MANAGING DEFAULT RISK: COMPETITION, REGULATION, AND CAPITAL

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THE EFFECTS OF BANKING COMPETITION ON GROWTH AND FINANCIAL STABILITY: EVIDENCE FROM THE NATIONAL BANKING ERA

Mark Carlson, Federal Reserve Board
Sergio Correia, Federal Reserve Board
Stephan Luck, Federal Reserve Board

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[...] The organization of small institutions in the large cities has a tendency to weaken those already organized, and to so divide the business as to make them all more or less unprofitable to the shareholders. [...] 

Jay Knox, Comptroller of the Currency

1876
DO ENTRY BARRIER DETER ENTRY?  
(FIGURES 3, 4, 5)
Loan Growth:

- Banks in less competitive market (greater entry barriers) see loan growth 20 PP less than more competitive markets
IMPLICATIONS OF LESS COMPETITION:
RESULTS I UNDERSTAND & NOT

- **Loan Growth:**
  - Banks in less competitive market (greater entry barriers) see loan growth 20 PP less than more competitive markets
Loan Growth:

Manufacturing Growth:
- Lower growth in manufacturing capital and output.
- Less capital → less investment.

Funding Loan Growth:
- Deposits: Markets with less competition (greater entry barriers) see deposits grow by 17 PP less (fewer loans to fund)
- Equity. Small and statistically insignificant increase
IMPLICATIONS OF LESS COMPETITION: RESULTS I UNDERSTAND & NOT

- Loan Growth:
- Manufacturing Growth:
- Funding Loan Growth:
- Less Risk Taking
  - Changes in loan portfolio risk (it is shrinking)
  - Leverage: Asset to equity and asset to loan ratio are lower in less competitive markets (Table 11)
  - Hold fewer seized assets (Table 12).
  - Banks less likely to fail (Table 13): 1.7% average, 1% lower.
IMPLICATIONS OF LESS COMPETITION: FACTS VERSUS IMPLICATIONS

- Competition Matters: The Facts are Clear
- What does it Mean: The Implications are Not
  - Banks are growing “too fast” until they don’t need to
  - Which market changes:
    - High barriers to entry slow
    - Low barriers to entry speed up
  - Which loans are marginal?
- The Mechanism?
THE IMPACT OF RISK RETENTION REGULATION ON THE UNDERWRITING OF SECURITIZED MORTGAGES

Craig Furfine, Northwestern University

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Capital Market Problem:
- Lenders who sold mortgages were incentivized to underwrite mortgages (high volume) and so underwrote mortgages of poor quality (and with inappropriately low interest rates).
- Investors were naïve. They did not understand the theory in this paper (they should read it) & either refuse to buy or to buy at a discount.
- Standard separating/pooling equilibrium and signaling logic (e.g. risk retention) failed.

Capital Market Solution: Force Lenders to Retain Greater Risk (Skin in the Game) in the Portfolio.
- 5% of horizontal risk: Assets risk
- 5% of vertical risk: Equity (first loss tranche)
The Facts
- Observable risk of underwritten mortgages fell
  - Lower loan to value (LTV)
  - Higher income to debt ratio (debt service coverage ratio)
- Interest rates rose

Obvious Implications
- Risk retention rules did address poor underwriting standards. Prior to the risk retention rules, loans were too risky
- Risk was mispriced. Given loans are safer, rates should be lower, not higher. This suggests that the investors did not appreciate the risk they were taking on.
LESS OBVIOUS IMPLICATIONS:
THINGS I DON’T UNDERSTAND

- Choice of Risk Retention:
  - Vertical (Asset)=37%; Horizontal (Equity)=38%; Both=25%
  - No correlation with results “For the full sample of loans, the coefficient estimates suggest that risk retention shape did not correlate with underwriting metrics.”
  - Why. Equity is riskier. If deal is 5% equity, and you hold equity (H) you lose 100% of your investment. If you hold asset (H), you lose 5% of your investment. This seems like it should matter.
LESS OBVIOUS IMPLICATIONS: THINGS I DON’T UNDERSTAND

- Regulation is Binding
  - “…the findings in Figure 4 and Table 9 suggest that risk-retention has been a binding constraint, significantly increasing the size of the retained risk, thus limiting the ability of securitizers to use retention size as a signaling tool.”

- Risk Retained Rises:
  - Before: 3.4% mean; only 25% of deals had risk retention > 5%
  - After: 10.3% mean; 75% of deals had risk retention > 10%
    - Variability of risk retention collapses: From a range of 2-22% to a range of 8-12%?
LESS OBVIOUS IMPLICATIONS:
THINGS I DON’T UNDERSTAND

FIGURE 4: B-PIECE SIZE BEFORE CRISIS AND AFTER RISK RETENTION IMPLEMENTATION

Fraction of Deal Face Value Held by B-Piece Investor

- Blue: B-Piece Size 2004-2007
- Orange: Horizontal Risk Retention
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Questions from the Audience