Understanding the Role of Debt in the Financial System*

13th BIS Conference, Lucerne
June 27, 2014

Bengt Holmstrom, MIT

*Based on joint work with Tri Vi Dang and Gary Gorton

Two very different systems

Stock markets

- Risk sharing
- **Price discovery**
- Information sensitive
- Transparent
- Big investments in info
- Many traders (exchanges)
- Trading not urgent

Money markets

- Lending/depositing
- **Obviating price discovery**
- Information insensitive
- Opaque
- Modest investments in info
- Few traders (bilateral)
- Trading urgent

Two ways to liquidity

Widely agreed:

Symmetric information about payoffs => liquidity

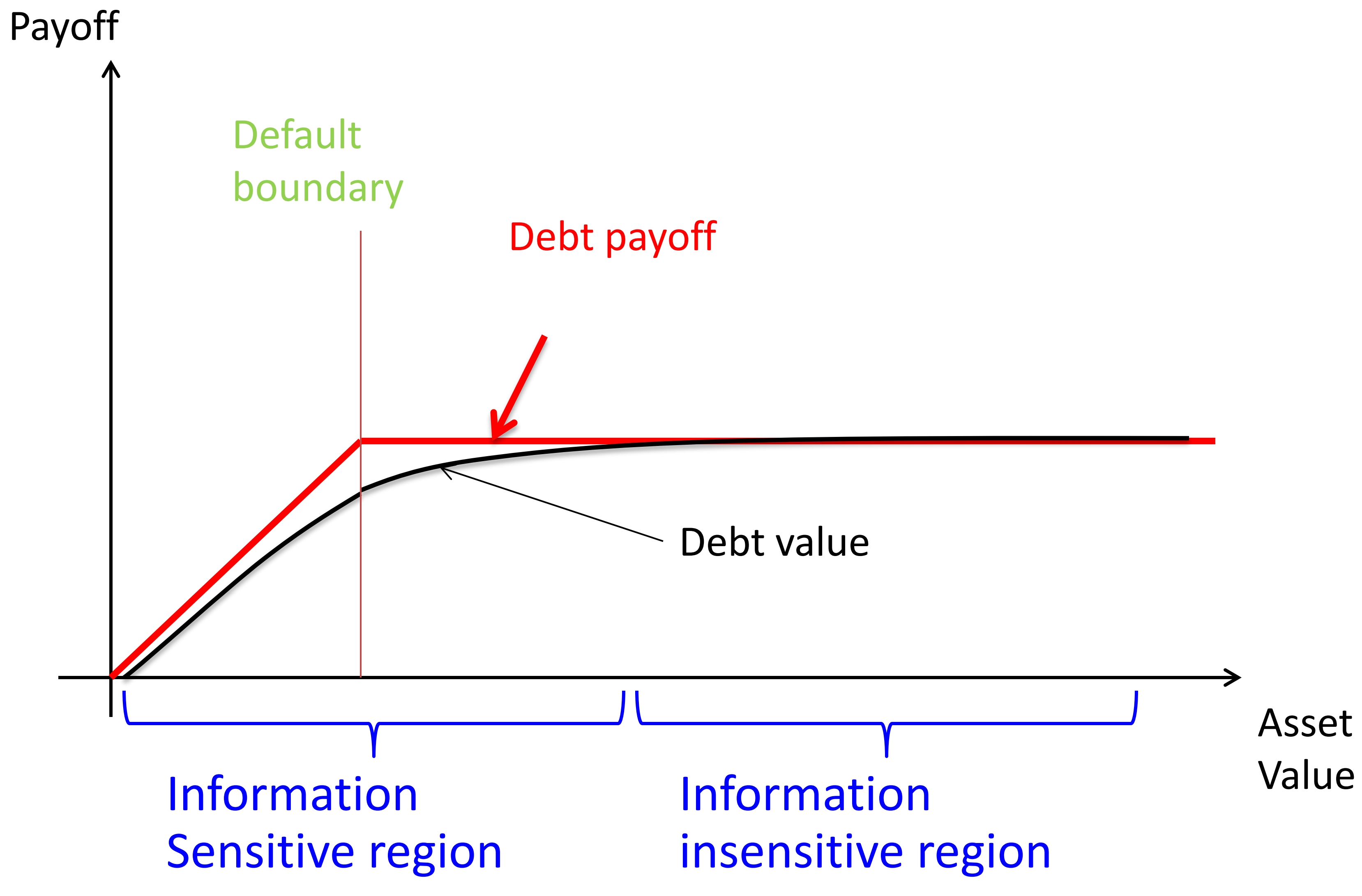
Two ways to symmetric information:

