

Discussion of “Endogenous Financial Fragility and Prudential Regulation” by Charles M. Kahn and Joao A.C. Santos

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¹The views expressed in this discussion do not necessarily reflect the views of the Federal Reserve Bank of Richmond or the Federal Reserve System.

The Question

- What is the role of policy in dealing with financial fragility?
- Really two questions
 1. Are financial systems fragile?
 - i.e. make a real shock worse
 2. If so, can and should supervision (or other policy) do something about this?

Motivation

WE CAN SKIP THIS!

Outline of Discussion

Three Elements of the Model

1. Theory of bank capital structure
 - Diamond and Rajan (2000,2001), Calomiris and Kahn (1991)
 - **Some fragility is optimal!**
2. Interbank Arrangement (**amount of fragility**)
3. Payments (**externality**)

Policy

Theory of Bank Capital Structure

Consumers, banks

$t = 0, 1, 2$

$t = 0$ – Consumers invest K (deposits or debt)

$t = 1$ – bank i shock is $\{X_i, Y_i\}$ (all see, not in contract)

- Liquidate $\rightarrow X_i$ at $t = 1$
- No liquidate $\rightarrow Y_i$ at $t = 2$

$X_i < Y_i$ liquidation bad

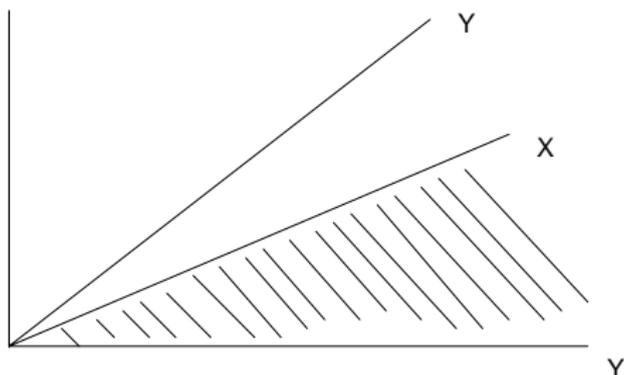
Renegotiation

$t = 1$ – Bank proposes new payoffs

Debtholders – Can coordinate, so bank renegotiates them to $X_i - D$

Limited Payments to Debt Holders

Only debt – no deposits



Debt holders receive a fraction of the output - **underinvestment**
Looks like outside equity not debt!

Advantage of deposits

Depositors – Can't coordinate, can run, so can't be renegotiated.

Avoids underinvestment, but liquidation if $Y_i < D$.

This Theory

Important Implication

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Theory is new, untested. Some questions

1. Is commitment really the main reason for deposits?
2. How quantitatively important is this mechanism?
3. What about deposit insurance?
4. Does the commitment results hold up to a dynamic treatment?

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IMPORTANT - Need the right theory of bank capital structure to do welfare calculations of policies.

Interbank Market

Here, just keep separate or consolidate.

Consolidation – $X = X_1 + X_2$, $Y = Y_1 + Y_2$.

This changes renegotiation, etc.

EFFICIENT DECISION MADE (no externalities)

The Producers

Each producer has a perishable good that some consumer wants at $t = 1$. Producer wants to consume at $t = 2$

Consumer trades financial claims to producers. (**Deposits and Debt are inside money**)!

Claims **must** be in solvent banks.

Financial wealth affects trade (like cash-in-advance)

The Externality

Interbank market/consolidation affects financial wealth

Bank and consumers contract - doesn't incorporate effect on producers

Examples where market structure is too fragile

Conclusions

Literature - Lots of models of financial fragility. Various mechanisms at play.

Nice features of this mechanism

- Optimal fragility is not zero
- Still, can get too much fragility
- Externality is through the payments system
 - NOT because of counterparty risk (usual concern of payment systems risk)

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Solutions - Regulate consolidation/interbank market, Pigouvian taxes (?), Introduce new financial contracts

Final Comment

Lots of interesting questions in banking.

Wonder if we sometimes get ahead of ourselves.

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Also matters for lots of others in banking like capital regulation.
It would be nice to have a robust theory in time for Basel 3!