Short-term Debt, Liquidity, And The **Financial Crisis** Douglas W. Diamond University of Chicago, Booth School of Business and NBER 2008 Financial Crisis: A 10 Year Review **Annual Reviews/MIT GCIP/NYU** November 9, 2018



The University of Chicago Booth School of Business

Evaluating recent responses to the crisis: Regulations and Policies

- What caused the fragility in the credit crisis?
 - Not the housing shock per se, but the system itself.
- New regulations did not take a position on the problem, tried to address them all. Belt and Suspenders.
 - Runs and the problems of short-term debt?
 - Too interconnected?
 - Anticipated bailouts ("Too Big to Fail").
 - Shadow banking which avoided regulation
 - Too little capital?

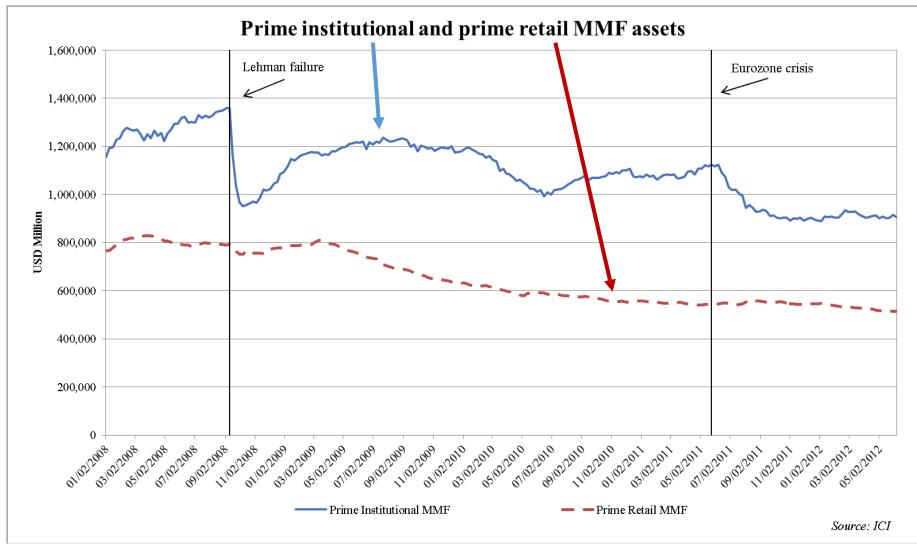
The recent crisis was like all others

• *Private* financial crises are everywhere and always due to problems of short-term debt.

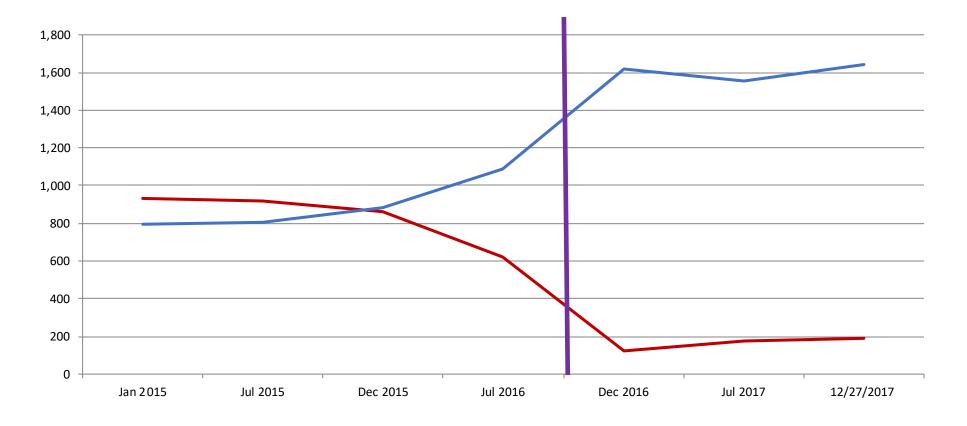
How do we evaluate crisis responses now?