Investors know everything of relevance (EMH)

Symmetric ignorance

Partial transparency can create adverse selection

Why debt?


Payoff
Default
boundary
Debt payoff
Debt value
Asset
Value
Information
Sensitive region
Information
insensitive region

An unpleasant trade-off

- Relying on debt, securitization, coarse ratings, mechanical rules… makes sense in good times

but….

- pushes risk into tail
- hides systemic risk

- Unpleasant trade-off: Enhanced liquidity, but increased risk and cost of a crisis

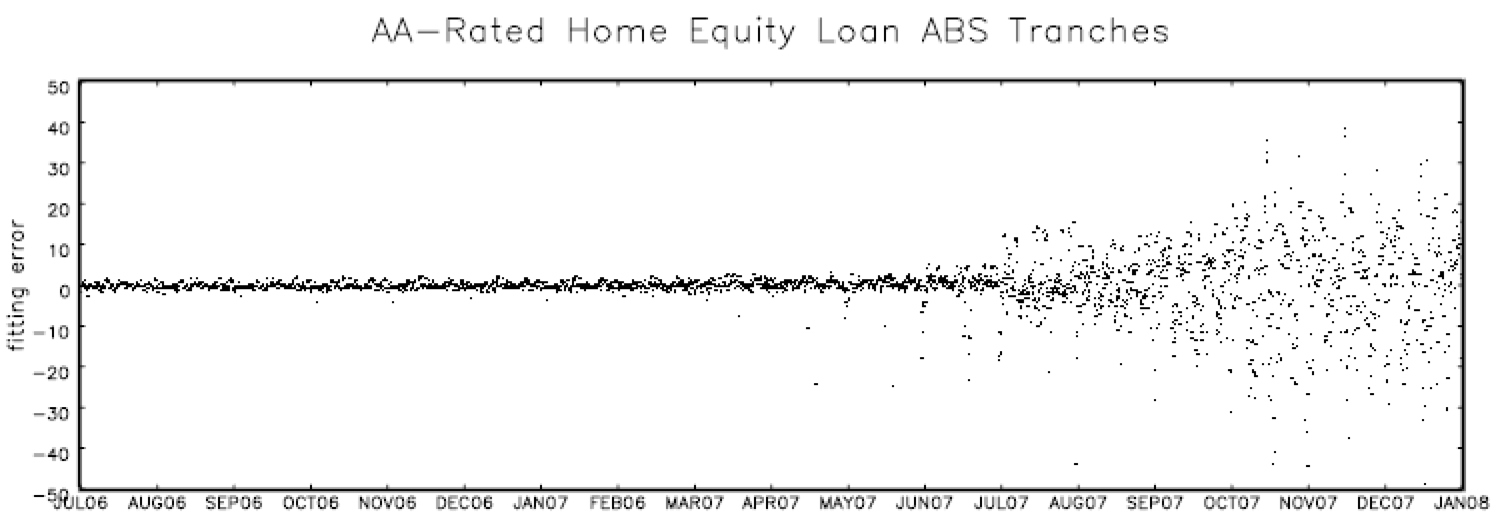
Examples of purposeful opacity

– De Beers and diamonds

– coarse bond ratings
– money market funds
– securitization
– “whatever it takes”
– CB policy
– money
– bubbles

