

# Inequality and Financial Fragility

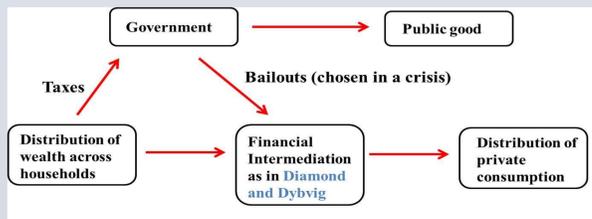
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## Summary

- How does the distribution of wealth influence financial fragility?
- Guarantees made by a utilitarian government will be credible for relatively poor individuals, but may not be for wealthier investors
  - Wealthier investors have a stronger incentive to panic in a crisis
- Panics and bailouts will tend to be concentrated among institutions catering to wealthy investors.
- Distribution of wealth affects the size of the fragile component of the financial system
  - Redistribution policies should take this effect into account

## The model

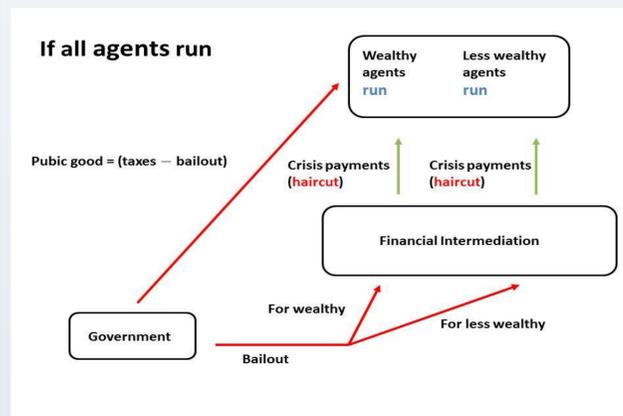
- Model of financial intermediation based on Diamond and Dybvig (1983)
  - Add wealth inequality across agents
  - Add govt. using tax revenue to provide a public good
- In a financial crisis, tax revenue is distributed between public good and bailouts to banks



- Wealth distribution is central in shaping the policy response during a banking crisis and the nature of financial fragility
- If govt. could commit to bail-out banks experiencing runs – crises will be averted. (Deposit insurance)
- But, govt. lacks commitment → any bailouts chosen ex-post once the crisis is underway.

## Policy responses in a banking crisis

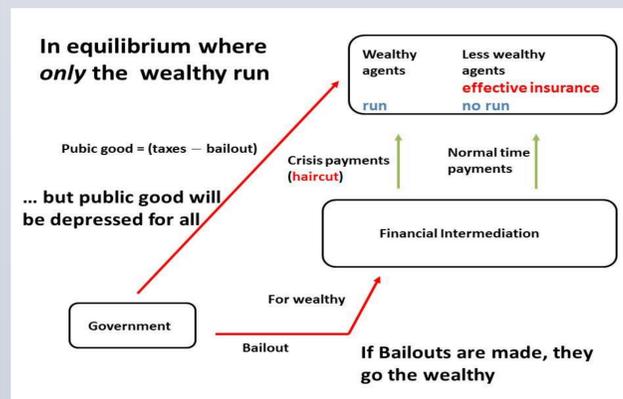
- The ex-post bailout response of the govt. assigns higher priority on low-wealth agents



- Low-wealth agents anticipate larger bailout → smaller losses, which makes them less prone to run.
- Runs may end up being **off-equilibrium** for the low-wealth agents.
- High-wealth agents anticipate smaller bailout → larger losses, which makes them more prone to run.

## Equilibrium runs

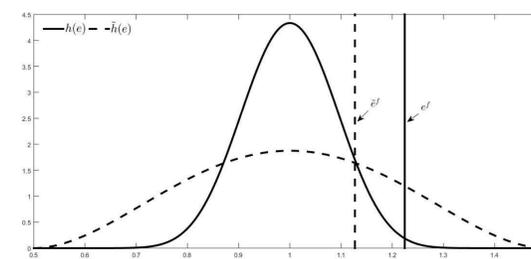
- If inequality is large, equilibrium runs restricted only to high-wealth agents.
- Bailouts (if any) target high-wealth agents and their institutions
  - even though, by construction, govt. is utilitarian



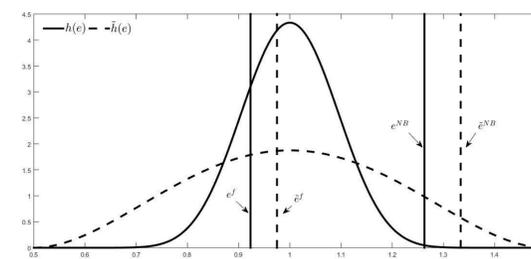
## How the distribution of wealth affects fragility

- With bailouts, there is a cutoff  $e^f$  such that the economy is fragile for agents with wealth  $e$  if and only if  $e > e^f$ .
  - Without bailouts, all agents are equally fragile.
- Higher inequality can either increase or decrease fragility depending on whether more agents are pulled above or below  $e^f$ .

### Case 1: More inequality leads to more fragility

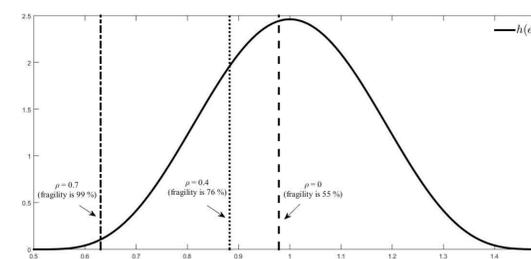


### Case 2: More inequality leads to less fragility



## Ex-ante redistribution and fragility

- A utilitarian policy maker will not necessarily choose to fully redistribute even when the standard costs of redistribution are completely absent.



- This occurs when progressive taxation pulls more agents above  $e^f$  and leads to fragility cost.

## Financial crises and distributional concerns

- Renewed interest in the link between inequality and policy responses (Wall Street vs. Main Street).

*The Paulson plan will buy toxic assets at inflated prices thereby creating a charitable institution that provides welfare to the rich at the taxpayers' expense. If this subsidy is large enough, it will succeed in stopping the crisis. But, again, at what price? (Luigi Zingales, 2008).*

- Existing bank run models: inequality is either absent or largely irrelevant.
- I present a model of financial intermediation where distributional issues are central
  - Govt. is utilitarian, but lacks commitment
- The lack of commitment assumption fits recent events:
  - Govt. guarantees often are renegotiated (Iceland, Cypriot, others).
  - Resulting in ad-hoc and highly selective responses.
  - Based on political rather than legal considerations.

## Main results

- If there are no bailouts, the distribution of wealth has no effect of fragility
- With bailouts, this distribution matters
  - financial panics will tend to be concentrated among wealthy investors and their institutions
  - bailouts will tend to benefit the wealthy
- Rising equality can make either raise or lower financial fragility
  - depends on the current distribution of wealth
- Redistribution policies should take these effects into account