CONFERENCE OF STATE BANK SUPERVISORS

Community Banking in the 21st Century Research and Policy Conference

2015 Resource Guide

<u>Community Banking in the 21st Century</u>

Talking Points and Research Paper Summaries

Contained below are high-level summaries from the Community Bank Survey, Community Bank Town Halls, and from each panel that presented at the conference. The research panels and discussions centered around three main focal points: small businesses and farm lending, community bank performance, and community banks pre- and post-crisis.

Following the high-level summaries are single-page summaries of each research paper to be presented at the conference. Community banker panel participants were a highlight of this year's conference, and their stories and practitioner's perspective add color and context to the academic research. All research papers, presentations, and videos are available at communitybanking.org.

Community Banking in the 21st Century Town Hall Summaries and Survey

- The Federal Reserve and CSBS once again jointly released Community Banking in the 21st Century: Opportunities, Challenges and Perspectives, a report that details conditions facing today's community bankers.
    - To solicit the views of the community banking industry, state regulators in 27 states held town hall meetings from April to July.
    - The town hall summaries within the Community Banking in the 21st Century Publication provide insights from the industry on the state of community banking.
    - In addition to the town hall summaries, the Fed and CSBS conducted a comprehensive survey administered by state bank commissioners. Nearly 1,000 community bankers participated, providing key data that reveal how community banks are responding to opportunities and challenges stemming from changing regulatory and market conditions.
- Some common themes emerged from town hall meetings:
    - While bankers typically considered safety and soundness exams to be helpful and meaningful in helping them to identify problem areas and offer opportunities for resolution, compliance exams were seen as more burdensome. One comment from an Arkansas banker represents the common view: "It is unbelievable the amount of money, time, energy and mental stress that goes into the compliance…instead of seeing the compliance examination as a tool to help manage the bank, it is viewed as a 'gotcha' process."
    - Bank customers in most states are still somewhat risk averse. In general, businesses were still shoring up adequate cushions in case of another crisis, are hesitant to re-enter lines of business where they lost money during the recession and are largely disinterested in taking large risks. Consumers were more hesitant to take out loans, shopping around a lot longer for loans with the expectation that banks will saddle more risk.
    - Small banks are struggling to maintain human capital. While some of these banks struggle because of their rural focus, others struggled because there were fewer training

programs at small and regional banks. The younger generation of employees was said to be hard to retain, with many of them leaving, after training, to work at larger banks with more promotion potential.
    - State banks reported that their consumers are not financially savvy. This did not appear to be limited to the younger generation; both high school graduates and retirees were said to be unable to maintain their own financial records, improve their credit score or manage their wealth. Several banks report that retirees seem ill-equipped to live within a budget that works for their retirement savings. As a result, several community banks have begun to use their marketing budget to provide educational seminars to their customers.

Small Businesses and Farm Lending

- Small banks provide a critical stopgap for small business lending during economic downturns. While larger banks may pull out of the small business lending market in certain regions when the economy worsens, small banks are directly tied to the local business community.
- Conversely, when large banks enter a new market, some data suggest that small banks are able to find a competitive advantage in mid-size loans for small businesses seeking a more tailored product.
- Evidence suggests community banks have their own opportunities in the emerging new world order for small business lending. Nonbank lenders have begun to introduce new and alternative underwriting methods that emphasize qualitative and non-traditional borrower analysis – a historical area of strength for community banks. There are likewise emerging examples of banks partnering with alternative lenders to purchase qualifying loans originated by online platforms.

Community Bank Performance Panel

- The FDIC Improvement Act of 1991's Prompt Corrective Action (PCA) provision was helpful in reducing failures of the 2008 financial crisis, but did not prevent the DIF from experiencing significant losses.
- Modeling sharp declines in agricultural land values reveals that the average agricultural bank would likely not suffer large loan losses. However, the subset of agricultural banks that are most sensitive to land value declines would suffer substantial losses and have greatly reduced levels of capital.
- Community banks would find value in conducting a realistic, simple, and adequately severe stress test that assesses adequate capital needs for their exposure and market conditions.

Community Banking Pre- and Post-Crisis

- Community banks service a disproportionately large amount of key segments of the U.S. commercial bank lending market, but community banks' share of the U.S. lending market has fallen by approximately half since 1994.
- While the full effects of the implementation of the Dodd-Frank Act (DFA) may not be known for several years, there are already some indications that the DFA has caused growing regulatory

burden for community banks. When choosing how to respond to this increased burden, data indicate that community banks are replacing exiting employees with higher-skilled, higher-cost, more productive staff.

- While conventional wisdom holds that bank closures accelerated significantly after the 2008 financial crisis, data indicate that the percentage of active banks that disappeared due to failure or merger from 2008-2013 is not that different from 2002-2007.
- Rather, nearly two-thirds of the recent decline in number of banks is due to the collapse of entry into commercial banking. If current trends continue, there could be 1,000 fewer banks in ten years compared to 500 fewer banks based on normal historical trends.
- Despite the challenges of consolidation, declining market share, and increased regulatory burden, community banks are still finding success in several venues. In mortgage loan selling and securitization, for example, community banks have higher returns on assets and equity.
- [Some] point out that community bank profits are heavily dependent on the net interest margin… and with present Federal Reserve monetary policy pushing lending rates down, this margin is relatively small… [However], there are plenty of periods where net interest margin declined, yet entry did not collapse.