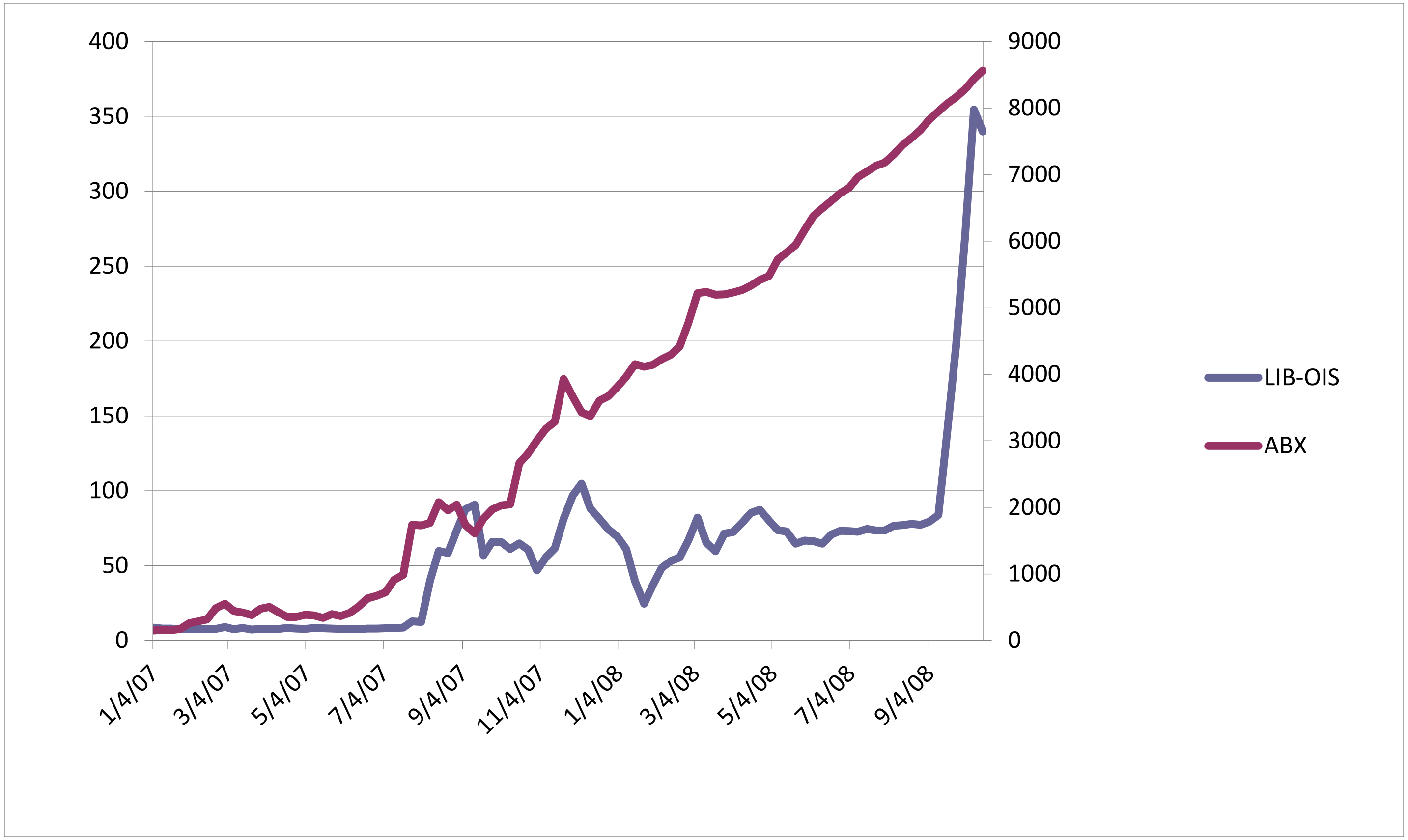
Trading in AA Home Equity Loan tranches Aug 2006-Jan 2008

- Ex ante: shared understanding (No Questions Asked)
- Bear collapse Jul 2007 releases “trapped information”
- Ex post: Private information relevant



Perraudin-Wu (2008)

Did transparency help?
ABX versus LIB-OIS spreads



Shadow banking

- Why now?
  - Global savings/banking glut
- Why US?
  - Underutilized housing pool
  - Had financial engineering technology
- Why shadow banking?
  - Securitization (not alchemy)
  - Rapidly scalable; global reach
  - Contingent (dynamic) use of collateral