- New regulations are binding (they changed behavior).
- No new crisis (none would occur this soon anyway).
- There also has been lots of liquidity in the corporate sector and the financial sector.
- Some liquidity has been due to policy (QE etc.)
- Liquidity provides a tail wind for the financial sector. The present looks "stable" from regulation and liquidity.

Good Regulation to deal with Runs: Runs on Institutional MMFs



Institutional Money Market Funds



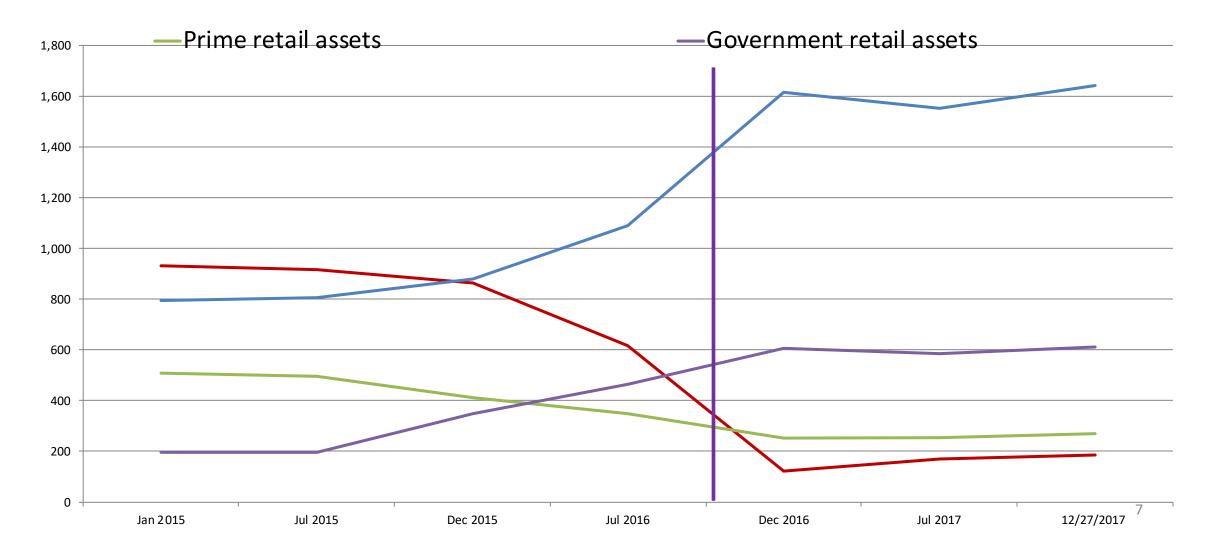
—Prime institutional assets

-Government institutional assets

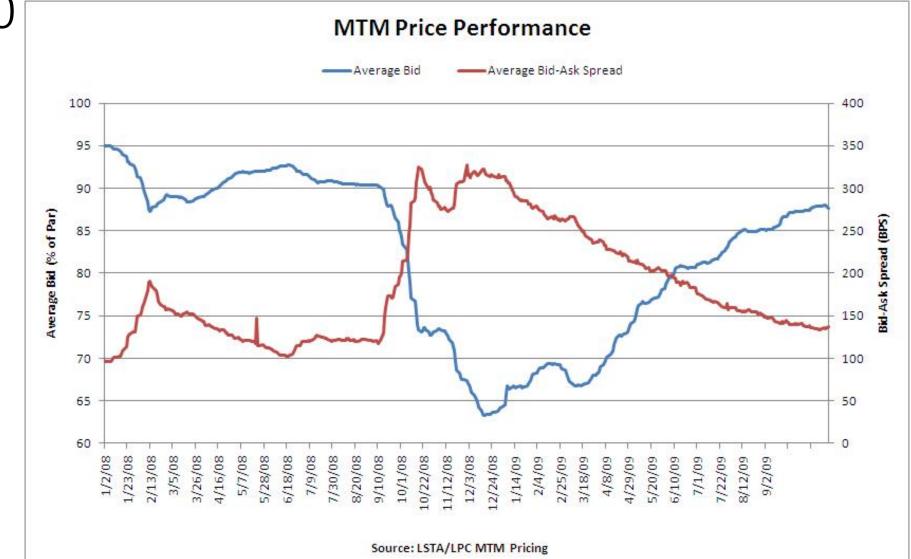
All Money Market Funds

-Prime institutional assets

—Government institutional assets



In the crisis there was too little liquidity and fire sale pricing : S&P/LSTA U.S. Leveraged Loan 100 Index 2008-2010