Panel Summaries and Paper Findings

Session 1 – Small Business and Farm Lending

The Changing Role of Small Banks in Small Business Lending[1]

Lamont Black and Michael Kowalic
DePaul University; Federal Reserve Bank of Boston

Major Findings:

- Community banks face increasing competition from large banks. This competition has grown due to advancements in information sharing and lending technologies.
- An increase in large bank competition makes small banks especially valuable to commercial and industrial (C&I) borrowers seeking intermediate-sized loans (loans between $250k to $1 million).
- Small, single-market banks increase the share in their portfolio in loans between $250k to $1 million when additional large banks enter the small bank's market. Loans less than $250k remain unchanged and the share of loans greater than $1 million declines.
- This effect is magnified by proximity of large bank entry to small bank branches. Proximity of large banks reduce small banks' share of C&I for their smallest loans.
- While small banks will likely be viable competitors despite increased competition from large banks, competitive pressures from large banks render some lending relationships unsustainable.

Notable Research Features:

- The findings of the paper are based on a theoretical model of large and small bank competition, where small banks have an inherent advantage at observing risk while large banks have an inherent advantage in loan cost.
- The model also assumes borrowers of varying entrepreneurial skill levels and risk appetites approach banks for loans. The success or failure of a loan then impacts the lending patterns of banks.

Quotes:

- "Although the small banks have a higher cost of loan making they can still outbid the large banks. The small banks can do so because they offer the borrower the flexibility to choose between two projects due to their ability to observe the risk of her projects[2]."
- "In other words, the small banks attract borrowers that value their ability to observe risk, which allows the borrowers to undertake the higher-return projects[3]."

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[1] Black, Lamont; Kowalic, Michael. *The Changing Role of Small Banks in Small Business Lending*. Depaul University; Federal Reserve Bank of Boston. June 2015.
[2] *Ibid*. Page 12
[3] *Ibid.* Page 13

<u>Lending on Main Street: Challenges and Opportunities for Community Banks – Before, During and After the Financial Crisis</u>[4]

Julapa Jagtiani and Catherine Lemieux

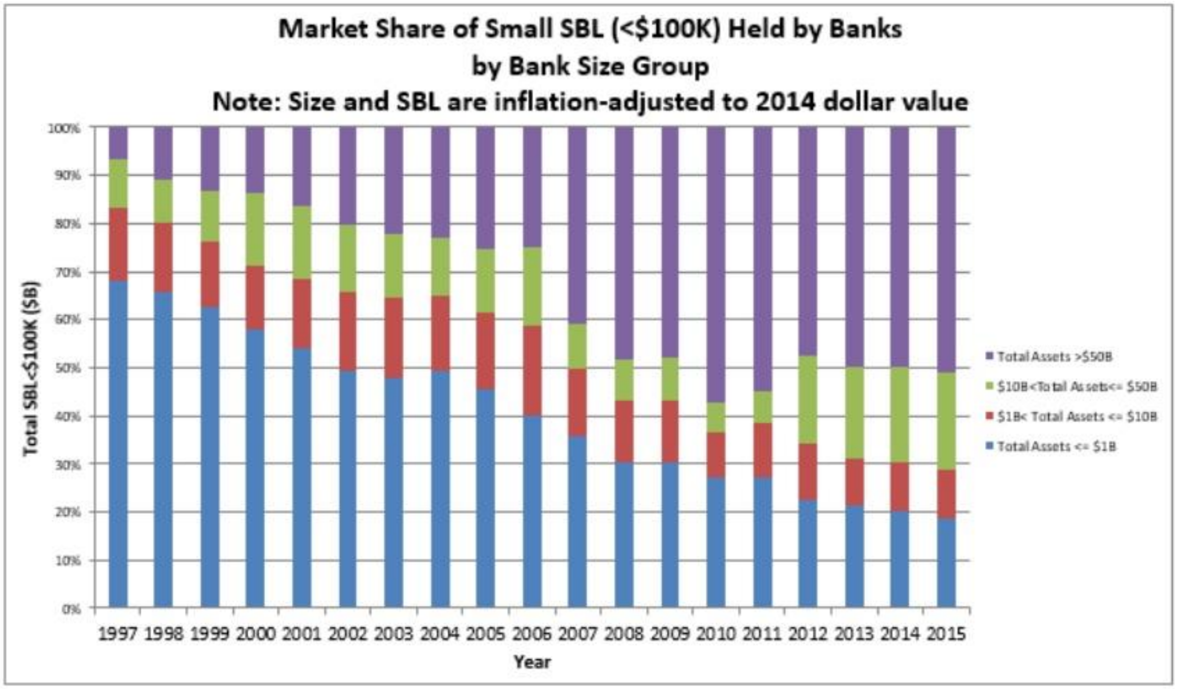
Federal Reserve Bank of Philadelphia; Federal Reserve Bank of Chicago

