Regulating NBFIs

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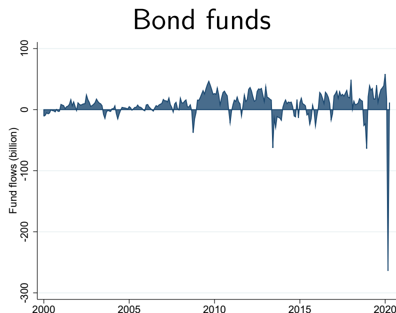
Before: Banks and Leverage

- The defining feature of banks is deposit funding
- Short-term debt backed by illiquid assets seen as the culprit of crises
- Monitoring of leverage + imposition of bank capital requirements

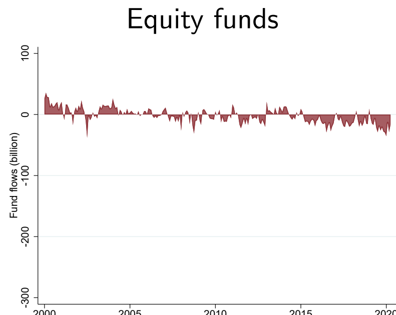
Now: NBFIs and Liquidity Transformation

- NBFIs engaged in liquidity transformation are often equity-funded with much lower leverage than banks
  - E.g., Bond mutual funds, Bond ETFs, MMMFs, REITS, stablecoins
- Remain subject to panic runs

Bond funds



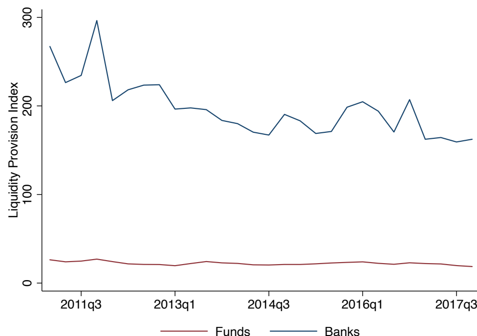
Equity funds



Ma, Xiao, and Zeng 21

From Leverage to Liquidity Mismatch

- Need to rethink leverage: no longer captures aggregate risk
- Need a coherent framework to monitor "risk" by functionality across banks and NBFIs
- One possible option: Liquidity Provision Index (Ma, Xiao, Zeng, 24)
  - Liquidity transformation by demandable debt versus demandable equity
  - How much liquidity does $1 of bank deposits vs $1 fund equity provide?



Sidenote: Improving the Design of NBFI's "Equity"

- The real problem: NBFI's demandable equity is not really "equity" because its value is not fully forward-looking
  - E.g. Mutual fund NAV does not sufficiently incorporate externalities
  - E.g. Gov MMF and retail prime MMF offer fixed $1 NAV
- Ideally: remove the debt-like features of NBFI equity as in swing pricing to make it "true equity"
- Until then, need coherent framework to monitor liquidity mismatch in the financial system instead of leverage

Lessons for Regulating NBFIs

Because Banks and NBFIs have shared functionalities:

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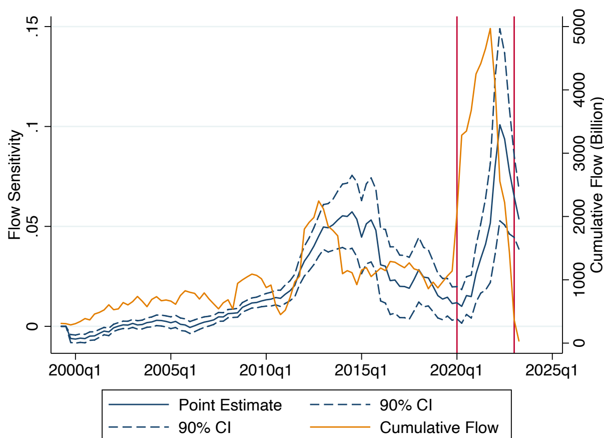
Spillover Effects between Banks and NBFIs

- Bank deposits and claims to NBFIs are imperfect substitutes for investors
- Investor switch between banks and NBFIs with increasing ease
  - E.g. March 2020: flight from NBFIs
  - E.g. March 2023: flight from Banks
- $\rightarrow$ the investor base in banks and NBFIs is time-varying and inter-dependent

Deposit Flightiness is Time-Varying

- Depositors' flow sensitivity increases with aggregate deposit inflows
- Incoming depositors' convenience value < existing depositors'



Li, Lu, and Ma 24

Policy Implifcations of Time-Varying Depositor Base

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3. Rate hikes trigger more run risk after large influx of investors and QE

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2. Consider spillover effects from investor flows between banks and NBFIs
   - + interactions with unconventional and conventional monetary policy