Some lessons

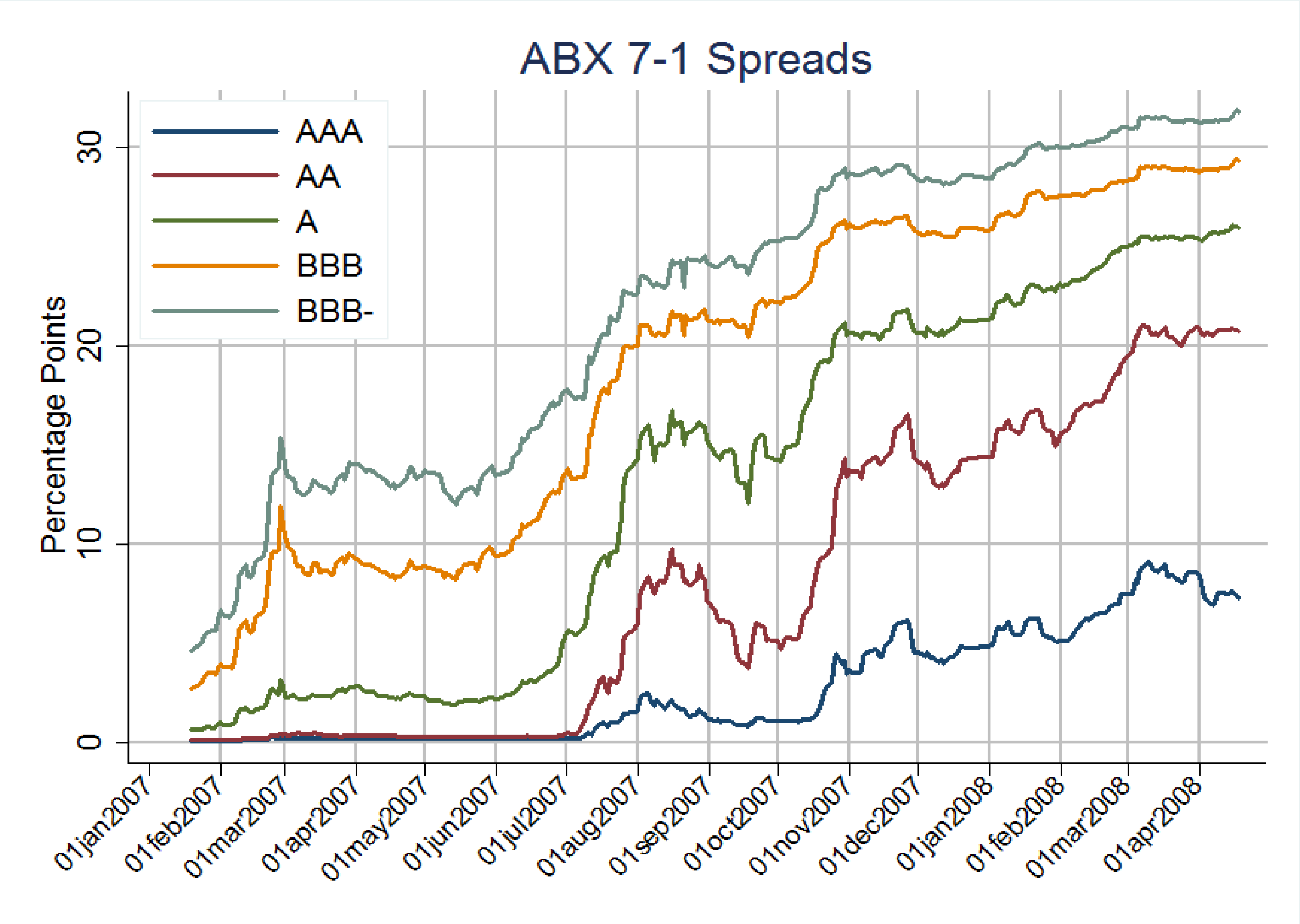
- Don’t regulate based on crisis state alone
- Cautious using stock market as reference

- More transparency => less liquidity (in NQA sense); may be good in good times: MMMF
- Stress tests – with corrective action: EU vs US
- Capital requirements

