Money Markets and Financial Intermediation

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Money Market(s)

- Wholesale market for low-risk, highly liquid, short-term debt (< 1 yr)

- Treasuries, agency debt, CDs, commercial paper, bankers’ acceptances, notes, repos, ABCPs,….

- Huge daily volume (dwarfs stock markets)

- Lots of innovation (used to be lightly regulated)

Common view of causes of crisis

- Wall Street greed and wrong incentives
- Securitization created complex, opaque ABS
- Poor, complicit ratings

Michael Lewis "The Big Short"

- How could Wall Street trade without knowing really anything?

- Universal call for more transparency

An alternative view

- In Money Markets

  “No Questions Asked” = Liquidity

- Bagehot: “Every banker knows that if he has to prove he is worthy of credit, in fact his credit is gone”

- Ignorance is (almost) bliss

Road map

1. The logic of money markets

2. Evidence of logic

3. Policy implications of logic

A common but false inference

Widely agreed:

Symmetric information about payoffs => liquidity

But:

Transparency ≠> symmetric information

Two ways to symmetric information:

(i) Investors know everything of relevance (EMH in stock mkts)

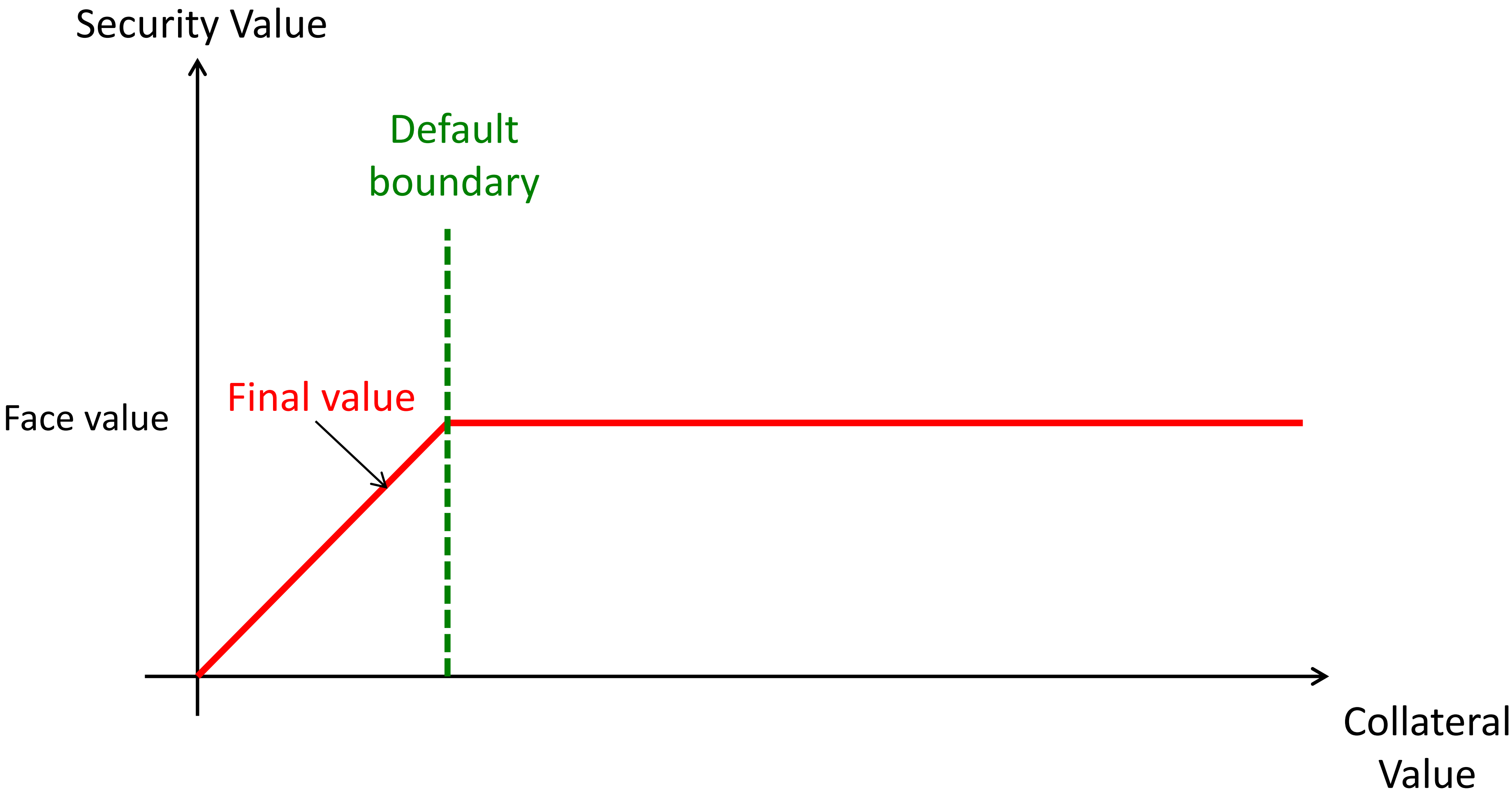
(ii) Symmetric ignorance (over-collateralized debt)