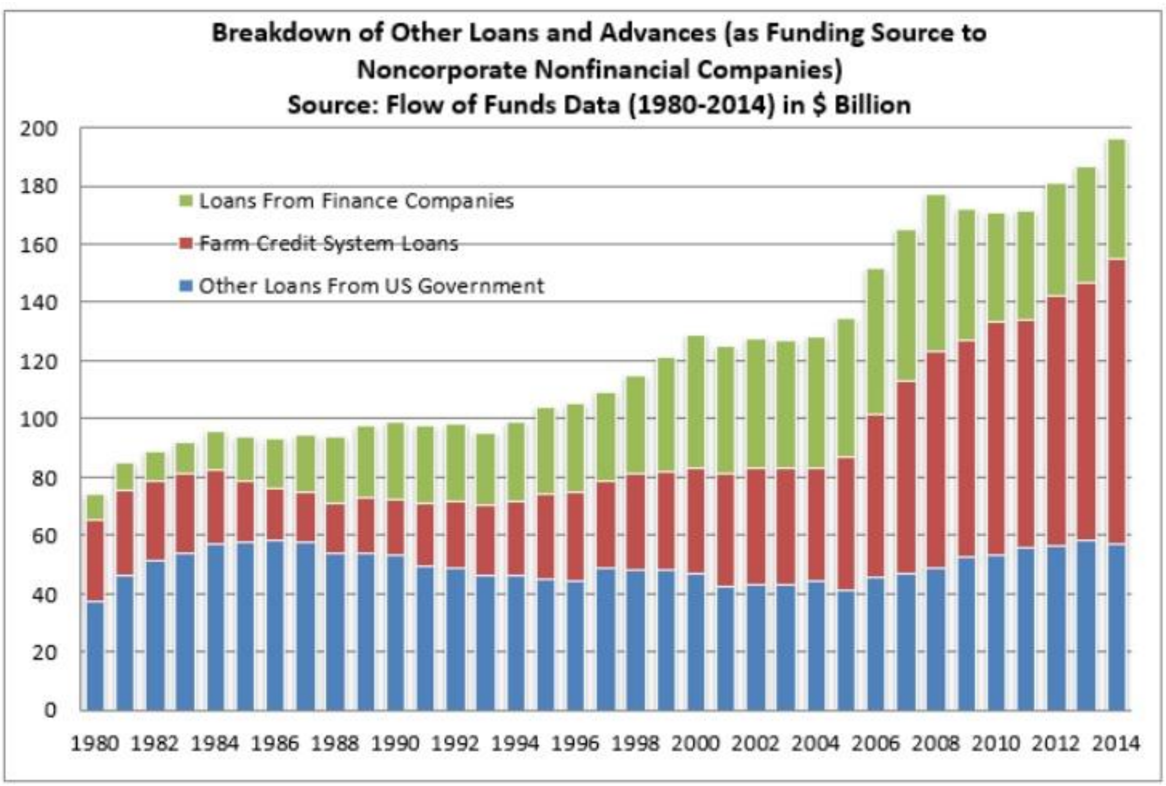
Major Findings:

- There is a growing body of research examining how the financial crisis and new regulations have translated to a consistent decline in small business lending by community banks.
    - The financial crisis served to accelerate some of those trends, setting the stage for a new post-crisis landscape.
    - As the housing bubble grew, Federal Reserve data show that small businesses increasingly used real estate as collateral for loans. Subsequently, as the economy and housing market began to recover, large banks leveraged technology to compete for smaller commercial borrowers as they searched for lending opportunities.
    - Most recently, nonbank and alternative lenders have begun to compete with banks by introducing sophisticated technologies and new underwriting methods to issue small business loans electronically, and with minimal processing time, across a range of sizes, terms and borrower risk profiles.
        - Large bank originations for small business are by and large concentrated in counties in the northwest and eastern seaboard.
- In the post-crisis environment, evidence suggests that community banks face a series of challenges and unique opportunities.
    - For example, the demographic of small businesses with the strongest demand for credit may not fit the risk appetites of commercial banks.
        - Banks, including community banks, are typically unable to underwrite a small business loan without financial statements, tax returns and evidence of business performance – all things new businesses by definition do not have.
    - Businesses that are established and eligible for bank loans have rising expectations for bank services, putting pressure on community banks to make deep investments in retail business models (e.g. online banking portals, expanded customer service offerings) and introduce new products (e.g. photo-capture check deposit, bill payments).
- Despite those challenges, evidence suggests community banks have their own opportunities in the emerging new world order for small business lending.
    - Nonbank lenders have begun to introduce new and alternative underwriting methods that emphasize qualitative and non-traditional borrower analysis – a historical area of strength for community banks.

[4] Julapa Jagtiani and Catherine Lemieux. *Lending on Main Street: Challenges and Opportunities for Community Banks – Before, During and After the Financial Crisis*. Federal Reserve Bank of Philadelphia; Federal Reserve Bank of Chicago. June 2015.

- There are likewise emerging examples of banks partnering with alternative lenders to purchase qualifying loans originated by online platforms.
- Finally, as new small business lending competitors reach start-up and marginal borrowers, they may be effectively cultivating the next potential borrowers of bank loans, particularly as new ventures become established enterprises.





Small Bank Comparative Advantage in Alleviating Financial Constraints and Providing Liquidity Insurance over Time[5]

Allen N. Berger, Christa H.S. Bouwman, and Dasol Kim

University of South Carolina; Texas A&M University; Case Western Reserve University

Major Findings:

- Small banks' comparative advantage is stronger when local economic conditions are worse, and that it has not deteriorated over time.
- While both small and large banks curtailed lending to small businesses during the recent financial crisis, small banks provided more support to small businesses following the Lehman Brothers failure in regions with exposure to banks dependent on the asset-backed commercial paper (ABCP) markets.
- On balance, the results suggest that small banks have a comparative advantage in alleviating financial constraints for small businesses, likely through providing liquidity insurance to relationship borrowers in spite of recent improvements in transactional lending technologies.
    - Liquidity insurance allows banks to obtain liquid assets in times of distress in exchange for similar assets, allowing banks to avoid holding excessive stocks of liquid assets.