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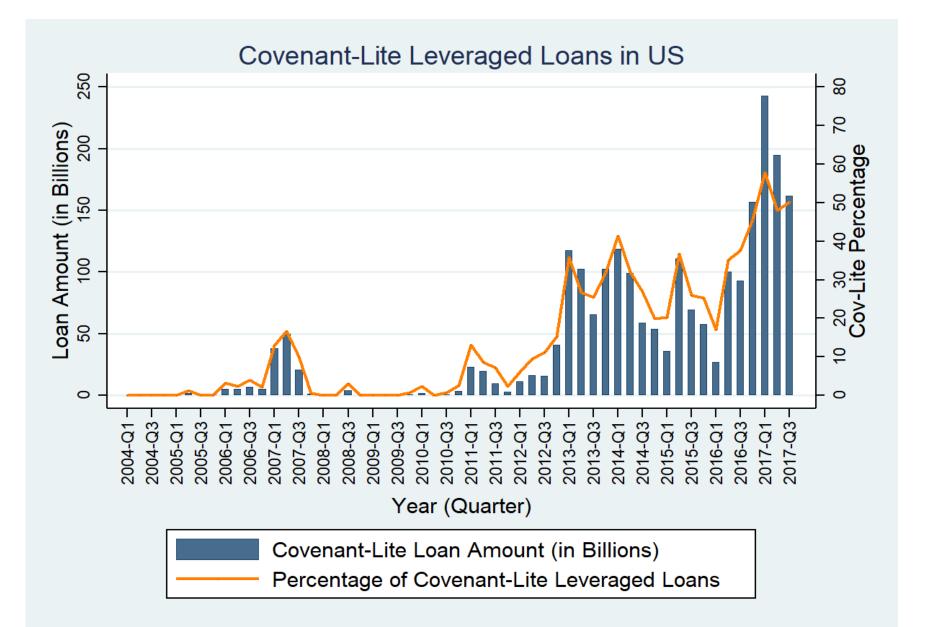
If Too Little Liquidity is Bad, Is More Liquidity always Good?

- Too little liquidity in a crisis is bad and makes debt runs both selffulfilling and contagious.
- However, recent a recent theory by Diamond-Hu-Rajan (2018), shows that too much liquidity in a boom reduces incentives to retain future financial capacity.
- Excess liquidity leads to market incentives for financial carelessness:
 - A boom in covenant-lite lending.
 - Lower voluntary accounting standards.
 - A reduction in monitored (Bank) Lending vs. bonds.
 - Less "skin in the game" for securitizations.

Are the risks for the next crisis building now?