Obviating need for price discovery

- Pawn shop
  - Haggling over price of sale is costly
  - Solution: give seller right to buy back pawn at same price plus interest
  - No need for price discovery
  - Age old, robust logic

- Repo
  - Modern day version of pawning
  - Wholesale funding market secured by collateral
  - Huge market (est 3 Tr); efficient "parking space" for money

Debt is information insensitive



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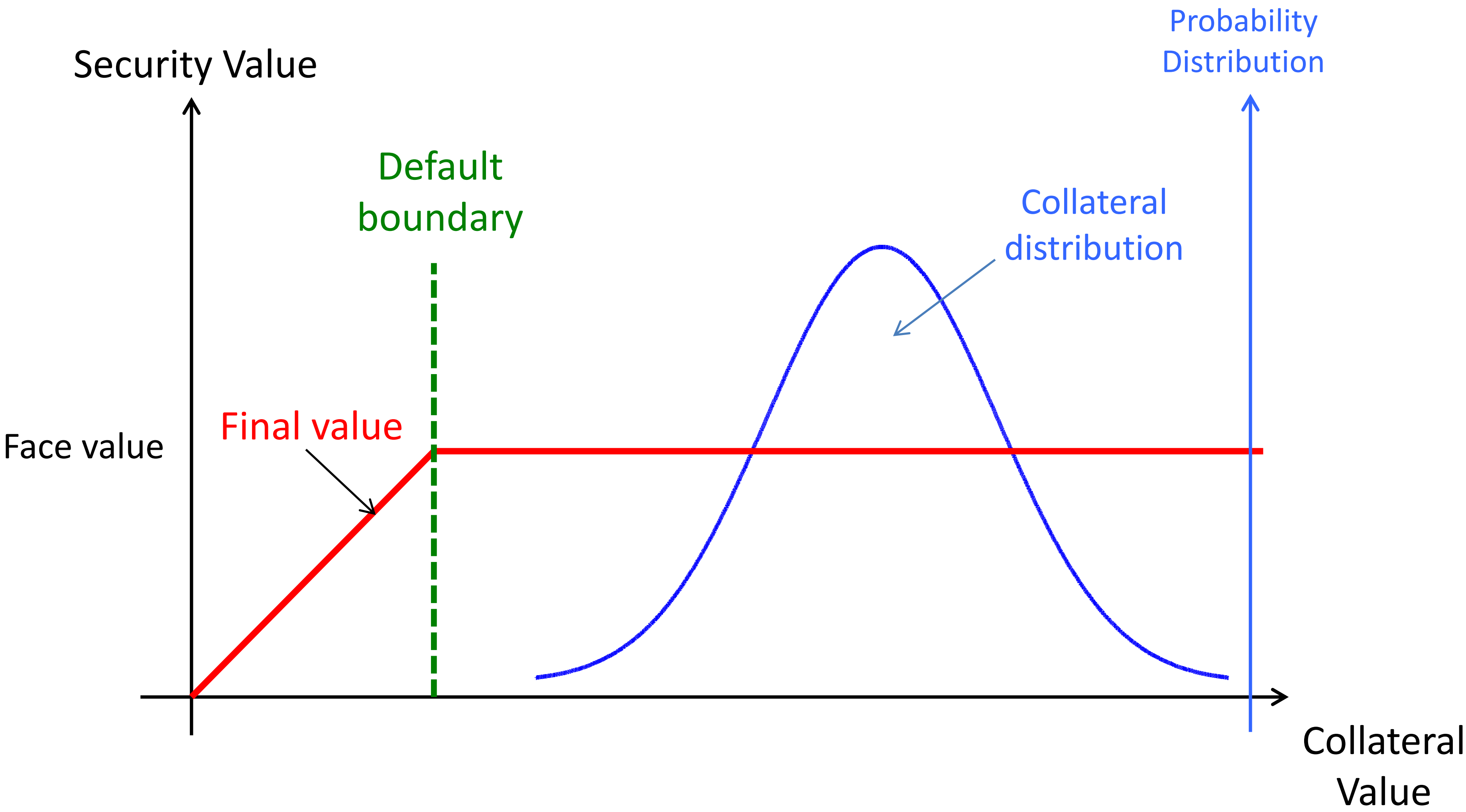