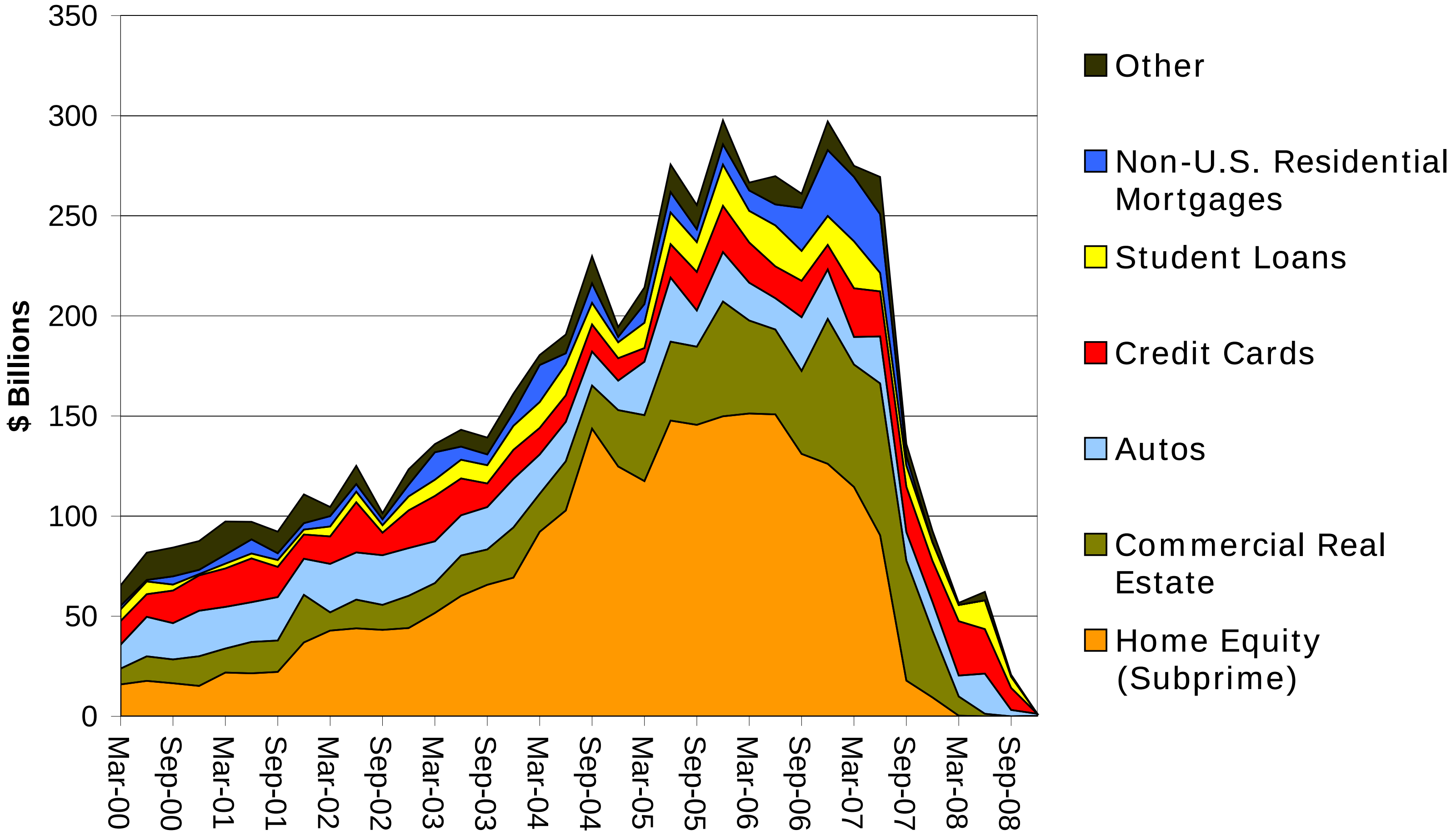
- Reduced transparency in bad times (historically)
  - Clearinghouses in 19th century
  - Bad banks in Scandinavian crisis 1991-92
  - “whatever it takes”

Thank you!

