



Comments on
Carletti and Leonello
Miao and Wang
Acharya and Mora

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2012 Bank Structure Conference
Chicago Federal Reserve

Two Theory Papers

- Contexts different but useful to compare underlying components
- Two models of consequences of illiquidity in financial systems



Necessary components of models of illiquidity

- Illiquid assets require a wedge between value to holder of asset and price obtainable from most willing buyer of asset
- For there to be a cost to this wedge, there must be a demand for liquidity: an incomplete market somewhere



Carletti and Leonello

- Liquidity demand from Diamond-Dybvig preferences; incompleteness of contracts on aggregate states
- Illiquidity at two points:
 - From spread cost of project to entrepreneurs and value extracted by lenders in banking system (“bargaining power”)
 - From inability of non-banks to buy loans



- Results

With competition among banks for lending opportunities

- Equilibrium has banks choosing maturities of holdings to give as much insurance as possible in bad aggregate state
- Relative prices of short and long maturity holdings adjust in spot market depending on demand for early consumption



- Mixed Equilibrium
- As profitability of loans increases these prices become inconsistent with banks remaining solvent
- The adjustment in equilibrium is for some banks to choose to be safe and others to choose to become risky



- Aside
- Why is there no equilibrium in which all banks default?
- Because the wedge between the value banks can receive from loans and the value non-banks can receive (zero) means it is always profitable for one bank to remain solvent



Miao and Wang

- Demand for liquidity from credit constraints (inability to borrow for positive NPV projects)
- Illiquidity of assets is the wedge between the value of the asset to the borrower (as durable productive input) and the value to the lender (as collateral)



- Collateral value
- Two possible sources (“can’t pay” vs “won’t pay”):
 - Value to lender on resale (Kiyotaki Moore)
 - Value to borrower of avoiding confiscation (here)
- (Note: in this model, not the full value of the asset to borrower, so wedge remains)



- Message
- “Won’t pay” model leads to a real effect from asset price bubbles
- Counterintuitive: you would think that resale price based models would incorporate bubble value. (But these bubbles are harder to sustain in equilibria)



- Message
- Intuition: The bubble raises collateral value, increasing the ability to borrow.
- Plausible (but need a more clear intuition why not in the resale case as well; suppose interest rates could vary in equilibrium)



- Analysis limited by solution approach
- Assume a linear form for the RE and solve by substitution
- But the problem is an LP not a quadratic. Corners are important
- Values found by marginal argument but then substituted into collateral constraint which depends on total.
- Bottom line: likely to be lots of other non linear RE equilibria. Need a more delicate argument to eliminate them.