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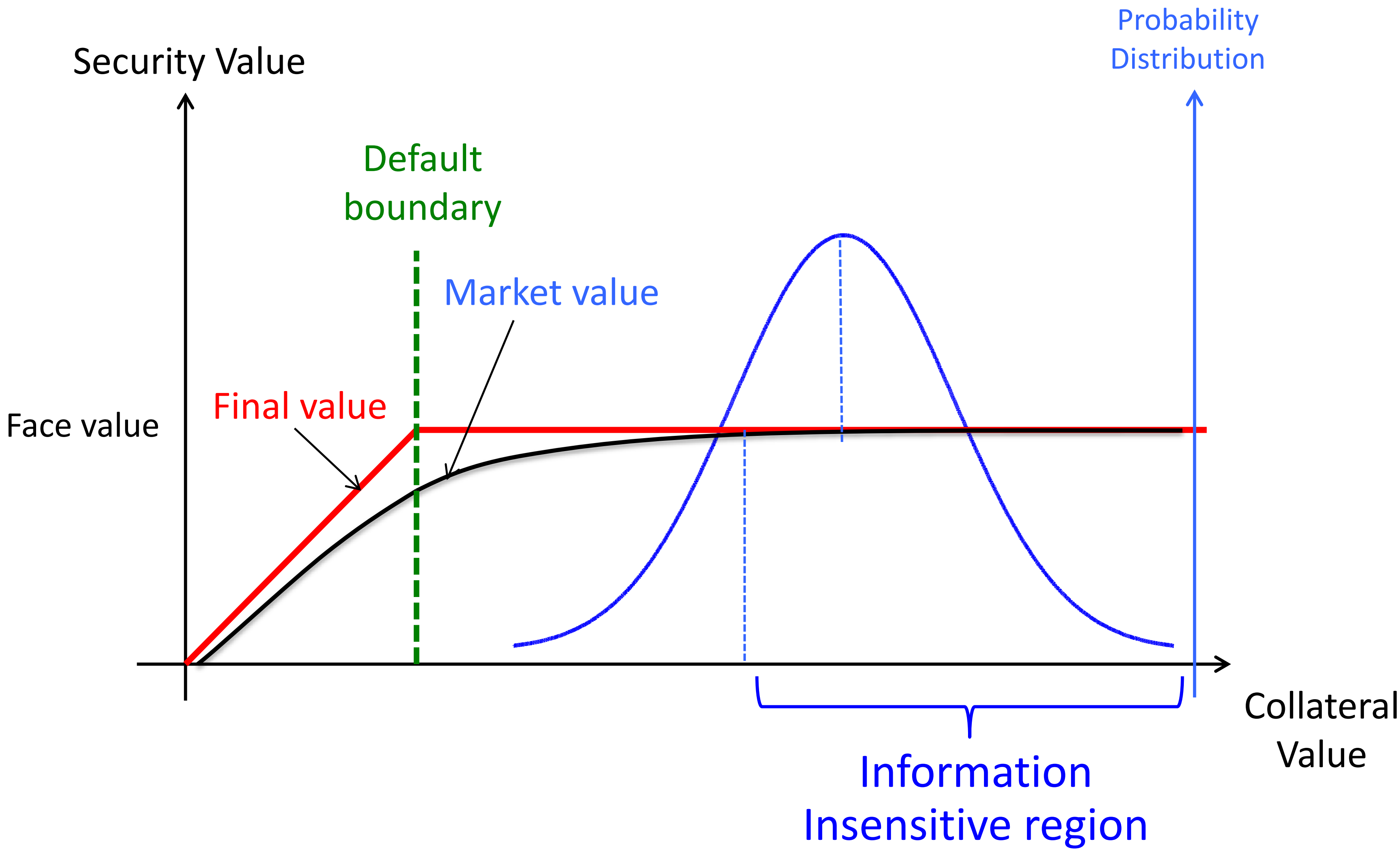

