

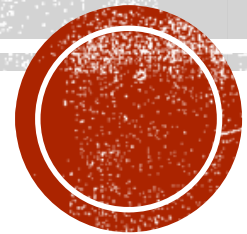
**COMMENTS ON:
“PRONE TO FAIL: THE PRE-CRISIS FINANCIAL SYSTEM”
BY DARRELL DUFFIE**

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DARRELL'S MAIN POINT

- “In summary, the greatest weakness of the financial system was the excessive leverage of its largest financial institutions, caused by a toxic mix of weak regulatory supervision and government-subsidized debt, under the presumption by creditors that these firms were too big to fail.”
- I agree wholeheartedly. As well as with the finer points of his analysis.
- So post-crisis reforms that have pushed capital ratios much higher, especially for the biggest banks, are surely a good and important step.
 - Indeed, I would like to see capital ratios go even a bit higher from here.
- OK, but have we basically fixed the problem? Can we now have confidence in the stability of the financial system?
- I will offer six reasons why you should still not be feeling too good.

REGULATORY ARBITRAGE MAKES EVEN SIMPLE RULE-WRITING HARD

- Measuring and enforcing basic capital adequacy based on backward-looking book values creates obvious vulnerabilities : on standard risk-based measures, most big institutions appeared “well capitalized” at point of failure in 2008.
- Haldane and co-authors have emphasized that a simple un-risk-weighted measure of leverage did better in predicting bank failures in the period leading up to the crisis.
- But probably only because regulators were not looking at it: Goodhart’s law cautions that we cannot fix things just by putting more regulatory emphasis on the leverage ratio.
- The regulatory arbitrage problem is always going to be very tough, especially if we continue to ignore market values.
 - Not to mention all the activity that may migrate outside the regulated banking sector.

CAPITAL CRUNCHES AND THE NEED FOR FAST RECAPITALIZATION

- It's easy to get too focused on the *level* of capital. Without a strong mechanism to force banks to *rapidly recapitalize* after losses, will always be at risk of powerful credit crunches, even if we manage to avoid complete panic meltdowns.
- Example: regulation forces all banks to hold 10% capital. Worst-case-scenario losses are 5%. So banks are never insolvent, and there are no runs.
 - But still, after a realization of 4% losses, if banks don't issue new equity, their assets must fall by 40% in order to maintain compliance with the regulation.
 - And banks won't want to issue equity at this point, given debt overhang problems.
 - Recall that banks paid out over \$100 billion in dividends and repurchases in 2007-08, and raised little new equity capital. This was a critical policy failure.
- Moral of the story: imperative for regulators to promptly cut off all dividends, and compel new equity raises, as we begin to slip into next major downturn.
 - I don't have great confidence on this point, especially the forced equity raises.

WHAT COUNTS AS SHORT-TERM DEBT?

- Diamond (2013): “private financial crises are everywhere and always due to problems of short-term debt.”
- OK, but what is short-term debt? Not just deposits, but also ABCP, repo.
- What about open-end bond and loan funds, which have grown very fast?
 - Hold illiquid fixed-income assets.
 - Not debt financed, but equity is immediately demandable.
 - And there are first-mover advantages, which can create run-like dynamics: Zeng (2017), Goldstein et al (2017), Chernenko and Sunderam (2017).

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I. Goldstein et al./Journal of Financial Economics 126 (2017) 592–613

