



# Nobel Symposium "Money and Banking"

https://www.houseoffinance.se/nobel-symposium

May 26-28, 2018 Clarion Hotel Sign, Stockholm



### Why debt?

Nobel Symposium Stockholm, June 27, 2018

Bengt Holmström MIT and NBER

#### Debt is cheap – no price discovery

- Pawn shop
  - Haggling over price of sale is costly
  - Solution: give seller the right to buy back pawn at same price plus interest
  - Age old, robust logic
- Repo
  - Modern day version of pawning
  - Often initiated by money lender ("depositor")

#### Money markets are different

#### **Money markets**

#### Liquidity provision

- Few, small traders (bilateral)
- Heterogenous
- Matrix pricing (NQA)
- Information insensitive
- Opaque
- Modest investments in info
- Urgent

#### **Stock markets**

#### Risk sharing

- Many, large traders (centralized)
- Homogenous
- Price discovery
- Information sensitive
- Transparent
- Big investments in info
- Not urgent

#### A common but false inference

Widely agreed:

Symmetric information about payoffs => liquidity

But:

Transparency ≠> symmetric information

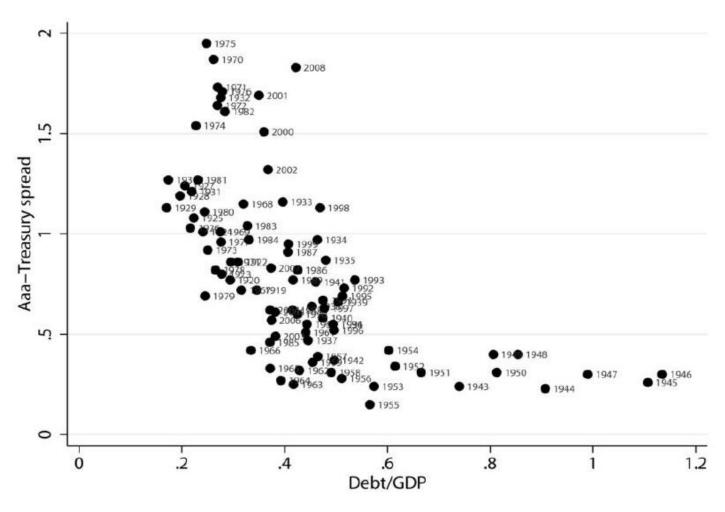
Two ways to symmetric information:

- (i) Investors know everything of relevance (EMH in stock mkts)
- (ii) Symmetric ignorance (over-collateralized debt)

#### Models of debt

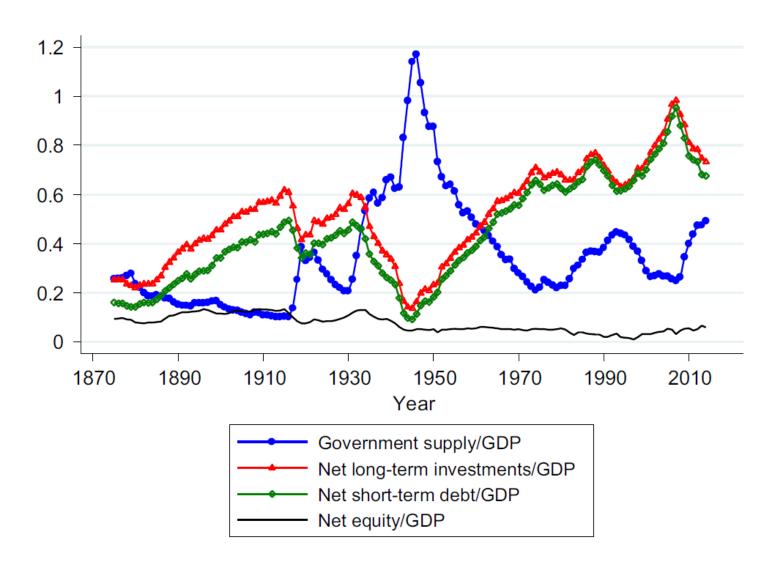
- CSV model (Townsend 1979, Gale-Hellwig 1985)
  - Contingent "price discovery"
- Diamond (1984)
  - Economizing on monitoring
- Gorton-Pennacchi (1990)
  - Liquidity provision (safe debt)
- DeMarzo-Duffie (1999), Dang et al (2012)
  - Optimal collateral

## Demand for safety/liquidity: convenience yield on government debt



Krishnamurthy and Vissing-Jorgensen (2012)

#### US Financial sector 1875-2014



#### Shadow banking: creating "parking space"

- New housing (modest)
- More marginal collateral (subprime, relatively modest?)
- Home equity loans (huge)
- More efficient use of collateral (originate and-distribute; repo market)
- Price increases, bubbles (huge)
- New loan pools (student, car, etc.; modest)

Wall Street response was for the most part logical

#### Role of government

- Central part of system
  - Contingent insurance ex post!
- Get back to "No Questions Asked" state
  - Recapitalization (explicit and implicit)
  - "whatever it takes"

- Regulation
  - Higher capital requirements
  - Stress tests plus corrective action: EU vs US

#### Concluding remarks

- Money markets need a more central place in financial economics – do not fit asset pricing framework
- How should we handle systemic risk in a system designed to be information sparse?
  - Paradox of safety: the safer the system, the less attentive and riskier the behavior of investors (Tri-party repo)
- Will digitalization change the information logic of debt?
  - BigTech bigger threat than FinTech
  - CBDC a bad idea?

### Thank you!