Multiple roles of debt

- Ex ante: bridging disagreements through overcollateralization (pawn shop, pecking order)
- Ex post: avoiding verification of payoff (Costly State Verification, conditional price discovery)
- Interim: debt resilient to public and private information (debt-on-debt)

Two polar systems

Stock markets

- provide risk sharing

- Equity
- Continuous price discovery
- Transparent
- Information sensitive
- Centralized
- Not urgent

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Expensive liquidity

Money markets

- provide safety

- Debt
- Obviating price discovery
- Opaque
- Information insensitive
- Bilateral
- Urgent

Cheap liquidity

Examples of purposeful opacity

– DeBeers (wholesale diamonds)

– Securitization (benchmark pricing, TBA market)
– Coarse credit ratings
– MMMFs (delayed info release)
– Central bank secrecy (discount window, etc.)

2. Evidence of logic: panics

The dark side of opacity

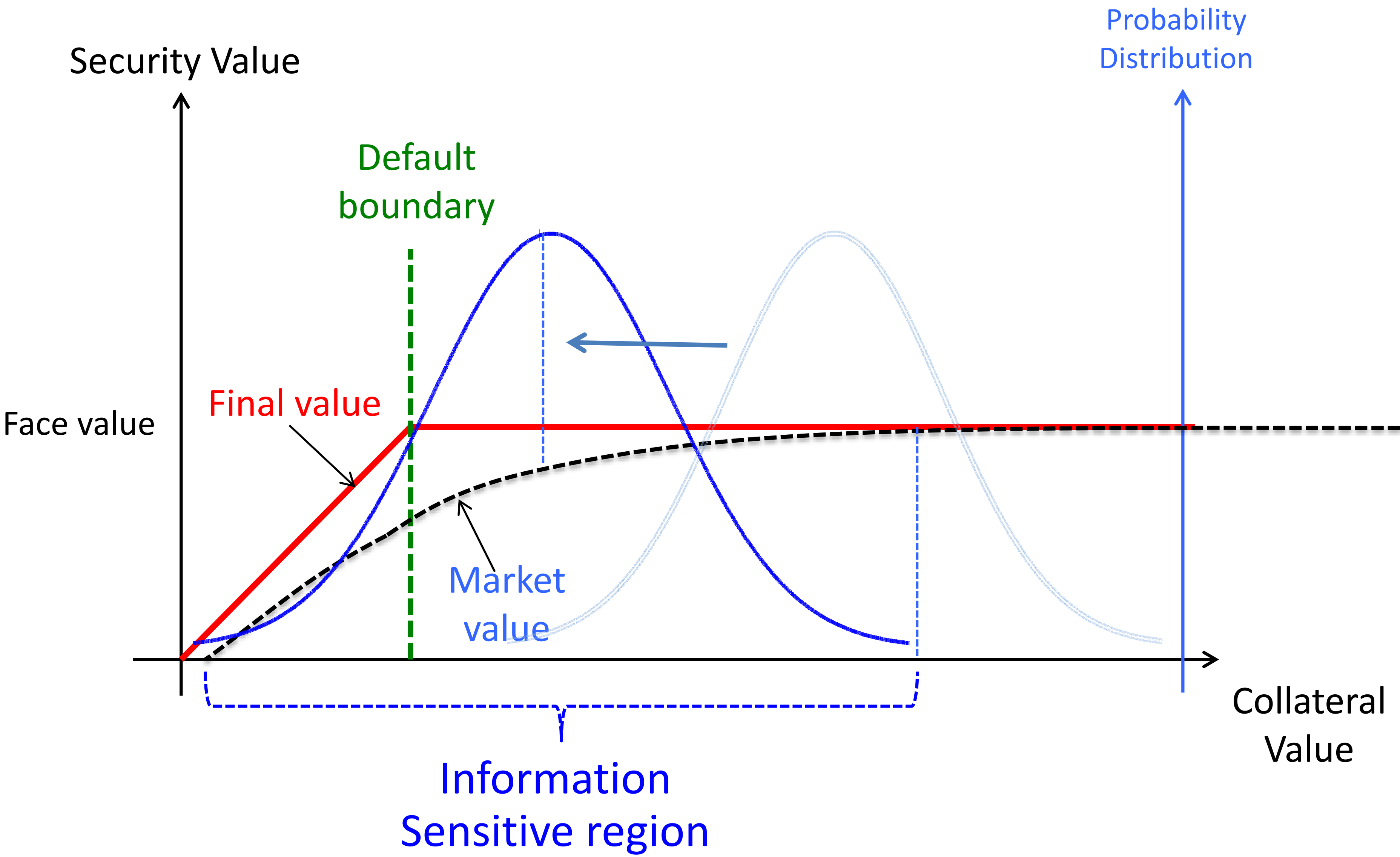
- Relying on debt, securitization, coarse ratings, mechanical rules… makes sense in good times