Notable Statistics:

- Analyzing markets with asset-backed commercial paper (ABCP) exposure following the failure of Lehman Brothers, the study finds that small businesses in regions with ABCP exposure were more prone to encountering financial difficulties, providing evidence of funding shocks for large banks that relied on the ABCP markets and that they were not able to fully retain some small business customers[6].
- Access to small banks in these markets served as a mitigating effect, suggesting small banks serve a valuable role in providing liquidity to small firms during local economic downturns.
- Firms with better access to small banks relative to large banks are better able to satisfy their financial needs. One standard deviation increase in small bank share decreases the likelihood of financial difficulties by 2.1% for all borrowers, which is economically significant when compared to the overall proportion of borrowers reporting financing constraints of 15.5%[7].

Quotes:

- "Banks as relationship lenders may alleviate frictions that reduce credit available to [small businesses in downturns], and their comparative advantage lies in their ability to use soft, qualitative information.[8]"

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[5] Allen N. Berger, Christa H.S. Bouwman, and Dasol Kim. *Small Bank Comparative Advantage in Alleviating Financial Constraints and Providing Liquidity Insurance over Time*. University of South Carolina; Texas A&M University; Case Western Reserve University. June 2015.

[6] *Ibid*. Page 1

[7] *Ibid*. Page 4

[8] *Ibid*. Page 1

<u>How does Farm Credit System Lending Affect Competition in the Banking Market?[9]</u>

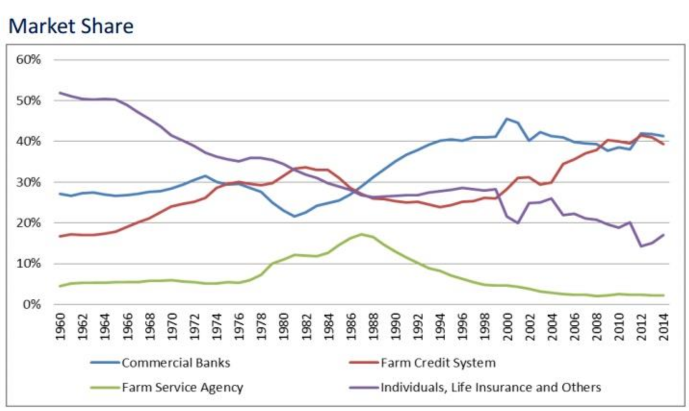
Eric Hogue, Chuck Morris, and Jim Wilkinson
Federal Reserve Bank of Kansas City

Premise:

- In recent years, consolidation in banking has led to significant increases in traditional measures of banking market concentration. Banking market concentration based on deposit shares is the primary initial screening measure of competition used by the Justice Department to assess whether proposed bank mergers and acquisitions are likely to be anticompetitive.
    - The tradeoff from not approving some of these applications can be a loss of local banking services.
- However, the current banking competition measures may not be providing accurate information on the degree of competition because they do not include competition from nonbanking firms.
- This article will develop a lending-based measure of banking market concentration that includes lending by the Farm Credit System's Agricultural Credit Associations (FCAs) to assess how this new measure affects conclusions about the cross section and time series patterns of competition in banking.

Major Findings:

- The Herfindahl-Hirschman Index (HHI), commonly used to measure market concentration, declined significantly when FCAs are included in the market, indicating a higher level of competition.
    - This effect is stronger and more prevalent in markets that are more relient on agriculture.
- This suggests that excluding FCAs may understate market competitiveness in rural markets where agriculture is important.
- If the ultimate goal of measuring market concentration is to increase the general welfare for consumers, FCAs should be considered in the calculation of HHI.



[9] Eric Hogue, Chuck Morris, and Jim Wilkinson. *How does Farm Credit System Lending Affect Competition in the Banking Market?*. Federal Reserve Bank of Kansas City.

Panel Summaries and Paper Findings

Session 2 – Community Bank Performance

Did the Financial Reforms of the Early 1990s Fail? A Comparison of Bank Failures and FDIC Losses in the 1986-02 and 2007-2013 Periods[10]

Eliana Balla, John R. Walter, and Edward Simpson Prescott

Federal Reserve Bank of Richmond; Federal Reserve Bank of Cleveland

Major Findings:

- The Prompt Corrective Action (PCA) provisions of the FDIC Improvement Act of 1991 (FDICIA) combined with higher capital levels helped reduce failure rates in the recent financial crisis.
- In contrast, the reforms did not help with FDIC losses. FDIC losses on failed commercial banks were approximately 14% of failed bank assets over the 1986-92 period, but increased to approximately 24% over the 2007-2013 period.
- Increased losses are not explained by variations in balance sheets or local economic conditions.
- The discretionary account variable, or interest accrued but not yet received, is predictive of both failure and higher FDIC losses.

Notable Statistics:

- Banks with characteristics of those in 1985 Q4 would have failed at a much higher rate if subject to the state-level economic shocks of 2007-2013. Similarly, banks with the characteristics of those in 2006 Q4 would have failed at a much lower rate if subject to the state-level economic shocks of 1986-1992[11].
    - This suggests that community and mid-size banks were not necessarily excessively risky going into the most recent crisis[12].
- While on average PCA led to banks being shut down before they had negative book capital, capital levels before failure were only about 300 basis points higher on average than in the later period, so this extra amount of capital was not enough to absorb an appreciable amount of losses on banks that were put into receivership[13].

