Prone to Fail

The Pre-Crisis Financial System

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Drawing from joint work with Antje Berndt and Yichao Zhu
Average leverage of systemic banks and investment banks

Data source: 10K filings. J.P. Morgan includes preceding mergers, pro forma.
Pre-crisis big-bank credit spreads were tiny

One-year USD LIBOR-OIS spread. Data source: Bloomberg.
Big-bank pre-crisis asset growth

Total assets of nine bank and I-bank holding companies. Data source: 10K filings.
Pre-crisis conditions were set for an unstable core financial system.

- Market discipline fails?
  - Yes → Big banks vulnerable to shocks
  - No → Creditors believe in bailouts?
    - Yes → Regulators supervise weakly?
      - Yes

What were they *thinking*?

Potential explanations:

1. Irrationally low belief in disaster scenarios (Gennaioli and Shleifer, 2018).

2. Fragile by design (Calomiris and Haber, 2014).

3. Dogmatic reliance on market discipline (Greenspan, 1997).

4. It was too difficult, within reason, for regulators to detect the problems.

5. Failure to assign regulators a clearer financial-stability mandate (Kohn, 2014).
Investment banks’ net capital in 2005, versus SEC required net capital

Net capital ($ billions)

Data source: 10K filings.
Heavy U.S. dependence on credit supplied through bond markets

Data source: Bank for International Settlements.
Look for short-term debt in the core of the financial system

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

Pre-crisis securities financing in U.S. money markets

- Fed
- retail
- banks
- cash pools
- MM funds
- securities
- other dealers
- major dealers

 repo connections:
 - Fed to MM funds
 - MM funds to retail
 - retail to banks
 - banks to cash pools
 - cash pools to securities
 - securities to other dealers
 - other dealers to major dealers
 - major dealers to repo
With exposure to intra-day credit from tri-party repo agent banks

- Fed
- MM funds
- other dealers
- major dealers
- retail
- banks
- cash pools
- securities
Gross market value of OTC derivatives

Data source: Bank for International Settlements.
Swap market turnover survives post-crisis regulation

The solvency buffers of big U.S. banks have gotten much larger.

Estimated 5-year CDS rates of a big bank at a fixed distance to default