

A Discussion of “Do Non-Banks Need Access to the Lender of Last Resort? Evidence from Fund Runs”

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December 16, 2021

This paper

- Empirically evaluate the role of central bank interventions during COVID-19 on bond fund liquidity.
- Two channels:
 - ▶ Central bank purchase of bonds.
Data: [portfolio holdings of individual funds at security level](#).
 - ▶ Central bank liquidity provision to banks, which channel liquidity to bond funds via repo.
Data: [repo data at transaction-level](#).

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- Findings
 - ▶ CB asset purchases benefit funds with eligible assets.
 - ▶ Shocks to banks' liquidity transmits to bond fund repo financing.
- Implications:
 - ▶ Traditional CB policy can affect both liability and asset side of bond funds.
 - ▶ Less need to set up direct CB lending to bond funds.

Macro Implications via Simple Calculations

- Bond funds having 45% v.s. 5% eligible holdings \rightarrow 3% of fund value difference at the height of crisis.
 - ▶ In other words, the average increase of bond value (held by funds) caused by central bank intervention is $0.03/0.4 = 7.5\%$.

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- Banks having 0.8% maturing CP/assets v.s. 0.01% maturing CP/assets → LTRO on bond fund repo outstanding difference is 1.8%.
 - ▶ For every 1% of extra CP financing by central bank, bond funds obtain $1.8/0.8=2.25\%$ extra repo financing.
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 - ▶ Note: funds borrow repo about 3% over assets.
- Both channels have significant transmissions, although the first one seems more important on magnitude.

Comment 1: Run Dynamics in Mutual Funds

- Depending on the types of mutual funds, the mechanisms of run dynamics are different.
 - ▶ Open-end, fixed NAV: typical for MMF. Floating asset value while promising fixed liability value. Sharp run dynamics like bank run (Diamond and Dybvig 1983).
 - ▶ **Open-end, floating NAV**: typical for bond mutual funds and ETFs. First-mover advantage due to the fire-sale externality on assets (Zeng 2017)
 - ▶ Closed-end funds, floating share price: typical for municipal bond fund. About 70% of them use leverage. These fund shares are more like equity shares of companies (without new issuance/repurchase). No runs.
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 - ▶ Closed-end funds, fixed NAV: ? None exists.
- The mechanism of bond fund runs in this paper is fundamentally related to fire-sale externality.
 - ▶ Purchasing assets is the direct resolution.

Comment 2: Is Repo Financing A Source of Stability or Instability?

- Results indicate that repo financing for mutual fund is a source of vulnerability. Recall the regression setting:

$$\Delta \text{bank lending}_{f,b} = \beta \cdot \text{relHigherExposure}_b + \mu_f + X_b + \varepsilon_{f,b}$$

- Coefficients β are all negative for the week of March 12 (emergency LTRO announcement).

	commercial paper split			excess liquidity split	
	(1) Δ transaction volumes	(2) Δ transaction volumes	(3) Δ amount outstanding	(4) Δ transaction volumes	(5) Δ amount outstanding
<i>exposure dummy</i>	-0.818 (0.703)	-2.599** (1.035)	-0.993 (0.834)	-0.877 (0.597)	-0.397 (0.357)

- Policy recommendation: forbid repo financing for open-end mutual funds.

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- What are the potential costs of CB intervention? If there is no cost, CB should purchase all kinds of assets in crises, including bank loans.

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- The bond that CB regularly purchase in crises will enjoy heightened valuation, leading to:
 - ▶ Over-investment of lower quality firms. (corporate bonds)
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- The bond that CB regularly purchase in crises will enjoy heightened valuation, leading to:
 - ▶ Over-investment of lower quality firms. (corporate bonds)
 - ▶ Over-issuance of riskier governments (municipal bonds and sovereign bonds in EU)
- This is testable in the data: check the expected returns of mutual funds and see if there is an “ECB guarantee premium”, especially in funds with lower-quality (but still eligible) assets.