Market Discipline under Financial Contagion

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Intoroduction

- Bankers become more creditor friendly by holding demand deposit or short-term debt.
  - -Calomiris and Kahn 1991 AER
  - -Diamond and Rajan 2000 JF, 2001JPE, 2012 JPE
- These contributions treat only one kind of bank or financial institution.

One of important aspects of recent financial crises is contagion.

When a financial crisis occurs, it spreads to other institutions or areas.

How a short-term debt affects the bank manager's (borrower's) behavior in an environment where a financial contagion occurs?

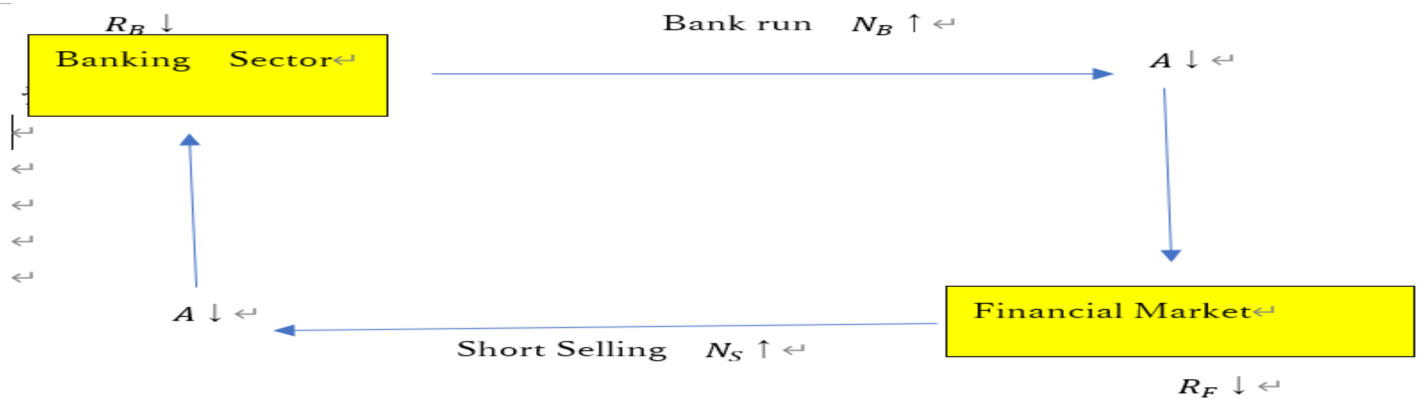
The Model Setup

- the global game technique
- an economy which has a banking sector and a financial market
- There are three dates indexed by 0, 1, 2.
- There are creditors in the banking sector and speculators in the financial market.
- Both creditors' withdrawal N_B and speculators' short selling N_S affects aggregate profitability A.
- The bank managers' problem

$e \uparrow \ \Rightarrow \ R_B \uparrow \ \Rightarrow \ N_B \downarrow$ (Bank run does not occur.)

$e \uparrow \ \Rightarrow$ The cost of effort $\uparrow$

Strategic Complemantarity



Main Results

The bank manager exerts less effort by holding more short-term debt.

Sufficient Conditions

1. The speculators have more precise information on fundamentals than the creditors.
2. The return of financial sector is larger than that of banking sector.
3. Bank run largely affects financial sector.

(intuition)

Short-term debt $\uparrow \longrightarrow N_B \uparrow \longrightarrow N_S \uparrow$

However, the bank manager cannot control speculators directly by exerting effort.

Conclusion

- Model where the bank is disciplined in a much simpler way than previous methods
- Contagion affects the incentive of bank manager.
- The information structure of bank creditors and speculators has an important role to decide a bank manager's behavior.
- When speculators in the financial market have much more precise information about fundamentals of the economy than that of creditors in the bank, there is a case that demand deposit or short-term debt induces the bankers to act against creditors' interests, which is contrary to existing studies.