But….

- pushes risk into tail
- hides systemic risk

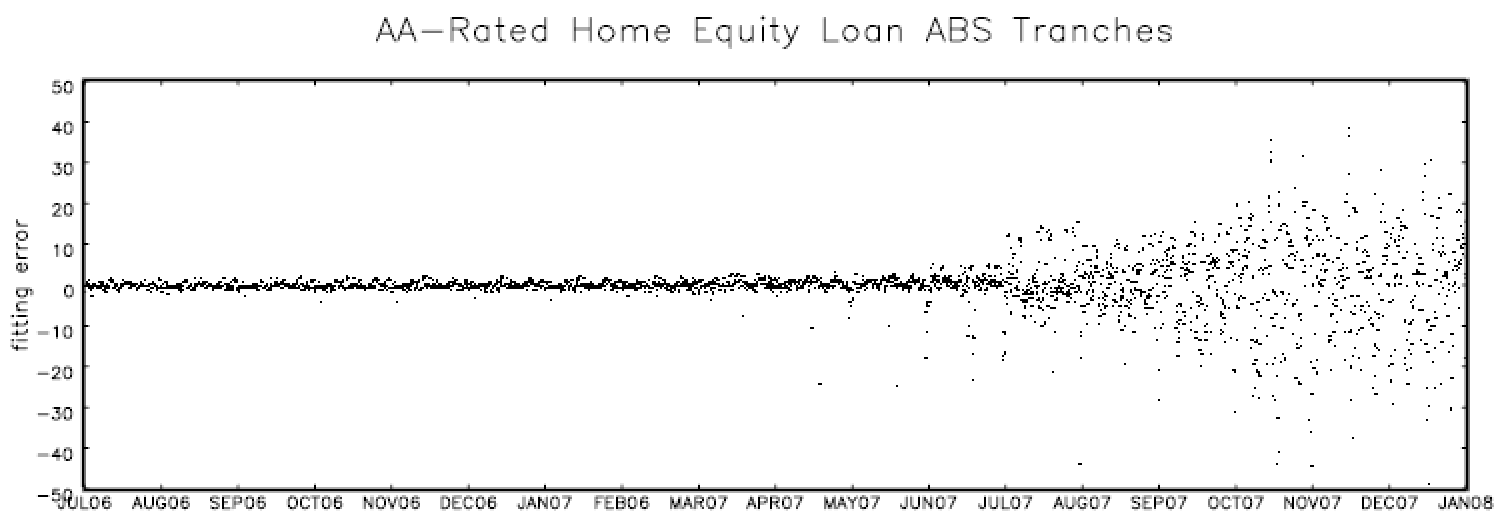
The social trade-off: Coarse information (opacity) enhances liquidity, but increases the risk and cost of a crisis