Quotes:

- "One of our striking findings is that the two crises have very similar qualitative effects. Virtually the same variables predict failures in both periods, though the sizes of the estimates differ. We find that construction and land development (CLD) lending increases the failure probability in both periods, but it is insignificant for losses. Commercial and industrial (C&I) lending has the same effect. Bank size lowers losses in both periods, while it lowers the failure probability in the later period... Not surprisingly, core deposits lower failure probabilities and lower losses in the early period... We find that state real estate conditions and increases in unemployment predict failure in both periods. Similarly, non-performing loans and non-CLD commercial real estate

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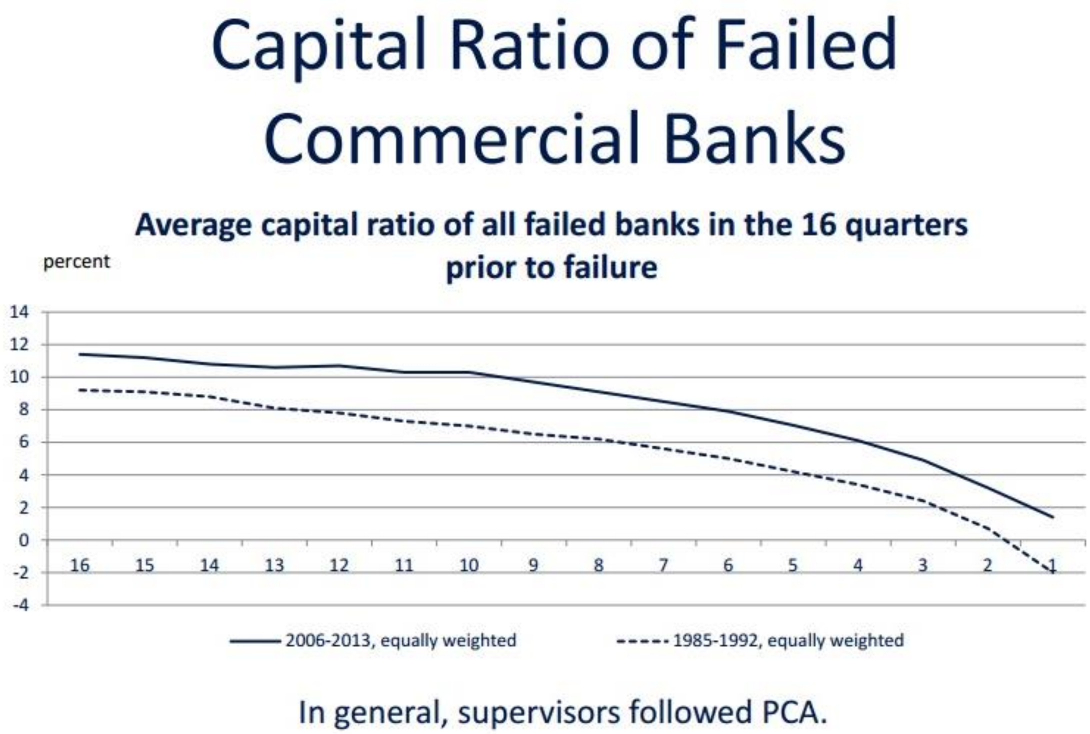
[10] Eliana Balla, John R. Walter, and Edward Simpson Prescott. *Did the Financial Reforms of the Early 1990s Fail? A Comparison of Bank Failures and FDIC Losses in the 1986-02 and 2007-2013 Periods*. Federal Reserve Bank of Richmond; Federal Reserve Bank of Cleveland. May 15, 2015.

[11] *Ibid*. Page 3.

[12] *Ibid*. Page 3.

[13] *Ibid*. Page 21.

lending predict failure in both periods. Residential lending is only significant in the earlier period, lowering the failure probability[14].”



[14] *Ibid*. Page 4.

An Historical Loss Approach to Community Bank Stress Testing[15]

Timothy J. Yeager
University of Arkansas

Major Findings:

- This study develops a community bank stress testing model based on an historical loss approach that subjects banks to credit conditions from the 2008-2012 period.
  - Traditional early warning signals are static and have a poor track record of predicting market weakness, whereas stress tests provide credible benchmarks for required capital.
- This model has the potential to be used systematically by U.S. bank regulators and community banks to assess quickly the ability of banks to withstand another severe commercial real estate (CRE) downturn and Great Recession. The stress test utilizes the new loan categories that were added to the call reports in 2007.
- The study analyzes the relative performance of residential construction loans and owner-occupied CRE loans, which ex-ante were perceived to have lower default risk, than nonresidential construction loans and non-owner-occupied CRE loans, respectively.

Notable Features of the Model:

- The model is realistic and severe in that each adverse loan shock imposed on banks is drawn from the 90th percentile of community bank charge offs for the years 2008-2012.
- The model is simple in that it does not require any explicit mapping from hypothetical economic conditions to bank performance; rather, the model contains a handful of assumptions about how provision expense and dividends adjust to the shock.
- The model relies exclusively on existing call report data and can be run quarterly[16].

Results of Test Case:

- Looking at Arkansas banks as a test subject for the model, only 3 of the 105 banks have equity to asset ratios that fall below 2% during the forecast horizon, implying that they would be closed by regulators without receiving additional capital injections[17].
- Just 10 banks have equity ratios that fall below 6.0%, the minimum Tier 1 leverage ratio under Basel III to be classified as adequately capitalized[18].
- Orderings of the most distressed banks by the equity ratio and stress tests are quite different, even if both statistics are correlated. This means that stress testing adds additional value beyond looking at Tier 1 leverage ratio[19].

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[15] Timothy J. Yeager. *An Historical Loss Approach to Community Bank Stress Testing*. University of Arkansas. June 2015.
[16] *Ibid.* Page 3.
[17] *Ibid*. Page 15.
[18] *Ibid. Page 15.*
[19] *Ibid*. Page 18.

Financial Performance and Management Structure of Small, Closely-Held Banks[20]

John M. Anderlik, Richard A. Brown, and Kathryn L. Fritzdixon

Federal Deposit Insurance Corporation (FDIC)

Key Questions:

- How much does ownership and management coincide for closely held institutions, and what are the implications?
- How do closely held banks differ from widely-held banks in terms of characteristics, performance, risk taking, and capital formation?

