

# Funding Agreement-Backed Securities & Financial System Vulnerabilities

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# Shadow banking and runs

## Traditional bank

Assets	Liabilities
Credit cards Auto loans Mortgages	Deposits

claim →  
← cash

## ABCP Conduit

Assets	Liabilities
Credit cards Auto loans Mortgages	Asset-backed CP

CP →  
← cash

## Money Market MF

Assets	Liabilities
Asset-backed CP	Cash

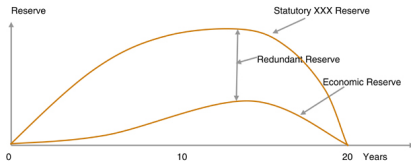
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# US life insurers' connection to shadow banking: Why?

- Traditional business model matches long-term, illiquid liabilities with safe assets of similar duration
- Major challenges to this model:



Falling Treasury rates

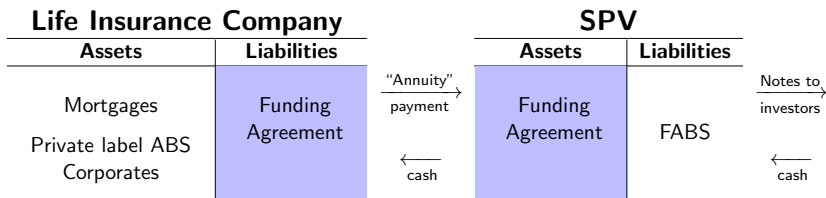


Higher capital requirements

- Responses to increase returns:
  1. Shift risk off-balance sheet to captives
  2. Lend securities against cash, reinvested in longer-dated assets
  3. Fund assets with *Institutional Funding Agreements*

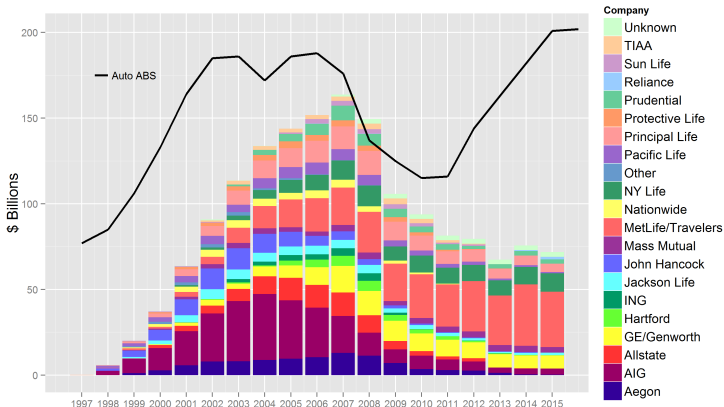
# US life insurers' connection to shadow banking: How?

- Funding Agreement-Backed Securities:




- Funding Agreements are insurance obligations
- FABS can be issued under various terms and with put options to meet demand from different type of *institutional investors*

## How large is the US FABS market?

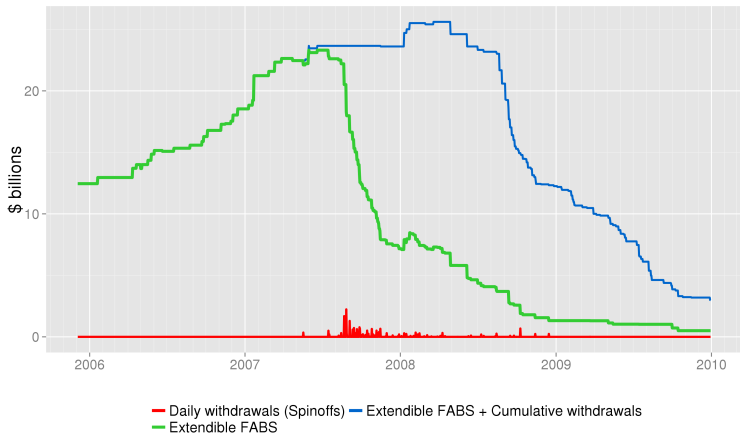


- Yearly issuance reached at least \$50 billion in 2006
- Amount outstanding peaked at more than \$170 billion

# FABS may contribute to financial system vulnerabilities

1. Increase the connection between insurers and financial sector
  2. Maturity and liquidity transformation increases vulnerabilities
  3. These vulnerabilities are amplified as FABS maturity shortens:
    - Shocks to insurers or institutional investors could trigger a run
    - Initial withdrawals could cause a panic, and more withdrawals
    - The effect of the run depends on the availability of liquidity
    - Illiquidity at an insurer could lead to delays in payments
    - Delays could cause a panic in short-term funding markets
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## There was a run on Extendible FABS in 2007



- *Extendible FABS* are put-able FABS designed for MMFs
- From 2007Q3, institutional investors refused to extend XFABS



# The FHLB system was an important backstop

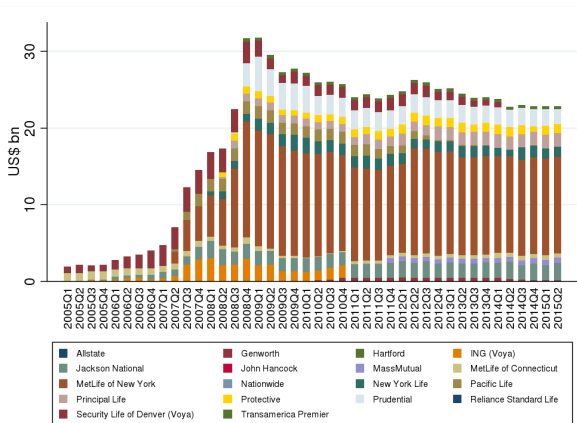


Figure: FHLB advances to FABS issuers

- FHLBs remained a source of funding for some

## What can we learn from the run on FABS?

Foley-Fisher, Nathan, Borghan Narajabad and Stéphane Verani (2015).  
“Self-fulfilling Runs: Evidence from the US Life Insurance Industry,”  
Federal Reserve Board Working Paper FEDS 2015-032

- **Is shadow banking vulnerable to self-fulfilling runs?**

- Potential amplification channel for triggers/shocks
- Challenging to tease out the panic effect
  - Investor decisions are simultaneous
  - Confounding effects of unobservable fundamentals

- Exploits the contractual structure of Extendible FABS

→ **3/4 of withdrawals was due to the panic effect**



## Conclusion

*“If a hurricane knocks down a house, you can blame it on the strength of the hurricane or on the structural deficiencies in the house. Ultimately both factors matter. A destructive financial crisis is analogous. There are immediate causal factors, or triggers—the hurricane. But the triggers cannot cause extensive damage without structural weakness, the vulnerabilities of the system itself—a house with weak foundation.”* – **Ben Bernanke, 2015**

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