Debt becomes information sensitive



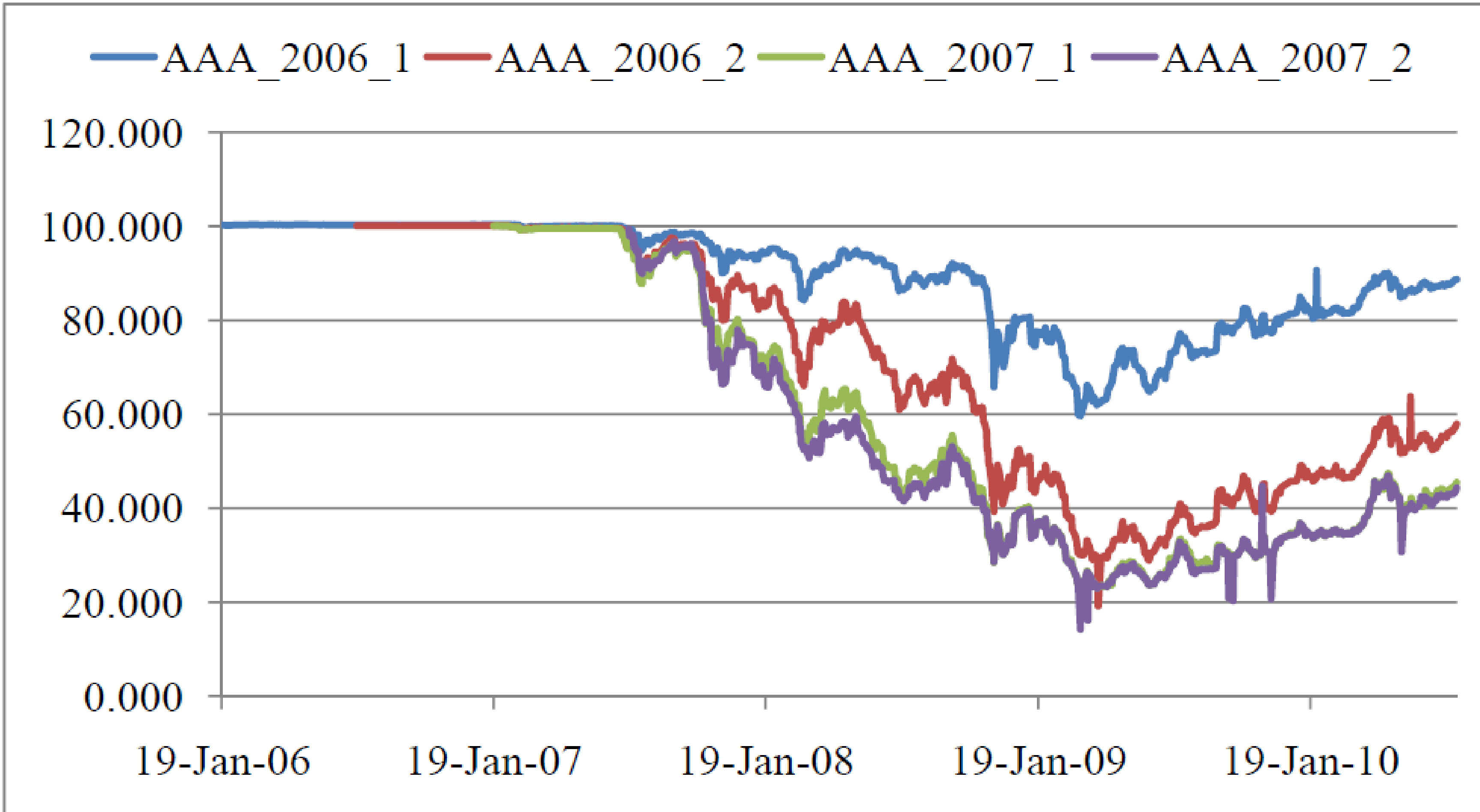
Trading in AA Home Equity Loan tranches Aug 2006-Jan 2008