Findings:

- Closely held community banks where ownership and control overlap have consistently been more profitable, but report lower efficiency ratios.
- Closely held community banks raise more capital through retained earnings, but still have access to external sources.
- Regression analysis shows that closely held banks do not underperform widely held banks.

Conclusions:

- Frequently, small financial institutions institutions are family owned or otherwise closely held, and many of them are organized under Subchapter S.
    - A disproportionate share of these smallest institutions hold relatively old charters located in slow growing or depopulating non-metro areas, but they may enjoy significant market share within those areas.
- By virtue of their closely-held ownership structure, they have the flexibility to pursue objectives beyond maximizing returns to shareholders, including the ability to better serve their immediate community.
- While organizing under Subchapter S can help to minimize their tax burden, many closely-held institutions must depend on retained earnings to raise capital internally or on their current shareholders or members of the community in order to raise external capital.
    - This leads to closely-held institutions being more risk averse given their concentration of personal wealth in the bank.
- Finally, institutions that are family owned and that operate in isolated or slow-growing markets face long-term strategic challenges in terms of management succession and the ability to recruit qualified staff that have become more pressing over time as the trend of rural depopulation continues.

[20] John M. Anderlik, Richard A. Brown, and Kathryn L. Fritzdixon. *Financial Performance and Management Structure of Small, Closely-Held Banks*. Federal Deposit Insurance Corporation.

How Vulnerable Are Agriculturally Concentrated Banks to a fall in Agricultural Land Values?[21]

Ron Feldman and Jay Smith

Federal Reserve Bank of Minneapolis

Major Findings:

- The agricultural bank crisis was preceded by a steep increase in agricultural land prices. Agricultural land values are once again at all-time highs.
- The paper models very large declines in land values relative to the historical record and estimates the loan losses they would produce for banks with significant exposure to agricultural lending.
- The average agricultural bank would not suffer large loan losses. However, the subset of agricultural banks that are the most sensitive to land value declines would suffer substantial losses and have greatly reduced levels of capital.

Notable Statistics:

- According to data from the U.S. Department of Agriculture (USDA), the U.S. farm sector had \$2.89 trillion in assets in 2013 and just \$308 billion in debt, putting equity at \$2.58 trillion. The vast majority of 2013 assets were held as real estate (\$2.38 trillion). Assets are forecast to rise to \$2.99 trillion and debts to \$317 billion in 2014, resulting in \$2.68 trillion in equity[22].
- The growth in agricultural real estate lending has contributed to the gain in share by the FCS, since 46.1% of real estate lending was funded by the Farm Credit System (FCS) in 2012 (plus another 2.2% by Farmer Mac). Commercial banks lent 34.1% of farm real estate debt in 2012; in contrast commercial banks provided 47.0% of non-agricultural real estate lending. The share of agricultural debt funded by the USDA's Farm Service Agency peaked in 1987 at 17.3% (at the end of the farm crisis)[23].
- A 25% fall in nominal land values would cause the loan loss rates at the average agricultural bank to jump from 0.2% to between 1.22% and 1.33% during the year of the shock, 1.37% to 1.79% by the end of the first year, and 1.08% to 1.20% in the next year. If a further 25% year-over-year decline is modeled, losses would jump to 1.95% to 2.41% by the second year[24].

Quotes:

- "The importance of agricultural real estate is clear. It is the largest component of the agricultural producer balance sheet. The largest type of agriculturally related lending is credit secured by agricultural real estate. Given its importance as a source of collateral and funding for the sector, we now turn to current valuation of agricultural real estate.[25]"

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[21] Ron Feldman and Jay Smith. *How Vulnerable Are Agriculturally Concentrated Banks to a fall in Agricultural Land Values?.* Federal Reserve Bank of Minneapolis. June 15, 2015.
[22] *Ibid*. Page 2.
[23] *Ibid*. Page 3.
[24] *Ibid*. Page 21.
[25] *Ibid.* Page 4.

Panel Summaries and Paper Findings

Session 3 – Community Banking: Pre- and Post-Crisis

<u>The State and Fate of Community Banking[26]</u>

Robert Greene and Marshall Lux

Harvard University

Major Findings:

- Community banks service a disproportionately large amount of key segments of the U.S. commercial bank lending market (agricultural, residential, and small business).
- Share of U.S. banking assets and lending markets has fallen from over 40% in 1994 to around 20% today.
- Community bank market share has declined at a rate almost double of that during the financial crisis after the passage of Dodd-Frank.

Notable Statistics:

- Since 1994, community banks' share of the U.S. lending market has fallen by approximately half – from 41% to 22% – while the top five largest banks' share has more than doubled – from 17% to 41%.
- Community banks provide 77% of agricultural loans and over 50% of small business loans[27].
- In 2013, the default rates for loans secured by one- to four-family residential properties ran at 3.47% for small community banks (<$1 billion) versus 10.42% for banks with more than $1 billion in assets.
- Since Q2 2010, the smallest community banks' share of U.S. banking assets has fallen 19%.