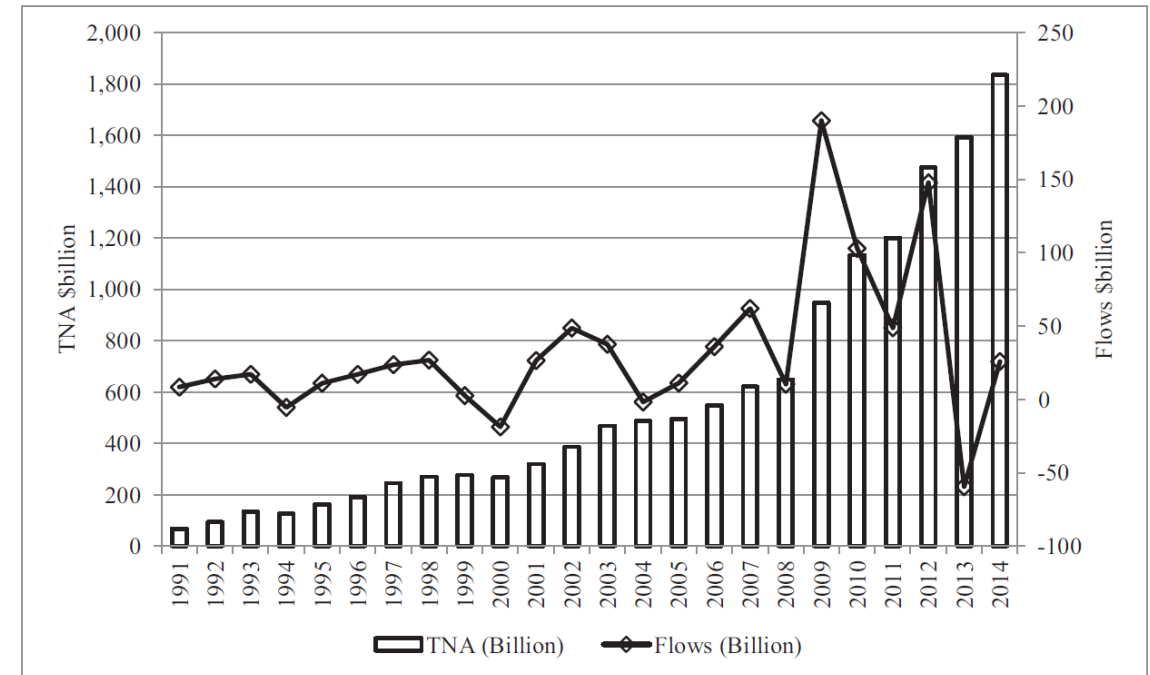


Fig. 2. Total net assets and dollar flows of active corporate bond funds. This figure shows total net assets (TNA) and dollar flows of actively managed corporate bond funds from 1991 to 2014. We exclude index corporate bond funds, exchange traded funds, and exchange traded notes from the CRSP mutual fund database.

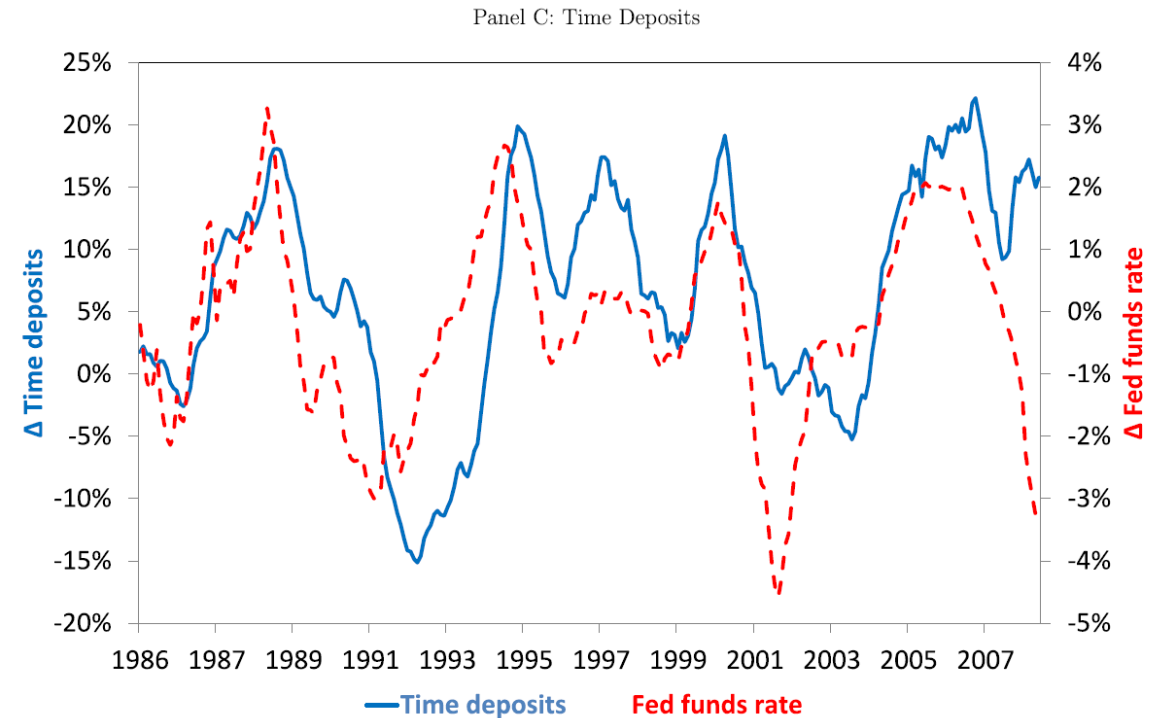
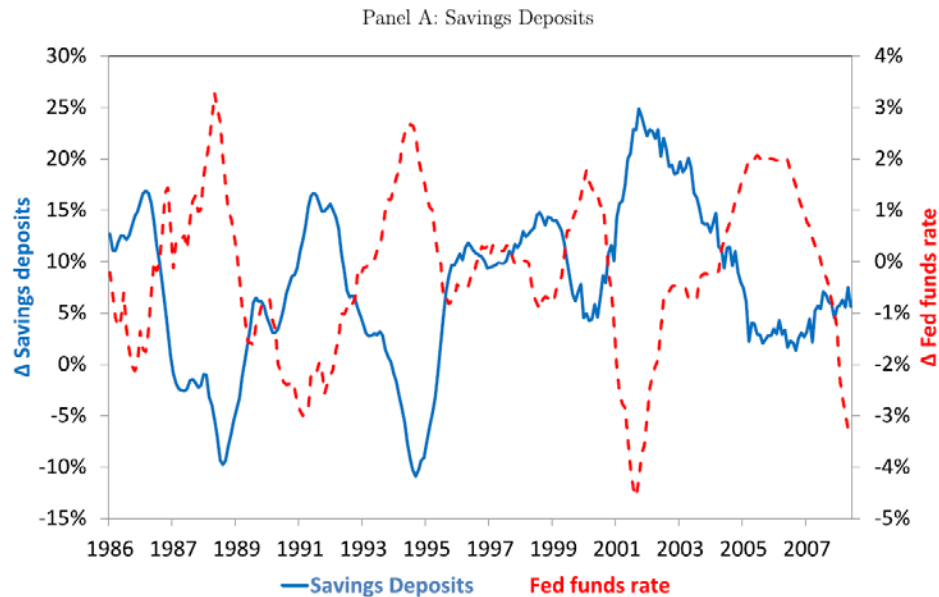
STRIKING THE RIGHT BALANCE WITH LIQUIDITY?