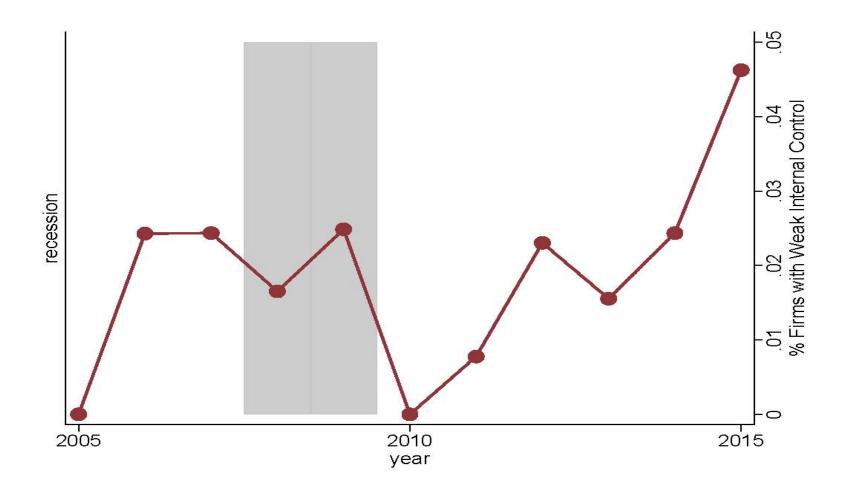
- Large Boom in Covenant-Lite Lending (well more in level and percentage than 2006-07)
- Recent uptick in US audits which report Major Weakness of Internal Control.

Boom in Covenant Lite Loans



Weakness of Internal Control

percentage of firms that were reported as with weak internal control in an earnings restatement year and/or the two subsequent years.



Median of cross country distribution of financial conditions



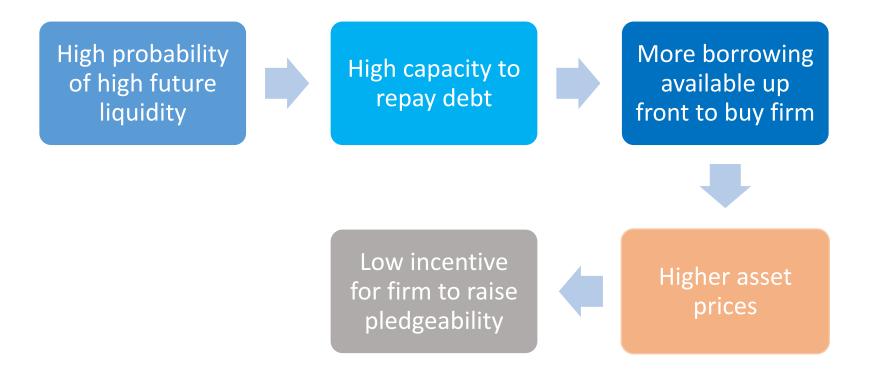
With moderate amounts of liquidity in the system, the market encourages covenants:

- Market forces naturally limit leverage and encourage covenants, monitored lending and high accounting standards.
- With Large Amounts of Liquidity in the System, market forces do not naturally encourage covenants and low leverage.
- If we get a negative shock after a high industry liquidity period:

"Only when the tide goes out do you discover who's been swimming naked." (Warren Buffett).

• In moderate liquidity times, the market forces firms to wear "swim suits" (high covenants, lower leverage).

Why anticipated market liquidity crowds out future covenants or "pledgeability"



Discretionary Increased Pledgeability

- Improved Pledgeability: Increases access to finance in the near future (access is improved by allowing larger credible payments in more distant future):
- Improving voluntary accounting standards and transparency.
- Extra Outside control: Stricter Loan Covenants (not "Covenant Lite").
- Monitored (Bank) Lending vs. bonds.
- These are sticky, but change over time at business cycle frequencies.

Liquidity (the "tide") is still high

- The financial system looks stable today, and there have been some beneficial changes in regulations and behavior.
- High anticipated liquidity allows firms to support higher leverage and permits intermediaries to increase leverage.
- Added funding is easy for both firms and intermediaries.

High Liquidity Makes the Present Stable, but Allows Choices Leading to Future Vulnerability

- High Liquidity makes new regulations appear to be very successful or even unneeded.
- But the high liquidity may mask some problems and prevent market incentives from limiting future vulnerability of the financial system.

Everything in Moderation: Including Liquidity

- Too much anticipated liquidity can be a bad thing.
- One factor in creating accommodative financing conditions (i.e., easy liquidity) is easy anticipated monetary policy.
- Monetary policy and financial stability cannot be separated.
- This is a lesson we have yet to digest.