Policy Recommendations:

- All federal financial regulators should be required to conduct cost-benefit analyses for economically significant proposed rulemakings, subject to non-binding review by the Office of Information and Regulatory Affairs (OIRA).
- The CFPB should be reorganized into a multi-member commissioner structure.
- A bipartisan commission should identify opportunities to merge, streamline, and simplify banking and consumer finance regulations.
- The FSOC should utilize its advantage as a council of regulators to identify what regulatory conflicts are unnecessarily harming community banks, ensuring better coordination and reducing unintended consequences stemming from conflicting regulatory objectives.
- Establish a non-risk-weighted capital-ratio threshold to exempt community banks from risk-weighted capital standards. Alternatively, policymakers could consider shifting more generally toward the overall use of simple capital ratios in banking[28].
- Regulators should consider exempting banks with less than $10 billion in assets from the Volcker Rule and Dodd-Franks compensation requirements.

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[26] Robert Greene and Marshall Lux. *The State and Fate of Community Banking.* Harvard University. February 2015.
[27] *Ibid*. Pages 9, 10, 14.
[28] *Ibid*. Pages 28-30.

Accounting for the Decline in the Number of Community Banks since the Great Recession[29]

Roisin McCord and Edward Simpson Prescott

Federal Reserve Bank of Richmond; Federal Reserve Bank of Cleveland

Major Findings:

- The recent decline in the number of banks is not due to exit from banking. Despite the financial crisis, the exit rate – the percentage of active banks that disappeared due to failure or merger with another bank – over the period of 2008-2013 is not that different from 2002-2007.
- Nearly two-thirds of the recent decline is due to the collapse of entry into commercial banking.
- The recent lack of entry has large implications for the number of banks and bank size distribution. Most new banks start small, so without that flow into banking, the number of small banks will decline.
- This drop is of potential concern because small banks are considered to have a comparative advantage in small business relationship-type lending.
    - If current trends continue, there could be 1,000 fewer banks in ten years, compared to 500 fewer banks based on historical trends[30].
- While the reasons for lack of entry could be many, small bank Call Report data do not seem to bear out that direct regulatory costs are significantly affecting profitability.

Notable Statistics:

- Between 2007 and 2013, the number of banks with assets below $50 million dropped 41.1%, while banks that hold less than $100 million in assets decreased about 30%.
- Despite a large number of bank exits in different periods, like the mid-1980s and mid-1990s, bank entry remained strong. For example, in 1984, when more than 5% of banks exited due to merger or failure, entrants equaled 3% of banks that operated at the beginning of that year. This is in stark contrast to 2007-2013, where entry rate is around .05%.
- Most entries into the commercial bank market since 2007 have been from charter conversions. From 2010-2013, there were 11 de novo banks, 30 "spinoff" banks from bank holding companies, and 46 charter conversions.
- Under more typical entry conditions, there would be 567, or 10.7%, more commercial banks at year-end 2013 than actually existed.

Quotes:

- "The entry and exit rates demonstrate that the normal dynamics of the banking industry are not such that there is a fixed stock of banks from which banks exit over time. Instead, it is of a dynamic industry with lots of entry and exit in both good and bad economic times. By these perspectives, the collapse of entry is what is so striking about the last few years.[31]"

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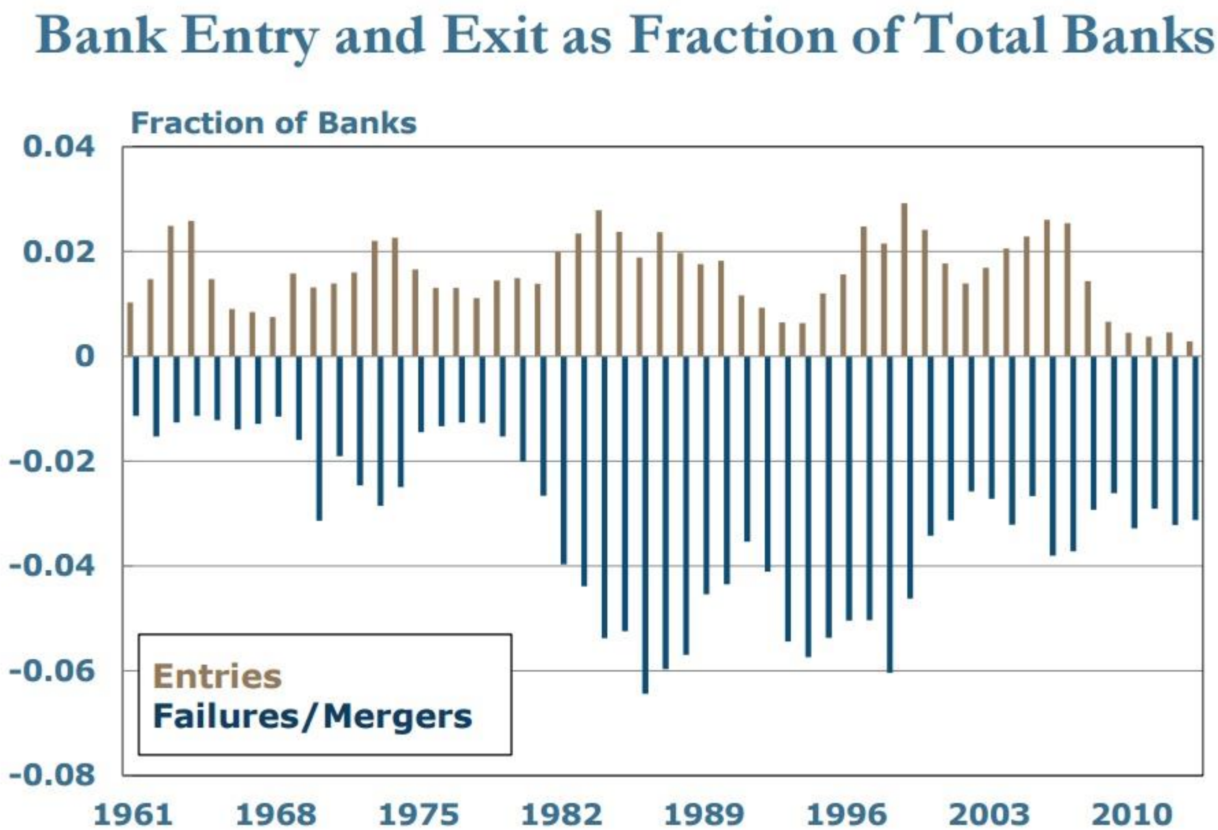
[29] Roisin McCord and Edward Simpson Prescott. *The Financial Crisis, the Collapse of Bank Entry, and Changes in the Size Distribution of Banks.* Federal Reserve Bank of Richmond; Federal Reserve Bank of Cleveland. Q1 2014.