Asset impairment – subprime spreads

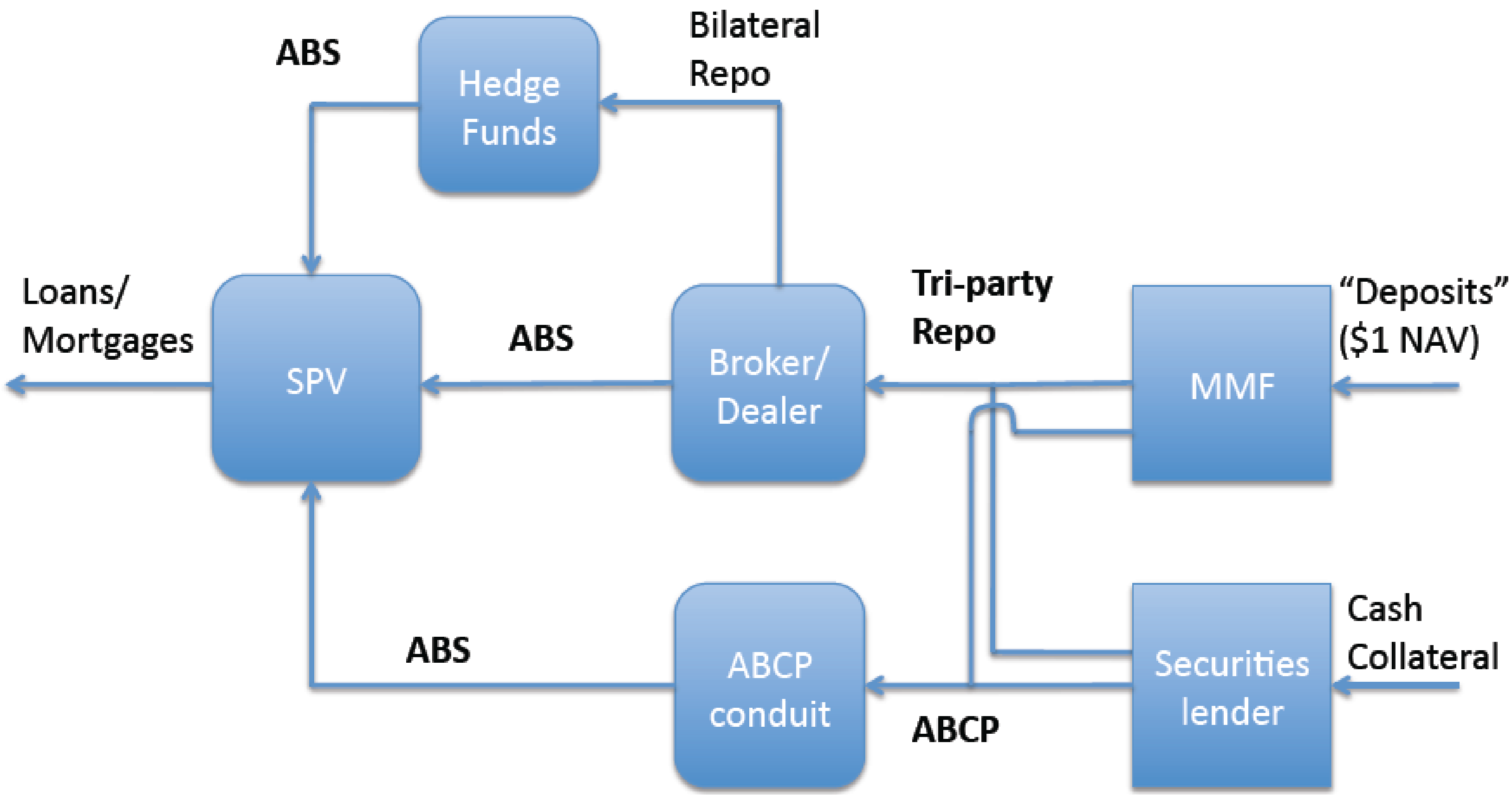


New Issuance of Asset Backed Securities



Source: JP Morgan

Using collateral more efficiently



Krishnamurthy, Nadel and Orlov (2011)