Discussion of
“Origination and Sale of Loans, and Bank Capital Regulation”
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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.
Their Goal

Effect of capital requirements on credit supply

particularly over a business cycle
The Bank’s Decision Problem

t = 0, 1, 2

At t = 0, decide on deposits and loans L that payoff at t = 2

\[ \text{Loans} + \text{Cash} = \text{Equity} + \text{Deposits} \]

s.t. capital requirement
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At $t = 1$, bank finds out payoff of $L$ and can make new (one-period) loans that also payoff at $t = 2$

- Whether payoff is private information depends on capital requirement
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Assumptions Can’t raise equity, investors can’t make loans
Capital Requirements

Risk Insensitive

- Bank quality at $t = 1$ private info
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Problem: A good bank cannot raise as much capital as it would like by selling loans. Thus, makes less $t = 1$ loans.

- Pooling equilibria - gets the pooled price or no sales
- Separating equilibrium - sells only enough so bad doesn’t copy
Capital Requirements

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- Makes risk public information
- Essentially credible disclosure
- Eliminates adverse selection

Note: Forbearance is good here!
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Doesn’t require reductions in loan supply during recessions

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Still problems: If bank bad in $t = 1$, hit with high capital charge. If $t = 0$ capital too low, insolvent in $t = 1$ and can’t make profitable $t = 1$ loans.

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Their Theory of Bank Capital

A buffer stock theory of bank capital based on an implicit bankruptcy cost of foregone loans

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Data - banks hold (in good times) a buffer over regulatory minimum

But, need to go a level deeper

- What are the costs and benefits of different levels?

This is a big open question.
Lots of theory, but not much quantitative work
Two Important Exceptions

Calem and Rob (*JFI*, 1999)
- Bank decision problem
- Dynamic model of bank risk taking
- Calibrated to data
- Get some counterintuitive results

- Estimates the cost of bank capital due to lost liquidity services
- Uses a GE steady state model
- Increase capital 10% costs 0.1 – 0.2% in consumption
- Big – but maybe worth it
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Value of Quantitative Work

Key issue is lost loan opportunities
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Also, relevant for analyzing other types of capital requirements like contingent capital