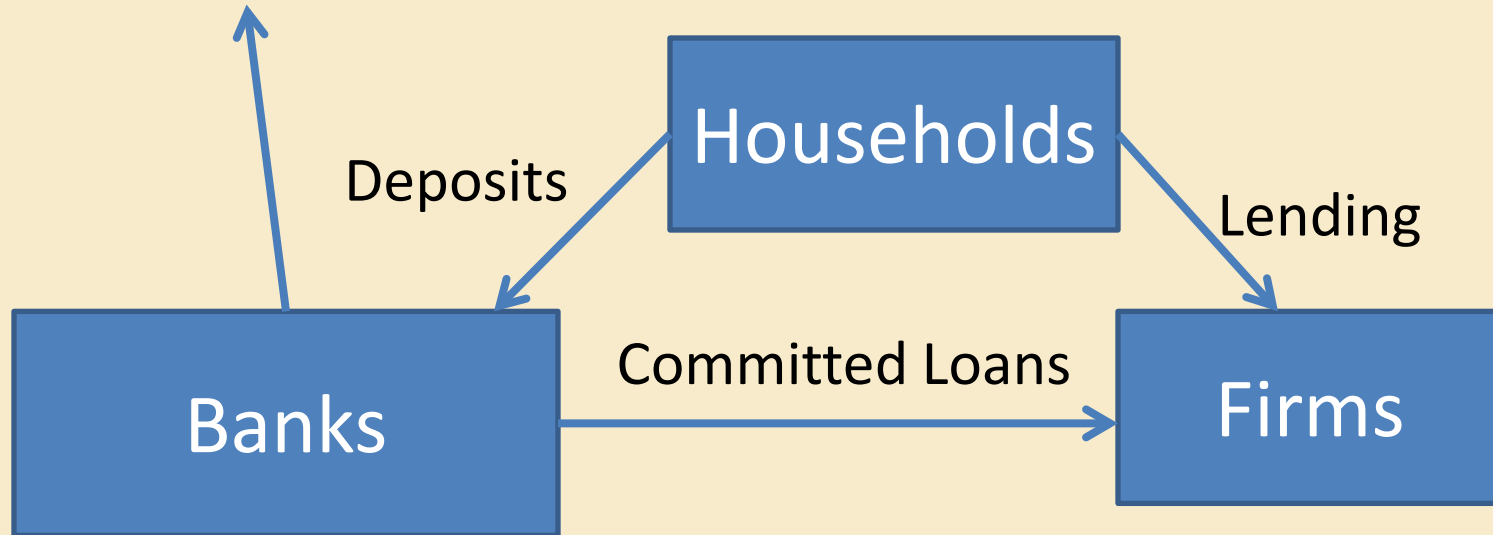


- Credit policy section
- As it stands, not really about credit policy; instead about transferring wealth from one sector to another
- But the argument can be reformulated if credit policy allows government substitute its taxing powers and credibility for the limited credibility of the borrowers



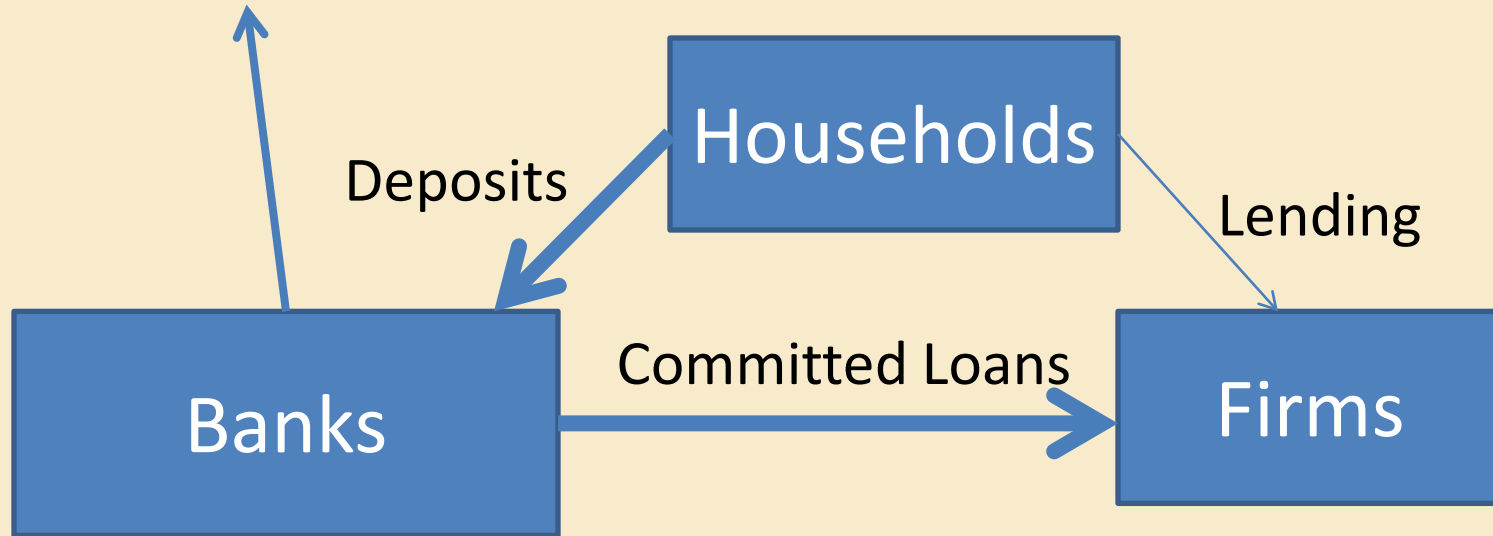
Acharya and Mora

Liquid Assets
(and government guarantees)