- Ex ante: shared understanding (NQA, benchmark pricing)
- Bear Fund collapse Jul 2007 releases “trapped information”
- Ex post: Private information relevant => price heterogeneity



Perraudin-Wu (2008)

AAA rated ABX spreads



(Stanton-Wallace, 2011)

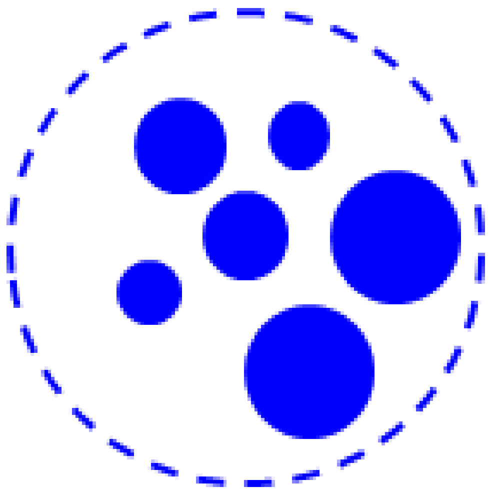
3. Policy implications of information logic

Getting out of a crisis

- Get back to “No Questions Asked” state; don’t try to value toxic assets
- Regain trust by recapitalizing (explicitly and implicitly)
  - “Lend without limit, to solvent firms, against good collateral, at 'high rates'” (Bagehot)
  - “Whatever it takes” (Draghi)
- Reduce transparency
  - Bad banks in Scandinavian crisis 1991-92
  - Clearinghouses in 19th century

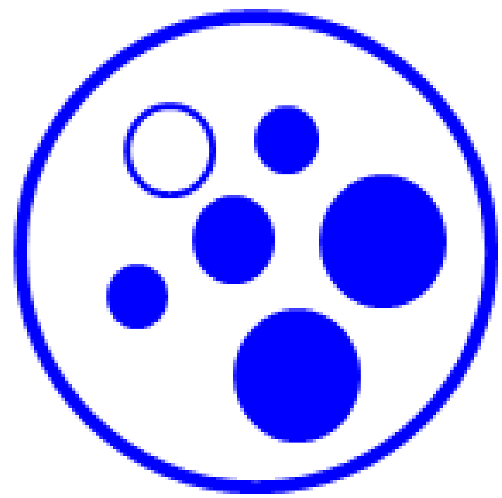
Clearing Houses in 19th Century

Normal times



- Decentralized
- Individual debt
- Transparent

Crisis



- Centralized
- Mutualized debt
- Opaque

Preventing crises

- More transparency => less liquidity
  - Maybe good in good times (MMMF)
- Stress tests and transparency
  - US vs EU experience
- Market discipline (tricky)
  - CDS/ABX, CoCo’s
- Higher capital requirements (simple, robust)
  - Limited help in crisis
- Liquidity Coverage Ratio
  - A worrisome boom in covered bonds

When is opacity good for liquidity?

- Good if public and private information complementary
  - Keeping complementary information secret reduces expert's informational advantage
- Bad if public and private information substitutes
  - Revealing substitute information makes expert information less relevant
- Aggregate, processed information tends to keep information more symmetric than "raw data"
  - Supports shared understanding (elevator test)

Concluding remarks

- Don’t use stock markets as a reference and guide for regulating money markets
- Limited information in money markets is a logical consequence of its purpose - NQA
- Financial crisis is an information event – when public abandons NQA
- How should we handle systemic risk in a system designed to be information sparse?
  - Paradox: the safer the system, the less attentive and riskier the behavior of investors
  - Government role critical (both before and in crisis)

Thank You !