- Two important post-crisis innovations:
- Liquidity regulation: e.g., the Liquidity Coverage Ratio (LCR).
 - Requires banks to hold minimum levels of high-quality liquid assets (Treasuries, reserves).
- Dodd-Frank restrictions on Fed lending to broker-dealer subs of bank holding companies (e.g. Goldman Sachs, Morgan Stanley).
- LCR is well-intentioned, but untested.
 - Sensibly calibrated?
 - Will firms actually draw down on their buffer stocks of liquid assets when hit with a stress scenario, as opposed to fire-selling assets?
- My view: doesn't make sense to put broker-dealer subs under same regulatory and supervisory regime as depository institutions but deny them access to lender of last resort. LCR should be thought of as a complement to LOLR, not a substitute.

THINGS MAY GET DICIER AS RATES RISE

Figure 2: Deposit flows and monetary policy

This figure plots year-over-year changes in savings deposits (Panel A), checking deposits (Panel B), time deposits (Panel C), and total deposits (Panel D) and year-over-changes in the Fed funds rate. The data are from the Federal Reserve Economic Database (FRED) and the Flow of Funds. The sample is from January 1986 to June 2008.



- When rates rise, stable retail deposits flow out of banks, and into money funds.
 - Banks replace these with flightier wholesale funding (Drechsler et al 2017).
 - And activity moves to shadow banking system (Xiao 2018).
- When yield curve steepens at front end, will be more incentive for wholesale funding to be very short term.
- We may then get a better sense of how the new liquidity regime performs.

AND THERE WILL BE REGULATORY BACKSLIDING

- Changes thus far have been mostly (but not entirely) sensible or benign:
 - Crapo bill focused on relief for smaller banks.
 - Proposed Fed rulemakings on leverage ratio, stress capital buffer, Volcker rule.
- Much worse: undoing of money-market fund reform is on the table
 - S.1117 (introduced by Senator Toomey) would make it again possible for institutional prime money funds to maintain a stable net asset value.
 - i.e., to pretend they are riskless despite holding manifestly risky securities with no capital.
- Need to keep a careful eye on implementation of annual bank stress tests
 - Very complex and opaque; room for substantial backsliding here on effective capital requirements for the biggest banks.