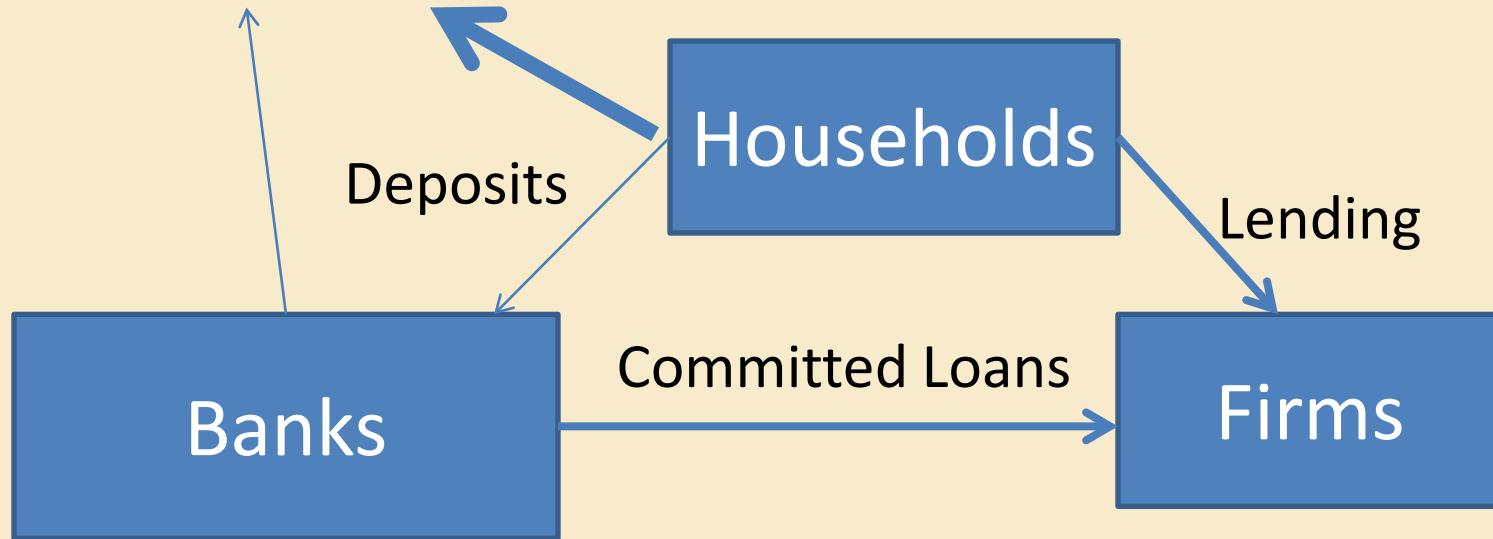
Production-Based Crisis

Liquid Assets
(and government guarantees)



Financial Crisis

Liquid Assets
(and government guarantees)



- Argument
- Two phases to the crisis:
- Pre-Lehman: Deposits flow away from (or at least not towards) banks
- Post-Lehman: Deposits flow towards banks



- Conclusion
- Behavior looks like S&L crisis of late 80's
- Troubled banks increase interest rate for deposits
- Insured depositors respond positively; uninsured depositors do not.



- Reaction
- Can quibble about endogeneity forever—but still a valuable insight and likely to be robust
- Particularly valuable in documenting the difference in responses in the two phases of the crisis





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