[30] *Ibid*. Page 31, 32, 36, 38, 45.

[31] *Ibid*. Page 33.

- "[Some] point out that community bank profits are heavily dependent on the net interest margin… and with present Federal Reserve monetary policy pushing lending rates down, this margin is relatively small… [However], there are plenty of periods where net interest margin declined, yet entry did not collapse.[32]"



[32] *Ibid*. Pages 39-40.

<u>The Direct Costs of Bank Compliance around New Regulation for Small and Community Banks[33]</u>

Ken B. Cyree
University of Mississippi

Major Findings:

- Bank Profits
    - The FDIC Improvement Act (FDICIA) and the branching provisions of the Riegle-Neal Interstate Banking and Branching Efficiency Act (IBBEA) had positive return on asset (ROA) effects for small banks, indicating that both acts increased efficiency and reduced regulatory burden.
    - Pre-tax ROA increased after passage of the PATRIOT Act, inconsistent with increased regulatory burden, suggesting that banks either did not experience significant regulatory burden or found ways to offset the cost.
    - During the rule-making period for the Dodd-Frank Act (DFA), both small and large banks had negative ROA, suggesting growing regulatory burden.
- Staffing and Salaries
    - Loans per employee fell significantly for every Act (FDICIA, IBBEA, PATRIOT Act) except for the Gramm-Leach-Bliley Act (GLBA) and the DFA, suggesting increased regulatory burden or more frequent bank exams.
    - Almost every large regulatory event showed decreases salaries-to-assets and average pay. However, the DFA is clearly different with significantly higher loans per employee, salaries-to-assets, and average pay, and lower technology and fixed-asset expenditures.
    - More employees were hired after the PATRIOT Act, consistent with hiring more personnel to handle anti-money laundering and other rules.
    - The DFA led to an increased ratio of salaries to assets and a higher average pay per employee. Combined with the increased number of loans per employee, this suggests that small banks replaced exiting employees with higher paid staff who are both more costly and more productive.
- Technology Costs
    - Reduced technology and fixed asset expenditures coupled with increased salaries indicates that banks substituted higher skilled labor for technology after passage of the DFA.

Quotes:

- “Few studies look at the direct costs of compliance or the costs of different regulations for banks over time for the banks themselves. If banks are reallocating time and resources away from managing the banking organization and implementing strategies to maximize shareholder

[33] Ken B. Cyree. *The Direct Costs of Bank Compliance around New Regulation for Small and Community Banks*. University of Mississippi. Q1 2014.

wealth, these effects should be apparent in bank costs and profits ,and in reduced loan production, all else equal.[34]"

- "The hypothesis that banks had no changes for major regulatory events I rejected, but the relationship is more complex than simply hiring more people to do additional regulatory and compliance tasks... either employees were reassigned to compliance tasks and paid more, or employees who did leave were replaced with higher salaried and better performing employees.[35]"
- "Collectively, it appears that bankers are adept at adjusting to new rules and making acceptable accounting profits in the face of major regulatory changes even though the burden appears to be a challenge for smaller banks.[36]"

[34] *Ibid*. Page 2
[35] *Ibid*. Page 23-24.
[36] *Ibid*. Page 24.

Post-Crisis Residential Mortgage Lending by Community Banks[37]

William F. Bassett and John C. Driscoll

Federal Reserve Board of Governors

Major Points

- Post-crisis sales and securitization of mortgage loans has been higher for community banks than for larger banks.
- Community banks engaged in mortgage loan selling and securitization have higher returns on assets and equity than larger banks who engage in them.
- The share of community banks engaged in mortgage loan selling and securitization has been rising, as has the total number of banks with income from sales and securitization.
- Smaller banks have not been deterred from engaging in sales and securitization of mortgages, have become a more important part of the market, and have profited from their activities.

Notable Statistics

- Since the end of the recession, gross returns at small banks have remained noticeably above those for large bank holding companies and have risen, on net from the level observed in 2007.
- Over the past several years, the return on assets (ROA) for banks with assets between $50 billion and $100 billion that originate mortgage loans for sale or securitization but do not retain servicing rights have been consistently above those of banks with the same business configuration in the other size categories.
- Even as the total volume of sales and originations with the intent of selling and securitizing has fallen, the number of banks in the industry participating in these activities has risen on net since the end of the financial crisis[38].

Quotes

- "All told, these data suggest that smaller banks have not only not been deterred from engaging in the "originate to distribute" business model, but they have also become a more important part of the market and have apparently profited from having done so.[39]"

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[37] William F. Bassett and John C. Driscoll. *Post-Crisis Residential Mortgage Lending by Community Banks.* Federal Reserve Board of Governors. April 2015

[38] *Ibid*. Page 10.

[39] *Ibid*. Page 4.

Number of Banks with Mortgage Banking Revenue