly grown in size
- Issue redeemable shares (liability)
- Invest in corporate and government bonds (assets)
- Have increasingly engaged in liquidity transformation – like banks

Figure: Mutual Fund versus Bank Liquidity Provision



Ma, Xiao and Zeng 20

Fixed-Income Open-end Mutual Funds

- May suffer from (inefficient) runs (Chen, Goldstein and Jiang 2017) – like banks
  - Share price/NAV does not adjust flexibly with redemption
  - $\rightarrow$ first-mover advantage to redeem when others are redeeming

- This paper asks the very important question:
  Do mutual funds need access to the LOLR – like banks?
  1. Announcement of asset purchase increased the maturity of repos that more-liquidity constrained banks lend to funds
  2. Funds with higher shares of assets eligible for central bank purchases in their portfolio before the COVID-19 crisis had smaller outflows and better performance

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- Answer:
  Mutual funds were stabilized without direct access to the LOLR

Overview of Comments

Overall, the paper addresses a very important question. It is carefully executed with a combination of interesting data!

I mostly have some big picture comments:

1. Does bank repo lending to mutual funds mitigate first-mover advantage in fund outflows?
   - Key: Look at the interest rate on repos
2. What is the economic significance of collateral?
3. What is the channel through which asset purchases stabilized mutual funds?

1. Repo Funding Cost and Fund Runs

Recall why there is first-mover advantage in mutual fund outflows

- Investor redemptions cause fund asset liquidations
- Asset liquidations incur fire sale discounts
- Fund NAV adjusts slowly
- $\rightarrow$ Investors want to front-run before NAV has fully adjusted

The benefits of repo funding

- Fund borrows repo following investor redemptions
- $\rightarrow$ Avoids asset sales at fire sale prices
- $\rightarrow$ prevents incentive to front-run
- $\rightarrow$ Expansion of repo funding can prevent runs

But what is the cost of repo? It depends on the interest rate!

1. Repo Funding Cost and Fund Runs

Whether repo funding can mitigate fund runs depends on the interest rate that funds incur

- Suppose funds can borrow repos to meet large investor redemptions during crisis times
- But the repo rate they have to pay is very high/at a penalty rate
  - Dealer bank balance sheet costs (Du, Tepper and Verdelhan 18)
  - Dealer banks have bargaining power in OTC repo markets (Anbil, Anderson and Senyuz 21, Eisenschmidt, Ma and Zhang 21)
- Fund NAV adjusts too slowly to incorporate the penalty repo rate
- $\rightarrow$ The incentive to front-run before NAV fully adjusts remains!

1. Repo Funding Cost and Fund Runs

Suggest to include repo interest rates in the analysis!

- Should be available from the MMSR data
- Has it increased over the Covid-19 period? Has it increased by more for funds who need to borrow more?
- How does it compare to the rate at which funds could potentially borrow from the central bank?
    - E.g. Marginal Lending Facility rate

Joint analysis of volumes and rate can better address whether funds need access to LOLR to prevent runs

2. Role of Collateral

Everything we have discussed so far applies to secured and unsecured borrowing alike

- Little documentation of secured borrowing by mutual funds
- Chernenko and Sunderam (2016)
  - 60% of mutual fund families have credit lines credit.
  - The median credit facility is less than 0.44% of the fund family assets
- Evidence for the use of secured funding is novel and interesting! Could be an important contribution of this paper!

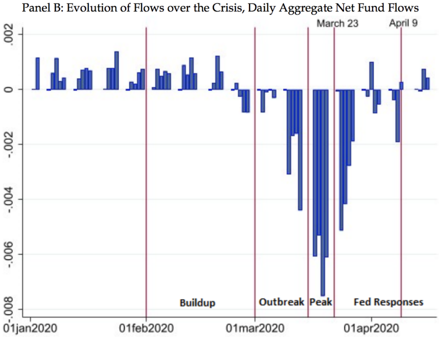
2. Role of Collateral

1. What types of collateral is being used? How does the collateral compare to the fund's asset portfolio?
    - In the case of fire sales, evidence for funds selling most liquid assets first
2. Variation in the cross-section
    - Which types of funds use repo funding more?
    - How does it relate to the illiquidity of fund assets, ceteris paribus?
3. Variation in the time-series
    - How does it vary with fund outflows, in general?
    - Hoe does it vary with dealer constraints, e.g. around quarter-ends, ?

3. Effect of Asset Purchases

What is the channel through which asset purchases affected funds?

- In the US,



Falato, Goldstein and Hortacsu 21

- Expansion of QE using Treasuries → did not appear effective
- Purchase of corporate bonds → appeared effective

3. Effect of Asset Purchases

What is the channel through which asset purchases affected funds?

1. Which types of funds benefitted more from asset purchases? What type of exposures had a larger effect?
   - Purchase of funds' "liquid asset buffers" may help reduce fire sale discounts incurred during asset sales
   - Purchase of funds' "illiquid assets" may curb outflows from the outset

2. How much was the direct impact through raising asset prices versus the indirect impact through alleviating fund outflows?
   - Run-like fund outflows are inefficient and should be curbed
   - Direct price impact on asset valuations may be less ideal

Conclusion

- Important topic + Novel data + interesting results
  - Convincingly show that mutual funds did not need direct LOLR access to be stabilized during the Covid-19 crisis
- Suggest to
  1. Examine repo rates $\rightarrow$ penalty rates could contribute to runs
  2. Explore economic significane and variation in collateral used
  3. Look into how asset purchases affected fund performance
- $\rightarrow$ Should mutual funds have direct access to the LOLR?